



## Product Catalogue 2016/2017

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Professional  
tool solutions



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# 1 | FACTORY AND WORKSHOP EQUIPMENT, SETS OF TOOLS

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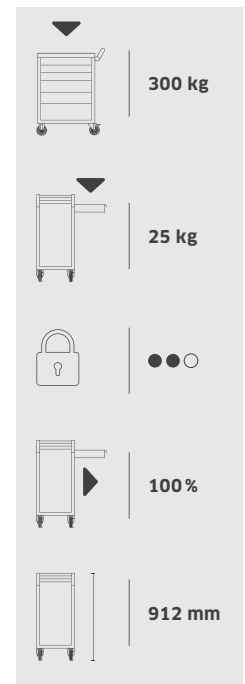


# More than just standard. Tool Trolley No 90.

1



Tool Trolley No 90 is the perfect, mobile storage system for your tools. Key features are the resilient worktop made of ABS plastic and drawers mounted in full-extension runners. The overall design and paint finish in RAL 7016 blend in harmoniously in any production or workshop environment.



1

Particularly tough, oil and Skydrol resistant worktop made of ABS with compartments for small components.

2

Two-stage safety logic:

- Central locking with a cylinder lock and fold-down key.
- Individual locks prevent inadvertent opening in transit.

3

Sturdy push-bar.

4

Six locking, easily removable drawers mounted in full-extension runners. Can be enhanced with STAHLWILLE Standard and TCS inlays.

5


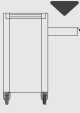



Oil and acid resistant wheels ( $\varnothing$  100 mm) with one parking brake.

# Robust. Compact. Safe.

## Tool Trolley No 95.



Model 95 provides even greater security and durability. The stainless steel handle with reinforced connections to the main body and wrap-around bumpers make it extremely robust. A further feature is the three-stage safety logic with central and individual locking together with a topple-proof mechanism to ensure maximum safety.

-  750 kg
-  30 kg
-  ●●●
-  100%
-  1021 mm



- 1** Three-stage safety logic:
  - Central locking with a lateral cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit.
  - Topple-proof - it is not possible to pull out more than one drawer at a time.
- 2** Impact protection strips with wrap-around bumper.
- 3** Easily removable drawers mounted in full extension rails with bearing cage guidance.
- 4** Perforations from both sides for Hooks No 8031-8041, e.g. for larger tools.
- 5** Oil and acid resistant wheels (∅ 125 mm) with two parking brakes. Carpet protection prevents the ingress of dirt and threads into the bearings.

### Individual needs

Five colour shades and options for 6, 7 or 8 drawers are available for Tool Trolleys 95, 95VA and 98VA.



# Good is now better. Tool Trolley 95VA.



Using Model 95 as a starting point, we have enhanced many aspects of the design to produce Tool Trolley 95 VA. The worktop and lower protective base strip made of stainless steel are particularly durable and resistant to scratching. Being able to label the drawers also makes it that much easier to locate tools quickly.



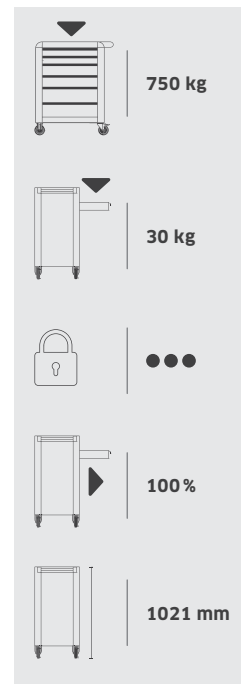
1



2



3



1

Wear and scratch-resistant worktop and ribbed protective base strip made of stainless steel.

2

Stainless steel handle with reinforced connection to body.

3

Drawers can be identified with several stickers per drawer (sheet of stickers included in delivery).



### Professional tidiness

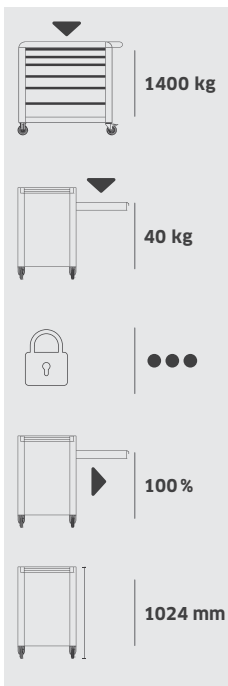
With capacities of approx. 9 l (AB 95) and 14 l (AB 98) respectively, these convenient containers provide ample room for waste. Optional for Models 95, 95 VA (AB 95) and 98 VA (AB 98).

# The definitive version. Tool Trolley No 98VA.

1



If you need a larger worktop and more space for storing tools and parts, the 98 VA trolley will fit the bill. With twice the drawer capacity compared with Models 95 & 95 VA, and a much more generous worktop made of stainless steel, this model provides plenty of room. The TCS compatible drawers are particularly high-grade and can take loads of up to 40 kg each.



### Drawer sizes

1	2	3
---	---	---

90, 95 and 95VA

1	2
3	4
5	6

98VA

- 1** In comparison with Models 90, 95 and 95 VA, this model offers 100% more drawer volume.
- 2** Drawer loads of up to 40 kg, static load capacity of 1400 kg.
- 3** All feature of Model 95 VA are included.
- 4** Five standard colour shades allow the trolleys to be individually adapted to your workshop or production needs (Models 95, 95 VA and 98 VA).



### Everything within reach.

Spray-can holders SDH 95 and 98 ensure rapid access to spray cans and screwdrivers.

Model SDH 95 for 95, 95 VA: 4 spray cans, 5 screwdrivers.

Model SDH 98 for 98 VA: 6 spray-cans and 7 screwdrivers.

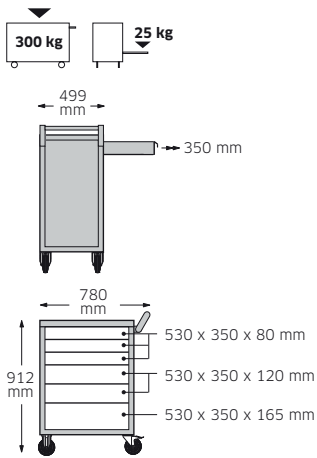
## Tool trolleys, Tool boxes, Workbenches and accessories

1

### 90/6A Tool trolley



- 6 locking, easily removable drawers mounted in full-extension runners.
- Two-stage safety logic:
  - Central locking with a cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit.
- Sturdy push-bar.
- Particularly tough, oil and Skydrol resistant worktop made of ABS with compartments for small components.
- Oil and acid resistant wheels (Ø 100 mm) with carpet protection to prevent ingress of dirt and fibres into bearings, with one parking brake.
- Can be enhanced with STAHLWILLE Standard and TCS inlays (see page 42-71).



Code	Colour	Δ kg
<b>81 20 0000</b>	charcoal grey, RAL 7016	53.2

### SCH 90 Drawers



Code	size	Dimensions mm	for No	Δ kg
<b>81 49 00 80</b>	<b>80SI</b>	530 x 350 x 80	90/6A	2.95
<b>81 49 01 20</b>	<b>120SI</b>	530 x 350 x 120	90/6A	3.55
<b>81 49 01 65</b>	<b>165SI</b>	530 x 350 x 165	90/6A	4.5

### R 90 Set of wheels



Set consists of 2 fixed wheels and 2 pivoting, 100 mm Ø.  
1 wheel with locking brake.

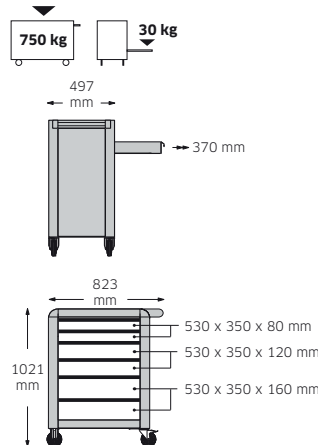


Code	for No	Δ kg
<b>81 49 0000</b>	90/6A	2.75

### 95/6 Tool trolleys TTS



- 6 easily removable drawers mounted in full extension rails with bearing cage guidance.
- Three-stage safety logic:
  - Central locking with a cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit
  - Tackle-proof - it is not possible to pull out more than one drawer at a time.
- Stainless steel handle with reinforced connection to body.
- Impact protection strips with wrap-around bumper.
- Particularly tough, oil and Skydrol resistant worktop made of ABS with compartments for small components.
- Oil and acid resistant wheels (Ø 125 mm) with carpet protection to prevent ingress of dirt and fibres into bearings, with two parking brakes.
- Paper-roll holder.
- 5 Standard colour shades, drawers in two colours (silver with black full-width handle).
- Perforations from both sides for Hooks No 8031-8041, e.g. for larger tools
- Can be enhanced with STAHLWILLE Standard and TCS inlays (see pages 42-71).



	STAHLWILLE green		RAL 2703035		RAL 9010
	RAL 3020		RAL 7016		

Code	No	Colour	Δ kg
<b>81 20 00 10</b>	<b>95/6G</b>	green	65.5
<b>81 20 00 11</b>	<b>95/6R</b>	red, RAL 3020	65.5
<b>81 20 00 12</b>	<b>95/6B</b>	blue, RAL 2703035	65.5
<b>81 20 00 13</b>	<b>95/6A</b>	charcoal grey, RAL 7016	65.5
<b>81 20 00 14</b>	<b>95/6W</b>	white, RAL 9010	65.5

### SCH 95 Drawers



Code	size	Dimensions mm	for No	Δ kg
<b>81 49 10 80</b>	<b>80SI</b>	530 x 350 x 80	95/6; 95/7; 95/8	2.8
<b>81 49 11 20</b>	<b>120SI</b>	530 x 350 x 120	95/6; 95/7	3.05
<b>81 49 11 60</b>	<b>160SI</b>	530 x 350 x 160	95/6; 95/7; 95/8	4.05



## 95/7 Tool trolleys TTS

- 7 easily removable drawers mounted in full extension rails with bearing cage guidance.
- Three-stage safety logic:
  - Central locking with a cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit
  - Topple-proof – it is not possible to pull out more than one drawer at a time.
- Stainless steel handle with reinforced connection to body.
- Impact protection strips with wrap-around bumper.
- Particularly tough, oil and Skydrol resistant worktop made of ABS with compartments for small components.
- Oil and acid resistant wheels (Ø 125 mm) with carpet protection to prevent ingress of dirt and fibres into bearings, with two parking brakes.
- Paper-roll holder.
- 5 Standard colour shades, drawers in two colours (silver with black full-width handle).
- Perforations from both sides for Hooks No 8031-8041, e.g. for larger tools
- Can be enhanced with STAHLWILLE Standard and TCS inlays (see pages 42–71).



Code	No	Colour	⚖ kg
81 20 00 15	95/7G	green	69.5
81 20 00 16	95/7R	red, RAL 3020	69.5
81 20 00 17	95/7B	blue, RAL 2703035	69.5
81 20 00 18	95/7A	charcoal grey, RAL 7016	69.5
81 20 00 19	95/7W	white, RAL 9010	69.5

## 95/8 Tool trolleys TTS

- 8 easily removable drawers mounted in full extension rails with bearing cage guidance.
- Three-stage safety logic:
  - Central locking with a cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit
  - Topple-proof – it is not possible to pull out more than one drawer at a time.
- Stainless steel handle with reinforced connection to body.
- Impact protection strips with wrap-around bumper.
- Particularly tough, oil and Skydrol resistant worktop made of ABS with compartments for small components.
- Oil and acid resistant wheels (Ø 125 mm) with carpet protection to prevent ingress of dirt and fibres into bearings, with two parking brakes.
- Paper-roll holder.
- 5 Standard colour shades, drawers in two colours (silver with black full-width handle).
- Perforations from both sides for Hooks No 8031-8041, e.g. for larger tools
- Can be enhanced with STAHLWILLE Standard and TCS inlays (see pages 42–71).



Code	No	Colour	⚖ kg
81 20 00 20	95/8G	green	74
81 20 00 21	95/8R	red, RAL 3020	74
81 20 00 22	95/8B	blue, RAL 2703035	74
81 20 00 23	95/8A	charcoal grey, RAL 7016	74
81 20 00 24	95/8W	white, RAL 9010	74

## R 95 Set of wheels

- Set consists of 2 fixed wheels and 2 pivoting, 125 mm Ø.
- 2 wheels with locking brake.



Code	for No	⚖ kg
81 49 00 01	95, 95VA	3.9

## 913/4 Cover

- Oil and Skydrol resistant.



Code	for No	mm	⚖ g
81 49 00 04	95	565 x 490 x 23	1250

## 910 Non-slip mat GRIPMAT

- protects the tools,
- prevents them sliding and rattling.



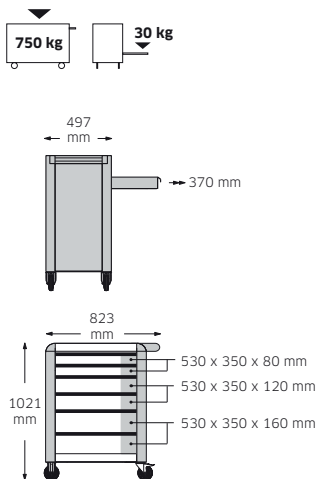
Code	Length mm	Width mm	⚖ g
89 01 00 03	3800	370	680

# Factory and workshop equipment, sets of tools

1

## 95VA/6 Tool trolleys TTS

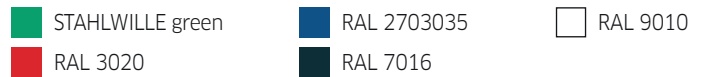
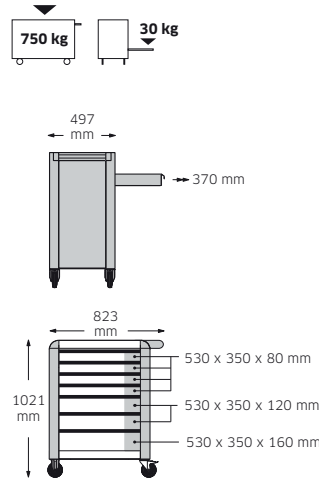
- 6 easily removable drawers mounted in full extension rails with bearing cage guidance.
- Three-stage safety logic:
  - Central locking with a cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit.
  - Topple-proof - it is not possible to pull out more than one drawer at a time.
- Drawers can be identified with multiple stickers per drawer (sheet of stickers included in delivery).
- Stainless steel handle with reinforced connection to body.
- Impact protection strips with wrap-around bumper.
- Wear and scratch-resistant worktop and ribbed protective base strip in stainless steel.
- Oil and acid resistant wheels (Ø 125 mm) with carpet protection to prevent ingress of dirt and fibres into bearings, with two parking brakes.
- Paper-roll holder.
- 5 Standard colour shades, drawers in two colours (silver with black full-width handle).
- Perforations from both sides for Hooks No 8031-8041, e.g. for larger tools.
- Can be enhanced with STAHLWILLE Standard and TCS inlays (see pages 42-71).



Code	No	Colour	ΔΔ kg
81 20 00 55	95VA/6G	green	68.5
81 20 00 56	95VA/6R	red, RAL 3020	68.5
81 20 00 57	95VA/6B	blue, RAL 2703035	68.5
81 20 00 58	95VA/6A	charcoal grey, RAL 7016	68.5
81 20 00 59	95VA/6W	white, RAL 9010	68.5

## 95VA/7 Tool trolleys TTS

- 7 easily removable drawers mounted in full extension rails with bearing cage guidance.
- Three-stage safety logic:
  - Central locking with a cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit.
  - Topple-proof - it is not possible to pull out more than one drawer at a time.
- Drawers can be identified with multiple stickers per drawer (sheet of stickers included in delivery).
- Stainless steel handle with reinforced connection to body.
- Impact protection strips with wrap-around bumper.
- Wear and scratch-resistant worktop and ribbed protective base strip in stainless steel.
- Oil and acid resistant wheels (Ø 125 mm) with carpet protection to prevent ingress of dirt and fibres into bearings, with two parking brakes.
- Paper-roll holder.
- 5 Standard colour shades, drawers in two colours (silver with black full-width handle).
- Perforations from both sides for Hooks No 8031-8041, e.g. for larger tools.
- Can be enhanced with STAHLWILLE Standard and TCS inlays (see pages 42-71).



Code	No	Colour	ΔΔ kg
81 20 00 60	95VA/7G	green	72.5
81 20 00 61	95VA/7R	red, RAL 3020	72.5
81 20 00 62	95VA/7B	blue, RAL 2703035	72.5
81 20 00 63	95VA/7A	charcoal grey, RAL 7016	72.5
81 20 00 64	95VA/7W	white, RAL 9010	72.5

## SCH 95VA Drawers



Code	size	Dimensions mm	for No	ΔΔ kg
81 49 30 80	80SI	530 x 350 x 80	95VA/6; 95VA/7; 95VA/8	2.9
81 49 31 20	120SI	530 x 350 x 120	95VA/6; 95VA/7	3.25
81 49 31 60	160SI	530 x 350 x 160	95VA/6; 95VA/7; 95VA/8	4.35

## SDH 95 Spray-can holder

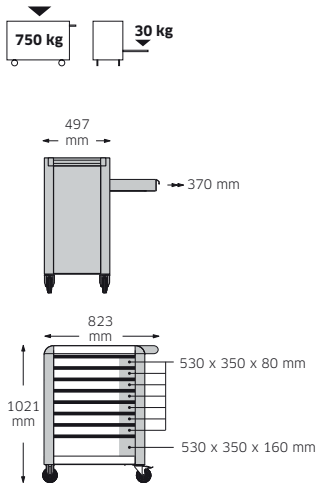


Code	for No	ΔΔ kg
81 49 00 03	95, 95VA	1.5



## 95VA/8 Tool trolleys TTS

- 8 easily removable drawers mounted in full extension rails with bearing cage guidance.
- Three-stage safety logic:
  - Central locking with a cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit.
  - Topple-proof – it is not possible to pull out more than one drawer at a time.
- Drawers can be identified with multiple stickers per drawer (sheet of stickers included in delivery).
- Stainless steel handle with reinforced connection to body.
- Impact protection strips with wrap-around bumper.
- Wear and scratch-resistant worktop and ribbed protective base strip in stainless steel.
- Oil and acid resistant wheels (Ø 125 mm) with carpet protection to prevent ingress of dirt and fibres into bearings, with two parking brakes.
- Paper-roll holder.
- 5 Standard colour shades, drawers in two colours (silver with black full-width handle).
- Perforations from both sides for Hooks No 8031-8041, e.g. for larger tools.
- Can be enhanced with STAHLWILLE Standard and TCS inlays (see pages 42–71).

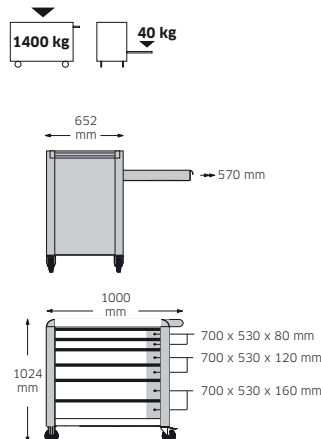


- STAHlwILLE green
- RAL 2703035
- RAL 9010
- RAL 3020
- RAL 7016

Code	No	Colour	kg
81 20 00 65	95VA/8G	green	77
81 20 00 66	95VA/8R	red, RAL 3020	77
81 20 00 67	95VA/8B	blue, RAL 2703035	77
81 20 00 68	95VA/8A	charcoal grey, RAL 7016	77
81 20 00 69	95VA/8W	white, RAL 9010	77

## 98VA/6 Tool trolleys TTS

- In comparison with the 90, 95 and 95VA models, this model offers 100% more drawer volume.**
- 6 easily removable drawers mounted in full extension rails with bearing cage guidance.
- Three-stage safety logic:
  - Central locking with a cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit.
  - Topple-proof – it is not possible to pull out more than one drawer at a time.
- Drawers can be identified with multiple stickers per drawer (sheet of stickers included in delivery).
- Stainless steel handle with reinforced connection to body.
- Impact protection strips with wrap-around bumper.
- Wear and scratch-resistant worktop and ribbed protective base strip in stainless steel.
- Oil and acid resistant ball-bearing mounted low-friction wheels (Ø 125 mm) with carpet protection to prevent ingress of dirt and fibres into bearings, with two parking brakes.
- Paper-roll holder.
- 5 Standard colour shades, drawers in two colours (silver with black full-width handle).
- Perforations from both sides for Hooks No 8031-8041, e.g. for larger tools.
- Can be enhanced with STAHLWILLE Standard and TCS inlays (see pages 42–71).



- STAHlwILLE green
- RAL 2703035
- RAL 9010
- RAL 3020
- RAL 7016

Code	No	Colour	kg
81 20 00 99	98VA/6G	green	98
81 20 01 00	98VA/6R	red, RAL 3020	98
81 20 01 01	98VA/6B	blue, RAL 2703035	98
81 20 01 02	98VA/6A	charcoal grey, RAL 7016	98
81 20 01 03	98VA/6W	white, RAL 9010	98

## AB 95 Rubbish bin

Capacity approx. 9 l.



Code	for No	mm	kg
89 01 00 52	95, 95VA	302 x 133 x 320	2.1

## SCH 98VA Drawers



Code	size	Dimensions mm	for No	kg
81 49 20 80	80SI	700 x 530 x 80	98VA/6; 98VA/7; 98VA/8	5
81 49 21 20	120SI	700 x 530 x 120	98VA/6; 98VA/7	6
81 49 21 60	160SI	700 x 530 x 160	98VA/6; 98VA/7; 98VA/8	6.5

# Factory and workshop equipment, sets of tools

1

## 98VA/7 Tool trolleys TTS



- In comparison with the 90, 95 and 95VA models, this model offers **100% more drawer volume**.
- 7 easily removable drawers mounted in full extension rails with bearing cage guidance.
- Three-stage safety logic:
  - Central locking with a cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit.
  - Topple-proof - it is not possible to pull out more than one drawer at a time.
- Drawers can be identified with multiple stickers per drawer (sheet of stickers included in delivery).
- Stainless steel handle with reinforced connection to body.
- Impact protection strips with wrap-around bumper.
- Wear and scratch-resistant worktop and ribbed protective base strip in stainless steel.
- Oil and acid resistant ball-bearing mounted low-friction wheels (Ø 125 mm) with carpet protection to prevent ingress of dirt and fibres into bearings, with two parking brakes.
- Paper-roll holder.
- 5 Standard colour shades, drawers in two colours (silver with black full-width handle).
- Perforations from both sides for Hooks No 8031-8041, e.g. for larger tools.
- Can be enhanced with STAHLWILLE Standard and TCS inlays (see pages 42-71).



- STAHLWILLE green
- RAL 2703035
- RAL 9010
- RAL 3020
- RAL 7016

Code	No	Colour	△△ kg
81 2001 04	98VA/7G	green	100
81 2001 05	98VA/7R	red, RAL 3020	100
81 2001 06	98VA/7B	blue, RAL 2703035	100
81 2001 07	98VA/7A	charcoal grey, RAL 7016	100
81 2001 08	98VA/7W	white, RAL 9010	100

## 98VA/8 Tool trolleys TTS



- In comparison with the 90, 95 and 95VA models, this model offers **100% more drawer volume**.
- 8 easily removable drawers mounted in full extension rails with bearing cage guidance.
- Three-stage safety logic:
  - Central locking with a cylinder lock and fold-down key.
  - Individual locks prevent inadvertent opening in transit.
  - Topple-proof - it is not possible to pull out more than one drawer at a time.
- Drawers can be identified with multiple stickers per drawer (sheet of stickers included in delivery).
- Stainless steel handle with reinforced connection to body.
- Impact protection strips with wrap-around bumper.
- Wear and scratch-resistant worktop and ribbed protective base strip in stainless steel.
- Oil and acid resistant ball-bearing mounted low-friction wheels (Ø 125 mm) with carpet protection to prevent ingress of dirt and fibres into bearings, with two parking brakes.
- Paper-roll holder.
- 5 Standard colour shades, drawers in two colours (silver with black full-width handle).
- Perforations from both sides for Hooks No 8031-8041, e.g. for larger tools.
- Can be enhanced with STAHLWILLE Standard and TCS inlays (see pages 42-71).



- STAHLWILLE green
- RAL 2703035
- RAL 9010
- RAL 3020
- RAL 7016

Code	No	Colour	△△ kg
81 2001 09	98VA/8G	green	102
81 2001 10	98VA/8R	red, RAL 3020	102
81 2001 11	98VA/8B	blue, RAL 2703035	102
81 2001 12	98VA/8A	charcoal grey, RAL 7016	102
81 2001 13	98VA/8W	white, RAL 9010	102

## R 98 Set of wheels



Set consists of 2 fixed and 2 pivoting ball-bearing mounted low-friction wheels, 125 mm Ø.  
2 wheels with locking brake.



Code	for No	△△ kg
81 49 0005	98VA	4.2

## AB 98 Rubbish bin

Capacity approx. 14 l.



Code	for No	mm	△△ kg
89010053	98VA	456 x 150 x 370	3

### SDH 98 Spray-can holder

for 6 spray-cans and 7 screwdrivers.



Code	for No	Δ kg
<b>89 01 00 49</b>	98VA	1.9

### 912 Empty tray for small components

with compartments for small parts such as screws, nuts etc. Oil and Skydrol resistant. 8 compartments each 60 x 80 mm or 80 x 80 mm, 2 compartments each 100 x 165 mm or 50 x 330 mm.



Code	for No	mm	Δ kg
<b>83 81 20 70</b>	90; 92KM G; 95; 95VA; 98VA; 920; 922N	520 x 340 x 30	330

### VE 50-150 Drawer separators

allow you to divide up the drawer the way you need it. Consisting of: one each galvanised steel front and back piece and three separators.



Code	for No	mm	Δ kg
<b>81 48 40 01</b>	92KM G; 95; 95VA; 98VA; 920; 922N	530 x 350 x 40	0.8

### KH 91 Cable holder

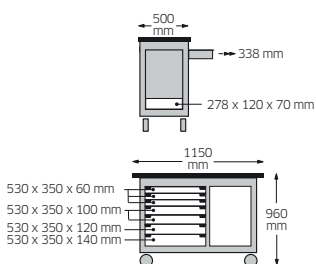
for storing cable and hoses.



Code	for No	mm	Δ kg
<b>89 01 00 40</b>	95; 95VA; 98VA	200 x 153 x 170	0.86

### 92KM G Mobile workbench

with 4 smooth-running plastic wheels, of which 2 are swivelling and have parking brakes; 7 removable drawers with plastic handles, smooth-action rollers, fully extendible drawers, simply lift to lock in place, holders for paper rolls and spray cans, 30 mm multiplex beechwood worktop. Roomy storage area with a shelf in the cabinet, drawers and access door to storage area, each individually lockable with a cylinder lock. One outer side can be individually adapted to suit requirements using perforated sheets with square holes for hooks No 8031-8041. Can be enhanced with STAHLWILLE standard and TCS inlays (see pp. 42-71).



Code	Δ kg
<b>85 01 00 14</b>	80

### Drawers with plastic handles

coated with environmentally friendly silver-coloured textured powder-coat.



Code	No	Dimensions mm	Can be combined with No	Δ kg
<b>81 48 30 60</b>	<b>SCH 60KM</b>	530 x 350 x 60	92KM G	2.5
<b>81 48 31 00</b>	<b>SCH 100KM</b>	530 x 350 x 100	92KM G	3.3
<b>81 48 31 20</b>	<b>SCH 120KM</b>	530 x 350 x 120	92KM G	3.4
<b>81 48 31 40</b>	<b>SCH 140KM</b>	530 x 350 x 140	92KM G	3.6

### AB97N Rubbish bin

Capacity approx. 9 l. All painted parts have an environmentally friendly silver finish powder coat.



Code	for No	mm	Δ kg
<b>89 01 00 12</b>	92KM G	278 x 300 x 140	2.1

### PB98 Personal box

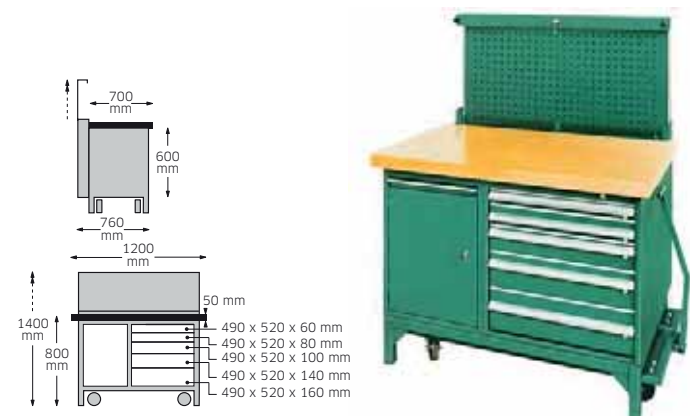
for personal effects. With separate locking system. All painted parts have an environmentally friendly silver finish powder coat.



Code	for No	mm	Δ kg
<b>89 01 00 13</b>	92KM G	277 x 317 x 115	2.4

### 96/3 Mobile workbench

with chassis and retractable tool panel. 5 ball-bearing mounted steel drawers with slotted liners for partitioning drawers. Aluminium handle. Automatic catches on all drawers prevent them opening in transit. Lockup cabinet with height-adjustable shelf. Worktop is 50 mm thick, warp- and water resistant, multilayer bonded beech wood with clear varnish finish. Front edge has hardwood edging strip.



Code	Δ kg
<b>85 03 00 03</b>	166.5



# CONVERTA

## The system and its components

1

The CONVERTA system and its components are a modular system. The system consists of wheely boxes with drawers or up-and-over doors, magazines with integrated carrying handles, magazine drawers and magazines and a set of wheels, and detachable spray-can holders. Thanks to the possibility of combining the many modules available, there are almost no limits to the options open to the user in optimising his or her individual tool-storage environment.

All the magazines are positioned on flat magazine drawers which can be locked in place when extended. The tool magazines and standard drawers are interchangeable. A safety mechanism prevents more than one drawer being opened at any one time.

All the boxes can be fitted with a cylinder lock to enable central locking. The boxes can still be locked even if one or more magazines or drawers have been removed. All painted parts have an environmentally friendly powdercoat. The worktops of the cases are fitted with an oil and skydrol resistant plastic mat with compartments for small components. The undersides of the magazines have non-slip film attached to them.



920 + R 920

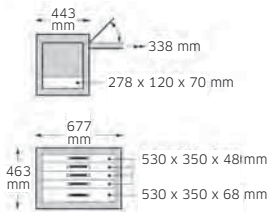


920 + 922N



## 920 Magazine case

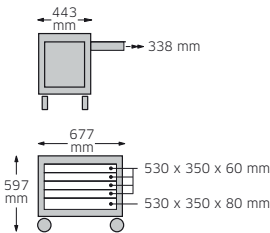
with 5 drawers and 5 magazines. **Converts to tool trolley with undercarriage No R 920.** Features two removable spray can holders on the end pieces of the case and two integrated lifting handles. Drawers for mounting magazines are removable and lockable in fully extended position. The magazines can be replaced with standard drawers. The worktop of the case is fitted with an oil and Skydrol resistant plastic mat with compartments for small components.



Code	Colour	Can be combined with No	Δ⊃ kg
<b>81 48 00 00</b>	red RAL 3020	920; 922N	53.6

## 922N Wheely box with drawers

With 4 wheels  $\varnothing$  125 mm (2 pivoting castors, one wheel with parking brake). With 5 silver-coloured drawers (sizes: 4 drawers 60 mm high, 1 x 80 mm). Drawers are removable and lockable in fully extended position. The worktop of the case is fitted with an oil and Skydrol resistant plastic mat with compartments for small components. Spray can holders No SDH 921 can be retrofitted to the sides (please order separately).



Code	Colour	Can be combined with No	Δ⊃ kg
<b>96 48 00 02</b>	red RAL 3020	920	37.4

## Accessories CONVERTA

### SCH 60-80 Drawers

coated with environmentally friendly silver-coloured textured powder-coat.



Code	No	Dimensions mm	Can be combined with No	Δ⊃ kg
<b>81 48 20 60</b>	<b>SCH 60</b>	530 x 350 x 60	922N	2.4
<b>81 48 20 80</b>	<b>SCH 80</b>	530 x 350 x 80	920; 922N	2.8

### 913 Cover

Oil and Skydrol resistant.



Code	for No	mm	Δ⊃ g
<b>89 01 00 11</b>	920; 922N	680 x 450 x 20	936

## 913/1 Multi-purpose worktop

Particularly sturdy construction with robust, two-part handle-bar. Large worktop and 11 holes for storing e.g. screwdrivers, files, scrapers etc. Additional compartments for small components and 2 round recesses for cans. Oil and Skydrol resistant.



Code	for No	mm	Δ⊃ kg
<b>89 01 00 22</b>	920; 922N	780 x 540 x 35	3.1

## 913/2 Additional tray

slots into and extends the multipurpose worktop No 913/1. Oil and Skydrol resistant.



Code	for No	mm	Δ⊃ kg
<b>89 01 00 23</b>	920; 922N	443 x 540 x 35	2.2

## 920 C-SCH Magazine drawer

Coated with environmentally friendly silver-coloured textured powder-coat. For mounting tool magazines No 920 C.



Code	Δ⊃ kg
<b>81 48 10 00</b>	2.64

## 920 C Tool magazines

Coated with environmentally friendly silver-coloured textured powder-coat. For use with magazine drawers No 920 C-SCH.



Code	No	Dimensions mm	Can be combined with No	Δ⊃ kg
<b>81 48 10 60</b>	<b>920 C 60</b>	530 x 350 x 48	920; 922N; 92KM G	3.2
<b>81 48 10 80</b>	<b>920 C 80</b>	530 x 350 x 68	920; 922N; 92KM G	3.3
<b>81 48 11 20</b>	<b>920 C 120</b>	530 x 350 x 108	92KM G	3.7

## R 920 Set of wheels

Set consists of 2 fixed wheels and 2 pivoting, 125 mm  $\varnothing$ . 2 wheels with locking brake.



Code	for No	Δ⊃ kg
<b>89 48 00 01</b>	920; 922N	4.3

## SDH 921 Spray can and paper roll holder

coated with environmentally friendly silver-coloured textured powder-coat.



Code	for No	Δ⊃ kg
<b>81 48 30 01</b>	92KM G; 920; 922N	1

## Accessories Tool Trolley, Tool Box and Mobile Workbench

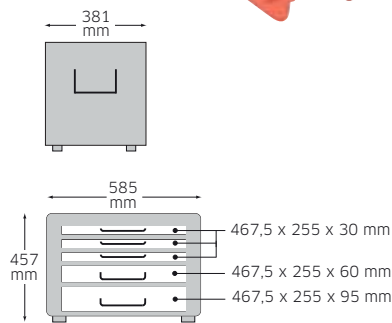
1

	No 90/6A	No 95/6	No 95/7	No 95/8	No 95VA/6	No 95VA/7	No 95VA/8	No 98VA/6	No 98VA/7	No 98VA/8	No 920	No 922	No 92KM G
<b>Drawers</b>													
	SCH 90-80SI	•											
	SCH 90-120SI	•											
	SCH 90-165SI	•											
	SCH 95-80SI		•	•									
	SCH 95-120SI		•	•									
	SCH 95-160SI		•	•									
	SCH 95VA-80SI				•	•	•						
	SCH 95VA-120SI				•	•							
	SCH 95VA-160SI				•	•	•						
	SCH 98VA-80SI						•	•	•				
	SCH 98VA-120SI						•	•	•				
	SCH 98VA-160SI						•	•	•				
	SCH 60										•	•	
	SCH 80										•	•	
<b>Drawers with plastic handles</b>													
	SCH 60KM												•
	SCH 100KM												•
	SCH 120KM												•
	SCH 140KM												•
<b>Drawer separators</b>													
	VE 50-150		•	•	•	•	•	•	•	•	•	•	•
<b>Magazine drawer</b>													
	920C-SCH										•	•	•
<b>Tool magazines</b>													
	920 C 60										•	•	•
	920 C 80										•	•	
	920 C 120												•
<b>Empty tray for small components</b>													
	912	•	•	•	•	•	•	•	•	•	•	•	•
<b>Worktops</b>													
	913										•	•	
	913/1										•	•	
	913/4		•	•	•								
<b>Additional tray</b>													
	913/2										•	•	
<b>Cable holder</b>													
	KH 91		•	•	•	•	•	•	•	•			
<b>Spray can holders</b>													
	SDH 95		•	•	•	•	•						
	SDH 98							•	•	•			
	SDH 921										•	•	•
<b>Rubbish bins</b>													
	AB 95		•	•	•	•	•						
	AB 98							•	•	•			
	AB 97N												•
<b>Lockable personal box</b>													
	PB 98												•
<b>Sets of wheels</b>													
	R90	•											
	R95		•	•	•	•	•	•	•	•			
	R98					•	•	•	•	•			
	R920										•	•	

## Tool boxes

### 13217 Tool trolleys

- Extremely sturdy, tool trolley resilient to loads and made of polypropylene for professional use.
- 5 easily removed lockable drawers with transparent covers, with endstops for the extendible rails, 3 different drawer heights.
- Drawers can be inserted in any order.
- With one top cover and one front cover, both folding.
- The top cover is fitted with napped foam to hold tools firmly in place.
- One removable tray with 2 handles and 2 transparent drawer covers under the top cover.
- Drawers can be used as separate tool boxes using the transparent cover.
- Tool case and drawers can be individually marked.
- 2 smooth-running twin castors on the telescopic-handle side.
- Adaptable for vertical transport using 4 castors, R 13217 Set of castors (please order separately).
- Extendible telescopic handle facilitates transport.
- 2 carrying handles at the sides.
- Resistant to Skydrol, acetone, petrol and hydraulic fluids.
- Carrying capacity 60 kg.
- 3 locking positions with padlock.



- luminous orange
- luminous yellow
- luminous red
- jet black

Code	No	Colour	△ kg
<b>8109 1301</b>	13217 LGE	luminous yellow	15
<b>8109 1302</b>	13217 LOR	luminous orange	15
<b>8109 1304</b>	13217 LR	luminous red	15
<b>8109 1306</b>	13217 TS	jet black	15

# Factory and workshop equipment, sets of tools

## 805/4 WT TCS Tool set for Tool Trolley No 13217



89 Tools, in TCS inlays (Tool Control System see page 53).  
**Additional sets of tools with Tool Trolley No 13217 on pages 34, 37, 39, 40.**

Code	⚖ kg
<b>97 84 28 03</b>	9.2



**96 83 43 15**



**96 83 43 16**



**96 83 43 17**



**96 83 43 18**

	<b>No 13</b>	sizes 6; 7; 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 22; 24 mm
	<b>No 17</b>	sizes 8; 10; 13; 17; 19 mm
	<b>No 40</b>	1/4" ♂ sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13 mm
	<b>No 400</b>	1/4" ■ 150 mm
	<b>No 405/2</b>	1/4" ■ ♂ 54 mm
	<b>No 405/6</b>	1/4" ■ ♂ 150 mm
	<b>No 407</b>	1/4" ■ ♂ 38 mm
	<b>No 412</b>	1/4" ♂ ♂
	<b>No 415</b>	1/4" ■
	<b>No 52</b>	1/2" ♂ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm
	<b>No 509/3</b>	1/2" ■ ♂ 75 mm
	<b>No 509/5</b>	1/2" ■ ♂ 130 mm
	<b>No 509/10</b>	1/2" ■ ♂ 255 mm
	<b>No 510</b>	1/2" ■ ♂ 71 mm
	<b>No 512</b>	1/2" ■
	<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm)
	<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)
	<b>No 4630</b>	sizes 1; 2; 3
	<b>No 4734</b>	size 2
	<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 10771/8</b>	sizes T9; T10; T15; T20; T25; T27; T30; T40

	<b>No 65 01 5 180</b>
	<b>No 65 29 5 200</b>
	<b>No 65 51 6 240</b>
	<b>No 66 02 5 160</b>

## R 13217 Set of wheels

optional extra castors allowing upright travel on four wheels, consists of: 4 swivelling castors, 2 of which with parking brakes.



Code	for No	⚖ kg
<b>96 89 48 05</b>	13217	0.8

## 13217 TA Transparent cover

The cover is fitted to the top lid and provides additional storage space, e.g. for documents. Delivery includes fixing materials.



Code	for No	⚖ kg
<b>89 01 01 00</b>	13217	0.56

## TR-SCH Drawers

for Tool Trolley No 13217, black



Code	size	Dimensions mm	⚖ kg
<b>81 48 32 30</b>	<b>30 SC</b>	467.5 x 255 x 30	0.56
<b>81 48 32 60</b>	<b>60 SC</b>	467.5 x 255 x 60	0.78
<b>81 48 32 95</b>	<b>95 SC</b>	467.5 x 255 x 95	0.9





## 806/6 WT TCS Tool set for Tool Trolley No 13217



104 Tools, in TCS inlays (Tool Control System see page 53).  
Additional sets of tools with Tool Trolley No 13217 on pages 34, 37, 39, 40.

Code	⚖ kg
<b>97 83 02 07</b>	14.2



**96 83 00 94**



**96 83 00 95**



**96 83 00 96**



**96 83 00 97**



**96 83 00 98**



**96 83 00 99**

	<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm
	<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24 mm
	<b>No 17</b>	sizes 8; 10; 13; 17; 19 mm
	<b>No 40</b>	1/4"  sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 400</b>	1/4"  150 mm
	<b>No 404</b>	1/4"  116 mm
	<b>No 405/2</b>	1/4"  54 mm
	<b>No 405/6</b>	1/4"  150 mm
	<b>No 407</b>	1/4"  38 mm
	<b>No 412</b>	1/4"
	<b>No 415</b>	1/4"
	<b>No 10760CV</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10; 12 mm
	<b>No 52</b>	1/2"  sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm
	<b>No 506</b>	1/2"  300 mm
	<b>No 509/2</b>	1/2"  52 mm
	<b>No 509/5</b>	1/2"  130 mm

	<b>No 509/10</b>	1/2"  255 mm
	<b>No 510</b>	1/2"  71 mm
	<b>No 512</b>	1/2"
	<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm)
	<b>No 4630</b>	sizes 1; 2; 3
	<b>No 65 01 5 180</b>	
	<b>No 65 29 5 200</b>	
	<b>No 65 43 4 002</b>	
	<b>No 65 45 4 002</b>	
	<b>No 65 51 6 240</b>	
	<b>No 65 64 2 250</b>	
	<b>No 66 02 5 160</b>	
	<b>No 102</b>	175 mm
	<b>No 108</b>	150 x 6; 175 x 6 mm
	<b>No 109</b>	size 6; 100 x 3.4 mm
	<b>No 10956</b>	∅ 35 mm
	<b>No 10960</b>	500 g

## TCS inlays for Tool Trolley No 13217

### TCS WT 10/10, 6-32 mm



for the drawers of Tool Trolley No 13217, 460 x 250 x 30 mm, 10 pieces

Code	⚖ g
<b>96 83 01 20</b>	1550

	<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 20 x 22; 24 x 27; 30 x 32 mm
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### TCS WT 10a/9



for the drawers of Tool Trolley No 13217, 460 x 250 x 30 mm, 9 pieces

Code	⚖ g
<b>96 83 01 24</b>	1600

	<b>No 10a</b>	sizes 1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16; 19/32 x 11/16; 5/8 x 3/4; 3/4 x 7/8; 25/32 x 13/16; 15/16 x 1; 1 1/8 x 1 5/16"
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# Factory and workshop equipment, sets of tools

1

## TCS WT 13/18, 6-24 mm



for the drawers of Tool Trolley No 13217, 460 x 250 x 60 mm, 18 pieces

Code	g
<b>96830121</b>	1940

**No 13** sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24 mm

## TCS WT 13a/22



for the drawers of Tool Trolley No 13217, 460 x 250 x 60 mm, 22 pieces

Code	g
<b>96830125</b>	2440

**No 13a** sizes 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16"

## TCS WT 17/12



for the drawers of Tool Trolley No 13217, 460 x 250 x 30 mm, 12 pieces

Code	g
<b>96830128</b>	1490

**No 17** sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm

## TCS WT 240/10



for the drawers of Tool Trolley No 13217, 460 x 250 x 30 mm, 10 pieces

Code	g
<b>96830130</b>	2005

**No 240** sizes 8; 10; 11; 12; 13; 14; 16; 17; 18; 19 mm

## TCS WT 40/4008/10/9



for the removable tray of Tool Trolley No 13217, cannot be combined with transparent cover 13217 TA, 460 x 250 x 30 mm, 39 pieces

Code	g
<b>96830132</b>	1120

**No 40** 1/4" sizes 4; 4.5; 5; 6; 7; 8; 10; 11; 12; 13 mm

**No 405QR/2** 1/4" 54 mm

**No 405QR/6** 1/4" 150 mm

**No 407QR** 1/4" 38 mm

**No 412** 1/4"

**No 415QR N** 1/4"

**No 1204/21-1** 4 x ; 4 x ; 9 x ; 3 x

**No 3115/1** 1/4"

**No 4008** sizes 1; 2

## TCS WT 40/45/46/37/14



for the removable tray of Tool Trolley No 13217, cannot be combined with transparent cover 13217 TA, 455 x 240 x 30 mm, 51 pieces

Code	g
<b>96830123</b>	2500

**No 40aD** 1/4" sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"

**No 402a** 1/4" sizes 1/4; 5/16; 3/8; 7/16; 1/2"

**No 40aDL** 3/8" sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"

**No 45a** 3/8" sizes 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 15/16; 1"

**No 46a** 3/8" sizes 5/8; 11/16; 3/4; 7/8"

**No 405QR/2** 1/4" 54 mm

**No 405QR/6** 1/4" 150 mm

**No 407QR** 1/4" 38 mm

**No 409M** 3/8" 1/4"

**No 415QR N** 1/4"

**No 415SGB** 1/4"

**No 412** 1/4"

**No 427QR/3** 3/8" 76 mm

**No 427QR/10** 3/8" 240 mm

**No 428QR** 3/8" 46 mm

**No 431** 1/4" 3/8"

**No 432M** 1/2" 3/8"

**No 435QR N** 3/8"

**No 443** 5/16" 3/8"

### TCS WT 40/52/27/13



for the removable tray of Tool Trolley No 13217, cannot be combined with transparent cover 13217 TA, 455 x 240 x 30 mm, 40 pieces



Code		ΔΔ g
<b>96830117</b>		4000
<b>No 40</b>	1/4" ○ sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm	
<b>No 52</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm	
<b>No 400</b>	1/4" ■ 150 mm	
<b>No 404</b>	1/4" ■ 116 mm	
<b>No 405/2</b>	1/4" ■ ○ 54 mm	
<b>No 405/6</b>	1/4" ■ ○ 150 mm	
<b>No 407</b>	1/4" ■ ○ 38 mm	
<b>No 412</b>	1/4" ○ ○	
<b>No 415QR N</b>	1/4" ■	
<b>No 506</b>	1/2" ■ 300 mm	
<b>No 509/2</b>	1/2" ■ 52 mm	
<b>No 509/5</b>	1/2" ■ ○ 130 mm	
<b>No 509/10</b>	1/2" ■ ○ 255 mm	
<b>No 510</b>	1/2" ■ ○ 71 mm	
<b>No 512QR N</b>	1/2" ■	

### TCS WT 4622-4650



for the drawers of Tool Trolley No 13217, 460 x 250 x 60 mm, 20 pieces



Code		ΔΔ g
<b>96830122</b>		1500
<b>No 4622SK</b>	size 1 (0.8 x 4.0 x 90 mm) size 2 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 6.5 x 125 mm)	
<b>No 4632SK</b>	sizes 1; 2; 3	
<b>No 4650</b>	sizes T10; T15; T20; T25; T30	
<b>No 10767H/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm	

### TCS WT 4622-4650-1



for the drawers of Tool Trolley No 13217, 460 x 250 x 60 mm, 24 pieces



Code		ΔΔ g
<b>96830126</b>		1610
<b>No 4622SK</b>	size 1 (0.8 x 4.0 x 90 mm) size 2 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 6.5 x 125 mm)	
<b>No 4632SK</b>	sizes 1; 2; 3	
<b>No 4650</b>	sizes T10; T15; T20; T25; T30	
<b>No 10767a/13</b>	sizes 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8"	

### TCS WT 4650-4665-1



for the drawers of Tool Trolley No 13217, 460 x 250 x 60 mm, 20 pieces



Code		ΔΔ g
<b>96830129</b>		1320
<b>No 4650</b>	sizes T10; T15; T20; T25; T30	
<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm) size 3 (0.6 x 3.5 x 100 mm) size 5 (1.0 x 5.5 x 125 mm)	
<b>No 4665 VDE</b>	sizes 1; 2; 3	
<b>No 10767H/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm	

### TCS WT 4650-4665



for the drawers of Tool Trolley No 13217, 460 x 250 x 60 mm, 24 pieces



Code		ΔΔ g
<b>96830127</b>		1400
<b>No 4650</b>	sizes T10; T15; T20; T25; T30	
<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm) size 3 (0.6 x 3.5 x 100 mm) size 5 (1.0 x 5.5 x 125 mm)	
<b>No 4665 VDE</b>	sizes 1; 2; 3	
<b>No 10767a/13</b>	sizes 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8"	



# Factory and workshop equipment, sets of tools

1

## TCS WT 6501-6602/7



for the drawers of Tool Trolley  
No 13217, 460 x 250 x 30 mm,  
7 pieces

Code	g
<b>96830118</b>	1180
<b>No 65 01 5 180</b>	
<b>No 65 29 5 200</b>	
<b>No 65 43 4 002</b>	
<b>No 65 45 4 002</b>	
<b>No 65 51 6 240</b>	
<b>No 65 64 2 250</b>	
<b>No 66 02 5 160</b>	

## TCS WT 6501-6602/7-1



for the drawers of Tool Trolley  
No 13217, 460 x 250 x 30 mm,  
8 pieces

Code	g
<b>96830131</b>	1660
<b>No 65 01 5 180</b>	
<b>No 65 29 5 200</b>	
<b>No 65 43 4 002</b>	
<b>No 65 45 4 002</b>	
<b>No 65 51 6 240</b>	
<b>No 65 75 1 220</b>	
<b>No 66 02 5 160</b>	

## Tool Control System The safety inlay system

- Designed to fit our Tool Trolleys and Tool Boxes
- With yellow signal cut-outs to show whether all tools are in their places



## TCS WT 102-109/16



for the drawers of Tool Trolley  
No 13217, 460 x 250 x 30 mm,  
16 pieces

Code	g
<b>96830119</b>	1790
<b>No 102</b>	175 mm
<b>No 105</b>	120 x 12 mm
<b>No 108</b>	115 x 2; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
<b>No 109</b>	size 6; 100 x 3.4 mm
<b>No 10956</b>	∅ 27 mm
<b>No 10960</b>	300 g
<b>No 12320</b>	
<b>No 12921M</b>	∅ 32 mm
<b>No 12931</b>	3 m
<b>No 13110</b>	300 mm
<b>No 13126-2</b>	



### 13216/2 Tool box

with 2 drawers and one compartment under the lid, safety lock and dip-coated carrying handle on the lid. Wide, spring-mounted dip-coated carrying handles on the sides. High-grade, fully extendible sturdy rails. Easily removable drawers. The perforated panel can be arranged as required using spring loaded clips No 8050 (page 24, please order separately).



Code	⚖️ kg
<b>81091002</b>	10.3

### 13216/3 Tool box

with 3 drawers and one compartment under the lid, safety lock and dip-coated carrying handle on the lid. Wide, spring-mounted dip-coated carrying handles on the sides. High-grade, fully extendible sturdy rails. Easily removable drawers. The perforated panel can be arranged as required using spring loaded clips No 8050 (page 24, please order separately).



Code	⚖️ kg
<b>81091003</b>	11

### 83/010 Tool box, 3 trays

lockable by padlock.



Code	Width mm	Height mm	Depth mm	⚖️ kg
<b>81060000</b>	420	150	200	3.7

### 82/013 Tool box

with lift out tray. Lockable by padlock.



Code	Width mm	Height mm	Depth mm	⚖️ kg
<b>81080000</b>	545	225	180	6.9

### 13216/4 Tool box

with 4 drawers, a compartment under the lid, safety lock and sturdy textured aluminium sheeting on the lid. Wide, spring-mounted dip-coated carrying handles on the sides. High-grade, fully extendible sturdy rails. Easily removable drawers. The perforated panel can be arranged as required using spring loaded clips No 8050 (page 24, please order separately).



Code	⚖️ kg
<b>81091004</b>	14

### TBT13216 Tool box trolley

for tool boxes No 13216/2, 13216/3, 13216/4.

- Safe tool box locking system with quick-release mechanism.
  - Unrestricted access to all tool box functions.
  - Sturdy steel-sheet construction.
  - 2 fixed wheels and 2 castors (∅ 75 mm) with parking brakes.
  - Convenient, fold-away push-handle with endstop.
  - Maximum static load capacity: 150 kg
- Supplied without tool box.



Code	Width mm	Height mm	Depth mm	⚖️ kg
<b>81091009</b>	570	216 (914 open)	328	7

### 83/09 Tool box, 5 trays

lockable by padlock.



Code	Width mm	Height mm	Depth mm	⚖️ kg
<b>81050000</b>	420	200	200	4.7

### 446/08 Tool box, 5 trays

lockable by padlock.



Code	Width mm	Height mm	Depth mm	⚖️ kg
<b>81070000</b>	530	200	200	5.59

## Perforated panels, hooks and holding devices

### 8002 Perforated panel

Perforation 9 x 9 mm, made of sturdy, 1 mm thick sheet steel, with 2 strengthening ribs at rear. These ribs carry the holes for wall mounting panel.

For the individual mounting of tools, on a variety of hooks and clips No 8031-8041.



Code	Width mm	Height mm	Depth mm	△△ kg
<b>80020001</b>	500	1000	15	4

### 8031 Single hook

for perforated panel No 8002, Mobile workbench No 92KM G and Tool trolleys No 95, 95VA, 98VA.



Code	size	mm	△△ g	☐
<b>80310030</b>	<b>1</b>	30	13	5
<b>80310060</b>	<b>2</b>	60	17	5
<b>80310090</b>	<b>3</b>	90	21	5

### 8032 Twin hook

for perforated panel No 8002, Mobile workbench No 92KM G and Tool trolleys No 95, 95VA, 98VA.



Code	size	mm	△△ g	☐
<b>80320030</b>	<b>1</b>	30	19	3
<b>80320060</b>	<b>2</b>	60	26	3

### 8034 Twin hook

for perforated panel No 8002, Mobile workbench No 92KM G and Tool trolleys No 95, 95VA, 98VA.



Code	size	mm	△△ g	☐
<b>80340040</b>	<b>1</b>	40 x 35	30	3
<b>80340050</b>	<b>2</b>	50 x 40	30	3

### 8035 Square lug

for perforated panel No 8002, Mobile workbench No 92KM G and Tool trolleys No 95, 95VA, 98VA.



Code	size	mm	△△ g	☐
<b>80350017</b>	<b>1</b>	17 x 35	23	3
<b>80350020</b>	<b>2</b>	20 x 55	26	3

### 8036 Spring clip

for perforated panel No 8002, Mobile workbench No 92KM G and Tool trolleys No 95, 95VA, 98VA.



Code	size	mm	△△ g	☐
<b>80360012</b>	<b>1</b>	12	9	6
<b>80360018</b>	<b>2</b>	18	10	6
<b>80360024</b>	<b>3</b>	24	14	6

### 8038 Container

for perforated panel No 8002, Mobile workbench No 92KM G and Tool trolleys No 95, 95VA, 98VA.



Code	mm	△△ g	☐
<b>80380030</b>	30 x 72	15	4

### 8041 Holding device for spanners

for perforated panel No 8002, Mobile workbench No 92KM G and Tool trolleys No 95, 95VA, 98VA.



Code	mm	△△ g	☐
<b>80410235</b>	235 x 144 x 47	62	1

### 8050 Spring clip

for perforated panel No 8002, Mobile workbench No 92KM G, Tool trolleys No 95, 95VA, 98VA and Tool boxes No 13216/2, 13216/3, 13216/4.



Code	size	mm	△△ g	☐
<b>81485006</b>	<b>6</b>	6	28	5
<b>81485012</b>	<b>12</b>	12	35	5



## Tool cases, hard shell

### 13209/1 Tool case, hard shell, base model

sturdy aluminium frame, 2 locks, ergonomically shaped carrying handle, robust jointed lid-prop, tool-holder panel for storing tools from both sides, with 21 pockets and integrated document pouch. ABS insert can be subdivided and includes cover with 6 pockets.



Code	Width mm	Height mm	Depth mm	⚖️ kg
<b>81 62 0002</b>	460	310	160	4.1

### 13209/2 Tool case, hard shell, medium model

as for No 13209/1, but with an additional combination lock, tool-holder panel with 13 pockets and 26 rubber-loop holders, separate document pouch in the lid, ABS inlay tray with 13 pockets and 8 rubber-loop holders.



Code	Width mm	Height mm	Depth mm	⚖️ kg
<b>81 62 0003</b>	460	310	180	4.5

### 13209 Tool case, hard shell, premium model

as for No 13209/1, but with an additional combination lock, tool-holder panel with 13 pockets and 26 rubber-loop holders, additional tool-holder panel with 11 pockets and a smaller components pouch, separate document pouch in the lid, ABS inlay tray with 13 pockets and 8 rubber-loop holders.



Code	Width mm	Height mm	Depth mm	⚖️ kg
<b>81 62 0001</b>	460	310	180	6

## Workshop sets

### 801N Large tool set













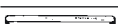

127 Tools

Code	⚖️ kg
<b>9784 12 10</b>	28.6
<b>No 10/12</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 23; 24 x 27; 25 x 28; 30 x 32 mm
<b>No 12/10</b>	sizes 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11 mm
<b>No 20/12</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 23; 24 x 27; 25 x 28; 30 x 32 mm
<b>No 29</b>	sizes 10 x 11; 12 x 13; 14 x 15; 16 x 18; 17 x 19; 21 x 23 mm
<b>No 35c Pkw</b>	sizes 17; 19; 22; 1/2" ■
<b>No 39</b>	400 mm (2x)
<b>No 39/1</b>	600 mm (2x)
<b>No 50</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28; 30; 32 mm
<b>No 51</b>	1/2" ○ sizes 13; 16 mm-5/8"; 17; 18; 19 mm; 20.8 mm-13/16"; 22; 24; 27; 30; 32 mm
<b>No 54</b>	1/2" ○ sizes 4; 5; 6; 8; 10; 12; 14 mm
<b>No 501</b>	1/2" ■ 433 mm
<b>No 504/15</b>	1/2" ■ 397 mm
<b>No 506</b>	1/2" ■ 300 mm
<b>No 509/2</b>	1/2" ■ ○ 52 mm
<b>No 509/5</b>	1/2" ■ ○ 130 mm
<b>No 509/10</b>	1/2" ■ ○ 255 mm
<b>No 510</b>	1/2" ■ ○ 71 mm
<b>No 512</b>	1/2" ■
<b>No 100/8</b>	200 mm
<b>No 103</b>	150 mm
<b>No 104</b>	120 x 4 mm
<b>No 105</b>	100 x 10 mm
<b>No 4622</b>	size 2 (1.2 x 6.5 x 125 mm) size 3 (1.2 x 8.0 x 150 mm) size 5 (2.0 x 12.0 x 200 mm)
<b>No 4628</b>	size 2 (0.6 x 3.5 x 75 mm) size 4 (0.8 x 4.0 x 125 mm)
<b>No 4630</b>	sizes 1; 2; 3
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
<b>No 65 01 6 180</b>	
<b>No 65 29 6 200</b>	
<b>No 65 30 6 200</b>	
<b>No 65 43 4 002</b>	
<b>No 65 45 4 002</b>	
<b>No 65 54 4 250</b>	
<b>No 65 64 2 250</b>	
<b>No 66 02 6 160</b>	

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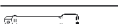
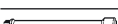




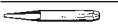




# Factory and workshop equipment, sets of tools


















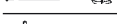





1

	<b>No 10670</b>	310 mm
	<b>No 10676</b>	85 x 12 x 315 mm
	<b>No 10960</b>	500 g
	<b>No 11095/13</b>	0.05-1 mm
	<b>No 12025</b>	210 mm
	<b>No 12030</b>	260 mm
	<b>No 12035</b>	210 mm
	<b>No 12050</b>	300 mm
	<b>No 12150</b>	200 mm
	<b>No 12200</b>	145 mm
	<b>No 12250</b>	
	<b>No 12320</b>	
	<b>No 12375</b>	
	<b>No 12931</b>	3 m

## 802N Large tool set











129 Tools

Code		△ kg
<b>97 84 03 12</b>		28.1
	<b>No 12/10</b>	sizes 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11 mm
	<b>No 13/26</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28; 29; 30; 32 mm
	<b>No 29</b>	sizes 10 x 11; 12 x 13; 14 x 15; 16 x 18; 17 x 19; 21 x 23 mm
	<b>No 35c Pkw</b>	sizes 17; 19; 22; 1/2" ■
	<b>No 39</b>	400 mm (2x)
	<b>No 39/1</b>	600 mm (2x)
	<b>No 50</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28; 30; 32 mm
	<b>No 51</b>	1/2" ○ sizes 13; 16 mm-5/8"; 17; 18; 19 mm; 20.8 mm-13/16"; 22; 24; 27; 30; 32 mm
	<b>No 54</b>	1/2" ○ sizes 4; 5; 6; 8; 10; 12; 14 mm
	<b>No 501</b>	1/2" ■ 433 mm
	<b>No 504/15</b>	1/2" ■ 397 mm
	<b>No 506</b>	1/2" ■ 300 mm
	<b>No 509/2</b>	1/2" ■ ○ 52 mm
	<b>No 509/5</b>	1/2" ■ ○ 130 mm
	<b>No 509/10</b>	1/2" ■ ○ 255 mm
	<b>No 510</b>	1/2" ■ ○ 71 mm
	<b>No 512</b>	1/2" ■
	<b>No 100/8</b>	200 mm
	<b>No 103</b>	150 mm
	<b>No 104</b>	120 x 4 mm
	<b>No 105</b>	100 x 10 mm
	<b>No 4622</b>	size 2 (1.2 x 6.5 x 125 mm) size 3 (1.2 x 8.0 x 150 mm) size 5 (2.0 x 12.0 x 200 mm)
	<b>No 4628</b>	size 2 (0.6 x 3.5 x 75 mm) size 4 (0.8 x 4.0 x 125 mm)
	<b>No 4630</b>	sizes 1; 2; 3

	<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
	<b>No 65 01 6 180</b>	
	<b>No 65 29 6 200</b>	
	<b>No 65 30 6 200</b>	
	<b>No 65 43 4 002</b>	
	<b>No 65 45 4 002</b>	
	<b>No 65 54 4 250</b>	
	<b>No 65 64 2 250</b>	
	<b>No 66 02 6 160</b>	
	<b>No 10670</b>	310 mm
	<b>No 10676</b>	85 x 12 x 315 mm
	<b>No 10960</b>	500 g
	<b>No 11095/13</b>	0.05-1 mm
	<b>No 12025</b>	210 mm
	<b>No 12030</b>	260 mm
	<b>No 12035</b>	210 mm
	<b>No 12050</b>	300 mm
	<b>No 12150</b>	200 mm
	<b>No 12200</b>	145 mm
	<b>No 12250</b>	
	<b>No 12320</b>	
	<b>No 12375</b>	
	<b>No 12931</b>	3 m

## 803N Large tool set

164 Tools

Code		△ kg
<b>97 84 26 13</b>		17.8
	<b>No 10/12</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 23; 24 x 27; 25 x 28; 30 x 32 mm
	<b>No 10a</b>	sizes 1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16; 5/8 x 11/16; 3/4 x 7/8; 15/16 x 1"
	<b>No 12/10</b> <b>No 12a/13</b>	sizes 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11 mm sizes 5/32; 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
	<b>No 13</b>	sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm
	<b>No 13a</b>	sizes 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4"
	<b>No 21</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 17 x 19 mm
	<b>No 20a</b>	sizes 1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16; 3/4 x 7/8; 15/16 x 1"
	<b>No 23/8</b> <b>No 230a</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22 mm sizes 3/8 x 7/16; 1/2 x 9/16; 9/16 x 5/8; 11/16 x 3/4; 13/16 x 7/8; 15/16 x 1"
	<b>No 50</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 27; 30; 32 mm
	<b>No 50a</b>	1/2" ○ sizes 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8; 1 3/16; 1 1/4"



	<b>No 501</b>	1/2" ■ 433 mm
	<b>No 504/15</b>	1/2" ■ 397 mm
	<b>No 506</b>	1/2" ■ 300 mm
	<b>No 509/2</b>	1/2" ■ ○ 52 mm
	<b>No 509/5</b>	1/2" ■ ○ 130 mm
	<b>No 509/10</b>	1/2" ■ ○ 255 mm
	<b>No 510</b>	1/2" ■ ○ 71 mm
	<b>No 512</b>	1/2" ■
	<b>No 100</b>	150 mm
	<b>No 105</b>	120 x 12 mm
	<b>No 108</b>	150 x 4; 150 x 6 mm
	<b>No 4620</b>	size 3 (1.0 x 5.5 x 100 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm) size 6 (1.6 x 10.0 x 200 mm)
	<b>No 4628</b>	size 2 (0.6 x 3.5 x 75 mm)
	<b>No 4630</b>	sizes 1; 2; 3
	<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
	<b>No 65 01 6 200</b>	
	<b>No 65 09 5 160</b>	
	<b>No 65 51 6 240</b>	
	<b>No 66 02 6 160</b>	
	<b>No 10760CV/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 10760aCV/10Pc</b>	sizes 1/16; 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8"
	<b>No 10970</b>	1 lb.
	<b>No 12050</b>	300 mm

## 804N Large tool set





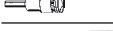





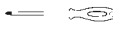





















		Code	△ kg
		<b>9784 27 14</b>	11.8
	<b>No 12/10</b>	sizes 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11 mm	
	<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32 mm	
	<b>No 40/13/6</b>	1/4" ○ No 40 sizes 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13 mm; No 400; 404; 405/2; 405/6; 407; 415	
	<b>No 50</b>	1/2" ○ sizes 10; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32 mm	
	<b>No 51</b>	1/2" ○ sizes 16 mm-5/8"; 20.8 mm-13/16"	
	<b>No 506</b>	1/2" ■ 300 mm	
	<b>No 509/5</b>	1/2" ■ ○ 130 mm	
	<b>No 509/10</b>	1/2" ■ ○ 255 mm	
	<b>No 510</b>	1/2" ■ ○ 71 mm	
	<b>No 512</b>	1/2" ■	
	<b>No 100/8</b>	200 mm	
	<b>No 103</b>	200 mm	
	<b>No 105-8/6 K</b>	No 105/120 x 10 mm; No 108/150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6 mm	
	<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm)	
	<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)	
	<b>No 4630</b>	size 1; size 2	
	<b>No 65 01 6 180</b>		
	<b>No 65 29 6 200</b>		
	<b>No 65 51 6 240</b>		
	<b>No 65 64 2 250</b>		
	<b>No 66 02 6 160</b>		
	<b>No 10760CV/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm	
	<b>No 10955</b>	35 mm ∅	
	<b>No 10960</b>	500 g	
	<b>No 11095/20</b>	0.05-1 mm	
	<b>No 12251</b>		
	<b>No 12321</b>		
	<b>No 12375</b>		

Made in Germany

# Factory and workshop equipment, sets of tools






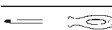








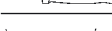





**811N**
**Car tool set**

84 Tools

Code		⚖ kg
<b>97841311</b>		16.3
 <b>No 10/12</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 23; 24 x 27; 25 x 28; 30 x 32 mm	
 <b>No 20/12</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 23; 24 x 27; 25 x 28; 30 x 32 mm	
 <b>No 39</b>	400 mm (2x)	
 <b>No 50</b>	1/2" $\odot$ sizes 10; 11; 12; 13; 14; 15; 16; 17; 19; 21; 22; 23; 24; 26; 27; 30; 32 mm	
 <b>No 51</b>	1/2" $\odot$ sizes 16 mm-5/8"; 20.8 mm-13/16"	
 <b>No 54</b>	1/2" $\odot$ sizes 4; 5; 6; 8; 10; 12; 14 mm	
 <b>No 504/15</b>	1/2" $\blacksquare$ 397 mm	
 <b>No 506</b>	1/2" $\blacksquare$ 300 mm	
 <b>No 509/2</b>	1/2" $\blacksquare \odot$ 52 mm	
 <b>No 509/5</b>	1/2" $\blacksquare \odot$ 130 mm	
 <b>No 509/10</b>	1/2" $\blacksquare \odot$ 255 mm	
 <b>No 510</b>	1/2" $\blacksquare \odot$ 71 mm	
 <b>No 512</b>	1/2" $\blacksquare$	
 <b>No 100/8</b>	200 mm	
 <b>No 103</b>	150 mm	
 <b>No 104</b>	120 x 4 mm	
 <b>No 105</b>	100 x 10 mm	
 <b>No 4622</b>	size 2 (1.2 x 6.5 x 125 mm) size 3 (1.2 x 8.0 x 150 mm) size 5 (2.0 x 12.0 x 200 mm)	
 <b>No 4628</b>	size 2 (0.6 x 3.5 x 75 mm) size 4 (0.8 x 4.0 x 125 mm)	
 <b>No 4630</b>	sizes 1; 2; 3	
 <b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)	
 <b>No 65 01 6 180</b>		
 <b>No 65 29 6 200</b>		
 <b>No 65 30 6 200</b>		
 <b>No 65 43 4 002</b>		
 <b>No 65 45 4 002</b>		
 <b>No 65 54 4 250</b>		
 <b>No 65 64 2 250</b>		
 <b>No 66 02 6 160</b>		
 <b>No 10670</b>	310 mm	
 <b>No 10676</b>	85 x 12 x 315 mm	
 <b>No 10960</b>	500 g	
<b>No 12375</b>		

**3027**
**Electrician tool set**

85 Tools

Code		⚖ kg
<b>97843101</b>		6.3
 <b>No 13</b> <b>No 13/9</b>	sizes 6; 7 mm sizes 9; 10; 11; 12; 13; 14; 17; 19; 22 mm	
 <b>No 40/23/6N</b>	1/4" $\odot$ No 40 sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm No 41K sizes 0.6 x 3.5; 1 x 5.5; 1.2 x 8 mm No 44K: 3; 4; 5; 6; 8 mm No 44P: sizes 1; 2; 3; 4 No 400; 404; 405/2; 405/6; 407; 415	
 <b>No 46</b>	3/8" $\odot$ sizes 12; 20.8 mm	
 <b>No 4600</b>	3/8" $\odot$ size 16 mm	
 <b>No 425</b>	3/8" $\blacksquare$ 165 mm	
 <b>No 428</b>	3/8" $\blacksquare \odot$ 46 mm	
 <b>No 427/6</b>	3/8" $\blacksquare \odot$ 160 mm	
 <b>No 4628</b>	size 2 (0.6 x 3.5 x 75 mm) size 4 (0.8 x 4.0 x 125 mm) size 6 (1.0 x 5.5 x 200 mm)	
 <b>No 4630</b>	size 1; size 2	
 <b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)	
 <b>No 4734</b>	size 2	
 <b>No 10546</b>	size 3	
 <b>No 10551</b>	size 1 x 2	
 <b>No 10760CV/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm	
 <b>No 7756</b>	3-48 Volt	
 <b>No 65 01 5 180</b>		
 <b>No 65 29 5 160</b>		
 <b>No 65 30 5 160</b>		
 <b>No 65 51 6 240</b>		
 <b>No 66 02 6 140</b>		
<b>No 66 22 5 160</b>		
<b>No 10641</b>		
<b>No 10956</b>	$\varnothing$ 35 mm	
<b>No 1551</b>	for contact sizing $\square$ 2.8 mm	
<b>No 1552</b>	for contact sizing $\square$ 5.8 mm	
<b>No 1560</b>	Content: 1 Piece No 1501 ejection tool for contact sizing $\varnothing$ 1.5 mm 1 Piece No 1502 ejection tool for contact sizing $\varnothing$ 3.5 mm 1 Piece No 1503 ejection tool for contact sizing $\varnothing$ 4.0 mm ABS (trucks) resp. mounting bush No 1523 2 Pieces No 1511 dismounting bush $\varnothing$ 1.5 mm (1 Piece assembled) 2 Pieces No 1512 dismounting bush $\varnothing$ 3.5 mm (1 Piece assembled) 2 Pieces No 1513 dismounting bush $\varnothing$ 4.0 mm 1 Piece No 1523 mounting bush (ABS)	

## 841N Construction machinery set

129 tools

Code	⊕	kg
<b>97 84 14 18</b>		35.9
<b>No 10/9</b>		sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 24 mm
<b>No 14</b>		sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32; 34; 36 mm
<b>No 40/13/6</b>		1/4" ○ No 40 sizes 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13 mm; No 400; 404; 405/2; 405/6; 407; 415
<b>No 50/16/6</b>		1/2" ○ No 50: sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32 mm; No 506; 509/5; 509/10; 506; 510; 512
<b>No 504/15</b>		1/2" ■ 397 mm
<b>No 514</b>		3/4" ■ 1/2" ○
<b>No 55/9/6N</b>		3/4" ○ No 55: sizes 32; 34; 36; 38; 41; 46; 50; 55; 60 mm; No 552; 554; 556; 558; 559/8; 559/16
<b>No 568</b>		1/2" ■ 3/4" ○
<b>No 102-5/6T</b>		No 104/120 x 2; 120 x 4 mm; No 105/120 x 10 mm; No 106/125 mm; 150 mm; No 107/125 mm
<b>No 4840</b>		sizes 1; 2
<b>No 4891</b>		⊖ 4820: 0.6 x 3.5 x 75 mm; 0.8 x 4.0 x 100 mm; 1.0 x 5.5 x 125 mm; 1.2 x 6.5 x 150 mm; ⊕ 4830: sizes 1; 2
<b>No 10760CV/9</b>		sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
<b>No 65 01 5 180</b>		
<b>No 65 31 5 170</b>		
<b>No 65 63 2 250</b>		
<b>No 65 67 2 280</b>		
<b>No 65 72 6 240</b>		
<b>No 66 00 5 160</b>		
<b>No 10956</b>		∅ 35 mm
<b>No 10960</b>		300; 500 g
<b>No 11095/20</b>		20 blades 0.05-1 mm
<b>No 12050</b>		300 mm
<b>No 12050R</b>		10 blades
<b>No 12374</b>		
<b>No 12600</b>		1800 g
<b>No 12931</b>		3 m

## Tool sets for aerospace industry

### 13200a Basic tool set for aircraft mechanics (piston engine)















178 Tools

Code	⊕	kg
<b>97 84 60 11</b>		15
<b>No 12a/13</b>		sizes 5/32; 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
<b>No 13a</b>		sizes 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1"
<b>No 230a</b>		sizes 1/4 x 5/16; 5/16 x 11/32; 3/8 x 7/16; 7/16 x 1/2; 1/2 x 9/16; 9/16 x 5/8; 11/16 x 3/4; 13/16 x 7/8; 15/16 x 1"
<b>No 4025</b>		size 4
<b>No 40aD/30/7QR</b>		1/4" ○ No 40a: size 1/8"; No 40aD: sizes 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"; No 40aDL: sizes 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"; No 402a: sizes 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2"; No 400QR; 405/2QR (2x); 405/6QR; 407QR; 412; 415 SG-QR
<b>No 409</b>		3/8" ■ 1/4" ○
<b>No 4155GB</b>		1/4" ○
<b>No 46a</b>		3/8" ○ sizes 7/16; 1/2; 9/16; 5/8"
<b>No 427/18</b>		3/8" ■ ○ 455 mm
<b>No 431</b>		1/4" ■ 3/8" ○
<b>No 45a/22/8QR</b>		3/8" ○ No 45a: sizes 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8; 15/16; 1"; No 47a: sizes 5/16; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4"; No 427/10QR; 427/6QR; 427/3QR; 428QR; 435SG-QR; 442; 443; 453
<b>No 1220</b>		size 0
<b>No 1221</b>		size 1
<b>No 1222</b>		size 2
<b>No 1223</b>		size 3
<b>No 13010</b>		sizes 0; 1; 2; 3; 4; 5; 6; 8; 10
<b>No 4006/1</b>		1/4" ○
<b>No 12503</b>		1/4" ○
<b>No 4622</b>		size 1 (1.0 x 5.5 x 100 mm); size 3 (1.2 x 8.0 x 150 mm); size 4 (1.6 x 10.0 x 175 mm)
<b>No 4632</b>		sizes 1; 2; 3
<b>No 10760aCV/13</b>		sizes 0.028; 0.035; 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4"
<b>No 65 01 5 180</b>		
<b>No 65 10 5 190</b>		
<b>No 65 31 5 170</b>		
<b>No 65 51 6 240</b>		
<b>No 65 75 1 280</b>		
<b>No 66 00 5 180</b>		

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














# Factory and workshop equipment, sets of tools














1

	<b>No 105-8/6 K</b>	No 105/120 x 10 mm; No 108/150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6 mm
	<b>No 10670</b>	215 mm
	<b>No 10955</b>	∅ 27 mm
	<b>No 10960</b>	300 g
	<b>No 12320</b>	
	<b>No 12321</b>	
	<b>No 12600</b>	500 g
	<b>No 12900</b>	
	<b>No 12921N</b>	∅ 50 mm
	<b>No 12922E</b>	∅ 6 mm
	<b>No 12931</b>	3 m
	<b>No 13110</b>	300 mm
	<b>No 13126-1</b>	
	<b>No 13135</b>	

## 13205a Standard aircraft maintenance tool set




















131 Tools

Code		⚖ kg
<b>97846012</b>		7.8
	<b>No 12a/13</b>	sizes 5/32; 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
	<b>No 13a</b>	sizes 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4"
	<b>No 230a</b>	sizes 5/16 x 11/32; 3/8 x 7/16; 7/16 x 1/2; 1/2 x 9/16; 9/16 x 5/8; 11/16 x 3/4"
	<b>No 4025</b>	size 4
	<b>No 409</b>	3/8" ■ 1/4" ○
	<b>No 40aD/30/7QR</b>	1/4" ○ No 40a: size 1/8" No 40aD: sizes 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16" No 40aDL: sizes 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16" No 402a: sizes 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2" No 400QR; 405/2QR (2x); 405/6QR; 407QR; 412; 415 SG-QR
	<b>No 1161-1166</b>	0.5 x 4; 0.6 x 3.5; 0.6 x 4.5; 0.8 x 4; 0.8 x 5.5; 1 x 5.5 mm
	<b>No 1220-1223</b>	sizes 0; 1; 2; 3
	<b>No 13008</b>	sizes 0; 1; 2; 3; 4; 5
	<b>No 13010</b>	sizes 0; 1; 2; 3; 4; 5; 6; 8; 10
	<b>No 4006/1</b>	1/4" ○
	<b>No 12503</b>	1/4" ○
	<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 8.0 x 150 mm) size 4 (1.6 x 10.0 x 175 mm)
	<b>No 4632</b>	sizes 1; 2; 3
	<b>No 65 01 5 180</b>	
	<b>No 65 10 5 190</b>	
	<b>No 65 31 5 170</b>	
	<b>No 65 51 6 240</b>	
	<b>No 65 75 1 220</b>	
	<b>No 66 00 5 180</b>	

	<b>No 105-8/6 K</b>	No 105/120 x 10 mm; No 108/150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6 mm
	<b>No 10955</b>	∅ 27 mm
	<b>No 10960</b>	300 g
	<b>No 12025</b>	210 mm
	<b>No 12030</b>	260 mm
	<b>No 12035</b>	210 mm
	<b>No 12036</b>	250 mm
	<b>No 12053</b>	
	<b>No 12321</b>	
	<b>No 12900N</b>	
	<b>No 12921N</b>	∅ 40 mm
	<b>No 13110</b>	300 mm
	<b>No 13126-1</b>	

## 13207a Electricians set in tool case No 13209

111 Tools

Code		⚖ kg
<b>98810322</b>		12.5
	<b>No 13a</b>	sizes 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4"
	<b>No 12a/13</b>	sizes 5/32; 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
	<b>No 40a</b>	1/4" ○ sizes 1/8; 5/32"
	<b>No 400QR</b>	1/4" ■ 150 mm
	<b>No 40aD/12/7QR</b>	1/4" ○ No 40a: size 1/8" No 40aD: sizes 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16" No 400QR; 405/2QR (2x); 405/6QR; 407QR; 412; 415SG-QR
	<b>No 4006/1</b>	1/4" ○
	<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm) size 3 (0.6 x 3.5 x 100 mm) size 5 (1.0 x 5.5 x 125 mm) size 6 (1.2 x 6.5 x 150 mm)
	<b>No 4665 VDE</b>	sizes 0; 1; 2
	<b>No 10760aCV/13</b>	sizes 0.028; 0.035; 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4"
	<b>No 65 01 5 160, No 65 01 5 180</b>	
	<b>No 65 24 5 160</b>	
	<b>No 65 29 5 200</b>	
	<b>No 65 30 5 200</b>	
	<b>No 65 31 5 170</b>	
	<b>No 65 55 5 125</b>	
	<b>No 65 76 5 231</b>	
	<b>No 66 00 5 130</b>	
	<b>No 66 02 5 180</b>	
	<b>No 66 23 5 160</b>	

	<b>No 105-8/6 K</b>	No 105/120 x 10 mm; No 108/150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6 mm
	<b>No 10960</b>	300 g
	<b>No 12053</b>	
	<b>No 12320</b>	
	<b>No 12600</b>	500 g
	<b>No 12921N</b>	∅ 40 mm
	<b>No 12922E</b>	∅ 6 mm
	<b>No 12941</b>	
	<b>No 13008</b>	sizes 0; 1; 2; 3; 4; 5
	<b>No 13010</b>	sizes 0; 1; 2; 3; 4; 5
	<b>No 13126-1</b>	
	<b>No 13130</b>	
	<b>No 13131</b>	
	<b>No 13209</b>	

### 13208a Board case for aircraft in tool case No 13209

57 Tools

Code		△▽ kg
<b>98 81 03 23</b>		8.9
	<b>No 13a</b>	sizes 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2"
	<b>No 4025</b>	sizes 4; 6; 8
	<b>No 1220</b> <b>No 1221</b> <b>No 1222</b> <b>No 1223</b>	size 0 size 1 size 2 size 3
	<b>No 13008</b>	sizes 0; 1; 2; 3; 4; 5; 6
	<b>No 13010</b>	sizes 0; 1; 2; 3; 4; 5; 6; 8; 10
	<b>No 4006/1</b>	1/4" ○
	<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 8.0 x 150 mm) size 4 (1.6 x 10.0 x 175 mm)
	<b>No 4632</b>	sizes 1; 2; 3
	<b>No 10760aCV/13</b>	sizes 0.028; 0.035; 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4"
	<b>No 65 01 5 180</b>	
	<b>No 65 10 5 190</b>	
	<b>No 65 51 6 240</b>	
	<b>No 65 76 5 231</b>	
	<b>No 66 00 5 180</b>	
	<b>No 12320</b>	
	<b>No 13126-1</b>	
	<b>No 13209</b>	

### 13210 Electronics set in tool case No 13209

Code		△▽ kg
<b>98 81 03 01</b>		10.7
	<b>No 13</b>	sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 13a</b>	sizes 3/16; 7/32; 1/4; 3/8; 1/2"
	<b>No 16</b>	sizes 3.2; 3.5; 4; 4.5; 5 mm
	<b>No 4025</b>	size 4
	<b>No 4621</b>	size 5 (1.2 x 8.0 x 160 mm)
	<b>No 4630</b>	sizes 0; 1; 2
	<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm) size 4 (0.8 x 4.0 x 100 mm) size 6 (1.2 x 6.5 x 150 mm)
	<b>No 4724</b>	size 1 (0.6 x 3.5 x 25 mm) size 2 (1.0 x 5.5 x 25 mm)
	<b>No 4753</b>	● sizes 0.7; 0.9; 1.3 mm
	<b>No 4797</b>	⊖ 4751: 0.3 x 1.5; 0.4 x 2; 0.4 x 2.5; 0.5 x 3 mm ⊕ 4752: No 00, No 0; No 1
	<b>No 10546</b>	size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm)
	<b>No 10554</b>	220-250 Volt
	<b>No 10760aCV/13</b>	sizes 0.028; 0.035; 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4"
	<b>No 10765</b>	sizes 2; 2.5; 3; 4 mm
	<b>No 12500N</b>	sizes 6; 7 mm
	<b>No 018/3</b>	
	<b>No 109</b>	sizes 1; 2; 3; 4; 5; 6; 7; 8
	<b>No 65 01 5 160</b>	
	<b>No 65 11 5 135</b>	
	<b>No 65 32 5 170</b>	
	<b>No 65 36 5 160</b>	
	<b>No 66 04 6 110</b>	
	<b>No 66 06 6 130</b>	
	<b>No 66 23 5 160</b>	
	<b>No 12900</b>	
	<b>No 10971</b>	
	<b>No 12921N</b>	∅ 50 mm
	<b>No 13100</b>	
	<b>No 13135</b>	
	<b>Drip oiler</b>	
	<b>Magnetic lifter</b>	
	<b>Electronics tweezers</b>	
	<b>Electronics tweezers</b>	
	<b>Extractor hook set</b>	

Continuation see next page

# Factory and workshop equipment, sets of tools

1

	<b>Test equipment set for safety applications</b>
	<b>Universal soldering iron</b>
	<b>Solder</b>
	<b>Solder removing pump, antistatic</b>
	<b>Blade holders with blades</b>
	<b>Lamp extractor</b>
	<b>Magnifying glass</b>
	<b>2 Screw-holding screwdrivers</b>
	<b>Tweezers</b>
	<b>Stripper</b>
	<b>Set of soldering tools</b>
	<b>Solder removing wire</b>
	<b>Hand vice</b>
	<b>Inspection mirror, insulated, Ø 40 mm</b>
	<b>No 13209</b>

## 13211a Sheetmetal set

53 Tools

Code		⚖ kg
<b>97846008</b>		9
<b>No 10a</b>	sizes 1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16"	
<b>No 13a</b>	sizes 7/32; 11/32"	
<b>No 230a</b>	sizes 1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16"	
<b>No 4025</b>	size 8	
<b>No 442</b>	1/4" ○ 3/8" ○	
<b>No 443</b>	5/16" ○ 3/8" ○	
<b>No 453</b>	3/8" ■	
<b>No 103</b>	150 mm	
<b>No 104-5/6D</b>	No 104/120 x 2; 120 x 3; 120 x 4; 120 x 5; 120 x 6 mm No 105/120 mm	
<b>No 104</b>	120 x 8 mm	
<b>No 108/6D</b>	No 108/150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm	
<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 8.0 x 150 mm) size 4 (1.6 x 10.0 x 175 mm) size 6 (2.5 x 14.0 x 250 mm)	
<b>No 4630</b>	sizes 1; 2; 3	
<b>No 4734</b>	size 2	
<b>No 65 01 6 180</b>		
<b>No 65 64 2 175</b>		
<b>No 66 02 6 160</b>		
<b>No 10670</b>	265 mm	
<b>No 10955</b>	32 mm Ø	

<b>No 10970</b>	3/4; 1 1/2 lb.
<b>No 12025</b>	210 mm
<b>No 12030</b>	260 mm
<b>No 12035</b>	210 mm
<b>No 12036</b>	260 mm
<b>No 12050</b>	465 mm
<b>No 12200</b>	145 mm
<b>No 12378</b>	
<b>No 12752R</b>	
<b>No 12800</b>	
<b>No 12900N</b>	
<b>No 12931</b>	3 m
<b>No 13110</b>	300 mm

## 13213a Engine mechanics set

129 Tools

Code		⚖ kg
<b>97846010</b>		12.1
<b>No 13a</b>	sizes 19/32; 5/8; 11/16; 3/4"	
<b>No 130a</b>	sizes 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"	
<b>No 24</b>	sizes 1/4 x 5/16; 5/16 x 3/8; 3/8 x 7/16; 1/2 x 9/16; 5/8 x 3/4"	
<b>No 230a</b>	sizes 1/4 x 5/16; 5/16 x 3/8; 3/8 x 7/16; 7/16 x 1/2; 9/16 x 5/8; 5/8 x 3/4; 11/16 x 3/4"	
<b>No 405</b>	1/4" ■ ○ sizes 10; 14	
<b>No 413</b>	1/4" ■	
<b>No 415SGB</b>	1/4" ○	
<b>No 40aD/30/7QR</b>	1/4" ○ No 40a: size 1/8" No 40aD: sizes 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16" No 40aDL: sizes 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16" No 402a: sizes 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2" No 400QR; 405/2QR (2x); 405/6QR; 407QR; 412; 415 SG-QR	
<b>No 45a/22/8QR</b>	3/8" ○ No 45a: sizes 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8; 15/16; 1" No 47a: sizes 5/16; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4" No 427/10QR; 427/6QR; 427/3QR; 428QR; 435SG-QR; 442; 443; 453	
<b>No 109</b>	sizes 1; 2; 3; 4; 5	
<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 2 (1.2 x 6.5 x 125 mm) size 4 (1.6 x 10.0 x 175 mm) size 5 (2.0 x 12.0 x 200 mm)	
<b>No 4631</b>	sizes 1; 2	
<b>No 4632</b>	sizes 1; 2; 3	
<b>No 10760aCV/10Pc</b>	sizes 1/16; 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8"	
<b>No 65 16 5 200</b>		
<b>No 65 31 5 170</b>		
<b>No 65 51 6 240</b>		



	<b>No 65 75 1 220</b>	
	<b>No 66 00 5 160</b>	
	<b>No 10960</b>	300 g
	<b>No 11097/22</b>	4-25/1000"
	<b>No 12600</b>	500 g
	<b>No 12900N</b>	
	<b>No 12921N</b>	∅ 50 mm

**13214**

**Line maintenance set in tool box  
No 13216/4**



for maintenance  
on aeroplanes  
and helicopters,  
122 Tools



Code	∅
<b>98 81 48 03</b>	kg
	27.5



**96 83 08 04**



**96 83 08 06**



**96 83 17 94**



**96 83 07 95**



**96 83 08 05**

	<b>No 13</b>	sizes 5.5; 6; 7; 8; 9; 10; 12; 13; 14; 15; 17; 19; 20; 21; 22; 24; 27; 30 mm
	<b>No 16</b>	sizes 3.2; 3.5; 4; 4.5; 5 mm
	<b>No 25</b>	sizes 7 x 8; 9 x 10; 12 x 13; 17 x 19 mm
	<b>No 40</b>	1/4" ∅ sizes 4; 4.5 mm
	<b>No 40D</b>	1/4" ∅ sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 40L</b> <b>No 40DL</b>	1/4" ∅ sizes 4.5 mm 1/4" ∅ sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 402</b>	1/4" ∅ sizes 6; 7; 8; 9; 10 mm

	<b>No 405QR/2</b>	1/4" ■ ∅ 54 mm
	<b>No 405QR/6</b>	1/4" ■ ∅ 150 mm
	<b>No 407QR</b>	1/4" ■ ∅ 38 mm
	<b>No 409M</b>	3/8" ■ 1/4" ∅
	<b>No 415QR N</b>	1/4" ■
	<b>No 415SGB</b>	1/4" ∅
	<b>No 412</b>	1/4" ∅ ∅
	<b>No 45</b>	3/8" ∅ sizes 15; 17; 19; 21; 22; 24 mm
	<b>No 46</b>	3/8" ∅ sizes 15; 17; 19; 21 mm
	<b>No 427QR/3</b>	3/8" ■ ∅ 76 mm
	<b>No 427QR/10</b>	3/8" ■ ∅ 240 mm
	<b>No 428QR</b>	3/8" ■ ∅ 46 mm
	<b>No 431</b>	1/4" ■ 3/8" ∅
	<b>No 432M</b>	1/2" ■ 3/8" ∅
	<b>No 435QR N</b>	3/8" ■
	<b>No 443</b>	5/16" ∅ 3/8" ∅
	<b>No 453</b>	3/8" ■
	<b>No 4000</b>	
	<b>No 1163</b>	0.6 x 4.5 mm
	<b>No 104</b>	120 x 2; 120 x 3; 120 x 4; 120 x 5 mm
	<b>No 109</b>	sizes 2; 5
	<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 8.0 x 150 mm)
	<b>No 4632</b>	sizes 1; 2; 3
	<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 65 16 5 200</b>	
	<b>No 65 32 5 170</b>	
	<b>No 65 51 6 240</b>	
	<b>No 65 64 2 175</b>	
	<b>No 65 75 1 220</b>	
	<b>No 66 00 5 160</b>	
	<b>No 10956</b>	∅ 35 mm
	<b>No 10960</b>	500 g
	<b>No 11095/20</b>	0.05-1 mm
	<b>No 12053</b>	
	<b>No 12320</b>	
	<b>No 12321</b>	
	<b>No 12600</b>	270 g
	<b>No 12900</b>	
	<b>No 12921N</b>	∅ 50 mm
	<b>No 12922E</b>	∅ 6 mm
	<b>No 12931</b>	3 m
	<b>No 13126-1</b>	
	<b>No 8050</b>	size 6 (4x); size 12 (6x)
	<b>No 13216/4</b>	

# Factory and workshop equipment, sets of tools

## 13214 WT/LR Line maintenance set in tool trolley No 13217



for maintenance on aeroplanes and helicopters, 121 Tools. Tool Trolley No 13217 and accessories see pages 17, 18.



Code	⚖️ kg
<b>9881 4900</b>	26.5



**96 83 01 00**



**96 83 01 01**



**96 83 01 02**



**96 83 01 03**



**96 83 01 04**



**96 83 01 05**

<b>No 13</b>	sizes 5.5; 6; 7; 8; 9; 10; 12; 13; 14; 15; 17; 19; 20; 21; 22; 24; 27; 30 mm
<b>No 16</b>	sizes 3.2; 3.5; 4; 4.5; 5 mm
<b>No 25</b>	sizes 7 x 8; 9 x 10; 12 x 13; 17 x 19 mm
<b>No 40</b>	1/4"  sizes 4; 4.5 mm
<b>No 40D</b>	1/4"  sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm

<b>No 40L</b>	1/4"  sizes 4.5 mm
<b>No 40DL</b>	1/4"  sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
<b>No 402</b>	1/4"  sizes 6; 7; 8; 9; 10 mm
<b>No 405QR/2</b>	1/4"  sizes 54 mm
<b>No 405QR/6</b>	1/4"  sizes 150 mm
<b>No 407QR</b>	1/4"  sizes 38 mm
<b>No 409M</b>	3/8"  1/4"
<b>No 415QR N</b>	1/4"
<b>No 415SGB</b>	1/4"
<b>No 412</b>	1/4"
<b>No 45</b>	3/8"  sizes 15; 17; 19; 21; 22; 24 mm
<b>No 46</b>	3/8"  sizes 15; 17; 19; 21 mm
<b>No 427QR/3</b>	3/8"  sizes 76 mm
<b>No 427QR/10</b>	3/8"  sizes 240 mm
<b>No 428QR</b>	3/8"  sizes 46 mm
<b>No 431</b>	1/4"  3/8"
<b>No 432M</b>	1/2"  3/8"
<b>No 435QR N</b>	3/8"
<b>No 443</b>	5/16"  3/8"
<b>No 453</b>	3/8"
<b>No 4008-1</b>	
<b>No 104</b>	120 x 2; 120 x 3; 120 x 4; 120 x 5 mm
<b>No 109</b>	sizes 2; 5
<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 8.0 x 150 mm)
<b>No 4632</b>	sizes 1; 2; 3
<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
<b>No 65 16 5 200</b>	
<b>No 65 32 5 170</b>	
<b>No 65 51 6 240</b>	
<b>No 65 64 2 175</b>	
<b>No 65 75 1 220</b>	
<b>No 66 00 5 160</b>	
<b>No 10956</b>	∅ 35 mm
<b>No 10960</b>	500 g
<b>No 11095/20</b>	0.05-1 mm
<b>No 12053</b>	
<b>No 12320</b>	
<b>No 12321</b>	
<b>No 12600</b>	270 g
<b>No 12900</b>	
<b>No 12921M</b>	∅ 57 mm
<b>No 12922E</b>	∅ 6 mm
<b>No 12931</b>	3 m
<b>No 13126-2</b>	
<b>No 13217-1 LR</b>	



## 13214 WW Line maintenance set



for maintenance on aeroplanes and helicopters,  
121 Tools, in TCS inlays (Tool Control System see page 53-71),  
4x3/3 inlays for 4 drawers (No 98VA for 2 drawers),  
suitable for Workbench No 92KM G, Tool trolleys 90, 95, 95VA, 98VA;  
Magazine case No 920 and Wheely box No 922N.

Code	Δ kg
<b>97 83 08 03</b>	10.1



**96 83 08 88**



**96 83 22 06**



**96 83 22 07**



**96 83 22 08**

	<b>No 13</b>	sizes 5.5; 6; 7; 8; 9; 10; 12; 13; 14; 15; 17; 19; 20; 21; 22; 24; 27; 30 mm
	<b>No 16</b>	sizes 3.2; 3.5; 4; 4.5; 5 mm
	<b>No 25</b>	sizes 7 x 8; 9 x 10; 12 x 13; 17 x 19 mm
	<b>No 40</b>	1/4"  sizes 4; 4.5 mm
	<b>No 40D</b>	1/4"  sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 40L</b>	1/4"  size 4.5 mm
	<b>No 40DL</b>	1/4"  sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 402</b>	1/4"  sizes 6; 7; 8; 9; 10 mm
	<b>No 405QR/2</b>	1/4"  54 mm
	<b>No 405QR/6</b>	1/4"  150 mm
	<b>No 407QR</b>	1/4"  38 mm
	<b>No 409M</b>	3/8"  1/4"
	<b>No 415QR N</b>	1/4"
	<b>No 415SGB</b>	1/4"
	<b>No 412</b>	1/4"
	<b>No 45</b>	3/8"  sizes 15; 17; 19; 21; 22; 24 mm
	<b>No 46</b>	3/8"  sizes 15; 17; 19; 21 mm
	<b>No 427QR/3</b>	3/8"  76 mm
	<b>No 427QR/10</b>	3/8"  240 mm
	<b>No 428QR</b>	3/8"  46 mm
	<b>No 431</b>	1/4"  3/8"
	<b>No 432M</b>	1/2"  3/8"
	<b>No 435QR N</b>	3/8"
	<b>No 443</b>	5/16"  3/8"
	<b>No 453</b>	3/8"
	<b>No 4000</b>	

	<b>No 104</b>	120 x 2; 120 x 3; 120 x 4; 120 x 5 mm
	<b>No 109</b>	sizes 2; 5
	<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 8.0 x 150 mm)
	<b>No 4632</b>	sizes 1; 2; 3
	<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 65 16 5 200</b>	
	<b>No 65 32 5 170</b>	
	<b>No 65 51 6 240</b>	
	<b>No 65 64 2 175</b>	
	<b>No 65 75 1 220</b>	
	<b>No 66 00 5 160</b>	
	<b>No 10956</b>	∅ 35 mm
	<b>No 10960</b>	500 g
	<b>No 11095/20</b>	0.05-1 mm
	<b>No 12053</b>	
	<b>No 12320</b>	
	<b>No 12321</b>	
	<b>No 12600</b>	270 g
	<b>No 12900</b>	
	<b>No 12921N</b>	∅ 50 mm
	<b>No 12922E</b>	∅ 6 mm
	<b>No 12931</b>	3 m
	<b>No 13126-1</b>	



# Factory and workshop equipment, sets of tools

13214a

Line maintenance set in tool box  
No 13216/4



for maintenance on aeroplanes and helicopters, 123 Tools



Code	⚖️ kg
<b>98 81 48 01</b>	27.2



96 83 56 92



96 83 17 93



96 83 17 94



96 83 07 95



96 83 07 96

<b>No 13a</b>	sizes 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8"
<b>No 25a</b>	sizes 1/4 x 5/16; 5/16 x 11/32; 3/8 x 7/16; 1/2 x 9/16"
<b>No 40aD</b>	1/4" ○ sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
<b>No 40aDL</b>	1/4" ○ sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
<b>No 402a</b>	1/4" ○ sizes 1/4; 5/16; 3/8; 7/16; 1/2"
<b>No 405QR/2</b>	1/4" ■ ○ 54 mm
<b>No 405QR/6</b>	1/4" ■ ○ 150 mm
<b>No 407QR</b>	1/4" ■ ○ 38 mm
<b>No 409M</b>	3/8" ■ 1/4" ○
<b>No 415QR N</b>	1/4" ■
<b>No 415SGB</b>	1/4" ○
<b>No 412</b>	1/4" ○ ○

<b>No 45a</b>	3/8" ○ sizes 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 15/16; 1"
<b>No 46a</b>	3/8" ○ sizes 5/8; 11/16; 3/4; 7/8"
<b>No 427QR/3</b>	3/8" ■ ○ 76 mm
<b>No 427QR/10</b>	3/8" ■ ○ 240 mm
<b>No 428QR</b>	3/8" ■ ○ 46 mm
<b>No 431</b>	1/4" ■ 3/8" ○
<b>No 432M</b>	1/2" ■ 3/8" ○
<b>No 435QR N</b>	3/8" ■
<b>No 443</b>	5/16" ○ 3/8" ○
<b>No 453</b>	3/8" ■
<b>No 4000</b>	
<b>No 1163</b>	0.6 x 4.5 mm
<b>No 104</b>	120 x 2; 120 x 3; 120 x 4; 120 x 5 mm
<b>No 109</b>	sizes 2; 5
<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 8.0 x 150 mm)
<b>No 4632</b>	sizes 1; 2; 3
<b>No 10767a/13</b>	sizes 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8"
<b>No 65 16 5 200</b>	
<b>No 65 32 5 170</b>	
<b>No 65 51 6 240</b>	
<b>No 65 64 2 175</b>	
<b>No 65 75 1 220</b>	
<b>No 66 00 5 160</b>	
<b>No 10956</b>	∅ 35 mm
<b>No 10960</b>	500 g
<b>No 11095/20</b>	0.05-1 mm
<b>No 12053</b>	
<b>No 12320</b>	
<b>No 12321</b>	
<b>No 12600</b>	270 g
<b>No 12900</b>	
<b>No 12921N</b>	∅ 50 mm
<b>No 12922E</b>	∅ 6 mm
<b>No 12931</b>	3 m
<b>No 13126-1</b>	
<b>No 8050</b>	size 6 (4x); size 12 (6x)
<b>No 13216/4</b>	

**13214a**  
**WT/LR**

**Line maintenance set in tool trolley**  
**No 13217**



for maintenance  
on aeroplanes  
and helicopters,  
122 Tools.  
Tool Trolley  
No 13217 and  
accessories  
see pages 17, 18.



Code	
<b>98 81 49 05</b>	kg 28.2



**96 83 01 06**



**96 83 01 02**



**96 83 01 03**



**96 83 01 07**



**96 83 01 08**



**96 83 01 09**

	<b>No 13a</b>	sizes 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8"
	<b>No 25a</b>	sizes 1/4 x 5/16; 5/16 x 11/32; 3/8 x 7/16; 1/2 x 9/16"
	<b>No 40aD</b>	1/4"  sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
	<b>No 40aDL</b>	1/4"  sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"

	<b>No 402a</b>	1/4"  sizes 1/4; 5/16; 3/8; 7/16; 1/2"
	<b>No 405QR/2</b>	1/4"  54 mm
	<b>No 405QR/6</b>	1/4"  150 mm
	<b>No 407QR</b>	1/4"  38 mm
	<b>No 409M</b>	3/8"  1/4"
	<b>No 415QR N</b>	1/4"
	<b>No 415SGB</b>	1/4"
	<b>No 412</b>	1/4"
	<b>No 45a</b>	3/8"  sizes 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 15/16; 1"
	<b>No 46a</b>	3/8"  sizes 5/8; 11/16; 3/4; 7/8"
	<b>No 427QR/3</b>	3/8"  76 mm
	<b>No 427QR/10</b>	3/8"  240 mm
	<b>No 428QR</b>	3/8"  46 mm
	<b>No 431</b>	1/4"  3/8"
	<b>No 432M</b>	1/2"  3/8"
	<b>No 435QR N</b>	3/8"
	<b>No 443</b>	5/16"  3/8"
	<b>No 453</b>	3/8"
	<b>No 4008-1</b>	
	<b>No 104</b>	120 x 2; 120 x 3; 120 x 4; 120 x 5 mm
	<b>No 109</b>	sizes 2; 5
	<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 8.0 x 150 mm)
	<b>No 4632</b>	sizes 1; 2; 3
	<b>No 10767a/13</b>	sizes 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8"
	<b>No 65 16 5 200</b>	
	<b>No 65 32 5 170</b>	
	<b>No 65 51 6 240</b>	
	<b>No 65 64 2 175</b>	
	<b>No 65 75 1 220</b>	
	<b>No 66 00 5 160</b>	
	<b>No 10956</b>	∅ 35 mm
	<b>No 10960</b>	500 g
	<b>No 11095/20</b>	0.05-1 mm
	<b>No 12053</b>	
	<b>No 12320</b>	
	<b>No 12321</b>	
	<b>No 12600</b>	270 g
	<b>No 12900</b>	
	<b>No 12921M</b>	∅ 57 mm
	<b>No 12922E</b>	∅ 6 mm
	<b>No 12931</b>	3 m
	<b>No 13126-2</b>	
	<b>No 13217-1 LR</b>	



# Factory and workshop equipment, sets of tools

## 13214a WW Line maintenance set



for maintenance on aeroplanes and helicopters,  
122 Tools, in TCS inlays (Tool Control System see page 53-71),  
4x3/3 inlays for 4 drawers (No 98VA for 2 drawers), suitable for  
Workbench No 92KM G, Tool trolleys 90, 95, 95VA, 98VA,  
Magazine case No 920 and Wheely box No 922N.

Code	kg
97830802	11.5



96 83 08 85



96 83 08 86



96 83 08 87



96 83 08 88

	<b>No 13a</b>	sizes 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8"
	<b>No 25a</b>	sizes 1/4 x 5/16; 5/16 x 11/32; 3/8 x 7/16; 1/2 x 9/16"
	<b>No 40aD</b>	1/4"  sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
	<b>No 40aDL</b>	1/4"  sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
	<b>No 402a</b>	1/4"  sizes 1/4; 5/16; 3/8; 7/16; 1/2"
	<b>No 405QR/2</b>	1/4"  54 mm
	<b>No 405QR/6</b>	1/4"  150 mm
	<b>No 407QR</b>	1/4"  38 mm
	<b>No 409M</b>	3/8"  1/4"
	<b>No 415QR N</b>	1/4"
	<b>No 415SGB</b>	1/4"
	<b>No 412</b>	1/4"
	<b>No 45a</b>	3/8"  sizes 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 15/16; 1"
	<b>No 46a</b>	3/8"  sizes 5/8; 11/16; 3/4; 7/8"
	<b>No 427QR/3</b>	3/8"  76 mm
	<b>No 427QR/10</b>	3/8"  240 mm
	<b>No 428QR</b>	3/8"  46 mm
	<b>No 431</b>	1/4"  3/8"
	<b>No 432M</b>	1/2"  3/8"
	<b>No 435QR N</b>	3/8"
	<b>No 443</b>	5/16"  3/8"
	<b>No 453</b>	3/8"
	<b>No 4000</b>	
	<b>No 104</b>	120 x 2; 120 x 3; 120 x 4; 120 x 5 mm

	<b>No 109</b>	sizes 2; 5
	<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 8.0 x 150 mm)
	<b>No 4632</b>	sizes 1; 2; 3
	<b>No 10767a/13</b>	sizes 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8"
	<b>No 65 16 5 200</b>	
	<b>No 65 32 5 170</b>	
	<b>No 65 51 6 240</b>	
	<b>No 65 64 2 175</b>	
	<b>No 65 75 1 220</b>	
	<b>No 66 00 5 160</b>	
	<b>No 10956</b>	∅ 35 mm
	<b>No 10960</b>	500 g
	<b>No 11095/20</b>	0.05-1 mm
	<b>No 12053</b>	
	<b>No 12320</b>	
	<b>No 12321</b>	
	<b>No 12600</b>	270 g
	<b>No 12900</b>	
	<b>No 12921N</b>	∅ 50 mm
	<b>No 12922E</b>	∅ 6 mm
	<b>No 12931</b>	3 m
	<b>No 13126-1</b>	



The STAHLWILLE **Tool trolley 95VA** is equipped with a three-stage safety concept - for maximum safety in the respective application.

→ 10

## 13221 WT/TS AOG-Kit for aeroplanes in tool trolley No 13217



163 Tools, in TCS inlays (Tool Control System see page 53). Tool Trolley No 13217 and accessories see pages 17, 18.



Code	kg
<b>98 81 49 15</b>	28.6



**96 83 01 33**



**96 83 01 34**



**96 83 01 35**



**96 83 01 36**



**96 83 01 37**



**96 83 01 38**



**96 83 01 39**



**96 83 01 40**

<b>No 10</b>	sizes 4 x 5; 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 27 x 32 mm
<b>No 13a</b>	sizes 3/8; 7/16; 1/2; 9/16; 5/8; 11/16"
<b>No 17</b>	sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm
<b>No 23</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22 mm















<b>No 40D</b>	1/4"  sizes 5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
<b>No 40DL</b> <b>No 40aDL</b>	1/4"  sizes 5; 6; 7; 8; 10; 11; 12; 13 mm 1/4"  sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
<b>No 405QR/2</b>	1/4"  54 mm
<b>No 405QR/6</b>	1/4"  150 mm
<b>No 407QR</b>	1/4"  45 mm
<b>No 409</b>	3/8"  1/4"
<b>No 412</b>	1/4"
<b>No 415QR N</b>	1/4"
<b>No 415B</b>	1/4"
<b>No 45</b>	3/8"  sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm
<b>No 45a</b>	3/8"  sizes 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 15/16; 1"
<b>No 427QR/3</b>	3/8"  76 mm
<b>No 427QR/6</b>	3/8"  160 mm
<b>No 428QR</b>	3/8"  46 mm
<b>No 431</b>	1/4"  3/8"
<b>No 435QR N</b>	3/8"
<b>No 3115</b>	1/4"
<b>No 13010</b>	sizes 4; 5; 6; 8; 10
<b>No 4008-1</b>	
<b>No 4622SK</b>	size 1 (0.8 x 4.0 x 90 mm) size 3 (1.2 x 6.5 x 125 mm)
<b>No 4632SK</b>	sizes 1; 2; 3
<b>No 4636</b>	No 4; 8
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
<b>No 4744</b>	size 1
<b>No 4751</b>	size 4 (0.3 x 1.5 mm) size 6 (0.4 x 2.0 mm) size 7 (0.4 x 2.5 mm) size 8 (0.5 x 3.0 mm)
<b>No 4752</b>	size 0; 1
<b>No 10767H/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
<b>No 10767a/8</b>	sizes 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4; 5/16"
<b>No 65 01 5 180</b>	
<b>No 65 18 5 130</b>	
<b>No 65 35 5 200</b>	
<b>No 65 51 5 240</b>	
<b>No 65 71 2 165</b>	
<b>No 65 75 1 220</b>	
<b>No 65 76 5 231</b>	
<b>No 66 07 6 110</b>	
<b>No 90432513</b>	
<b>No 105</b>	120 x 10 mm
<b>No 108</b>	150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6 mm
<b>No 10956</b>	∅ 27 mm
<b>No 10960</b>	300 g

Continuation see next page



# Factory and workshop equipment, sets of tools

1

	<b>No 11095/20</b>	0.05-1 mm
	<b>No 12320</b>	
	<b>No 12321</b>	
	<b>No 12375</b>	
	<b>No 12600</b>	270 g
	<b>No 12800</b>	
	<b>No 12900N</b>	
	<b>No 12921M</b>	∅ 57 mm
	<b>No 12922E</b>	∅ 6 mm
	<b>No 12931</b>	3 m
	<b>No 13110</b>	300 mm
	<b>No 13128</b>	
	<b>No 13130</b>	
	<b>No 13217-3 TS</b>	

## 13224a WT/TS AOG-Kit for aeroplanes in tool trolley No 13217



154 Tools, in TCS inlays (Tool Control System see page 53).  
Tool Trolley No 13217 and accessories see pages 17, 18.



Code		kg
<b>9881 49 10</b>		28.4



**96 83 01 10**



**96 83 01 11**



**96 83 01 12**



**96 83 01 13**































**96 83 01 14**



**96 83 01 15**



**96 83 01 16**

	<b>No 12a</b>	sizes 5/32; 7/32; 1/4"
	<b>No 13a</b>	sizes 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8"
	<b>No 25a</b>	sizes 1/4 x 5/16; 5/16 x 11/32; 3/8 x 7/16; 1/2 x 9/16"
	<b>No 40aD</b>	1/4" ∅ sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
	<b>No 40aDL</b>	1/4" ∅ sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
	<b>No 402a</b>	1/4" ∅ sizes 1/4; 5/16; 3/8; 7/16; 1/2"
	<b>No 402aK</b>	1/4" ∅ size 9/16"
	<b>No 405W/2</b>	1/4" ■ ∅ 54 mm
	<b>No 405QR/2</b>	1/4" ■ ∅ 54 mm
	<b>No 405QR/6</b>	1/4" ■ ∅ 150 mm
	<b>No 407QR</b>	1/4" ■ ∅ 45 mm
	<b>No 409M</b>	3/8" ■ 1/4" ∅
	<b>No 412</b>	1/4" ∅ ∅
	<b>No 415QR</b>	1/4" ■
	<b>No 415B</b>	1/4" ∅
	<b>No 45a</b>	3/8" ∅ sizes 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 15/16; 1"
	<b>No 46a</b>	3/8" ∅ sizes 5/8; 11/16; 3/4; 7/8"
	<b>No 427W/3</b>	1/4" ■ ∅ 76 mm
	<b>No 427QR/3</b>	3/8" ■ ∅ 76 mm
	<b>No 427QR/10</b>	3/8" ■ ∅ 240 mm
	<b>No 428QR</b>	3/8" ■ ∅ 46 mm
	<b>No 431</b>	1/4" ■ 3/8" ∅
	<b>No 432M</b>	1/2" ■ 3/8" ∅
	<b>No 435QR N</b>	3/8" ■
	<b>No 443</b>	5/16" ∅ 3/8" ∅
	<b>No 453</b>	3/8" ■
	<b>No 1204/21-1</b>	4 x ⊕; 4 x ⊕; 9 x ⊕; 3 x ⊕
	<b>No 4000</b>	
	<b>No 4622SK</b>	size 1 (0.8 x 4.0 x 90 mm) size 3 (1.2 x 6.5 x 125 mm)
	<b>No 4632SK</b>	sizes 1; 2; 3
	<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
	<b>No 4734</b>	size 2

	<b>No 10767a/13</b>	sizes 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8"
	<b>No 65 16 5 200</b>	
	<b>No 65 32 5 170</b>	
	<b>No 65 64 2 175</b>	
	<b>No 65 72 6 240</b>	
	<b>No 65 75 1 220</b>	
	<b>No 65 76 5 231</b>	
	<b>No 66 00 5 160</b>	
	<b>No 104</b>	120 x 2; 120 x 3; 120 x 4; 120 x 5 mm
	<b>No 109</b>	sizes 2; 5
	<b>No 10956</b>	∅ 27 mm
	<b>No 10960</b>	300 g

	<b>No 11095/20</b>	0.05-1 mm
	<b>No 12053</b>	
	<b>No 12320</b>	
	<b>No 12321</b>	
	<b>No 12600</b>	270 g
	<b>No 12800</b>	
	<b>No 12900N</b>	
	<b>No 12921M</b>	∅ 57 mm
	<b>No 12922E</b>	∅ 6 mm
	<b>No 12931</b>	3 m
	<b>No 13110</b>	300 mm
	<b>No 13126-1</b>	
	<b>No 13217-2 TS</b>	





### The modular tool tray system. **Standard – the perfectly organised workshop.**

Tool trays from STAHLWILLE ensure perfect tool management within the Tool Trolley or Tool Box. All the tools are neatly arranged and instantly at hand, and always securely held in the same place. The Tool Trolley or Tool Box can be equipped as required with 1/6, 1/3, 2/3 or 3/3 inlays.

Wherever large numbers of tools are in constant use and rapid, unhindered access is paramount, the inlays in this tried-and-tested modular STAHLWILLE system provide the security and efficiency required for smooth workflows and reliable quality. The drawers of the Tool Trolleys can be optimally used if a number of spare inlays are kept in store to enable the perfect “for task” combination of tools. In addition, these inlays are made of skydrol resistant and permanently oil resistant engineering plastic and the sculpted cut-outs protect your high-grade, expensive tools.



The perfectly organised workshop



## Tool sets in plastic inlays for Workbench No 92KM G, Tool trolleys No 90, 95, 95VA, 98VA; Magazine case No 920 and Wheely box No 922N (Modular system)

### 806/10 Tool set

99 Tools, in plastic inlays (modular system see page 42-52), 9x1/3 and 1x3/3 inlays for 4 drawers (No 98VA for 2 drawers), suitable for Workbench No 92KM G, Tool trolleys No 90, 95, 95VA, 98VA, Magazine case No 920 and Wheely box No 922N.

Code	kg
<b>98 83 0001</b>	13.35



96 83 81 26



96 83 81 27



96 83 81 28



96 83 81 10



96 83 81 12



96 83 81 13



96 83 82 37



96 83 81 21



96 83 81 23



96 83 81 25

<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm
<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24 mm
<b>No 40</b>	1/4"  sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm

<b>No 400</b>	1/4"  150 mm
<b>No 404</b>	1/4"  116 mm
<b>No 405/2</b>	1/4"  54 mm
<b>No 405/6</b>	1/4"  150 mm
<b>No 407</b>	1/4"  38 mm
<b>No 412</b>	1/4"
<b>No 415</b>	1/4"
<b>No 10760CV</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10; 12 mm
<b>No 52</b>	1/2"  sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm
<b>No 506</b>	1/2"  300 mm
<b>No 509/2</b>	1/2"  52 mm
<b>No 509/5</b>	1/2"  130 mm
<b>No 509/10</b>	1/2"  255 mm
<b>No 510</b>	1/2"  71 mm
<b>No 512</b>	1/2"
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm)
<b>No 4630</b>	sizes 1; 2; 3
<b>No 65 01 5 180</b>	
<b>No 65 29 5 200</b>	
<b>No 65 43 4 002</b>	
<b>No 65 45 4 002</b>	
<b>No 65 51 6 240</b>	
<b>No 65 64 2 250</b>	
<b>No 66 02 5 160</b>	
<b>No 102</b>	175 mm
<b>No 108</b>	150 x 6; 175 x 6 mm
<b>No 109</b>	size 6; 100 x 3.4 mm
<b>No 10956</b>	∅ 35 mm
<b>No 10960</b>	500 g

Made in Germany

# Factory and workshop equipment, sets of tools

## 808/9 Tool set

102 Tools, in plastic inlays (modular system see page 42-52), 9x1/3 and 1x3/3 inlays for 4 drawers (No 98VA for 2 drawers), suitable for Workbench No 92KM G, Tool trolleys No 90, 95, 95VA, 98VA; Magazine case No 920 and Wheely box No 922N.

Code	kg
98 83 00 02	11.7



96 83 81 30



96 83 81 05



96 83 81 06



96 83 81 10



96 83 81 11



96 83 82 38



96 83 81 32



96 83 81 24

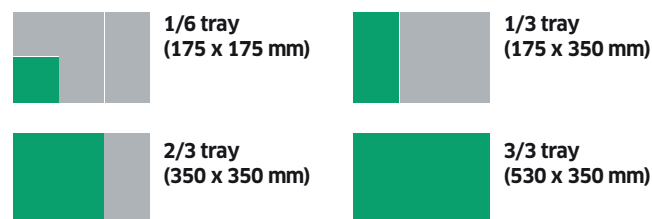


96 83 81 31

	No 10	sizes 5.5 x 7; 8 x 10; 10 x 12; 11 x 13; 12 x 14; 14 x 17; 17 x 19; 18 x 21; 19 x 22; 22 x 24 mm
	No 14	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24 mm
	No 40	1/4" $\varnothing$ sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	No 400	1/4" ■ 150 mm
	No 404	1/4" ■ 116 mm
	No 405/2	1/4" ■ $\varnothing$ 54 mm
	No 405/6	1/4" ■ $\varnothing$ 150 mm
	No 407	1/4" ■ $\varnothing$ 38 mm
	No 412	1/4" $\varnothing$ $\varnothing$
	No 415	1/4" ■
	No 10760CV	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10; 12 mm
	No 456	3/8" $\varnothing$ sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm

	No 425	3/8" ■ 165 mm
	No 427/3	3/8" ■ $\varnothing$ 76 mm
	No 427/6	3/8" ■ $\varnothing$ 160 mm
	No 427/10	3/8" ■ $\varnothing$ 240 mm
	No 428	3/8" ■ $\varnothing$ 46 mm
	No 435	3/8" ■
	No 4620	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm)
	No 4622	size 1 (1.0 x 5.5 x 100 mm) size 2 (1.2 x 6.5 x 125 mm) size 3 (1.2 x 8.0 x 150 mm)
	No 4632	sizes 1; 2; 3
	No 65 01 5 200	
	No 65 29 5 160	
	No 65 43 4 002	
	No 65 45 4 002	
	No 65 51 6 240	
	No 65 64 2 250	
	No 66 02 5 160	
	No 102	175 mm
	No 105	120 x 12 mm
	No 108	150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
	No 10956	$\varnothing$ 35 mm
	No 10970	1 lb.

## The modular tool tray system





### ES 10/10, 5.5x7-22x24 mm



175 x 350 x 60 mm, 10 pieces

Code	g
<b>96 83 81 30</b>	1100
<b>No 10</b>	sizes 5.5 x 7; 8 x 10; 10 x 12; 11 x 13; 12 x 14; 14 x 17; 17 x 19; 18 x 21; 19 x 22; 22 x 24 mm
<b>83 81 20 33</b> Empty tray	106

### ES 13/5, 27-32 mm



530 x 350 x 30 mm, 5 pieces

Code	g
<b>96 83 81 04</b>	2280
<b>No 13</b>	sizes 27; 28; 29; 30; 32 mm
<b>83 81 20 40</b> Empty tray	287

### ES 10/10, 6x7-30x32 mm



175 x 350 x 70 mm, 10 pieces

Code	g
<b>96 83 81 26</b>	1515
<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm
<b>83 81 20 22</b> Empty tray	112

### ES 14/10, 6-15 mm



175 x 350 x 39 mm, 10 pieces

Code	g
<b>96 83 81 05</b>	700
<b>No 14</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15 mm
<b>83 81 20 34</b> Empty tray	110

### ES 13/10, 6-15 mm



175 x 350 x 40 mm, 10 pieces

Code	g
<b>96 83 81 27</b>	525
<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15 mm
<b>83 81 20 23</b> Empty tray	105

### ES 14/8, 16-24 mm



175 x 350 x 51 mm, 8 pieces

Code	g
<b>96 83 81 06</b>	1820
<b>No 14</b>	sizes 16; 17; 18; 19; 20; 21; 22; 24 mm
<b>83 81 20 35</b> Empty tray	112

### ES 13/8, 16-24 mm



175 x 350 x 54 mm, 8 pieces

Code	g
<b>96 83 81 28</b>	1440
<b>No 13</b>	sizes 16; 17; 18; 19; 20; 21; 22; 24 mm
<b>83 81 20 24</b> Empty tray	112

### ES 20/8, 6x7-19x22 mm



175 x 350 x 30 mm, 8 pieces

Code	g
<b>96 83 81 67</b>	1266
<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22 mm
<b>83 81 20 83</b> Empty tray	103

# Factory and workshop equipment, sets of tools

1

## ES 20/10, 6x7-30x32 mm



530 x 350 x 44 mm, 10 pieces

Code	△ g
<b>96838107</b>	2620

<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm
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<b>83812044</b> Empty tray	309
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## ES 24/7, 8x10-19x22 mm



175 x 350 x 30 mm, 7 pieces

Code	△ g
<b>96838171</b>	835

<b>No 24</b>	sizes 8 x 10; 10 x 11; 11 x 13; 12 x 14; 14 x 17; 17 x 19; 19 x 22 mm
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<b>83812086</b> Empty tray	103
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## ES 25/7, 7x8-17x19 mm



175 x 350 x 30 mm, 7 pieces

Code	△ g
<b>96838108</b>	1040

<b>No 25</b>	sizes 7 x 8; 9 x 10; 10 x 11; 12 x 13; 14 x 15; 16 x 18; 17 x 19 mm
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<b>83812038</b> Empty tray	111
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## ES 29/6, 8x9-18x19 mm



175 x 350 x 30 mm, 6 pieces

Code	△ g
<b>96838109</b>	1185

<b>No 29</b>	sizes 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19 mm
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<b>83812041</b> Empty tray	105
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## ES 10750/10, 6x7-20x22 mm



175 x 350 x 30 mm, 10 pieces

Code	△ g
<b>96838168</b>	1132

<b>No 10750</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22 mm
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<b>No 10750 1/2</b>	sizes 6; 7
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<b>83812084</b> Empty tray	103
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## ES TX/32



175 x 350 x 40 mm, 32 pieces

Code	△ g
<b>96838166</b>	931

<b>No 21TX</b>	sizes E6 x E8; E10 x E12; E14 x E18; E20 x E24
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<b>No 45TX</b>	3/8" ○ sizes E8; E10; E12; E14
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<b>No 50TX</b>	1/2" ○ sizes E16; E18; E20
----------------	----------------------------

<b>No 412</b>	1/4" ○ ○
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<b>No 442</b>	1/4" ○ 3/8" ○
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<b>No 543</b>	5/16" ○ 1/2" ○
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<b>No 1440</b>	size T10
<b>No 1441</b>	size T15
<b>No 1442</b>	size T20
<b>No 1443</b>	size T25
<b>No 1444</b>	size T27
<b>No 1445</b>	size T30

<b>No 1432</b>	size T40
<b>No 1433</b>	size T45
<b>No 1434</b>	size T50

<b>No 10766/9</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30; T40
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<b>83812082</b> Empty tray	103
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### ES 1/4" + 10760CV



175 x 350 x 41 mm, 27 pieces

Code		Δ	g
<b>96838110</b>		1035	
<b>No 40</b>	1/4" ○ sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm		
<b>No 400</b>	1/4" ■ 150 mm		
<b>No 404</b>	1/4" ■ 116 mm		
<b>No 405/2</b>	1/4" ■ ○ 54 mm		
<b>No 405/6</b>	1/4" ■ ○ 150 mm		
<b>No 407</b>	1/4" ■ ○ 38 mm		
<b>No 412</b>	1/4" ○ ○		
<b>No 415</b>	1/4" ■		
<b>No 10760CV</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10; 12 mm		
<b>83812028</b>	Empty tray	107	

### ES 456/16/6



175 x 350 x 40 mm, 22 pieces

Code		Δ	g
<b>96838111</b>		1555	
<b>No 456</b>	3/8" ○ sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm		
<b>No 425</b>	3/8" ■ 165 mm		
<b>No 427/3</b>	3/8" ■ ○ 76 mm		
<b>No 427/6</b>	3/8" ■ ○ 160 mm		
<b>No 427/10</b>	3/8" ■ ○ 240 mm		
<b>No 428</b>	3/8" ■ ○ 46 mm		
<b>No 435</b>	3/8" ■		
<b>83812032</b>	Empty tray	103	

### ES 52/17



175 x 350 x 47 mm, 17 pieces

Code		Δ	g
<b>96838112</b>		1760	
<b>No 52</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm		
<b>83812030</b>	Empty tray	107	

### ES 1/2" - 512/6



175 x 350 x 35 mm, 6 pieces

Code		Δ	g
<b>96838113</b>		1915	
<b>No 506</b>	1/2" ■ 300 mm		
<b>No 509/2</b>	1/2" ■ ○ 52 mm		
<b>No 509/5</b>	1/2" ■ ○ 130 mm		
<b>No 509/10</b>	1/2" ■ ○ 255 mm		
<b>No 510</b>	1/2" ■ ○ 71 mm		
<b>No 512</b>	1/2" ■		
<b>83812029</b>	Empty tray	110	

### ES 54/54KK



175 x 350 x 38 mm, 14 pieces

Code		Δ	g
<b>96838114</b>		1630	
<b>No 54</b>	1/2" ○ sizes 4; 5; 6; 7; 8; 10; 12; 14; 17; 19 mm		
<b>No 54KK</b>	1/2" ○ sizes 5; 6; 8; 10 mm		
<b>83812046</b>	Empty tray	108	

### ES 54KK/5



175 x 175 x 30 mm, 5 pieces

Code		Δ	g
<b>96838165</b>		505	
<b>No 54KK</b>	1/2" ○ sizes 5; 6; 7; 8; 10 mm		
<b>83812051</b>	Empty tray	55	

# Factory and workshop equipment, sets of tools

1

## ES 1054/2054



175 x 175 x 30 mm, 6 pieces

Code	⚠ g	
<b>96838164</b>	900	
<b>No 1054</b>	1/2" ⚪ sizes 8; 10; 12 mm	
<b>No 2054</b>	1/2" ⚪ sizes 5; 6; 14 mm	
<b>83812081</b> Empty tray	55	

## ES 54X/54TX



175 x 350 x 38 mm, 16 pieces

Code	⚠ g	
<b>96838115</b>	1600	
<b>No 54X</b>	1/2" ⚪ sizes M5; M6; M8; M10; M12; M14; M16	
<b>No 54TX</b>	1/2" ⚪ sizes T20; T25; T27; T30; T40; T45; T50; T55; T60	
<b>83812045</b> Empty tray	111	

## ES 1054/2054TX/6



175 x 175 x 30 mm, 6 pieces

Code	⚠ g	
<b>96838163</b>	950	
<b>No 1054TX</b>	1/2" ⚪ sizes T30; T50; T55; T60	
<b>No 2054TX</b>	1/2" ⚪ sizes T40; T45	
<b>83812081</b> Empty tray	55	

## ES 55/6/4



530 x 350 x 83 mm, 10 pieces

Code	⚠ g	
<b>96838174</b>	7875	
<b>No 55</b>	3/4" ⚪ sizes 34; 36; 41; 46; 50; 55 mm	
<b>No 552</b>	3/4" ■	
<b>No 556</b>	3/4" ■	
<b>No 558</b>	510 mm	
<b>No 559/8</b>	3/4" ■ ⚪ 200 mm	
<b>83812089</b> Empty tray	298	

## ES 2309/4



175 x 175 x 40 mm, 4 pieces

Code	⚠ g	
<b>96838162</b>	1145	
<b>No 2309</b>	1/2" ⚪ sizes 17; 19; 20.8 mm-13/16"; 22 mm	
<b>83812080</b> Empty tray	55	

## ES 2309K/3



175 x 175 x 40 mm, 3 pieces

Code	⚠ g	
<b>96838260</b>	800	
<b>No 2309K</b>	1/2" ⚪ sizes 17; 19; 20.8 mm-13/16"	
<b>83812080</b> Empty tray	55	

## STAHLWILLE »AS-Drive«



STAHLWILLE sockets are equipped with the AS Drive\* profile: this permits high transmission of forces to the lands of nuts and bolts without damaging them. No longer will you have to worry about stripping the corners off nuts and bolts.

\*Anti-Slip-Drive



### ES 721/15/3/2



530 x 350 x 40 mm, 6 pieces

Code		g
<b>96 83 81 72</b>		5012
<b>No 2309K</b>	1/2" $\square$ sizes 17; 19; 20.8 mm-13/16"	
<b>No 721/15</b>	30-150 N·m	
<b>No 35c cars</b>	17; 19; 22; $\blacksquare$ 1/2"	
<b>No 10599/2</b>	245 mm	
<b>83 81 20 87</b>	Empty tray	299

### ES 4620/4628/4630/7



175 x 350 x 39 mm, 7 pieces

Code		g
<b>96 83 82 36</b>		530
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm)	
<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)	
<b>No 4630</b>	sizes 1; 2	
<b>83 81 21 01</b>	Empty tray	98

### ES 4620/4630/8



175 x 350 x 39 mm, 8 pieces

Code		g
<b>96 83 82 37</b>		770
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm)	
<b>No 4630</b>	sizes 1; 2; 3	
<b>83 81 21 02</b>	Empty tray	111

### ES 4620/4622/4632/8



175 x 350 x 39 mm, 8 pieces

Code		g
<b>96 83 82 38</b>		770
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm)	
<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 2 (1.2 x 6.5 x 125 mm) size 3 (1.2 x 8.0 x 150 mm)	
<b>No 4632</b>	size 1; 2; 3	
<b>83 81 21 02</b>	Empty tray	111

### ES 4622-4734/9



175 x 350 x 39 mm, 9 pieces

Code		g
<b>96 83 82 34</b>		865
<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 2 (1.2 x 6.5 x 125 mm) size 3 (1.2 x 8.0 x 150 mm) size 4 (1.6 x 10.0 x 175 mm)	
<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)	
<b>No 4632</b>	sizes 1; 2	
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)	
<b>No 4734</b>	size 2	
<b>83 81 21 03</b>	Empty tray	100

### ES 4622SK/4632SK/6



175 x 350 x 39 mm, 6 pieces

Code		g
<b>96 83 82 19</b>		770
<b>No 4622SK</b>	size 1 (0.8 x 4.0 x 90 mm) size 2 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 6.5 x 125 mm) size 4 (1.2 x 8.0 x 150 mm)	
<b>No 4632SK</b>	sizes 1; 2	
<b>83 81 21 06</b>	Empty tray	111



# Factory and workshop equipment, sets of tools

1

## ES 4650/9



175 x 350 x 39 mm, 9 pieces

Code	g
<b>96838217</b>	645
<b>No 4650</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30; T40
<b>83812104</b> Empty tray	100

## ES 4656/9



175 x 350 x 39 mm, 9 pieces

Code	g
<b>96838218</b>	645
<b>No 4656</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30; T40
<b>83812104</b> Empty tray	100

## ES 4660/4665 VDE/6



175 x 350 x 39 mm, 6 pieces

Code	g
<b>96838235</b>	525
<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm) size 3 (0.6 x 3.5 x 100 mm) size 5 (1.0 x 5.5 x 125 mm) size 6 (1.2 x 6.5 x 150 mm)
<b>No 4665 VDE</b>	sizes 1; 2
<b>83812105</b> Empty tray	99

## ES 4820/4830/6



175 x 350 x 33 mm, 6 pieces

Code	g
<b>96838134</b>	480
<b>No 4820</b>	0.6 x 3.5 x 75 mm 0.8 x 4.0 x 100 mm 1.0 x 5.5 x 125 mm 1.2 x 6.5 x 150 mm
<b>No 4830</b>	sizes 1; 2
<b>83812066</b> Empty tray	111

## ES 4820/4830/8



175 x 350 x 30 mm, 8 pieces

Code	g
<b>96838135</b>	735
<b>No 4820</b>	0.6 x 3.5 x 75 mm 0.8 x 4.0 x 100 mm 1.0 x 5.5 x 125 mm 1.2 x 6.5 x 150 mm 1.6 x 8.0 x 175 mm
<b>No 4830</b>	sizes 1; 2; 3
<b>83812068</b> Empty tray	110

## ES 4856/9



175 x 350 x 30 mm, 9 pieces

Code	g
<b>96838136</b>	705
<b>No 4856</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30; T40
<b>83812067</b> Empty tray	110

## ES 12500N/7



175 x 350 x 39 mm, 7 pieces

Code	g
<b>96838200</b>	1060
<b>No 12500N</b>	sizes 7; 8; 9; 10; 11; 12; 13 mm
<b>83813085</b> Empty tray	99

## ES 10768/6



350 x 350 x 37 mm, 6 pieces

Code	g
<b>96838119</b>	780
<b>No 10768</b>	sizes 3; 4; 5; 6; 8; 10 mm
<b>83812042</b> Empty tray	209

### ES 10769/7



175 x 350 x 35 mm, 7 pieces

Code	Δ∇ g
<b>96 83 81 20</b>	450

<b>No 10769</b>	sizes T10; T15; T20; T25; T27; T30; T40
<b>83 81 20 43</b>	Empty tray 116

### ES 10769B/7



175 x 350 x 35 mm, 7 pieces

Code	Δ∇ g
<b>96 83 81 29</b>	430

<b>No 10769B</b>	sizes T10; T15; T20; T25; T27; T30; T40
<b>83 81 20 43</b>	Empty tray 116

### ES 6501-6602/7A



530 x 350 x 40 mm, 7 pieces

Code	Δ∇ g
<b>96 83 81 21</b>	2085

<b>No 65 01 5 180</b>	
<b>No 65 29 5 200</b>	
<b>No 65 43 4 002</b>	
<b>No 65 45 4 002</b>	
<b>No 65 51 6 240</b>	
<b>No 65 64 2 250</b>	
<b>No 66 02 5 160</b>	
<b>83 81 20 21</b>	Empty tray 307

### ES 6501-6602/7B



530 x 350 x 40 mm, 7 pieces

Code	Δ∇ g
<b>96 83 81 32</b>	2055

<b>No 65 01 5 200</b>	
<b>No 65 29 5 160</b>	
<b>No 65 43 4 002</b>	
<b>No 65 45 4 002</b>	
<b>No 65 51 6 240</b>	
<b>No 65 64 2 250</b>	
<b>No 66 02 5 160</b>	
<b>83 81 20 21</b>	Empty tray 307

### ES 6543-6546/4



175 x 350 x 30 mm, 4 pieces

Code	Δ∇ g
<b>96 83 81 22</b>	700

<b>No 65 43 4 002</b>	
<b>No 65 44 4 021</b>	
<b>No 65 45 4 002</b>	
<b>No 65 46 4 021</b>	
<b>83 81 20 37</b>	Empty tray 109

### ES 102/108/109/4



175 x 350 x 30 mm, 4 pieces

Code	Δ∇ g
<b>96 83 81 23</b>	555

<b>No 102</b>	175 mm
<b>No 108</b>	150 x 6; 175 x 6 mm
<b>No 109</b>	size 6; 100 x 3.4 mm
<b>83 81 20 27</b>	Empty tray 115

# Factory and workshop equipment, sets of tools

1

## ES 102/105/108/8



175 x 350 x 33 mm, 8 pieces

Code	g
<b>96838124</b>	900
<b>No 102</b>	175 mm
<b>No 105</b>	120 x 12 mm
<b>No 108</b>	150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
<b>83812036</b> Empty tray	114

## ES 10670-13110/11



530 x 350 x 35 mm, 11 pieces

Code	g
<b>96838173</b>	2120
<b>No 10670</b>	265 mm
<b>No 12025</b>	210 mm
<b>No 12030</b>	260 mm
<b>No 12035</b>	210 mm
<b>No 12036</b>	260 mm
<b>No 12050</b>	465 mm
<b>No 12320</b>	
<b>No 12321</b>	
<b>No 12377</b>	
<b>No 12931</b>	3 m
<b>No 13110</b>	300 mm
<b>83812088</b> Empty tray	301

## ES 10956/10960/2



175 x 350 x 45 mm, 2 pieces

Code	g
<b>96838125</b>	1130
<b>No 10956</b>	∅ 35 mm
<b>No 10960</b>	500 g
<b>83812025</b> Empty tray	114

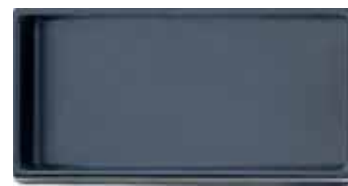
## ES 10956/10970/2



175 x 350 x 45 mm, 2 pieces

Code	g
<b>96838131</b>	1075
<b>No 10956</b>	∅ 35 mm
<b>No 10970</b>	1 lb.
<b>83812025</b> Empty tray	114

## Empty inlay



175 x 350 x 30 mm

Code	g
<b>83812047</b>	110

## Empty inlay



175 x 175 x 28 mm

Code	g
<b>83812080</b>	55

## The modular tool tray system



**1/6 tray**  
(175 x 175 mm)



**1/3 tray**  
(175 x 350 mm)



**2/3 tray**  
(350 x 350 mm)



**3/3 tray**  
(530 x 350 mm)



# The modular tool tray system.

## Tool Control System – built-in safety.

1



Initially, the TCS Tool Control System was developed by STAHLWILLE in conjunction with British Aerospace for the aerospace industry with a view to improving safety. Today, the system is appreciated by employees in the automotive industry and other fields of industry and the trades for its convincing benefits. The system guarantees a high level of organisation and security, protects high-grade, expensive tools from damage and is ideal wherever large numbers of tools are prone to “disappear” – in other words, a real value-for-money investment that will soon pay for itself.



### The advantages at a glance:

- With our Tool Control System, the tools are arranged in chemical-resistant special foam inlays with milled three-dimensional cut-outs.
- The signal colour is yellow. A glance is enough to see whether all tools are in their correct places: if you can see yellow, there is something missing.



**1** The milled cut-outs for each tool are individually shaped using computer technology to provide each tool with a secure place. Easy to remove thanks to additional recesses.

**2** The milled cut-outs enable you to see at a glance where each tool goes. Saves time and money.

**3** The inlays are chemical-resistant and extremely flexible.

**4** Two-layer, two-colour plastic inlays: the upper half is black and the lower layer is yellow.

1

## Tool sets in TCS inlays for Workbench No 92KM G, Tool trolleys No 90, 95, 95VA, 98VA; Magazine case No 920 and Wheely box No 922N

### 806/9 TCS TCS tool set



98 Tools, in TCS inlays (Tool Control System see page 53-71), 7x1/3, 1x2/3 and 1x3/3 inlays for 4 drawers (No 98VA for 2 drawers), suitable for Workbench No 92KM G, Tool trolleys No 90, 95, 95VA, 98VA; Magazine case No 920 and Wheely box No 922N.

Code	kg
<b>98 83 00 04</b>	12.53



96 83 81 75



96 83 81 76



96 83 81 77



96 83 82 78



96 83 81 79



96 83 81 80



96 83 81 81



96 83 81 82



96 83 81 83

<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm
<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24 mm
<b>No 40</b>	1/4"  sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
<b>No 400</b>	1/4"  150 mm

<b>No 404</b>	1/4"  116 mm
<b>No 405/2</b>	1/4"  54 mm
<b>No 405/6</b>	1/4"  150 mm
<b>No 407</b>	1/4"  38 mm
<b>No 412</b>	1/4"
<b>No 415</b>	1/4"
<b>No 10760CV</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10; 12 mm
<b>No 52</b>	1/2"  sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm
<b>No 506</b>	1/2"  300 mm
<b>No 509/2</b>	1/2"  52 mm
<b>No 509/5</b>	1/2"  130 mm
<b>No 509/10</b>	1/2"  255 mm
<b>No 510</b>	1/2"  71 mm
<b>No 512</b>	1/2"
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm)
<b>No 4630</b>	sizes 1; 2; 3
<b>No 65 01 5 180</b>	
<b>No 65 29 5 200</b>	
<b>No 65 43 4 002</b>	
<b>No 65 45 4 002</b>	
<b>No 65 51 6 240</b>	
<b>No 65 64 2 250</b>	
<b>No 66 02 5 160</b>	
<b>No 102</b>	175 mm
<b>No 108</b>	150 x 6; 175 x 6 mm
<b>No 109</b>	size 6; 100 x 3.4 mm
<b>No 10956</b>	∅ 35 mm
<b>No 10960</b>	500 g



→ 10

STAHLWILLE's Tool Trolley 95VA now features even better safety and more sophisticated details.



### TCS 10/10, 6x7-30x32 mm



350 x 350 x 30 mm, 10 pieces

Code	Δg
<b>96 83 81 82</b>	1550



**No 10**

sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13;  
14 x 15; 16 x 17; 18 x 19; 20 x 22;  
24 x 27; 30 x 32 mm

### TCS 10/10, 6x7-30x32 mm MF



175 x 350 x 75 mm, 10 pieces

Code	Δg
<b>96 83 03 53</b>	1437



**No 10**

sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13;  
14 x 15; 16 x 17; 18 x 21; 19 x 22;  
24 x 27; 30 x 32 mm

### TCS 10/10, 6x7-24x27 mm



175 x 350 x 66 mm, 10 pieces

Code	Δg
<b>96 83 81 87</b>	1287



**No 10**

sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13;  
14 x 15; 16 x 17; 18 x 19; 20 x 22;  
21 x 24; 24 x 27 mm

### TCS 10/10, 6x7-24x27 mm MF



175 x 350 x 70 mm, 10 pieces

Code	Δg
<b>96 83 03 58</b>	1320



**No 10**

sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13;  
14 x 15; 16 x 17; 18 x 19; 20 x 22;  
21 x 24; 24 x 27 mm

### TCS 10/11, 6x7-34x36 mm



175 x 350 x 82 mm, 11 pieces

Code	Δg
<b>96 83 01 67</b>	2056



**No 10**

sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13;  
14 x 15; 16 x 17; 18 x 21; 19 x 22;  
24 x 27; 30 x 32; 34 x 36 mm

### TCS 10+13+24/30



530 x 350 x 75 mm, 30 pieces

Code	Δg
<b>96 83 06 05</b>	3724



**No 10**

sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13;  
14 x 15; 16 x 17; 18 x 19; 20 x 22;  
21 x 24 mm



**No 13**

sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 21; 22; 24; 27; 30; 32 mm



**No 24**

size 10 x 11 mm

### TCS 10a/9



175 x 350 x 70 mm, 9 pieces

Code	Δg
<b>96 83 87 79</b>	1555



**No 10a**

sizes 1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16;  
19/32 x 11/16; 5/8 x 3/4; 3/4 x 7/8;  
25/32 x 13/16; 15/16 x 1; 1 1/8 x 1 5/16"

### TCS 13/18, 6-24 mm



530 x 350 x 35 mm, 18 pieces

Code	Δg
<b>96 83 81 83</b>	1850



**No 13**

sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 20; 21; 22; 24 mm

## TCS 13/17, 6-24 mm



350 x 350 x 60 mm, 17 pieces

Code	g
<b>96830164</b>	1615
<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24 mm

## TCS 13/17, 6-24 mm MF



350 x 350 x 60 mm, 17 pieces

Code	g
<b>96830351</b>	1552
<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24 mm

## TCS 13/21, 6-34 mm



530 x 350 x 75 mm, 21 pieces

Code	g
<b>96830174</b>	3571
<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32; 34 mm

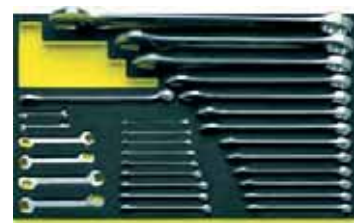
## TCS 13/25, 5.5-34 mm



530 x 350 x 80 mm, 25 pieces

Code	g
<b>96832096</b>	4550
<b>No 13</b>	sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 27; 29; 30; 32; 34 mm

## TCS 12+13+14/29



530 x 350 x 80 mm, 29 pieces

Code	g
<b>96830193</b>	3752
<b>No 12</b>	sizes 5.5; 12; 14 mm (2x)
<b>No 13</b>	sizes 7; 11 mm (2x); 6; 8; 9; 10; 12; 13; 14; 15; 16; 17; 18; 19; 20; 22; 24; 30; 32; 36 mm (1x)
<b>No 14</b>	size 17 mm

## TCS 13a/19



350 x 350 x 55 mm, 19 pieces

Code	g
<b>96838778</b>	2000
<b>No 13a</b>	sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1"

## TCS 13a/23



530 x 350 x 35 mm, 23 pieces

Code	g
<b>96830885</b>	2726
<b>No 13a</b>	sizes 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8"



### TCS 14/5, 17-21 mm



175 x 350 x 30 mm, 5 pieces

Code  $\Delta \Delta$   
g

**96 83 81 88** 1065

**No 14** sizes 17; 18; 19; 20; 21 mm

### TCS 20/8, 6x7-19x22 mm



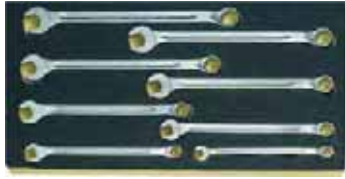
175 x 350 x 45 mm, 8 pieces

Code  $\Delta \Delta$   
g

**96 83 81 92** 1300

**No 20** sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13;  
14 x 15; 16 x 17; 18 x 21; 19 x 22 mm

### TCS 14/8, 8-16 mm



175 x 350 x 30 mm, 8 pieces

Code  $\Delta \Delta$   
g

**96 83 81 89** 660

**No 14** sizes 8; 10; 11; 12; 13; 14; 15; 16 mm

### TCS 20/8, 6x7-19x22 mm MF



175 x 350 x 45 mm, 8 pieces

Code  $\Delta \Delta$   
g

**96 83 03 56** 1323

**No 20** sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13;  
14 x 15; 16 x 17; 18 x 21; 19 x 22 mm

### TCS 14/18, 6-24 mm



350 x 350 x 60 mm, 18 pieces

Code  $\Delta \Delta$   
g

**96 83 87 50** 2600

**No 14** sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 20; 21; 22; 24 mm

### TCS 20/10, 6x7-30x32 mm



350 x 350 x 45 mm, 10 pieces

Code  $\Delta \Delta$   
g

**96 83 01 66** 2450

**No 20** sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13;  
14 x 15; 16 x 17; 18 x 21; 19 x 22;  
24 x 27; 30 x 32 mm

### TCS 14/21, 6-36 mm



530 x 350 x 75 mm, 21 pieces

Code  $\Delta \Delta$   
g

**96 83 87 71** 5100

**No 14** sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 21; 22; 24; 27; 30; 32;  
36 mm

### TCS 24/7, 8x10-19x22 mm



175 x 350 x 35 mm, 7 pieces

Code  $\Delta \Delta$   
g

**96 83 87 58** 780

**No 24** sizes 8 x 10; 10 x 11; 11 x 13; 12 x 14;  
14 x 17; 17 x 19; 19 x 22 mm

# Factory and workshop equipment, sets of tools

1

## TCS 240/6



175 x 350 x 35 mm, 6 pieces

Code  $\Delta \nabla$   
g

**96838774** 1163



**No 240**

sizes 10; 11; 13; 14; 17; 19 mm

## TCS 17/12



175 x 350 x 45 mm, 12 pieces

Code  $\Delta \nabla$   
g

**96830649** 1460



**No 17**

sizes 8; 9; 10; 11; 12; 13; 14; 15; 16;  
17; 18; 19 mm

## TCS 25/7



175 x 350 x 30 mm, 7 pieces

Code  $\Delta \nabla$   
g

**96838751** 984



**No 25**

sizes 7 x 8; 9 x 10; 10 x 11; 12 x 13;  
14 x 15; 16 x 18; 17 x 19 mm

## TCS 29/6, 8x9-18x19 mm



175 x 350 x 35 mm, 6 pieces

Code  $\Delta \nabla$   
g

**96838764** 1079



**No 29**

sizes 8 x 9; 10 x 11; 12 x 13; 14 x 15;  
16 x 17; 18 x 19 mm

## TCS 29/7, 8x9-20x22 mm



175 x 350 x 40 mm, 7 pieces

Code  $\Delta \nabla$   
g

**96830195** 1520



**No 29**

sizes 8 x 9; 10 x 11; 12 x 13; 14 x 15;  
16 x 17; 18 x 19; 20 x 22 mm

## TCS 4026/3



175 x 350 x 30 mm, 3 pieces

Code  $\Delta \nabla$   
g

**96838765** 1402



**No 4026**

sizes 8; 10; 12

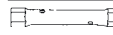
## TCS 10750/10, 6x7-20x22 mm



175 x 350 x 40 mm, 10 pieces

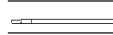
Code  $\Delta \nabla$   
g

**96838756** 1130



**No 10750**

sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13;  
14 x 15; 16 x 17; 18 x 19; 20 x 22 mm



**No 10750 1/2**

sizes 6; 7

## TCS 1/4" + 10760CV



175 x 350 x 43 mm, 27 pieces

Code  $\Delta \nabla$   
g

**96838176** 987



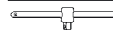
**No 40**

1/4"  $\bigcirc$  sizes 5.5; 6; 7; 8; 9; 10; 11; 12;  
13; 14 mm



**No 400**

1/4"  $\blacksquare$  150 mm



**No 404**

1/4"  $\blacksquare$  116 mm



**No 405/2**

1/4"  $\blacksquare \bigcirc$  54 mm



**No 405/6**

1/4"  $\blacksquare \bigcirc$  150 mm



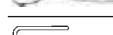
**No 407**

1/4"  $\blacksquare \bigcirc$  38 mm



**No 412**

1/4"  $\bigcirc \bigcirc$



**No 415**

1/4"  $\blacksquare$



**No 10760CV**

sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10; 12 mm



### TCS 40/41/44/8



175 x 350 x 45 mm, 33 pieces

Code		g
<b>96 83 02 17</b>		715
<b>No 40</b>	1/4"  sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm	
<b>No 41K</b>	1/4"   0.6 x 3.5; 1.0 x 5.5; 1.2 x 8 mm	
<b>No 44K</b>	1/4"   3; 4; 5; 6; 8 mm	
<b>No 44P</b>	1/4"   sizes 1; 2; 3; 4	
<b>No PZ1221</b> <b>No PZ1222</b>	1/4"   size 1 1/4"   size 2	
<b>No 400</b>	1/4"  150 mm	
<b>No 404</b>	1/4"  116 mm	
<b>No 405/2</b>	1/4"   54 mm	
<b>No 405/6</b>	1/4"   150 mm	
<b>No 407</b>	1/4"   38 mm	
<b>No 409</b>	3/8"  1/4"	
<b>No 412</b>	1/4"	
<b>No 415</b>	1/4"	

### TCS 40/35/9



175 x 350 x 40 mm, 44 pieces

Code		g
<b>96 83 06 01</b>		1045
<b>No 40</b>	1/4"  sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm	
<b>No 40L</b>	1/4"  sizes 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13 mm	
<b>No 41K</b>	1/4"   0.6 x 3.5; 1.0 x 5.5; 1.2 x 8 mm	
<b>No 44K</b>	1/4"   3; 4; 5; 6; 8 mm	
<b>No 44P</b>	1/4"   sizes 1; 2; 3; 4 mm	
<b>No 400</b>	1/4"  150 mm	
<b>No 404</b>	1/4"  116 mm	
<b>No 405/2</b> <b>No 405/4</b>	1/4"   54 mm 1/4"   100 mm	
<b>No 405/6</b>	1/4"   150 mm	
<b>No 407</b>	1/4"   38 mm	
<b>No 412</b>	1/4"	
<b>No 415</b>	1/4"	
<b>No 409</b>	3/8"  1/4"	

### TCS 4008/8/52



175 x 350 x 50 mm, 60 pieces

Code		g
<b>96 83 87 73</b>		715
<b>No 412</b>	1/4"	
<b>No 412/1</b>	1/4"  10 mm	
<b>No 442</b>	1/4"   3/8"	
<b>No 1200/1</b>	1/4"	
<b>No 3825/1</b>	1/4"	
<b>No 3115/1</b>	1/4"	
<b>No 4008-1</b>	1/4"	
<b>No 4008-2</b>	1/4"	
<b>No 1300</b> <b>No 1301</b> <b>No 1302</b> <b>No 1303</b> <b>No 1304</b>	size 3 mm (2x) size 4 mm (2x) size 5 mm (2x) size 6 mm (2x) size 8 mm (2x)	
<b>No 1220</b> <b>No 1221</b> <b>No 1222</b> <b>No 1223</b>	size 0 (2x) size 1 (2x) size 2 (2x) size 3 (2x)	
<b>No PZ1221</b> <b>No PZ1222</b> <b>No PZ1223</b>	size 1 (2x) size 2 (2x) size 3 (2x)	
<b>No 1414</b> <b>No 1415</b> <b>No 1416</b> <b>No 1417</b> <b>No 1419</b> <b>No 1420</b>	size T10 (2x) size T15 (2x) size T20 (2x) size T25 (2x) size T30 (2x) size T40 (2x)	
<b>No 1440</b> <b>No 1441</b> <b>No 1442</b> <b>No 1443</b> <b>No 1445</b> <b>No 1446</b>	size T10 (2x) size T15 (2x) size T20 (2x) size T25 (2x) size T30 (2x) size T40 (2x)	
<b>No 1161</b> <b>No 1163</b> <b>No 1165</b> <b>No 1166/1</b>	size 0.5 x 4.0 mm size 0.6 x 4.5 mm size 0.8 x 5.5 mm size 1.2 x 6.5 mm	

## Tool Control System

### The safety inlay system

- Designed to fit our Tool Trolleys and Tool Boxes
- With yellow signal cut-outs to show whether all tools are in their places



# Factory and workshop equipment, sets of tools

1

## TCS 456/16/6



175 x 350 x 45 mm, 22 pieces

Code		g
<b>96 83 87 52</b>		1465
<b>No 456</b>	3/8"  sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm	
<b>No 425</b>	3/8"  165 mm	
<b>No 427/3</b>	3/8"  76 mm	
<b>No 427/6</b>	3/8"  160 mm	
<b>No 427/10</b>	3/8"  240 mm	
<b>No 428</b>	3/8"  46 mm	
<b>No 435</b>	3/8"	

## TCS 456/16/7



175 x 350 x 40 mm, 23 pieces

Code		g
<b>96 83 02 18</b>		1400
<b>No 456</b>	3/8"  sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm	
<b>No 427/3</b>	3/8"  76 mm	
<b>No 427/5</b>	3/8"  125 mm	
<b>No 427/10</b>	3/8"  240 mm	
<b>No 428</b>	3/8"  46 mm	
<b>No 431</b>	1/4"  3/8"	
<b>No 432</b>	1/2"  3/8"	
<b>No 435</b>	3/8"	

## TCS 456/16/4 MF



175 x 350 x 45 mm, 20 pieces

Code		g
<b>96 83 03 57</b>		1123
<b>No 456</b>	3/8"  sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm	
<b>No 427/5</b>	3/8"  125 mm	
<b>No 427/10</b>	3/8"  240 mm	
<b>No 428</b>	3/8"  46 mm	
<b>No 435</b>	3/8"	

## TCS 456/31/8



350 x 350 x 32 mm, 39 pieces

Code		g
<b>96 83 06 02</b>		2701
<b>No 456</b>	3/8"  sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm	
<b>No 46</b>	3/8"  sizes 10; 11; 12; 13 mm	
<b>No 47</b>	3/8"  sizes 10; 11; 12; 13; 14; 15; 16 mm	
<b>No 1049</b>	3/8"  size 9 mm	
<b>No 49X</b>	3/8"  sizes M6; M8; M10	
<b>No 427/3</b>	3/8"  76 mm	
<b>No 427/5</b>	3/8"  125 mm	
<b>No 427/10</b>	3/8"  240 mm	
<b>No 428</b>	3/8"  46 mm	
<b>No 431</b>	1/4"  3/8"	
<b>No 432</b>	1/2"  3/8"	
<b>No 435</b>	3/8"	
<b>No 452</b>	3/8"	

## TCS 49/1049/2049/45TX/49TX



175 x 350 x 40 mm, 24 pieces

Code		g
<b>96 83 87 72</b>		1188
<b>No 49</b>	3/8"  sizes 4; 5; 6; 7; 8; 10 mm	
<b>No 1049</b>	3/8"  size 7 mm	
<b>No 2049</b>	3/8"  sizes 4; 5; 6; 8; 10 mm	
<b>No 45TX</b>	3/8"  sizes E5; E6; E7; E8; E10; E12	
<b>No 49TX</b>	3/8"  sizes T10; T15; T20; T25; T30; T40	

### TCS 1/2"-512/6



175 x 350 x 35 mm, 6 pieces

Code		△ g
<b>96 83 81 75</b>		1845
<b>No 506</b>	1/2" ■ 300 mm	
<b>No 509/2</b>	1/2" ■ ○ 52 mm	
<b>No 509/5</b>	1/2" ■ ○ 130 mm	
<b>No 509/10</b>	1/2" ■ ○ 255 mm	
<b>No 510</b>	1/2" ■ ○ 71 mm	
<b>No 512</b>	1/2" ■	

### TCS 1/2"-512/9



175 x 350 x 40 mm, 9 pieces

Code		△ g
<b>96 83 06 03</b>		2364
<b>No 506</b>	1/2" ■ 300 mm	
<b>No 509QR/2</b>	1/2" ■ ○ 52 mm	
<b>No 509/5</b>	1/2" ■ ○ 130 mm	
<b>No 509QR/10</b>	1/2" ■ ○ 255 mm (2x)	
<b>No 510</b>	1/2" ■ ○ 71 mm	
<b>No 512</b>	1/2" ■	
<b>No 513</b>	3/8" ■ 1/2" ○	
<b>No 514</b>	3/4" ■ 1/2" ○	

### TCS 52/14/4



175 x 350 x 50 mm, 18 pieces

Code		△ g
<b>96 83 87 81</b>		2510
<b>No 52</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 22; 24; 27; 30 mm	
<b>No 509/5</b>	1/2" ■ ○ 130 mm	
<b>No 509/10</b>	1/2" ■ ○ 255 mm	
<b>No 510</b>	1/2" ■ ○ 71 mm	
<b>No 512</b>	1/2" ■	

### TCS 50/52/30/6 MF



350 x 350 x 70 mm, 36 pieces

Code		△ g
<b>96 83 03 54</b>		4604
<b>No 50</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 30 mm	
<b>No 52</b>	1/2" ○ sizes 12; 13; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32; 34 mm	
<b>No 54</b>	1/2" ○ sizes 5; 6; 7; 8; 10; 12 mm	
<b>No 506</b>	1/2" ■ 300 mm	
<b>No 509/5</b>	1/2" ■ ○ 130 mm	
<b>No 509/10</b>	1/2" ■ ○ 255 mm	
<b>No 510</b>	1/2" ■ ○ 71 mm	
<b>No 512</b>	1/2" ■	
<b>No 513</b>	3/8" ■ 1/2" ○	

### TCS 50/51/52/32



175 x 350 x 50 mm, 32 pieces

Code		△ g
<b>96 83 81 91</b>		2950
<b>No 50</b>	1/2" ○ sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 30 mm	
<b>No 52</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm	
<b>No 51</b>	1/2" ○ sizes 22; 27 mm	

### TCS 51/11



175 x 350 x 50 mm, 11 pieces

Code		△ g
<b>96 83 87 76</b>		2345
<b>No 51</b>	sizes 10; 13; 15; 17; 18; 19; 22; 24; 27; 30; 32 mm	

# Factory and workshop equipment, sets of tools

1

## TCS 52/17



175 x 350 x 40 mm, 17 pieces

Code	g
<b>96838177</b>	1605
<b>No 52</b>	1/2" $\varnothing$ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm

## TCS 52/18 MF



175 x 350 x 55 mm, 18 pieces

Code	g
<b>96830359</b>	1850
<b>No 52</b>	1/2" $\varnothing$ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32; 34 mm

## TCS 50a/17



175 x 350 x 40 mm, 17 pieces

Code	g
<b>96838780</b>	1600
<b>No 50a</b>	1/2" $\varnothing$ sizes 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8; 1 3/16; 1 1/4"

## TCS 54/54TX/18



175 x 350 x 40 mm, 18 pieces

Code	g
<b>96838782</b>	1665
<b>No 54</b>	1/2" $\varnothing$ sizes 4; 5; 6; 7; 8; 10; 12; 14; 17 mm
<b>No 54TX</b>	1/2" $\varnothing$ sizes T20; T25; T27; T30; T40; T45; T50; T55; T60

## TCS 40/456/52/78/19



530 x 350 x 60 mm, 97 pieces

Code	g
<b>96832095</b>	7000
<b>No 40</b>	1/4" $\varnothing$ sizes 4; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13 mm
<b>No 44K</b>	1/4" $\varnothing$ , $\square$ 3; 4; 5; 6; 8 mm
<b>No 456</b>	3/8" $\varnothing$ sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm
<b>No 49</b>	3/8" $\varnothing$ sizes 5; 6; 8 mm
<b>No 52</b>	1/2" $\varnothing$ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32; 34 mm
<b>No 54</b>	1/2" $\varnothing$ sizes 10; 12 mm
<b>No 40TX</b>	1/4" $\varnothing$ sizes E8; E10
<b>No 44KTXB</b>	1/4" $\varnothing$ sizes T8; T10; T15; T20; T25; T27; T30; T40
<b>No 45TX</b>	3/8" $\varnothing$ sizes E8; E10; E12; E14
<b>No 49TX</b> <b>No 54TX</b>	3/8" $\varnothing$ sizes T25; T45 1/2" $\varnothing$ sizes T40; T50; T55; T60
<b>No 1054TX</b> <b>No 2054TX</b>	1/2" $\varnothing$ sizes T50; T55 1/2" $\varnothing$ size T40; T45
<b>No 400</b>	1/4" $\blacksquare$ 150 mm
<b>No 404</b>	1/4" $\blacksquare$ 116 mm
<b>No 405/2</b> <b>No 405/4</b>	1/4" $\blacksquare$ $\varnothing$ 54 mm 1/4" $\blacksquare$ $\varnothing$ 100 mm
<b>No 407</b>	1/4" $\blacksquare$ $\varnothing$ 38 mm
<b>No 412</b>	1/4" $\varnothing$ $\varnothing$
<b>No 415</b>	1/4" $\blacksquare$
<b>No 425</b>	3/8" $\blacksquare$ 165 mm
<b>No 427/3</b>	3/8" $\blacksquare$ $\varnothing$ 76 mm
<b>No 427/10</b>	3/8" $\blacksquare$ $\varnothing$ 240 mm
<b>No 428</b>	3/8" $\blacksquare$ $\varnothing$ 46 mm
<b>No 431</b>	1/4" $\blacksquare$ 3/8" $\varnothing$
<b>No 432</b>	1/2" $\blacksquare$ 3/8" $\varnothing$
<b>No 435</b>	3/8" $\blacksquare$
<b>No 506</b>	1/2" $\blacksquare$ 300 mm
<b>No 509/5</b>	1/2" $\blacksquare$ $\varnothing$ 130 mm
<b>No 509/10</b>	1/2" $\blacksquare$ $\varnothing$ 255 mm
<b>No 510</b>	1/2" $\blacksquare$ $\varnothing$ 71 mm
<b>No 512</b>	1/2" $\blacksquare$
<b>No 513</b>	3/8" $\blacksquare$ 1/2" $\varnothing$



### TCS 40/45/50/89/19



530 x 350 x 70 mm, 108 pieces

Code		g
<b>96 83 01 92</b>		7770
<b>No 40</b>	1/4"  sizes 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13 mm	
<b>No 44</b>	1/4"  sizes 3; 4; 5; 6 mm	
<b>No 400</b>	1/4"  150 mm	
<b>No 404</b>	1/4"  116 mm	
<b>No 405/6</b>	1/4"  150 mm	
<b>No 407</b>	1/4"  38 mm	
<b>No 409M</b>	3/8"  1/4"	
<b>No 415</b>	1/4"	
<b>No 45</b>	3/8"  sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm	
<b>No 46</b>	3/8"  sizes 20.8 mm-13/16"	
<b>No 49</b>	3/8"  sizes 4; 5; 6; 7; 8; 10 mm	
<b>No 425</b>	3/8"  165 mm	
<b>No 427/3</b>	3/8"  76 mm	
<b>No 427/10</b>	3/8"  240 mm	
<b>No 428</b>	3/8"  46 mm	
<b>No 432M</b>	1/2"  3/8"	
<b>No 435</b>	3/8"	
<b>No 50</b>	1/2"  sizes 19; 21; 22; 24; 27; 30; 32 mm	
<b>No 52</b>	1/2"  sizes 16; 17; 18; 19; 22; 24; 27; 30; 32 mm	
<b>No 54</b>	1/2"  sizes 6; 7; 8; 10 mm	
<b>No 54X</b>	1/2"  sizes M6; 8; 12; 14	
<b>No 506</b>	1/2"  300 mm	
<b>No 509/5</b>	1/2"  130 mm	
<b>No 509/10</b>	1/2"  255 mm	
<b>No 510</b>	1/2"  71 mm	
<b>No 512</b>	1/2"	
<b>No 514M</b>	3/4"  1/2"	
<b>No 40TX</b>	1/4"  sizes E4; E5; E6; E7; E8	
<b>No 45TX</b>	3/8"  sizes E10; E12; E14	
<b>No 50TX</b>	1/2"  sizes E11; E16; E18; E20; E24	
<b>No 54TX</b>	1/2"  sizes T45; T50; T55; T60	
<b>No 1410</b>	size T6	
<b>No 1411</b>	size T7	
<b>No 1412</b>	size T8	
<b>No 1413</b>	size T9	
<b>No 1440</b>	size T10	
<b>No 1441</b>	size T15	
<b>No 1442</b>	size T20	
<b>No 1443</b>	size T25	
<b>No 1444</b>	size T27	
<b>No 1445</b>	size T30	
<b>No 1446</b>	size T40	
<b>No 1427</b>	size T25 (65 mm)	
<b>No 4155GB</b>	1/4"	

### TCS 50TX/54TX/17



175 x 350 x 40 mm, 17 pieces

Code		g
<b>96 83 87 63</b>		1382
<b>No 50TX</b>	1/2"  sizes E10; E11; E12; E14; E16; E18; E20; E24	
<b>No 54TX</b>	1/2"  sizes T20; T25; T27; T30; T40; T45; T50; T55; T60	

### TCS 54/2309K/12506



175 x 350 x 40 mm, 13 pieces

Code		g
<b>96 83 01 63</b>		1830
<b>No 54</b>	1/2"  sizes 5; 6; 7; 8; 10; 12; 14; 17; 19 mm	
<b>No 2309K</b>	1/2"  sizes 17; 19 mm	
<b>No 12506</b>	sizes 6; 7 mm	

### TCS 54/54X/16



175 x 350 x 35 mm, 16 pieces

Code		g
<b>96 83 87 62</b>		1665
<b>No 54</b>	1/2"  sizes 4; 5; 6; 7; 8; 10; 12; 14; 17 mm	
<b>No 54X</b>	1/2"  sizes M5; M6; M8; M10; M12; M14; M16	

### TCS 1054/2054/10



175 x 350 x 40 mm, 10 pieces

Code		g
<b>96 83 87 60</b>		1272
<b>No 1054</b>	1/2"  sizes 8; 10; 12 mm	
<b>No 2054</b>	1/2"  sizes 5; 6 mm	
<b>No 1054TX</b>	1/2"  sizes T30; T50; T55	
<b>No 2054TX</b>	1/2"  sizes T40; T45	

# Factory and workshop equipment, sets of tools

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## TCS 55/11/6



530 x 350 x 90 mm, 17 pieces

Code	g	
<b>96 83 02 21</b>	10100	
<b>No 55</b>	3/4" $\bigcirc$ sizes 22; 24; 27; 30; 32; 34; 36; 38; 41; 46; 50 mm	
<b>No 552</b>	3/4" $\blacksquare$	
<b>No 556</b>	3/4" $\blacksquare$	
<b>No 558</b>	510 mm	
<b>No 559/8</b>	3/4" $\blacksquare$ $\bigcirc$ 200 mm	
<b>No 559/16</b>	3/4" $\blacksquare$ $\bigcirc$ 400 mm	
<b>No 568</b>	1/2" $\blacksquare$ 3/4" $\bigcirc$	

## TCS TX/57 MF N



350 x 350 x 75 mm, 57 pieces

Code	g	
<b>96 83 04 50</b>	2060	
<b>No 21TX</b>	sizes E6 x E8; E10 x E12; E14 x E18; E20 x E24	
<b>No 40TX</b> <b>No 45TX</b>	1/4" $\bigcirc$ sizes E4; E5; E6; E7; E8 3/8" $\bigcirc$ sizes E10; E12; E14	
<b>No 49TX</b>	3/8" $\bigcirc$ sizes T40; T45	
<b>No 50TX</b>	1/2" $\bigcirc$ sizes E16; E18; E20; E24	
<b>No 54TX</b>	1/2" $\bigcirc$ sizes T50; T55; T60	
<b>No 4155GB</b>	1/4" $\bigcirc$	
<b>No 412</b>	1/4" $\bigcirc$ $\bigcirc$	
<b>No 442</b>	1/4" $\bigcirc$ 3/8" $\bigcirc$	
<b>No 1410</b>	size T6	
<b>No 1411</b>	size T7	
<b>No 1412</b>	size T8	
<b>No 1413</b>	size T9	
<b>No 1440</b>	size T10	
<b>No 1441</b>	size T15	
<b>No 1442</b>	size T20	
<b>No 1443</b>	size T25	
<b>No 1444</b>	size T27	
<b>No 1445</b>	size T30	
<b>No 1446</b>	size T40	
<b>No 1427</b>	size T25 (65 mm)	
<b>No 4650</b>	sizes T6; T7; T8; T9; T10; T15; T20; T25; T27; T30	
<b>No 10766</b>	sizes T6; T7	
<b>No 10766/9</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30; T40	

## TCS 50IMP/51IMP/19



170 x 350 x 50 mm, 19 pieces

Code	g	
<b>96 83 87 77</b>	3960	
<b>No 50IMP</b>	1/2" $\bigcirc$ sizes 10; 13; 15; 16; 17; 18; 19; 21; 22; 24; 27 mm	
<b>No 51IMP</b>	1/2" $\bigcirc$ sizes 13; 15; 17; 18; 19; 21; 22; 24 mm	

## TCS 50IMP/19/2



175 x 350 x 50 mm, 21 pieces

Code	g	
<b>96 83 87 91</b>	3055	
<b>No 50IMP</b>	sizes 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 23; 24; 25; 27; 30; 32 mm	
<b>No 509/5IMP</b>	1/2" $\blacksquare$ $\bigcirc$ 125 mm	
<b>No 510IMP</b>	1/2" $\blacksquare$ $\bigcirc$ 68 mm	

## TCS 54IMP/2307TX/15



175 x 350 x 40 mm, 15 pieces

Code	g	
<b>96 83 87 92</b>	1285	
<b>No 54IMP</b>	1/2" $\bigcirc$ 5; 6; 7; 8; 10; 12; 14; 17; 19 mm	
<b>No 2307TX</b>	1/2" $\bigcirc$ sizes T30; T40; T45; T50; T55; T60	

## TCS 4620/4630



175 x 350 x 35 mm, 7 pieces

Code	g	
<b>96 83 82 78</b>	490	
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm)	
<b>No 4630</b>	sizes 1; 2; 3	

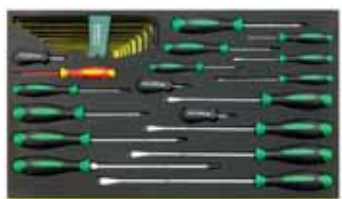
### TCS 4620/4640



175 x 350 x 40 mm, 7 pieces

Code	g
<b>96 83 87 84</b>	410
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm)
<b>No 4640</b>	size PZ1; PZ2; PZ3

### TCS 4620/4660VDE+10767



530 x 350 x 35 mm, 27 pieces

Code	g
<b>96 83 11 68</b>	2080
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm) size 6 (1.6 x 10.0 x 200 mm) size 7 (2.0 x 12.0 x 200 mm)
<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)
<b>No 4630</b>	sizes 1; 2; 3
<b>No 4632</b>	size 4
<b>No 4640</b>	sizes 0; 1; 2
<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm)
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
<b>No 4734</b> <b>No 4744</b>	size 2 size 1
<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm

### TCS 4620-4734/8



175 x 350 x 40 mm, 8 pieces

Code	g
<b>96 83 87 69</b>	503
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm)
<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)
<b>No 4630</b>	sizes 1; 2
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
<b>No 4734</b>	size 2

### TCS 4620/4660VDE



530 x 350 x 40 mm, 18 pieces

Code	g
<b>96 83 11 79</b>	1689
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm) size 6 (1.6 x 10.0 x 200 mm) size 7 (2.0 x 12.0 x 200 mm)
<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)
<b>No 4630</b>	sizes 1; 2; 3
<b>No 4632</b>	size 4
<b>No 4640</b>	sizes 0; 1; 2
<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm)
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
<b>No 4734</b> <b>No 4744</b>	size 2 size 1

### TCS 4621/4734/16



530 x 350 x 40 mm, 16 pieces

Code	g
<b>96 83 20 98</b>	1490
<b>No 4621</b>	size 0 (0.4 x 2.5 x 80 mm) size 1 (0.5 x 3.5 x 90 mm) size 2 (0.6 x 4.0 x 100 mm) size 4 (1.0 x 6.5 x 140 mm) size 5 (1.2 x 8.0 x 160 mm)
<b>No 4631</b>	size 1; 2
<b>No 4632</b>	size 1; 2; 3
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
<b>No 4734</b>	size 2
<b>No 10506</b>	0.8 x 4.0 x 300 mm
<b>No 10518</b>	1.0 x 5.5 x 410 mm
<b>No 12600</b>	500 g
<b>No 12922E</b>	∅ 6 mm

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# Factory and workshop equipment, sets of tools

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## TCS 4622/4632



175 x 350 x 35 mm, 6 pieces

Code	g
<b>96 83 87 83</b>	845

<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 2 (1.2 x 6.5 x 125 mm) size 3 (1.2 x 8.0 x 150 mm) size 4 (1.6 x 10.0 x 175 mm)
<b>No 4632</b>	sizes 2; 3

## TCS 4622/4650+10760+10766



530 x 350 x 40 mm, 36 pieces

Code	g
<b>96 83 11 96</b>	1895

<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 2 (1.2 x 6.5 x 125 mm) size 4 (1.6 x 10.0 x 175 mm) size 5 (2.0 x 12.0 x 200 mm)
<b>No 4630</b>	size 1
<b>No 4632</b>	size 3
<b>No 4650</b>	sizes T6; T7; T8; T9; T10; T15; T20; T25; T27; T30
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
<b>No 4734</b>	size 2



<b>No 10760CV/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
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<b>No 10766/9</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30; T40
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## TCS 4650



175 x 350 x 35 mm, 8 pieces

Code	g
<b>96 83 87 67</b>	340

<b>No 4650</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30
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## TCS 4660/4665



175 x 350 x 40 mm, 6 pieces

Code	g
<b>96 83 87 66</b>	391

<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm) size 3 (0.6 x 3.5 x 100 mm) size 5 (1.0 x 5.5 x 125 mm) size 6 (1.2 x 6.5 x 150 mm)
<b>No 4665 VDE</b>	size 1; 2

## TCS 4665/4670



175 x 350 x 40 mm, 7 pieces

Code	g
<b>96 83 87 85</b>	580

<b>No 4665VDE</b> <b>No 4670VDE</b>	sizes PH0; PH1; PH2; PH3 sizes PZ0; PZ1; PZ2
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## TCS 4724/4840+10767



530 x 350 x 45 mm, 24 pieces

Code	g
<b>96 83 07 06</b>	1755

<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
<b>No 4734</b> <b>No 4744</b>	size 2 size 1
<b>No 4820</b>	0.6 x 3.5 x 75 mm 0.8 x 4.0 x 100 mm 1.2 x 6.5 x 150 mm 1.6 x 10.0 x 200 mm 2.0 x 12.0 x 250 mm
<b>No 4830</b> <b>No 4840</b>	sizes 1; 2; 3 size 1
<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
<b>No 7756</b>	
<b>No 12922E</b>	∅ 6 mm



### TCS 4820/4830



175 x 350 x 35 mm, 7 pieces

Code	Δ∇ g
<b>96 83 81 84</b>	555

<b>No 4820</b>	0.6 x 3.5 x 75 mm 0.8 x 4.0 x 100 mm 1.0 x 5.5 x 125 mm 1.2 x 6.5 x 150 mm
<b>No 4830</b>	sizes 1; 2; 3

### TCS 4856



175 x 350 x 40 mm, 7 pieces

Code	Δ∇ g
<b>96 83 87 55</b>	447

<b>No 4856</b>	sizes T8; T9; T10; T15; T20; T25; T30
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### TCS 12500N/5



175 x 350 x 45 mm, 5 pieces

Code	Δ∇ g
<b>96 83 87 57</b>	730

<b>No 12500N</b>	sizes 7; 8; 10; 12; 13 mm
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### TCS 12507-2K/5



175 x 350 x 40 mm, 5 pieces

Code	Δ∇ g
<b>96 83 87 61</b>	792

<b>No 12507-2K</b>	sizes 7; 8; 10; 12; 13 mm
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### TCS 10768/8



350 x 350 x 40 mm, 8 pieces

Code	Δ∇ g
<b>96 83 87 86</b>	745

<b>No 10768</b>	sizes 2; 2.5; 3; 4; 5; 6; 8; 10 mm
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### TCS 10765/10768/12507/19



530 x 350 x 30 mm, 19 pieces

Code	Δ∇ g
<b>96 83 06 21</b>	1640

<b>No 10765/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
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<b>No 10768</b>	sizes 2.5; 3; 4; 5; 6; 8; 10 mm
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<b>No 12507-2K</b>	sizes 8; 10; 13 mm
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### TCS 10768-2K/6



350 x 350 x 40 mm, 6 pieces

Code	Δ∇ g
<b>96 83 87 53</b>	792

<b>No 10768-2K</b>	sizes 3; 4; 5; 6; 8; 10 mm
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# Factory and workshop equipment, sets of tools

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## TCS 10769+10771/17



350 x 350 x 30 mm, 17 pieces

Code  $\Delta \nabla$   
g  
**96 83 20 99** 940



**No 10769** sizes T9; T10; T15; T20; T25; T30; T40; T45; T50



**No 10771/8** sizes T9; T10; T15; T20; T25; T27; T30; T40

## TCS 10760-10771/26



175 x 350 x 35 mm, 26 pieces

Code  $\Delta \nabla$   
g  
**96 83 87 88** 990



**No 10760CV/9** sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm



**No 10767/9** sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm



**No 10771/8** sizes T9; T10; T15; T20; T25; T27; T30; T40

## TCS 1201/4000/10766/38



175 x 350 x 45 mm, 38 pieces

Code  $\Delta \nabla$   
g  
**96 83 87 68** 880



**No 10767/9** sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm



**No 10766/9** sizes T8; T9; T10; T15; T20; T25; T27; T30; T40



**No 4000** 1/4"  $\bigcirc$



**No 1201** 1/4"  $\bullet$ ,  $\ominus$  sizes 0.6 x 4.5; 0.8 x 5.5; 1.2 x 6.5;  
1/4"  $\oplus$  sizes 1; 2; 3;  
1/4"  $\oplus$  sizes 1; 2; 3;  
1/4"  $\bullet$ ,  $\oplus$  sizes T10; T15; T20; T25; T30; T40;  
1/4"  $\bullet$ ,  $\bullet$  sizes 4; 5; 6 mm;  
1/4"  $\bigcirc$ , 1/4"  $\bullet$  bitholder

## TCS 4751/4752



175 x 350 x 35 mm, 9 pieces

Code  $\Delta \nabla$   
g  
**96 83 87 87** 280



**No 4751** size 4 (0.3 x 1.5 x 40 mm)  
size 6 (0.4 x 2.0 x 60 mm)  
size 7 (0.4 x 2.5 x 75 mm)  
size 8 (0.5 x 3.0 x 75 mm)



**No 4752** sizes PH00; PH0; PH1



**No 6540 6 120**



**No 6604 6 110**

## TCS 6501-6602/3



175 x 350 x 40 mm, 3 pieces

Code  $\Delta \nabla$   
g  
**96 83 87 75** 1125



**No 65 01 5 200**



**No 65 51 6 300**



**No 66 02 5 180**

## TCS 6501-6602/4



175 x 350 x 35 mm, 4 pieces

Code  $\Delta \nabla$   
g  
**96 83 81 79** 1000



**No 65 01 5 180**



**No 65 29 5 200**



**No 65 51 6 240**



**No 66 02 5 160**

### TCS 6501-6602/4N



175 x 350 x 35 mm, 4 pieces

Code △△  
g  
**96 83 0 622** 1080

- No 65 01 5 180**
- No 65 29 5 200**
- No 65 72 6 240**
- No 66 02 5 160**

### TCS 6543-6564/3



175 x 350 x 30 mm, 3 pieces

Code △△  
g  
**96 83 81 80** 815

- No 65 43 4 002**
- No 65 45 4 002**
- No 65 64 2 250**

### TCS 6543-6546/4

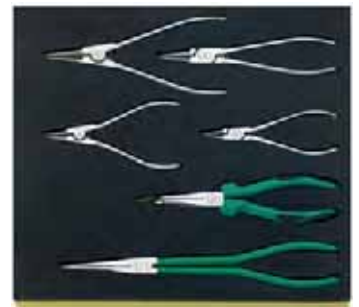


175 x 350 x 30 mm, 4 pieces

Code △△  
g  
**96 83 0 608** 626

- No 65 43 4 002**
- No 65 44 4 021**
- No 65 45 4 002**
- No 65 46 4 021**

### TCS 6534-6545/6



350 x 350 x 30 mm, 6 pieces

Code △△  
g  
**96 83 2 100** 1070

- No 65 34 5 280**
- No 65 35 5 200**
- No 65 43 4 001**  
**No 65 43 4 002**
- No 65 45 4 001**  
**No 65 45 4 002**

### TCS 6501-6600/3



175 x 350 x 40 mm, 3 pieces

Code △△  
g  
**96 83 87 70** 740

- No 65 01 7 180**
- No 65 29 7 200**
- No 66 00 7 160**

### TCS 102-109/10956/10960/6



175 x 350 x 40 mm, 6 pieces

Code △△  
g  
**96 83 81 81** 1500

- No 10956** ∅ 35 mm
- No 10960** 500 g
- No 102** 175 mm
- No 108** 150 x 6; 175 x 6 mm
- No 109** size 6; 100 x 3.4 mm

# Factory and workshop equipment, sets of tools

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## TCS 102-108/10960/10



175 x 350 x 40 mm, 10 pieces

Code	g
<b>96830361</b>	1569
<b>No 102</b>	200 mm
<b>No 105</b>	120 x 12 mm
<b>No 108</b>	115 x 2; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 175 x 4; 200 x 8 mm
<b>No 10960</b>	500 g

## TCS 102-108/11



175 x 350 x 33 mm, 11 pieces

Code	g
<b>96838754</b>	1665
<b>No 102</b>	150; 200; 250 mm
<b>No 105</b>	120 x 10; 120 x 12 mm
<b>No 108</b>	150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm

## TCS 102-108/10957/10960/16



530 x 350 x 45 mm, 16 pieces

Code	g
<b>96830609</b>	3715
<b>No 102</b>	200 mm
<b>No 103</b>	150 mm
<b>No 105</b>	120 x 10 mm
<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
<b>No 10957</b>	∅ 40 mm
<b>No 10960</b>	500 g
<b>No 12373</b>	
<b>No 12600</b>	500 g
<b>No 12718</b>	
<b>No 12931</b>	3 m
<b>No 65 64 2 250</b>	
<b>No 39 cars</b>	400 mm

## TCS 102-108/10957/10960/13



530 x 350 x 60 mm, 13 pieces

Code	g
<b>96830177</b>	5540
<b>No 102</b>	200; 300 mm
<b>No 103</b>	175 mm
<b>No 105</b>	120 x 12 mm
<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
<b>No 10957</b>	∅ 50 mm
<b>No 10960</b>	500; 800; 1000 g

## TCS 102-108/10957/10960 MF



530 x 350 x 40 mm, 12 pieces

Code	g
<b>96830355</b>	3343
<b>No 102</b>	200 mm
<b>No 103</b>	150 mm
<b>No 105</b>	120 x 10 mm
<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
<b>No 10957</b>	∅ 40 mm
<b>No 10960</b>	500; 800 g
<b>No 12718</b>	

## TCS 102-108/10957/12718/13



530 x 350 x 40 mm, 13 pieces

Code	g
<b>96830226</b>	3730
<b>No 102</b>	200 mm
<b>No 103</b>	150 mm
<b>No 105</b>	120 x 10 mm
<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8; 200 x 8 mm
<b>No 10957</b>	∅ 40 mm
<b>No 10960</b>	500; 800 g
<b>No 12718</b>	



### TCS 102-108/10956/10960/18



530 x 350 x 55 mm, 18 pieces

Code		g
<b>96 83 06 20</b>		3653
<b>No 102</b>	150 mm	
<b>No 103</b>	150 mm	
<b>No 105</b>	120 x 10 mm	
<b>No 108</b>	150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm	
<b>No 10956</b>	∅ 50 mm	
<b>No 10960</b>	300; 500 g	
<b>No 10356</b>		
<b>No 10670</b>	285 mm	
<b>No 10672</b>	20 x 315 mm	
<b>No 12374</b>		
<b>No 12900N</b>		
<b>No 12965N</b>		

### TCS 11095-13110/8



175 x 350 x 40 mm, 8 pieces

Code		g
<b>96 83 87 89</b>		700
<b>No 12000</b>	ISO	
<b>No 11095/20</b>	0.05 - 1.00 mm	
<b>No 12931</b>	3 m	
<b>No 12321</b>		
<b>No 12322</b>		
<b>No 12665/52</b>	0.25 - 6 mm	
<b>No 12900</b>		
<b>No 13110</b>	300 mm	

### TCS 10356-12965/5



175 x 350 x 40 mm, 5 pieces

Code		g
<b>96 83 87 90</b>		610
<b>No 12053</b>	158 mm	
<b>No 10356</b>	40 mm	
<b>No 10356R</b>	10 pieces	
<b>No 12320</b>		
<b>No 12965</b>		

### TCS 12025-13110/11



530 x 350 x 35 mm, 11 pieces

Code		g
<b>96 83 87 59</b>		2070
<b>No 12025</b>	210 mm	
<b>No 12030</b>	260 mm	
<b>No 12035</b>	210 mm	
<b>No 12036</b>	260 mm	
<b>No 12050</b>	300 mm	
<b>No 12320</b>		
<b>No 12321</b>		
<b>No 12718</b>		
<b>No 12931</b>	3 m	
<b>No 12965N</b>		
<b>No 13110</b>	300 mm	

### TCS 1/3 MF



175 x 350 x 30 mm, empty inlay

Code		g
<b>83 82 03 60</b>		30

# Factory and workshop equipment, sets of tools

1

## 8003S Display unit

220 cm high, 100 cm wide, black, RAL 9005, on request available in green RAL 6024 and light grey RAL 7035.

Consists of:

- 5 steel pegboards 100 x 40 cm,
- 1 base plate light grey,
- 2 base supports with adjusting screws,
- 100 hooks 170 x 9 mm, plastic coated,
- 25 hooks 170 x 6 mm, plastic coated

**Without columns and light unit**

(please order separately: column No 8024, single, or No 8029, 2 columns, and light unit No 8023L)



Code	No	△	kg
<b>80030010</b>	<b>8003S</b>		38.5
<b>80240000</b>	<b>8024</b>	(1 column)	6
<b>80290000</b>	<b>8029</b>	(2 columns)	12
<b>80230110</b>	<b>8023L</b>	(light unit)	8.5

## 8023L Light unit

with connecting cable



Code	△	kg
<b>80230110</b>		8.5

## 8023-2 Angle bracket with cover

1 pair, for Light unit 8023L



Code	△	kg
<b>80230012</b>		1.1

## 8023-3 Angle holder

Holder for two Light units 8023L mounted side-by-side



Code	△	kg
<b>80230013</b>		0.75

## Accessories for display units

### 8043 Steel display tray for small components

Consisting of:

- 1 base 100 x 47 cm, RAL 7035, made in one piece with grooves front and back
- 1 pair hook-on supports for fixing tray to perforated panel, depth 47 cm, RAL 7035
- 2 dividers, clear plastic, for compartmented tray grooves, 100 x 7.5 cm
- 8 toothed dividers clear plastic, 47 x 7.5 cm
- 5 cross dividers, clear plastic, 8.4 x 7.5 cm
- 25 cross dividers, clear plastic, 16.8 x 7.5 cm
- 1 price rail, plastic, 100 cm
- 1 protective film for price rail



Code	Width mm	Height mm	Depth mm	△	kg
<b>88100111</b>	1000	80	470		11.6

### 8043/1 Cover for steel display tray

protects against dust and pilfering, for steel display tray No 8043



Code	Width mm	Height mm	Depth mm	△	kg
<b>88100110</b>	1005	35	450		4.6

## 8024 Column

without base support, black RAL 9005



Code	L cm	△	kg
<b>80240000</b>	220		6

## 8029 2 Columns

without base supports,  
black RAL 9005



Code	L cm	ΔΔ kg
<b>80 29 00 00</b>	220	12

## 8024-1 Column extension

for extending the Column  
from 220 to 260 cm



Code	L cm	ΔΔ kg
<b>80 24 00 01</b>	50	1.6

## 8025 Base support

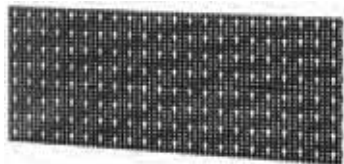
for column



Code	ΔΔ kg
<b>80 25 00 00</b>	3

## 8026S Steel pegboard

black RAL 9005,  
on request available in  
green RAL 6024 and  
light grey RAL 7035



Code	Width mm	Height mm	ΔΔ kg
<b>80 26 00 03</b>	1000	400	3.5

## 8027 Base plate

metal, light grey RAL 7035



Code	ΔΔ kg
<b>80 27 00 00</b>	5.6

## 8042 Drawer

for storing larger parts under the  
base plate.  
Steel sheet, light grey



Code	Width mm	Height mm	Depth mm	ΔΔ kg
<b>80 42 00 00</b>	1000	180	470	8

## 8015 Plastic coated hook

25 pieces,  
55 x 6 mm



Code	ΔΔ g
<b>88 10 01 03</b>	600

## 8016 Plastic coated hook

50 pieces,  
170 x 9 mm



Code	ΔΔ g
<b>88 10 01 04</b>	3850

## 8017 Plastic coated hook

25 pieces,  
170 x 6 mm



Code	ΔΔ g
<b>88 10 01 05</b>	1040

## 8022N Pliers/wrench hook



Code	ΔΔ g
<b>88 10 01 26</b>	108

# Factory and workshop equipment, sets of tools

1

## 8044 Toothed divider

47 x 7.5 cm,  
for flexible arrangement of  
compartments in the display tray



Code	△△ g
<b>88 1001 12</b>	186

## 8045 Cross divider

16.8 x 7.5 cm,  
for flexible arrangement of  
compartments in the display tray



Code	△△ g
<b>88 1001 18</b>	47

## 8046 Cross divider

8.4 x 7.5 cm,  
for flexible arrangement of  
compartments in the display tray



Code	△△ g
<b>88 1001 14</b>	19

## 8004S Corner display unit, 90°

Consists of:  
5 steel pegboards, left,  
40 cm high, black RAL 9005,  
5 steel pegboards, right,  
40 cm high, black RAL 9005.  
On request available in  
green RAL 6024 and  
light grey RAL 7035,  
1 base plate, metal,  
light grey RAL 7035,  
1 base support with adjusting  
screws.

**Without columns and corner  
cover**

(please order separately column  
No 8024, single, or  
No 8029, 2 columns,  
and cover No 8023-4)



Code	D mm	W mm	H mm	D mm	△△ kg
<b>800400 10</b>	950	660	2200	850	33.5

D = Diagonal, W = Width of pegboard, H = Height, D = Depth

## 8023-4 Cover

for use with Corner display unit  
No 8004S.



Code	△△ kg
<b>80 2300 14</b>	3

## Display stands

### ST 11 Display stand for pliers

for 72 pairs of pliers, matt black  
lacquered, three-tier design.  
Counter or wall display.  
Supplied without pliers.



Code	Width mm	Height mm	Depth mm	△△ kg
<b>82 0800 01</b>	500	200	380	4.5

### ST 97 SERVOMAT display stand for sockets

free standing or for hanging on  
pegboards, variable configuration  
possible for sockets with 1/4, 3/8 and  
1/2" □ square drive.  
Display Stand is delivered with  
17 dividing elements.  
Further dividing elements can be  
ordered for an individual arrangement.  
Details: sheet metal, green painted, with acryl-glass cover,  
660 x 250 x 200 mm.  
Supplied without sockets.



Code	△△ g	☐
<b>82 1300 01</b>	6380	1

### ST 97 R Standard partitions

for SERVOMAT ST 97

Code	size	partition height	△△ g	☐
<b>88 1300 01</b>	<b>1201</b>	12 mm, straight	20	10
<b>88 1300 02</b>	<b>1202</b>	12 mm, bent	22	10
<b>88 1300 03</b>	<b>2201</b>	22 mm, straight	40	10
<b>88 1300 04</b>	<b>2202</b>	22 mm, bent	41	10



# STAHLWILLE – Certified to DIN EN ISO 9001.

After STAHLWILLE was certified, as one of the very first companies back in 1990, to **DIN EN ISO 9002**, our Quality Assurance System was also certified to **DIN EN ISO 9001 in 1992**.



## CERTIFICATE

This is to certify that the  
**STAHLWILLE-Group**



**Eduard Wille GmbH & Co. KG**  
Lindenallee 27  
42349 Wuppertal

**SWM Werkzeugfabrik GmbH & Co. KG**  
Bereich Schmiede  
Stiller Berg  
98587 Steinbach-Hallenberg

Lange Str. 40-56  
42857 Remscheid

has implemented and maintains a **Quality Management System**.

Scope:  
Development, manufacture & distribution of tools

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

### ISO 9001 : 2008

Certificate registration no.	000018 QM08
Valid from	2015-06-01
Valid until	2018-05-31
Date of certification	2015-04-10



**DQS GmbH**



Götz Blechschmidt  
Managing Director

Accredited Body: DQS GmbH, August-Schanz-Straße 21, 60433 Frankfurt am Main





## 2 | SPANNERS

### **DOUBLE OPEN ENDED** SPANNERS

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### **COMBINATION** SPANNERS

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### **DOUBLE ENDED RING** SPANNERS

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### **DOUBLE ENDED OPEN RING** SPANNERS

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### **RATCHET** WRENCHES

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### **DOUBLE ENDED FLEXI-JOINT** SPANNERS

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### **HEAVY DUTY RING** SPANNERS

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### **STRIKING FACE RING** SPANNERS

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### **STRIKING FACE OPEN ENDED** SPANNERS

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### **SINGLE-END** SPANNERS

→ PAGE 97



### **BOX** SPANNERS

→ PAGE 98





# Strong, extremely tough and durable. **STAHLWILLE spanners**

**1**

### Conventional spanners

When force is applied to a spanner, the greatest force acts on the joint between the jaw and the shaft. Standard-quality open-jaw spanners do not take this fact into consideration. In the context of normal hard work, this can lead to the tool breaking, causing considerable personal injury.

### STAHLWILLE spanners

To reduce the danger of breakage, we add more material where the greatest loads are to be found and take it away from the places that are not under such stress. In this way, we are able to manufacture extremely sturdy, slim and light tools which also facilitate working in confined spaces due to their compact designs.

**2**

### Extremely resilient, remarkably durable

- Drop-forged from high-grade special steels.
- Optimum hardening in continuous furnaces with no scale build-up or skin decarburisation.
- Gentle quenching in oil.

**3**

### Light and easy to handle

- High resistance to bending and low weight thanks to STAHLWILLE's typical double-T profile.
- Snug-fitting, skin-friendly surfaces thanks to STAHLWILLE's rounded finish.

**4**

### Key benefits when tightening and loosening screws

- Tougher than any bolt thanks to the forged double hex.
- Thinner than conventional rings - facilitating work in confined spaces.
- Higher than standard nuts - prevents the spanner jamming on the nut.

**5**

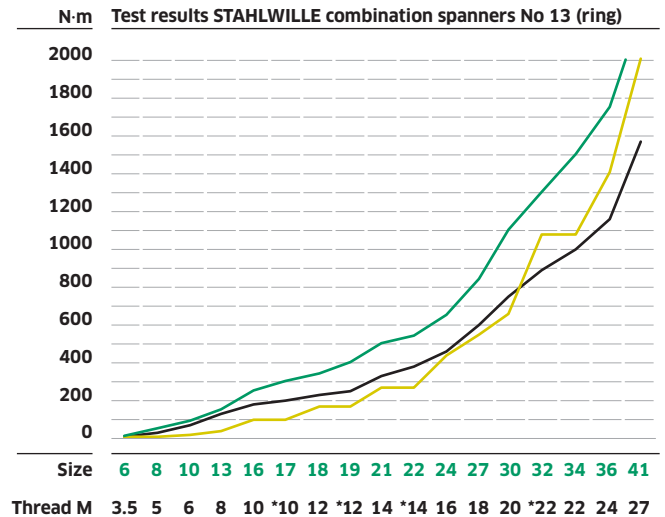
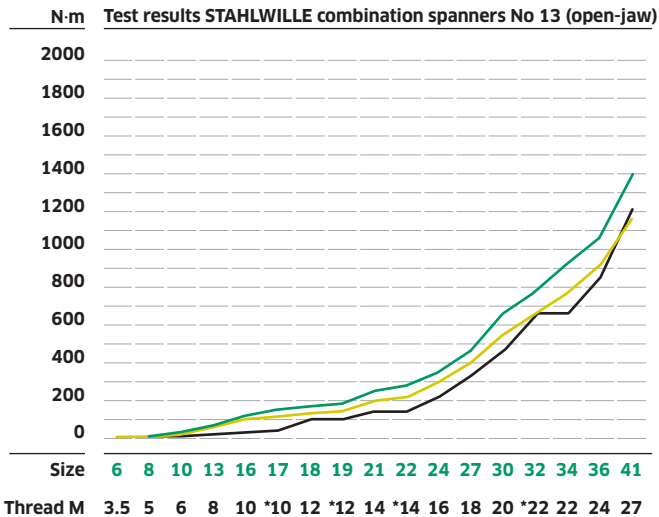
### Quality assured

STAHLWILLE's Quality Assurance System was awarded an internationally recognised certificate in accordance with DIN ISO 9001 by the DQS (German Association for the Certification of Quality Assurance Systems).



Reproducible and identical -  
tailored and perfectly  
chrome-plated over nickel,  
non-flaking finish





— Test results for STAHLWILLE  
 — Test results to DIN 899 or ISO 1711  
 — Clamping torque for 8.8 fasteners at 100% tensile yield strength ( $\mu = 0.14$ )  
 \*Reference to older screw thread standards

— Test results for STAHLWILLE  
 — Test results to DIN 899 or ISO 1711  
 — Clamping torque for 12.9 fasteners at 100% tensile yield strength ( $\mu = 0.14$ )



1 Load zones in standard-quality spanners

2 Load zones in spanners by STAHLWILLE

3 Open-jaw spanners in oil



4 Resistant to bending thanks to the double-T profile

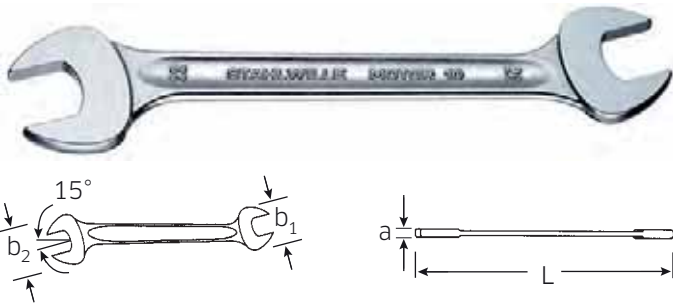
5 Snug-fitting, skin-friendly surfaces thanks to STAHLWILLE's rounded finish

6 STAHLWILLE No 8 striking face double hex box-spanners are tougher, thinner and higher.

# Spanners

## 10 Double open ended spanners

DIN 3110, ISO 10102 (metric sizes), Chrome Alloy Steel, chrome plated.



Code	mm	L mm	b <sub>1</sub> mm	b <sub>2</sub> mm	a mm	g	
40030405	4 x 5	100	12.5	14	3.4	11	10
40035507	5.5 x 7	120	14.8	17	3.7	19	10
40030607	6 x 7	120	15.5	17	3.7	17	10
40030708	7 x 8	140	17	18	4.0	25	10
40030809	8 x 9	140	18	21	4.0	21	10
40030810	8 x 10	140	18	23	4.5	33	10
40031011	10 x 11	155	23	26	4.8	40	10
40031012	10 x 12	170	23	28	5.3	51	10
40031013	10 x 13	170	23	30	5.3	57	10
40031113	11 x 13	170	26	30	5.3	55	10
40031213	12 x 13	170	28	30	5.3	64	10
40031214	12 x 14	170	28	32	5.3	63	10
40031314	13 x 14	190	30	32	5.3	70	10
40031315	13 x 15	190	30	35	5.3	73	10
40031317	13 x 17	205	30	38	5.8	92	10
40031415	14 x 15	190	32	35	5.3	81	10
40031417	14 x 17	205	32	38	5.8	99	10
40031617	16 x 17	205	36	38	5.8	100	10
40031618	16 x 18	220	36	40	6.7	125	10
40031719	17 x 19	220	38	42	6.7	131	10
40031819	18 x 19	220	40	42.5	6.7	147	10
40031821	18 x 21	235	40	47	7.3	170	10
40031922	19 x 22	235	42	49	7.3	179	10
40032022	20 x 22	235	45	49	7.3	185	10
40032123	21 x 23	250	47	51	7.8	225	5
40032124	21 x 24	250	47	53	7.8	215	5
40032224	22 x 24	250	49	53	7.8	232	5
40032426	24 x 26	270	53	57.5	8.3	293	5
40032427	24 x 27	280	53	60	8.3	299	5
40032528	25 x 28	285	55	62	8.3	309	5
40032730	27 x 30	300	60	66	9.4	412	5
40032732	27 x 32	300	60	70	9.4	418	5
40033032	30 x 32	300	66	70	9.4	451	5
40033034	30 x 34	300	66	75	9.4	480	5
40033236	32 x 36	325	70	80	10	546	5
40033436	34 x 36	325	75	80	10	619	1
40033641	36 x 41	375	80	88	11	800	1
40034146	41 x 46	425	88	94.5	12	1030	1

## 10a Double open ended spanners

Code	mm	L mm	b <sub>1</sub> mm	b <sub>2</sub> mm	a mm	g	
40431620	1/4 x 5/16	140	16	18	4	21	10
40432024	5/16 x 3/8	140	18	23	4.5	34	10
40432428	3/8 x 7/16	155	23	26	4.8	48	10
40432832	7/16 x 1/2	170	26	30	5.3	58	10
40433234	1/2 x 9/16	190	30	32	5.3	73	10
40433436	9/16 x 5/8	205	32	36	5.8	96	10
40433538	19/32 x 11/16	205	35	40	5.8	105	10
40433638	5/8 x 11/16	205	36	40	5.8	101	10
40433640	5/8 x 3/4	220	36	42	6.7	135	10
40433840	11/16 x 3/4	220	40	42	6.7	135	10
40433842	11/16 x 13/16	235	40	47	7.3	167	10
40434044	3/4 x 7/8	235	42	49	7.3	177	10
40434142	25/32 x 13/16	235	45	47	7.3	190	10
40434446	7/8 x 15/16	250	49	53	7.8	235	10
40434648	15/16 x 1	270	53	55	8.3	303	5
40435258	1 1/8 x 1 5/16	300	64	75	9.4	502	5

## 10, 10a Sets: Double open ended spanners, in roll-up wallet

Roll-up wallet made of extremely tough textile with Velcro fastener.



Code	No	Content mm/"	g
96400305	10/8	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22	745
96400314	10/9 <sup>1)</sup>	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 24	918
96400307	10/10	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32	1540
96400306	10/12	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 23; 24 x 27; 25 x 28; 30 x 32	2125
96404306	10a/7	1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16; 5/8 x 3/4; 11/16 x 13/16; 7/8 x 15/16; 1 1/8 x 1 5/16	1242
96404307	10a/11	1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16; 9/16 x 5/8; 19/32 x 11/16; 5/8 x 3/4; 11/16 x 13/16; 3/4 x 7/8; 25/32 x 13/16; 7/8 x 15/16; 1 1/8 x 1 5/16	1870

<sup>1)</sup> packed in carton

## ES 10/10, 5.5x7-22x24 mm



175 x 350 x 60 mm, 10 pieces

Code	g
96838130	1100
No 10	sizes 5.5 x 7; 8 x 10; 10 x 12; 11 x 13; 12 x 14; 14 x 17; 17 x 19; 18 x 21; 19 x 22; 22 x 24 mm
83812033	Empty tray 106

Made in Germany

### ES 10/10, 6x7-30x32 mm



175 x 350 x 70 mm, 10 pieces

Code	Δg
<b>96 83 81 26</b>	1515
<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm
<b>83 81 20 22</b>	Empty tray 112

### TCS 10/10, 6x7-30x32 mm



350 x 350 x 30 mm, 10 pieces

Code	Δg
<b>96 83 81 82</b>	1550
<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm

### TCS 10/10, 6x7-30x32 mm MF



175 x 350 x 75 mm, 10 pieces

Code	Δg
<b>96 83 03 53</b>	1437
<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 24 x 27; 30 x 32 mm

### TCS 10/10, 6x7-24x27 mm



175 x 350 x 66 mm, 10 pieces

Code	Δg
<b>96 83 81 87</b>	1287
<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 24; 24 x 27 mm

### TCS 10/10, 6x7-24x27 mm MF



175 x 350 x 70 mm, 10 pieces

Code	Δg
<b>96 83 03 58</b>	1320
<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 24; 24 x 27 mm

### TCS 10/11, 6x7-34x36 mm



175 x 350 x 82 mm, 11 pieces

Code	Δg
<b>96 83 01 67</b>	2056
<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 24 x 27; 30 x 32; 34 x 36 mm

### TCS 10+13+24/30



530 x 350 x 75 mm, 30 pieces

Code	Δg
<b>96 83 06 05</b>	3724
<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 24 mm
<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32 mm
<b>No 24</b>	size 10 x 11 mm

### TCS 10a/9



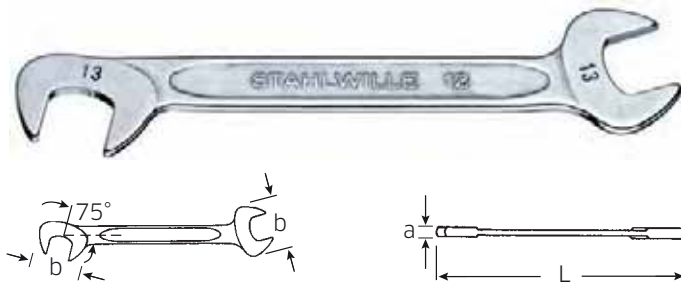
175 x 350 x 70 mm, 9 pieces

Code	Δg
<b>96 83 87 79</b>	1555
<b>No 10a</b>	sizes 1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16; 19/32 x 11/16; 5/8 x 3/4; 3/4 x 7/8; 25/32 x 13/16; 15/16 x 1; 1 1/8 x 1 5/16"

## Spanners

### 12 Small double open ended spanners ELECTRIC

Chrome Alloy Steel, chrome plated.



Code	Ø mm	L mm	b mm	a mm	⚖ g	📦
40063232	3.2	70	10.5	2	5	10
40063535	3.5	70	10.5	2	5	10
40060404	4	70	10.5	2	5	10
40064545	4.5	70	10.5	2	5	10
40060505	5	78	12.6	2	7	10
40065555	5.5	78	12.6	2	7	10
40060606	6	78	12.6	2	6	10
40060707	7	91	14.7	2	9	10
40060808	8	96	16.8	3	16	10
40060909	9	103	18.9	3	19	10
40061010	10	105	21	3	22	10
40061111	11	116	24.2	3	27	10
40061212	12	116	24.2	3	27	10
40061313	13	131	28.3	3	37	10
40061414	14	131	28.3	3	36	10

### 12a Small double open ended spanners ELECTRIC

Code	Ø"	L mm	b mm	a mm	⚖ g	📦
40461010	5/32	70	10.5	2	5	10
40461212	3/16	70	10.5	2	5	10
40461313	13/64	78	12.6	2	7	10
40461414	7/32	78	12.6	2	6	10
40461515	15/64	78	12.6	2	6	10
40461616	1/4	91	14.7	2	9	10
40461818	9/32	91	14.7	2	9	10
40462020	5/16	96	16.8	3	16	10
40462222	11/32	103	18.9	3	19	10
40462424	3/8	105	21	3	22	10
40462828	7/16	116	24.2	3	28	10
40463232	1/2	131	28.3	3	37	10
40463434	9/16	131	28.3	3	36	10

### 12, 12a Sets: Small double open ended spanners ELECTRIC, in roll-up wallet

Roll-up wallet made of extremely tough textile with Velcro fastener.

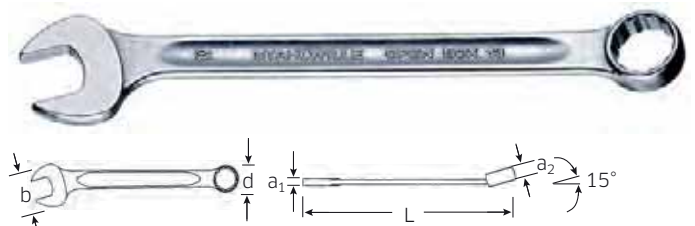


Code	No	Content mm/"	⚖ g
96400653	12/10	4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11	161
96400651	12/15	3.2; 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14	296
96404654	12a/13	5/32; 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16	270

### 13 Combination spanners OPEN-BOX

AS-drive

DIN 3113 form A/ISO 7738 form A (metric sizes), Chrome Alloy Steel, chrome plated.



Code	Ø mm	L mm	b mm	d mm	a <sub>1</sub> mm	a <sub>2</sub> mm	⚖ g	📦
40085500	5.5	100	14.8	9.2	3.5	5.8	13	10
40080606	6	105	15.5	9.9	3.6	6	15	10
40080707	7	110	17	11.3	3.9	6	20	10
40080808	8	115	18	12.4	4.2	7	21	10
40080909	9	120	21	13.4	4.5	7	27	10
40081010	10	125	23	14.8	4.8	7	35	10
40081111	11	135	26	16.4	4.8	8	43	10
40081212	12	140	28	17.8	5.3	8.5	46	10
40081313	13	160	30	19.1	5.3	8.5	57	10
40081414	14	165	32	20.6	5.3	8.5	68	10
40081515	15	170	35	21.9	5.3	8.5	73	10
40081616	16	180	37	23.2	5.8	10	89	10
40081717	17	190	38	24.6	5.8	10	99	10
40081818	18	200	40	26	6.7	11.5	126	10
40081919	19	230	42	27.5	6.7	11.5	142	10
40082020	20	230	45	29	7	13	176	10
40082121	21	260	47	30.3	7.3	13	216	10
40082222	22	260	49	31.8	7.3	13	220	10
40082323	23	280	53	33.5	7.8	14	251	5
40082424	24	280	53	34.9	7.8	14	254	5
40082525	25	300	55	36.3	8.4	14.5	281	5
40082626	26	300	57.5	37.8	8.4	14.5	315	5
40082727	27	300	60	39.2	8.4	14.5	345	5
40082828	28	320	62	40.6	8.4	14.5	368	5
40082929	29	330	64	41.9	8.9	16	420	5
40083030	30	330	66	43.2	8.9	16	404	5
40083232	32	360	70	45.8	9.4	16.5	484	5
40083434	34	450	75	48	9.4	17	683	1
40083636	36	460	80	50.8	10	18	787	1
40083838	38	480	87	53.6	11	19	915	1
40084141	41	480	88	57.8	11	19	1055	1
40084646	46	500	94.5	65.2	13	20	1352	1
40085050	50	530	103	73	14	21	1700	1
40085555	55	560	114	81	15	22	2193	1
40086060	60	590	125	89.8	16	24	2825	1

STAHLWILLE »AS-Drive«



The rings of STAHLWILLE combination spanners and double ended ring spanners are equipped with the AS-Drive\* profile: this permits high transmission of forces to the lands of nuts and bolts without damaging them. No longer will you have to worry about stripping the corners off nuts and bolts.

\*Anti-Slip-Drive



### 13a Combination spanners OPEN-BOX

Code	⚙️ "	L mm	b mm	d mm	a <sub>1</sub> mm	a <sub>2</sub> mm	⚖️ g	📦
40 48 12 12	3/16	95	14	9.8	3	3.2	10	5
40 48 13 13	13/64	95	14	9.8	3	3.2	10	5
40 48 14 14	7/32	95	14	9.8	3	3.2	10	5
40 48 15 15	15/64	95	14	9.8	3	3.2	9	5
40 48 16 16	1/4	105	15.5	10.2	3.6	6	14	10
40 48 18 18	9/32	110	17	11.3	3.9	6	17	10
40 48 20 20	5/16	115	18	12.4	4.2	7	20	10
40 48 22 22	11/32	120	21	13.4	4.5	7	26	10
40 48 24 24	3/8	125	23	14.3	4.8	7	32	10
40 48 28 28	7/16	135	26	16.4	4.8	8	41	10
40 48 32 32	1/2	160	30	18.8	5.3	8.5	57	10
40 48 34 34	9/16	165	32	20.6	5.3	8.5	68	10
40 48 35 35	19/32	170	35	21.9	5.3	8.5	74	10
40 48 36 36	5/8	180	37	23.2	5.8	10	88	10
40 48 38 38	11/16	200	40	25.3	6.7	11.5	116	10
40 48 40 40	3/4	230	42	27.5	6.7	11.5	144	10
40 48 41 41	25/32	235	45	29	7	13	175	5
40 48 42 42	13/16	260	47	30	7.3	13	204	5
40 48 44 44	7/8	260	49	31.8	7.3	13	217	5
40 48 46 46	15/16	280	53	34.9	7.8	14	255	5
40 48 48 48	1	300	55	37.2	8.4	14.5	286	5
40 48 50 50	1 1/16	300	60	39.2	8.4	14.5	327	5
40 48 52 52	1 1/8	330	64	41.4	8.9	16	380	5
40 48 54 54	1 3/16	332	66	43.2	8.9	16.5	398	1
40 48 56 56	1 1/4	360	70	45.8	9.4	16.5	504	5
40 48 58 58	1 5/16	450	74	47	9.6	17	617	1
40 48 60 60	1 3/8	460	80	49.3	10	18	796	1
40 48 62 62	1 7/16	461	80	51.4	10	18	770	1
40 48 64 64	1 1/2	480	87	53.6	11	19	961	1
40 48 66 66	1 5/8	480	88	58	11	19	1021	1
40 48 69 69	1 13/16	500	94.5	65.3	13	20	1343	1
40 48 70 70	1 7/8	530	103	68.4	14	21	1779	1
40 48 72 72	2	530	103	74	14	21	1817	1

### 13, 13a Sets: Combination spanners OPEN-BOX



Code	No	Content mm/"	⚖️ g
96 40 08 13	13/6 <sup>3)</sup>	7; 8; 10; 13; 17; 19	430
96 40 08 01	13/9	9; 10; 11; 12; 13; 14; 17; 19; 22	758
96 40 08 08	13/10KT <sup>1)</sup>	8; 9; 10; 11; 12; 13; 14; 15; 17; 19	746
96 40 08 02	13/11	8; 9; 10; 11; 12; 13; 14; 15; 17; 19; 22	915
96 40 08 03	13/15	6; 7; 8; 9; 10; 11; 12; 13; 17; 19; 22; 24; 27; 30; 32	2236
96 40 08 16	13/16 <sup>3)</sup>	7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24	1620
96 40 08 04	13/17	6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22	1480
96 40 08 05	13/26 <sup>3)</sup>	6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28; 29; 30; 32	4705
96 40 48 03	13a/8	7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8	959
96 40 48 12	13a/10KT <sup>1)</sup>	1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4	750
96 40 48 04	13a/20 <sup>1)</sup>	1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8; 1 1/4	3210

Standard packing: Roll-up wallet made of extremely tough textile with Velcro fastener.

<sup>1)</sup> carton with clear view cover

<sup>2)</sup> packed in carton

<sup>3)</sup> in convenient clip holder

### ES 13/10, 6-15 mm



175 x 350 x 40 mm, 10 pieces

Code	⚖️ g	
96 83 81 27	525	
83 81 20 23	Empty tray	105

### ES 13/8, 16-24 mm



175 x 350 x 54 mm, 8 pieces

Code	⚖️ g	
96 83 81 28	1440	
83 81 20 24	Empty tray	112

### ES 13/5, 27-32 mm



530 x 350 x 30 mm, 5 pieces

Code	⚖️ g	
96 83 81 04	2280	
83 81 20 40	Empty tray	287

### TCS 13/18, 6-24 mm



530 x 350 x 35 mm, 18 pieces

Code	⚖️ g	
96 83 81 83	1850	
83 81 20 40	Empty tray	287

No 13 sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24 mm

# Spanners

2

## TCS 13/17, 6-24 mm



350 x 350 x 60 mm, 17 pieces

Code

**96830164**



1615



**No 13**

sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24 mm

## TCS 13/17, 6-24 mm MF



350 x 350 x 60 mm, 17 pieces

Code

**96830351**



1552



**No 13**

sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24 mm

## TCS 13/21, 6-34 mm



530 x 350 x 75 mm, 21 pieces

Code

**96830174**



3571



**No 13**

sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32; 34 mm

## TCS 13/25, 5.5-34 mm



530 x 350 x 80 mm, 25 pieces

Code

**96832096**



4550



**No 13**

sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 27; 29; 30; 32; 34 mm

## TCS 12+13+14/29



530 x 350 x 80 mm, 29 pieces

Code

**96830193**



3752



**No 12**

sizes 5.5; 12; 14 mm (2x)



**No 13**

sizes 7; 11 mm (2x); 6; 8; 9; 10; 12; 13; 14; 15; 16; 17; 18; 19; 20; 22; 24; 30; 32; 36 mm (1x)



**No 14**

size 17 mm

## TCS 13a/19



350 x 350 x 55 mm, 19 pieces

Code

**96838778**



2000



**No 13a**

sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1"



### TCS 13a/23



530 x 350 x 35 mm, 23 pieces

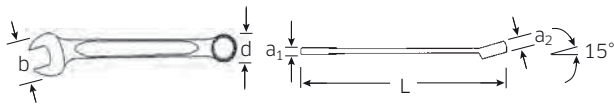
Code	$\Delta$ g
<b>96 83 08 85</b>	2726

<b>No 13a</b>	sizes 3/16; 13/64; 7/32; 15/64; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8"
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### 130a Combination spanners



Fed. Spec. GGG-W-636 E, HPQ® high performance steel, chrome plated.

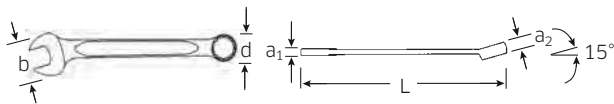


Code	$\Delta$ "	L mm	b mm	d mm	a <sub>1</sub> mm	a <sub>2</sub> mm	$\Delta$ g	
<b>40 57 16 16</b>	1/4	105	14.2	9.8	3.6	6	13	10
<b>40 57 18 18</b>	9/32	110	15.5	10.9	4.1	6	16	10
<b>40 57 20 20</b>	5/16	115	17	12	4.5	7	20	10
<b>40 57 22 22</b>	11/32	120	19	13.1	4.9	7	25	10
<b>40 57 24 24</b>	3/8	125	20.5	14.1	5.2	7	32	10
<b>40 57 28 28</b>	7/16	135	23	16.2	6	8	42	10
<b>40 57 32 32</b>	1/2	150	27	18.2	6.5	8.5	61	10
<b>40 57 34 34</b>	9/16	165	30.5	20.6	7	8.5	78	10

### 130aSP Spline drive combination spanners



MS-33787, MIL-W-8982, HPQ® high performance steel, chrome plated.

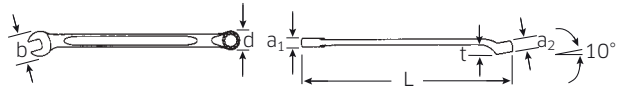


Code	Spline size	$\Delta$ "	L mm	b mm	d mm	a <sub>1</sub> mm	a <sub>2</sub> mm	$\Delta$ g	
<b>40 58 16 16</b>	8	1/4	105	14.2	10	3.6	5.6	13	5
<b>40 58 20 20</b>	10	5/16	115	17	12.2	4.5	6.4	21	5
<b>40 58 24 24</b>	12	3/8	125	20.5	14.8	5.2	7	31	5
<b>40 58 28 28</b>	14	7/16	135	23	16.5	6	8	43	5
<b>40 58 32 32</b>	16	1/2	150	27	18.7	6.5	8.5	59	5
<b>40 58 34 34</b>	18	9/16	165	30.5	20.8	7	8.5	84	5

### 14 Combination spanners OPEN-BOX, long



DIN 3113 form B/ ISO 7738 form B, Chrome Alloy Steel, chrome plated.



Code	$\Delta$ mm	L mm	b mm	d mm	a <sub>1</sub> mm	a <sub>2</sub> mm	t mm	$\Delta$ g	
<b>40 10 06 06</b>	6	125	14	9.5	4.5	6	7	18	10
<b>40 10 07 07</b>	7	135	16	10.8	5	7	8	25	10
<b>40 10 08 08</b>	8	145	17.5	12.1	5	7	8	28	10
<b>40 10 09 09</b>	9	155	19	13.3	5.5	8	9	34	10
<b>40 10 10 10</b>	10	165	21	14.6	5.5	8	9	43	10
<b>40 10 11 11</b>	11	180	23.5	15.9	6	9	10	55	10
<b>40 10 12 12</b>	12	180	25.5	17.3	6	9	10	61	10
<b>40 10 13 13</b>	13	195	27.5	18.6	6.5	10	11	83	10
<b>40 10 14 14</b>	14	210	29.5	20.1	6.5	10	11	88	10
<b>40 10 15 15</b>	15	215	31	21.4	7	11	13	109	10
<b>40 10 16 16</b>	16	230	33	22.7	7	11	14	108	10
<b>40 10 17 17</b>	17	240	35	24.1	7.5	12	15	151	10
<b>40 10 18 18</b>	18	255	37	25.5	7.5	12	16	151	10
<b>40 10 19 19</b>	19	265	39.5	27	8	13	18	190	10
<b>40 10 20 20</b>	20	280	41.5	28.5	8	13	19	219	10
<b>40 10 21 21</b>	21	280	43	29.8	8.5	13	19	244	10
<b>40 10 22 22</b>	22	300	45	31.3	8.5	14	20	268	10
<b>40 10 24 24</b>	24	330	50	34.3	9.5	14	22	363	5
<b>40 10 27 27</b>	27	385	56	38.6	10.5	16	24	502	5
<b>40 10 30 30</b>	30	415	63	42.6	12	18	26	645	5
<b>40 10 32 32</b>	32	430	67	45.2	12	18	27	666	5
<b>40 10 34 34</b>	34	460	72	48	13	18	27	900	1
<b>40 10 36 36</b>	36	480	74	50.8	13	19	28	951	1
<b>40 10 41 41</b>	41	560	84	57.8	14	20	32	1322	1

### 14 Sets: Combination spanners OPEN-BOX, long



Code	No	Content mm	$\Delta$ g
<b>96 40 10 08</b>	<b>14/6<sup>1)</sup></b>	10; 13; 17; 19; 22; 24	1175
<b>96 40 10 09</b>	<b>14/9<sup>2)</sup></b>	10; 11; 13; 17; 19; 22; 24; 27; 30	2395
<b>96 40 10 07</b>	<b>14/10 KT<sup>1)</sup></b>	8; 10; 11; 12; 13; 14; 16; 17; 18; 19	1235
<b>96 40 10 06</b>	<b>14/11</b>	8; 9; 10; 11; 12; 13; 14; 15; 17; 19; 22	1131
<b>96 40 10 04</b>	<b>14/15</b>	6; 7; 8; 9; 10; 11; 12; 13; 17; 19; 22; 24; 27; 30; 32	3370
<b>96 40 10 10</b>	<b>14/15N<sup>2)</sup></b>	10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30	3165
<b>96 40 10 05</b>	<b>14/17</b>	6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22	1874

Standard packing: Roll-up wallet made of extremely tough textile with Velcro fastener.

<sup>1)</sup> packed in plastic with transparent cover

<sup>2)</sup> packed in carton

# Spanners

## ES 14/10, 6-15 mm



175 x 350 x 39 mm, 10 pieces

Code	g
<b>96838105</b>	700
<b>No 14</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15 mm
<b>83812034</b>	Empty tray
	110

## ES 14/8, 16-24 mm



175 x 350 x 51 mm, 8 pieces

Code	g
<b>96838106</b>	1820
<b>No 14</b>	sizes 16; 17; 18; 19; 20; 21; 22; 24 mm
<b>83812035</b>	Empty tray
	112

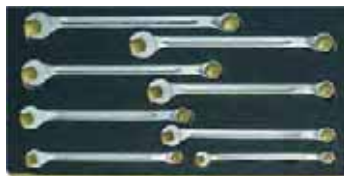
## TCS 14/5, 17-21 mm



175 x 350 x 30 mm, 5 pieces

Code	g
<b>96838188</b>	1065
<b>No 14</b>	sizes 17; 18; 19; 20; 21 mm

## TCS 14/8, 8-16 mm



175 x 350 x 30 mm, 8 pieces

Code	g
<b>96838189</b>	660
<b>No 14</b>	sizes 8; 10; 11; 12; 13; 14; 15; 16 mm

## TCS 14/18, 6-24 mm



350 x 350 x 60 mm, 18 pieces

Code	g
<b>96838750</b>	2600
<b>No 14</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24 mm

## TCS 14/21, 6-36 mm



530 x 350 x 75 mm, 21 pieces

Code	g
<b>96838771</b>	5100
<b>No 14</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32; 36 mm

## Tool Control System The safety inlay system

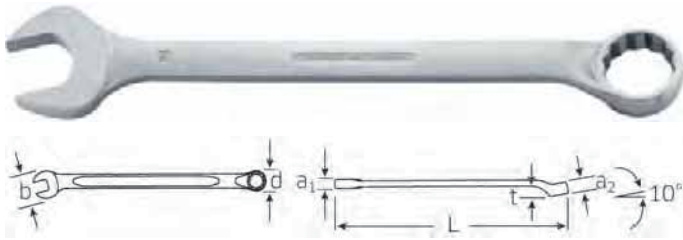
- Designed to fit our Tool Trolleys and Tool Boxes
- With yellow signal cut-outs to show whether all tools are in their places





### 4014 Combination spanners

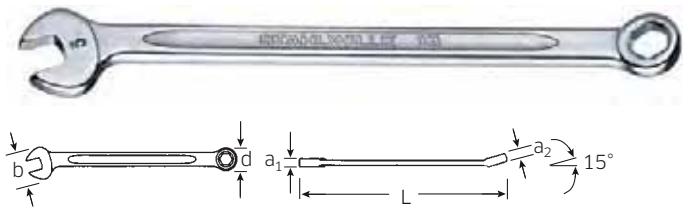
Chrome-Vanadium, chrome plated.



Code	mm	L mm	b mm	d mm	a <sub>1</sub> mm	a <sub>2</sub> mm	t mm	g	g	g
40 14 65 65	65	710	133	98	22	33	49.5	4500	1	
40 14 70 70	70	760	143	105	24	35	53.5	5500	1	
40 14 75 75	75	810	153	110	26	38	57.5	6500	1	
40 14 80 80	80	860	163	119	28	41	63.5	8000	1	

### 16 Combination spanners OPEN-BOX

ISO 3318, Chrome Alloy Steel, chrome plated.



Code	mm	L mm	b mm	d mm	a <sub>1</sub> mm	a <sub>2</sub> mm	t mm	g	g	g
40 09 32 32	3.2	75	10	6.6	3	3.2		6	10	
40 09 35 35	3.5	75	10	6.6	3	3.2		6	10	
40 09 40 40	4	85	12.5	7.8	3	3.2		9	10	
40 09 45 45	4.5	85	12.5	7.8	3	3.2		8	10	
40 09 50 50	5	95	14	9.8	3	3.2		11	10	

### 16/5 Set: Combination spanners OPEN-BOX; 3.2-5 mm, in textile bag



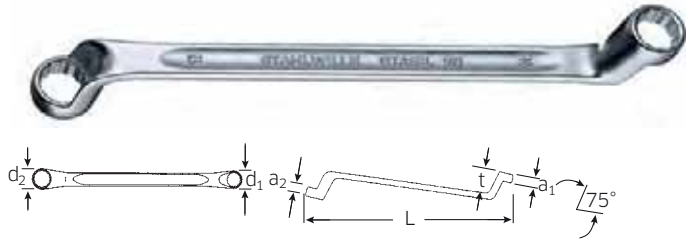
Code	Content mm	g
96 40 09 02	3.2; 3.5; 4; 4.5; 5	46

### 20 Double ended ring spanners

AS-drive

#### StahlwilleSTABIL®

offset, DIN 838/ISO 10104 (metric sizes), Chrome Alloy Steel, chrome plated.



Code	mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	t mm	g	g	g
41 04 06 07	6 x 7	165	10.5	11.8	6	7	18	46	10	
41 04 08 09	8 x 9	180	13.1	14.5	7	8	20	62	10	
41 04 08 10	8 x 10	180	13.1	15.8	7	9	21	61	10	
41 04 10 11	10 x 11	200	15.8	17.2	9	9	23	93	10	
41 04 10 13	10 x 13	220	15.8	20	9	10	25	122	10	
41 04 12 13	12 x 13	220	18.6	20	9	10	25	126	10	
41 04 13 17	13 x 17	245	20	25.3	10	12	27	169	10	
41 04 14 15	14 x 15	245	21.3	22.6	10	12	27	163	10	
41 04 16 17	16 x 17	255	23.9	25.3	11	12	27	181	10	
41 04 17 19	17 x 19	270	25.3	28	12	13	29	220	10	
41 04 18 19	18 x 19	275	26.6	28	12	13	29	228	10	
41 04 18 21	18 x 21	300	26.6	30.7	12	13	31	279	10	
41 04 19 22	19 x 22	300	28	32.1	13	14	31	315	10	
41 04 20 22	20 x 22	300	29.4	32.1	13	14	31	317	5	
41 04 21 23	21 x 23	315	30.7	33.4	13	14	31	312	5	
41 04 21 24	21 x 24	330	30.7	34.7	13	14	34	384	5	
41 04 22 24	22 x 24	330	32.1	34.7	14	14	34	368	5	
41 04 24 26	24 x 26	330	34.7	37.3	14	15	34	427	5	
41 04 24 27	24 x 27	330	34.7	38.6	14	15	34	447	5	
41 04 25 28	25 x 28	350	36	40	14	15	34	414	5	
41 04 27 30	27 x 30	360	38.3	42.6	15	15	37	595	5	
41 04 27 32	27 x 32	360	39.3	47.2	15	16	37	596	5	
41 04 30 32	30 x 32	365	42.6	45.4	15	16	37	603	5	
41 04 30 34	30 x 34	365	42.6	48	15	16	37	660	1	
41 04 36 41	36 x 41	440	53	60	17	18	40	1015	1	
41 04 46 50	46 x 50	535	65.2	73	19	20	45	1709	1	

### 20a Double ended ring spanners

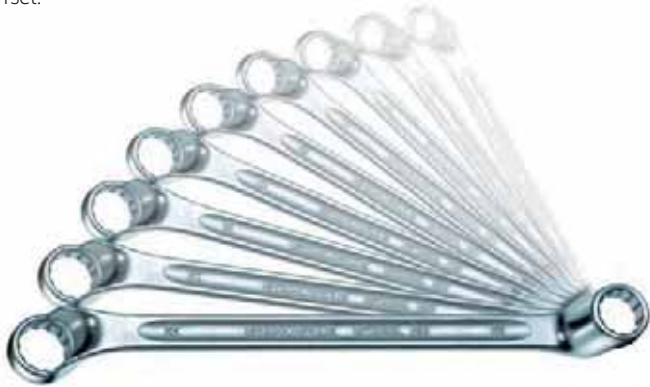
Code	mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	t mm	g	g	g
41 44 16 20	1/4 x 5/16	180	11.8	13.1	7	7	20	61	10	
41 44 24 28	3/8 x 7/16	200	15.8	17.2	9	9	23	88	10	
41 44 32 34	1/2 x 9/16	220	20	21.3	9	10	25	131	10	
41 44 34 36	9/16 x 5/8	245	21.3	25.3	10	12	27	168	10	
41 44 35 38	19/32 x 11/16	255	23.9	25.3	11	12	27	177	10	
41 44 36 40	5/8 x 3/4	270	23.9	28	12	13	29	235	10	
41 44 38 42	11/16 x 13/16	300	25.3	30.7	12	13	31	280	5	
41 44 40 44	3/4 x 7/8	300	28	32.1	13	14	31	299	5	
41 44 41 42	25/32 x 13/16	300	29.4	32.1	13	14	31	333	5	
41 44 44 46	7/8 x 15/16	330	32.1	34.7	14	14	34	363	5	
41 44 46 48	15/16 x 1	330	34.7	37.3	14	15	34	419	5	
41 44 52 58	1 1/8 x 1 5/16	365	42.6	45.4	15	16	37	581	1	



# Spanners

## 20, 20a Sets: Double ended ring spanners

**StahlwilleSTABIL®**  
offset.



Code	No	Content mm/"	△△ g
<b>96 41 04 08</b>	<b>20/7N</b>	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19;	930
<b>96 41 04 05</b>	<b>20/8</b>	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22	1220
<b>96 41 04 09</b>	<b>20/9</b>	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 24	1650
<b>96 41 04 07</b>	<b>20/10</b>	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32	2331
<b>96 41 04 06</b>	<b>20/12</b>	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 23; 24 x 27; 25 x 28; 30 x 32	3137
<b>96 41 44 02</b>	<b>20a/6</b>	1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16; 5/8 x 3/4; 11/16 x 13/16; 7/8 x 15/16	1244
<b>96 41 44 05</b>	<b>20a/10</b>	1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16; 9/16 x 5/8; 19/32 x 11/16; 5/8 x 3/4; 11/16 x 13/16; 3/4 x 7/8; 25/32 x 13/16; 7/8 x 15/16	2260

packed in carton

## ES 20/8, 6x7-19x22 mm



175 x 350 x 30 mm, 8 pieces

Code	No	Content	△△ g
<b>96 83 81 67</b>	<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22 mm	1266
<b>83 81 20 83</b>	Empty tray		103

## ES 20/10, 6x7-30x32 mm



530 x 350 x 44 mm, 10 pieces

Code	No	Content	△△ g
<b>96 83 81 07</b>	<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm	2620
<b>83 81 20 44</b>	Empty tray		309

## TCS 20/8, 6x7-19x22 mm



175 x 350 x 45 mm, 8 pieces

Code	No	Content	△△ g
<b>96 83 81 92</b>	<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22 mm	1300

## TCS 20/8, 6x7-19x22 mm MF



175 x 350 x 45 mm, 8 pieces

Code	No	Content	△△ g
<b>96 83 03 56</b>	<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22 mm	1323

## TCS 20/10, 6x7-30x32 mm



350 x 350 x 45 mm, 10 pieces

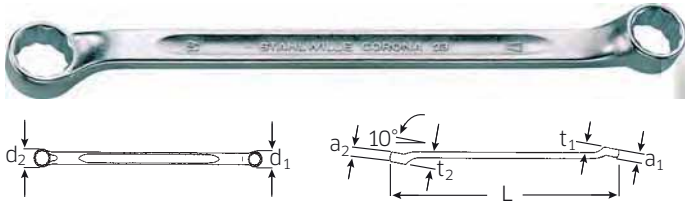
Code	No	Content	△△ g
<b>96 83 01 66</b>	<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 24 x 27; 30 x 32 mm	2450

 Made in Germany

## 23 Double ended ring spanners

AS-drive

shallow offset, DIN 897/ISO 10104 (metric sizes),  
Chrome Alloy Steel, chrome plated.



Code	Size mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Weight g	Box
41070607	6 x 7	170	9.5	10.8	6	7	7	8	41	10
41070809	8 x 9	179	12.1	13.3	7	8	8	9	49	10
41071011	10 x 11	188	14.6	15.9	8.5	9.5	9	10	66	10
41071213	12 x 13	203	17.3	18.6	9.5	10.5	10	11	78	10
41071415	14 x 15	219	20.1	21.4	10.5	11.5	11	13	109	10
41071617	16 x 17	248	22.7	24.1	11.5	12.5	14	15	144	10
41071719	17 x 19	250	24.1	27	12.5	13.5	15	18	162	10
41071819	18 x 19	251	25.5	27	12.5	13.5	16	18	157	10
41072022	20 x 22	280	28.5	31.3	13.5	14.5	19	20	223	5
41072123	21 x 23	328	29.8	32.9	13.5	14.5	19	22	281	5
41072427	24 x 27	376	34.3	38.6	14.5	16	22	24	426	5
41073032	30 x 32	429	42.6	45.2	18	18	26	27	608	5

## 23/8 Set: Double ended ring spanners; 6x7-20x22 mm

shallow offset.



Code	Content mm	Weight g
96410704	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22	870

packed in carton

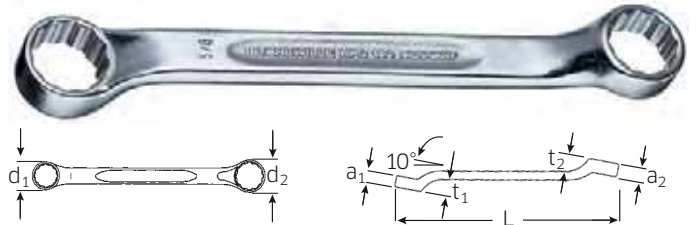


One like the other:  
precisely and flaking  
chrome-plated  
over nickel.

## 180a Double ended ring spanners

AS-drive HPQ

short, shallow offset, Fed. Spec. GGG-W-636 E,  
S.B.A.C. Techn. Spec. T.S. 48 up to size 1/2",  
HPQ® high performance steel, chrome plated.

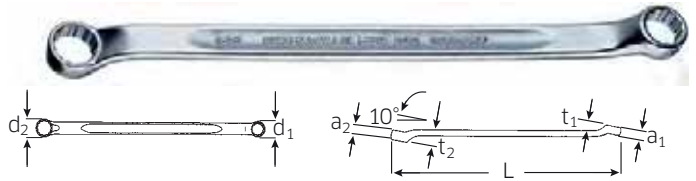


Code	Size "	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Weight g	Box
41601620	1/4 x 5/16	107	10.2	11.8	7	8	7.2	7.4	26	10
41602428	3/8 x 7/16	122	14.6	16.7	6.7	7.8	9	10	42	10
41603234	1/2 x 9/16	141	18.5	20.7	8.7	9.5	11	12	62	10
41603436	9/16 x 5/8	148	20.7	22.6	9.5	10.5	11.5	12.5	87	10

## 230a Double ended ring spanners

AS-drive HPQ

shallow offset, SAE AS 954 (dimensions and test loads);  
Fed. Spec. GGG-W-636E, S.B.A.C. Techn. Spec. T.S. 48 up to size 1/2",  
HPQ® high performance steel, chrome plated.



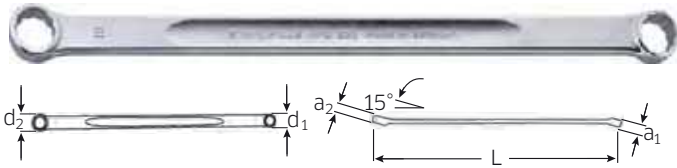
Code	Size "	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Weight g	Box
41611620	1/4 x 5/16	180	10.2	11.9	5.2	6	7.9	8.8	45	10
41612022	5/16 x 11/32	195	11.9	13.5	7	8	8	9	45	10
41612024	5/16 x 3/8	195	11.9	14.6	6	7.9	10.8	12.4	54	10
41612428	3/8 x 7/16	215	14.6	16.7	7.9	8.7	11.4	11.7	74	10
41612832	7/16 x 1/2	225	16.7	19.5	8.7	9.1	11.9	12.6	105	10
41613234	1/2 x 9/16	235	19.5	20.7	9.1	9.5	12.2	12.9	119	10
41613436	9/16 x 5/8	245	20.7	22.6	9.5	11.5	13.8	13.9	122	10
41613640	5/8 x 3/4	274	22.6	27.5	11.1	12	14.8	15.8	156	10
41613840	11/16 x 3/4	275	25.4	27.5	11.1	12	15.2	15.8	158	10
41614244	13/16 x 7/8	301	29.5	31.7	13.5	14.5	19	20	175	5
41614648	15/16 x 1	340	34.1	36.5	14.5	15	22	23	375	5
41614850	1 x 1 1/16	368	36.5	38.6	15	16	23	24	460	5
41615256	1 1/8 x 1 1/4	403	40.8	45	16	18	25	27	620	5

# Spanners

## 220 Double ended ring spanners



extra long, 15° angled, SAE AS 954-E (test loads) (American sizes), HPQ® high performance steel, chrome plated.



Code	Size mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	Δg g	
41035507	5.5 x 7	185	8.8	11	5.3	5.8	28	5
41030608	6 x 8	205	9.8	12.1	5.6	6	34	5
41030911	9 x 11	250	14.2	16.7	8	8.7	80	5
41031011	10 x 11	250	15.5	16.7	8	8.7	80	5
41031214	12 x 14	290	18.3	20.7	9.5	9.5	162	5
41031314	13 x 14	290	18.7	20.7	9.5	9.5	160	5
41031719	17 x 19	365	25	27.5	11	12	296	5
41031819	18 x 19	365	25.5	27.5	11	12	295	5
41031922	19 x 22	408	27.5	31.5	13	14.3	520	5
41032022	20 x 22	409	28.5	31.5	13	14.3	515	5

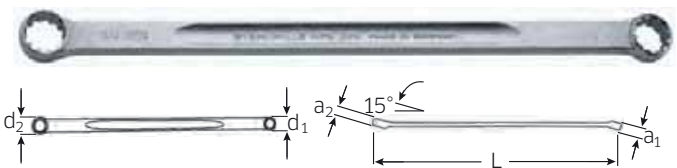
## 220a Double ended ring spanners

Code	Size "	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	Δg g	
41431416	7/32 x 1/4	184	9	9.9	5.3	5.8	29	5
41431620	1/4 x 5/16	205	9.9	12.2	5.6	6	33	5
41432428	3/8 x 7/16	250	14	16	8	8.7	79	5
41433234	1/2 x 9/16	290	18.5	21	9.5	9.5	160	5
41433640	5/8 x 3/4	363	22.6	27	11	12	298	5
41433840	11/16 x 3/4	365	25	27	11	12	291	5

## 220aSP Double ended ring spanners



extra long, with spline-drive profile, 15° angled, MS-33787, MIL-W-8982, HPQ® high performance steel, chrome plated.



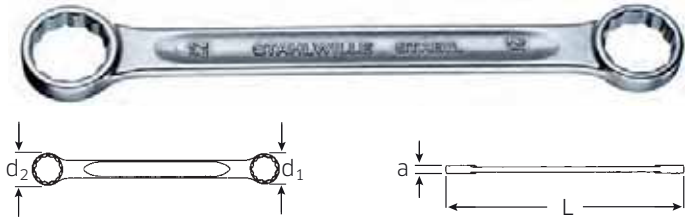
Code	Spline size	Size "	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	Δg g	
41160709	7 x 9	7/32 x 9/32	185	9.4	11.5	5.3	5.8	28	5
41160810	8 x 10	1/4 x 5/16	205	10.4	12.4	5.6	6	33	5
41161214	12 x 14	3/8 x 7/16	250	14.9	17	8	8.7	79	5
41161618	16 x 18	1/2 x 9/16	290	19	21	9.5	9.5	161	5
41161820	18 x 20	9/16 x 5/8	315	21	23	10	11	205	5
41162224	22 x 24	11/16 x 3/4	365	25	27.5	11	12	310	5
41162630	26 x 30	13/16 x 15/16	410	29.5	34	13	14.3	496	5
41162832	28 x 32	7/8 x 1	430	32	36.5	13.5	15	582	5

## 21 Double ended ring spanners



**StahlwilleSTABIL®**

straight, DIN 837/ISO 10103, Chrome Alloy Steel, chrome plated.



Code	Size mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a mm	Δg g	
41050607	6 x 7	100	9.6	11	4.5	14	10
41050809	8 x 9	115	12.5	14	5.5	19	10
41050810	8 x 10	115	12.5	15.4	6	18	10
41051011	10 x 11	130	15.4	16.6	6	28	10
41051213	12 x 13	150	18.2	19.5	6.5	42	10
41051317	13 x 17	170	19.5	25	8	57	10
41051415	14 x 15	165	21	22.5	7.5	55	10
41051617	16 x 17	170	23.8	25	8	68	10
41051719	17 x 19	185	25	27.6	8	78	10
41051819	18 x 19	185	26.3	27.6	9	84	10
41051821	18 x 21	210	26.3	30.5	9	107	5
41051922	19 x 22	210	27.6	32.4	9	109	5
41052022	20 x 22	210	29	32.4	9	109	5
41052124	21 x 24	235	30.5	34.7	10	128	5
41052427	24 x 27	290	34.7	38.5	11	225	5
41052732	27 x 32	320	38.5	45.5	12	283	5
41053032	30 x 32	325	43	45.5	12	289	5
41053034	30 x 34	325	43	48.5	12	307	5

## 21 Sets: Double ended ring spanners

**StahlwilleSTABIL®**

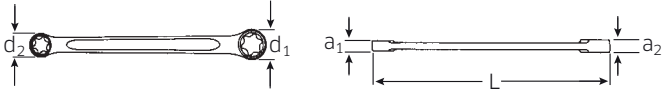


Code	No	Content mm	Δg g
96410503	21/7	8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22	397
96410501	21/10	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32	943

packed in carton

## 21TX Double ended ring spanners

for external TORX® screws, straight, Chrome Alloy Steel, chrome plated.

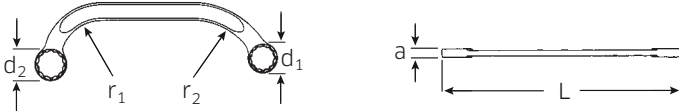


Code	size	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	$\Delta$ g	
41 25 06 08	E6 x E8	115.5	9.6	11.6	4.5	5.5	17	10
41 25 10 12	E10 x E12	149.5	13.7	15.7	6.5	7.5	33	10
41 25 14 18	E14 x E18	185	17.8	22.5	8	9.5	71	10
41 25 20 24	E20 x E24	227	24.7	29.2	10.5	12.5	129	10

## 27 Double ended ring spanners STARTER

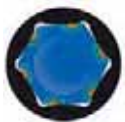
AS-drive

ISO 3318, Chrome Alloy Steel, chrome plated.



Code	$\square$ mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a mm	r <sub>1</sub> mm	r <sub>2</sub> mm	$\Delta$ g	
41 09 10 12	10 x 12	150	16.5	19.5	6.5	35	60	53	10
41 09 11 13	11 x 13	150	16.5	19.5	6.5	35	60	50	10
41 09 14 16	14 x 16	179	21	24.5	7.5	36	64	91	10
41 09 14 17	14 x 17	179	21	24.5	7.5	36	64	89	10
41 09 15 17	15 x 17	184	22.5	25	7.5	38	66	96	10
41 09 16 18	16 x 18	200	25.3	27.5	8.5	47	68	130	5
41 09 19 22	19 x 22	225	28	32	9	48	67	164	5

## STAHLWILLE »AS-Drive«



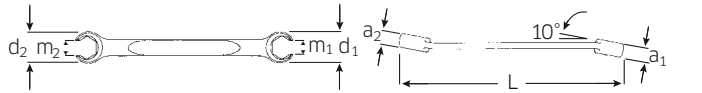
The rings of STAHLWILLE combination spanners and double ended ring spanners are equipped with the AS-Drive\* profile: this permits high transmission of forces to the lands of nuts and bolts without damaging them. No longer will you have to worry about stripping the corners off nuts and bolts.

\*Anti-Slip-Drive

## 24 Double ended open ring spanners, angled

AS-drive

hexagon, DIN 3118/ISO 3318 (metric sizes), Chrome Alloy Steel, chrome plated.



Code	$\square$ mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	m <sub>1</sub> mm	m <sub>2</sub> mm	$\Delta$ g	
41 08 08 10	8 x 10	145	17.5	19.5	7	8.5	6.3	7.1	39	10
41 08 09 11	9 x 11	155	18.5	21.5	8.5	9	6.7	8.6	54	10
41 08 10 11	10 x 11	155	19.5	21.5	8.5	9	7.1	8.6	55	10
41 08 10 12	10 x 12	160	19.5	22.5	8.5	9.5	7.1	9	59	10
41 08 11 13	11 x 13	170	21.5	24	9	10	8.6	10	80	10
41 08 12 14	12 x 14	180	24	26	9.5	10.5	9	11	89	10

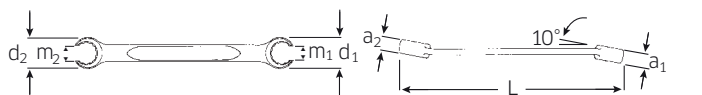
## 24a Double ended open ring spanners, angled

Code	$\square$ "	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	m <sub>1</sub> mm	m <sub>2</sub> mm	$\Delta$ g	
41 48 16 20	1/4 x 5/16	105	16.5	18	5.5	7	3.7	5	32	10
41 48 20 24	5/16 x 3/8	145	17.5	19.5	7	8.5	6.3	7.1	39	10
41 48 24 28	3/8 x 7/16	155	19.5	21.5	8.5	9	7.1	8.6	57	10
41 48 32 34	1/2 x 9/16	180	24	26	9.5	10.5	9.5	11	87	10

## 24 Double ended open ring spanners, angled

AS-drive

bi-hexagon, DIN 3118/ISO 3318 (metric sizes), Chrome Alloy Steel, chrome plated.



Code	$\square$ mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	m <sub>1</sub> mm	m <sub>2</sub> mm	$\Delta$ g	
41 08 14 17	14 x 17	200	26	30	10.5	12	11	14	115	10
41 08 16 19	16 x 19*	220	29	33	12	13	13	15.8	155	5
41 08 17 19	17 x 19*	220	30	33	12	13	14	15.8	151	10
41 08 19 22	19 x 22	230	33	37	13	15	15.8	17	192	5
41 08 22 24	22 x 24	245	37	40.5	15	16	17	18	251	5
41 08 24 27	24 x 27	270	40.5	44.5	16	17.5	18	20	310	5
41 08 27 36	27 x 36	300	42	54	16	19	20	27	414	5
41 08 30 32	30 x 32	300	48.5	50.5	20	22	22	24	455	5

\* to be discontinued

## 24a Double ended open ring spanners, angled

Code	$\square$ "	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	m <sub>1</sub> mm	m <sub>2</sub> mm	$\Delta$ g	
41 48 36 40	5/8 x 3/4	218	29	33	12	13	12.7	15.8	148	5
41 48 40 48	3/4 x 1	232	33	40.2	13	16	15.8	19	199	5



# Spanners

## ES 24/7, 8x10-19x22 mm



175 x 350 x 30 mm, 7 pieces

Code	g
<b>96838171</b>	835
<b>No 24</b>	sizes 8 x 10; 10 x 11; 11 x 13; 12 x 14; 14 x 17; 17 x 19; 19 x 22 mm
<b>83812086</b>	Empty tray 103

## TCS 24/7, 8x10-19x22 mm

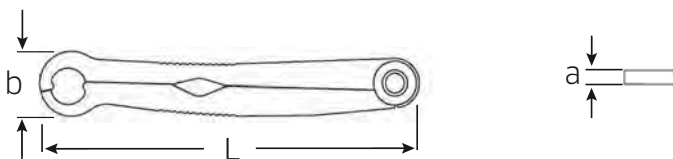


175 x 350 x 35 mm, 7 pieces

Code	g
<b>96838758</b>	780
<b>No 24</b>	sizes 8 x 10; 10 x 11; 11 x 13; 12 x 14; 14 x 17; 17 x 19; 19 x 22 mm

## 240 Ratchet wrenches FastRatch

patent, specially suitable for union nuts.  
Using a single wrench, it is possible to tighten/loosen both metric and imperial nuts and bolts.  
Made of hardened and tempered stainless steel.



Code	mm/"	L mm	b mm	a mm	g	
<b>41100808</b>	<b>8</b> 5/16	121.4	16	4	60	1
<b>41101010</b>	<b>10</b> 3/8	133.3	20	4	70	1
<b>41101111</b>	<b>11</b> 7/16	140.4	23	5	103	1
<b>41101212</b>	<b>12</b> 15/32	146.3	25	5	100	1
<b>41101313</b>	<b>13</b> 1/2	168.4	26.8	6	154	1
<b>41101414</b>	<b>14</b> 9/16	174.6	29.6	6	180	1
<b>41101616</b>	<b>16</b> 5/8	191.3	32.8	7	270	1
<b>41101717</b>	<b>17</b> 21/32	201.7	34.3	7	292	1
<b>41101818</b>	<b>18</b> 11/16	212.8	36.2	7	310	1
<b>41101919</b>	<b>19</b> 3/4	238.5	38.5	7	367	1

## 240 Sets: Ratchet wrenches FastRatch



Code	No	Content mm/"	g
<b>96411001</b>	<b>240/5</b>	10 mm - 3/8"; 11 mm - 7/16"; 14 mm - 9/16"; 17 mm - 21/32"; 19 mm - 3/4"	1022
<b>96411002</b>	<b>240/6</b>	8 mm - 5/16"; 10 mm - 3/8"; 13 mm - 1/2"; 14 mm - 9/16"; 17 mm - 21/32"; 19 mm - 3/4"	1094

packed in carton

## TCS 240/6

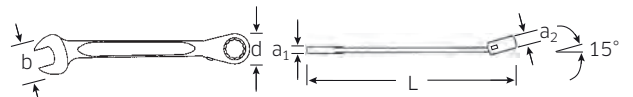


175 x 350 x 35 mm, 6 pieces

Code	g
<b>96838774</b>	1163
<b>No 240</b>	sizes 10; 11; 13; 14; 17; 19 mm

## 17 Combination ratcheting spanners OPEN-RATCH

reversible, bi-hexagon, 72 teeth, for work in confined spaces, tight ratchet angle of only 5°, ring end offset by 15°, Chrome Alloy Steel, chrome plated.



Code	mm	L mm	b mm	d mm	a1 mm	a2 mm	g	
<b>41170808</b>	<b>8</b>	144	17.0	18.0	4.7	7.4	38	5
<b>41170909</b>	<b>9</b>	150	18.8	19.5	5.3	7.4	49	5
<b>41171010</b>	<b>10</b>	158	21.7	21.0	5.7	8.4	67	5
<b>41171111</b>	<b>11</b>	165	23.0	22.0	6.1	8.4	68	5
<b>41171212</b>	<b>12</b>	173	25.2	23.5	6.4	8.4	84	5
<b>41171313</b>	<b>13</b>	182	26.5	25.0	6.6	8.4	89	5
<b>41171414</b>	<b>14</b>	190	29.5	26.5	7.3	8.4	110	5
<b>41171515</b>	<b>15</b>	202	31.3	28.0	7.5	8.4	128	5
<b>41171616</b>	<b>16</b>	215	33.4	29.0	7.7	10.0	153	5
<b>41171717</b>	<b>17</b>	229	36.3	30.5	7.9	10.0	177	5
<b>41171818</b>	<b>18</b>	240	38.0	32.0	8.4	11.5	198	5
<b>41171919</b>	<b>19</b>	252	39.0	34.0	8.7	11.5	224	5



## 17 Sets: Combination ratcheting spanners OPEN-RATCH, in roll-up wallet

Roll-up wallet made of extremely tough textile with Velcro fastener.



Code	No	Content mm	Δ△ g
96 41 17 05	17/5	8; 10; 13; 17; 19	732
96 41 17 12	17/12	8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19	1665

## TCS 17/12



175 x 350 x 45 mm, 12 pieces

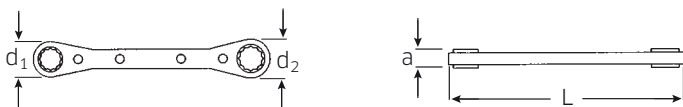
Code	Δ△ g
96 83 06 49	1460

**No 17** sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm

## 25 Ratchet ring spanners

AS-drive

with bi-hexagon, straight, 22 teeth, chrome plated.



Code	mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a mm	Δ△ g	
41 13 07 08	7 x 8	109	15	17	9	55	1
41 13 09 10	9 x 10	139	20	23	9	80	1
41 13 10 11	10 x 11	170	26	30	12	144	1
41 13 12 13	12 x 13	170	26	30	12	135	1
41 13 14 15	14 x 15	170	26	30	12	126	1
41 13 16 18	16 x 18	205	33	36	12	196	1
41 13 17 19	17 x 19	205	33	36	12	188	1

## 25aN Ratchet ring spanners

as No 25, but made of solid steel, Fed. Spec. GGG-W-001405.



Code	mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a mm	Δ△ g	
41 56 16 20	1/4 x 5/16	109	15	17	9	65	1
41 56 20 22	5/16 x 11/32	109	15	17	9	60	1
41 56 24 28	3/8 x 7/16	139	20	23	9	90	1
41 56 32 34	1/2 x 9/16	174	26	30	12	164	1
41 56 36 38	5/8 x 11/16	205	33	36	12	257	1
41 56 40 44	3/4 x 7/8	235	36	40	13	296	1
41 56 42 46	13/16 x 15/16	235	36	40	12	281	1

## 25, 25a Sets: Ratchet ring spanners, in roll-up wallet

Roll-up wallet made of extremely tough textile with Velcro fastener.



Code	No	Content mm/"	Δ△ g
96 41 13 02	25/4	9 x 10; 12 x 13; 14 x 15; 17 x 19	556
96 41 13 01	25/7	7 x 8; 9 x 10; 10 x 11; 12 x 13; 14 x 15; 16 x 18; 17 x 19	1150
96 41 56 02	25a/4N	3/8 x 7/16; 1/2 x 9/16; 5/8 x 11/16; 3/4 x 7/8	1000
96 41 56 01	25a/7N	1/4 x 5/16; 5/16 x 11/32; 3/8 x 7/16; 1/2 x 9/16; 5/8 x 11/16; 3/4 x 7/8; 13/16 x 15/16	1271

## ES 25/7, 7x8-17x19 mm



175 x 350 x 30 mm, 7 pieces

Code	Δ△ g
96 83 81 08	1040

**No 25** sizes 7 x 8; 9 x 10; 10 x 11; 12 x 13; 14 x 15; 16 x 18; 17 x 19 mm

83 81 20 38	Empty tray	111
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# Spanners

## TCS 25/7



175 x 350 x 30 mm, 7 pieces

Code	△	g
<b>96838751</b>		984



No 25

sizes 7 x 8; 9 x 10; 10 x 11; 12 x 13; 14 x 15; 16 x 18; 17 x 19 mm

## 25aSP Spline drive ratchet ring spanners

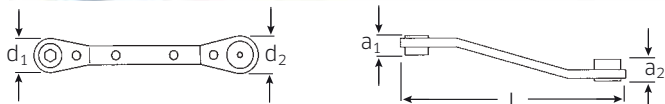
straight, 22 teeth, chrome plated.



Code	Spline size	⌀"	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a mm	△ g	☐
<b>41570810</b>	<b>8 x 10</b>	1/4 x 5/16	109	15	17	9	59	1
<b>41571214</b>	<b>12 x 14</b>	3/8 x 7/16	139	20	23	9	84	1
<b>41571618</b>	<b>16 x 18</b>	1/2 x 9/16	174	26	30	12	153	1
<b>41572022</b>	<b>20 x 22</b>	5/8 x 11/16	205	33	36	12	250	1
<b>41572428</b>	<b>24 x 28</b>	3/4 x 7/8	235	36	40	13	279	1

## 25B Ratcheting bit holder

for hexagon BITS, magnetic location, reversible heads angled, chrome plated.

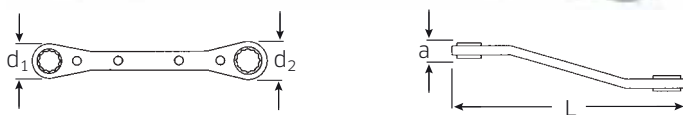


Code	inside ⌀"	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	△ g	☐
<b>41541620</b>	1/4 x 5/16	138	20	23	15	17	105	1

## 26a Ratchet ring spanners



reversible, with bi-hexagon, angled, 22 teeth, chrome plated.

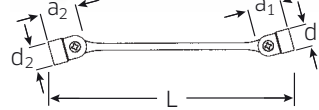


Code	⌀"	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a mm	△ g	☐
<b>41551620</b>	1/4 x 5/16	109	15	17	9	55	1
<b>41552428</b>	3/8 x 7/16	139	20	23	9	80	1
<b>41553234</b>	1/2 x 9/16	170	26	30	12	140	1

## 29 Double ended flexi-joint spanner FLEXI



hexagon, Chrome Alloy Steel, chrome plated.



Code	⌀ mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	△ g	☐
<b>43010607</b>	<b>6 x 7</b>	180	9.5	11	23	23	51	10

## 29 Double ended flexi-joint spanners FLEXI



bi-hexagon, Chrome Alloy Steel, chrome plated.



Code	⌀ mm	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	△ g	☐
<b>43010809</b>	<b>8 x 9</b>	201	11.9	13.4	26	27.5	81	10
<b>43011011</b>	<b>10 x 11</b>	202	14.7	15.9	30.5	32	102	10
<b>43011013</b>	<b>10 x 13</b>	230.5	14.7	18.4	30	33.5	137	10
<b>43011213</b>	<b>12 x 13</b>	228	17.2	18.4	33	33.5	153	10
<b>43011415</b>	<b>14 x 15</b>	227	19.7	20.9	35	37	197	10
<b>43011617</b>	<b>16 x 17</b>	247	22.2	23.7	38.5	39	234	10
<b>43011618</b>	<b>16 x 18</b>	249	22.2	24.7	38.5	40	267	10
<b>43011719</b>	<b>17 x 19</b>	250	23.7	26.3	39	41	277	5
<b>43011819</b>	<b>18 x 19</b>	246.5	24.7	26.3	40	41	294	5
<b>43012022</b>	<b>20 x 22</b>	287.5	27.3	29.8	45.5	48	430	5
<b>43012123</b>	<b>21 x 23</b>	286.5	28.6	31.1	46.5	50	447	5
<b>43012427</b>	<b>24 x 27</b>	349.5	32.4	36.1	50.5	60.5	716	5

## 29a Double ended flexi-joint spanners FLEXI

Code	⌀"	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	△ g	☐
<b>43412428</b>	3/8 x 7/16	202	14	16	30.5	32	98	5
<b>43413234</b>	1/2 x 9/16	227	18.1	20	35	37	195	5
<b>43413638</b>	5/8 x 11/16	249.5	22.1	24	39	40	269	5

## 29/7 Set: Double ended flexi-joint spanners FLEXI; 8x9-20x22 mm



Code	Content mm	△ g
<b>96430101</b>	8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22	1503

Standard packing: carton.

### ES 29/6, 8x9-18x19 mm



175 x 350 x 30 mm, 6 pieces

Code	$\Delta$ g
<b>96 83 81 09</b>	1185

<b>No 29</b>	sizes 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19 mm
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<b>83 81 20 41</b>	Empty tray	105
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### TCS 29/6, 8x9-18x19 mm



175 x 350 x 35 mm, 6 pieces

Code	$\Delta$ g
<b>96 83 87 64</b>	1079

<b>No 29</b>	sizes 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19 mm
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### TCS 29/7, 8x9-20x22 mm



175 x 350 x 40 mm, 7 pieces

Code	$\Delta$ g
<b>96 83 01 95</b>	1520

<b>No 29</b>	sizes 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22 mm
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## Tool Control System

The safety inlay system

- Designed to fit our Tool Trolleys and Tool Boxes
- With yellow signal cut-outs to show whether all tools are in their places



### 5 Heavy duty ring spanners

without tubular handle, Chrome Alloy Steel, chrome plated.



Code	$\Delta$ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	b mm	a mm	h mm	$\Delta$ g	handle	
<b>42 02 00 24</b>	<b>24</b>	180	555	38	17	29.5	381	5 1/2 - 1	1
<b>42 02 00 27</b>	<b>27</b>	190	560	41	17	31.5	421	1	1
<b>42 02 00 30</b>	<b>30</b>	200	565	47	18	33.5	525	1	1
<b>42 02 00 32</b>	<b>32</b>	235	730	49	18	34	712	2	1
<b>42 02 00 36</b>	<b>36</b>	245	735	54	20	35.5	816	2	1
<b>42 02 00 38</b>	<b>38</b>	250	740	56	21	37.5	810	2	1
<b>42 02 00 41</b>	<b>41</b>	265	750	62	22	39.5	910	2	1
<b>42 02 00 42</b>	<b>42</b>	265	750	62	22	39.5	919	2	1
<b>42 02 00 46</b>	<b>46</b>	280	910	69	23	40	1192	3	1
<b>42 02 00 50</b>	<b>50</b>	290	920	76	25.5	42.5	1426	3	1
<b>42 02 00 55</b>	<b>55</b>	300	925	81	28	45.5	1541	3	1
<b>42 02 00 60</b>	<b>60</b>	345	1050	90	30.5	49	2260	4	1
<b>42 02 00 65</b>	<b>65</b>	355	1060	98	33	53	2603	4	1
<b>42 02 00 70</b>	<b>70</b>	365	1065	105	35.5	55	2882	4	1
<b>42 02 00 75</b>	<b>75</b>	375	1070	110	38	57.6	3058	4	1
<b>42 02 00 80</b>	<b>80</b>	385	1075	125	40.5	59	3889	4	1
<b>42 02 00 85</b>	<b>85</b>	385	1075	125	40.5	59	3648	4	1
<b>42 02 00 90</b>	<b>90</b>	410	1100	140	45	63	5238	4	1
<b>42 02 00 95</b>	<b>95</b>	410	1100	140	45	63	4630	4	1
<b>42 02 01 00</b>	<b>100</b>	412	1100	143	45	63	4895	4	1

No 5a available on request  
L<sub>2</sub> = length with handle No 5 1/2

### 5 1/2 Tubular handles

for heavy duty ring spanners No 5.



Code	size	L mm	d mm	$\Delta$ mm	$\Delta$ "	$\Delta$ g	
<b>48 03 00 01</b>	<b>1</b>	460	19	24-30	1-1 3/16	605	1
<b>48 03 00 02</b>	<b>2</b>	610	22	32-42	1 1/4-1 11/16	1562	1
<b>48 03 00 03</b>	<b>3</b>	760	25	46-55	1 3/4-2 1/4	2820	1
<b>48 03 00 04</b>	<b>4</b>	860	30	60-100	2 3/8-3 7/8	3705	1

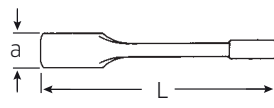
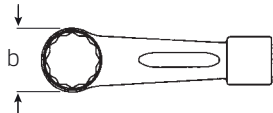


# Spanners

## 8 Striking face ring spanners

**StahlwilleSTABIL®**

Chrome Alloy Steel, green painted.



Code	Ø mm	L mm	b mm	a mm	Δ g	Box
42010032	32	195	47	24	661	1
42010036	36	195	52.4	26	684	1
42010041	41	200	59	29	896	1
42010046	46	250	65	32	1218	1
42010050	50	280	70	35	1555	1
42010055	55	300	76	38	2087	1
42010060	60	300	82.5	42	2394	1
42010065	65	325	90.5	45	3209	1
42010070	70	355	97	48	3649	1
42010075	75	360	103.5	51	4428	1
42010080	80	440	110	57	5895	1
42010085	85	440	117	57	6033	1
42010090	90	445	124	60	6885	1
42010095	95	450	131	67	7875	1
42010100	100	455	137	72	10224	1
42010105	105	460	146	73	10202	1
42010110	110	500	156	82	14492	1
42010115	115	505	162	82	14376	1
42010120	120	510	174	82	15308	1

Additional spanner opening to DIN 7444 on request.



STAHLWILLE Striking face ring spanners  
No 8 with bi-hexagon are stronger, thinner  
and higher.

## 4205 Striking face ring spanners

DIN 7444, special steel, grey.



Code	Ø mm	L mm	b mm	a mm	Δ g	Box
42050024	24	160	42.5	15	200	1
42050026	26	160	42.5	15	200	1
42050027	27	180	46	16	260	1
42050028	28	180	47	15.5	275	1
42050030	30	190	51.5	16.5	365	1
42050032	32	195	53	16.5	353	1
42050033	33	195	53	16.5	350	1
42050036	36	205	60	19.5	505	1
42050037	37	205	60	19.5	500	1
42050038	38	205	60	19.5	500	1
42050041	41	225	66	20.5	715	1
42050042	42	225	66	20.5	671	1
42050046	46	240	75	22.5	915	1
42050047	47	240	75	22.5	975	1
42050048	48	240	75	22.5	920	1
42050050	50	250	80	23.5	1120	1
42050052	52	250	80	23.5	1075	1
42050055	55	270	87.5	25	1375	1
42050056	56	270	87.5	25	1320	1
42050060	60	270	93.5	26	1565	1
42050064	64	290	101	29	2300	1
42050065	65	290	101	29	2100	1
42050070	70	320	109.5	33	3000	1
42050075	75	325	114.5	34	2780	1
42050080	80	345	126	35	4100	1
42050085	85	360	129	37	3835	1
42050090	90	400	152	41.5	5180	1
42050095	95	400	152	41.5	4900	1
42050100	100	400	152	41.5	6560	1
42050105	105	435	172	47.5	6300	1
42050110	110	435	172	47.5	7960	1
42050115	115	435	172	47.5	7495	1
42050120	120	480	182	54	9900	1
42050130	130	520	202	58	12640	1
42050135	135	520	202	58	12120	1
42050145	145	580	228	64	18250	1
42050160	160	580	228	64	18800	1
42050165	165	650	265	70	28500	1
42050170	170	650	265	70	27500	1
42050175	175	650	265	70	27750	1
42050180	180	650	265	70	26340	1
42050210	210	750	320	80	41000	1

 Made in  
**Germany**



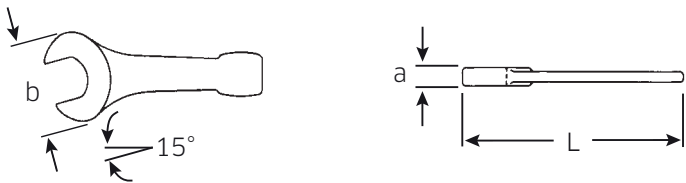
### 4205a Striking face ring spanners

Code	⌀ "	L mm	b mm	a mm	⚖ g	📦
42 45 00 56	1 1/4	190	52	17	350	1
42 45 00 58	1 5/16	190	52	17	350	1
42 45 00 64	1 1/2	205	58	18	500	1
42 45 00 66	1 5/8	230	66	20	700	1
42 45 00 67	1 11/16	230	66	20	700	1
42 45 00 69	1 13/16	240	74	22	975	1
42 45 00 70	1 7/8	240	74	22	975	1
42 45 00 72	2	255	80	24	1075	1
42 45 00 73	2 1/16	255	80	24	1075	1
42 45 00 75	2 3/16	270	86	25	1320	1
42 45 00 76	2 1/4	270	86	25	1340	1
42 45 00 78	2 3/8	280	93	26	1600	1
42 45 00 79	2 7/16	280	93	26	1600	1
42 45 00 81	2 9/16	300	102	30	2300	1
42 45 00 82	2 5/8	300	102	30	2300	1
42 45 00 84	2 3/4	330	110	33	2900	1
42 45 00 85	2 13/16	330	110	33	2900	1
42 45 00 87	2 15/16	330	110	33	2900	1

Additional spanner opening on request.

### 4204 Striking face open ended spanners

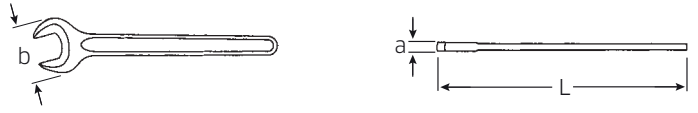
DIN 133, Special Tool Steel, grey finish.



Code	⌀ mm	L mm	b mm	a mm	⚖ g	📦
42 04 00 27	27	180	56	16	321	1
42 04 00 30	30	190	62	17	451	1
42 04 00 32	32	190	62	17	424	1
42 04 00 36	36	215	76	17.5	698	1
42 04 00 41	41	235	86	18.5	923	1
42 04 00 46	46	255	98	20	1245	1
42 04 00 50	50	275	105	21	1445	1
42 04 00 55	55	300	116	23	2057	1
42 04 00 60	60	320	128	24.5	2559	1
42 04 00 65	65	342	138	27	3285	1
42 04 00 70	70	375	154	30	4573	1
42 04 00 75	75	375	154	30	4163	1
42 04 00 80	80	408	174	34	6059	1
42 04 00 85	85	408	174	34	5871	1
42 04 00 90	90	445	194	38	7600	1
42 04 00 95	95	445	194	38	7600	1
42 04 01 00	100	485	215	44	11500	1
42 04 01 05	105	485	215	44	11200	1

### 4004 Single-end spanners

DIN 894, Special Tool Steel, grey finish.



Code	⌀ mm	L mm	b mm	a mm	⚖ g	📦
40 04 02 40	24	215	50	8.9	147	1
40 04 02 70	27	238	56	9.8	193	1
40 04 03 00	30	261	62	10.8	268	1
40 04 03 20	32	273	66	11.8	315	1
40 04 03 60	36	300	74	12.8	421	1
40 04 04 10	41	335	83.5	12.8	555	1
40 04 04 60	46	369	93	14.8	770	1
40 04 05 00	50	412	102	17	1003	1
40 04 05 50	55	457	112	18	1267	1
40 04 06 00	60	492	122	18	1650	1
40 04 06 50	65	528	132	19	1900	1
40 04 07 00	70	572	142	20	2425	1
40 04 07 50	75	608	152	21	2758	1
40 04 08 00	80	645	162	22	2963	1
40 04 08 50	85	690	173	23	3717	1
40 04 09 00	90	690	173	23	3570	1
40 04 09 50	95	847	195	25	5943	1
40 04 10 00	100	847	195	25	5500	1
40 04 10 50	105	1000	217	28	8400	1
40 04 11 00	110	1000	217	28	9000	1
40 04 11 50	115	1000	225	28	8500	1
40 04 12 00	120	1000	225	28	8500	1
40 04 12 50	125	1000	225	28	7934	1
40 04 13 00	130	1000	225	28	8500	1
40 04 13 50	135	1000	225	28	8000	1

### 4025 Single-end spanners, adjustable

right-handed, DIN 3117/ISO 6787, B shape, jaw offset 22°, Chrome Vanadium, chrome plated.

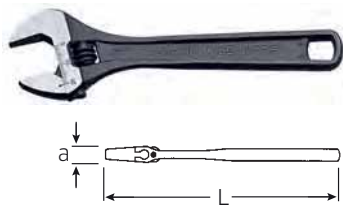
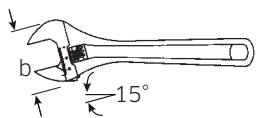


Code	size	⌀ max. mm	L mm	b mm	a mm	⚖ g	📦
40 25 00 04	4	13	114	33	9.5	53	5
40 25 00 06	6	20	159	48	12	123	5
40 25 00 08	8	24	206	60	13.5	241	5
40 25 00 10	10	29	257	71	16	410	5
40 25 00 12	12	34	309	83	19	708	5
40 25 00 15	15	43	384	103	25	1287	1
40 25 00 18	18	53	460	120	30	2105	1

# Spanners

## 4026 Single-end spanners, adjustable

left-handed, DIN 3117/ISO 6787, A shape, jaw offset 15°, Chrome-Vanadium, gunmetal finish.



Code	size	max. mm	L mm	b mm	a mm	g	
40260004	4	13	114	33	9.5	50	5
40260006	6	20	159	48	12	138	5
40260008	8	24	206	60	13.5	247	5
40260010	10	29	257	71	16	397	5
40260012	12	34	309	83	19	699	5
40260015	15	43	384	103	25	1324	1
40260018	18	53	460	120	30	2076	1

## TCS 4026/3



175 x 350 x 30 mm, 3 pieces

Code	g
96838765	1402

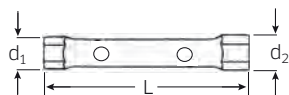


No 4026

sizes 8; 10; 12

## 10750 Box spanners

DIN 896 Type B, made of seamlessly drawn precision steel tubing, recessed at both ends, Chrome Alloy Steel, surface polished and chrome plated.



Code	mm	L mm	d1 mm	d2 mm	g	
43330607	6 x 7	110	10.5	11.5	26	10
43330809	8 x 9	110	13	14.5	38	10
43331011	10 x 11	125	16	17	50	10
43331213	12 x 13	145	19	20.5	78	10
43331415	14 x 15	145	21.5	22.5	78	10
43331617	16 x 17	155	24	26	127	10
43331719	17 x 19	160	26	28.5	199	10
43331819	18 x 19	160	27.5	28.5	199	10
43332022	20 x 22	170	29.5	32	232	5
43332123	21 x 23	170	30.5	33	251	5
43332426	24 x 26	190	34.5	37	300	5
43332427	24 x 27	190	34.5	38.5	301	5
43333032	30 x 32	205	42	45	382	5
43333236	32 x 36	225	45	50	535	2
43333641	36 x 41	225	50	56	648	2
43334146	41 x 46	245	56	62	755	2
43334650	46 x 50	245	62	68	878	2
43335560	55 x 60	245	70	76	1178	2

## 10750 Sets: Box spanners



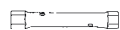
Code	No	Content mm	g
96431202	10750/7	8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22	830
96431205	10750/11	6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 23; 24 x 27; 30 x 32	1850

## ES 10750/10, 6x7-20x22 mm



175 x 350 x 30 mm, 10 pieces

Code	g
96838168	1132



No 10750

sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22 mm



No 10750 1/2

sizes 6; 7

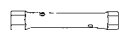
83812084	Empty tray	103
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## TCS 10750/10, 6x7-20x22 mm



175 x 350 x 40 mm, 10 pieces

Code	g
96838756	1130



No 10750

sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22 mm



No 10750 1/2

sizes 6; 7

## 10750 1/2 Tommy bars

for No 10750, stepped.



Code	size	for No 10750 mm	Length mm	g	
48010006	6	6 x 7-14 x 15	180	57	1
48010007	7	16 x 17-24 x 27	320	338	1
48010008	8	30 x 32-55 x 60	630	1400	1

L = Length







# 3 | SOCKETS, SOCKET SETS

**1/4"-DRIVE**  
→ PAGE 104



**3/8"-DRIVE**  
→ PAGE 119



**1/2"-DRIVE**  
→ PAGE 131



**3/4"-DRIVE**  
→ PAGE 147



**1"-DRIVE**  
→ PAGE 150



**CROW-RING-, CROW-FOOT SPANNERS, ADAPTORS**  
→ PAGE 151



**EMPTY BOXES AND TRAYS**  
→ PAGE 154





# Provide guaranteed safety and efficiency. **STAHLWILLE sets of socket spanners and inserts**

**The professionals in industry and the trades are under pressure to work quickly, accurately and economically. Which is why they make heavy demands on their tools. Due to the numerous technical innovations incorporated in them, STAHLWILLE ratchets and sockets make a valuable contribution to the prevention of both mistakes and injuries.**

By using ratchets, adaptors and inserts made by STAHLWILLE, professional technicians are quite simply "making sure". It does not matter whether it is a full set of tools or individual components – users can be sure they will get top-of-the-range quality every time. This is guaranteed by adherence to the closest tolerances during production and stringently applied quality assurance measures in accordance with DIN EN ISO 9001. The legendary reliability and precision of these tools is enhanced by a large number of user-friendly features.

- Non-slip, ergonomically manufactured 2-component handles facilitate strain-free working.
- Slim-design sockets enable access to awkward places.
- The QuickRelease system ensures full control over the joint between the ratchet, the adaptors and the sockets.
- STAHLWILLE tool cases are particularly resilient thanks to the robust ABS plastic used. They are shaped for safe stacking and the integrated handles make transport easy. Convenient feature: on the inside of the cover is a list showing the contents of the case.
- Sculpted chemical-resistant cut-outs in special PE foam inlays prevent tools rattling and sliding around.



Light, robust, stackable: STAHLWILLE plastic cases. The inside of the cover shows the contents of the case.

**1**

Ergonomically designed 2-component handle made of impact-resistant, skydrol resistant plastic.

**2**

All metal parts are made of high-grade steel (Chrome Alloy Steel, chrome plated).

**3**

Firm seating and yet easy release of sockets and adaptors.

**4**

Wear parts can be easily replaced using sets of spares for sockets.

**5**

Ergonomic pawl to switch from clockwise to anti-clockwise.



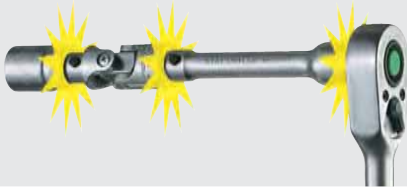
### Safety advantage 1

#### STAHlwille QuickRelease system

**The problem:** imagine what happens if a tool falls into an inaccessible place during repair or overhaul work.

**The consequences:** arduous, costly search and recovery, possibly involving disassembly of an aeroengine or machine.

**The solution:** the safety lock built into the QuickRelease system prevents damage to workpieces and guarantees secure, rapid connection of all individual components to form a single combined unit. Nothing can get lost because it is not possible to inadvertently release a tool. To release a tool, it is first necessary to press the release button deliberately. Even if you have oily or greasy hands, attaching and separating the individual components is so simple it noticeably smoothes your workflows.



### Safety advantage 2

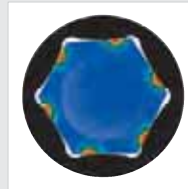
#### STAHlwille AS-Drive

**The problem:** removing heavily corroded or thermally set fasteners requires the application of considerable force. The socket slips off the head of the fastener.

**The consequences:** uncontrolled movements cause injuries and damage to both the workpiece and the tools.

**The solution:** STAHlwille sockets are equipped with the AS-Drive\* profile. This permits high transmission of forces to the lands of nuts and bolts without damaging them. The risk of injury is minimised and the corners of the fastener heads and nuts are no longer damaged.

\*AS-Drive = Anti-Slip-Drive



### Safety advantage 3

#### STAHlwille HPQ®-inserts

**The problem:** although there is hardly enough room to move, you still have to apply considerable torque to loosen a stubborn threaded fasteners.

**The consequences:** many of the sockets available are useless simply because their wall thickness makes them impracticable in awkward places.

**The solution:** STAHlwille HPQ®-sockets are manufactured from selected tough steel alloys. These sockets will not slip off the head of the fastener, nor will they stretch when subjected to heavy loads. Their extremely thin walls and unbelievably high load capacity are simply exemplary. HPQ®-sockets are free of cadmium and are therefore suitable for use on titanium alloy parts and titanium fasteners as used e.g. in the aerospace industry, where safety is a crucial factor. They meet these aerospace standards: E DIN EN 3709, E DIN EN 3710, SAE AS 954-E, S.B.A.C. AS 40605/40606, MS-33787, MIL-W-8982.

\* = High Performance Quality



### Safety advantage 4

#### Fine-tooth ratchets without screws or rivets

**STAHlwille is the first manufacturer to offer a complete product family of particularly efficient fine-tooth ratchets. Eighty teeth generate an extremely tight ratchet angle of only 4.5°, which enables comfortable working in confined spaces.**

The screwless construction, compliant with FOD requirements, make these models the preferred choice for use in safety relevant applications, such as aerospace.



415QR N 1/4"



435QR N 3/8"



512QR N 1/2"

# Sockets, Socket Sets

6.3  
1/4"

DIN  
3120

ISO  
1174-1

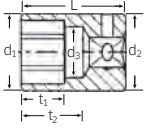
3

## 40D

### Sockets



metric sizes: DIN 3124/ISO 2725-1, E DIN EN 3709, ASME B 107.5M,  
American sizes: ASME B 107.1, Fed. Spec. GGG-W-641,  
SAE AS 954-E (test loads), HPQ® high performance steel, chrome plated.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	g
01030005	5	7.9	10.7	4	23	4.5	15	9	10
01030055	5.5	8.5	10.7	4.5	23	6	15	9	10
01030006	6	9.2	10.7	5	23	6	15	9	10
01030007	7	10.7	10.7	6	23	6.5	13.4	10	10
01030008	8	11.6	11.6	7	23	8	13.1	11	10
01030009	9	12.8	12.8	8	23	8	12.8	13	10
01030010	10	14.3	14.3	9	23	8	14.9	17	10
01030011	11	15.5	15.5	10	23	9	14.6	19	10
01030012	12	16.5	16.5	11	23	9.5	14.3	23	10
01030013	13	17.8	17.8	12	23	9.5	14	25	10
01030014	14	18.8	18.8	13	24	10	14.7	32	10

## 40aD

### Sockets

Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	g
01530010	5/32	6.7	10.7	3.2	23	3.5	15	7	10
01530012	3/16	7.6	10.7	4	23	4.5	15	9	10
01530014	7/32	8.6	10.7	5	23	6	15	9	10
01530016	1/4	9.4	10.7	5.5	23	6	15	9	10
01530018	9/32	10.7	10.7	6.6	23	6.5	13.2	10	10
01530020	5/16	11.6	11.6	7	23	8	13.1	11	10
01530022	11/32	12.7	12.7	8.1	23	8	13.3	13	10
01530024	3/8	13.7	13.7	8.3	23	8	13.3	16	10
01530028	7/16	15.8	15.8	10	23	9	14.6	21	10
01530032	1/2	17.3	17.3	11.5	23	9.5	14.1	27	10
01530034	9/16	18.8	18.8	13.1	24	10	14.7	31	10

## 40aD/10CL

### Set: Sockets with clip strip



Content:  
3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"  
1 clip strip No 40CL-2



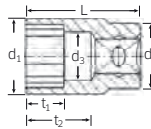
Code	g
96015310	206

## 40

### Sockets



metric sizes: DIN 3124/ISO 2725-1, ASME B 107.5M,  
E DIN EN 3709 (test loads), American sizes: ASME B 107.1,  
Fed. Spec. GGG-W-641, SAE AS 954-E (test loads),  
HPQ® high performance steel, chrome plated.



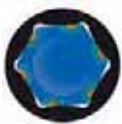
Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	g
01010003	3	5.6	10.7	2.5	23	2	15	7	10
01010032	3.2	5.6	10.7	2.5	23	2	15	8	10
01010035	3.5	6	10.7	2.5	23	2.5	15	8	10
01010004	4	6.7	10.7	3.2	23	3.5	15	9	10
01010045	4.5	7.3	10.7	3.7	23	4	15	9	10
01010005	5	7.9	10.7	4	23	4.5	15	8	10
01010055	5.5	8.5	10.7	4.5	23	6	15	9	10
01010006	6	9.2	10.7	5	23	6	15	9	10
01010007	7	10.7	10.7	6	23	6.5	13.4	10	10
01010008	8	11.6	11.6	7	23	8	13.1	11	10
01010009	9	12.8	12.8	8	23	8	12.8	14	10
01010010	10	14.3	14.3	9	23	8	14.9	17	10
01010011	11	15.5	15.5	10	23	9	14.6	19	10
01010012	12	16.5	16.5	11	23	9.5	14.3	24	10
01010013	13	17.8	17.8	12	23	9.5	14	26	10
01010014	14	18.8	18.8	13	24	10	14.7	32	10

## 40a

### Sockets

Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	g
01410008	1/8	5.6	10.7	2.5	23	2	15	7	10
01410010	5/32	6.7	10.7	3.2	23	3.5	15	9	10
01410012	3/16	7.6	10.7	4	23	4.5	15	9	10
01410014	7/32	8.6	10.7	5	23	6	15	9	10
01410016	1/4	9.4	10.7	5.5	23	6	15	9	10
01410018	9/32	10.7	10.7	6.6	23	6.5	13.2	10	10
01410020	5/16	11.6	11.6	7	23	8	13.1	12	10
01410022	11/32	12.7	12.7	8.1	23	8	13.3	14	10
01410024	3/8	13.7	13.7	8.3	23	8	13.3	16	10
01410028	7/16	15.8	15.8	10	23	9	14.6	21	10
01410032	1/2	17.3	17.3	11.5	23	9.5	14.1	27	10
01410034	9/16	18.8	18.8	13.1	24	10	14.7	31	10

## STAHLWILLE »AS-Drive«



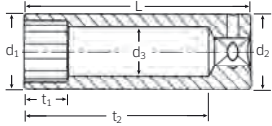
STAHLWILLE sockets are equipped with the AS-Drive® profile: this permits high transmission of forces to the lands of nuts and bolts without damaging them. No longer will you have to worry about stripping the corners off nuts and bolts.

\*Anti-Slip-Drive



## 40DL Sockets

extra deep, metric sizes: E DIN EN 3710, E DIN EN 3709, DIN 3124/ISO 2725-1, ASME B 107.5M, American sizes: ASME B 107.1, Fed. Spec. GGG-W-641, SAE AS 954-E, HPQ® high performance steel, chrome plated.



Code		d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	$\Delta\Delta$ g	
01 24 00 05	5	7.9	10.7	4	50	4.5	42	15	5
01 24 00 55	5.5	8.5	10.7	4.5	50	6	42	16	5
01 24 00 06	6	9.2	10.7	5	50	6	42	18	5
01 24 00 07	7	10.7	10.7	6	50	6.5	40.9	21	5
01 24 00 08	8	11.6	11.6	7	50	8	40.1	23	5
01 24 00 09	9	12.8	12.8	8	50	8	39.8	30	5
01 24 00 10	10	14.3	14.3	9	50	9	41.9	35	5
01 24 00 11	11	15.5	15.5	10	50	10.5	41.6	40	5
01 24 00 12	12	16.5	16.5	11	50	12	41.3	47	5
01 24 00 13	13	17.8	17.8	12	50	12	41	50	5
01 24 00 14	14	18.8	18.8	13	50	15	40.7	57	5

## 40aDL Sockets

Code		d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	$\Delta\Delta$ g	
01 64 00 10	5/32	6.7	10.7	3.2	50	4.5	42	13	5
01 64 00 12	3/16	7.6	10.7	4	50	4.5	42	15	5
01 64 00 14	7/32	8.6	10.7	5	50	6	42	16	5
01 64 00 16	1/4	9.4	10.7	5.2	50	6	42	19	5
01 64 00 18	9/32	10.7	10.7	6.5	50	8	40.2	20	5
01 64 00 20	5/16	11.6	11.6	7	50	8	40.1	24	5
01 64 00 22	11/32	12.7	12.7	8.1	50	9	39.7	26	5
01 64 00 24	3/8	13.7	13.7	8.3	50	9	39.7	33	5
01 64 00 28	7/16	15.8	15.8	10	50	10.5	41.6	42	5
01 64 00 32	1/2	17.3	17.3	11.5	50	12	41.1	44	5
01 64 00 34	9/16	18.8	18.8	13.1	50	15	40.7	55	5

## STAHLWILLE HPQ® sockets



STAHLWILLE HPQ® sockets are manufactured from selected tough steel alloys. The result: they are extremely durable. HPQ® sockets are free of cadmium and are therefore suitable for use on titanium alloy parts and titanium fasteners as used e.g. in the aerospace industry, where safety is a crucial factor.

\*High Performance Quality

## 40aDL/7 Set: Sockets

extra deep  
Content: 3/16; 1/4; 5/16; 3/8; 7/16; 1/2; 9/16"



Code	$\Delta\Delta$ g
96 01 64 01	241

packed in carton

## 40aDL/10CL Set: Sockets with clip strip

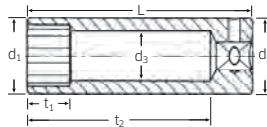
Content: 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"  
1 clip strip No 40CL-2



Code	$\Delta\Delta$ g
96 01 64 10	350

## 40aDV Sockets

SAE AS 954, S.B.A.C. AS 40605/40606,  
HPQ® high performance steel, chrome plated.



Code		d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	$\Delta\Delta$ g	
01 65 00 14	7/32	8.6	10.7	5	31.8	6	23.8	12	10
01 65 00 16	1/4	9.4	10.7	5.2	31.8	6	23.8	13	10
01 65 00 18	9/32	10.7	10.7	6.6	31.8	6.5	22	13	10
01 65 00 20	5/16	11.6	11.6	7	31.8	8	21.9	15	10

6.3  
1/4"

DIN  
3120

ISO  
1174-1

3

# Sockets, Socket Sets

6.3  
1/4"

DIN  
3120

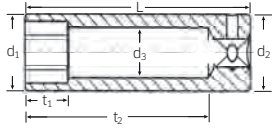
ISO  
1174-1

3

## 40L Sockets



extra deep, DIN 3124/ISO 2725-1, ASME B 107.5M, E DIN EN 3710, E DIN EN 3709 (test loads), HPQ® high performance steel, chrome plated.

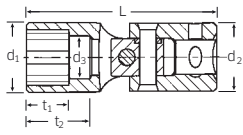


Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	g	
01020004	4	6.7	10.7	3.2	50	3.5	42	14	10	
01020045	4.5	7.3	10.7	3.7	50	4	42	15	10	
01020005	5	7.9	10.7	4	50	4.5	42	16	10	
01020055	5.5	8.5	10.7	4.5	50	6	42	17	10	
01020006	6	9.2	10.7	5	50	6	42	18	10	
01020007	7	10.7	10.7	6	50	6.5	40.9	24	10	
01020008	8	11.6	11.6	7	50	8	40.1	27	10	
01020009	9	12.8	12.8	8	50	8	39.8	31	10	
01020010	10	14.3	14.3	9	50	9	41.9	38	10	
01020011	11	15.5	15.5	10	50	10.5	41.6	43	10	
01020012	12	16.5	16.5	11	50	12	41.3	49	10	
01020013	13	17.8	17.8	12	50	12	41	56	10	

## 402 UNIFLEX sockets



American sizes: SAE AS 954, ASME B 107.1, HPQ® high performance steel, chrome plated.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	g	
01140006	6	9.2	12.7	5	32	5.5	10	16	5	
01140007	7	10.4	12.7	6	33.5	6	11.5	16	5	
01140008	8	11.6	12.7	6.7	35	8	13	17	5	
01140009	9	13	12.7	8	36	8	12	20	5	
01140010	10	14.2	12.7	9	38	12	14	21	5	

## 402a UNIFLEX sockets

Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	g	
01540014	7/32	8.6	12.7	4.8	32	5.5	10	17	5	
01540016	1/4	9.6	12.7	5.2	32	5.5	10	16	5	
01540018	9/32	11	12.7	6.4	32	6.5	10	19	5	
01540020	5/16	11.6	12.7	6.7	35	8	13	17	5	
01540022	11/32	12.7	12.7	8	35	7.5	11.5	19	5	
01540024	3/8	13.6	12.7	9	38	8.6	13.1	20	5	
01540028	7/16	15.7	12.7	10.5	39.5	10.7	15	23	5	
01540032	1/2	17.3	12.7	12	41.5	11.1	16.5	27	5	

## 402a/5 Set: UNIFLEX sockets



Content: 1/4; 5/16; 3/8; 7/16; 1/2"

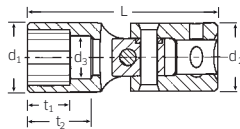


Code	Δg	g
96015401		101

## 402aK UNIFLEX sockets



short version, HPQ® high performance steel, chrome plated.

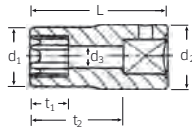


Code	"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	g	
01541024	3/8	13.6	12.7	6.7	34	9.1	12.0	19	5	
01541034	9/16	19	12.7	13.1	37.5	10.3	11.8	25	5	

## 40TX Sockets



for external TORX® screws, HPQ® high performance steel, chrome plated.



Code	size	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	g	
01270004	E4	3.8	5.6	10.7	2	23	4.5	15	8	10	
01270005	E5	4.7	6.7	10.7	2.8	23	5	15	7	10	
01270006	E6	5.7	8	10.7	3.6	23	5.5	15	10	10	
01270007	E7	6.2	9.6	10.7	3.8	23	6.5	15	10	10	
01270008	E8	7.5	10.5	11.6	4.3	23	7	15	10	10	
01270010	E10	9.4	12.7	12.7	5.6	23	9	15	17	10	

### 40aSP Sockets spline-drive



MS-33787, MIL-W-8982, HPQ® high performance steel, chrome plated.



Code	Spline size	"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	
01011007	7	7/32	8.6	10.7	5	22.2	6	14.2	7	1
01011008	8	1/4	9.5	10.7	5.6	22.2	7	14.2	10	1
01011009	9	9/32	11.2	11.2	6.6	22.2	8	12.4	10	1
01011010	10	5/16	11.6	11.6	7.1	22.2	8	12.2	12	1
01011012	12	3/8	13.8	13.8	8.6	23	8.7	12.6	18	1
01011014	14	7/16	15.7	15.7	10.4	25	10.7	14.1	24	1

### 40aLSP Sockets spline-drive



extra deep bolt clearance, MS-33787, MIL-W-8982, HPQ® high performance steel, chrome plated.



Code	Spline size	"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	
01021007	7	7/32	8.6	10.7	5	50.8	6	42.8	18	1
01021008	8	1/4	9.5	10.7	5.6	50.8	8	42.8	24	1
01021010	10	5/16	11.6	11.6	7.1	50.8	8	40.8	27	1

### 402aSP UNIFLEX sockets spline-drive



MS-33787, MIL-W-8982, HPQ® high performance steel, chrome plated.



Code	Spline size	"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	
01542016	8	1/4	9.5	12.7	5.6	32	6.4	9.8	16	5
01542020	10	5/16	11.6	12.7	7.1	35	8	13	18	5

### 41K Screwdriver sockets

for slotted screws, blades to DIN 5264, Chrome Alloy Steel, chrome plated.

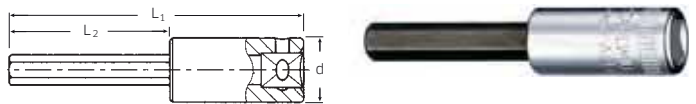


Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	a mm	b mm	g	
01280006	0.6x3.5	28	16	11.6	0.6	3.5	9	5
01280008	0.8x4	28	16	11.6	0.8	4	10	5
01280010	1x5.5	28	16	11.6	1	5.5	11	5
01280012	1.2x8	28	16	11.6	1.2	8	12	5
01280016	1.6x10*	28	16	11.6	1.6	10	14	5

\* to be discontinued

### 44 IN HEX sockets

for socket head screws, DIN 7422, Chrome Alloy Steel, chrome plated.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	
01050003	3	55	30	10.7	14	5
01050004	4	55	30	10.7	16	5
01050005	5	55	30	10.7	20	5
01050006	6	55	30	11.6	26	5

### 44a IN HEX sockets

Code	"	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	
01450004	1/16	55	30	10.7	11	5
01450005	5/64	55	30	10.7	12	5
01450006	3/32	55	30	10.7	14	5
01450007	7/64	55	30	10.7	17	5
01450008	1/8	55	30	10.7	12	5
01450009	9/64	55	30	10.7	13	5
01450010	5/32	55	30	10.7	14	5
01450012	3/16	55	30	10.7	17	5
01450014	7/32	55	30	10.7	19	5
01450016	1/4	55	30	11.6	24	5

### 44K IN HEX sockets

for socket head screws, Chrome Alloy Steel, chrome plated.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	
01120003	3	28	16	11.6	10	5
01120004	4	28	16	11.6	10	5
01120005	5	28	16	11.6	10	5
01120006	6	28	16	11.6	10	5
01120008	8	28	16	11.6	15	5

6.3  
1/4"

DIN  
3120

ISO  
1174-1

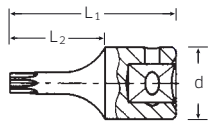
3

## Sockets, Socket Sets

6.3  
1/4"

### 44KTX Screwdriver sockets

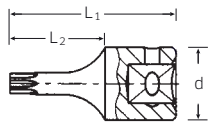
for inside TORX® screws, Chrome Alloy Steel, chrome plated.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	△△ g	
01 35 00 08	T8	2.3	28	16	11.6	10	5
01 35 00 09	T9	2.5	28	16	11.6	10	5
01 35 00 10	T10	2.7	28	16	11.6	10	5
01 35 00 15	T15	3.3	28	16	11.6	10	5
01 35 00 20	T20	3.8	28	16	11.6	11	5
01 35 00 25	T25	4.4	28	16	11.6	11	5
01 35 00 27	T27	5.0	28	16	11.6	11	5
01 35 00 30	T30	5.5	28	16	11.6	11	5
01 35 00 40	T40	6.6	28	16	11.6	12	5

### 44KTXB Screwdriver sockets

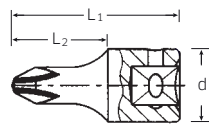
with hollow point, for inside TORX® screws (TORX® TAMPER RESISTANT), Chrome Alloy Steel, chrome plated.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	△△ g	
01 35 10 08	T8	2.3	28	16	11.6	10	5
01 35 10 09	T9	2.5	28	16	11.6	10	5
01 35 10 10	T10	2.7	28	16	11.6	10	5
01 35 10 15	T15	3.3	28	16	11.6	10	5
01 35 10 20	T20	3.8	28	16	11.6	10	5
01 35 10 25	T25	4.4	28	16	11.6	11	5
01 35 10 27	T27	5.0	28	16	11.6	10	5
01 35 10 30	T30	5.5	28	16	11.6	11	5
01 35 10 40	T40	6.6	28	16	11.6	12	5

### 44P Screwdriver sockets

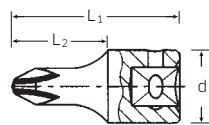
for recessed head screws Phillips-Recess®, tips to DIN 5260, Chrome Alloy Steel, chrome plated.



Code	PH size	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	△△ g	
01 29 00 01	1	28	16	11.6	12	5
01 29 00 02	2	28	16	11.6	11	5
01 29 00 03	3	28	16	11.6	12	5
01 29 00 04	4	28	16	11.6	14	5

### 44PZ Screwdriver sockets

for POZIDRIV/SUPADRIV® screws, Chrome Alloy Steel, chrome plated.



Code	PZ size	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	△△ g	
01 30 00 01	1	28	16	11.6	10	5
01 30 00 02	2	28	16	11.6	11	5

### 40CL Clip strips

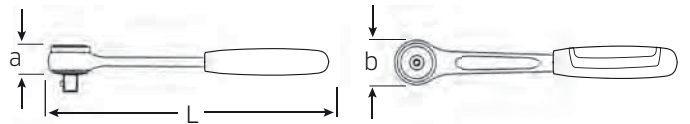
for socket retention, with 9 or 10 retaining clips. Supplied without sockets.



Code	size	L mm	△△ g	
80 40 00 01	1	200	36	5
80 40 00 02	2	300	52	5

## Drive tools and accessories

1/4" □, finish: Chrome Alloy Steel, chrome plated.



### 411 Ratchet, fine tooth

reversible, 60 teeth, with 2-component handle, for use in confined spaces, re-engages after movement of 6°, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	
11 23 10 11	118	24	19.5	96	1

### 415 Ratchet

reversible, 22 teeth, with 2-component handle, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	
11 11 10 10	117	22	13	80	5

### 415QR N QuickRelease ratchet, fine tooth

reversible, 80 teeth, with QuickRelease safety lock and 2-component handle, for use in confined spaces, re-engages after movement of 4.5°, construction without screws prevents foreign object damage, DIN 3122/ISO 3315, registered design.



Code	L mm	b mm	a mm	△△ g	
11 11 10 20	117	22.6	10.7	79	1

### 415QR QuickRelease ratchet



reversible, 22 teeth, with QuickRelease safety lock and 2-component handle, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	$\Delta$ g	
<b>11 11 00 20</b>	117	22	13	79	1

### 415SG-QR QuickRelease ratchet



reversible, 22 teeth, with QuickRelease safety lock and steel handle, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	$\Delta$ g	
<b>11 11 00 30</b>	117	22	13	90	1

### 415QRL QuickRelease ratchet



long, reversible, 22 teeth, with QuickRelease safety lock and 2-component handle.



Code	L mm	b mm	a mm	$\Delta$ g	
<b>11 11 01 53</b>	153	22	13	96	1

### 415B Bit ratchet

reversible, 22 teeth, with 2-component handle and inside hexagon, 1/4", DIN 3126/ISO 1173 D 6.3 for BITS Screwdriver sockets 1/4". Internal hex drive with a collar-thrust spring. Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).



Code	L mm	b mm	a mm	$\Delta$ g	
<b>11 13 10 11</b>	117	22	12	76	5

### 415SGB Bit ratchet

reversible, 22 teeth, with steel handle and inside hexagon, 1/4", DIN 3126/ISO 1173 D 6.3 for Bits Screwdriver sockets 1/4". Internal hex drive with a collar-thrust spring. Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).



Code	L mm	b mm	a mm	$\Delta$ g	
<b>11 13 00 11</b>	117	22	12	85	1

### 416 Flexible joint ratchet

reversible, 60 teeth, handle may be raised or lowered by approx. 90°. Lockable in following positions: straight, 30° up, 60° up, 30° down. Unlocked by depressing button in handle, registered design.



Code	L mm	b mm	a mm	$\Delta$ g	
<b>11 26 00 01</b>	170	25	19.5	232	1

### 4110 Spare parts set for ratchets No 411, 416

Content:  
1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws

Code	$\Delta$ g	
<b>19 20 00 01</b>	47	1

for ratchets from 4/96

### 4150 Spare parts set for ratchets No 415, 415SK, 415SG

Content:  
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws M 1.7 x 8; 1 cover plate

Code	$\Delta$ g	
<b>19 01 00 00</b>	26	1

### 4150QR Spare parts set for ratchets No 415QR, 415QRL, 415SG-QR



Content:  
1 pinion; 1 pawl; 2 levers with pin; 1 ball; 2 compression springs; 2 screws M 1.7 x 8; 2 cover plates

Code	$\Delta$ g	
<b>19 01 10 20</b>	24	1

### 4150QR N Spare parts set for ratchet No 415QR N



Content:  
1 pinion; 1 locking disc; 1 lever; 1 pin; 1 ball; 1 compression spring; 2 circlips; 1 cover plate

Code	$\Delta$ g	
<b>19 01 20 20</b>	21	1

### 4150B Spare parts set for ratchets No 415B, 415SGB

Content:  
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws M 1.7 x 8; 1 cover plate

Code	$\Delta$ g	
<b>19 01 00 11</b>	20	1

6.3  
1/4"

DIN  
3120

ISO  
1174-1

3



## Sockets, Socket Sets

6.3  
1/4"

DIN  
3120

ISO  
1174-1

### 400 Drive handle

DIN 3122/ISO 3315.



Code	L mm	♻️ g	📦
<b>11050010</b>	150	70	5

### 400QR QuickRelease drive handle



DIN 3122/ISO 3315, with QuickRelease safety lock, patent.



Code	L mm	♻️ g	📦
<b>11051010</b>	150	80	1

### 400 Drall Drive handle

with 1/4" square drive in end of handle, DIN 3122/ISO 3315.



Code	L mm	♻️ g	📦
<b>11050011</b>	150	106	5

### 401 Drive handle

flexible shaft (right hand rotation only), maximum torque 5 N-m.



Code	L mm	♻️ g	📦
<b>11051002</b>	240	130	5

### 403 Flexible handle

DIN 3122/ISO 3315, with 2-component handle.



Code	L mm	♻️ g	📦
<b>11061010</b>	154.5	70	1

### 404 Sliding T-handle

DIN 3122/ISO 3315.



Code	L mm	♻️ g	📦
<b>11070000</b>	116	38	5

### 404QR QuickRelease sliding T-handle



with QuickRelease safety locks, patent.



Code	L mm	♻️ g	📦
<b>11071000</b>	116	52	1

### 413 Speeder brace

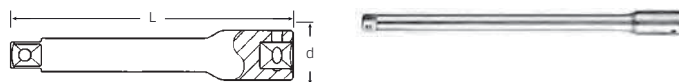
with steel handle, for greater axial power transmission, detachable palm head, working radius 70 mm.



Code	L mm	♻️ g	📦
<b>11100001</b>	440	352	1

### 405 Extensions

DIN 3123/ISO 3316.



Code	size	L mm	d mm	♻️ g	📦
<b>11010001</b>	<b>2</b>	54	11.6	29	5
<b>11010006</b>	<b>4</b>	100	11.6	46	5
<b>11010002</b>	<b>6</b>	150	11.6	65	5
<b>11010010</b>	<b>10</b>	254	11.6	115	1
<b>11010014</b>	<b>14</b>	356	11.6	155	1

### 405W Extensions with wobble-drive

swivel angle 8° each side, max. torque 40 N-m.



Code	size	L mm	d mm	♻️ g	📦
<b>11010011</b>	<b>2</b>	54	11.6	28	1
<b>11010016</b>	<b>4</b>	100	11.6	45	1
<b>11010012</b>	<b>6</b>	150	11.6	55	1
<b>11010020</b>	<b>10</b>	254	11.6	110	1
<b>11010024</b>	<b>14</b>	356	11.6	155	1

### 405QR QuickRelease extensions



patent, DIN 3123/ISO 3316.



Code	size	L mm	d mm	♻️ g	📦
<b>11011001</b>	<b>2</b>	54	11.6	28	1
<b>11011006</b>	<b>4</b>	102	11.6	49	1
<b>11011002</b>	<b>6</b>	150	11.6	65	1
<b>11011013</b>	<b>13</b>	330	11.6	145	1
<b>11011005</b>	<b>14</b>	356	11.6	150	1

### 406 Extension, flexible

(right hand rotation only)  
maximum torque 5 N·m.



Code	L mm	d mm	$\Delta$ g	
<b>11 04 0000</b>	152	11.6	61	5

### 407 Universal joint

DIN 3123/ISO 3316.

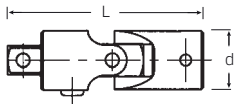


Code	L mm	d mm	$\Delta$ g	
<b>11 02 0000</b>	37	12.8	23	5

### 407QR QuickRelease universal joint



with QuickRelease safety lock, patent.



Code	L mm	d mm	$\Delta$ g	
<b>11 02 1000</b>	45	13	35	1

### 409 Adaptor



1/4" socket x 3/8" plug (6.3 x 10),  
DIN 3123/ISO 3316, HPQ® high performance steel.



Code	L mm	d mm	$\Delta$ g	
<b>11 03 0002</b>	25	12.8	18	5

### 409M/432M/514M/3 Set adaptors, 3 pieces

1/4" socket x 3/8" plug,  
3/8" socket x 1/2" plug,  
1/2" socket x 3/4" plug.



Code	$\Delta$ g	
<b>96 12 1002</b>	120	1

### 409M Adaptor

1/4" socket x 3/8" plug (6.3 x 10).



Code	L mm	$\phi$ mm	$\Delta$ g	
<b>11 03 00 10</b>	13	28	14	1

### 410 Adaptor



1/4" socket x 1/2" plug (6.3 x 12.5),  
HPQ® high performance steel.



Code	L mm	d mm	$\Delta$ g	
<b>11 03 00 03</b>	28	16.5	36	5

### 412 Bit holder



○ 1/4" inside hexagon, DIN 3126/ISO 1173 D 6.3.  
Internal hex drive with a collar-thrust spring.  
Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).  
HPQ® high performance steel.



Code	L mm	d mm	$\Delta$ g	
<b>11 18 00 10</b>	25	11.6	15	5

### 412-1 Bit holder



○ 1/4" inside hexagon, DIN 3126/ISO 1173 D 6.3  
Outer ● 10 mm for use in tools with 10 mm  
internal hex drive or internal double hexagon  
(e.g. "FLEXI" double-ended flexi-joint spanners, T-handle universal joint spanners, box spanners, ratchet ring spanners etc.).  
Internal hex drive with a collar-thrust spring.  
Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).  
HPQ® high performance steel.



Code	outside ●	L mm	d mm	$\Delta$ g	
<b>11 18 00 20</b>	10 mm	20	11.6	11	5

### 417/1 Locking adaptor

with hexagon key wrench  
No 10760aCV 3/32".



Code	L mm	d mm	$\Delta$ g	
<b>96 11 27 01</b>	42	13	23	1

6.3  
1/4"

DIN  
3120

ISO  
1174-1

3

# Sockets, Socket Sets

6.3  
1/4"

DIN  
3120

ISO  
1174-1

## 4008 Ratcheting BIT holder

- Easy change of direction (anticlockwise, clockwise and fixed) by simply twisting the locking ring
- Ergonomically designed, non-slip 2-component handle for optimum force transmission
- Storage compartment for 6 bits in the handle; push button to open (Size 1)
- For BITS screwdriver inserts with external hex 1/4" DIN 3126/ISO 1173 Type C 6.3
- 1/4" sockets can be used with Adaptor No 3115/1 (external hex and square drive 1/4")
- Easy bit change thanks to internal hex. drive with magnet
- Knurled spin section for faster screw advance
- Heavy-duty mechanism with 48 teeth (7.5° working angle)



4008-1



4008-2

Code	size	inside O	"	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	
18 12 0001	1	D 6.3	1/4	127	250	10	248	1
18 12 0002	2	D 6.3	1/4	25	95	10	137	1

inside O DIN 3126/ISO 1173

## 4008/27/1R Ratcheting BIT holder set



- 29 pieces  
Content:
- 1 Ratcheting bit holder No 4008-1
  - 3 Bits ⊕ 1221; 1222; 1223
  - 3 Bits ⊕ PZ 1221; PZ 1222; PZ 1223
  - 6 Bits ⊕ 1440 T10; 1441 T15; 1442 T20; 1443 T25; 1445 T30; 1446 T40
  - 3 Bits ⊙ 1301; 1302; 1303
  - 3 Bits ⊖ 1163 0.6 x 4.5; 1165 0.8 x 5.5; 1166/1 1.2 x 6.5 mm
  - 1 Square drive extension No 3115/1 with 1/4" outer hex. and outer square drives for attaching 1/4" □ sockets
  - 9 Sockets No 40, 1/4" □ sizes 4; 5; 5.5; 6; 7; 8; 10; 11; 13 mm

Code	g	
96 18 2203	642	1

# Tools for Hi-Lok bolts

## 40aD/8/1H Socket set

- for Hi-Lok bolts.  
Content:
- 5 sockets with bi-hexagon No 40aD: sizes 7/32; 1/4; 5/16; 11/32; 3/8"
  - 3 offset screwdrivers No 10759a: 1/16; 5/64; 3/32"
  - 1 ratchet No 415SGH



Code	g	
96 01 63 03	638	1

## 415SGH Ratchet

- reversible, 22 teeth, patent, axially drilled pinion, locking facility for sockets.  
For use on Hi-Lok bolts in the aerospace industry.



Code	L mm	b mm	a mm	g	
11 11 00 02	117	22	13	90	5

## 414H Hi-Lok extensions

- with lock-on facility as on ratchet No 415SGH, patent.



Code	size	L mm	d mm	g	
11 24 00 11	2	54	13	34	1
11 24 00 12	4	102	13	49	1
11 24 00 13	6	152	13	66	1

## 10759 Offset screwdrivers

- with hexagon end for ratchet No 415SGH, patent.  
Round shaft on screwdriver enables locking of ball retainer.



Code	size	mm	L mm	g	
43 06 20 02	1	2	50	5	5
43 06 40 02	2	2	100	8	5

## 10759a Offset screwdrivers

Code	size	"	L mm	g	
43 56 00 04	1	1/16	50	5	5
43 56 40 04	2	1/16	100	8	5
43 56 00 05	1	5/64	50	5	5
43 56 40 05	2	5/64	100	8	5
43 56 00 06	1	3/32	50	5	5
43 56 40 06	2	3/32	100	8	5

**40/20/4 SCI Socket set 1/4" □**

in softcase with foam inlay,  
24 pieces  
Content:

- 10 sockets with hexagon No 40:  
sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12;  
13 mm
- 2 bits ⊕ 1221: size 1; 1222: size 2
- 3 bits ● 1301: 4 mm; 1302: 5 mm;  
1303: 6 mm
- 5 bits ● 1414: T10; 1415: T15;  
1416: T20; 1417: T25; 1419: T30
- 1 ratchet No 415QR N
- 2 extensions No 405QR/2 (54 mm), No 405QR/6 (150 mm)
- 1 bit-holder No 412



Code	⚙ g
<b>96010127</b>	565

**40/13/6 Socket set 1/4" □**

in sturdy, stackable ABS plastic case,  
19 pieces  
Content:

- 13 sockets with hexagon No 40:  
sizes 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9;  
10; 11; 12; 13 mm
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm),  
No 405/6 (150 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404



Code	⚙ g
<b>96011124</b>	924

**40/9/4 Socket set 1/4" □**

in sturdy, stackable ABS plastic case,  
13 pieces  
Content:

- 9 sockets with hexagon No 40:  
sizes 4; 5; 5.5; 6; 7; 8; 10; 11;  
13 mm
- 1 ratchet No 415
- 2 extensions  
No 405/2 (54 mm),  
No 405/6 (150 mm)
- 1 universal joint No 407



Code	⚙ g
<b>96011119</b>	717

**40/13/6QR Socket set 1/4" □**

in sturdy, stackable ABS plastic case,  
19 pieces  
Content:

- 13 sockets with hexagon No 40:  
sizes 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9;  
10; 11; 12; 13 mm
- 1 ratchet No 415QR N
- 2 extensions No 405QR/2 (54 mm),  
No 405QR/6 (150 mm)
- 1 universal joint No 407QR
- 1 drive handle No 400QR
- 1 T-handle No 404QR



Code	⚙ g
<b>96011180</b>	978

**40D/9/4 Socket set 1/4" □**

in sturdy, stackable ABS plastic case,  
13 pieces  
Content:

- 9 sockets with bi-hexagon No 40D:  
sizes 4; 5; 5.5; 6; 7; 8; 10; 11;  
13 mm
- 1 ratchet No 415
- 2 extensions  
No 405/2 (54 mm),  
No 405/6 (150 mm)
- 1 universal joint No 407



Code	⚙ g
<b>96011304</b>	749

**40/44/17/5 Socket set 1/4" □**

in sturdy, stackable ABS plastic case,  
22 pieces  
Content:

- 13 sockets with hexagon No 40:  
sizes 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9;  
10; 11; 12; 13 mm
- 4 INHEX sockets No 44:  
sizes 3; 4; 5; 6 mm
- 1 ratchet No 415
- 1 extension No 405/6 (150 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404



Code	⚙ g
<b>96011113</b>	968

## Sockets, Socket Sets

6.3  
1/4"

### 40/44/17/ 5QR

#### Socket set 1/4"



in sturdy, stackable ABS plastic case,  
22 pieces  
Content:

- 13 sockets with hexagon No 40:  
sizes 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9;  
10; 11; 12; 13 mm
- 4 INHEX sockets No 44:  
sizes 3; 4; 5; 6 mm
- 1 ratchet 415QR N
- 1 extension No 405/6QR (150 mm)
- 1 universal joint No 407QR
- 1 drive handle 400QR
- 1 T-handle No 404QR



Code  
**9601 1181**

g  
981

### 40/23/6

#### Socket set 1/4"

in sturdy, stackable ABS plastic case,  
29 pieces  
Content:

- 11 sockets with hexagon No 40:  
sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12;  
13; 14 mm
- 3 screwdriver sockets  $\ominus$  No 41K:  
sizes 0.6 x 3.5; 1.0 x 5.5;  
1.2 x 8 mm,
- 5 INHEX sockets No 44K:  
sizes 3; 4; 5; 6; 8 mm
- 4 screwdriver sockets  $\oplus$  No 44P: sizes 1; 2; 3; 4
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm), No 405/6 (150 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404



Code  
**9601 1136**

g  
1064

### 40/23/7

#### Socket set 1/4"

in sturdy, stackable ABS plastic case,  
30 pieces  
Content:

- 12 sockets with hexagon No 40:  
sizes 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10;  
11; 12; 13 mm
- 4 INHEX sockets No 44:  
sizes 3; 4; 5; 6 mm
- 3 bits  $\oplus$  1221: size 1; 1222: size 2; 1223: size 3
- 4 bits  $\ominus$  1162: 0.6 x 3.5 mm; 1164: 0.8 x 4 mm; 1166: 1 x 5.5 mm;  
1168: 1.6 x 8 mm
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm), No 405/6 (150 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404
- 1 bit-holder No 412



Code  
**9601 1134**

g  
1287

### 40D/23/6

#### Socket set 1/4"

in sturdy, stackable ABS plastic case,  
29 pieces  
Content:

- 11 sockets with bi-hexagon No 40D:  
sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12;  
13; 14 mm
- 3 screwdriver sockets  $\ominus$  No 41K:  
sizes 0.6 x 3.5; 1.0 x 5.5;  
1.2 x 8 mm
- 5 INHEX sockets No 44K:  
sizes 3; 4; 5; 6; 8 mm
- 4 screwdriver sockets  $\oplus$  No 44P: sizes 1; 2; 3; 4
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm), No 405/6 (150 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404



Code  
**9601 1306**

g  
1017

### 40D/23/7

#### Socket set 1/4"

in sturdy, stackable ABS plastic case,  
30 pieces  
Content:

- 2 sockets with hexagon No 40:  
sizes 4; 4.5 mm
- 10 sockets with bi-hexagon No 40D:  
sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12;  
13 mm
- 4 INHEX sockets No 44: sizes 3; 4; 5; 6 mm
- 3 bits  $\oplus$  No 1221: size 1; No 1222: size 2; No 1223: size 3
- 4 bits  $\ominus$  1162: 0.6 x 3.5 mm; 1164: 0.8 x 4 mm; 1166: 1.0 x 5.5 mm;  
1168: 1.6 x 8 mm
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm), No 405/6 (150 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404
- 1 bit-holder No 412



Code  
**9601 1305**

g  
1212

### 40/24/6

#### Socket set 1/4"

in sturdy, stackable ABS plastic case,  
30 pieces  
Content:

- 12 sockets with hexagon No 40:  
sizes 4; 5; 5.5; 6; 7; 8; 9; 10; 11;  
12; 13; 14 mm
- 3 screwdriver sockets  $\ominus$  No 41K:  
0.6 x 3.5; 1.0 x 5.5; 1.2 x 8 mm
- 5 INHEX sockets No 44K:  
sizes 3; 4; 5; 6; 8 mm
- 2 screwdriver sockets  $\oplus$  No 44P: sizes 1; 2
- 2 screwdriver sockets  $\oplus$  No 44PZ: sizes 1; 2
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm), No 405/6 (150 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404



Code  
**9601 1138**

g  
1058

3



### 40/24/6QR Socket set 1/4"



in sturdy, stackable ABS plastic case,  
30 pieces

Content:

- 12 sockets with hexagon No 40:  
sizes 4; 5; 5.5; 6; 7; 8; 9; 10; 11;  
12; 13; 14 mm
- 3 screwdriver sockets  $\ominus$  No 41K:  
0.6 x 3.5; 1.0 x 5.5; 1.2 x 8 mm
- 5 INHEX sockets No 44K: sizes 3; 4; 5; 6; 8 mm
- 2 screwdriver sockets  $\oplus$  No 44P: sizes 1; 2
- 2 screwdriver sockets  $\oplus$  No 44PZ: sizes 1; 2
- 1 ratchet No 415QR N
- 2 extensions No 405QR/2 (54 mm), No 405QR/6 (150 mm)
- 1 universal joint No 407QR
- 1 drive handle No 400QR
- 1 T-handle No 404QR



Code	$\frac{\Delta}{g}$
<b>9601 1182</b>	1093

### 40/45/36/12 Socket set 1/4"; 3/8"

in sturdy, stackable ABS plastic case,  
48 pieces

Content:

- 8 sockets with hexagon No 40:  
sizes 4; 4.5; 5; 5.5; 6; 7; 8; 9 mm
- 12 sockets with bi-hexagon No 45:  
sizes 10; 11; 12; 13; 14; 15; 16;  
17; 18; 19; 21; 22 mm
- 1 socket with bi-hexagon, long,  
with rubber insert No 4600:  
size 16 mm - 5/8"
- 3 bits  $\oplus$  1221: size 1; 1222: size 2; 1223: size 3
- 1 bit  $\oplus$  PZ1222: size 2
- 6 bits  $\ominus$  1160: 0.5 x 3 mm; 1162: 0.6 x 3.5 mm; 1164: 0.8 x 4 mm;  
1166: 1.0 x 5.5 mm; 1166/1: 1.2 x 6.5 mm; 1168: 1.6 x 8 mm
- 5 bits  $\bullet$  1300: 3 mm; 1301: 4 mm; 1302: 5 mm; 1303: 6 mm;  
1304: 8 mm
- 2 ratchets No 415, No 435
- 3 extensions No 427/3 (76 mm), No 405/6 (150 mm),  
No 427/10 (240 mm)
- 2 universal joints No 407, No 428
- 1 drive handle No 400
- 1 T-handle No 425
- 2 bit-holder No 412, No 442
- 1 adaptor No 431



Code	$\frac{\Delta}{g}$
<b>9601 2047</b>	2963

### 40/52/27/11 Socket set 1/4"; 1/2"

in sturdy, stackable ABS plastic case,  
38 pieces

Content:

- 9 sockets with hexagon No 40:  
sizes 4; 5; 5.5; 6; 7; 8; 9; 10;  
11 mm
- 10 sockets with hexagon No 52:  
sizes 13; 16; 17; 18; 19; 21; 22;  
24; 27; 30 mm
- 3 INHEX sockets No 44: sizes 3; 4; 5 mm
- 5 INHEX sockets No 54: sizes 6; 8; 10; 12; 14 mm
- 2 ratchets No 415, No 512
- 4 extensions No 405/2 (54 mm), No 509/5 (130 mm),  
No 405/6 (150 mm), No 509/10 (255 mm)
- 2 universal joints No 407, No 510
- 1 drive handle No 400
- 2 T-handles No 404, No 506



Code	$\frac{\Delta}{g}$
<b>9601 1160</b>	5145

### 40ma/25/8 Socket set 1/4"

in sturdy, stackable ABS plastic case,  
33 pieces

Content:

- 25 sockets with hexagon  
No 40: sizes 3.2; 3.5; 4; 4.5; 5;  
5.5; 6; 7; 8; 9; 10; 11; 12;  
13; 14 mm
- No 40a: sizes 3/16; 7/32; 1/4; 9/32;  
5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm), No 405/6 (150 mm)
- 1 extension, flexible No 406 (152 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 flexible handle No 403
- 1 T-handle No 404



Code	$\frac{\Delta}{g}$
<b>9601 1162</b>	1484

### 40TX/44KTX/15/6 Socket set TORX® 1/4"

in sturdy, stackable ABS plastic case,  
21 pieces

Content:

- 6 sockets for external TORX®  
screws No 40TX:  
sizes E4; E5; E6; E7; E8; E10
- 9 screwdriver sockets for internal  
TORX® screws No 44KTX:  
sizes T8; T9; T10; T15; T20; T25;  
T27; T30; T40
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm), No 405/6 (150 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404



Code	$\frac{\Delta}{g}$
<b>9601 3701</b>	896

## Sockets, Socket Sets

6.3  
1/4"

DIN  
3120

ISO  
1174-1

3

### 86TX Socket set TORX® 1/4; 1/2" □

in sturdy, stackable ABS plastic case,  
63 pieces

Content:

- 9 sockets with hexagon No 40:  
sizes 4; 5; 5.5; 6; 7; 8; 9; 10;  
11 mm
- 10 sockets with hexagon No 52:  
sizes 13; 16; 17; 18; 19; 21; 22;  
24; 27; 30 mm
- 5 sockets for external TORX® screws No 40TX:  
sizes E4; E5; E6; E7; E8
- 7 sockets for external TORX® screws No 50TX:  
sizes E10; E12; E14; E16; E18; E20; E24
- 3 INHEX sockets No 44: sizes 3; 4; 5 mm
- 5 INHEX sockets No 54: sizes 6; 8; 10; 12; 14 mm
- 6 screwdriver sockets for internal TORX® screws No 44KTX:  
sizes T8; T9; T10; T15; T20; T25
- 7 screwdriver sockets for internal TORX® screws No 54TX:  
sizes T27; T30; T40; T45; T50; T55; T60
- 2 ratchets No 415, No 512
- 4 extensions No 405/2 (54 mm), No 509/5 (130 mm),  
No 405/6 (150 mm), No 509/10 (255 mm)
- 2 universal joints No 407, No 510
- 1 drive handle No 400
- 2 T-handles No 404, No 506



Code	g
98113702	6734

### 88TX Socket set TORX® 1/4" □

in sturdy, stackable ABS plastic case,  
36 pieces

Content:

- 10 sockets with hexagon No 40:  
sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12;  
13 mm
- 6 sockets for external TORX®  
screws No 40TX: sizes E4; E5; E6;  
E7; E8; E10
- 5 INHEX sockets No 44K: sizes 3; 4; 5; 6; 8 mm
- 9 screwdriver sockets for internal TORX® screws No 44KTX:  
sizes T8; T9; T10; T15; T20; T25; T27; T30; T40
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm), No 405/6 (150 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 T-handle No 404



Code	g
98819801	1287

### 89TX Socket set TORX® 1/4; 3/8; 1/2" □

in sturdy, stackable ABS plastic case,  
35 pieces

Content:

- 3 sockets for external TORX®  
screws No 40TX:  
sizes E4; E5; E6
- 2 screwdriver sockets for internal  
TORX® screws No 44KTX:  
sizes T8; T9
- 4 sockets for external TORX® screws No 45TX:  
sizes E7; E8; E10; E12
- 5 screwdriver sockets for internal TORX® screws No 49TX:  
sizes T10; T15; T20; T25; T27
- 6 sockets for external TORX® screws No 50TX:  
sizes E11; E14; E16; E18; E20; E24
- 6 screwdriver sockets for internal TORX® screws No 54TX:  
sizes T30; T40; T45; T50; T55; T60
- 7 bits 1440: T10; 1441: T15; 1442: T20; 1443: T25; 1444: T27;  
1445: T30; 1446: T40
- 1 bit-holder No 442
- 1 TORX® controller: sizes E6; E7; E8; E10; E12; E14; E16; T10; T15; T20;  
T25; T27; T30; T40; T45; T47; T50; T55; T60



Code	g
98811908	2568

### 40a/9/4 Socket set 1/4" □

in sturdy, stackable ABS plastic case,  
13 pieces

Content:

- 9 sockets with hexagon No 40a:  
sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32;  
3/8; 7/16; 1/2"
- 1 ratchet No 415
- 2 extensions  
No 405/2 (54 mm),  
No 405/6 (150 mm)
- 1 universal joint No 407



Code	g
98015107	817

### 40aD/9/4 Socket set 1/4" □

in sturdy, stackable ABS plastic case,  
13 pieces

Content:

- 9 sockets with bi-hexagon  
No 40aD: sizes 3/16; 7/32; 1/4;  
9/32; 5/16; 11/32; 3/8; 7/16; 1/2"
- 1 ratchet No 415
- 2 extensions  
No 405/2 (54 mm),  
No 405/6 (150 mm)
- 1 universal joint No 407



Code	g
98016302	727

 Made in  
Germany

### 40aD/12/7QR Socket set 1/4"



in sturdy, stackable ABS plastic case,  
19 pieces

Content:

- 1 socket with hexagon No 40a:  
size 1/8"
- 11 sockets with bi-hexagon  
No 40aD: sizes 5/32; 3/16; 7/32; 1/4;  
9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
- 1 ratchet No 415SG-QR
- 3 extensions No 405/2QR (2x) (54 mm), No 405/6QR (150 mm)
- 1 universal joint No 407QR
- 1 drive handle No 400QR
- 1 bit-holder No 412



Code		g
<b>96 01 52 08</b>		917

### 40aD/30/7QR Socket set 1/4"



in sturdy, stackable ABS plastic case,  
37 pieces

Content:

- 1 socket with hexagon No 40a:  
size 1/8"
- 11 sockets with bi-hexagon  
No 40aD: sizes 5/32; 3/16; 7/32; 1/4;  
9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
- 11 sockets with bi-hexagon, long, No 40aDL:  
sizes 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
- 7 UNIFLEX sockets with bi-hexagon No 402a:  
sizes 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2"
- 1 ratchet No 415SG-QR
- 3 extensions No 405/2QR (2x) (54 mm), No 405/6QR (150 mm)
- 1 universal joint No 407QR
- 1 drive handle No 400QR
- 1 bit-holder No 412



Code		g
<b>96 01 52 05</b>		2168

### 40ma/25/8 Socket set 1/4"

in sturdy, stackable ABS plastic case,  
33 pieces

Content:

- 25 sockets with hexagon  
No 40: sizes 3.2; 3.5; 4; 4.5; 5;  
5.5; 6; 7; 8; 9; 10; 11; 12;  
13; 14 mm
- No 40a: sizes 3/16; 7/32; 1/4; 9/32;  
5/16; 11/32; 3/8; 7/16; 1/2; 9/16"
- 1 ratchet No 415
- 2 extensions No 405/2 (54 mm), No 405/6 (150 mm)
- 1 extension, flexible No 406 (152 mm)
- 1 universal joint No 407
- 1 drive handle No 400
- 1 flexible handle No 403
- 1 T-handle No 404



Code		g
<b>96 01 11 62</b>		1484

### ES 1/4" + 10760CV



175 x 350 x 41 mm, 27 pieces

Code		g
<b>96 83 81 10</b>		1035
<b>No 40</b>	1/4"  sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm	
<b>No 400</b>	1/4"  150 mm	
<b>No 404</b>	1/4"  116 mm	
<b>No 405/2</b>	1/4"   54 mm	
<b>No 405/6</b>	1/4"   150 mm	
<b>No 407</b>	1/4"   38 mm	
<b>No 412</b>	1/4"	
<b>No 415</b>	1/4"	
<b>No 10760CV</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10; 12 mm	
<b>83 81 20 28</b>	Empty tray	107

### TCS 1/4" + 10760CV



175 x 350 x 43 mm, 27 pieces

Code		g
<b>96 83 81 76</b>		987
<b>No 40</b>	1/4"  sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm	
<b>No 400</b>	1/4"  150 mm	
<b>No 404</b>	1/4"  116 mm	
<b>No 405/2</b>	1/4"   54 mm	
<b>No 405/6</b>	1/4"   150 mm	
<b>No 407</b>	1/4"   38 mm	
<b>No 412</b>	1/4"	
<b>No 415</b>	1/4"	
<b>No 10760CV</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10; 12 mm	

6.3  
1/4"

DIN  
3120

ISO  
1174-1

3

## Sockets, Socket Sets

6.3  
1/4"

DIN  
3120

ISO  
1174-1

3

### TCS 40/41/44/8



175 x 350 x 45 mm, 33 pieces

Code		♻️ g
<b>96 83 02 17</b>		715
<b>No 40</b>	1/4" ○ sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm	
<b>No 41K</b>	1/4" ○, ⊖ 0.6 x 3.5; 1.0 x 5.5; 1.2 x 8 mm	
<b>No 44K</b>	1/4" ○, ● 3; 4; 5; 6; 8 mm	
<b>No 44P</b>	1/4" ○, ⊕ sizes 1; 2; 3; 4	
<b>No PZ1221</b> <b>No PZ1222</b>	1/4" ●, ⊕ size 1 1/4" ●, ⊕ size 2	
<b>No 400</b>	1/4" ■ 150 mm	
<b>No 404</b>	1/4" ■ 116 mm	
<b>No 405/2</b>	1/4" ■ ○ 54 mm	
<b>No 405/6</b>	1/4" ■ ○ 150 mm	
<b>No 407</b>	1/4" ■ ○ 38 mm	
<b>No 409</b>	3/8" ■ 1/4" ○	
<b>No 412</b>	1/4" ○ ○	
<b>No 415</b>	1/4" ■	

### TCS 40/35/9



175 x 350 x 40 mm, 44 pieces

Code		♻️ g
<b>96 83 06 01</b>		1045
<b>No 40</b>	1/4" ○ sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm	
<b>No 40L</b>	1/4" ○ sizes 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13 mm	
<b>No 41K</b>	1/4" ○, ⊖ 0.6 x 3.5; 1.0 x 5.5; 1.2 x 8 mm	
<b>No 44K</b>	1/4" ○, ● 3; 4; 5; 6; 8 mm	
<b>No 44P</b>	1/4" ○, ⊕ sizes 1; 2; 3; 4 mm	
<b>No 400</b>	1/4" ■ 150 mm	
<b>No 404</b>	1/4" ■ 116 mm	
<b>No 405/2</b> <b>No 405/4</b>	1/4" ■ ○ 54 mm 1/4" ■ ○ 100 mm	
<b>No 405/6</b>	1/4" ■ ○ 150 mm	
<b>No 407</b>	1/4" ■ ○ 38 mm	
<b>No 412</b>	1/4" ○ ○	
<b>No 415</b>	1/4" ■	
<b>No 409</b>	3/8" ■ 1/4" ○	

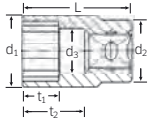




## 45 Sockets



metric sizes: DIN 3124/ISO 2725-1, ASME B 107.5M, E DIN EN 3709,  
American sizes: ASME B 107.1, Fed. Spec. GGG-W-641,  
SAE AS 954-E (test loads), HPQ® high performance steel, chrome plated.



Code	Ø	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L	t <sub>1</sub>	t <sub>2</sub>	Δ	g	
	mm	mm	mm	mm	mm	mm	mm			
02010007	7	10.5	16.5	6	24	6	12.5	19	10	
02010008	8	11.7	16.5	7	25	7	13.5	19	10	
02010009	9	13	16.5	8	25	7	13.5	19	10	
02010010	10	14.3	16.5	9	27	8.5	15.5	20	10	
02010011	11	15.6	16.5	10	27	8.5	13.7	21	10	
02010012	12	16.9	17.5	11	28	9.5	14.4	24	10	
02010013	13	18	17.5	12	30	11.5	16.1	30	10	
02010014	14	19.4	17.5	13	30	11.5	15.8	28	10	
02010015	15	20.6	19	14	31	12.5	19.2	40	10	
02010016	16	21.7	19	15	31	13.5	18.9	33	10	
02010017	17	23	19	16	31	12.5	18.6	44	10	
02010018	18	24.2	19	17	32	13.5	19.3	39	5	
02010019	19	25.2	19	18	32	13.5	19	39	5	
02010020	20	26.2	20	19	34	15.5	20.7	51	5	
02010021	21	27.7	21	20	34	15.5	20.5	53	5	
02010022	22	28.7	21	21	35	17	21.2	61	5	
02010024	24	31.5	24	21	35	18	21.2	92	5	

## 45a Sockets

Code	Ø	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L	t <sub>1</sub>	t <sub>2</sub>	Δ	g	
	"	mm	mm	mm	mm	mm	mm			
02410016	1/4	9.7	16.5	5.2	24	6	12.5	18	10	
02410020	5/16	11.7	16.5	7	25	7	13.5	19	10	
02410022	11/32	12.5	16.5	8.1	25	7	13.5	19	10	
02410024	3/8	13.7	16.5	8.4	27	8.5	15.5	20	10	
02410028	7/16	15.7	16.5	10	28	9.5	15.1	20	10	
02410032	1/2	18	17.5	11.5	30	11.5	16.5	24	10	
02410034	9/16	20.2	19	13.1	31	12.7	16.8	28	10	
02410035	19/32	20.6	19	14	31	13	19.2	36	5	
02410036	5/8	21.7	19	15	31	13.5	18.9	31	5	
02410038	11/16	23.4	19	16.3	32	14.7	19.5	34	5	
02410040	3/4	25.2	19	18	32	15.9	19	41	5	
02410042	13/16	27.2	20.5	19.4	34	16.5	20.5	52	5	
02410044	7/8	28.7	22	21	35	18	21	59	5	
02410046	15/16	31.5	24	22.6	35	18.5	20.7	95	5	
02410048	1	33	25.5	24.2	35	18.5	20.2	97	5	

## STAHLWILLE »AS-Drive«



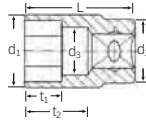
STAHLWILLE sockets are equipped with the AS-Drive\* profile: this permits high transmission of forces to the lands of nuts and bolts without damaging them. No longer will you have to worry about stripping the corners off nuts and bolts.

\*Anti-Slip-Drive

## 456 Sockets



DIN 3124/ISO 2725-1, ASME B 107.5M,  
E DIN EN 3709 (test loads),  
HPQ® high performance steel, chrome plated.

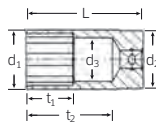


Code	Ø	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L	t <sub>1</sub>	t <sub>2</sub>	Δ	g	
	mm	mm	mm	mm	mm	mm	mm			
02110007	7	10.5	16.5	6	24	6	12.5	19	10	
02110008	8	11.7	16.5	7	25	7	13.5	19	10	
02110009	9	13	16.5	8	25	7	13.5	20	10	
02110010	10	14.3	16.5	9	27	8.5	15.5	20	10	
02110011	11	15.6	16.5	10	27	8.5	13.7	21	10	
02110012	12	16.9	17.5	11	28	9.5	14.4	24	10	
02110013	13	18	17.5	12	30	11.5	16.1	25	10	
02110014	14	19.4	17.5	13	30	11.5	15.8	29	10	
02110015	15	20.6	19	14	31	12.5	19.2	30	10	
02110016	16	21.7	19	15	31	13.5	18.9	34	10	
02110017	17	23	19	16	31	12.5	18.6	45	10	
02110018	18	24.2	19	17	32	13.5	19.3	42	10	
02110019	19	25.2	19.6	18	32	13.5	19	43	10	
02110020	20	26.2	20.5	19	34	15.5	20.7	53	10	
02110021	21	27.7	21.8	20	34	15.5	20.5	59	10	
02110022	22	28.7	21	21	35	17	21.2	59	10	

## 460a Sockets



SAE AS 954-E, S.B.A.C. AS 40610/40611, ASME B 107.1,  
HPQ® high performance steel, chrome plated.



Code	Ø	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L	t <sub>1</sub>	t <sub>2</sub>	Δ	g	
	"	mm	mm	mm	mm	mm	mm			
02620016	1/4	9.9	16.5	5.2	32	7	20.5	21	5	
02620020	5/16	11.5	16.5	7	32	8.5	20.5	22	5	
02620024	3/8	13.7	16.5	8.5	38	9	26.5	29	5	
02620028	7/16	15.7	16.5	10	38	11	24.5	33	5	
02620032	1/2	17.5	17.8	11.5	44	12	30	44	5	

## STAHLWILLE HPQ® sockets



STAHLWILLE HPQ® sockets are manufactured from selected tough steel alloys. The result: they are extremely durable. HPQ® sockets are free of cadmium and are therefore suitable for use on titanium alloy parts and titanium fasteners as used e.g. in the aerospace industry, where safety is a crucial factor.

\*High Performance Quality



# Sockets, Socket Sets

10  
3/8"

DIN  
3120

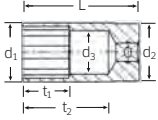
ISO  
1174-1

3

## 46 Sockets



extra deep, metric sizes: DIN 3124/ISO 2725-1, E DIN EN 3710, E DIN EN 3709, ASME B 107.5M,  
American sizes: ASME B 107.1, Fed. Spec. GGG-W-641, SAE AS 954-E, HPQ® high performance steel, chrome plated.



Code	mm/"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	g
02020008	8	11.7	16.5	7	54	9	42.5	36	10
02020010	10	14.3	16.5	9	54	20	42.5	41	10
02020011	11	15.6	16.5	10	54	20	40.7	51	10
02020012	12	16.9	17.5	11	54	20	40.4	57	10
02020013	13	18	17.5	12	54	20	40.1	61	10
02020014	14	19.4	17.5	13	60	25	45.8	75	10
02020015	15	20.6	19	14	60	25	48.2	85	10
02020016	16	21.7	19.5	15	60	25	47.9	81	10
02020017	17	23	21	16	65	30	52.6	97	10
02020018	18	24.2	22	17	65	30	52.3	121	10
02020019	19	25.2	23	18	65	30	52	112	10
02020208	20.8-13/16 <sup>1)</sup>	27.2	25	-	65	18	-	151	10
02020021	21	27.7	25.5	20	65	30	51.5	137	5
02020022	22	28.7	26.5	21	65	30	51.2	178	5

<sup>1)</sup> with rubber insert for spark plugs

## 46a Sockets

Code	mm/"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	g
02420016	1/4	9.7	16.5	5.2	54	9	42.5	33	5
02420020	5/16	11.7	16.5	7	54	9	42.5	35	5
02420024	3/8	13.7	16.5	8.4	54	20	42.5	45	5
02420028	7/16	15.7	16.5	10	54	20	40.7	53	5
02420032	1/2	18	17.5	11.5	54	20	40.2	64	5
02420034	9/16	20.2	19	13.1	60	25	45.8	66	5
02420035	19/32	20.6	19	14	60	25	48.2	84	5
02420036	5/8	21.7	19.5	15	60	25	47.9	81	5
02420038	11/16	23.4	21.5	16.3	65	30	52.5	114	5
02420040	3/4	25.2	23	18	65	30	52	137	5
02420042	13/16	27.2	25	19.4	65	30	51.6	130	5
02420044	7/8	28.7	26.5	21	65	30	51.2	184	5
02420046	15/16	31.5	29	22.6	65	30	50.7	195	5
02420048	1	33	31	24.2	65	30	50.2	205	5

## 5100 Rubber insert

for size 20.8 mm (No 46; 51; 51S).

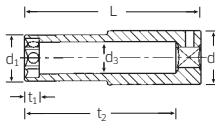
Code	g	g
09010001	6	5



## 3466 Spark plug socket



extra deep, with magnet, HPQ® high performance steel, chrome plated.

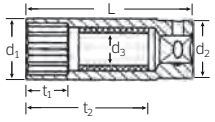


Code	mm/"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	g
02140036	16-5/8	21.8	25.5	15	85	7	72.9	180	5

## 4600 Spark plug socket



extra deep, with rubber insert, HPQ® high performance steel, chrome plated.

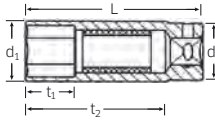


Code	mm/"	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	g
02120036	16-5/8	21.7	19.5	60	15	47.8	88	10

## 4606 Spark plug socket



extra deep, with rubber insert, HPQ® high performance steel, chrome plated.



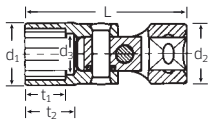
Code	mm/"	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	g
02130018	18-11/16	24.2	22	65	18	52.8	132	10

Assembly of spark plugs on motorcycles, mopeds

## 47 UNIFLEX sockets



SAE AS 954-E (American sizes), HPQ® high performance steel, chrome plated.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	g
02040010	10	14.3	17.5	9	45.5	7	12	51	1
02040011	11	15.6	17.5	10	47.5	11	14	55	1
02040012	12	16.9	17.5	11	48	11	14.5	54	1
02040013	13	18.3	17.5	12	48	12	14.5	53	1
02040014	14	19.4	17.5	13	48.5	13	14.5	55	1
02040015	15	20.6	17.5	14	48.5	13	14.5	56	1
02040016	16	21.8	17.5	15	51.5	14	17	58	1
02040017	17	23	17.5	16	53.5	15	18.5	63	1
02040018	18	24.2	17.5	17	54.5	16	18.5	61	1
02040019	19	25.5	17.5	18	57	16	21	68	1

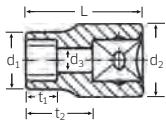
### 47a UNIFLEX sockets

Code	Size	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	Box
02 44 00 20	5/16	11.7	17.5	7	45.5	7	12.5	50	1
02 44 00 24	3/8	13.7	17.5	8.5	45.5	7	12	50	1
02 44 00 28	7/16	15.8	17.5	10	47.5	11	14	50	1
02 44 00 32	1/2	18.3	17.5	11.5	47.5	11.5	14	57	1
02 44 00 34	9/16	19.7	17.5	13.1	48.5	13	14.5	55	1
02 44 00 36	5/8	21.6	17.5	15	51.5	14	17	59	1
02 44 00 38	11/16	23.5	17.5	16.3	53.5	16	18.5	58	1
02 44 00 40	3/4	25.5	17.5	18	57	16	21	67	1

### 45TX Sockets



for external TORX® screws, HPQ® high performance steel, chrome plated.



Code	size	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	Box
02 27 00 05	E5	4.7	7	16.5	2.8	28	5	16.5	23	10
02 27 00 06	E6	5.7	8	16.5	3.6	28	5.5	16.5	23	10
02 27 00 07	E7	6.2	9	16.5	3.8	28	6.5	16.5	24	10
02 27 00 08	E8	7.5	10.5	16.5	4.3	28	7	16.5	22	10
02 27 00 10	E10	9.4	13	16.5	5.6	28	8	16.5	27	10
02 27 00 12	E12	11.1	14.9	16.5	7.2	28	9.5	16.5	28	10
02 27 00 14	E14	12.9	16.5	17.3	8	28	10	16.5	34	10

### 45TX/7 Set: Sockets



for external TORX® screws.  
Content: E5; E6; E7; E8; E10; E12; E14

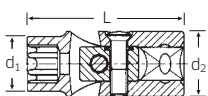


Code	Δg	Box
96 02 27 02	g	219 1

in carton packing

### 47TX UNIFLEX sockets

for external TORX® screws, Chrome Alloy Steel, chrome plated.

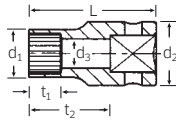


Code	size	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	Δg	Box
02 07 00 08	E8	7.5	11.5	19	43	56	1
02 07 00 10	E10	9.4	13.8	19	44	61	1
02 07 00 12	E12	11.1	16	19	46	66	1
02 07 00 14	E14	12.9	17.8	19	48	75	1

### 45aSP Sockets spline-drive



MS-33787, MIL-W-8982, HPQ® high performance steel, chrome plated.

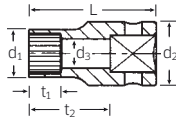


Code	Spline size	Size	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	Box
02 01 10 12	12	3/8	13.7	16.5	8.6	26.5	9	15	24	1
02 01 10 14	14	7/16	16	17.3	10.4	28	11	14.5	37	1
02 01 10 16	16	1/2	18	18.3	12.2	28	11.5	14	28	1

### 45aPSP Socket spline-drive



MS-33787, MIL-W-8982, for disassembling jet engines, series CFM 56, HPQ® high performance steel, gunmetal finish.

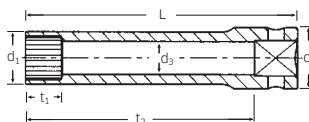


Code	Spline size	Size	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	Box
22 41 00 28	14	7/16	18.8	18.8	10.4	28	11	14.5	36	10

### 46aSP Sockets spline-drive



extra deep bolt clearance, MS-33787, MIL-W-8982, HPQ® high performance steel, chrome plated.

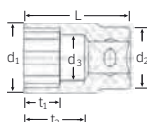


Code	Spline size	Size	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	Box
02 02 10 12	12	3/8	13.7	16.5	8.6	54	9	42.5	52	1
02 02 10 14	14	7/16	16	17.3	10.4	54	11	42.5	63	1

### 45aP Socket



ASME B 107.1, Fed. Spec. GGG-W-641, SAE AS 954-E (test loads), for disassembling jet engines, series CFM 56, HPQ® high performance steel, gunmetal finish.



Code	Size	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δg	Box
02 43 00 20	5/16	11.9	16.5	8.1	25	7	13.5	19	10

10  
3/8"

DIN  
3120

ISO  
1174-1

3

# Sockets, Socket Sets

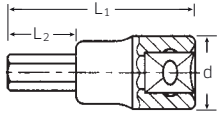
10  
3/8"

DIN  
3120

ISO  
1174-1

## 49 INHEX sockets

for socket head screws, DIN 7422, Chrome Alloy Steel, chrome plated.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	boxes
02 05 0003	3	52	20	17.8	38	5
02 05 0004	4	52	20	17.8	40	5
02 05 0005	5	52	20	17.8	44	5
02 05 0006	6	52	20	17.8	46	5
02 05 0007	7	52	20	17.8	51	5
02 05 0008	8	52	20	17.8	55	5
02 05 0010	10	52	20	17.8	62	5

## 49a INHEX sockets

Code	"	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	boxes
02 45 0008	1/8	52	20	17.8	39	5
02 45 0009	9/64	52	20	17.8	40	5
02 45 0010	5/32	52	20	17.8	40	5
02 45 0012	3/16	52	20	17.8	44	5
02 45 0014	7/32	52	20	17.8	46	5
02 45 0016	1/4	52	20	17.8	48	5
02 45 0020	5/16	52	20	17.8	55	5
02 45 0024	3/8	52	20	17.8	61	5

## 2049 INHEX sockets

for socket head screws, extra long, DIN 7422, Chrome Alloy Steel, chrome plated.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	boxes
02 15 1004	4	100	68	17.8	45	5
02 15 1005	5	100	68	17.8	50	5
02 15 1006	6	100	68	17.8	57	5
02 15 1208	8	120	88	17.8	85	5
02 15 1210	10	120	88	17.8	106	5

## 1049/3049 INHEX sockets

for socket head screws, DIN 7422, special lengths, Chrome Alloy Steel, chrome plated.

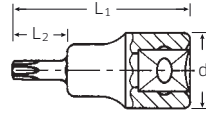


Code	No	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	boxes
02 15 1007	1049/7	7	100	68	17.8	66	5
02 15 2408	3049/8	8	24	6.5	19	28	5
02 15 1009	1049/9 <sup>1)</sup>	9	57	25	17.8	62	5

<sup>1)</sup> For brake calliper retainers on BMW and MINI.

## 49TX Screwdriver sockets

for inside TORX® screws, Chrome Alloy Steel, chrome plated.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	boxes
02 10 0009	T9	2.5	49	17	17.8	45	5
02 10 0010	T10	2.7	49	17	17.8	45	5
02 10 0015	T15	3.3	49	17	17.8	45	5
02 10 0020	T20	3.8	49	17	17.8	46	5
02 10 0025	T25	4.4	49	17	17.8	46	5
02 10 0027	T27	5	49	17	17.8	46	5
02 10 0030	T30	5.5	49	17	17.8	47	5
02 10 0040	T40	6.6	49	17	17.8	48	5
02 10 0045	T45	7.8	49	17	17.8	49	5

## 49TX/8 Set: Screwdriver sockets

for inside TORX® screws.

Content: T9; T10; T15; T20; T25; T27; T30; T40

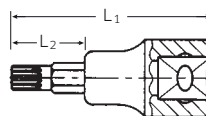


Code	g	boxes
96 02 1001	456	1

in carton packing

## 49X Screwdriver sockets

for tri-square socket head screws (XZN®), DIN 2324, Chrome Alloy Steel, chrome plated.



Code	size	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	boxes
02 06 0005	M5	52	20	17.8	45	5
02 06 0006	M6	52	20	17.8	47	5
02 06 0008	M8	52	20	17.8	56	5
02 06 0010	M10	52	20	17.8	63	5

## 3049X Screwdriver sockets

for tri-square socket head screws (XZN®), extra long, DIN 2324, Chrome Alloy Steel, chrome plated.



Code	size	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	boxes
02 26 1208	M8	120	88	17.8	80	5
02 26 1210	M10	120	88	17.8	106	5

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### 45CL Clip strips

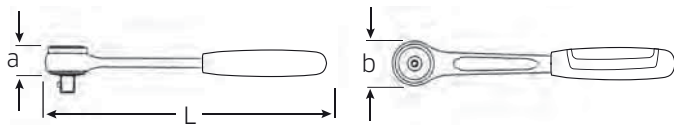
for socket retention, with 9 or 10 retaining clips.  
Supplied without sockets.



Code	size	L mm	$\Delta$ g	
<b>80 45 00 01</b>	<b>1</b>	200	40	5
<b>80 45 00 02</b>	<b>2</b>	300	58	5

## Drive tools and accessories

$\frac{3}{8}$ " □, finish: Chrome Alloy Steel, chrome plated.



### 422 Ratchet

fine tooth, reversible, 60 teeth,  
with 2-component handle,  
for use in confined spaces,  
re-engages after movement of 6°,  
DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	$\Delta$ g	
<b>12 23 10 11</b>	194	32	24	236	1

### 435 Ratchet

reversible, 30 teeth,  
with 2-component handle,  
DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	$\Delta$ g	
<b>12 11 10 10</b>	193	29	18	245	5

### 435QR N QuickRelease ratchet, fine tooth



reversible, 80 teeth,  
with QuickRelease safety lock  
and 2-component handle,  
for use in confined spaces,  
re-engages after movement of 4.5°,  
construction without screws prevents foreign object damage,  
DIN 3122/ISO 3315, registered design.



Code	L mm	b mm	a mm	$\Delta$ g	
<b>12 11 10 20</b>	193	30	15	235	1

### 435QR QuickRelease ratchet



reversible, 30 teeth,  
with QuickRelease safety lock  
and 2-component handle, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	$\Delta$ g	
<b>12 11 00 20</b>	193	29	18	244	1

### 435SG-QR QuickRelease ratchet



reversible, 30 teeth,  
with QuickRelease safety lock and  
steel handle, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	$\Delta$ g	
<b>12 11 00 30</b>	193	29	18	275	1

### 445 Ratchet adaptor

reversible, 20 teeth.



Code	L mm	$\varnothing$ mm	$\Delta$ g	
<b>12 14 00 00</b>	53	30	135	1

### 452 Flexible joint ratchet

reversible, 60 teeth, handle may be raised or lowered by approx. 90°.  
Lockable in following positions: straight, 30° up, 60° up, 30° down.  
Unlocked by depressing button in handle, registered design.



Code	L mm	b mm	a mm	$\Delta$ g	
<b>12 26 00 01</b>	300	34	24	500	1

### 7350/5 Spare parts set for ratchets No 422, 452

Content:  
1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws.

Code	$\Delta$ g	
<b>59 25 10 05</b>	85	1

for ratchets from 12/97

### 4350 Spare parts set for ratchets No 435, 435SG, 438, 439

Content:  
1 pinion; 1 pawl; 1 lever with pin; 1 ball;  
2 compression springs; 2 screws

Code	$\Delta$ g	
<b>19 02 00 00</b>	50	1

for ratchets from 1992

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# Sockets, Socket Sets

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## 4350QR Spare parts set for ratchets No 435QR, 435SG-QR



Content:  
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws

Code	g	g	g
19020020	51	1	

## 4350QR N Spare parts set for ratchet No 435QR N



Content:  
1 pinion; 1 locking disc; 1 lever; 1 pin; 1 ball; 1 compression spring;  
2 circlips; 1 cover plate

Code	g	g	g
19021020	48	1	

## 421 Speeder brace

working radius 85 mm,  
DIN 3122/ISO 3315.



Code	L mm	g	g
12100010	386.5	385	5

## 453 Speeder brace

with steel handle,  
for greater axial power  
transmission, detachable palm  
head, working radius 85 mm,  
DIN 3122/ISO 3315.



Code	L mm	g	g
12100002	408	619	1

## 424 Flexible handle

DIN 3122/ISO 3315,  
with 2-component handle.



Code	L mm	g	g
12061010	253.5	222	1

## 425 Sliding T-handle

DIN 3122/ISO 3315.



Code	L mm	g	g
12070000	165	133	5

## 425QR QuickRelease sliding T-handle



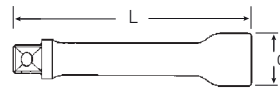
patent,  
with QuickRelease safety lock.



Code	L mm	g	g
12071000	165	148	1

## 427 Extensions

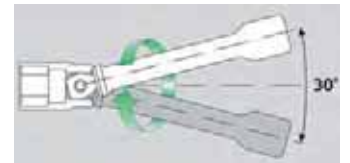
DIN 3123/ISO 3316.



Code	size	L mm	d mm	g	g
12010005	1.5	38	17	36	5
12010001	3	76	17	67	5
12010006	5	125	17	104	5
12010002	6	160	17	127	5
12010003	10	240	17	188	5
12010004	18	455	17	345	5

## 427W Extensions with wobble-drive

swivel angle 15° each side,  
max. torque 80 N-m.



Code	size	L mm	d mm	g	g
12010007	3	76	17	67	5
12010008	5	125	17	104	5
12010009	6	160	17	127	5

## 427QR QuickRelease extensions



patent, DIN 3123/ISO 3316.



Code	size	L mm	d mm	g	g
12011001	3	76	17	66	1
12011002	6	160	17	127	1
12011003	10	240	17	185	1

## 433/1 Locking adaptor

with hexagon key wrench No 10760aCV 1/8".



Code	L mm	d mm	g	g
96122701	52	18	57	1



### 434 Extension, flexible

(right hand rotation only),  
maximum torque 7 N·m.



Code	L mm	d mm	$\Delta$ g	
<b>12040000</b>	194	17	109	5

### 1225 Special extension

offset



Code	L mm	d mm	$\Delta$ g	
<b>12250001</b>	150	17	128	5

### 13220 Special extension

for removing Boroscope  
plugs, with Boroscope plug locking,  
external hexagon size 16 mm.



Code	L mm	$\Delta$ g	
<b>12270020</b>	355	362	1

### 428 Universal joint

DIN 3123/ISO 3316.

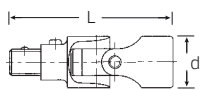


Code	L mm	d mm	$\Delta$ g	
<b>12020000</b>	46	18.8	55	5

### 428QR QuickRelease universal joint



patent, DIN 3123/ISO 3316, with QuickRelease safety lock.



Code	L mm	d mm	$\Delta$ g	
<b>12021000</b>	60	19	66	1

### 431 Adaptor



$\frac{3}{8}$ " socket x  $\frac{1}{4}$ " plug (10 x 6.3),  
maximum torque 62 N·m, DIN 3123/ISO 3316,  
HPQ® high performance steel.



Code	L mm	d mm	$\Delta$ g	
<b>12030001</b>	28	17.2	26	5

### 432 Adaptor



$\frac{3}{8}$ " socket x  $\frac{1}{2}$ " plug (10 x 12.5),  
DIN 3123/ISO 3316,  
HPQ® high performance steel.



Code	L mm	d mm	$\Delta$ g	
<b>12030003</b>	31	17.2	36	5

### 409M/432M/ 514M/3 Set adaptors, 3 pieces

$\frac{1}{4}$ " socket x  $\frac{3}{8}$ " plug,  
 $\frac{3}{8}$ " socket x  $\frac{1}{2}$ " plug,  
 $\frac{1}{2}$ " socket x  $\frac{3}{4}$ " plug.



Code	$\Delta$ g	
<b>96121002</b>	120	1

### 432M Adaptor

$\frac{3}{8}$ " socket x  $\frac{1}{2}$ " plug  
(10 x 12.5).



Code	L mm	$\phi$ mm	$\Delta$ g	
<b>12030010</b>	16	32	22	1

### 442 Bit holder

$\odot$   $\frac{1}{4}$ " inside hexagon, DIN 3126/ISO 1173 D 6.3.  
Internal hex drive with a collar-thrust spring.  
Bits are easy to insert, lock securely in position and  
can be removed just as easily; even hex bits with  
a wide groove (Type E, DIN 3126/ISO 1173).



Code	L mm	d mm	$\Delta$ g	
<b>12180026</b>	32	16.5	30	5

### 443 Bit holder

$\odot$   $\frac{5}{16}$ " inside hexagon, DIN 3126/ISO 1173 D 8.  
Internal hex drive with a collar-thrust spring.  
Bits are easy to insert, lock securely in position and  
can be removed just as easily; even hex bits with  
a wide groove (Type E, DIN 3126/ISO 1173).



Code	L mm	d mm	$\Delta$ g	
<b>12180030</b>	32	16.5	39	5

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## Sockets, Socket Sets

10  
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### 45/11/4 Socket set 3/8"

in sturdy, stackable ABS plastic case,  
15 pieces  
Content:

- 11 sockets with bi-hexagon No 45:  
sizes 8; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19 mm
- 1 ratchet No 435
- 2 extensions  
No 427/3 (76 mm),  
No 427/10 (240 mm)
- 1 universal joint No 428



Code	△△ g
<b>96021109</b>	1434

### 456/11/4 Socket set 3/8"

in sturdy, stackable ABS plastic case,  
15 pieces  
Content:

- 11 sockets with hexagon No 456:  
sizes 8; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19 mm
- 1 ratchet No 435
- 2 extensions  
No 427/3 (76 mm),  
No 427/10 (240 mm)
- 1 universal joint No 428



Code	△△ g
<b>96022133</b>	1454

### 45/14/5i Socket set 3/8"

in sturdy, stackable ABS plastic case,  
19 pieces  
Content:

- 14 sockets with bi-hexagon No 45:  
sizes 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 21; 22 mm
- 1 ratchet No 435
- 2 extensions  
No 427/3 (76 mm),  
No 427/10 (240 mm)
- 1 T-handle No 425
- 1 universal joint No 428



Code	△△ g
<b>96024132</b>	1698

### 456/14/5i Socket set 3/8"

in sturdy, stackable ABS plastic case,  
19 pieces  
Content:

- 14 sockets with hexagon No 456:  
sizes 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 21; 22 mm
- 1 ratchet No 435
- 2 extensions  
No 427/3 (76 mm),  
No 427/10 (240 mm)
- 1 T-handle No 425
- 1 universal joint No 428



Code	△△ g
<b>96023132</b>	1704

### 45/14/5iQR Socket set 3/8"



in sturdy, stackable ABS plastic case,  
19 pieces  
Content:

- 14 sockets with bi-hexagon No 45:  
sizes 8; 9; 10; 11; 12; 13; 14;  
15; 16; 17; 18; 19; 21; 22 mm
- 1 ratchet No 435QR N
- 2 extensions No 427QR/3 (76 mm), No 427QR/10 (240 mm)
- 1 T-handle No 425QR
- 1 universal joint No 428QR



Code	△△ g
<b>96021180</b>	1856

### 45/13/5 Socket set 3/8"

in sturdy, stackable ABS plastic case,  
18 pieces  
Content:

- 12 sockets with bi-hexagon No 45:  
sizes 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19 mm
- 1 socket with bi-hexagon, long,  
with rubber insert,  
No 4600: size 16 mm - 5/8"
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240 mm)
- 1 T-handle No 425
- 1 universal joint No 428



Code	△△ g
<b>96021234</b>	1771

### 456/13/5 Socket set 3/8"

in sturdy, stackable ABS plastic case,  
18 pieces  
Content:

- 12 sockets with hexagon No 456:  
sizes 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19 mm
- 1 socket with bi-hexagon, long,  
with rubber insert, No 4600:  
size 16 mm - 5/8"
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240 mm)
- 1 T-handle No 425
- 1 universal joint No 428



Code	△△ g
<b>96021202</b>	1802



**45/49/19/5 Socket set 3/8" □**

in sturdy, stackable ABS plastic case,  
24 pieces

Content:

- 11 sockets with bi-hexagon No 45:  
sizes 8; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19 mm
- 1 socket with bi-hexagon, long,  
with rubber insert No 4600:  
size 16 mm - 5/8"
- 7 INHEX sockets No 49: sizes 3; 4; 5; 6; 7; 8; 10 mm
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240 mm)
- 1 T-handle No 425
- 1 universal joint No 428



Code	STAWLWILLE g
<b>9602 1223</b>	2633

**456/49/19/5 Socket set 3/8" □**

in sturdy, stackable ABS plastic case,  
24 pieces

Content:

- 11 sockets with hexagon No 456:  
sizes 8; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19 mm
- 1 socket with bi-hexagon, long,  
with rubber insert No 4600:  
size 16 mm - 5/8"
- 7 INHEX sockets No 49: sizes 3; 4; 5; 6; 7; 8; 10 mm
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240 mm)
- 1 T-handle No 425
- 1 universal joint No 428



Code	STAWLWILLE g
<b>9602 1236</b>	2707

**40/45/36/12 Socket set 1/4"; 3/8" □**

in sturdy, stackable ABS plastic case,  
48 pieces

Content:

- 8 sockets with hexagon No 40:  
sizes 4; 4.5; 5; 5.5; 6; 7; 8; 9 mm
- 12 sockets with bi-hexagon No 45:  
sizes 10; 11; 12; 13; 14; 15; 16;  
17; 18; 19; 21; 22 mm
- 1 socket with bi-hexagon, long,  
with rubber insert No 4600:  
size 16 mm - 5/8"
- 3 bits ⊕ 1221: size 1; 1222: size 2; 1223: size 3
- 1 bit ⊕ PZ1222: size 2
- 6 bits ⊖ 1160: 0.5 x 3 mm; 1162: 0.6 x 3.5 mm; 1164: 0.8 x 4 mm;  
1166: 1.0 x 5.5 mm; 1166/1: 1.2 x 6.5 mm; 1168: 1.6 x 8 mm
- 5 bits ● 1300: 3 mm; 1301: 4 mm; 1302: 5 mm; 1303: 6 mm;  
1304: 8 mm
- 2 ratchets No 415, No 435
- 3 extensions No 427/3 (76 mm), No 405/6 (150 mm),  
No 427/10 (240 mm)
- 2 universal joints No 407, No 428
- 1 drive handle No 400
- 1 T-handle No 425
- 2 bit-holder No 412, No 442
- 1 adaptor No 431



Code	STAWLWILLE g
<b>9601 2047</b>	2963

**89 Socket set 3/8" □**

in sturdy, stackable ABS plastic case,  
44 pieces

Content:

- 15 sockets with bi-hexagon No 45:  
sizes 7; 8; 9; 10; 11; 12; 13; 14;  
15; 16; 17; 18; 19; 21; 22 mm
- 2 sockets with bi-hexagon, long,  
with rubber insert,  
No 4600: size 16 mm - 5/8",  
No 46: size 20.8 mm - 13/16"
- 7 INHEX sockets No 49:  
sizes 3; 4; 5; 6; 7; 8; 10 mm
- 15 combination spanners No 13:  
sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22 mm
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240 mm)
- 1 T-handle No 425
- 1 universal joint No 428



Code	STAWLWILLE g
<b>9602 3128</b>	5019

**45ma/28/5 Socket set 3/8" □**

in sturdy, stackable ABS plastic case,  
33 pieces

Content:

- 28 sockets with bi-hexagon  
No 45: sizes 7; 8; 9; 10; 11; 12;  
13; 14; 15; 16; 17; 18;  
19; 20; 21; 22 mm
- No 45a: sizes 1/4; 5/16; 11/32; 3/8;  
7/16; 1/2; 9/16; 5/8; 11/16; 3/4;  
13/16; 7/8"
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240 mm)
- 1 T-handle No 425
- 1 universal joint No 428



Code	STAWLWILLE g
<b>9602 1122</b>	2898

**45/41/9 Socket set 3/8" □**

in sturdy sheet steel case,  
50 pieces

Content:

- 11 sockets with bi-hexagon No 45:  
sizes 8; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19 mm
- 9 sockets with bi-hexagon, long,  
No 46: sizes 10; 11; 12; 13; 14;  
15; 17; 18; 19 mm
- 2 sockets with bi-hexagon, long, with rubber insert  
No 4600: size 16 mm - 5/8"; No 46: size 20.8 mm - 13/16"
- 10 UNIFLEX sockets with bi-hexagon No 47:  
sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm
- 5 INHEX sockets No 49: size 4; 5; 6; 8; 10 mm
- 4 bits ⊕ 1231: size 1; 1232: size 2; 1233: size 3; 1234: size 4
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240 mm)
- 1 flexible handle No 424
- 1 T-handle No 425
- 1 universal joint No 428
- 1 flexible extension No 434
- 1 bit-holder No 443



Code	STAWLWILLE g
<b>9602 0108</b>	6521

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3/8"

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## Sockets, Socket Sets

10  
3/8"

### 45TX/49TX/15/5 Socket set TORX® 3/8"

in sturdy, stackable ABS plastic case,  
20 pieces

Content:

- 7 sockets for external TORX® screws No 45TX: sizes E5; E6; E7; E8; E10; E12; E14
- 8 screwdriver sockets for internal TORX® screws No 49TX: sizes T9; T10; T15; T20; T25; T27; T30; T40
- 1 ratchet No 435
- 2 extensions No 427/5 (125 mm), No 427/10 (240 mm)
- 1 universal joint No 428
- 1 T-handle No 425



Code	g
<b>96023703</b>	1963

### 89TX Socket set TORX® 1/4; 3/8; 1/2"

in sturdy, stackable ABS plastic case,  
35 pieces

Content:

- 3 sockets for external TORX® screws No 40TX: sizes E4; E5; E6
- 2 screwdriver sockets for internal TORX® screws No 44KTX: sizes T8; T9
- 4 sockets for external TORX® screws No 45TX: sizes E7; E8; E10; E12
- 5 screwdriver sockets for internal TORX® screws No 49TX: sizes T10; T15; T20; T25; T27
- 6 sockets for external TORX® screws No 50TX: sizes E11; E14; E16; E18; E20; E24
- 6 screwdriver sockets for internal TORX® screws No 54TX: sizes T30; T40; T45; T50; T55; T60
- 7 bits 1440: T10; 1441: T15; 1442: T20; 1443: T25; 1444: T27; 1445: T30; 1446: T40
- 1 bit-holder No 442
- 1 TORX® controller: sizes E6; E7; E8; E10; E12; E14; E16; T10; T15; T20; T25; T27; T30; T40; T45; T47; T50; T55; T60



Code	g
<b>98811908</b>	2568

### 45/49/32/5TX Socket set 3/8"

in sturdy, stackable ABS plastic case,  
37 pieces

Content:

- 11 sockets with bi-hexagon No 45: sizes 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm
- 7 sockets for external TORX® screws No 45TX: sizes E5; E6; E7; E8; E10; E12; E14
- 6 INHEX sockets No 49: sizes 4; 5; 6; 7; 8; 10 mm
- 8 screwdriver sockets for internal TORX® screws No 49TX: sizes T9; T10; T15; T20; T25; T27; T30; T40
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240 mm)
- 1 T-handle No 425
- 1 universal joint No 428



Code	g
<b>96022119</b>	3078

### 45a/12/5 Socket set 3/8"

in sturdy, stackable ABS plastic case,  
17 pieces

Content:

- 11 sockets with bi-hexagon No 45a: sizes 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16"
- 1 socket with bi-hexagon, long, with rubber insert No 4600: size 16 mm - 5/8",
- 1 ratchet No 435
- 2 extensions No 427/3 (76 mm), No 427/10 (240 mm)
- 1 T-handle No 425
- 1 universal joint No 428



Code	g
<b>96025204</b>	1746

### 45a/14/8QR Socket set 3/8"



in sturdy, stackable ABS plastic case,  
22 pieces

Content:

- 14 sockets with bi-hexagon No 45a: sizes 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8; 15/16; 1"
- 1 ratchet No 435SG-QR
- 3 extensions No 427/3QR (76 mm), No 427/6QR (160 mm), No 427/10QR (240 mm)
- 1 universal joint No 428QR
- 2 bit-holders No 442, No 443
- 1 speeder brace No 453



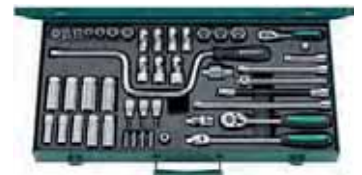
Code	g
<b>96025206</b>	3507

### 45a/33/13 Socket set 3/8"

in sturdy sheet steel case,  
46 pieces

Content:

- 10 sockets with bi-hexagon No 45a: sizes 1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4"
- 2 sockets with bi-hexagon, long, with rubber insert, No 4600: size 16 mm - 5/8", No 46: size 20.8 mm - 13/16"
- 7 sockets with bi-hexagon, long, No 46a: sizes 3/8; 7/16; 1/2; 9/16; 11/16; 3/4; 7/8"
- 7 UNIFLEX sockets with bi-hexagon No 47a: sizes 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4"
- 3 INHEX sockets No 49a: sizes 1/8; 5/32; 3/16"
- 4 bits 1231: size 1; 1232: size 2; 1233: size 3; 1234: size 4
- 2 ratchets No 415, No 435
- 1 ratchet adaptor No 445
- 3 extensions No 427/3 (76 mm), No 427/6 (160 mm), No 427/10 (240 mm)
- 1 flexible extension No 434 (194 mm)
- 1 adaptor No 409
- 1 speeder brace No 421
- 1 flexible handle No 424
- 1 T-handle No 425
- 1 universal joint No 428
- 1 bit-holder No 443



Code	g
<b>96024113</b>	6540



### 45a/22/8QR Socket set 3/8"



in sturdy, stackable ABS plastic case,  
30 pieces

Content:

14 sockets with bi-hexagon No 45a:

sizes 1/4; 5/16; 11/32; 3/8; 7/16; 1/2;  
9/16; 5/8; 11/16; 3/4; 13/16; 7/8; 15/16; 1"

8 UNIFLEX sockets with bi-hexagon

No 47a: sizes 5/16; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4"

1 ratchet No 435SG-QR

3 extensions No 427/3QR (76 mm), No 427/6QR (160 mm),  
No 427/10QR (240 mm)

1 universal joint No 428QR

2 bit-holders No 442, No 443

1 speeder brace No 453



Code	Δ	g
<b>96 02 52 07</b>		3970

### 45ma/28/5 Socket set 3/8"

in sturdy, stackable ABS plastic case,  
33 pieces

Content:

28 sockets with bi-hexagon

No 45: sizes 7; 8; 9; 10; 11; 12;  
13; 14; 15; 16; 17; 18;  
19; 20; 21; 22 mm

No 45a: sizes 1/4; 5/16; 11/32; 3/8;  
7/16; 1/2; 9/16; 5/8; 11/16; 3/4;  
13/16; 7/8"

1 ratchet No 435

2 extensions No 427/3 (76 mm), No 427/10 (240 mm)

1 T-handle No 425

1 universal joint No 428



Code	Δ	g
<b>96 02 11 22</b>		2898

### ES 456/16/6



175 x 350 x 40 mm, 22 pieces



Code	Δ	g
<b>96 83 81 11</b>		1555

	<b>No 456</b>	3/8"  sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm
	<b>No 425</b>	3/8"  165 mm
	<b>No 427/3</b>	3/8"  76 mm
	<b>No 427/6</b>	3/8"  160 mm
	<b>No 427/10</b>	3/8"  240 mm
	<b>No 428</b>	3/8"  46 mm
	<b>No 435</b>	3/8"
<b>83 81 20 32</b>	Empty tray	103

### TCS 456/16/6



175 x 350 x 45 mm, 22 pieces

Code	Δ	g
<b>96 83 87 52</b>		1465

	<b>No 456</b>	3/8"  sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm
	<b>No 425</b>	3/8"  165 mm
	<b>No 427/3</b>	3/8"  76 mm
	<b>No 427/6</b>	3/8"  160 mm
	<b>No 427/10</b>	3/8"  240 mm
	<b>No 428</b>	3/8"  46 mm
	<b>No 435</b>	3/8"

### TCS 456/16/7



175 x 350 x 40 mm, 23 pieces

Code	Δ	g
<b>96 83 02 18</b>		1400

	<b>No 456</b>	3/8"  sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm
	<b>No 427/3</b>	3/8"  76 mm
	<b>No 427/5</b>	3/8"  125 mm
	<b>No 427/10</b>	3/8"  240 mm
	<b>No 428</b>	3/8"  46 mm
	<b>No 431</b>	1/4"  3/8"
	<b>No 432</b>	1/2"  3/8"
	<b>No 435</b>	3/8"

### TCS 456/16/4 MF



175 x 350 x 45 mm, 20 pieces

Code	Δ	g
<b>96 83 03 57</b>		1123

	<b>No 456</b>	3/8"  sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm
	<b>No 427/5</b>	3/8"  125 mm
	<b>No 427/10</b>	3/8"  240 mm
	<b>No 428</b>	3/8"  46 mm
	<b>No 435</b>	3/8"

10  
3/8"

DIN  
3120

ISO  
1174-1

3



## Sockets, Socket Sets

10  
3/8"

DIN  
3120

ISO  
1174-1

### TCS 456/31/8



350 x 350 x 32 mm, 39 pieces

Code		g
<b>96 83 06 02</b>		2701
<b>No 456</b>	3/8" O sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm	
<b>No 46</b>	3/8" O sizes 10; 11; 12; 13 mm	
<b>No 47</b>	3/8" O sizes 10; 11; 12; 13; 14; 15; 16 mm	
<b>No 1049</b>	3/8" O size 9 mm	
<b>No 49X</b>	3/8" O sizes M6; M8; M10	
<b>No 427/3</b>	3/8" O 76 mm	
<b>No 427/5</b>	3/8" O 125 mm	
<b>No 427/10</b>	3/8" O 240 mm	
<b>No 428</b>	3/8" O 46 mm	
<b>No 431</b>	1/4" O 3/8" O	
<b>No 432</b>	1/2" O 3/8" O	
<b>No 435</b>	3/8" O	
<b>No 452</b>	3/8" O	

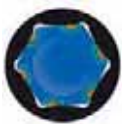
### TCS 49/1049/2049/45TX/49TX



175 x 350 x 40 mm, 24 pieces

Code		g
<b>96 83 87 72</b>		1188
<b>No 49</b>	3/8" O sizes 4; 5; 6; 7; 8; 10 mm	
<b>No 1049</b> <b>No 2049</b>	3/8" O size 7 mm 3/8" O sizes 4; 5; 6; 8; 10 mm	
<b>No 45TX</b>	3/8" O sizes E5; E6; E7; E8; E10; E12	
<b>No 49TX</b>	3/8" O sizes T10; T15; T20; T25; T30; T40	

## STAHLWILLE »AS-Drive«



STAHLWILLE sockets are equipped with the AS-Drive\* profile: this permits high transmission of forces to the lands of nuts and bolts without damaging them. No longer will you have to worry about stripping the corners off nuts and bolts.

\*Anti-Slip-Drive

## STAHLWILLE HPQ® sockets



STAHLWILLE HPQ® sockets are manufactured from selected tough steel alloys. The result: they are extremely durable. HPQ® sockets are free of cadmium and are therefore suitable for use on titanium alloy parts and titanium fasteners as used e.g. in the aerospace industry, where safety is a crucial factor.

\*High Performance Quality

## Tool Control System The safety inlay system

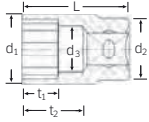
- Designed to fit our Tool Trolleys and Tool Boxes
- With yellow signal cut-outs to show whether all tools are in their places



## 50 Sockets



metric sizes: DIN 3124/ISO 2725-1, E DIN EN 3709, ASME B 107.5 M, American sizes: ASME B 107.1, Fed. Spec. GGG-W-641, SAE AS 954-E (test loads), HPQ® high performance steel, chrome plated.



Code	Ø mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δ g	
03010008	8	13	22	7	38	9	22	56	10
03010009	9	13.7	22	8	38	9	22	57	10
03010010	10	14.5	22	9	38	9	22	57	10
03010011	11	15.8	22	10	38	9.5	22	52	10
03010012	12	17	22	11	38	13	22	58	10
03010013	13	18.3	22	12	38	13	22	60	10
03010014	14	19.9	22.7	13	38	13	20.5	60	10
03010015	15	21.2	22.7	14	38	13.5	20.2	62	10
03010016	16	22.4	23.7	15	38	13.5	19.6	63	10
03010017	17	24	23.7	15.2	38	15	19.6	66	10
03010018	18	24.7	23.7	17	38	15.5	19.1	71	10
03010019	19	26.2	25	18	38	16	21.7	78	10
03010020	20	27.2	25	19	42	15	25.5	89	10
03010021	21	28.7	26	20	42	16	25.2	104	10
03010022	22	29.7	26	21	42	16.5	24.9	113	10
03010023	23	30.7	26	20	42	18	25.4	114	5
03010024	24	32	26	21	42	18.5	24.9	117	5
03010025	25	33.2	25	22	42	18.5	24.6	119	5
03010026	26	34.4	25	23	42	18.5	24.3	122	5
03010027	27	36.2	26	24	45	19.5	27	150	5
03010028	28	37.4	27	25	45	19.5	26.7	158	5
03010030	30	39.7	28	27	45	20.5	26.1	171	5
03010031	31	42.2	28	28	47	22	27.9	215	5
03010032	32	42.2	28	29	47	22	27.6	189	5
03010034	34	45	28	31	47	22	27	209	5

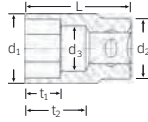
## 50a Sockets

Code	Ø"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δ g	
03410024	3/8	14.3	22	8.3	38	9	22	57	10
03410028	7/16	16.3	22	9.9	38	9	22	59	10
03410032	1/2	18.3	22	11.5	38	13	22	59	10
03410034	9/16	20.3	22.7	13.1	38	13	20.2	62	10
03410035	19/32	21.3	22.7	13.5	38	13.5	20.1	61	10
03410036	5/8	22.4	23.7	15	38	13.5	19.6	62	10
03410038	11/16	24.2	23.7	16.5	38	15.5	19.2	68	10
03410040	3/4	26.2	25	18	38	16	21.7	78	10
03410041	25/32	27	25	18.6	41	16	24.6	90	5
03410042	13/16	28.2	25	19.4	41	16.5	24.3	95	5
03410044	7/8	29.7	26	21	42	18	24.9	111	5
03410046	15/16	32	26	22.6	42	18.5	24.4	121	5
03410048	1	33.7	27	24.2	42	18.5	24	135	5
03410050	1 1/16	36.2	26	25.8	45	19.5	26.5	155	5
03410052	1 1/8	38.1	28	27.4	45	20	26	167	5
03410054	1 3/16	39	28	28	45	20.5	25.9	178	5
03410056	1 1/4	40	28	30.5	45	21	25.1	196	5
03410058	1 5/16	41.8	28	32.1	47	22	26.7	170	5
03410060	1 3/8	46	28	33.7	50	23	29.2	232	5
03410062	1 7/16	49.4	31	34	54	26	33.1	320	5
03410064	1 1/2	51	31	35	54	26	32.8	330	5

## 52 Sockets



DIN 3124/ISO 2725-1, ASME B 107.5M, E DIN EN 3709 (test loads), HPQ® high performance steel, chrome plated.



Code	Ø mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δ g	
03030008	8	13	22	7	38	9	22	56	10
03030009	9	13.7	22	8	38	9	22	56	10
03030010	10	14.5	22	9	38	9	22	60	10
03030011	11	15.8	22	10	38	9.5	22	58	10
03030012	12	17	22	11	38	13	22	52	10
03030013	13	18.3	22	12	38	13	22	51	10
03030014	14	19.9	22.7	13	38	13	20.5	59	10
03030015	15	21.2	22.7	14	38	13.5	20.2	63	10
03030016	16	22.4	23.7	15	38	13.5	19.6	65	10
03030017	17	24	23.7	15.2	38	15	19.6	70	10
03030018	18	24.7	23.7	17	38	15.5	19.1	73	10
03030019	19	26.2	25	18	38	16	21.7	80	10
03030020	20	27.2	25	19	42	15	25.5	95	10
03030021	21	28.7	26	20	42	16	25.2	110	10
03030022	22	29.7	26	21	42	16.5	24.9	115	10
03030023	23	30.7	26	20	42	18	25.4	119	5
03030024	24	32	26	21	42	18.5	24.9	125	5
03030025	25	33.2	26	22	42	18.5	24.6	128	5
03030026	26	34.4	25	23	42	18.5	24.3	132	5
03030027	27	36.2	26	24	45	19.5	27	161	5
03030028	28	37.4	27	25	45	19.5	26.7	166	5
03030030	30	39.7	28	27	45	20.5	26.1	186	5
03030032	32	42.2	28	29	47	22	27.6	200	5
03030034	34	45	28	31	47	22	27	235	5

## ES 52/17



175 x 350 x 47 mm, 17 pieces

Code	Δ g
96838112	1760
No 52	1/2" Ø sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm
83812030	Empty tray 107

12.5  
1/2"

DIN  
3120

ISO  
1174-1

3

# Sockets, Socket Sets

12.5  
1/2"

DIN  
3120

ISO  
1174-1

## TCS 52/17



175 x 350 x 40 mm, 17 pieces

Code	$\Delta$ g
<b>96838177</b>	1605



**No 52**

1/2"  $\varnothing$  sizes 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 20; 21; 22; 24; 27; 30;  
32 mm

## TCS 52/18 MF



175 x 350 x 55 mm, 18 pieces

Code	$\Delta$ g
<b>96830359</b>	1850



**No 52**

1/2"  $\varnothing$  sizes 10; 11; 12; 13; 14; 15; 16;  
17; 18; 19; 20; 21; 22; 24; 27; 30; 32;  
34 mm

## TCS 50/51/52/32



175 x 350 x 50 mm, 32 pieces

Code	$\Delta$ g
<b>96838191</b>	2950



**No 50**

1/2"  $\varnothing$  sizes 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 30 mm



**No 52**

1/2"  $\varnothing$  sizes 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 20; 21; 22; 24; 27; 30;  
32 mm



**No 51**

1/2"  $\varnothing$  sizes 22; 27 mm

## TCS 50a/17



175 x 350 x 40 mm, 17 pieces

Code	$\Delta$ g
<b>96838780</b>	1600



**No 50a**

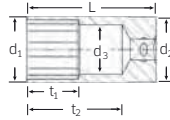
1/2"  $\varnothing$  sizes 3/8; 7/16; 1/2; 9/16; 19/32; 5/8;  
11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1; 1 1/16;  
1 1/8; 1 3/16; 1 1/4"

## 51

## ○ Sockets



extra deep, metric sizes: DIN 3124/ISO 2725-1, E DIN EN 3710, E DIN EN 3709, ASME B 107.5M, American sizes: ASME B 107.1, Fed. Spec. GGG-W-641, SAE AS 954-E, HPQ® high performance steel, chrome plated.



Code	$\varnothing$ mm/"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	$\Delta$ g	
<b>03020010</b>	<b>10</b>	14.5	22	9	83	19	67	90	10
<b>03020013</b>	<b>13</b>	18.3	22	12	83	35	67	122	10
<b>03020014</b>	<b>14</b>	19.9	22.7	13	83	35	65.2	129	10
<b>03020015</b>	<b>15</b>	21.2	22.7	14	83	35	64.9	132	10
<b>03020016</b>	<b>16</b>	22.4	23.7	15	83	35	64.6	145	10
<b>03020216</b>	<b>16-<sup>5</sup>/<sub>8</sub> 1)</b>	22.4	23.7	15.4	83	19	64.5	137	10
<b>03020017</b>	<b>17</b>	24	23.7	16	83	35	64.3	132	10
<b>03020018</b>	<b>18</b>	24.7	23.7	17	83	35	64.1	170	10
<b>03020019</b>	<b>19</b>	26.2	25	18	83	35	66.7	186	10
<b>03020208</b>	<b>20.8-<sup>13</sup>/<sub>16</sub> 1)</b>	27.7	26	20	83	22	66.2	194	10
<b>03020021</b>	<b>21</b>	28.7	26.5	20	83	35	66.2	231	10
<b>03020022</b>	<b>22</b>	29.7	27.5	21	83	35	65.5	200	10
<b>03020024</b>	<b>24</b>	32	30	21	83	35	66.1	280	5
<b>03020026</b>	<b>26</b>	34.4	32.5	23	83	35	65.3	334	5
<b>03020027</b>	<b>27 2)</b>	36.2	34	27	83	20	60	294	5
<b>03020030</b>	<b>30 2)</b>	39.7	37.5	30.2	83	35	65	341	5
<b>03020032</b>	<b>32</b>	42.4	40	29	83	35	63.9	461	5

1) with rubber insert for spark plugs

2) for diesel injector (Audi, Daihatsu, Ford, Mazda, Mercedes, Mitsubishi, Nissan, Opel, Peugeot, Toyota, VW, Volvo)

## 51a

## ○ Sockets

Code	$\varnothing$ "	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	$\Delta$ g	
<b>03420024</b>	<b>3/8</b>	14.3	22	8.3	83	19	67	93	5
<b>03420028</b>	<b>7/16</b>	16.3	22	9.9	83	19	67	102	5
<b>03420032</b>	<b>1/2</b>	18.3	22	11.5	83	35	67	122	5
<b>03420034</b>	<b>9/16</b>	20.3	22.7	13.1	83	35	65.2	131	5
<b>03420036</b>	<b>5/8</b>	22.4	23.7	15	83	35	64.6	145	5
<b>03420038</b>	<b>11/16</b>	24.2	23.7	16.5	83	35	64.2	158	5
<b>03420040</b>	<b>3/4</b>	26.2	25	18	83	35	66.7	188	5
<b>03420042</b>	<b>13/16</b>	27.7	26	19.5	83	35	66.3	170	5
<b>03420044</b>	<b>7/8</b>	29.7	27.5	21	83	35	65.9	200	5
<b>03420046</b>	<b>15/16</b>	32	30	22.6	83	35	65.7	281	5
<b>03420048</b>	<b>1</b>	33.7	32	24.2	83	35	65	260	5
<b>03420050</b>	<b>1 1/16</b>	36.2	34	25.8	83	35	64.5	359	5
<b>03420052</b>	<b>1 1/8</b>	38.1	36	27.4	83	35	64	300	5
<b>03420054</b>	<b>1 3/16</b>	39	37	28	83	35	63.9	377	5
<b>03420056</b>	<b>1 1/4</b>	40	38	30.5	83	35	63.1	433	5
<b>03420058</b>	<b>1 5/16</b>	41.8	40	32.1	83	35	62.7	479	5
<b>03420060</b>	<b>1 3/8</b>	46	44	33.7	83	35	62.2	506	5
<b>03420062</b>	<b>1 7/16</b>	49.4	47	34	83	35	62.1	635	5
<b>03420064</b>	<b>1 1/2</b>	51	49	35	83	35	61.8	675	5

## 5100

## Rubber insert

for size 20.8 mm (No 51; 51S; 46).

Code	$\Delta$ g	
<b>09010001</b>	6	5

### 51/8 Set: Sockets

AS-drive HPQ

long.  
Content: 13; 17; 19; 22; 24; 27; 30;  
32 mm



Code	g	Box
<b>96 03 02 12</b>	2780	1

in softcase with foam inlay

### TCS 51/11



175 x 350 x 50 mm, 11 pieces

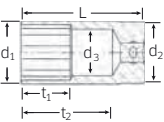
Code	g
<b>96 83 87 76</b>	2345

**No 51** sizes 10; 13; 15; 17; 18; 19; 22; 24; 27;  
30; 32 mm

### 51S Sockets

AS-drive HPQ

extra deep, DIN 3124/ISO 2725-1, E DIN EN 3710,  
E DIN EN 3709 (test loads), HPQ® high performance steel, chrome plated.



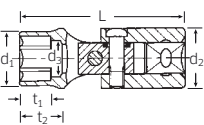
Code	mm/"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	Box
<b>03 24 00 17</b>	<b>17</b>	24	23.7	16	83	35	64.3	157	10
<b>03 24 00 19</b>	<b>19</b>	26.2	25	18	83	35	66.7	190	10
<b>03 24 02 08</b>	<b>20.8-13/16<sup>1)</sup></b>	27.7	26	20	83	22	66.2	196	10
<b>03 24 00 22</b>	<b>22</b>	29.7	27.5	21	83	35	65.9	246	10

<sup>1)</sup> with rubber insert for spark plugs and for tightening and untightening wheel nuts on Japanese cars

### 53 UNIFLEX sockets

AS-drive

Chrome Alloy Steel, chrome plated.

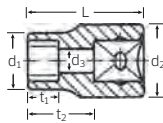


Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	Box
<b>03 04 00 10</b>	<b>10</b>	14.7	25	9	70	12	20	136	1
<b>03 04 00 13</b>	<b>13</b>	18.4	25	12	70	12	20	140	1
<b>03 04 00 16</b>	<b>16</b>	22.4	25	15	69	13	17	141	1
<b>03 04 00 17</b>	<b>17</b>	23.5	25	16	70	13	18	141	1
<b>03 04 00 18</b>	<b>18</b>	25	25	17	70	12	18	145	1
<b>03 04 00 19</b>	<b>19</b>	26.3	25	18	70	12	17.5	148	1

### 50TX Sockets

HPQ

for external TORX® screws, HPQ® high performance steel, chrome plated.



Code	size	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	Box	
<b>03 27 00 10</b>	<b>E10</b>	9.4	13	22	5.6	38	9.5	22	53	10
<b>03 27 00 11</b>	<b>E11</b>	10.1	14	22	6	38	9.5	22	50	10
<b>03 27 00 12</b>	<b>E12</b>	11.1	14.9	22	7.2	38	9.5	22	55	10
<b>03 27 00 14</b>	<b>E14</b>	12.9	16.7	22	8	38	11	22	56	10
<b>03 27 00 16</b>	<b>E16</b>	14.7	19	22	9.3	38	12.5	22	60	10
<b>03 27 00 18</b>	<b>E18</b>	16.6	21	26.5	10.4	38	13.5	22	92	10
<b>03 27 00 20</b>	<b>E20</b>	18.4	23.5	26.5	12	38	15	22	98	10
<b>03 27 00 24</b>	<b>E24</b>	22.1	27.8	26	14.1	41.2	17.5	23.6	123	10

### 50TX/7 Set: Sockets

HPQ

for external TORX® screws.  
Content: E10; E12; E14; E16; E18; E20; E24



Code	g	Box
<b>96 03 27 03</b>	623	1

in carton packing

### 50TX/8 Set: Sockets

HPQ

for external TORX® screws.  
Content:  
E10; E11; E12; E14; E16; E18; E20;  
E24



Code	g	Box
<b>96 03 37 04</b>	1052	1

in sturdy, stackable ABS plastic case

12.5  
1/2"

DIN  
3120

ISO  
1174-1

3

# Sockets, Socket Sets

12.5  
1/2"

DIN  
3120

ISO  
1174-1

## TCS 50TX/54TX/17



175 x 350 x 40 mm, 17 pieces

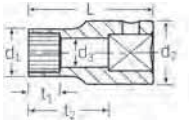
Code			$\Delta$ g
<b>96 83 87 63</b>			1382
<b>No 50TX</b>	1/2" $\circ$ sizes E10; E11; E12; E14; E16; E18; E20; E24		
<b>No 54TX</b>	1/2" $\circ$ sizes T20; T25; T27; T30; T40; T45; T50; T55; T60		

3

## 50aPSP Sockets spline-drive



MS-33787, HPQ® high performance steel, gunmetal finish.

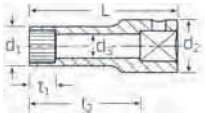


Code	Spline size	$\circ$ "	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	$\Delta$ g	
<b>03 01 20 24</b>	<b>12</b>	<b>3/8</b>	15.5	22	8.6	38	9.5	22	55	5
<b>03 01 20 28</b>	<b>14</b>	<b>7/16</b>	18	23.7	10.4	38	11	22	65	5
<b>03 01 20 34</b>	<b>18</b>	<b>9/16</b>	22	23.7	13.5	38	12	20	71	5

## 50aPLSP Socket spline-drive



extra deep bolt clearance, MS-33787, HPQ® high performance steel, gunmetal finish.

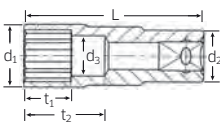


Code	Spline size	$\circ$ "	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	$\Delta$ g	
<b>03 01 30 28</b>	<b>14</b>	<b>7/16</b>	18	23.7	10.4	50	11	34	83	5

## 51aP Socket



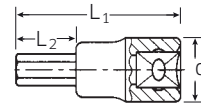
extra deep bolt clearance, HPQ® high performance steel, gunmetal finish. For the brakes on A320/A321.



Code	$\circ$ "	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	$\Delta$ g	
<b>03 42 10 41</b>	<b>25/32</b>	28	23	17.9	80	21	36	182	1

## 54 IN HEX sockets

for hexagon socket head screws, DIN 7422, Chrome Alloy Steel, chrome plated.



Code	$\circ$ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	$\Delta$ g	
<b>03 05 00 04</b>	<b>4</b>	60	22	22.7	68	5
<b>03 05 00 05</b>	<b>5</b>	60	22	22.7	68	5
<b>03 05 00 06</b>	<b>6</b>	60	22	22.7	71	5
<b>03 05 00 07</b>	<b>7</b>	60	22	22.7	75	5
<b>03 05 00 08</b>	<b>8</b>	60	22	22.7	79	5
<b>03 05 00 10</b>	<b>10</b>	60	22	22.7	97	5
<b>03 05 00 12</b>	<b>12</b>	60	20	23.7	122	5
<b>03 05 00 14</b>	<b>14</b>	60	20	23.7	135	5
<b>03 05 00 17</b>	<b>17</b>	60	20	27.5	186	5
<b>03 05 00 19</b>	<b>19</b>	60	20	31	242	5

## 54a IN HEX sockets

Code	$\circ$ "	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	$\Delta$ g	
<b>03 45 00 14</b>	<b>7/32</b>	60	22	22.7	70	5
<b>03 45 00 16</b>	<b>1/4</b>	60	22	22.7	75	5
<b>03 45 00 20</b>	<b>5/16</b>	60	22	22.7	81	5
<b>03 45 00 24</b>	<b>3/8</b>	60	22	22.7	97	5
<b>03 45 00 28</b>	<b>7/16</b>	60	22	22.7	103	5
<b>03 45 00 32</b>	<b>1/2</b>	60	20	23.7	125	5
<b>03 45 00 34</b>	<b>9/16</b>	60	20	23.7	137	5
<b>03 45 00 36</b>	<b>5/8</b>	60	20	27.5	169	5
<b>03 45 00 40</b>	<b>3/4</b>	60	20	31	244	2

## 54/10 IN HEX socket set No 54

sizes 4; 5; 6; 7; 8; 10; 12; 14; 17; 19 mm



Code	$\Delta$ g
<b>96 03 15 08</b>	1552

in sturdy, stackable ABS plastic case

## 54/12 IN HEX socket set

Content:  
12 IN HEX sockets  
No 54, sizes 4, 5, 6, 7, 8, 10, 12, 14, 17, 19 mm,  
No 3054/8, No 1054/10



Code	$\Delta$ g	
<b>96 03 15 03</b>	1963	1

in sturdy, stackable ABS plastic case



### ES 54/54KK



175 x 350 x 38 mm, 14 pieces

Code			$\Delta$	$\nabla$
			g	
<b>96838114</b>			1630	
<b>No 54</b>	1/2" $\odot$ sizes 4; 5; 6; 7; 8; 10; 12; 14; 17; 19 mm			
<b>No 54KK</b>	1/2" $\odot$ sizes 5; 6; 8; 10 mm			
<b>83812046</b>	Empty tray		108	

### TCS 54/54X/16



175 x 350 x 35 mm, 16 pieces

Code			$\Delta$	$\nabla$
			g	
<b>96838762</b>			1665	
<b>No 54</b>	1/2" $\odot$ sizes 4; 5; 6; 7; 8; 10; 12; 14; 17 mm			
<b>No 54X</b>	1/2" $\odot$ sizes M5; M6; M8; M10; M12; M14; M16			

### 1054/2054 INHEX sockets

for hexagon socket head screws, extra long, DIN 7422, Chrome Alloy Steel, chrome plated.



Code	No	$\odot$ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	$\Delta$	$\nabla$	
						g		
<b>03151205</b>	<b>2054/5</b>	5	120	82	22.7	78	5	
<b>03151206</b>	<b>2054/6</b>	6	120	82	22.7	84	5	
<b>03151207</b>	<b>2054/7</b>	7	120	82	22.7	96	5	
<b>03151208</b>	<b>1054/8K</b>	8	120	82	22.7	104	5	
<b>03151410</b>	<b>1054/10</b>	10	140	102	22.7	150	5	
<b>03151412</b>	<b>1054/12<sup>1)</sup></b>	12	140	100	23.7	197	5	
<b>03151414</b>	<b>2054/14</b>	14	140	100	23.7	231	5	

<sup>1)</sup> For fitting radiators

### 1054/3054 INHEX sockets

for hexagon socket head screws, special lengths, DIN 7422, Chrome Alloy Steel, chrome plated.



Code	No	$\odot$ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	$\Delta$	$\nabla$	
						g		
<b>03151805</b>	<b>1054/5</b>	5	180	20	22	118	5	
<b>03150706</b>	<b>1054/6</b>	6	70	32	22.7	72	5	
<b>03151006</b>	<b>3054/6<sup>1)</sup></b>	6	100	62	22.7	80	5	
<b>03152206</b>	<b>1054/6L</b>	6	220	182	22.7	108	5	
<b>03151007</b>	<b>1054/7</b>	7	100	62	22.7	87	5	
<b>03150808</b>	<b>3054/8</b>	8	80	42	22.7	88	5	
<b>03151408</b>	<b>1054/8</b>	8	140	102	22.7	114	5	
<b>03150713</b>	<b>1054/13</b>	13	70	25	24	130	5	

<sup>1)</sup> for intake manifolds on 5-cylinder diesel engines on VW/Audi and T4 vans

### ES 1054/2054



175 x 175 x 30 mm, 6 pieces

Code			$\Delta$	$\nabla$
			g	
<b>96838164</b>			900	
<b>No 1054</b>	1/2" $\odot$ sizes 8; 10; 12 mm			
<b>No 2054</b>	1/2" $\odot$ sizes 5; 6; 14 mm			
<b>83812081</b>	Empty tray		55	

### TCS 1054/2054/10

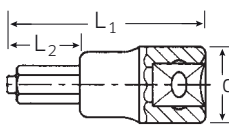


175 x 350 x 40 mm, 10 pieces

Code			$\Delta$	$\nabla$
			g	
<b>96838760</b>			1272	
<b>No 1054</b>	1/2" $\odot$ sizes 8; 10; 12 mm			
<b>No 2054</b>	1/2" $\odot$ sizes 5; 6 mm			
<b>No 1054TX</b>	1/2" $\odot$ sizes T30; T50; T55			
<b>No 2054TX</b>	1/2" $\odot$ sizes T40; T45			

### 541C INHEX sockets

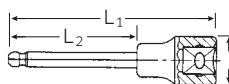
for hexagon socket head screws with guide pin, Chrome Alloy Steel, chrome plated.



Code	$\odot$ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	$\Delta$	$\nabla$	
						g	
<b>03070005</b>	<b>5</b>	60	22	22.7	70	5	
<b>03070006</b>	<b>6</b>	60	22	22.7	71	5	
<b>03070008</b>	<b>8</b>	60	22	22.7	70	5	
<b>03070010</b>	<b>10</b>	60	22	22.7	95	5	
<b>03070012</b>	<b>12</b>	60	20	23.7	120	5	
<b>03070014</b>	<b>14</b>	60	20	23.7	131	5	

### 54KK INHEX sockets

with ball point hexagon, for hexagon socket head screws, swivel angle up to 25° each side, Chrome Alloy Steel, chrome plated.



Code	$\odot$ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	$\Delta$	$\nabla$	
						g	
<b>03280005</b>	<b>5</b>	100	62	22.7	75	5	
<b>03280006</b>	<b>6</b>	100	62	22.7	80	5	
<b>03280007</b>	<b>7<sup>1)</sup></b>	100	62	22.7	85	5	
<b>03280008</b>	<b>8</b>	100	62	22.7	95	5	
<b>03280010</b>	<b>10</b>	100	62	22.7	120	5	

<sup>1)</sup> Application: BMW brakes

12.5  
1/2"

DIN  
3120

ISO  
1174-1

3

# Sockets, Socket Sets

12.5  
1/2"

DIN  
3120

ISO  
1174-1

## ES 54KK/5



175 x 175 x 30 mm, 5 pieces

Code	⚖ g
<b>96838165</b>	505

**No 54KK** 1/2" O sizes 5; 6; 7; 8; 10 mm

<b>83812051</b>	Empty tray	55
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## 1054KK ● INHEX sockets

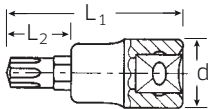
with ball point hexagon,  
for hexagon socket head screws,  
swivel angle up to 25° each side, special lengths,  
Chrome Alloy Steel, chrome plated.



Code	⌀ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	⚖ g	📦
<b>03310005</b>	<b>5</b>	238	200	22.7	145	5
<b>03310008</b>	<b>8</b>	238	200	22.7	154	5

## 54CV ● Screwdriver sockets

for spline socket head screws (Ribe-CV®), Chrome Alloy Steel,  
chrome plated.



Code	size	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	⚖ g	📦
<b>03090005</b>	<b>M5</b>	60	22	22.7	69	5
<b>03090006</b>	<b>M6</b>	60	22	22.7	71	5
<b>03090007</b>	<b>M7</b>	60	22	22.7	78	5
<b>03090008</b>	<b>M8</b>	60	22	22.7	78	5
<b>03090009</b>	<b>M9</b>	60	22	22.7	92	5
<b>03090010</b>	<b>M10</b>	60	22	22.7	95	5
<b>03090012</b>	<b>M12</b>	60	20	23.7	119	5
<b>03090013</b>	<b>M13</b>	60	20	23.7	125	5
<b>03090014</b>	<b>M14</b>	60	20	23.7	126	5
<b>03090016</b>	<b>M16</b>	63	23	27.5	163	5

Application:

Size M7, for brakes, cylinder head screws, bodywork and motor jobs incl. valve covers and spark plug covers on Fiat vehicles  
Size M8, bodywork and motor jobs incl. valve covers and spark plug covers on Fiat vehicles  
Size M9, brakes, cylinder head screws (1.2 l; 8V/16V) on Fiat vehicles  
Size M10, for cylinder head screws (1.2 l; 8V/16V) on Fiat vehicles  
Size M12 for cylinder head screws on Fiat 2.0 l engines  
Size M13, for brakes, cylinder head screws on Fiat vehicles; cylinder head screws on Alfa vehicles, e.g. 1.6 l; 16V engines  
Size M14; M16, for cylinder head screws on Alfa vehicles, e.g. 1.6 l; 16V engines

## 54CV/9 ● Set: Screwdriver sockets

for spline socket head screws  
(Ribe-CV®),  
9 pieces,  
Content: M5; M6; M7; M8; M9; M10;  
M12; M13; M14

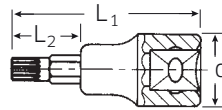


Code	⚖ g	📦
<b>96031901</b>	1317	1

in sturdy, stackable ABS plastic case

## 54X ● Screwdriver sockets

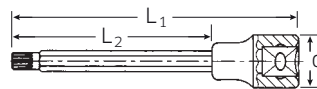
for trisquare socket head screws (XZN®), DIN 2324, Chrome Alloy Steel,  
chrome plated.



Code	size	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	⚖ g	📦
<b>03060005</b>	<b>M5</b>	60	22	22.7	67	5
<b>03060006</b>	<b>M6</b>	60	22	22.7	74	5
<b>03060008</b>	<b>M8</b>	60	22	22.7	79	5
<b>03060010</b>	<b>M10</b>	60	22	22.7	94	5
<b>03060012</b>	<b>M12</b>	60	20	23.7	120	5
<b>03060014</b>	<b>M14</b>	60	20	23.7	128	5
<b>03060016</b>	<b>M16</b>	60	20	27.5	174	5

## 3054X ● Screwdriver sockets

for trisquare socket head screws (XZN®), DIN 2324, extra long,  
Chrome Alloy Steel, chrome plated.



Code	size	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	⚖ g	📦
<b>03261408</b>	<b>M8</b>	140	102	22.7	109	5
<b>03261410</b>	<b>M10</b>	140	102	22.7	142	5
<b>03261412</b>	<b>M12</b>	140	102	22.7	160	5
<b>03261414</b>	<b>M14</b>	140	100	23.7	225	1

Application: sizes M10 and M12 for cylinder head screws on VW/Audi, Opel, Mercedes-Benz, size M14 for cylinder head screws on VM diesel engines, Chrysler

## 3054X/54X/8 ● Set: Screwdriver sockets

for trisquare socket head screws  
(XZN®), 8 pieces,  
Content: 3054X: M8, M10, M12  
54X: M6, M8, M10, M12, M14



Code	⚖ g	📦
<b>96033606</b>	1357	1

in sturdy, stackable ABS plastic case

3

### 1054x/2054x Screwdriver sockets

for trisquare socket head screws (XZN®), special lengths, DIN 2324, Chrome Alloy Steel, chrome plated.

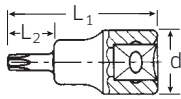


Code	No	size	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	△△ g	
03 16 08 08	1054x	M8	80	42	22.7	86	5
03 16 12 08	2054x	M8	120	82	22.7	104	5
03 16 11 10	2054x	M10	110	72	22.7	130	5
03 16 11 12	2054x	M12	110	70	23.7	168	5

Application: No 1054x, size M8, for jointed shafts on VW/Audi

### 54TX Screwdriver sockets

for inside TORX® screws, Chrome Alloy Steel, chrome plated.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	△△ g	
03 10 00 20	T20	3.8	55	17	22.7	71	5
03 10 00 25	T25	4.4	55	17	22.7	71	5
03 10 00 27	T27	5	55	17	22.7	72	5
03 10 00 30	T30	5.5	55	17	22.7	72	5
03 10 00 40	T40	6.6	55	17	22.7	72	5
03 10 00 45	T45	7.8	55	17	22.7	74	5
03 10 00 50	T50	8.8	55	17	22.7	87	5
03 10 00 55	T55	11.2	58	18	23.7	112	5
03 10 00 60	T60	13.2	58	18	23.7	113	5
03 10 00 70	T70	15.5	60	20	27.5	155	1

Application: size T55 for the cylinder head screws on the Opel Omega V6

### 54TX/9 Set: Screwdriver sockets

for inside TORX® screws, 9 pieces, Content: sizes T20; T25; T27; T30; T40; T45; T50; T55; T60



Code	△△ g	
96 03 10 04	820	1

packed in carton

### 54TX/10 Socket set TORX®

for inside TORX® screws, 10 pieces, Content: sizes T20; T25; T27; T30; T40 (2x); T45; T50; T55; T60



Code	△△ g
96 03 20 05	1197

in sturdy, stackable ABS plastic case

### 54TX/59TX/12/1 Socket set TORX®



for inside TORX® screws, 13 pieces, Content:

9 screwdriver sockets for internal TORX® screws No 54TX: sizes T20; T25; T27; T30; T40; T45; T50; T55; T60

3 screwdriver sockets for internal TORX® screws No 59TX: sizes T70; T80; T90

1 adaptor No 514, 1/2" socket x 3/4" plug (12.5 x 20)



Code	△△ g
96 03 20 06	2595

in sturdy, stackable ABS plastic case

### ES 54X/54TX



175 x 350 x 38 mm, 16 pieces



Code	△△ g
96 83 81 15	1600
No 54X	1/2"  sizes M5; M6; M8; M10; M12; M14; M16
No 54TX	1/2"  sizes T20; T25; T27; T30; T40; T45; T50; T55; T60
83 81 20 45	Empty tray 111

### TCS 54/54TX/18



175 x 350 x 40 mm, 18 pieces



Code	△△ g
96 83 87 82	1665
No 54	1/2"  sizes 4; 5; 6; 7; 8; 10; 12; 14; 17 mm
No 54TX	1/2"  sizes T20; T25; T27; T30; T40; T45; T50; T55; T60

Made in Germany

12.5  
1/2"

DIN  
3120

ISO  
1174-1

3

## Sockets, Socket Sets


12.5  
1/2"

### 1054TX/ 2054TX

#### Screwdriver sockets

for inside TORX® screws, extra long,  
Chrome Alloy Steel, chrome plated.



Code	No	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	
03 13 12 30	1054TX	T30	5.5	120	82	22.7	99	5
03 13 14 40	2054TX	T40	6.6	140	102	22.7	110	5
03 13 14 45	2054TX	T45	7.8	140	102	22.7	111	5
03 13 14 50	1054TX	T50	8.8	140	102	22.7	143	5
03 13 14 55	1054TX	T55	11.2	140	102	22.7	159	5
03 13 14 60	1054TX	T60	13.2	140	100	23.7	221	5

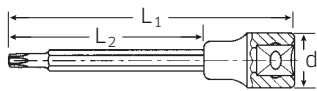
Application: size T55 for the cylinder head screws on various Ford models,  
e.g. Mondeo 16V


3

### 1054TX

#### Screwdriver sockets

for inside TORX® screws, extra long, Chrome Alloy Steel, chrome plated.






Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	
03 13 12 40	T40	6.6	120	82	22.7	100	5
03 13 12 45	T45	7.8	120	82	22.7	100	5
03 13 10 70	T70	15.5	107	67	23.7	201	5

### ES 1054/2054TX/6



175 x 175 x 30 mm, 6 pieces

Code	g	
96 83 81 63	950	
 No 1054TX No 2054TX	1/2"  sizes T30; T50; T55; T60 1/2"  sizes T40; T45	
83 81 20 81	Empty tray	55

### 1054TX/4T

#### Set: Screwdriver sockets

for inside TORX® screws,  
in textile bag, 4 pieces,  
Content:  
T40; T45; T50; T55

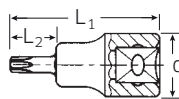



Code	g	
96 03 13 01	527	1

### 54TXB

#### Screwdriver sockets

for inside TORX® screws, tamper proof, with hollow point,  
Chrome Alloy Steel, chrome plated (TORX® TAMPER RESISTANT).



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	
03 11 00 20	T20	3.8	55	17	22.7	70	5
03 11 00 25	T25	4.4	55	17	22.7	70	5
03 11 00 27	T27	5	55	17	22.7	71	5
03 11 00 30	T30	5.5	55	17	22.7	71	5
03 11 00 40	T40	6.6	55	17	22.7	71	5
03 11 00 45	T45	7.8	55	17	22.7	73	5
03 11 00 50	T50	8.8	55	17	22.7	86	5
03 11 00 55	T55	11.2	58	18	23.7	111	5
03 11 00 60	T60	13.2	58	18	23.7	113	5

Application: size T50 for the spare wheel retaining plate on the bumper of  
the Opel Frontera Sport

### 54TXB/9

#### Set: Screwdriver sockets

for inside TORX® screws, tamper proof, with hollow point  
(TORX® TAMPER RESISTANT).

9 pieces

Content: T20; T25; T27; T30; T40; T45; T50; T55; T60



Code	g	
96 03 10 07	810	1

in carton packing with transparent cover

### 54TXB/10

#### Set: Screwdriver sockets

for inside TORX® screws,  
tamper proof, with hollow point  
(TORX® TAMPER RESISTANT).

10 pieces

Content:

T20; T25; T27; T30; 2 x T40; T45;  
T50; T55; T60



Code	g	
96 03 20 08	1185	1


in sturdy, stackable ABS plastic case

### 50CL

#### Clip strips

for socket retention, with 9 or 11 retaining clips.  
Supplied without sockets.

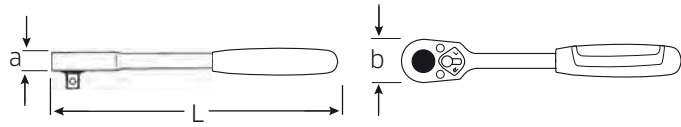


Code	size	L mm	g	
80 50 00 01	1	200	54	5
80 50 00 02	2	300	73	5



## Drive tools and accessories

1/2" □, finish: Chrome Alloy Steel, chrome plated.



### 512 Ratchet

reversible, 36 teeth, with 2-component handle, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	
<b>13 11 10 10</b>	265.5	41	22.5	600	1

### 512G Ratchet

reversible, 36 teeth, with 2-component handle, DIN 3122/ISO 3315. Encapsulated housing minimises the ingress of dirt.



Code	L mm	b mm	a mm	△△ g	
<b>13 11 11 10</b>	265.5	41	22.5	613	1

### 512QR N QuickRelease ratchet, fine tooth



reversible, 80 teeth, with QuickRelease safety lock and 2-component handle, for use in confined spaces, re-engages after movement of 4.5°, DIN 3122/ISO 3315, registered design.



Code	L mm	b mm	a mm	△△ g	
<b>13 11 11 20</b>	265.5	41	23	647	1

### 512SG-QR QuickRelease ratchet



reversible, 36 teeth, with QuickRelease safety lock and steel handle, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	
<b>13 11 00 30</b>	265.5	41	22.5	680	1

### 515 Ratchet, fine tooth

reversible, 60 teeth, with 2-component handle, for use in confined spaces, re-engages after movement of 6°, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	
<b>13 23 10 11</b>	265	40	26.2	515	1

### 517 Flexible joint ratchet

reversible, 60 teeth, handle may be raised or lowered by approx. 90°. Lockable in following positions: straight, 30° up, 60° up, 30° down. Unlocked by depressing button in handle, registered design.



Code	L mm	b mm	a mm	△△ g	
<b>13 26 00 01</b>	415	43	26	793	1

### 522 Ratchet adaptor

reversible, 20 teeth.



Code	L mm	∅ mm	△△ g	
<b>13 14 00 00</b>	67.5	40	316	1

### 532 Ratchet

long handle, reversible, 36 teeth, with 2-component handle.



Code	L mm	b mm	a mm	△△ g	
<b>13 12 10 10</b>	380	41	22.5	821	1

### 532G Ratchet

long handle, reversible, 36 teeth, with 2-component handle. Encapsulated housing minimises the ingress of dirt.



Code	L mm	b mm	a mm	△△ g	
<b>13 12 11 10</b>	380	41	22.5	815	1

### 5120 + 7210/15 Spare parts set for ratchets No 512, 512SG, 532, 538

Content:  
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws.

Code	△△ g	
<b>1904 00 00</b>	127	1

for ratchets from 1990

### 5120G Spare parts set for ratchets No 512G, 532G

Content:  
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws.

Code	△△ g	
<b>1904 00 30</b>	120	1

12.5  
1/2"

DIN  
3120

ISO  
1174-1

3



# Sockets, Socket Sets

12.5  
1/2"

DIN  
3120

ISO  
1174-1

## 5120QR N80 Spare parts set for ratchet No 512QR N



for ratchet 512QR N, screwless design.  
Content:

1 pinion; 1 locking disc; 1 lever; 1 pin;  
1 ball; 1 compression spring;  
2 circlips; 1 cover plate.



Code	g	g	g
19042020	130		1

## 5120QR N Spare parts set for ratchet No 512QR N



for ratchet 512QR N, design with screws.  
Content:

1 pinion; 1 pawl; 1 lever with pin;  
1 ball; 2 compression springs; 2 screws.



Code	g	g	g
19040040	140		1

## 5120QR Spare parts set for ratchets No 512, 512SG-QR



Content:  
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws.

Code	g	g	g
19040020	118		1

## 7350/20 Spare parts set for ratchets No 515, 517

Content:  
1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws.

Code	g	g	g
59251020	146		1

for ratchets from 4/96

## 501 Speeder brace

working radius 105 mm,  
DIN 3122/ISO 3315.



Code	L mm	g	g
13100010	456	600	5

## 501B Speeder brace

with steel handle,  
for greater axial power  
transmission, detachable palm  
head, working radius 105 mm,  
DIN 3122/ISO 3315.



Code	L mm	g	g
13100002	456	886	1

## 504 Flexible handle

DIN 3122/ISO 3315,  
with 2-component handle.



Code	size	L mm	g	g
13061015	15	397	735	1
13061018	18	469	831	1
13061024	24	610	1051	1

## 5040N Spare parts set for No 504

for version with black,  
manganese-phosphated  
TORX® screw.

Content:  
1 universal Joint  
1 screw  
1 spring Washer



Code	g	g	g
96190801	80		1

## 5040 Spare parts set for No 504

for version with chrome plated  
Philips-head screw.

Content:  
1 universal Joint  
1 screw  
1 spring Washer



Code	g	g	g
96190800	75		1

## 506 Sliding T-handle

DIN 3122/ISO 3315.



Code	L mm	g	g
13070000	300	436	5

## 506QR QuickRelease sliding T-handle



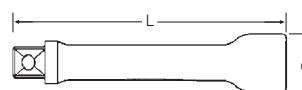
patent,  
with QuickRelease safety lock.



Code	L mm	g	g
13071000	300	470	1

## 509 Extensions

DIN 3123/ISO 3316.



Code	size	L mm	d mm	g	g
13010001	2	52	23	88	5
13010004	3	75	23.2	120	5
13010002	5	130	23.2	191	5
13010003	10	255	23.2	341	5

3

### 509W Extensions with wobble-drive

swivel angle 15° each side, maximum torque 200 N·m.



Code	size	L mm	d mm	⚖ g	📦
<b>13010005</b>	<b>2</b>	52	23	80	5
<b>13010006</b>	<b>3</b>	75	23.2	120	5
<b>13010007</b>	<b>5</b>	130	23.2	191	5
<b>13010008</b>	<b>10</b>	255	23.2	341	5

### 509QR QuickRelease extensions



patent, DIN 3123/ISO 3316.



Code	size	L mm	d mm	⚖ g	📦
<b>13011001</b>	<b>2</b>	52	23	90	1
<b>13011004</b>	<b>3</b>	75	23	123	1
<b>13011002</b>	<b>5</b>	130	23	187	1
<b>13011003</b>	<b>10</b>	255	23	341	1

### 3505 Special extension



Code	L mm	d mm	⚖ g	📦
<b>13210001</b>	120	23.2	186	1

### 510 Universal joint

DIN 3123/ISO 3316.



Code	L mm	d mm	⚖ g	📦
<b>13020000</b>	71	25	146	5

### 510QR QuickRelease universal joint



patent, DIN 3123/ISO 3316, with QuickRelease safety lock.



Code	L mm	d mm	⚖ g	📦
<b>13021000</b>	80	25	155	1

### 513 Adaptor



1/2" socket x 3/8" plug (12.5 x 10), maximum torque 202 N·m, DIN 3123/ISO 3316, HPQ® high performance steel.



Code	L mm	d mm	⚖ g	📦
<b>13030002</b>	35	22.7	55	5

### 514 Adaptor



1/2" socket x 3/4" plug (12.5 x 20), DIN 3123/ISO 3316, HPQ® high performance steel.



Code	L mm	d mm	⚖ g	📦
<b>13030005</b>	44	25	118	5

### 7789-1 Adaptor



1/2" socket x 1" plug (12.5 x 25), HPQ® high performance steel.



Code	L mm	d mm	⚖ g	📦
<b>58522089</b>	35	36.5	175	1

### 409M/432M/514M/3 Set adaptors, 3 pieces

1/4" socket x 3/8" plug,  
3/8" socket x 1/2" plug,  
1/2" socket x 3/4" plug.



Code	⚖ g	📦
<b>96121002</b>	120	1

### 514M Adaptor

1/2" socket x 3/4" plug (12.5 x 20).



Code	L mm	∅ mm	⚖ g	📦
<b>13030010</b>	22	38	40	1

12.5  
1/2"

DIN  
3120

ISO  
1174-1

3

## Sockets, Socket Sets

12.5  
1/2"

DIN  
3120

ISO  
1174-1

### 543 Bit holder

○ 5/16" inside hexagon, DIN 3126/ISO 1173 D 8. Internal hex drive with a collar-thrust spring. Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).



Code	L mm	d mm	△△ g	☐
<b>13 1800 10</b>	38	22	65	5

### 52/9/3 Socket set 1/2" ☐

in sturdy, stackable ABS plastic case, 12 pieces

Content:

- 9 sockets with hexagon No 52:  
sizes 10; 13; 16; 17; 18; 19; 21;  
22; 24 mm
- 1 ratchet No 512
- 2 extensions No 509/5 (130 mm),  
No 509/10 (255 mm)



Code	△△ g
<b>9603 1343</b>	2747

### 50/12/3 Socket set 1/2" ☐

in sturdy, stackable ABS plastic case, 15 pieces

Content:

- 12 sockets with bi-hexagon No 50:  
sizes 10; 13; 16; 17; 18; 19; 21;  
22; 24; 27; 30; 32 mm
- 1 ratchet No 512
- 2 extensions  
No 509/5 (130 mm),  
No 509/10 (255 mm)



Code	△△ g
<b>9603 1435</b>	2739

### 52/12/3 Socket set 1/2" ☐

in sturdy, stackable ABS plastic case, 15 pieces

Content:

- 12 sockets with hexagon No 52:  
sizes 10; 13; 16; 17; 18; 19; 21;  
22; 24; 27; 30; 32 mm
- 1 ratchet No 512
- 2 extensions No 509/5 (130 mm),  
No 509/10 (255 mm)



Code	△△ g
<b>9603 1436</b>	3562

### 54/8/4 Socket set 1/2" ☐

in sturdy, stackable ABS plastic case, 12 pieces

Content:

- 8 INHEX sockets No 54:  
sizes 4; 5; 6; 8; 10; 12; 14; 17 mm
- 1 ratchet No 512
- 2 extensions No 509/5 (130 mm),  
No 509/10 (255 mm)
- 1 T-handle No 506



Code	△△ g
<b>9603 1501</b>	3636

### 52/16/5 Socket set 1/2" ☐

in sturdy, stackable ABS plastic case, 21 pieces

Content:

- 15 sockets with hexagon No 52:  
sizes 10; 11; 12; 13; 14; 15; 16;  
17; 18; 19; 21; 22; 24; 27; 30 mm
- 1 socket, long, with rubber insert  
No 51: sizes 16 mm - 5/8"
- 1 ratchet No 512
- 2 extensions No 509/5 (130 mm), No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	△△ g
<b>9603 1406</b>	4635

### 50/16/6 Socket set 1/2" ☐

in sturdy, stackable ABS plastic case, 22 pieces

Content:

- 16 sockets with bi-hexagon No 50:  
sizes 10; 11; 12; 13; 14; 15; 16;  
17; 18; 19; 21; 22; 24; 27; 30;  
32 mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm),  
No 509/5 (130 mm), No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	△△ g
<b>9603 1447</b>	4827

### 52/16/6 Socket set 1/2" ☐

in sturdy, stackable ABS plastic case, 22 pieces

Content:

- 16 sockets with hexagon No 52:  
sizes 10; 11; 12; 13; 14; 15; 16;  
17; 18; 19; 21; 22; 24; 27; 30;  
32 mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm),  
No 509/5 (130 mm), No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	△△ g
<b>9603 1448</b>	4810

**52/16/6QR Socket set 1/2"** 


in sturdy, stackable ABS plastic case,  
22 pieces

Content:

- 16 sockets with hexagon No 52:  
sizes 10; 11; 12; 13; 14; 15; 16;  
17; 18; 19; 21; 22; 24; 27; 30;  
32 mm
- 1 ratchet No 512QR N
- 3 extensions No 509QR/3 (75 mm), No 509QR/5 (130 mm),  
No 509QR/10 (255 mm)
- 1 T-handle No 506QR N
- 1 universal joint No 510QR



Code	ΔΔ g
<b>9603 1480</b>	4765

**50/22/6 Socket set 1/2"** 

in sturdy, stackable ABS plastic case,  
28 pieces

Content:

- 22 sockets with bi-hexagon No 50:  
sizes 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 20; 21; 22; 23;  
24; 26; 27; 28; 30; 32 mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm),  
No 509/5 (130 mm), No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	ΔΔ g
<b>9603 1407</b>	5410

**52/22/6 Socket set 1/2"** 

in sturdy, stackable ABS plastic case,  
28 pieces

Content:

- 22 sockets with hexagon No 52:  
sizes 8; 9; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 20; 21; 22; 23;  
24; 26; 27; 28; 30; 32 mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm),  
No 509/5 (130 mm), No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	ΔΔ g
<b>9603 1409</b>	5360

**50ma/39/6N Socket set 1/2"** 

in sturdy sheet steel case,  
45 pieces

Content:

- 39 sockets with bi-hexagon  
No 50: sizes 10; 11; 12; 13; 14;  
15; 16; 17; 18; 19; 20;  
21; 22; 23; 24; 25; 26;  
27; 28; 30; 32; 34 mm
- No 50a: sizes 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1;  
1 1/16; 1 1/8; 1 3/16; 1 1/4"
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm), No 509/5 (130 mm),  
No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	ΔΔ g
<b>9603 0140</b>	9020

**40/52/27/11 Socket set 1/4"; 1/2"** 

in sturdy, stackable ABS plastic case,  
38 pieces

Content:

- 9 sockets with hexagon No 40:  
sizes 4; 5; 5.5; 6; 7; 8; 9; 10;  
11 mm
- 10 sockets with hexagon No 52:  
sizes 13; 16; 17; 18; 19; 21; 22;  
24; 27; 30 mm
- 3 INHEX sockets No 44: sizes 3; 4; 5 mm
- 5 INHEX sockets No 54: sizes 6; 8; 10; 12; 14 mm
- 2 ratchets No 415, No 512
- 4 extensions No 405/2 (54 mm), No 509/5 (130 mm),  
No 405/6 (150 mm), No 509/10 (255 mm)
- 2 universal joints No 407, No 510
- 1 drive handle No 400
- 2 T-handles No 404, No 506



Code	ΔΔ g
<b>9601 1160</b>	5145

**50/54/25/6 Socket set 1/2"** 

in sturdy, stackable ABS plastic case,  
31 pieces

Content:

- 17 sockets with bi-hexagon No 50:  
sizes 8; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 21; 22; 24; 27;  
30; 32 mm
- 8 INHEX sockets No 54:  
sizes 4; 5; 6; 7; 8; 10; 12; 14 mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm), No 509/5 (130 mm),  
No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	ΔΔ g
<b>9603 1439</b>	5579

12.5  
1/2"

DIN  
3120

ISO  
1174-1

3



# Sockets, Socket Sets

12.5  
1/2"

DIN  
3120

ISO  
1174-1

## 52/54/25/6 Socket set 1/2"

in sturdy, stackable ABS plastic case,  
31 pieces  
Content:

- 17 sockets with hexagon No 52:  
sizes 8; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 21; 22; 24; 27;  
30; 32 mm
- 8 INHEX sockets No 54:  
sizes 4; 5; 6; 7; 8; 10; 12; 14 mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm), No 509/5 (130 mm),  
No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	⚠ g
<b>9603 1239</b>	5590

## 50/43/7 Socket set 1/2"

in sturdy sheet steel case,  
50 pieces  
Content:

- 23 sockets with bi-hexagon No 50:  
sizes 8; 10; 11; 12; 13; 14; 15;  
16; 17; 18; 19; 20; 21; 22; 23;  
24; 25; 26; 27; 28; 30; 32; 34 mm
- 7 sockets, long, No 51:  
sizes 13; 17; 18; 19; 22; 24; 27 mm
- 2 sockets, long, with rubber insert No 51:  
sizes 16 mm - 5/8", 20.8 mm - 13/16"
- 6 UNIFLEX sockets with hexagon No 53:  
sizes 10; 13; 16; 17; 18; 19 mm
- 5 INHEX sockets No 54: sizes 4; 5; 6; 8; 10 mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm), No 509/5 (130 mm),  
No 509/10 (255 mm)
- 1 flexible handle No 504/15
- 1 T-handle No 506
- 1 universal joint No 510



Code	⚠ g
<b>96030136</b>	10710

## 87 Socket set 1/2"

in sturdy, stackable ABS plastic case,  
47 pieces  
Content:

- 19 sockets with bi-hexagon No 50:  
sizes 8; 9; 10; 11; 12; 13; 14;  
15; 16; 17; 18; 19; 21; 22; 24;  
27; 30; 32; 34 mm
- 2 sockets, long, with rubber insert,  
No 51: sizes 16 mm - 5/8";  
20.8 mm - 13/16"
- 7 INHEX sockets No 54:  
sizes 4; 5; 6; 7; 8; 10; 12 mm
- 13 combination spanners No 13:  
sizes 10; 11; 12; 13; 14; 15; 16;  
17; 18; 19; 21; 22; 24 mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm), No 509/5 (130 mm),  
No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	⚠ g
<b>9603 1101</b>	8059

## 876 Socket set 1/2"

in sturdy, stackable ABS plastic case,  
47 pieces  
Content:

- 19 sockets with hexagon No 52:  
sizes 8; 9; 10; 11; 12; 13; 14;  
15; 16; 17; 18; 19; 21; 22; 24;  
27; 30; 32; 34 mm
- 2 sockets, long, with rubber insert,  
No 51: sizes 16 mm - 5/8";  
20.8 mm - 13/16"
- 7 INHEX sockets No 54:  
sizes 4; 5; 6; 7; 8; 10; 12 mm
- 13 combination spanners No 13:  
sizes 10; 11; 12; 13; 14; 15; 16;  
17; 18; 19; 21; 22; 24 mm
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm), No 509/5 (130 mm),  
No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	⚠ g
<b>9603 2301</b>	8034

## 50TX/16/5 Socket set TORX® 1/2"

in sturdy, stackable ABS plastic case,  
21 pieces  
Content:

- 7 sockets for external TORX® screws  
No 50TX: sizes E10; E12; E14;  
E16; E18; E20; E24
- 9 screwdriver sockets for internal  
TORX® screws No 54TX:  
sizes T20; T25; T27; T30; T40;  
T45; T50; T55; T60
- 1 ratchet No 512
- 3 extensions No 509/2 (52 mm), No 509/5 (130 mm),  
No 509/10 (255 mm)
- 1 universal joint No 510



Code	⚠ g
<b>9603 3702</b>	4013

## 876TX Socket set TORX® 1/2"

in sturdy, stackable ABS plastic case,  
39 pieces  
Content:

- 12 sockets with hexagon No 52:  
sizes 8; 10; 13; 16; 17; 18; 19;  
21; 22; 24; 27; 30 mm
- 6 INHEX sockets No 54:  
sizes 5; 6; 8; 10; 12; 14 mm
- 7 sockets for external TORX®  
screws No 50TX:  
sizes E10; E12; E14; E16; E18; E20; E24
- 9 screwdriver sockets for internal TORX® screws No 54TX:  
sizes T20; T25; T27; T30; T40; T45; T50; T55; T60
- 1 ratchet No 512
- 2 extensions No 509/5 (130 mm), No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	⚠ g
<b>9881 1909</b>	6574

3



### 89TX Socket set TORX® 1/4; 3/8; 1/2" □

in sturdy, stackable ABS plastic case,  
35 pieces

Content:

- 3 sockets for external TORX® screws  
No 40TX: sizes E4; E5; E6
- 2 screwdriver sockets for internal  
TORX® screws No 44KTX:  
sizes T8; T9
- 4 sockets for external TORX® screws  
No 45TX: sizes E7; E8; E10; E12
- 5 screwdriver sockets for internal TORX® screws No 49TX:  
sizes T10; T15; T20; T25; T27
- 6 sockets for external TORX® screws No 50TX:  
sizes E11; E14; E16; E18; E20; E24
- 6 screwdriver sockets for internal TORX® screws No 54TX:  
sizes T30; T40; T45; T50; T55; T60
- 7 bits ④ 1440: T10; 1441: T15; 1442: T20; 1443: T25; 1444: T27;  
1445: T30; 1446: T40
- 1 bit-holder No 442
- 1 TORX® controller: sizes E6; E7; E8; E10; E12; E14; E16; T10; T15; T20;  
T25; T27; T30; T40; T45; T47; T50; T55; T60



Code	ΔΔ g
<b>9881 1908</b>	2568

### 86TX Socket set TORX® 1/4; 1/2" □

in sturdy, stackable ABS plastic case,  
63 pieces

Content:

- 9 sockets with hexagon No 40:  
sizes 4; 5; 5.5; 6; 7; 8; 9; 10;  
11 mm
- 10 sockets with hexagon No 52:  
sizes 13; 16; 17; 18; 19; 21; 22;  
24; 27; 30 mm
- 5 sockets for external TORX® screws No 40TX:  
sizes E4; E5; E6; E7; E8
- 7 sockets for external TORX® screws No 50TX:  
sizes E10; E12; E14; E16; E18; E20; E24
- 3 INHEX sockets No 44: sizes 3; 4; 5 mm
- 5 INHEX sockets No 54: sizes 6; 8; 10; 12; 14 mm
- 6 screwdriver sockets for internal TORX® screws No 44KTX:  
sizes T8; T9; T10; T15; T20; T25
- 7 screwdriver sockets for internal TORX® screws No 54TX:  
sizes T27; T30; T40; T45; T50; T55; T60
- 2 ratchets No 415, No 512
- 4 extensions No 405/2 (54 mm), No 509/5 (130 mm),  
No 405/6 (150 mm), No 509/10 (255 mm)
- 2 universal joints No 407, No 510
- 1 drive handle No 400
- 2 T-handles No 404, No 506



Code	ΔΔ g
<b>9601 3702</b>	6734

### 50a/17/6 Socket set 1/2" □

in sturdy, stackable ABS plastic case,  
23 pieces

Content:

- 17 sockets with bi-hexagon No 50a:  
sizes 3/8; 7/16; 1/2; 9/16; 19/32; 5/8;  
11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1;  
1 1/16; 1 1/8; 1 3/16; 1 1/4"
- 1 ratchet No 512
- 3 extensions No 509/2 (52 mm),  
No 509/5 (130 mm), No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	ΔΔ g
<b>9603 5125</b>	5015

### 50ma/39/6N Socket set 1/2" □

in sturdy sheet steel case,  
45 pieces

Content:

- 39 sockets with bi-hexagon  
No 50: sizes 10; 11; 12; 13; 14;  
15; 16; 17; 18; 19; 20;  
21; 22; 23; 24; 25; 26;  
27; 28; 30; 32; 34 mm
- No 50a: sizes 3/8; 7/16; 1/2; 9/16; 19/32; 5/8; 11/16; 3/4; 25/32; 13/16; 7/8; 15/16; 1;  
1 1/16; 1 1/8; 1 3/16; 1 1/4"
- 1 ratchet No 512
- 3 extensions No 509/3 (75 mm), No 509/5 (130 mm),  
No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	ΔΔ g
<b>9603 0140</b>	9020

### 87a Socket set 1/2" □

in sturdy, stackable ABS plastic case,  
40 pieces

Content:

- 15 sockets with bi-hexagon No 50a:  
sizes 3/8; 7/16; 1/2; 9/16; 5/8; 11/16;  
3/4; 13/16; 7/8; 15/16; 1; 1 1/16; 1 1/8;  
1 3/16; 1 1/4"
- 2 sockets, long, with rubber insert,  
No 51: sizes 16 mm - 5/8";  
20.8 mm - 13/16"
- 5 INHEX sockets No 54a:  
sizes 7/32; 1/4; 5/16; 3/8; 1/2 "
- 12 combination spanners No 13a:  
sizes 1/4; 5/16; 11/32; 3/8; 7/16; 1/2;  
9/16; 5/8; 11/16; 3/4; 13/16; 7/8"
- 1 ratchet No 512
- 3 extensions No 509/2 (52 mm), No 509/5 (130 mm),  
No 509/10 (255 mm)
- 1 T-handle No 506
- 1 universal joint No 510



Code	ΔΔ g
<b>9603 5101</b>	7219

## Sockets, Socket Sets

12.5  
1/2"

DIN  
3120

ISO  
1174-1

### ES 1/2"-512/6



175 x 350 x 35 mm, 6 pieces

Code		$\Delta$ g
<b>96838113</b>		1915
<b>No 506</b>	1/2" ■ 300 mm	
<b>No 509/2</b>	1/2" ■ ○ 52 mm	
<b>No 509/5</b>	1/2" ■ ○ 130 mm	
<b>No 509/10</b>	1/2" ■ ○ 255 mm	
<b>No 510</b>	1/2" ■ ○ 71 mm	
<b>No 512</b>	1/2" ■	
<b>83812029</b>	Empty tray	110

### TCS 1/2"-512/6



175 x 350 x 35 mm, 6 pieces

Code		$\Delta$ g
<b>96838175</b>		1845
<b>No 506</b>	1/2" ■ 300 mm	
<b>No 509/2</b>	1/2" ■ ○ 52 mm	
<b>No 509/5</b>	1/2" ■ ○ 130 mm	
<b>No 509/10</b>	1/2" ■ ○ 255 mm	
<b>No 510</b>	1/2" ■ ○ 71 mm	
<b>No 512</b>	1/2" ■	

### TCS 1/2"-512/9



175 x 350 x 40 mm, 9 pieces

Code		$\Delta$ g
<b>96830603</b>		2364
<b>No 506</b>	1/2" ■ 300 mm	
<b>No 509QR/2</b>	1/2" ■ ○ 52 mm	
<b>No 509/5</b>	1/2" ■ ○ 130 mm	
<b>No 509QR/10</b>	1/2" ■ ○ 255 mm (2x)	
<b>No 510</b>	1/2" ■ ○ 71 mm	
<b>No 512</b>	1/2" ■	
<b>No 513</b>	3/8" ■ 1/2" ○	
<b>No 514</b>	3/4" ■ 1/2" ○	

### TCS 50/52/30/6 MF



350 x 350 x 70 mm, 36 pieces

Code		$\Delta$ g
<b>96830354</b>		4604
<b>No 50</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 30 mm	
<b>No 52</b>	1/2" ○ sizes 12; 13; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32; 34 mm	
<b>No 54</b>	1/2" ○ sizes 5; 6; 7; 8; 10; 12 mm	
<b>No 506</b>	1/2" ■ 300 mm	
<b>No 509/5</b>	1/2" ■ ○ 130 mm	
<b>No 509/10</b>	1/2" ■ ○ 255 mm	
<b>No 510</b>	1/2" ■ ○ 71 mm	
<b>No 512</b>	1/2" ■	
<b>No 513</b>	3/8" ■ 1/2" ○	

### TCS 52/14/4



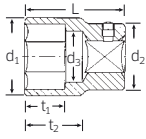
175 x 350 x 50 mm, 18 pieces

Code		$\Delta$ g
<b>96838781</b>		2510
<b>No 52</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 22; 24; 27; 30 mm	
<b>No 509/5</b>	1/2" ■ ○ 130 mm	
<b>No 509/10</b>	1/2" ■ ○ 255 mm	
<b>No 510</b>	1/2" ■ ○ 71 mm	
<b>No 512</b>	1/2" ■	

## 55 Sockets



DIN 3124/ISO 2725-1, ASME B 107.5 M, AS-drive and HPQ® high performance steel up to size 38, chrome plated.

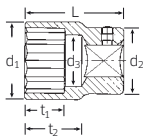


Code	Ø mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δ g	☐
05 01 00 19	19	28.5	34.7	17	50	16	26	183	5
05 01 00 21	21	31	34.7	18	50	16	26	226	5
05 01 00 22	22	32	34.7	19	51	17	25.2	199	5
05 01 00 24	24	34	34.7	21	51	18.5	24.6	200	5
05 01 00 27	27	38.5	38	24	54	20	26.8	263	5
05 01 00 30	30	42	38	27	58	21	33.6	313	5
05 01 00 32	32	44.5	38	29	58	22	33	326	2
05 01 00 33	33	46	40	30	60	22	34.7	372	2
05 01 00 34	34	47	40	31	60	24	34.4	363	2
05 01 00 36	36	49.5	40	33	60	24	33.9	386	2
05 01 00 38	38	52	40	35	64	30	37.3	429	2
05 01 00 41	41	55.5	40	33	67	30	37.5	498	2
05 01 00 46	46	61	40	33	73	34	43.5	605	1
05 01 00 50	50	66	40	33	80	34	48.5	769	1
05 01 00 55	55	72	45	33	80	36	49.5	954	1
05 01 00 60	60	78	45	33	80	40	50.5	1025	1

## 55a Sockets



SAE AS 954-E (test loads), ASME B 107.1, AS-drive and HPQ® high performance steel up to size 1 1/2", chrome plated.

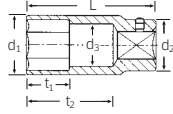


Code	Ø"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δ g	☐
05 41 00 40	3/4	28.5	34.7	18.6	50	16	26	176	2
05 41 00 42	13/16	31	34.7	19.4	51	16.5	25.1	190	2
05 41 00 44	7/8	33	34.7	21	51	18	24.5	240	2
05 41 00 46	15/16	34	34.7	22.5	51	18.5	24.2	248	2
05 41 00 48	1	37	38	24	52	20	24.8	251	2
05 41 00 50	1 1/16	38.5	38	26	54	20	26.2	265	2
05 41 00 52	1 1/8	41	38	27.5	57	20	32.5	297	2
05 41 00 56	1 1/4	44.5	38	30.5	58	22	32.6	339	2
05 41 00 58	1 5/16	46.5	40	32.1	59	24	33.1	368	2
05 41 00 60	1 3/8	48.5	40	33.7	59	24	32.7	375	2
05 41 00 62	1 7/16	50	40	35.3	60	27	33.2	395	2
05 41 00 64	1 1/2	52	40.5	36.8	64	30	36.8	415	2
05 41 00 66	1 5/8	56	40	33	67	30	37.5	469	1
05 41 00 67	1 11/16	58	40	33	70	32	40.5	524	1
05 41 00 68	1 3/4	59.5	40	33	70	32	40.5	524	1
05 41 00 69	1 13/16	61.5	40	33	73	34	43.5	585	1
05 41 00 70	1 7/8	63.5	40	33	76	34	45	651	1
05 41 00 72	2	67	40	33	80	34	48.5	757	1

## 56 Sockets



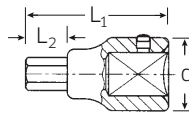
DIN 3124/ISO 2725-1, ASME B 107.5 M, extra deep, AS-drive and HPQ® high performance steel up to size 36, chrome plated.



Code	Ø mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	Δ g	☐
05 02 00 22	22	32	34.7	19	90	40	64.2	374	5
05 02 00 24	24	34	34.7	21	90	40	63.6	341	5
05 02 00 27	27	38.5	38	24	90	40	62.8	443	5
05 02 00 30	30	42	38	27	90	40	65.6	477	5
05 02 00 32	32	44.5	38	29	90	40	65	526	2
05 02 00 34	34	47	40	31	90	40	64.4	562	2
05 02 00 36	36	49.5	40	33	90	40	63.9	620	2
05 02 00 41	41	55.5	40	38	90	40	58.5	714	2

## 59 INHEX sockets

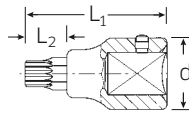
for socket head screws, DIN 7422, Chrome Alloy Steel, chrome plated.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	Δ g	☐
05 05 00 14	14	80	25	34.7	272	1
05 05 00 17	17	80	25	34.7	311	1
05 05 00 19	19	80	25	34.7	346	1
05 05 00 22	22	80	25	40	515	1

## 59X Screwdriver sockets

for trisquare socket head screws (XZN®), Chrome Alloy Steel, chrome plated.

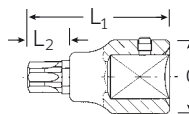


Code	size	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	Δ g	☐
05 06 00 14	M14	90	35	34.7	281	1
05 06 00 16	M16	80	25	34.7	302	1
05 06 00 18	M18	100	45	34.7	315	1

Application: Flywheel and oscillation damper on Mercedes-Benz commercial vehicles

## 59TX Screwdriver sockets

for inside TORX® screws, Chrome Alloy Steel, chrome plated.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	Δ g	☐
05 10 00 60	T60	13.2	80	25	34.7	265	1
05 10 00 70	T70	15.5	80	25	34.7	285	1
05 10 00 80	T80	17.6	80	25	34.7	300	1
05 10 00 90	T90	19.9	80	25	34.7	331	1
05 10 01 00	T100	22.1	80	25	40	474	1

Application: size T80 for MAN series M, size T100 for MAN series F

20  
3/4"

DIN  
3120

ISO  
1174-1

3

# Sockets, Socket Sets

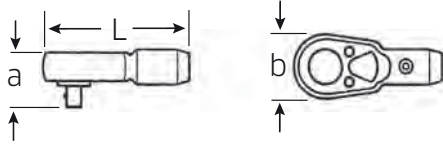
20  
3/4"

DIN  
3120

ISO  
1174-1

## Drive tools and accessories

3/4" □, finish: Chrome Alloy Steel, chrome plated.



### 552 Ratchet



reversible, 36 teeth, with QuickRelease safety lock, without Bar handle No 558.



Code	L mm	b mm	a mm	△g	g	☐
15 11 0000	165	70	55	1670		1

### 5520 Spare parts set for ratchet No 552

Content:  
1 pinion, 1 pawl, 1 lever, 1 ball, 1 compression spring, 2 screws

Code	△g	g	☐
19 05 0000	536		1

### 563 Ratchet adaptor

reversible, 44 teeth.



Code	L mm	∅ mm	△g	g	☐
15 14 0000	105.5	63	1257		1

### 554 Flexible head



with QuickRelease safety lock, without Bar handle No 558.



Code	L mm	d mm	△g	g	☐
15 06 0000	132	40	795		5

### 556 Sliding head

without Bar handle No 558.



Code	L mm	d mm	△g	g	☐
15 07 0000	61.5	40	318		5

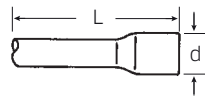
### 558 Bar handle



Code	L mm	d mm	△g	g	☐
15 17 0000	510	20	1259		2

### 559 Extensions

DIN 3123/ISO 3316.



Code	size	L mm	d mm	△g	g	☐
15 01 0003	4	95	35	369		5
15 01 0001	8	200	35	696		5
15 01 0002	16	400	35	1255		5

### 561 Universal joint

DIN 3123/ISO 3316.



Code	L mm	d mm	△g	g	☐
15 02 0000	109	40	566		1

### 568 Adaptor



3/4" socket x 1/2" plug (20 x 12.5), maximum torque 512 N·m, DIN 3123/ISO 3316, HPQ® high performance steel.



Code	L mm	d mm	△g	g	☐
15 03 0003	55	34.7	203		5

### 569 Adaptor



3/4" inside x 1" plug (20 x 25), DIN 3123/ISO 3316, HPQ® high performance steel.



Code	L mm	d mm	△g	g	☐
15 03 0006	61	34.7	295		5

### 55/10/6 Socket set 3/4" □

in sturdy sheet steel case,

16 pieces

Content:

- 10 sockets with hexagon No 55: sizes 22; 24; 27; 30; 32; 34; 36; 41; 46; 50 mm
- 1 ratchet No 552
- 2 extensions No 559/8 (200 mm), No 559/16 (400 mm)
- 1 flexible head No 554
- 1 sliding head for T-handle No 556
- 1 bar handle No 558



Code	△g	g
96 05 01 04	13965	



### 55/9/6N Socket set 3/4"

in sturdy sheet steel case,  
15 pieces  
Content:  
9 sockets with hexagon No 55:  
sizes 32; 34; 36; 38; 41; 46; 50;  
55; 60 mm  
1 ratchet No 552  
2 extensions No 559/8 (200 mm),  
No 559/16 (400 mm)  
1 flexible head No 554  
1 sliding head for T-handle No 556  
1 bar handle No 558



Code	Δg
<b>96 05 01 03</b>	15731

### 55a/10/5 Socket set 3/4"

in sturdy sheet steel case,  
15 pieces  
Content:  
10 sockets with bi-hexagon  
No 55a: sizes 1 1/16; 1 1/8; 1 1/4;  
1 3/8; 1 7/16; 1 1/2; 1 5/8; 1 3/4;  
1 13/16; 1 7/8"  
1 ratchet No 552  
2 extensions  
No 559/8 (200 mm), No 559/16 (400 mm)  
1 sliding head for T-handle No 556  
1 bar handle No 558



Code	Δg
<b>96 05 41 01</b>	12620

### 55a/16/6 Socket set 3/4"

in sturdy sheet steel case,  
22 pieces  
Content:  
16 sockets with bi-hexagon No 55a:  
sizes 7/8; 15/16; 1; 1 1/16; 1 1/8;  
1 1/4; 1 5/16; 1 3/8; 1 7/16; 1 1/2;  
1 5/8; 1 11/16; 1 3/4; 1 13/16; 1 7/8; 2"  
1 ratchet No 552  
2 extensions No 559/8 (200 mm),  
No 559/16 (400 mm)  
1 flexible head No 554  
1 sliding head for T-handle No 556  
1 bar handle No 558



Code	Δg
<b>96 05 41 03</b>	16750

### ES 55/6/4



530 x 350 x 83 mm, 10 pieces

Code	Δg
<b>96 83 81 74</b>	7875
<b>No 55</b>	3/4" <input type="checkbox"/> sizes 34; 36; 41; 46; 50; 55 mm
<b>No 552</b>	3/4" <input type="checkbox"/>
<b>No 556</b>	3/4" <input type="checkbox"/>
<b>No 558</b>	510 mm
<b>No 559/8</b>	3/4" <input type="checkbox"/> <input type="checkbox"/> 200 mm
<b>83 81 20 89</b>	Empty tray 298

### TCS 55/11/6



530 x 350 x 90 mm, 17 pieces

Code	Δg
<b>96 83 02 21</b>	10100
<b>No 55</b>	3/4" <input type="checkbox"/> sizes 22; 24; 27; 30; 32; 34; 36; 38; 41; 46; 50 mm
<b>No 552</b>	3/4" <input type="checkbox"/>
<b>No 556</b>	3/4" <input type="checkbox"/>
<b>No 558</b>	510 mm
<b>No 559/8</b>	3/4" <input type="checkbox"/> <input type="checkbox"/> 200 mm
<b>No 559/16</b>	3/4" <input type="checkbox"/> <input type="checkbox"/> 400 mm
<b>No 568</b>	1/2" <input type="checkbox"/> 3/4" <input type="checkbox"/>

## STAHLWILLE »AS-Drive«



STAHLWILLE sockets are equipped with the AS-Drive\* profile: this permits high transmission of forces to the lands of nuts and bolts without damaging them. No longer will you have to worry about stripping the corners off nuts and bolts.

\*Anti-Slip-Drive

# Sockets, Socket Sets

25  
1"

DIN  
3120

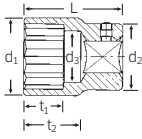
ISO  
1174-1

3

## 60 Sockets



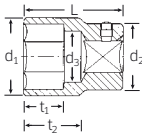
DIN 3124/ISO 2725-1, AS-drive and HPQ® high performance steel up to size 36, chrome plated.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	
06 01 00 30	30	42.5	43	27	65	20	33.1	371	2
06 01 00 32	32	45	43	29	67	24	34.6	374	2
06 01 00 34	34	47	43	31	67	24	34	398	2
06 01 00 36	36	49.5	48	33	67	24	33.4	493	2
06 01 00 41	41	55.5	48	36	70	30	37.5	520	1
06 01 00 46	46	61	49	40	75	32	43.5	622	1
06 01 00 50	50	66	48	43	80	34	47.5	707	1
06 01 00 55	55	72	48	49	85	36	49.5	920	1
06 01 00 60	60	78	48	53	90	40	56.5	992	1

## 60 Sockets

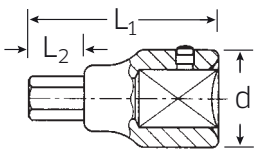
DIN 3124, Chrome Alloy Steel, chrome plated.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	g	
06 01 00 65	65	87	60	58	105	40	68.5	1917	1
06 01 00 70	70	94	60	63	110	42	72.5	2210	1
06 01 00 75	75	101	60	68	115	45	78.5	2525	1
06 01 00 80	80	108	60	73	120	48	83.5	2865	1

## 64 IN HEX sockets

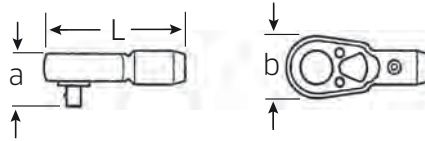
DIN 7422, Chrome Alloy Steel, chrome plated.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	
06 05 00 14	14	85	25	43	390	1
06 05 00 17	17	85	25	43	417	1
06 05 00 19	19	85	25	43	445	1
06 05 00 22	22	90	25	48	661	1
06 05 00 24	24	90	25	48	719	1
06 05 00 27	27	90	25	49	827	1

## Drive tools and accessories

1" □, finish: Chrome Alloy Steel, chrome plated.



## 882 Ratchet



reversible, 36 teeth, with QuickRelease safety lock, without Bar handle No 888.



Code	L mm	b mm	a mm	g	
16 11 00 00	185	70	60	1984	1

## 8820 Spare parts set for ratchet No 882

Content:

1 pinion, 1 pawl, 1 lever, 1 ball, 1 compression spring, 2 screws

Code	g	
19 07 00 00	609	1

## 884 Flexible head



with QuickRelease safety lock, without Bar handle No 888.



Code	L mm	d mm	g	
16 06 00 00	195	48	1848	1

## 886 Sliding head

without Bar handle No 888.



Code	L mm	d mm	g	
16 07 00 00	80	48	616	1

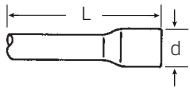
## 888 Bar handle



Code	L mm	d mm	g	
16 17 00 00	700	28	3337	1

### 859 Extensions

DIN 3123/ISO 3316.



Code	size	L mm	d mm	$\Delta$ g	
<b>16010001</b>	<b>8</b>	200	43	1004	2
<b>16010002</b>	<b>16</b>	410	43	1794	2

### 866 Adaptor



1" socket x 3/4" plug (25 x 20),  
maximum torque 1412 N·m,  
DIN 3123/ISO 3316, HPQ® high performance steel.



Code	L mm	d mm	$\Delta$ g	
<b>16030005</b>	70	43	347	2

### 60/6/6/882 Socket set 1"

in sturdy sheet steel case,  
12 pieces  
Content:  
6 sockets with bi-hexagon No 60:  
sizes 36; 41; 46; 50; 55; 60 mm  
1 ratchet No 882  
2 extensions No 859/8 (200 mm),  
No 859/16 (410 mm)  
1 flexible head No 884  
1 sliding head for T-handle No 886  
1 bar handle No 888



Code	$\Delta$ g
<b>96060101</b>	19720

### 60/8/6/882 Socket set 1"

in sturdy sheet steel case,  
14 pieces  
Content:  
4 sockets with bi-hexagon No 60:  
sizes 46; 50; 55; 60 mm  
4 sockets with hexagon No 60:  
sizes 65; 70; 75; 80 mm  
1 ratchet No 882  
2 extensions No 859/8 (200 mm), No 859/16 (410 mm)  
1 flexible head No 884  
1 sliding head for T-handle No 886  
1 bar handle No 888

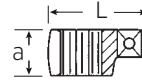
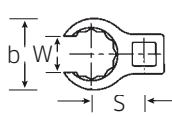


Code	$\Delta$ g
<b>96060103</b>	30000

### 440 CROW-RING spanners



Caution! Modified settings on torque wrench (refer to note on page 189).  
Chrome Alloy Steel, chrome plated.



Code	$\Delta$ mm	"	L mm	b mm	a mm	S mm	W mm	$\Delta$ g	
<b>01190008</b>	<b>8</b>	1/4	23.8	12.7	8	12.3	6.3	11	1
<b>01190009</b>	<b>9</b>	1/4	28.5	18.2	13.5	14	6.7	21	1
<b>01190010</b>	<b>10<sup>1)</sup></b>	1/4	28.4	18.2	13.5	14	7.1	16	1
<b>01190011</b>	<b>11</b>	1/4	28	18.2	13.5	14	8.6	17	1
<b>01190012</b>	<b>12<sup>1)</sup></b>	1/4	30.8	20.6	14	15.7	9	20	1
<b>01190013</b>	<b>13</b>	1/4	32	22.2	14	16.4	10	30	1
<b>01190014</b>	<b>14<sup>1)</sup></b>	1/4	31.7	22.2	14	16.4	11.1	20	1
<b>02190015</b>	<b>15</b>	3/8	36.5	24.6	17.5	19.1	11.9	34	1
<b>02190016</b>	<b>16</b>	3/8	36.1	24.6	17.5	19.1	13	27	1
<b>02190017</b>	<b>17<sup>2)</sup></b>	3/8	39.2	27.3	17.5	20.5	14	40	1
<b>02190018</b>	<b>18</b>	3/8	40.8	29	18.5	21.3	14.8	45	1
<b>02190019</b>	<b>19<sup>2)</sup></b>	3/8	40.5	29	18.5	21.3	15.8	40	1
<b>02190020</b>	<b>20</b>	3/8	42.9	31.3	18.5	22.5	15.8	54	1
<b>02190021</b>	<b>21</b>	3/8	42.8	31.3	18.5	22.5	16.2	45	1
<b>02190022</b>	<b>22<sup>2)</sup></b>	3/8	45.3	33.5	19	23.6	17	57	1
<b>02190023</b>	<b>23</b>	3/8	47.5	35.7	19.5	24.6	17.5	71	1
<b>02190024</b>	<b>24<sup>2)</sup></b>	3/8	47.3	35.7	19.5	24.6	18	57	1
<b>02190025</b>	<b>25</b>	3/8	49.3	37.7	20	25.7	19	80	1
<b>02190026</b>	<b>26</b>	3/8	49.3	37.7	20	25.7	19	63	1
<b>02190027</b>	<b>27</b>	3/8	52.8	40	21.4	28.2	20	100	1
<b>02191027</b>	<b>27MB<sup>3)</sup></b>	3/8	57.1	42.1	15	29.3	20	92	1
<b>03190028</b>	<b>28</b>	1/2	56.8	42.1	22.5	29.3	21	120	1
<b>03190030</b>	<b>30</b>	1/2	63	48	22.5	32.5	22	155	1
<b>03190032</b>	<b>32</b>	1/2	62.5	48	22.5	32.5	24	145	1
<b>03190034</b>	<b>34</b>	1/2	64.2	50	24	33.5	27	146	1
<b>03190036</b>	<b>36</b>	1/2	66.5	51.9	24	34.6	27	150	1
<b>03190038</b>	<b>38</b>	1/2	68.1	53.9	24	35.6	28.6	147	1
<b>03190040</b>	<b>40</b>	1/2	71.8	57.9	24.5	37.7	31	160	1
<b>03190041</b>	<b>41</b>	1/2	71.8	57.9	24.5	37.7	31	169	1
<b>03190042</b>	<b>42</b>	1/2	71	57.9	24.5	37.7	33.2	189	1
<b>03190046</b>	<b>46</b>	1/2	77.7	64.2	26	40.9	34.1	215	1
<b>03190050</b>	<b>50</b>	1/2	83.2	70.5	27.5	44.1	39.7	295	1

<sup>1)</sup> For union nuts on fuel injection leads on 4-cylinder Mercedes-Benz diesel engines

<sup>2)</sup> For use on suction or pressure lines within expansion valve of air conditioning unit (Mercedes-Benz)

<sup>3)</sup> Slim-line version for setting of electronic injection on 440-HP-engines Mercedes-Benz series OM 442

# Sockets, Socket Sets

6.3  
1/4"

10  
3/8"

12.5  
1/2"

DIN  
3120

ISO  
1174-1

3

## 440a CROW-RING spanners

Code	⌀ "	⌀ "	L mm	b mm	a mm	S mm	W mm	Δ g	
01 49 00 24	3/8 <sup>1)</sup>	1/4	28.4	18.2	13.5	14	7.1	16	1
01 49 00 28	7/16	1/4	28	18.2	13.5	14	8.6	14	1
01 49 00 32	1/2	1/4	30.5	20.6	14	15.7	10	19	1
01 49 00 34	9/16	1/4	31.7	22.2	14	16.4	11.1	23	1
02 49 00 36	5/8	3/8	36.5	24.6	17.5	19.1	11.9	33	1
02 49 00 38	11/16	3/8	39.2	27.3	17.5	20.5	14	36	1
02 49 00 40	3/4	3/8	40.9	29	18.5	21.3	14.2	44	1
02 49 00 42	13/16	3/8	42.9	31.3	18.5	22.5	15.8	51	1
02 49 00 44	7/8	3/8	45.2	33.5	19	23.6	17.5	62	1
02 49 00 46	15/16	3/8	47.2	35.7	19.5	24.6	18.3	63	1
02 49 00 48	1	3/8	49.3	37.7	20	25.7	19	71	1
02 49 00 50	1 1/16	3/8	52.8	40	21.4	28.2	20	84	1
03 49 00 52	1 1/8	1/2	56.8	42.1	22.5	29.3	21	110	1
03 49 00 56	1 1/4	1/2	62.5	48	22.5	32.5	23.8	137	1
03 49 00 58	1 5/16	1/2	62.3	48	22.5	32.5	24.6	130	1
03 49 00 60	1 3/8	1/2	64.2	50	24	33.5	27	138	1
03 49 00 62	1 7/16	1/2	66.5	51.9	24	34.6	27	143	1
03 49 00 64	1 1/2	1/2	68.1	53.9	24	35.6	28.6	152	1
03 49 00 65	1 9/16	1/2	70.1	55.9	24	36.7	29.4	172	1
03 49 00 66	1 5/8	1/2	71.8	57.9	24.5	37.7	31	169	1
03 49 00 68	1 3/4	1/2	75.6	62	25.5	39.8	33.2	199	1
03 49 00 69	1 13/16	1/2	77.7	64.2	26	40.9	34.1	229	1
03 49 00 72	2	1/2	83.2	70.5	27.5	44.1	39.7	277	1
03 49 00 76	2 1/4	1/2	91.2	78.7	29.5	48.2	42.8	337	1
03 49 00 77	2 5/16	1/2	93.3	80.9	30	49.2	43.6	309	1
03 49 00 78	2 3/8	1/2	95.2	83	30.5	50.2	46	385	1

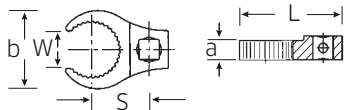
<sup>1)</sup> For Volvo aero-engines, types "JAS"

## 440S MJ CROW-RING spanners



Supersedes No 440 MJ

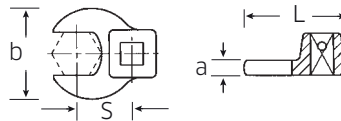
Caution! Modified settings on torque wrench (refer to note on page 189), EN 4108, for pipe unions with straight cylindrical involute toothing, HPO® high performance steel, chrome plated.



Code	Threaded nut	⌀ mm	⌀ "	L mm	b mm	a mm	S mm	W mm	Δ g	
01 21 10 10 MJ10	DN04	1/4	31.9	22	8	17	6.5	54	1	
01 21 10 14 MJ14	DN06	1/4	36.5	27	8	19.5	8.5	29	1	
02 21 10 16 MJ16	DN08	3/8	43.8	31	8	24	10.5	47	1	
02 21 10 18 MJ18	DN10	3/8	45.2	33	8	25	13	45	1	
02 21 10 20 MJ20	DN12	3/8	46.2	35	8	26	15	49	1	
02 21 10 22 MJ22	DN14	3/8	48.4	37	9	27	17.5	54	1	
02 21 10 24 MJ24	DN16	3/8	49.5	39	9	28	19.7	56	1	
02 21 10 27 MJ27	DN18	3/8	54.4	44	10	31	21.5	70	1	
02 21 10 30 MJ30	DN20	3/8	60.8	50	10	36	23.7	93	1	

## 540 CROW-FOOT spanners

Caution! Modified settings on torque wrench (refer to note on page 189), Chrome Alloy Steel, chrome plated.



Code	⌀ mm	⌀ "	L mm	b mm	a mm	S mm	Δ g	
01 20 00 08	8	1/4	25.5	19.8	6.3	14.6	19	1
01 20 00 09	9	1/4	25.5	19.8	6.3	14.6	21	1
01 20 00 10	10	1/4	25.5	19.8	6.3	14.6	20	1
02 20 00 11	11	3/8	32	22.2	6.3	17.4	36	1
02 20 00 12	12	3/8	34.3	25.4	6.3	18.2	37	1
02 20 00 13	13	3/8	34.3	25.4	6.3	17.8	36	1
02 20 00 14	14	3/8	37.7	30	6.3	20.8	46	1
02 20 00 15	15	3/8	37.7	30	6.3	20.4	45	1
02 20 00 16	16	3/8	37.7	30	6.3	19.9	45	1
02 20 00 17	17	3/8	42.5	38	6.3	23.8	62	1
02 20 00 18	18	3/8	42.5	38	6.3	22.9	61	1
02 20 00 19	19	3/8	42.5	38	6.3	22.4	64	1
02 20 00 20	20	3/8	42.4	38	6.3	25	55	1
02 20 00 21	21	3/8	44.5	41	6.3	23.6	59	1
02 20 00 22	22	3/8	44.5	41	6.3	24.2	64	1
02 20 00 23	23	3/8	44.5	41	6.3	25.8	64	1
02 20 00 24	24	3/8	44.4	41	6.3	26.2	60	1
02 20 00 25	25	3/8	47	45	8	26.4	75	1
02 20 00 26	26	3/8	47	45	8	27.6	80	1
02 20 00 27	27	3/8	47	45	8	27.6	76	1
02 20 00 28	28	3/8	50	50	8	29.3	78	1
02 20 00 30	30	3/8	50	50	8	29.3	84	1
02 20 00 32	32	3/8	53	57	8	30.5	95	1
02 20 00 34	34	3/8	54.5	60	8	31.6	107	1
02 20 00 36	36	3/8	56.5	62	8	32.8	100	1
02 20 00 40	40	3/8	63	70	8	37.6	130	1
02 20 00 41	41	3/8	63	70	8	37.2	130	1
02 20 00 42	42	3/8	63	70	8	37.7	125	1
02 20 00 46	46	3/8	72	82	8	43.1	191	1
02 20 00 50	50	3/8	75	88	8	45.4	217	1

## 540a CROW-FOOT spanners

Code	⌀ mm	⌀ "	L mm	b mm	a mm	S mm	Δ g	
01 50 00 24	3/8	1/4	25.5	19.8	6.3	14.6	17	1
02 50 00 28	7/16	3/8	32	22.2	6.3	17.2	34	1
02 50 00 32	1/2	3/8	34.3	25.4	6.3	18.1	37	1
02 50 00 34	9/16	3/8	37.7	30	6.3	20.9	40	1
02 50 00 36	5/8	3/8	37.7	30	6.3	20.4	44	1
02 50 00 38	11/16	3/8	42.5	38	6.3	24.1	62	1
02 50 00 40	3/4	3/8	42.5	38	6.3	24	66	1
02 50 00 42	13/16	3/8	42.3	38	6.3	24	59	1
02 50 00 44	7/8	3/8	44.5	41	6.3	25.8	65	1
02 50 00 48	1	3/8	47	45	8	26.7	78	1
02 50 00 50	1 1/16	3/8	47	45	8	27.2	78	1
02 50 00 52	1 1/8	3/8	50	50	8	28.5	84	1
02 50 00 54	1 3/16	3/8	50	50	8	29.2	83	1
02 50 00 56	1 1/4	3/8	53	57	8	30.3	101	1
02 50 00 58	1 5/16	3/8	53	57	8	31.2	101	1
02 50 00 60	1 3/8	3/8	54.5	60	8	32.3	105	1
02 50 00 62	1 7/16	3/8	56.5	62	8	33.1	107	1
02 50 00 64	1 1/2	3/8	58	65	8	34.5	118	1
02 50 00 65	1 9/16	3/8	59.5	68	8	35.7	126	1
02 50 00 66	1 5/8	3/8	63	70	8	37.3	140	1
02 50 00 67	1 11/16	3/8	63	70	8	37.7	126	1
02 50 00 68	1 3/4	3/8	68	76	8	40.4	161	1
02 50 00 70	1 7/8	3/8	72	82	8	42	205	1
02 50 00 72	2	3/8	75	88	8	44.8	214	1
02 50 00 74	2 1/8	3/8	75.6	91	10	46	265	1
02 50 00 76	2 1/4	3/8	80.5	96	10	49.5	297	1
03 50 00 78	2 3/8	1/2	81.5	96	8	51.3	214	1



## 540a HD CROW-FOOT spanners Heavy Duty

for particularly high loadings, e.g. stainless steel screw fittings.  
Full use of jaws in conjunction with standard ratchets.  
Caution! Modified settings on torque wrench (refer to note on page 189),  
chrome plated. Supplied without ratchet.



Code	mm	"	L mm	b mm	a mm	S mm	g	g	g
02 50 10 34	9/16	3/8	43.4	32	11	26.8	52	1	
02 50 10 36	5/8	3/8	45	34.8	11	27.7	58	1	
02 50 10 38	11/16	3/8	47.2	38	11	28.6	69	1	
02 50 10 42	13/16	3/8	51	46.4	11	30.5	113	1	
02 50 10 44	7/8	3/8	52	48	11	31.3	99	1	
02 50 10 46	15/16	3/8	54	51.2	11	32.3	129	1	
02 50 10 48	1	3/8	56	53.4	11	33.2	133	1	
02 50 10 50	1 1/16	3/8	57	53.8	11	34.1	124	1	
02 50 10 52	1 1/8	3/8	59	53.8	11	35	128	1	
02 50 10 56	1 1/4	3/8	62	60	11	36.8	153	1	
02 50 10 62	1 7/16	3/8	66.5	66	11	39.6	172	1	
03 50 10 64	1 1/2	1/2	76	70	16	45	310	1	
03 50 10 69	1 13/16	1/2	85	84	16	49.6	400	1	
03 50 10 72	2	1/2	89	90	16	52.3	451	1	
03 50 10 74	2 1/8	1/2	91.5	92.8	16	54.2	460	1	
03 50 10 75	2 3/16	1/2	93	96	16	55.1	480	1	
03 50 10 76	2 1/4	1/2	95	99	16	56	500	1	

## 1225 Special extension

3/8" offset



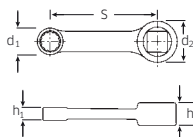
Code	L mm	d mm	g	g
12 25 0001	150	17	128	5



## 447 Adaptor

AS-drive HPQ

Caution! Modified settings on torque wrench (refer to note on page 189),  
American sizes: SAE AS 954-E, HPQ® high performance steel, gunmetal  
finish.



Code	mm	"	d1 mm	d2 mm	h1 mm	h2 mm	S mm	g	g
02 18 10 07	7	3/8	11.5	19	6	11	50.8	30	1
02 18 10 08	8	3/8	12.4	19	6	11	50.8	30	1
02 18 10 09	9	3/8	14	19	8	11	50.8	40	1
02 18 10 10	10	3/8	15.6	19	8	11	50.8	40	1
02 18 10 13	13	3/8	19.3	19	9.2	11	50.8	55	1

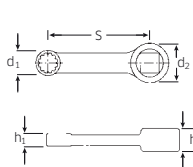
## 447a Adaptor

Code	mm	"	d1 mm	d2 mm	h1 mm	h2 mm	S mm	g	g
02 47 00 16	1/4	3/8	10.4	19	6	11	50.8	27	1
02 47 00 20	5/16	3/8	12.4	19	6	11	50.8	29	1
02 47 00 24	3/8	3/8	14.9	19	8	11	50.8	41	1
02 47 00 28	7/16	3/8	17	19	8	11	50.8	40	1
02 47 00 32	1/2	3/8	19	19	9.2	11	50.8	56	1
02 47 00 34	9/16	3/8	21	19	9.2	11	50.8	61	1
02 47 00 36	5/8	3/8	23	19	12	11	50.8	73	1

## 447aSP Spline-Drive adaptor

HPQ

Caution! Modified settings on torque wrench (refer to note on page 189),  
MS-33787, MIL-W-8982, HPQ® high performance steel, gunmetal finish.



Code	Spline size	mm	"	d1 mm	d2 mm	h1 mm	h2 mm	S mm	g	g
02 48 00 14	7	7/32	3/8	9.4	19	6	11	50.8	38	1
02 48 00 16	8	1/4	3/8	10.4	19	6	11	50.8	27	1
02 48 00 18	9	9/32	3/8	11.5	19	6	11	50.8	29	1
02 48 00 20	10	5/16	3/8	12.4	19	6	11	50.8	29	1
02 48 00 24	12	3/8	3/8	14.9	19	8	11	50.8	40	1
02 48 00 28	14	7/16	3/8	17	19	9.2	11	50.8	39	1
02 48 00 32	16	1/2	3/8	19	19	9.2	11	50.8	59	1
02 48 00 34	18	9/16	3/8	21	19	9.2	11	50.8	55	1
02 48 00 36	20	5/8	3/8	23	19	12	11	50.8	74	1

10  
3/8"

12.5  
1/2"

DIN  
3120

ISO  
1174-1

3

## Empty boxes and trays

No	Box No	mm	Box Code	Tray Code	No	Box No	mm	Box Code	Tray Code
40/9/4, 40D/9/4	40/9KN	227x131x57	81 25 10 19	83 01 30 12*	45a/22/8QR	50/4KN	454x253x64	81 27 10 34	83 02 21 12*
40/13/6	40/9KN	227x131x57	81 25 10 19	83 01 20 80*	45a/33/13	50/5	530x265x50	81 27 00 05	83 02 02 13
40/13/6QR	40/9KN	227x131x57	81 25 10 19	83 01 21 82*	52/9/3	50/3KN	413x226x64	81 27 10 13	83 03 14 25*
40/44/17/5	40/9KN	227x131x57	81 25 10 19	83 01 20 81*	50/12/3, 52/12/3	50/3KN	413x226x64	81 27 10 13	83 03 14 12*
40/44/17/5QR	40/9KN	227x131x57	81 25 10 19	83 02 20 84*	54/10	40/9KN	227x131x57	81 25 10 19	83 03 24 03*
40/23/7, 40D/23/7	45/1KN	322x134x57	81 26 10 11	83 01 20 16*	54/12	45/1KN	322x134x57	81 26 10 11	83 03 44 09*
40/23/6N, 40D/23/6	40/9KN	227x131x57	81 25 10 19	83 01 20 14*	54CV/9	40/9KN	227x131x57	81 25 10 19	83 03 34 09*
40/24/6	40/9KN	227x131x57	81 25 10 19	83 01 20 82*	3054X/54X/8	40/9KN	227x131x57	81 25 10 19	83 03 36 12*
40/24/6QR	40/9KN	227x131x57	81 25 10 19	83 01 20 83*	54/8/4	40/7KN	413x230x57	81 25 10 14	83 03 34 13*
40ma/25/8	45/1KN	322x134x57	81 26 10 11	83 01 20 35*	52/16/5	50/4KN	454x253x64	81 27 10 34	83 03 54 09*
40/45/36/12	40/7KN	413x230x57	81 25 10 14	83 01 20 11*	50/16/6, 52/16/6	50/4KN	454x253x64	81 27 10 34	83 03 24 80*
40/52/27/11	50/4KN	454x253x64	81 27 10 34	83 01 20 04*	52/16/6QR	50/4KN	454x253x64	81 27 10 34	83 03 24 81*
40TX/44KTX/15/6	40/9KN	227x131x57	81 25 10 19	83 01 20 07*	50/22/6, 52/22/6	50/4KN	454x253x64	81 27 10 34	83 03 14 07*
88TX	45/1KN	322x134x57	81 26 10 11	83 02 20 17*	50ma/39/6N	50/5	530x265x50	81 27 00 05	83 03 14 26
89TX	40/7KN	413x230x57	81 25 10 14	83 09 20 13*	50/54/25/6, 52/54/25/6	50/4KN	454x253x64	81 27 10 34	83 03 24 17*
86TX	50/6KN	481x288x82	81 27 10 19	83 01 20 02*	50/43/7	50/5	530x265x50	81 27 00 05	83 03 05 11
40a/9/4, 40aD/9/4	40/9KN	227x131x57	81 25 10 19	83 01 20 13*	87, 876	50/6KN	481x288x82	81 27 10 19	83 09 30 11*
40aD/12/7QR	40/9KN	227x131x57	81 25 10 19	83 01 21 16*	50TX/7	-	-	-	83 06 00 09
40aD/30/7QR	40/7KN	413x230x57	81 25 10 14	83 01 21 12*	50TX/8	40/9KN	227x131x57	81 25 10 19	83 03 34 11*
40aD/8/1H	40/9KN	227x131x57	81 25 10 19	83 01 21 07*	54TX/9	-	-	-	83 06 00 10
4008/27/1R	45/1KN	322x134x57	81 26 10 11	83 18 10 02*	54TX/10	40/9KN	227x131x57	81 25 10 19	83 03 24 02*
45/11/4, 456/11/4	45/1KN	322x134x57	81 26 10 11	83 02 20 13*	54TX/59TX/12/1	40/7KN	413x230x57	81 25 10 14	83 06 10 12*
45/14/5i, 456/14/5i	45/1KN	322x134x57	81 26 10 11	83 02 20 80*	54TXB/9	-	-	-	83 06 00 10
45/14/5iQR	45/1KN	322x134x57	81 26 10 11	83 02 20 81*	54TXB/10	40/9KN	227x131x57	81 25 10 19	83 03 24 02*
45/13/5, 456/13/5	45/1KN	322x134x57	81 26 10 11	83 02 20 45*	50TX/16/5	50/3KN	413x226x64	81 27 10 13	83 03 24 13*
45ma/28/5	40/7KN	413x230x57	81 25 10 14	83 02 20 27*	876TX	50/6KN	481x288x82	81 27 10 19	83 09 20 11*
45/49/19/5, 456/49/19/5	40/7KN	413x230x57	81 25 10 14	83 02 20 21*	50a/17/6	50/4KN	454x253x64	81 27 10 34	83 03 14 41*
89	50/6KN	481x288x82	81 27 10 19	83 02 11 18*	87a	50/6KN	481x288x82	81 27 10 19	83 09 10 12*
45/41/9	50/5	530x265x50	81 27 00 05	83 02 02 02	55/10/6	55/7	575x220x86	81 29 00 08	83 04 00 02
45TX/7	-	-	-	83 06 00 15	55/9/6N	55/7	575x220x86	81 29 00 08	83 04 00 01
49TX/8	-	-	-	83 06 00 14	55a/10/5	55/6	520x160x86	81 29 00 07	83 04 00 03
45TX/49TX/15/5	40/7KN	413x230x57	81 25 10 14	83 02 20 19*	55a/16/6	55/7	575x220x86	81 29 00 08	83 04 00 04
45/49/32/5TX	40/7KN	413x230x57	81 25 10 14	83 02 20 09*	60/6/6/882	60/1	785x173x90	81 30 00 01	-
45a/12/5	45/1KN	322x134x57	81 26 10 11	83 02 20 06*	60/8/6/882	60/2	785x200x122	81 30 00 02	-
45a/14/8QR	50/4KN	454x253x64	81 27 10 34	83 02 20 12*					

\* The code numbers of these inlays are applicable only to the new plastic cases.

 Made in  
Germany



**Do you need empty cases?**

If so, include the appropriate hard-foam inlays from STAHLWILLE in your order. Together with the new tool cases, they ensure an exact fit and, as a result, excellent protection for your tools.





## 4 | IMPACT SOCKETS, BITS

**IMPACT** SOCKETS,  
ADAPTORS AND SETS  
→ PAGE 158



**BITS** AND ACCESSORY TOOLS  
→ PAGE 166



**IMPACT** DRIVER AND SET  
→ PAGE 174





## IMPACT Sockets, Machine actuated. **STAHLWILLE IMPACT**

1

**Tried-and-tested components for professional use** in conjunction with compressed air and electric power and impact screwdrivers. All the tools in the IMPACT product range have been designed for particularly heavy-duty work on a day-to-day basis. Used as additional tools in conjunction with power impact tools they feature extremely good load-bearing capacity and very long lifetimes. The name IMPACT is a by-word in all fields of industry and the trades for leading-edge quality made by professionals for professionals.

2

**STAHLWILLE IMPACT sockets** are extraordinarily tough. Their remarkable fitting accuracy, which is due to very tight tolerances, guarantees minimum loss of force as the impact is transferred from the impact screwdriver to the socket insert and also dramatically improved durability.

3

**STAHLWILLE IMPACT sockets** are made from high-grade Chrome Alloy Steel. They are hardened in an oil bath to ensure they are normalised and non-warping, making them extremely accurate tools with very close tolerances.

4

### **IMPACT quality is available individually or in sets**

Whatever else the professional might want in a tool, there is no compromising on the quality. The extensions, adaptors, joints and sockets will always fit - perfectly. Combine them as you need them. Slot them together. Done.

5

### **Joints**

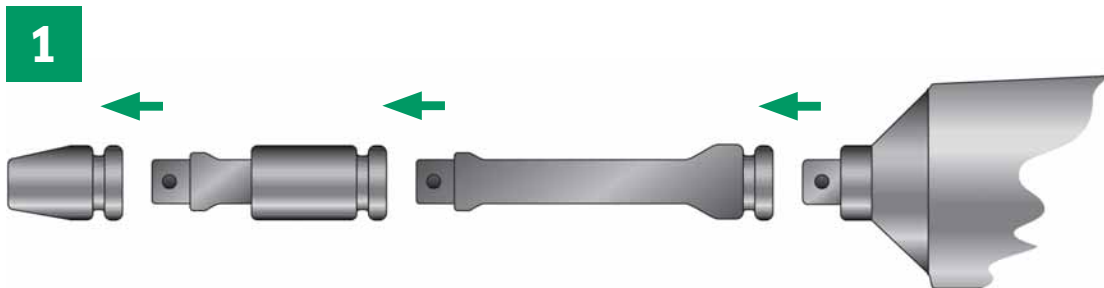
- 1 Deep groove for O-ring to improve grip and
- 2 straight-through central bore for locking pin.
- 3 Bevelled edge facilitates attachment and ensures optimum contact with the wrench. No mechanical loading on the retainer pin.
- 4 Recessed keyway adaptors with spring-loaded pins on the square drive, e.g. No 3116, 3216.





4

**No 2309K**  
 e.g. 1/2" wheel nut socket (sizes 17; 19 and 20.8 mm)  
 with plastic sleeves, specially for sensitive alloy wheels.



STAHLWILLE IMPACT sockets



STAHLWILLE IMPACT sockets



No 50IMP/6/2

12.5  
1/2"

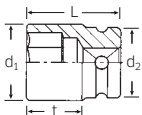
## IMPACT sockets

1/2" -drive

DIN  
3121

### 50IMP IMPACT sockets

1/2" -drive, DIN 3129/ISO 1711-2, for power drivers, Chrome Alloy Steel, gunmetal finish.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	$\Delta$ g	
23010008	8	14.3	25	38	21.5	86	10
23010010	10	16.8	25	38	21.5	89	10
23010011	11	18.1	25	38	21.5	88	10
23010012	12	19.5	25	38	21.5	89	10
23010013	13	20.8	25	38	21.5	85	10
23010014	14	22.1	25	38	21.5	86	10
23010015	15	23.5	30	38	23	132	10
23010016	16	24.8	30	38	23	130	10
23010017	17	26.2	30	38	22.9	132	10
23010018	18	27.5	30	38	22.6	130	10
23010019	19	28.8	30	40	24.6	133	10
23010021	21	31.3	30	40	23	135	10
23010022	22	32.5	30	42	25	141	10
23010023	23	33.8	30	40	24.5	150	5
23010024	24	35	30	44	28	164	5
23010025	25	36.3	30	44	25	170	5
23010027	27	38.8	30	45	29	190	5
23010030	30	42	30	50	34	199	5
23010032	32	44	30	50	34	210	5

### 50IMP/6/2 IMPACT set

8 pieces

Content:

6 Sockets No 50IMP:

sizes 13; 17; 19; 21; 22; 24 mm

1 Extension No 509/5IMP

1 Universal Joint No 510IMP for power drivers



Code	$\Delta$ g
96231101	1797

### 50D IMP IMPACT sockets



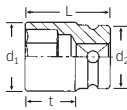
1/2" -drive, DIN 3129/ISO 1711-2, for power drivers, Chrome Alloy Steel, gunmetal finish.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	$\Delta$ g	
23011032	32	44	30	50	27	251	1
23011036	36	49	35	50	28.5	313	1

### 51IMP IMPACT sockets

1/2" -drive, ISO 1711-2, for power drivers, extra deep, Chrome Alloy Steel, gunmetal finish.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	$\Delta$ g	
23020013	13	20.8	25	85	68.5	222	5
23020015	15	23.5	30	85	68	340	5
23020016	16	24.8	30	85	68	338	5
23020017	17	26.2	30	85	68	318	5
23020018	18	27.5	30	85	68	309	5
23020019	19	28.8	30	85	67.5	292	5
23020021	21	31.3	30	85	66.5	291	5
23020022	22	32.5	30	85	66.5	323	5
23020024	24	35	30	85	66	335	5
23020027	27	38.8	30	85	65	385	5

### TCS 50IMP/51IMP/19



170 x 350 x 50 mm, 19 pieces

Code	$\Delta$ g
96838777	3960
No 50IMP	1/2"  sizes 10; 13; 15; 16; 17; 18; 19; 21; 22; 24; 27 mm
No 51IMP	1/2"  sizes 13; 15; 17; 18; 19; 21; 22; 24 mm

### TCS 50IMP/19/2



175 x 350 x 50 mm, 21 pieces

Code	$\Delta$ g
96838791	3055
No 50IMP	sizes 8; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 23; 24; 25; 27; 30; 32 mm
No 509/5IMP	1/2"  125 mm
No 510IMP	1/2"  68 mm

### TCS 54IMP/2307TX/15



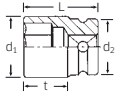
175 x 350 x 40 mm, 15 pieces

Code	$\Delta$ g
96838792	1285
No 54IMP	1/2"  5; 6; 7; 8; 10; 12; 14; 17; 19 mm
No 2307TX	1/2"  sizes T30; T40; T45; T50; T55; T60



## 2309 ○ IMPACT sockets

1/2" ○-drive, for power drivers, extra deep, with reduced outside diameter, Chrome Alloy Steel, gunmetal finish.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	g	
23090017	17	25.7	30	85	68	242	5
23090019	19	28.2	30	85	67.5	257	5
23090208	20.8	30.7	30	85	66.5	272	5
23090022	22	32	30	85	66.5	311	5

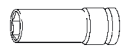
for wheel nuts

## ES 2309/4



175 x 175 x 40 mm, 4 pieces

Code	g
96838162	1145



No 2309

1/2" ○ sizes 17; 19; 20.8 mm-13/16"; 22 mm

83812080	Empty tray	55
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## 2309K ○ Wheel nut sockets

1/2" ○-drive, with plastic sleeve. Sleeve extension protects not only wheel bolts and nuts but also the wheel and holes.



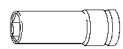
Code	mm	L mm	mm	g	
23091017	17	86	27	242	1
23091019	19	86	29	250	1
23091208	20.8	86	31	265	1

## ES 2309K/3



175 x 175 x 40 mm, 3 pieces

Code	g
96838260	800



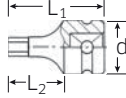
No 2309K

1/2" ○ sizes 17; 19; 20.8 mm-13/16"

83812080	Empty tray	55
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## 54IMP ○ IMPACT INHEX sockets

1/2" ○-drive, for hexagon socket head screws, for power drivers, Chrome Alloy Steel, gunmetal finish.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	g	
23050005	5	38	15	25	58	5
23050006	6	38	15	25	59	5
23050007	7	38	15	25	60	5
23050008	8	38	15	25	61	5
23050010	10	40	17	25	67	5
23050012	12	42	19	30	111	5
23050014	14	43	20	30	118	5
23050017	17	45	22	30	134	5
23050019	19	50	27	30	164	5

## 54IMP/9 IMPACT set INHEX sockets

9 pieces

Content:

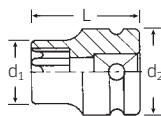
sizes 5; 6; 7; 8; 10; 12; 14; 17; 19 mm



Code	g
96231501	1267

## 2308TX ○ IMPACT sockets

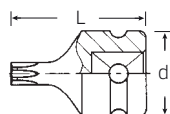
1/2" ○-drive, external TORX®, for power drivers, Chrome Alloy Steel, gunmetal finish.



Code	size	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	g	
23080010	E10	9.4	14	25	38	67	10
23080012	E12	11.1	15.9	25	38	73	10
23080014	E14	12.9	17.7	25	38	73	10
23080016	E16	14.7	20	25	38	77	10
23080018	E18	16.6	22	30	38	115	10
23080020	E20	18.4	24.5	30	38	120	10
23080024	E24	22.1	30	30	41.2	149	10

## 2307TX ○ IMPACT sockets

1/2" ○-drive, inside TORX®, for power drivers, Chrome Alloy Steel, gunmetal finish.



Code	size	mm	d mm	L mm	g	
23070030	T30	5.5	25	40	57	5
23070040	T40	6.6	25	40	58	5
23070045	T45	7.8	25	40	59	5
23070050	T50	8.8	25	40	57	5
23070055	T55	11.2	25	40	61	5
23070060	T60	13.2	25	40	66	5

12.5  
1/2"

DIN  
3121

ISO  
1174-2

4

# IMPACT-Tools

12.5  
1/2"

## Accessory tools for IMPACT sockets

1/2" square drive  
outside E 12.5, inside G 12.5  
Finish: Chrome Alloy Steel, gunmetal finish

20  
3/4"

DIN  
3121

ISO  
1174-2

### 509IMP Extensions



Code	size	L mm	d mm	g	
33010001	2	52	30	151	5
33010002	5	130	30	271	5
33010003	10	255	30	452	5

### 510IMP Universal joint



Code	L mm	d mm	g	
33020000	52	32	228	5

### 513IMP Adaptor



Code	inside		L mm	d mm	g	
	"	"				
33030002	1/2	3/8	37	30	109	5

### 514IMP Adaptor



Code	inside		L mm	d mm	g	
	"	"				
33030005	1/2	3/4	49	30	174	5

### 5091 Rubber rings

Code	size	g	
39011940	1IMP <sup>1)</sup>	1	10
39012440	2IMP <sup>2)</sup>	1	10

<sup>1)</sup> for Socket sizes 8-14 mm, TORX® size E10-E16, size T30-T60  
<sup>2)</sup> for Socket sizes 15-32 mm, TORX® size E18-E24 and accessories

### 5092 Connecting pins

Code	size	g	
39022030	1IMP <sup>1)</sup>	1	10
39022530	2IMP <sup>2)</sup>	2	10

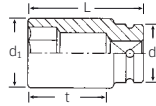
<sup>1)</sup> for Socket sizes 8-14 mm, TORX® size E10-E16, size T30-T60  
<sup>2)</sup> for Socket sizes 15-32 mm, TORX® size E18-E24 and accessories

## IMPACT sockets

3/4" -drive

### 55IMP IMPACT sockets

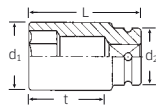
3/4" -drive DIN 3129/ISO 1711-2, for power drivers, Chrome Alloy Steel, gunmetal finish.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	g	
25010017	17	29	44	48	23	365	5
25010018	18	30.5	44	48	23	345	5
25010019	19	32	44	48	23	359	5
25010021	21	35	44	50	25	375	5
25010022	22	36.5	44	50	25	377	5
25010024	24	39.5	44	50	24.5	382	5
25010027	27	43.5	44	51	24.5	387	5
25010028	28	45	44	54	27	417	5
25010029	29	46	44	54	26.5	425	5
25010030	30	47.4	44	54	26.5	438	2
25010032	32	49.9	44	54	26	456	2
25010033	33	51.5	44	54	25.5	477	2
25010034	34	52.4	44	54	29	490	2
25010036	36	54.9	44	57	32	545	2
25010038	38	58	44	58	33	592	2
25010041	41	57	44	59	34	746	1
25010046	46	67	44	64	36.5	746	1

### 56IMP IMPACT sockets

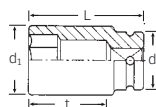
3/4" -drive, ISO 1711-2, for power drivers, extra deep, Chrome Alloy Steel, gunmetal finish.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	g	
25020017	17	32	44	100	75	783	2
25020019	19	32	44	100	75	779	2
25020021	21	35	44	100	75	864	2
25020022	22	36.5	44	100	75	854	2
25020024	24	39.5	44	100	74.5	838	2
25020027	27	43.5	44	100	72.5	800	2
25020030	30	47.4	44	100	72.5	860	2
25020032	32	49.9	44	100	72	922	2
25020034	34	52.4	44	100	71.5	983	2
25020036	36	54.9	44	100	71	1038	2
25020041	41	57	44	100	75	899	1
25020046	46	67	44	100	75	1427	1

### 2509 IMPACT sockets

3/4" -drive, for power drivers, extra deep, with reduced diameter, Chrome Alloy Steel, gunmetal finish.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	g	
25090027	27	40.5	44	100	72.5	672	2
25090030	30	44.3	44	100	72.5	728	2
25090032	32	46.8	44	100	72	778	2
25090033	33	48	44	100	72	803	2

for Trilux wheels

## Accessory tools for IMPACT sockets

3/4" square drive  
 outside F 20, inside H 20  
 Finish: Chrome Alloy Steel, gunmetal finish

### 560IMP Extensions



Code	size	L mm	d mm	g	
<b>35010001</b>	<b>7</b>	180	44	805	5
<b>35010002</b>	<b>10</b>	250	44	1051	5
<b>35010003</b>	<b>13</b>	330	44	1305	5

### 561IMP Universal joint



Code	L mm	d mm	g	
<b>35020000</b>	99	44	657	2

### 568IMP Adaptor



Code	inside "	outside "	L mm	d mm	g	
<b>35030003</b>	3/4	1/2	56	44	335	5

### 569IMP Adaptor



Code	inside "	outside "	L mm	d mm	g	
<b>35030006</b>	3/4	1	65	44	477	5

### 5591IMP Rubber ring

Code	g	
<b>39013650</b>	3	10

for sockets and accessories

### 5592IMP Connecting pin

Code	g	
<b>39023540</b>	3	10

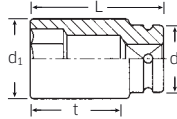
for sockets and accessories

## IMPACT sockets

1" -drive

### 60IMP IMPACT sockets

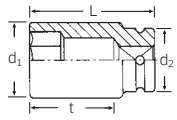
1" -drive, DIN 3129/ISO 1711-2, for power drivers, Chrome Alloy Steel, gunmetal finish.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	g	
<b>26010024</b>	<b>24</b>	41.5	54	58	28	638	2
<b>26010027</b>	<b>27</b>	45	54	60	30	654	2
<b>26010030</b>	<b>30</b>	49	54	62	32	688	2
<b>26010032</b>	<b>32</b>	51.5	54	63	32	694	2
<b>26010033</b>	<b>33</b>	52.5	54	63	31.5	692	2
<b>26010036</b>	<b>36</b>	56.5	54	67	34.5	754	2
<b>26010038</b>	<b>38</b>	59	54	70	37	836	2
<b>26010041</b>	<b>41</b>	63	54	70	36.5	892	2
<b>26010042</b>	<b>42</b>	64.5	54	73	39	970	1
<b>26010046</b>	<b>46</b>	69.5	54	76	41	1106	1
<b>26010050</b>	<b>50</b>	74.5	54	82	52	1362	1
<b>26010055</b>	<b>55</b>	81	54	87	57	1669	1
<b>26010060</b>	<b>60</b>	87	54	91	61	1960	1
<b>26010065</b>	<b>65</b>	92	54	85	55	1678	1
<b>26010070</b>	<b>70</b>	96	54	88	58	1803	1
<b>26010075</b>	<b>75</b>	100	86	92	62	2674	1
<b>26010080</b>	<b>80</b>	105	86	97	67	2949	1

### 66IMP IMPACT sockets

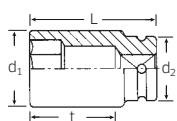
1" -drive, ISO 1711-2, for power drivers, extra deep, Chrome Alloy Steel, gunmetal finish.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	g	
<b>26020024</b>	<b>24</b>	41.5	54	110	80	1431	2
<b>26020027</b>	<b>27</b>	45	54	110	80	1393	2
<b>26020030</b>	<b>30</b>	49	54	110	79.5	1338	2
<b>26020032</b>	<b>32</b>	51.5	54	110	79	1296	2
<b>26020033</b>	<b>33</b>	52.5	54	110	78.5	1274	2
<b>26020036</b>	<b>36</b>	56.5	54	110	78	1312	2
<b>26020038</b>	<b>38</b>	59	54	110	77	1355	2
<b>26020041</b>	<b>41</b>	63	54	110	76	1504	2
<b>26020046</b>	<b>46</b>	69.5	54	110	72	1711	2

### 2609 IMPACT sockets

1" -drive, for power drivers, extra deep, with reduced outside diameter, Chrome Alloy Steel, gunmetal finish.



Code	mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	g	
<b>26090027</b>	<b>27</b>	42.3	54	110	80	1001	2
<b>26090030</b>	<b>30</b>	46	54	110	79.5	1047	2
<b>26090032</b>	<b>32</b>	48.5	54	110	79	1015	2
<b>26090033</b>	<b>33</b>	49.8	54	110	78.5	1102	2

for wheel nuts

20  
3/4"

25  
1"

DIN  
3121

ISO  
1174-2

4

## IMPACT-Tools

25  
1"

### Accessory tools for IMPACT sockets


1"  square drive  
outside  F 25, inside  H 25  
Finish: Chrome Alloy Steel, gunmetal finish

DIN  
3121

ISO  
1174-2


#### 859IMP Extensions



Code	size	L mm	d mm	$\Delta$ g	
<b>36010001</b>	<b>7</b>	180	54	1361	2
<b>36010002</b>	<b>13</b>	330	54	2168	2




#### 871IMP Universal joint



Code	L mm	d mm	$\Delta$ g	
<b>36020000</b>	125	54	1244	1




#### 865IMP Adaptor



Code	inside  "	outside  "	L mm	d mm	$\Delta$ g	
<b>36030007</b>	1	1 1/2	85	54	986	1

#### 866IMP Adaptor



Code	inside  "	outside  "	L mm	d mm	$\Delta$ g	
<b>36030005</b>	1	3/4	70	54	565	2

#### 6091IMP Rubber ring

Code	$\Delta$ g	
<b>39014850</b>	8	10

for sockets up to size 70 mm and accessories

#### 6092IMP Connecting pin


Code	$\Delta$ g	
<b>39025050</b>	7	10

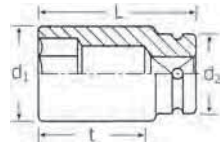
for sockets up to size 70 mm and accessories



## IMPACT sockets

1 1/2" -drive

#### 70IMP IMPACT sockets

1 1/2" -drive, DIN 3129, for power drivers,  
Chrome Alloy Steel, gunmetal finish.

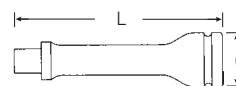



Code	 mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	$\Delta$ g	
<b>27010055</b>	<b>55</b>	86	86	89	42	2482	1
<b>27010060</b>	<b>60</b>	92	86	92	50	2743	1
<b>27010065</b>	<b>65</b>	100	86	96	54	3249	1
<b>27010070</b>	<b>70</b>	105	86	101	59	3541	1
<b>27010075</b>	<b>75</b>	109	86	105	63	3746	1
<b>27010080</b>	<b>80</b>	115	86	110	68	4162	1
<b>27010085</b>	<b>85</b>	121	86	116	74	4661	1
<b>27010090</b>	<b>90</b>	130	86	118	76	5382	1
<b>27010095</b>	<b>95</b>	135	127	118	76	7500	1
<b>27010100</b>	<b>100</b>	140	127	125	83	8000	1
<b>27010105</b>	<b>105</b>	150	127	125	83	9000	1
<b>27010110</b>	<b>110</b>	155	127	137	95	10500	1
<b>27010115</b>	<b>115</b>	160	127	137	95	10500	1
<b>27010120</b>	<b>120</b>	165	127	145	103	12000	1

### Accessory tools for IMPACT sockets

1 1/2"  square drive  
outside  F 40, inside  H 40  
Finish: Chrome Alloy Steel, gunmetal finish


#### 759IMP Extensions



Code	size	L mm	d mm	$\Delta$ g	
<b>37010001</b>	<b>10</b>	254	86	5500	2
<b>37010002</b>	<b>13</b>	330	86	7000	1
<b>37010003</b>	<b>15</b>	381	86	8000	1

#### 771IMP Universal joint



Code	L mm	d mm	$\Delta$ g	
<b>37020000</b>	125	86	4197	1

**768IMP Adaptor**


Code	inside ○"	outside ■"	L mm	d mm	△△ g	☐
<b>37030006</b>	1 1/2	2 1/2	93	86	3142	1

**867IMP Adaptor**


Code	inside ○"	outside ■"	L mm	d mm	△△ g	☐
<b>36030006</b>	1 1/2	1	95	86	2180	1

also for MULTIPOWER No MP300-5000 (page 223)

**7091 Rubber rings**

Code	size	△△ g	☐
<b>39013870</b>	<b>1IMP<sup>1)</sup></b>	15	1
<b>39013875</b>	<b>2IMP<sup>2)</sup></b>	38	1

<sup>1)</sup> for Socket sizes 70IMP 55-90 mm, 60IMP sizes 75 and 80 mm and accessories  
<sup>2)</sup> for Socket sizes 95-120 mm

**7092 Connecting pins**

Code	size	△△ g	☐
<b>39023870</b>	<b>1IMP<sup>1)</sup></b>	16	1
<b>39023875</b>	<b>2IMP<sup>2)</sup></b>	25	1

<sup>1)</sup> for Socket sizes 70IMP 55-90 mm, 60IMP sizes 75 and 80 mm and accessories

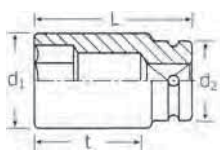
<sup>2)</sup> for Socket sizes 95-120 mm

**IMPACT sockets**

2 1/2" ○-drive

**80IMP ○ IMPACT sockets**

2 1/2" ○-drive, DIN 3129, for power drivers, Chrome Alloy Steel, gunmetal finish.



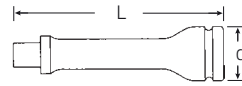
Code	○ mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	△△ g	☐
<b>28010075</b>	<b>75</b>	115	127	125	67	7500	1
<b>28010080</b>	<b>80</b>	115	127	125	67	7000	1
<b>28010085</b>	<b>85</b>	127	127	130	67	7490	1
<b>28010090</b>	<b>90</b>	135	127	132	74	8000	1
<b>28010095</b>	<b>95</b>	140	127	132	74	8000	1
<b>28010100</b>	<b>100</b>	145	127	141	83	9000	1
<b>28010105</b>	<b>105</b>	150	127	141	83	9000	1
<b>28010110</b>	<b>110</b>	160	127	150	92	11000	1
<b>28010115</b>	<b>115</b>	165	127	150	92	11000	1
<b>28010120</b>	<b>120</b>	170	127	158	100	12000	1

**Accessory tools for IMPACT sockets**

2 1/2" ○ square drive

outside ■ F 63, inside ○ H 63

Finish: Chrome Alloy Steel, gunmetal finish

**860IMP Extensions**


Code	size	L mm	d mm	△△ g	☐
<b>38010001</b>	<b>12</b>	305	127	16000	1
<b>38010002</b>	<b>18</b>	457	127	22000	1
<b>38010003</b>	<b>24</b>	610	127	28500	1

**868IMP Adaptors**


Code	inside ○"	outside ■"	L mm	d mm	△△ g	☐
<b>38030005</b>	2 1/2	1 1/2	138	127	7000	1

**8091/1IMP Rubber ring**

Code	△△ g	☐
<b>39016395</b>	37	10

for sockets and accessories

**8092/1IMP Connecting pin**

Code	△△ g	☐
<b>39026397</b>	42	1

for sockets and accessories

Made in Germany

40  
1 1/2"

63  
2 1/2"

DIN  
3121

ISO  
1174-2

4





# IMPACT Sockets, Machine actuated. **STAHLWILLE range of BITS**

**1**

### **STAHLWILLE range of BITS - uncompromisingly attractive.**

Reliable screwdriver inserts and adaptors in individual sizes or as sets for power screwdrivers or manual use.

**2**

### **The bit that fits - always**

That is why STAHLWILLE offers such a range of BITS for flat-bladed, Phillips®, POZIDRIV/SUPADRIV®, internal TORX®, TORX PLUS®, internal serration, internal hex drive, TRI-WING®, TORQ-SET® screws and recessed 5-star screws with a central pin - if required, also available in sets with corresponding tightening tools e.g. anticlockwise and clockwise ratcheting bit-holder. High-grade special steel alloys and special hardening processes guarantee optimum torquing and long service lifetimes.

**3**

### **Get a grip on it: sturdy bit-holders and ratchets etc.**

STAHLWILLE BITS are, of course, also suitable for manual use, e.g. in conjunction with the corresponding bit-holders, ratchets, magazine holders, switchable ratchets and TORSIOMAX torque screwdrivers.



No 4008/27/1R

1



No 1204/21-1

No 1204/21-2

2



Slotted



Phillips-Recess®



POZIDRIV®  
SUPADRIV®



Internal TORX®



Internal TORX®  
with hollow point



TORX PLUS®



Internal serration  
XZN®



Internal hex



TRI-WING®



TORQ-SET®



5-star  
with hollow point

3



BITS screwdriver inserts from STAHLWILLE guarantee minimum transmission losses.



STAHLWILLE BITS are also suitable for use with heavy-duty power screwdrivers.



e.g. bit holder No 4000 for BITS screwdriver inserts with external 1/4" hex



e.g. ratchet No 4155GB with 1/4" internal hex drive, reversible

4

# BITS

## 1218-1223 1231-1234



**BITS**

DIN 3128, for Phillips screws.



Code	No	Phillips-Recess®	outside ●	"	L mm	⚖ g	📦
08000000	1218	000	C 4	-	28	3	5
08000001	1219	00	C 4	-	28	3	5
08010000	1220	0	C 6.3	1/4	25	5	10
08010001	1221	1	C 6.3	1/4	25	5	10
08010002	1222	2	C 6.3	1/4	25	5	10
08010003	1223	3	C 6.3	1/4	25	5	10
08030001	1231	1	C 8	5/16	32	9	10
08030002	1232	2	C 8	5/16	32	10	10
08030003	1233	3	C 8	5/16	32	10	10
08030004	1234	4	C 8	5/16	32	12	10

outside ● DIN 3126/ISO 1173

Phillips-Recess® DIN 5260

extra hard for self tapping and other hardened screws.

## PZ1221-1223



**BITS**

for POZIDRIV/SUPADRIV® screws, extra hard.



Code	No	POZIDRIV/ SUPADRIV®	outside ●	"	L mm	⚖ g	📦
08050001	PZ1221	1	C 6.3	1/4	25	5	10
08050002	PZ1222	2	C 6.3	1/4	25	5	10
08050003	PZ1223	3	C 6.3	1/4	25	6	10

outside ● DIN 3126/ISO 1173

## 1157-1186



**BITS screwdrivers**

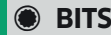
DIN 3127/ISO 2351, for slotted screws.



Code	No	a x b mm	outside ●	"	L mm	⚖ g	📦
08070017	1157	0.25 x 1.5	C 4	-	28	3	5
08070018	1158	0.4 x 2.0	C 4	-	28	3	5
08070019	1159	0.4 x 2.5	C 4	-	28	3	5
08070020	1160	0.5 x 3.0	C 6.3	1/4	39	5	10
08070021	1161	0.5 x 4.0	C 6.3	1/4	39	6	10
08070022	1162	0.6 x 3.5	C 6.3	1/4	39	6	10
08070023	1163	0.6 x 4.5	C 6.3	1/4	39	6	10
08070024	1164	0.8 x 4.0	C 6.3	1/4	39	6	10
08070025	1165	0.8 x 5.5	C 6.3	1/4	39	7	10
08070026	1166	1.0 x 5.5	C 6.3	1/4	39	8	10
08070030	1166/1	1.2 x 6.5	C 6.3	1/4	39	9	10
08070027	1167	1.2 x 8.0	C 6.3	1/4	39	12	10
08070028	1168	1.6 x 8.0	C 6.3	1/4	39	12	10
08070029	1169	1.6 x 10.0	C 6.3	1/4	39	16	10
08080030	1180	0.8 x 5.5	C 8	5/16	41	10	10
08080031	1181	1.0 x 5.5	C 8	5/16	41	11	10
08080032	1182	1.2 x 6.5	C 8	5/16	41	13	10
08080033	1183	1.2 x 8.0	C 8	5/16	41	15	10
08080034	1184	1.6 x 8.0	C 8	5/16	41	15	10
08080035	1185	1.6 x 10.0	C 8	5/16	41	19	10
08080036	1186	2.0 x 12.0	C 8	5/16	41	24	10

outside ● DIN 3126/ISO 1173

## 1350-1360



**BITS**

for tri-square socket head screws (XZN®).



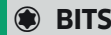
Code	No	size	outside ●	"	L mm	⚖ g	📦
08200004	1350	M4	C 6.3	1/4	25	4	10
08200010	1356	M5	C 6.3	1/4	25	5	10
08200011	1357	M6	C 6.3	1/4	25	5	10
08200012	1358	M8	C 8	5/16	28	10	10
08200013	1359	M10	C 8	5/16	38	15	10
08200014	1360	M12	C 8	5/16	38	20	10

outside ● DIN 3126/ISO 1173

DIN 65254 (M4, M5, M6)

Application: No 1350, size M4, for door lock attachment on the Audi TT, VW Golf, Bora, Passat B5, Lupo, New Beetle

## 1407-1421



**BITS**

### 1430-1435

for inside TORX® screws



Code	No	size	mm	outside ●	"	L mm	⚖ g	📦
08130003	1407	T 3	1.1	C 4	-	28	3	5
08130004	1408	T 4	1.3	C 4	-	28	3	5
08130005	1409	T 5	1.3	C 4	-	28	3	5
08130006	1410	T 6	1.6	C 6.3	1/4	26	5	10
08130007	1411	T 7	2.0	C 6.3	1/4	26	5	10
08130008	1412	T 8	2.3	C 6.3	1/4	26	5	10
08130009	1413	T 9	2.5	C 6.3	1/4	26	5	10
08130010	1414	T 10	2.7	C 6.3	1/4	26	5	10
08130015	1415	T 15	3.3	C 6.3	1/4	26	5	10
08130020	1416	T 20	3.8	C 6.3	1/4	26	5	10
08130025	1417	T 25	4.4	C 6.3	1/4	26	6	10
08130027	1418	T 27	5.0	C 6.3	1/4	26	6	10
08130030	1419	T 30	5.5	C 6.3	1/4	26	6	10
08130040	1420	T 40	6.6	C 6.3	1/4	26	7	10
08130045	1421	T 45	7.8	C 6.3	1/4	26	8	10
08140027	1430	T 27	5.0	C 8	5/16	35	11	10
08140030	1431	T 30	5.5	C 8	5/16	35	11	10
08140040	1432	T 40	6.6	C 8	5/16	35	12	10
08140045	1433	T 45	7.8	C 8	5/16	35	14	10
08140050	1434	T 50	8.8	C 8	5/16	35	14	10
08140055	1435	T 55	11.2	C 8	5/16	35	20	10

outside ● DIN 3126/ISO 1173

Application: No 1416, size T20, for the door handle attachment for Mercedes-Benz types 168 and 203

No 1421, size T45, for removing and refitting the front doors on the VW Golf III and Vento from model year 93 on

No 1435, size T55, for screws in rear seats of BMW X6 Model E71, 7 series Model F01/F02

## 1440-1446



**BITS**

with hollow point for inside TORX® screws (TORX® TAMPER RESISTANT).



Code	No	size	mm	outside ●	"	L mm	⚖ g	📦
08160010	1440	T 10	2.7	C 6.3	1/4	26	6	10
08160015	1441	T 15	3.3	C 6.3	1/4	26	6	10
08160020	1442	T 20	3.8	C 6.3	1/4	26	6	10
08160025	1443	T 25	4.4	C 6.3	1/4	26	6	10
08160027	1444	T 27	5.0	C 6.3	1/4	26	6	10
08160030	1445	T 30	5.5	C 6.3	1/4	26	6	10
08160040	1446	T 40	6.6	C 6.3	1/4	26	6	10

outside ● DIN 3126/ISO 1173

### 1427 BITS

for inside TORX® screws.



Code	size	outside mm	"	L mm	 g	
<b>08 13 10 25</b>	<b>T 25</b>	C 6.3	1/4	65	18	1

For BMW series 3 and 5  
outside DIN 3126/ISO 1173

### 1436 IP- 1446 IP BITS

for inside TORX PLUS® screws.



Code	No	outside mm	"	L mm	 g	
<b>08 16 20 06</b>	<b>1436 IP 6</b>	C 6.3	1/4	25	5	10
<b>08 16 20 07</b>	<b>1437 IP 7</b>	C 6.3	1/4	25	4	10
<b>08 16 20 08</b>	<b>1438 IP 8</b>	C 6.3	1/4	25	4	10
<b>08 16 20 09</b>	<b>1439 IP 9</b>	C 6.3	1/4	25	4	10
<b>08 16 20 10</b>	<b>1440 IP 10</b>	C 6.3	1/4	25	4	10
<b>08 16 20 15</b>	<b>1441 IP 15</b>	C 6.3	1/4	25	5	10
<b>08 16 20 20</b>	<b>1442 IP 20</b>	C 6.3	1/4	25	5	10
<b>08 16 20 25</b>	<b>1443 IP 25</b>	C 6.3	1/4	25	5	10
<b>08 16 20 27</b>	<b>1444 IP 27</b>	C 6.3	1/4	25	5	10
<b>08 16 20 30</b>	<b>1445 IP 30</b>	C 6.3	1/4	25	6	10
<b>08 16 20 40</b>	<b>1446 IP 40</b>	C 6.3	1/4	25	6	10

### 1440 TPI- 1446 TPI 5-star BITS

with hollow point,  
for female 5-star screws with  
a centring pin.



Code	No	outside mm	"	L mm	 g	
<b>08 16 10 10</b>	<b>1440 TPI 10</b>	C 6.3	1/4	26	6	5
<b>08 16 10 15</b>	<b>1441 TPI 15</b>	C 6.3	1/4	26	5	5
<b>08 16 10 20</b>	<b>1442 TPI 20</b>	C 6.3	1/4	26	5	5
<b>08 16 10 25</b>	<b>1443 TPI 25</b>	C 6.3	1/4	26	5	5
<b>08 16 10 27</b>	<b>1444 TPI 27</b>	C 6.3	1/4	26	5	5
<b>08 16 10 30</b>	<b>1445 TPI 30</b>	C 6.3	1/4	26	5	5
<b>08 16 10 40</b>	<b>1446 TPI 40</b>	C 6.3	1/4	26	7	5

outside DIN 3126/ISO 1173

### 1204/8 5-star BITS set

Storage facility for BITS screwdriver  
inserts.

Content:

- 1 bit-holder No 412
- 7 BITS screwdriver inserts for  
female 5-star screws with centring pin,  
sizes TPI 10, 15, 20, 25, 27, 30, 40.

For generators, motor management units,  
airflow sensors, door trim, immobilisers  
and injection pumps  
(e.g. Ford, Mercedes-Benz cars & HGVs,  
Rover, Volvo, VW/Audi).



Code	 g	
<b>96 08 11 13</b>	87	1

### 1300-1304 BITS

DIN 7426/ISO 3109,  
for socket head screws, extra hard.



Code	No	mm	outside mm	"	L mm	 g	
<b>08 09 00 03</b>	<b>1300</b>	3	C 6.3	1/4	25	4	10
<b>08 09 00 04</b>	<b>1301</b>	4	C 6.3	1/4	25	5	10
<b>08 09 00 05</b>	<b>1302</b>	5	C 6.3	1/4	25	6	10
<b>08 09 00 06</b>	<b>1303</b>	6	C 6.3	1/4	25	6	10
<b>08 09 00 08</b>	<b>1304</b>	8	C 6.3	1/4	30	11	10

outside DIN 3126/ISO 1173

### 1299 BITS

for inside hexagon screws,  
for operating the adjusting  
screws on torque wrenches  
No 720, 721, 730 and 730N.



Code	mm	outside mm	"	L mm	 g	
<b>08 09 00 02</b>	2	C 6.3	1/4	34	4	10

outside DIN 3126/ISO 1173

### 13008 BITS screwdrivers

for TRI-WING® screws.



Code	TRI- WING®	outside mm	"	L mm	 g	
<b>08 25 00 00</b>	<b>0</b>	C 6.3	1/4	25	5	10
<b>08 25 00 01</b>	<b>1</b>	C 6.3	1/4	25	5	10
<b>08 25 00 02</b>	<b>2</b>	C 6.3	1/4	25	5	10
<b>08 25 00 03</b>	<b>3</b>	C 6.3	1/4	25	5	10
<b>08 25 00 04</b>	<b>4</b>	C 6.3	1/4	25	5	10
<b>08 25 00 05</b>	<b>5</b>	C 6.3	1/4	25	5	10
<b>08 25 00 06</b>	<b>6</b>	C 6.3	1/4	25	8	10

outside DIN 3126/ISO 1173

### 13010 BITS screwdrivers

for TORQ-SET® screws.



Code	TORQ- SET®	outside mm	"	L mm	 g	
<b>08 26 00 00</b>	<b>0</b>	C 6.3	1/4	25	5	10
<b>08 26 00 01</b>	<b>1</b>	C 6.3	1/4	25	5	10
<b>08 26 00 02</b>	<b>2</b>	C 6.3	1/4	25	5	10
<b>08 26 00 03</b>	<b>3</b>	C 6.3	1/4	25	5	10
<b>08 26 00 04</b>	<b>4</b>	C 6.3	1/4	25	5	10
<b>08 26 00 05</b>	<b>5</b>	C 6.3	1/4	25	5	10
<b>08 26 00 06</b>	<b>6</b>	C 6.3	1/4	25	5	10
<b>08 26 00 08</b>	<b>8</b>	C 6.3	1/4	25	5	10
<b>08 26 00 10</b>	<b>10</b>	C 6.3	1/4	25	5	10
<b>08 26 00 16</b>	<b>1/4 A</b>	C 8	5/16	32	11	10
<b>08 26 00 20</b>	<b>5/16 A</b>	C 8	5/16	32	11	10
<b>08 26 00 24</b>	<b>3/8 A</b>	C 8	5/16	32	11	10

outside DIN 3126/ISO 1173

## BITS und accessories

### 1201 BITS box

Storage box with screwdriver bits.  
Content:

- 1 magnetic bit-holder
- ⊕ 3 Bits, sizes 1; 2; 3 for Phillips screws
- ⊕ 3 Bits, sizes 1; 2; 3 for POZIDRIV/SUPADRIV® screws
- ⊖ 3 Bits, sizes 0.6 x 4.5; 0.8 x 5.5; 1.2 x 6.5 mm; for slotted screws
- ⊗ 6 Bits, size T10; size T15; size T20; size T25; size T30; size T40; for inside TORX® screws (TORX® TAMPER RESISTANT)
- 3 Bits, sizes 4; 5; 6 mm; for inside hexagon screws



Code	g	g	g
96080102	190	1	

### 1204/21-1 BITS box

Storage box with screwdriver bits.  
Content:

- 1 magnetic bit-holder
- ⊕ 4 Bits, sizes 1; 2 (2x); 3 for Phillips screws
- ⊕ 4 Bits, sizes 1; 2 (2x); 3 for POZIDRIV/SUPADRIV® screws
- ⊗ 9 Bits, sizes T10; T15; T20 (2x); T25 (2x); T27; T30; T40; for inside TORX® screws
- 3 Bits, sizes 4; 5; 6 mm; for inside hexagon screws



Code	g	g	g
96080121	185	1	

### 1204/21-2 BITS box

Storage box with screwdriver bits.  
Content:

- 1 magnetic bit-holder
- ⊕ 3 Bits, sizes 1; 2; 3 for Phillips screws
- ⊖ 4 Bits, sizes 0.5 x 4.0; 0.6 x 4.5; 0.8 x 5.5; 1.2 x 6.5 mm; for slotted screws
- ⊗ 6 Bits, sizes T10; T15; T20; T25; T30; T40; for inside TORX® screws
- 3 Bits, sizes 4; 5; 6 mm; for inside hexagon screws
- ⊕ 4 Bits, sizes 4; 6; 8; 10 mm; for TORQ-SET® screws

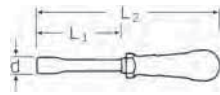


Code	g	g	g
96080122	181	1	

### 4000 Spinner handles

for BITS screwdriver bits with outside hexagon 1/4" DIN 3126/ISO 1173 C 6.3, handle of impact proof plastic. Internal hex drive with a collar-thrust spring.

Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).



Code	inside	"	d	L <sub>1</sub>	L <sub>2</sub>	g	g
18071026	D 6.3	1/4	11	75	190	119	5

inside ○ DIN 3126/ISO 1173

### 4006/1 Spinner with magazine holder

for 6 BITS screwdriver bits (25 mm) with 1/4" outer hexagon, DIN 3126/ISO 1173 C 6.3, transparent plastic handle for storing BITS with rotating selection cap, internal hexagon and powerful permanent magnet.



Code	inside	"	d	L <sub>1</sub>	L <sub>2</sub>	g	g
18080017	D 6.3	1/4	10	120	230	124	1

inside ○ DIN 3126/ISO 1173

### 12504 BIT holder

for BITS screwdriver bits with outside hexagon 1/4" DIN 3126/ISO 1173 C 6.3, flexible shaft, handle of impact proof plastic.



Code	inside	"	L <sub>1</sub>	L <sub>2</sub>	g	g
18101016	D 6.3	1/4	175	290	168	10

inside ○ DIN 3126/ISO 1173

### 12503 BIT holder

for BITS screwdriver bits with outside hexagon 1/4" DIN 3126/ISO 1173 C 6.3, inside hexagon with magnet, stubby version, handle of impact proof plastic.



Code	inside	"	L <sub>1</sub>	L <sub>2</sub>	g	g
18110016	D 6.3	1/4	10	65	50	10

inside ○ DIN 3126/ISO 1173



### 4007 BIT holder

for BITS screwdriver bits with outside hexagon 1/4" DIN 3126/ISO 1173 C 6.3, inside hexagon with magnet, with T-handle.



Code	inside ○	"	d mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
<b>18 09 00 16</b>	D 6.3	1/4	10	200	165	108	5

inside ○ DIN 3126/ISO 1173

### 415B BIT ratchet

reversible, 22 teeth, with 2-component handle and inside hexagon, 1/4", DIN 3126/ISO 1173 D 6.3 for BITS Screwdriver sockets 1/4". Internal hex drive with a collar-thrust spring (registered design). Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).



Code	inside ○	"	L mm	b mm	a mm	△△ g	📦
<b>11 13 10 11</b>	D 6.3	1/4	117	22	12	76	5

### 415SGB BIT ratchet

reversible, all steel handle, for BITS screwdrivers with outside hexagon 1/4" DIN 3126/ISO 1173 C 6.3, 22 teeth. Internal hex drive with a collar-thrust spring (registered design). Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).



Code	inside ○	"	L mm	△△ g	📦
<b>11 13 00 11</b>	D 6.3	1/4	117	85	1

inside ○ DIN 3126/ISO 1173

### 25B Ratcheting BIT holder

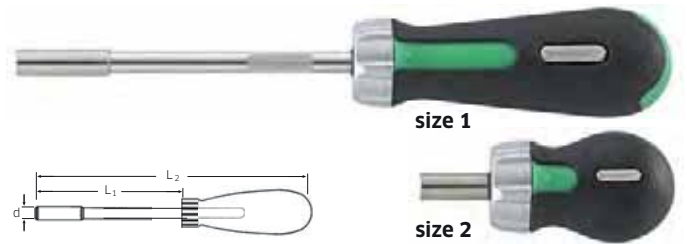
for hexagon BITS, magnetic location, reversible heads angled, chrome plated.



Code	inside ○	"	L mm	d <sub>1</sub> mm	d <sub>2</sub> mm	a <sub>1</sub> mm	a <sub>2</sub> mm	△△ g	📦
<b>41 54 16 20</b>	1/4 x 5/16	138	20	23	15	17	105	1	

### 4008 Ratcheting BIT holder

- Easy change of direction (anticlockwise, clockwise and fixed) by simply twisting the locking ring
- Ergonomically designed, non-slip 2-component handle for optimum force transmission
- Storage compartment for 6 bits in the handle; push button to open (Size 1)
- For BITS screwdriver inserts with external hex 1/4" DIN 3126/ISO 1173 Type C 6.3
- 1/4" sockets can be used with Adaptor No 3115/1 (external hex and square drive 1/4")
- Easy bit change thanks to internal hex. drive with magnet
- Knurled spin section for faster screw advance
- Heavy-duty mechanism with 48 teeth (7.5° working angle)



Code	size	inside ○	"	L <sub>1</sub> mm	L <sub>2</sub> mm	d mm	△△ g	📦
<b>18 12 00 01</b>	<b>1</b>	D 6.3	1/4	127	250	10	248	1
<b>18 12 00 02</b>	<b>2</b>	D 6.3	1/4	25	95	10	137	1

inside ○ DIN 3126/ISO 1173

### 4008/27/1R Ratcheting BIT holder set



- 29 pieces  
Content:
- 1 Ratcheting bit holder No 4008-1
  - 3 Bits ⊕ 1221; 1222; 1223
  - 3 Bits ⊕ PZ 1221; PZ 1222; PZ 1223
  - 6 Bits ⊕ 1440 T10; 1441 T15; 1442 T20; 1443 T25; 1445 T30; 1446 T40
  - 3 Bits ⊙ 1301; 1302; 1303
  - 3 Bits ⊖ 1163 0.6 x 4.5; 1165 0.8 x 5.5; 1166/1 1.2 x 6.5 mm
  - 1 Square drive extension No 3115/1 with 1/4" outer hex. and outer square drives for attaching 1/4" □ sockets
  - 9 Sockets No 40, 1/4" □ sizes 4; 5; 5.5; 6; 7; 8; 10; 11; 13 mm

Code	△△ g	📦
<b>96 18 22 03</b>	642	1

### 3115/2 BIT holder

for torque screwdrivers No 760 and No 775, inside hexagon DIN 3126 D4 for BITS screwdriver bits C4, outside hexagon 1/4" DIN 3126/ISO 1173 E 6.3.



Code	inside ○	outside ●	"	L mm	△△ g	📦
<b>31 15 00 03</b>	4 mm	E 6.3	1/4	60	18	1

outside ● DIN 3126/ISO 1173

# BITS und accessories

## 1200/1 BIT holder

with permanent magnet 1/4" inside and outside hexagon 1/4" DIN 3126/ISO 1173 C 6.3.



Code	inside ○	"	outside ●	"	L mm	Δ∇ g	
<b>38 12 0001</b>	D 6.3	1/4	E 6.3	1/4	72	37	5

inside ○/outside ● DIN 3126/ISO 1173

## 3825/1 Quick-change holder

for BITS screwdriver bits with 1/4" external hexagonal drive DIN 3126/ISO 1173 C 6.3, with quick-action chuck, adaptor with external hexagonal drive for powered use.



Code	inside ○	"	outside ●	"	L mm	Δ∇ g	
<b>38 25 0002</b>	D 6.3	1/4	E 6.3	1/4	62	27	1

inside ○/outside ● DIN 3126/ISO 1173

## 3115 Adaptor, manually operated

for torque screwdrivers No 760 and No 775, for manually operated sockets with recessed 6.3 (1/4") square drive DIN 3120/ISO 1174-1 Type C and D, square drive with ball bearing, Chrome Alloy Steel, gunmetal finish.



Code	outside ■	"	outside ●	"	L mm	d mm	Δ∇ g	
<b>31 15 0001</b>	A 6.3	1/4	E 6.3	1/4	50	8.9	16	5

outside ■ DIN 3120/ISO 1174-1 Type A (spring-loaded ball)  
outside ● DIN 3126/ISO 1173 Type E

## 3115/1 Adaptor, manually operated

for manually operated sockets with recessed 6.3 (1/4") square drive DIN 3120/ISO 1174-1 Type C and D, square drive with ball bearing, Chrome Alloy Steel.

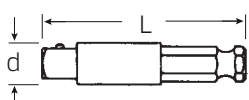


Code	outside ■	"	outside ●	"	L mm	Δ∇ g	
<b>31 15 0002</b>	A 6.3	1/4	C 6.3	1/4	25	10	5

outside ■ DIN 3120/ISO 1174-1 Type A (spring-loaded ball)  
outside ● DIN 3126/ISO 1173 Type C

## 3116/1 Adaptor, machine operated

DIN 7428/ISO 3317, with outside hexagon for power operated IMPACT sockets DIN 3129/ISO 2725-2 with inside square DIN 3121/ISO 1174-2. Square drive with spring loaded locking pin, Chrome Alloy Steel, gunmetal finish.

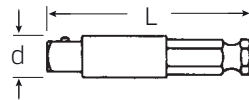


Code	outside ■	"	outside ●	"	L mm	d mm	Δ∇ g	
<b>31 16 0001</b>	E 6.3	1/4	E 6.3	1/4	50	8.9	16	5

outside ■ DIN 3121/ISO 1174-2 Type E (spring-loaded locking pin)  
outside ● DIN 3126/ISO 1173 Type E

## 3216/1 Adaptor, machine operated

DIN 7428/ISO 3317, with outside hexagon for power operated IMPACT sockets DIN 3129/ISO 2725-2 with inside square DIN 3121/ISO 1174-2. Large collar diameter for better support of IMPACT sockets. Square drive with spring loaded locking pin, Chrome Alloy Steel, gunmetal finish.

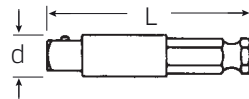


Code	outside ■	"	outside ●	"	L mm	d mm	Δ∇ g	
<b>32 16 0001</b>	E 10	3/8	E 6.3	1/4	50	15.5	23	5

outside ■ DIN 3121/ISO 1174-2 Type E (spring-loaded locking pin)  
outside ● DIN 3126/ISO 1173 Type E

## 3316/1 Adaptor, machine operated

DIN 7428/ISO 3317, with outside hexagon for power operated IMPACT sockets DIN 3129/ISO 2725-2 with inside square DIN 3121/ISO 1174-2. Large collar diameter for better support of IMPACT sockets. Square drive with spring loaded locking pin, Chrome Alloy Steel, gunmetal finish.



Code	outside ■	"	outside ●	"	L mm	d mm	Δ∇ g	
<b>33 16 0001</b>	E 12.5	1/2	E 6.3	1/4	50	18	34	5

outside ■ DIN 3121/ISO 1174-2 Type E (spring-loaded locking pin)  
outside ● DIN 3126/ISO 1173 Type E

## 412/442/443/543 BIT holder

square drive socket, for hand use only, for BITS-Screwdriver bits with outside hexagon 1/4" or 5/16" DIN 3126/ISO 1173 C 6.3 or C 8, Chrome Alloy Steel, chrome plated. Internal hex drive with a collar-thrust spring (registered design). Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).



Code	No	inside ○	"	inside ○	"	d mm	L mm	Δ∇ g	
<b>11 18 00 10</b>	<b>412</b>	D 6.3	1/4	C 6.3	1/4	11.6	25	15	5
<b>12 18 00 26</b>	<b>442</b>	D 6.3	1/4	C 10	3/8	16.5	32	30	5
<b>12 18 00 30</b>	<b>443</b>	D 8	5/16	C 10	3/8	16.5	32	39	5
<b>13 18 00 10</b>	<b>543</b>	D 8	5/16	C 12.5	1/2	22	38	65	5

inside ○ DIN 3126/ISO 1173  
inside ○ DIN 3120/ISO 1174-1

## 412-1 BIT holder

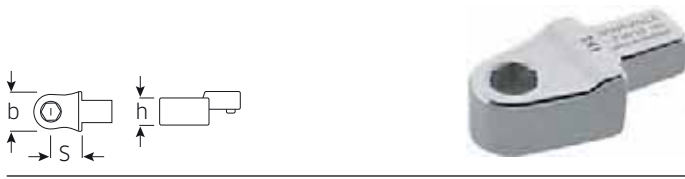
○ 1/4" inside hexagon, DIN 3126/ISO 1173 D 6.3. Outer ● 10 mm for use in tools with 10 mm internal hex drive or internal double hexagon (e.g. "FLEXI" double-ended flexi-joint spanners, T-handle universal joint spanners, box spanners, ratchet ring spanners etc.). Internal hex drive with a collar-thrust spring. Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).



Code	outside ●	L mm	d mm	Δ∇ g	
<b>11 18 00 20</b>	10 mm	20	11.6	11	5

### 736 BIT holder insert tools

Internal hex drive with a collar-thrust spring. Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).



Code	size	inside D	"	mm	b mm	h mm	S mm	Δg	g
<b>58 26 10 10</b>	<b>10</b>	D 8	5/16	9x12	16	12.5	17.5	47	
<b>58 26 26 10</b>	<b>10-1</b>	D 6.3	1/4	9x12	14	10	17.5	45	

inside ○ DIN 3126/ISO 1173

### BITS screwdrivers

with outside hexagon DIN 3126/ISO 1173, shape E 6.3 (1/4"), for use in power drivers.

### 1242-1250 BITS screwdrivers

DIN 3127/ISO 2351, for slotted screws.



Code	No	a x b mm	outside mm	"	L mm	Δg	g	g
<b>08 30 06 35</b>	<b>1242</b>	0.6 x 3.5	E 6.3	1/4	50	8	10	
<b>08 30 08 40</b>	<b>1244</b>	0.8 x 4.0	E 6.3	1/4	50	9	10	
<b>08 30 10 55</b>	<b>1246</b>	1.0 x 5.5	E 6.3	1/4	50	10	10	
<b>08 30 12 65</b>	<b>1248</b>	1.2 x 6.5	E 6.3	1/4	50	12	10	
<b>08 30 16 80</b>	<b>1250</b>	1.6 x 8.0	E 6.3	1/4	50	14	10	

outside ● DIN 3126/ISO 1173

### 1260-1262 BITS screwdrivers

DIN 3128, for Phillips screws.



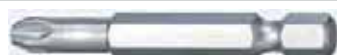
Code	No	Phillips-Recess®	outside mm	"	L mm	Δg	g	g
<b>08 31 00 01</b>	<b>1260</b>	1	E 6.3	1/4	50	10	10	
<b>08 31 00 02</b>	<b>1261</b>	2	E 6.3	1/4	50	11	10	
<b>08 31 00 03</b>	<b>1262</b>	3	E 6.3	1/4	50	11	10	

outside ● DIN 3126/ISO 1173

Phillips-Recess® DIN 5260

### 1270-1272 BITS screwdrivers

for POZIDRIV/SUPADRIV® screws.



Code	No	POZIDRIV/ SUPADRIV®	outside mm	"	L mm	Δg	g	g
<b>08 32 00 01</b>	<b>1270</b>	1	E 6.3	1/4	50	10	10	
<b>08 32 00 02</b>	<b>1271</b>	2	E 6.3	1/4	50	11	10	
<b>08 32 00 03</b>	<b>1272</b>	3	E 6.3	1/4	50	11	10	

outside ● DIN 3126/ISO 1173

### 1280-1284 BITS screwdrivers

DIN 7426/ISO 3109, for socket head screws.



Code	No	mm	outside mm	"	L mm	Δg	g	g
<b>08 33 00 03</b>	<b>1280</b>	3	E 6.3	1/4	50	9	10	
<b>08 33 00 04</b>	<b>1281</b>	4	E 6.3	1/4	50	10	10	
<b>08 33 00 05</b>	<b>1282</b>	5	E 6.3	1/4	50	12	10	
<b>08 33 00 06</b>	<b>1283</b>	6	E 6.3	1/4	50	13	10	
<b>08 33 00 08</b>	<b>1284</b>	8	E 6.3	1/4	50	18	10	

outside ● DIN 3126/ISO 1173

### 1290-1296 BITS screwdrivers

for inside TORX® screws.



Code	No	size	outside mm	"	L mm	Δg	g	g
<b>08 34 00 10</b>	<b>1290</b>	T 10	E 6.3	1/4	70	14	10	
<b>08 34 00 15</b>	<b>1291</b>	T 15	E 6.3	1/4	70	14	10	
<b>08 34 00 20</b>	<b>1292</b>	T 20	E 6.3	1/4	70	14	10	
<b>08 34 00 25</b>	<b>1293</b>	T 25	E 6.3	1/4	70	15	10	
<b>08 34 00 27</b>	<b>1294</b>	T 27	E 6.3	1/4	70	16	10	
<b>08 34 00 30</b>	<b>1295</b>	T 30	E 6.3	1/4	70	16	10	
<b>08 34 00 40</b>	<b>1296</b>	T 40	E 6.3	1/4	70	18	10	

outside ● DIN 3126/ISO 1173

### 1441 TN-1446 TN Torsion BITS screwdrivers



for inside TORX® screws.

- specifically developed for use with professional battery-powered impact screwdrivers.
- longer service lifetimes thanks to specially designed torsional shape, flexible material and high-grade hardening.
- controlled machine handling close to the screw thanks to very compact construction.



Code	No	size	outside mm	"	L mm	Δg	g	g
<b>08 16 11 15</b>	<b>1441 TN 15</b>	T 15	E 6.3	1/4	38	5	5	
<b>08 16 11 20</b>	<b>1442 TN 20</b>	T 20	E 6.3	1/4	38	5	5	
<b>08 16 11 25</b>	<b>1443 TN 25</b>	T 25	E 6.3	1/4	38	6	5	
<b>08 16 11 30</b>	<b>1445 TN 30</b>	T 30	E 6.3	1/4	38	7	5	
<b>08 16 11 40</b>	<b>1446 TN 40</b>	T 40	E 6.3	1/4	38	8	5	

outside ● DIN 3126/ISO 1173

### 2801 Sockets

with hexagon inserts for power drivers, hexagon fitted with permanent magnet, Chrome Alloy Steel, clear lacquered.



Code	mm	outside mm	"	d mm	L mm	Δg	g	g
<b>2801 10 07</b>	<b>7</b>	E 6.3	1/4	12	50	23	5	
<b>2801 10 08</b>	<b>8</b>	E 6.3	1/4	13	50	26	5	
<b>2801 10 10</b>	<b>10</b>	E 6.3	1/4	15.5	50	31	5	
<b>2801 10 13</b>	<b>13</b>	E 6.3	1/4	18.7	50	44	5	

# BITS und accessories

## 13006 Special socket

for use on plugs in electronic rack Airbus A320-A340.



Code	outside "	"	Ø mm	L mm	⚖ g	
<b>08 23 00 01</b>	E 6.3	1/4	11	50	32	10

outside DIN 3126/ISO 1173

## 13007 BIT screwdriver

for use on plugs in electronic rack Airbus A320-A340.



Code	"	outside "	"	L mm	⚖ g	
<b>08 24 00 06</b>	3/32	E 6.3	1/4	50	10	5

outside DIN 3126/ISO 1173

## 775/30N/2 Set

for use on plugs in electronic rack Airbus A320-A340.  
Content: 1 each  
Torque Screwdriver TORSIOMAX No 775/30  
Special Socket No 13006  
BIT Screwdriver insert No 13007



Code	⚖ g	
<b>96 51 05 02</b>	370	1

## 4060 IMPACT driver set

for screw sizes M5-M10,  
in strong metal case.  
Content:

- 1 each IMPACT driver No 4030
- Adaptors No 4035; No 4036

BITS screwdrivers for  
slotted screws No 4040-4044

BITS screwdrivers for  
Phillips-screws No 4050-4052

BITS screwdrivers for  
Hex. Socket Head screws No 4055-4058



Code	⚖ g	
<b>96 32 30 01</b>	1307	1

## 4030 IMPACT driver

with inside hexagon for  
BITS screwdriver inserts  
No 4040-4058, suitable for screws  
M 5-M 10, torque 120 N-m.



Code	inside "	L mm	⚖ g	
<b>32 20 00 01</b>	3/8	138	617	1

## 4035/4036 Adaptors

with outside hexagon,  
for IMPACT screwdriver No 4030.



Code	No	outside "	outside "	L mm	⚖ g	
<b>32 21 00 01</b>	<b>4035</b>	3/8	3/8	38	34	1
<b>33 21 00 01</b>	<b>4036</b>	3/8	1/2	38	43	1

## 4040-4045 BITS screwdrivers

for slotted screws,  
for IMPACT driver No 4030.



Code	No	a x b mm	outside "	L mm	⚖ g	
<b>08 40 00 10</b>	<b>4040</b>	1.0 x 7	3/8	40	17	10
<b>08 40 00 14</b>	<b>4041</b>	1.4 x 9	3/8	40	19	10
<b>08 40 00 16</b>	<b>4042</b>	1.6 x 10	3/8	40	21	10
<b>08 40 00 20</b>	<b>4043</b>	2.0 x 12	3/8	40	20	10
<b>08 40 00 15</b>	<b>4044</b>	1.5 x 13	3/8	40	24	10
<b>08 40 00 25</b>	<b>4045</b>	2.5 x 16	3/8	40	30	10

## 4050-4052 BITS screwdrivers

for Phillips screws,  
for IMPACT driver No 4030.



Code	No	Phillips- Recess®	outside "	L mm	⚖ g	
<b>08 41 00 02</b>	<b>4050</b>	2	3/8	35	17	10
<b>08 41 00 03</b>	<b>4051</b>	3	3/8	35	17	10
<b>08 41 00 04</b>	<b>4052</b>	4	3/8	35	17	10

Phillips-Recess® DIN 5260

## 4055-4058 BITS screwdrivers

for socket head screws,  
for IMPACT driver No 4030.



Code	No	mm	outside "	L mm	⚖ g	
<b>08 42 00 05</b>	<b>4055</b>	5	3/8	35	16	10
<b>08 42 00 06</b>	<b>4056</b>	6	3/8	35	16	10
<b>08 42 00 08</b>	<b>4057</b>	8	3/8	35	19	10
<b>08 42 00 10</b>	<b>4058</b>	10	3/8	35	23	10







# 5 | TORQUE TOOLS, TORQUE TESTERS

## **TORQUE** SCREWDRIVERS

→ PAGE 181



## **TORQUE** WRENCHES, MECHANICAL

→ PAGE 182



## **ANGLE-CONTROLLED** TORQUE WRENCHES, ELECTRONIC

→ PAGE 196



## **ACCESSORIES** TORQUE WRENCHES

→ PAGE 210



## **INSERT/SHELL TOOLS**

→ PAGE 211



## **TORQUE MULTIPLIERS** MULTIPOWER

→ PAGE 221



## **SPARE** PARTS

→ PAGE 222



## **TORQUE** TESTER

→ PAGE 224



## **CALIBRATION** SYSTEMS

→ PAGE 226



## **ACCESSORIES** TORQUE TESTER AND CALIBRATION SYSTEMS

→ PAGE 234



# Overview of torquing tools

What type of tool do you need?

To ensure safety and productivity, STAHLWILLE torquing tools offer you a high degree of convenience, accurate setting and optimised ergonomic designs. The following overview is designed to help you select just the right model for your application.

## 1 Torque screwdrivers



for example, the TORSIOMETER 760

### Torque screwdrivers

click-type	indicating	No	Capacity	Page
	•	760	15-600 cN·m	<b>181</b>
•		775	2-1000 cN·m	<b>181</b>

## 2 Torque wrenches



for example, the MANOSKOP® 730N

### Torque wrenches

click-type	indicating	No	Capacity	Page
	•	71	160-800 N·m	<b>182</b>
	•	73Nm/15	2-15 N·m	<b>182</b>
•		755	1,5-300 N·m	<b>183</b>
•		730	4-800 N·m	<b>184-186</b>
•		721	6-300 N·m	<b>187</b>
•		720Nf	160-800 N·m	<b>188</b>
•		721Nf	160-1000 N·m	<b>188</b>
•		730N	2-1000 N·m	<b>190-193</b>
	•	701	1-20 N·m	<b>194-195</b>
	•	712R/6	3-60 N·m	<b>208</b>

## 3 Angle-controlled/torque wrenches



for example, the Sensotork® 713R

### Torque wrench/angle-controlled wrench

click-type	indicating	No	Capacity	Page
•	•	730D	10-1000 N·m	<b>198-200</b>
•	•	714	1-1000 N·m	<b>202-205</b>
	•	713R	3-400 N·m	<b>206-208</b>

**STAHLWILLE's calibration laboratory - accredited from the highest instance.**

Controlled bolt tightening is an essential aspect of operating safety and the durability of screws and bolts. Put your trust in STAHLWILLE's DAkkS calibration laboratory. For all your torquing tools and testers.

**More details on page 180.**



## 4 Insert tools



### Insert tools

System		Page
9x12 mm	9x12	211 - 213
14x18 mm	14x18	214 - 215
22x28 mm	22x28	216
24.5x28 mm	24.5x28	217

## 5 Torque multipliers



### MULTIPOWER

No	Capacity	Page
MP300	800-5000 N·m	221
MP100-1500	100-1500 N·m	221

## 6 Reference technique



### Torque testers and calibrating units

No	Capacity	Page
7707 W Torque tester	0.2-1100 N·m	224
7791 / 7792 Manutork	1-3000 N·m	226 - 229
7794 perfectControl	1-1000 N·m	231 - 233
Accessories		234 - 235



## STAHLWILLE's calibration laboratory - accredited from the highest instance



Controlled tightening is a must in terms of safety and the lifetimes of the screws and bolts. STAHLWILLE has been awarded accreditation as a calibrating laboratory for torque by the German Accreditation Body (DAkkS) because of the Company's skills in the field of torque controlled tightening.



The STAHLWILLE calibration service is in a position to offer both the usual **works calibration certificate** and the **DAkkS certificate**.



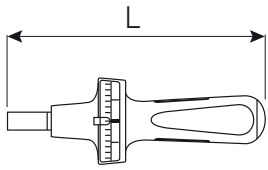
# Torque screwdrivers

## TORSIOMETER 760

- indicating type
- the measuring element is a torsional leaf spring
- clockwise tightening (with trailing pointer) and anticlockwise tightening
- with 1/4" internal hex drive (F 6.3 DIN 3126)
- comparative scale in in·lb and cursor
- inserts and adaptors with external hex E 6.3 (1/4")

- DIN 3126/ISO 1173 are securely held and firmly controlled in the mounting shaft (for BITS screwdriver inserts, refer to page 173).
- to attach 1/4" sockets, please order adaptor No 3115 (refer to page 172)
- with certificate
- display deviation value  $\pm 4\%$

### 760 Torque screwdrivers TORSIOMETER



Code	size				inside O	L mm	$\Delta$ g
51040007	7.5	15-75 cN·m	1.5-6.5 in·lb	2.5 cN·m	F 6.3	185	225
51040015	15	30-150 cN·m	3-13 in·lb	5 cN·m	F 6.3	185	225
51040030	30	60-300 cN·m	6-26 in·lb	10 cN·m	F 6.3	185	230
51040060	60	120-600 cN·m	12-52 in·lb	20 cN·m	F 6.3	185	230

## TORSIOMAX 775

- click-type
- for torque-controlled bolt tightening in the cN·m and in·lb ranges
- for one-off or production runs
- anticlockwise and clockwise tightening
- with 1/4" internal hex drive (F 6.3 DIN 3126/ISO1173)
- infinitely variable via micrometer scale (twist scale)
- disengaging clutch coupling prevents the preset value being exceeded

- the shape of the handle and its surface texture ensure safe and accurate transmission of torque
- insert tools: For all 1/4" hex E 6.3, Phillips-head screws, POZIDRIV/SUPADRIV®, straight-slot, TORX®, hex BITS (see pp. 173). For very small joints, BITS with a 4 mm hex drive and an adapter No 3115/2 for BITS screwdriver inserts, Type C4, and external hex 1/4" (E 6.3 DIN 3126/ISO 1173) are required (refer to pages 168, 171).
- with certificate
- display deviation value  $\pm 6\%$

### 775 Torque screwdrivers TORSIOMAX



Code	size			inside O	L mm	$\Delta$ g
51060003	3 <sup>1)</sup>	2-30 cN·m	0.2 cN·m	F 6.3	105	99
51060012	12 <sup>2)</sup>	20-120 cN·m	1 cN·m	F 6.3	157	192
51060030	30 <sup>2)</sup>	40-300 cN·m	1 cN·m	F 6.3	160	214
51060050	50 <sup>2)</sup>	100-500 cN·m	2.5 cN·m	F 6.3	205	436
51060100	100 <sup>3)</sup>	400-1000 cN·m	5 cN·m	F 6.3	235	762
51460003	a/3 <sup>1)</sup>	0.2-3 in·lb	0.02 in·lb	F 6.3	105	99
51460012	a/12 <sup>2)</sup>	2-12 in·lb	0.1 in·lb	F 6.3	157	192
51460050	a/50 <sup>2)</sup>	10-50 in·lb	0.25 in·lb	F 6.3	205	436

<sup>1)</sup> with a swivelling handle-end to improve tool control; and with a clamping screw for locking the preset.

<sup>2)</sup> with an additional locking mechanism to prevent the selected torque being inadvertently adjusted.

<sup>3)</sup> with screw-on handles for increasing the force applied for large torques.

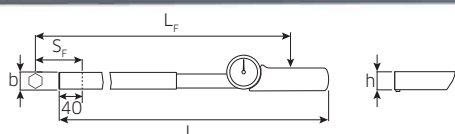
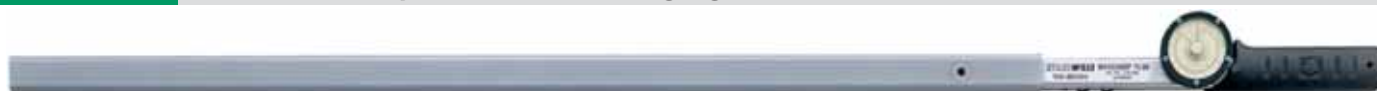
## Torque tools

### MANOSKOP® 71

211-217

- indicating type
- mount for interchangeable shell tools
- all 14 x 18 mm insert tools can also be used with insert tool adaptor No 7370/80 (max. 650 N·m)
- trailing pointer dial
- twin scales N·m/ft·lb
- scale is made of luminescent light yellow special film enabling clear readings even in poor light conditions
- handle with integrated force compensator
- measuring element is a bending plate housed in the handle
- with overload protection
- can be applied for either clockwise or anticlockwise tightening by turning the wrench over
- calibration using perfectControl calibrating unit No 7794 No 7794 or calibration system No 7706. Adjustment without disassembly.
- with certificate
- display deviation value  $\pm 4\%$

#### 71/80 MANOSKOP® torque wrench with dial gauge and mount for shell tools

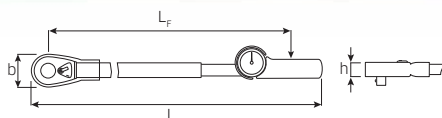


Code						b mm	h mm	L mm	L <sub>F</sub> mm	S <sub>F</sub> mm	$\Delta\%$ g
50030080	160-800 N·m	120-600 ft·lb	10 N·m	10 ft·lb	24,5x28	28	24	1048	1050	95	2360

### MANOSKOP® 71 with permanently installed reversible ratchet

- indicating type
- trailing pointer dial
- twin scales N·m/ft·lb
- scale is made of luminescent light yellow special film enabling clear readings even in poor light conditions
- additional protection for the gauge by the protective ring
- handle with integrated force compensator
- not for anticlockwise measurement
- calibration using perfectControl calibrating unit No 7794 or calibration system No 7706. Adjustment without disassembly.
- with certificate
- display deviation value  $\pm 4\%$

#### 71aR/80 MANOSKOP® torque wrench with dial gauge and permanently installed ratchet

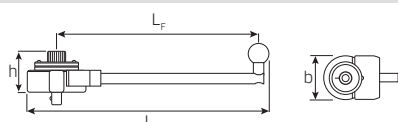


Code					"	b mm	h mm	L mm	L <sub>F</sub> mm	$\Delta\%$ g
50450080	100-600 ft·lb	160-800 N·m	10 ft·lb	10 N·m	3/4	70	30	1152	1060	4280

### Friction gauge

- indicating type
- permanently installed square drive for clockwise use
- trailing pointer dial
- no "needle wobble" during measurements
- lighter construction due to use of aluminium
- with certificate
- display deviation value  $\pm 4\%$

#### 73Nm/15 Friction gauge



Code			"	b mm	h mm	L mm	L <sub>F</sub> mm	S <sub>F</sub> mm	$\Delta\%$ g
50240015	2-15 N·m	0.5 N·m	1/2	72	50	298.5	250	0	775

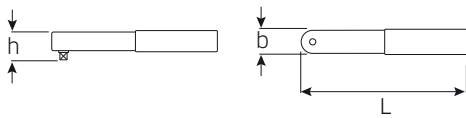
## Industrial MANOSKOP® 755

For work on production lines or series production. No setting scale; have to be set with a tester such as the STAHLWILLE No 7707 W tester or the No 7794, No 7706 calibration system.

- click-type
  - mount for interchangeable insert tools
  - dual stop signal
  - particularly light and easy to handle
  - handle and shank are made of square tubular steel
  - any force applied to the tool after the 'click' or applied in the opposite direction to the current function (up to the max. of the wrench's range)
- does not act on the trigger mechanism and cannot cause damage to it.
  - anticlockwise torquing thanks to swap-over insert tools
  - on request with preset cut-out value (surcharge 10%)
  - display deviation value  $\pm 4\%$

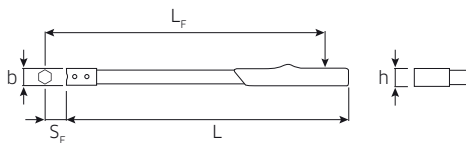
### 755R/1 Series MANOSKOP® torque wrench with permanently installed ratchet

dual stop signal, click-type. Deviation of indication  $\pm 4\%$ . Cut-out setting with aid of Setting Gauge.



Code			■ "	b mm	h mm	L mm	$\Delta\%$ g
50 10 0001	1.5-12.5 N·m	1.0-9.0 ft·lb	1/4	22	18	173.5	335

### 755 Series MANOSKOP® torque wrenches with mount for insert tools



Code	size			 mm	b mm	h mm	L mm	L <sub>F</sub> mm	S <sub>F</sub> mm	$\Delta\%$ g
5001 0004	4	4-40 N·m	4-30 ft·lb	9x12	22	18	201	172	17.5	522
5001 0010	10	20-100 N·m	15-74 ft·lb	9x12	28	24	318	289	17.5	635
5001 0020	20	40-200 N·m	30-147 ft·lb	14x18	28	24	457	435	25	1060
5001 0030	30	60-300 N·m	40-220 ft·lb	14x18	28	24	609	587	25	1210



**Industrial MANOSKOP® 755.**  
Accuracy - right down the line.



# MANOSKOP® 730

## Mechanical torque wrenches



### Advantages at a glance

- Easy setting and operation
- Extremely resilient and durable
- Wear-resistant switching mechanism
- Torque range 4 - 800 N·m
- No need for manual reset to zero - wear-free flexible rod instead of a compression spring
- Can be calibrated without disassembly
- Clearly detected cut-out even at very small torque settings
- Rapid setting thanks to slide control (sizes 2 - 65)
- Display deviation value  $\pm 4\%$

1

Protected mechanism, extremely resistant to mechanical wear, protected against dirt inside the outer housing

2

Easy-to-read twin scale for N·m/ft·lb and N·m/in·lb on sizes 5 - 80

3

Sturdy handle made of tough plastic, resistant to oils, grease, fuels, brake fluid and Skydrol

4

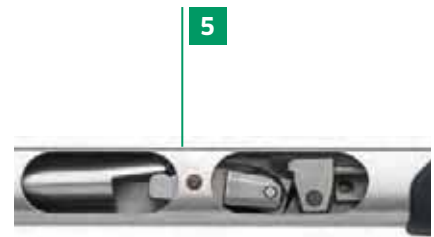
Square drive for use with a wide range of inserts (9x12 mm, 14x18 mm, 22x28 mm and 24.5x28 mm)

5

No need for manual reset to zero thanks to wear-free trigger system using triggering cam. The measuring element is only under load while force is being applied

6

Rapid setting of target torque on sizes 2 - 65.

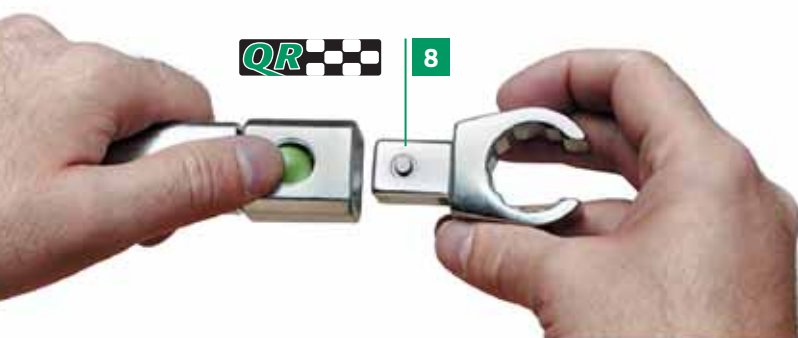


5

**7** Quick adjustment from outside, no disassembly of the torque wrench required

**8** QuickRelease safety lock guarantees secure locking of insert tools on sizes 5 - 65 and fast removal

**9** Any force applied to the tool after the 'click' or applied in the opposite direction to the current function - forcible loosening of a jammed screw - does not act on the trigger mechanism and cannot cause damage to it.



! Further details on **page 186**



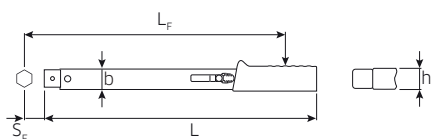
## Torque tools

### Service MANOSKOP® 730

- click-type
- mount for interchangeable insert/shell tools
- QuickRelease safety lock (sizes 5-65)
- rapid setting (sizes 2-65)
- dual stop signal
- twin scales N·m/ft·lb and N·m/in·lb (sizes 5-80)
- the measuring element is only under load while force is being applied, no need for manual reset to zero
- can be applied for either clockwise or anticlockwise tightening by turning the inserts over
- any force applied to the tool after the 'click' or applied in the opposite direction to the current function – e.g. forcible loosening of a jammed screw - does not act on the trigger mechanism and cannot cause damage to it.
- calibration using perfectControl calibrating unit No 7794 or calibration system No 7706. Adjustment without disassembly.
- with certificate
- display deviation value  $\pm 4\%$

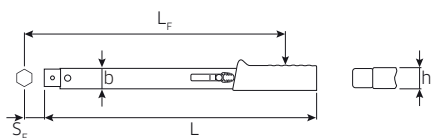
211-217

#### 730 Service MANOSKOP® torque wrenches with mount for insert tools



730/2

Code	size				mm	b mm	h mm	L mm	L <sub>F</sub> mm	S <sub>F</sub> mm	$\Delta\%$ g
50 18 0002	2	4-20 N·m	0.5 N·m		9x12	27.5	23	178.5	174	17.5	315
50 18 0004	4	8-40 N·m	1 N·m		9x12	27.5	23	222	218	17.5	395
50 58 0001	a/2-1	17.5-87.5 in·lb	2.5 in·lb		9x12	27.5	23	178.5	174	17.5	315
50 58 0002	a/2	30-175 in·lb	5 in·lb		9x12	27.5	23	178.5	174	17.5	315
50 58 0004	a/4	70-350 in·lb	10 in·lb		9x12	27.5	23	222	218	17.5	395



730/5

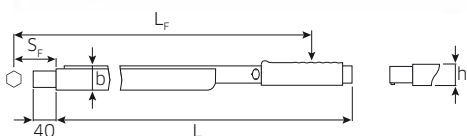
Code	size					mm	b mm	h mm	L mm	L <sub>F</sub> mm	S <sub>F</sub> mm	$\Delta\%$ g
50 18 0005	5	6-50 N·m	5-36 ft·lb	2 N·m	1 ft·lb	9x12	28	23	315	288	17.5	805
50 18 0010	10	20-100 N·m	15-72.5 ft·lb	2.5 N·m	2.5 ft·lb	9x12	28	23	370	343	17.5	965
50 18 0012	12	25-130 N·m	20-95 ft·lb	2.5 N·m	2.5 ft·lb	14x18	28	23	410	390	25	1100
50 18 0020	20	40-200 N·m	30-145 ft·lb	5 N·m	5 ft·lb	14x18	28	23	455	435	25	1250
50 18 0040	40	80-400 N·m	60-300 ft·lb	10 N·m	10 ft·lb	14x18	28	23	590	570	25	1880
50 18 0065	65*	130-650 N·m	100-480 ft·lb	20 N·m	20 ft·lb	14x18	30.6	25.6	875	855	25	3280
50 18 1565	II/65	130-650 N·m	100-480 ft·lb	20 N·m	20 ft·lb	22x28	30.6	25.6	897	907	55	3700
50 58 0005	a/5	6-50 N·m	50-440 in·lb	2 N·m	10 in·lb	9x12	28	23	315	288	17.5	805
50 58 0010	a/10	20-100 N·m	180-880 in·lb	2.5 N·m	20 in·lb	9x12	28	23	370	343	17.5	965
50 58 0012	a/12	25-130 N·m	225-1150 in·lb	2.5 N·m	25 in·lb	14x18	28	23	410	390	25	1100
50 58 0020	a/20	40-200 N·m	350-1750 in·lb	5 N·m	50 in·lb	14x18	28	23	455	435	25	1250

\* recommended ratchet insert tool No 735/40HD

#### 730/80 Service MANOSKOP® torque wrench with mount for shell tools



730/80



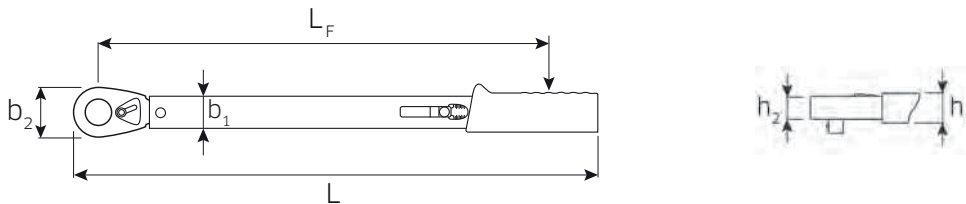
Code					mm	b mm	h mm	L mm	L <sub>F</sub> mm	S <sub>F</sub> mm	$\Delta\%$ g
50 18 0080	160-800 N·m	120-600 ft·lb	20 N·m	20 ft·lb	24.5x28	46	43	970	990	95	5377

Use shell adaptor No 7370/80 to make 14 x 18 mm insert tools fit.

## Standard MANOSKOP® 721

- click-type
- rapid setting
- dual stop signal
- twin scales N·m/ft·lb
- the measuring element is only under load while force is being applied, no need for manual reset to zero
- any force applied to the tool after the 'click' or applied in the opposite direction to the current function - e.g. forcible loosening of a jammed screw - does not act on the trigger mechanism and cannot cause damage to it.
- all the sensitive components are protected by the sturdy tubular steel housing
- calibration using perfectControl calibrating unit No 7794 or calibration system No 7706. Adjustment without disassembly.
- with certificate
- display deviation value  $\pm 4\%$

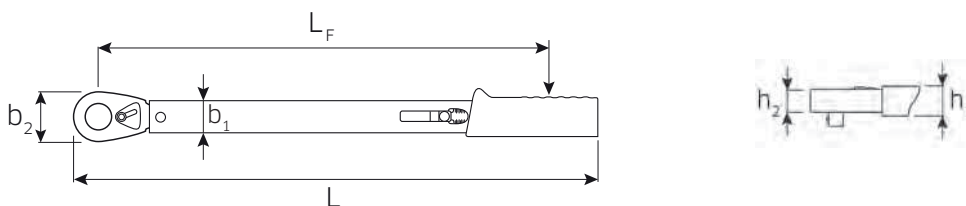
### 721 Standard MANOSKOP® torque wrenches permanently installed ratchet



Code	size					■	b <sub>1</sub> mm	b <sub>2</sub> mm	h <sub>1</sub> mm	h <sub>2</sub> mm	L mm	L <sub>F</sub> mm	Δg g
50 20 00 05	5	6-50 N·m	5-36 ft·lb	2 N·m	1 ft·lb	3/8	28	27.5	23	14.5	352	293	900
50 20 00 15	15	30-150 N·m	25-110 ft·lb	5 N·m	5 ft·lb	1/2	28	41	23	18	452	387	1395
50 20 00 20	20	40-200 N·m	30-150 ft·lb	5 N·m	5 ft·lb	1/2	28	41	23	18	483	418	1490
50 20 00 30	30	60-300 N·m	50-220 ft·lb	10 N·m	10 ft·lb	1/2	28	44	23	27.5	553	486	1720

size 30 with push through square drive for anticlockwise torquing (spare square drive, refer to page 223)

### 721QR/20 Standard MANOSKOP® torque wrench with permanently installed QuickRelease ratchet



Code					■	b <sub>1</sub> mm	b <sub>2</sub> mm	h <sub>1</sub> mm	h <sub>2</sub> mm	L mm	L <sub>F</sub> mm	Δg g
50 20 10 20	40-200 N·m	30-150 ft·lb	5 N·m	5 ft·lb	1/2	28	41	23	18	483	418	1250

### 721QR/20/3/1 Wheel-fitting set



Set of 5 in sturdy plastic case.

Contents

- 1 Standard MANOSKOP® No 721QR/20, 40-200 N·m, 30 - 150 ft·lb, with permanently installed QuickRelease ratchet, reversible, 1/2" ■ drive
- 3 wheel nut sockets No 51 IMP K, sizes 17 (green), 19 (blue), 20.8 mm (red)
- 1 extension 130 mm No 509QR/5



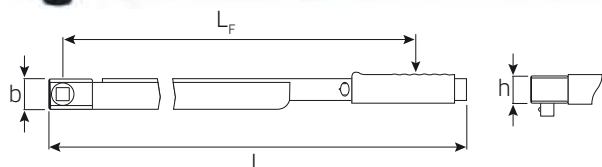
Code	Δg g	
96 50 72 13	2965	1

## Torque tools

### Standard MANOSKOP® 720Nf/721Nf

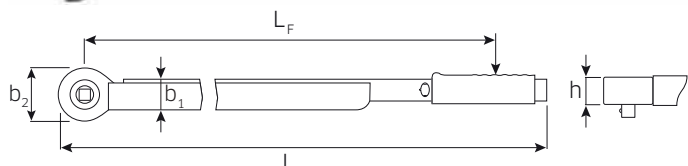
- click-type
- easy setting
- dual stop signal
- twin scales N·m/ft·lb
- anticlockwise torquing thanks to swap-over square drive
- all the sensitive components are protected by the sturdy tubular steel housing in the U-shaped aluminium profile
- calibration using perfectControl calibrating unit No 7794 or calibration system No 7706. Adjustment without disassembly.
- with certificate
- display deviation value  $\pm 4\%$

#### 720Nf/80 Standard MANOSKOP® torque wrench with permanently installed square drive



Code					"	b mm	h mm	L mm	L <sub>F</sub> mm	S <sub>F</sub> mm	$\Delta\Delta$ g
50 19 00 81	160-800 N·m	120-600 ft·lb	20 N·m	20 ft·lb	3/4	45	42	1034	938	0	5650

#### 721Nf Standard MANOSKOP® torque wrenches with permanently installed ratchet



Code	size					"	b <sub>1</sub> mm	b <sub>2</sub> mm	h mm	L mm	L <sub>F</sub> mm	$\Delta\Delta$ g
50 20 00 81	80	160-800 N·m	120-600 ft·lb	20 N·m	20 ft·lb	3/4	46.5	76	42	1051	938	6770
96 50 20 01	100	200-1000 N·m	150-725 ft·lb	25 N·m	25 ft·lb	3/4	46.5	76	42	1504	1365	7005

#### 730R/40/32 Torque wrench set

32 pieces, in steel case, for general service work.

Content:

- 1 SERVICE-MANOSKOP® No 730/40, 80-400 N·m
- 1 ratchet insert tool No 735/20, reversible, 1/2" ■-drive
- 1 square drive insert tool No 734/20, 1/2" ■-drive
- 7 o/e insert tools No 731/40, sizes 13, 15, 17, 19, 22, 27, 30 mm
- 1 No 3731/40 size 24 mm;
- 7 ring insert tools No 732/40, sizes 13, 15, 17, 19, 22, 24, 27 mm
- 10 sockets, bi-hexagon No 50, sizes 13, 14, 15, 17, 19, 22, 24, 27, 30, 32 mm
- 4 accessories, 1/2" ○-drive:
  - 1 T-handle No 506
  - 1 extension 255 mm No 509/10
  - 1 extension 130 mm No 509/5
  - 1 extension 55 mm No 509/2



Code	$\Delta\Delta$ g	
96 50 20 53	9739	1

# This is how to achieve the correct tightening torque - even if you are using inserts with an extension

When you tighten fasteners using inserts whose extension length  $S$  deviates from the standard length  $S_F$ , it is necessary to recalculate the setting/display value for the torque wrench in use.

**Caution!** If adapters are combined with inserts or special tools, use the sum of the extensions =  $\Sigma S$ . Where the special tool is angled to the side,  $W_k$  will have to be determined empirically.

$$W_k = \frac{M_A \cdot L_F}{L_k} \left[ \frac{\text{N} \cdot \text{m} \cdot \text{mm}}{\text{mm}} \right]$$

$$W_k = \frac{M_A \cdot L_F}{L_F - S_F + S \text{ (or } \Sigma S)}$$

$M_A$  = desired tightening torque

$W$  = reading/setting  $W = M_A$

$W_k$  = adjusted reading or setting value  $W_k \neq M_A$

$L_F$  = functional length (see dimension table for torque wrenches)

$L_k$  = adjusted functional length  $L_k = L_F - S_F + S \text{ (or } \Sigma S)$

$S$  = extension of STAHLWILLE inserts or special tools (see dimension table for inserts)

$S_F$  = standard extension (see dimension table for torque wrenches)

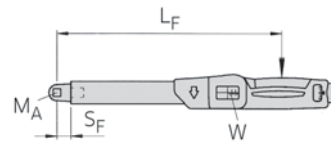
$\Sigma S$  = total of all extensions of the attached inserts  $S_{\text{adapter}} + S_{\text{insert}} + \dots$

### Normal situation

Torque wrench No 730N/10 combined with square drive insert tool No 734/5 and socket size 13 mm.

**Required tightening torque for the screw  $M_A = 40 \text{ N-m}$**

Dimension table for torque wrenches:  $L_F = 336 \text{ mm}$ ,  $S_F = 17.5 \text{ mm}$   
 Dimension table for square drive insert tools:  $S = 17.5 \text{ mm}$



**No adjustment** to setting value required on torque wrench.

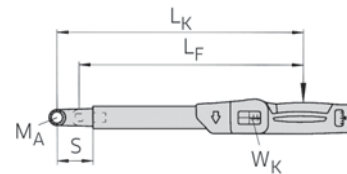
$\rightarrow S = S_F$   
 $\rightarrow W = M_A$

### Example 1: adjusted setting value (1 insert tool)

Torque wrench No 730N/20 combined with ring insert tool No 732/40 size 36 mm

**Required tightening torque for the screw  $M_A = 190 \text{ N-m}$**

Dimension table for torque wrenches:  $L_F = 424.5 \text{ mm}$ ,  $S_F = 25 \text{ mm}$   
 Dimension table for ring insert tools:  $S = 28 \text{ mm}$



And this is what it looks like in the catalogue:

730N		Basic wrenches with tool carrier for insert tools											
Code	size	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		
50181002	2	2-20 N-m	20-180 in-lb	1 N-m	10 in-lb	0.2 N-m	9x12	28	23	275	226	17.5	737
50181005	5	10-50 N-m	7-37 ft-lb	5 N-m	1 ft-lb	0.25 N-m	9x12	28	23	330	280.5	17.5	831
50181010	10	20-100 N-m	15-75 ft-lb	10 N-m	2.5 ft-lb	0.5 N-m	9x12	28	23	386	336	17.5	988
50181012	12	25-130 N-m	20-95 ft-lb	10 N-m	2.5 ft-lb	0.5 N-m	22x28	28	23	421	379	25	1128
50181020	20	40-200 N-m	30-150 ft-lb	10 N-m	5 ft-lb	1 N-m	22x28	28	23	467	424.5	25	1264
50181040	40	80-400 N-m	60-300 ft-lb	20 N-m	10 ft-lb	2 N-m	22x28	28	23	607	564.5	25	1655
50181065	65	130-650 N-m	100-480 ft-lb	50 N-m	20 ft-lb	2.5 N-m	22x28	30.6	25.6	890	848	25	3231
50181365	1/65	130-650 N-m	100-480 ft-lb	50 N-m	20 ft-lb	2.5 N-m	22x28	30.6	25.6	911	900	55	3504
50181080	80	160-800 N-m	120-600 ft-lb	100 N-m	25 ft-lb	5 N-m	22x28	30.6	25.6	1178	1167	55	4882
50181100	100	200-1000 N-m	150-750 ft-lb	100 N-m	25 ft-lb	5 N-m	22x28	30.6	25.6	1363	1297	55	5300
50581002	a/2	20-180 in-lb	1.5-15 ft-lb	10 in-lb	0.5 ft-lb	2 in-lb	9x12	28	23	275	226	17.5	737
50581005	a/5	90-450 in-lb	7-37 ft-lb	50 in-lb	1 ft-lb	2.5 in-lb	9x12	28	23	330	280.5	17.5	831
50581010	a/10	180-900 in-lb	15-75 ft-lb	100 in-lb	2.5 ft-lb	5 in-lb	9x12	28	23	386	336	17.5	988
50581020	a/20	350-1800 in-lb	30-150 ft-lb	100 in-lb	5 ft-lb	10 in-lb	22x28	28	23	467	424.5	25	1264
50581040	a/40	60-300 ft-lb	800-3600 in-lb	20 ft-lb	100 in-lb	2 ft-lb	22x28	28	23	607	564.5	25	1655

\* recommended ratchet insert tool No 735/40HD

$$W_k = \frac{M_A \cdot L_F}{L_F - S_F + S} = \frac{190 \text{ N-m} \cdot 424.5 \text{ mm}}{424.5 \text{ mm} - 25 \text{ mm} + 28 \text{ mm}} = \frac{190 \text{ N-m} \cdot 424.5 \text{ mm}}{427.5 \text{ mm}} = 188.7 \text{ N-m}$$

**Adjusted setting value  $W_k = 188.7 \text{ N-m}$**   
 $\rightarrow$  value to set 189 N-m

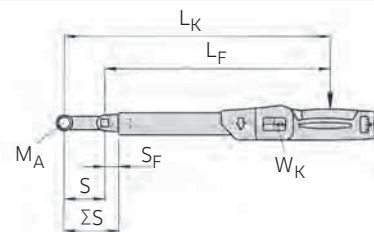
$\rightarrow S \neq S_F$   
 $\rightarrow W \neq M_A$

### Example 2: adjusted reading (insert tool and adapter)

Torque wrench No 730N/10 combined with square drive insert tool No 734/5 and adapter No 447 size 10 mm

**Required tightening torque for the screw  $M_A = 25 \text{ N-m}$**

Dimension table for torque wrenches:  $L_F = 336 \text{ mm}$ ,  $S_F = 17.5 \text{ mm}$   
 Dimension table for square drive insert tools:  $S_F = 17.5 \text{ mm}$   
 Dimension table for adapters:  $\Sigma S = 50.8 \text{ mm}$



$$W_k = \frac{M_A \cdot L_F}{L_F - S_F + \Sigma S} = \frac{25 \text{ N-m} \cdot 336 \text{ mm}}{336 \text{ mm} - 17.5 \text{ mm} + 17.5 \text{ mm} + 50.8 \text{ mm}} = \frac{25 \text{ N-m} \cdot 336 \text{ mm}}{386.8 \text{ mm}}$$

**Adjusted setting value  $W_k = 21.7 \text{ N-m}$**

$\rightarrow \Sigma S \neq S_F$   
 $\rightarrow W \neq M_A$



# MANOSKOP® 730N

## Mechanical torque wrench



### Benefits at a glance:

- Accurate one-handed setting – quick & easy control using the knob at the end of the handle
- Audible setting positions
- Fail-safe setting mechanism in the knob
- Clearly readable twin scale (N·m and ft·lb)
- Noticeable double signals when the preset torque is reached
- Square drives with
- QuickRelease safety locks – for 9x12, 14x18 and 22x28 mm
- Handle is resistant to oils, grease, fuels, brake fluids and Skydrol
- Deviation of indication  $\pm 3\%$

1

Protected mechanism extremely resistant to mechanical wear, protected against dirt inside the outer housing

2

Easily readable double scale. The colour differentiation between the N·m and ft·lb scales simplifies fine setting

3

Two-component handle made of extremely tough, impact resistant plastic with a kind-to-the-hands softer layer

4

Ring scale with fine settings for the black measuring range on the twin scale

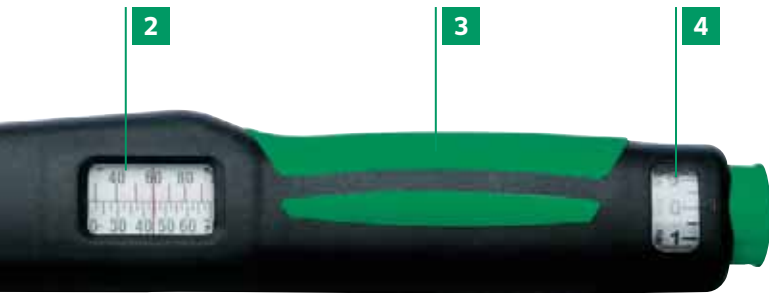
5

QuickSelect rapid setting: Pull, set, lock. All using the one setting knob

6

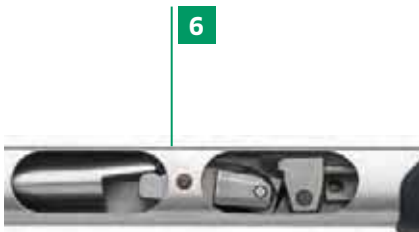
No need for manual reset to zero thanks to the wear-free triggering cam system. The measuring element is only under load while force is being applied.





**Also available with adaptor for 22x28 mm**

- Tighten large torques effortlessly
- High long-term durability
- 650 - 1000 N·m



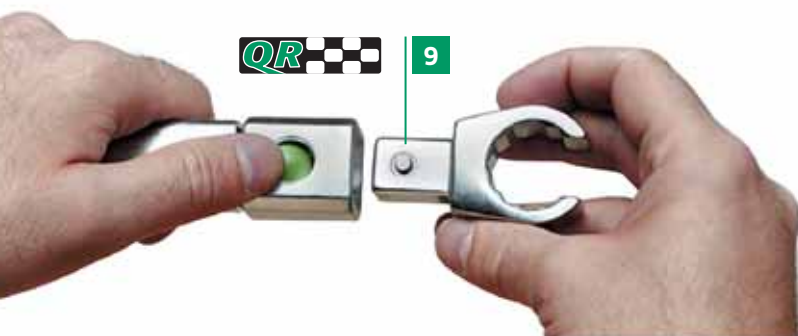
5

**7** The square drive enables a broad range of tightening tools

**8** Rapid adjustment from outside, no disassembly of the torque wrench

**9** QuickRelease safety lock  
Firm locking and rapid change of insert tools thanks to the QuickRelease safety lock

**10** Integrated clockwise and anticlockwise operation simply by turning over the wrench and insert tool



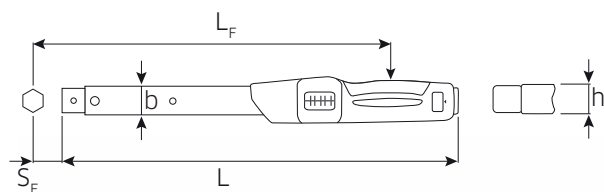
**!** Further details  
on page 192

## Service MANOSKOP® 730N

211-217

- click-type
- mount for interchangeable insert tools
- QuickRelease safety lock
- fast, accurate setting thanks to QuickSelect quick-action adjuster
- dual stop signal
- easy-to-read double scale with colour coding to differentiate between N·m/ft·lb and ft·lb/in·lb scales
- the measuring element is only under load while force is being applied, no need for manual reset to zero
- can be applied for either clockwise or anticlockwise tightening by turning the inserts over
- any force applied to the tool after the 'click' or applied in the opposite direction to the current function - e.g. forcible loosening of a jammed screw - does not act on the trigger mechanism and cannot cause damage to it.
- two-component handle with ergonomically designed green softer layers (resistant to oils, grease, fuels, brake fluids and Skydrol)
- calibration using perfectControl calibrating unit No 7794 or calibration system No 7706. Adjustment without disassembly.
- with certificate
- registered design
- display deviation value  $\pm 3\%$

### 730N Service MANOSKOP® torque wrenches with mount for insert tools



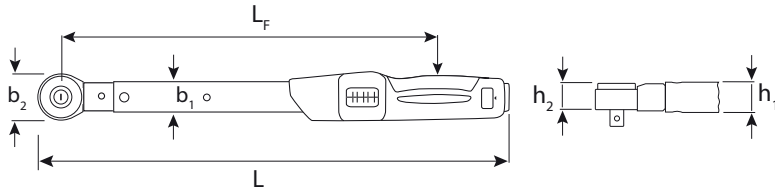
Code	size					Fine scale		b	h	L	L <sub>F</sub>	S <sub>F</sub>	$\Delta$ g
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
50 18 1002	2	2-20 N·m	20-180 in·lb	1 N·m	10 in·lb	0.2 N·m	9x12	28	23	275	226	17.5	737
50 18 1005	5	10-50 N·m	7-37 ft·lb	5 N·m	1 ft·lb	0.25 N·m	9x12	28	23	330	280.5	17.5	1054
50 18 1010	10	20-100 N·m	15-75 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	9x12	28	23	386	336	17.5	988
50 18 1012	12	25-130 N·m	20-95 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	14x18	28	23	421	379	25	1128
50 18 1020	20	40-200 N·m	30-150 ft·lb	10 N·m	5 ft·lb	1 N·m	14x18	28	23	467	424.5	25	1264
50 18 1040	40	80-400 N·m	60-300 ft·lb	20 N·m	10 ft·lb	2 N·m	14x18	28	23	607	564.5	25	1655
50 18 1065	65*	130-650 N·m	100-480 ft·lb	50 N·m	20 ft·lb	2.5 N·m	14x18	30.6	25.6	890	848	25	3231
50 18 1365	II/65	130-650 N·m	100-480 ft·lb	50 N·m	20 ft·lb	2.5 N·m	22x28	30.6	25.6	911	900	55	3504
50 18 1080	80	160-800 N·m	120-600 ft·lb	100 N·m	25 ft·lb	5 N·m	22x28	30.6	25.6	1178	1167	55	4825
50 18 1100	100	200-1000 N·m	150-750 ft·lb	100 N·m	25 ft·lb	5 N·m	22x28	30.6	25.6	1363	1352	55	5000
50 58 1002	a/2	20-180 in·lb	1.5-15 ft·lb	10 in·lb	0.5 ft·lb	2 in·lb	9x12	28	23	275	226	17.5	737
50 58 1005	a/5	90-450 in·lb	7-37 ft·lb	50 in·lb	1 ft·lb	2.5 in·lb	9x12	28	23	330	280.5	17.5	831
50 58 1010	a/10	180-900 in·lb	15-75 ft·lb	100 in·lb	2.5 ft·lb	5 in·lb	9x12	28	23	386	336	17.5	988
50 58 1020	a/20	350-1800 in·lb	30-150 ft·lb	100 in·lb	5 ft·lb	10 in·lb	14x18	28	23	467	424.5	25	1264
50 58 1040	a/40	60-300 ft·lb	800-3600 in·lb	20 ft·lb	100 in·lb	2 ft·lb	14x18	28	23	607	564.5	25	1655

\* recommended ratchet insert tool No 735/40HD



## 730NR Service MANOSKOP® torque wrenches with permanently installed fine-tooth ratchet

in sturdy plastic case (size 65 in steel case). Deviation of indication  $\pm 4\%$ .

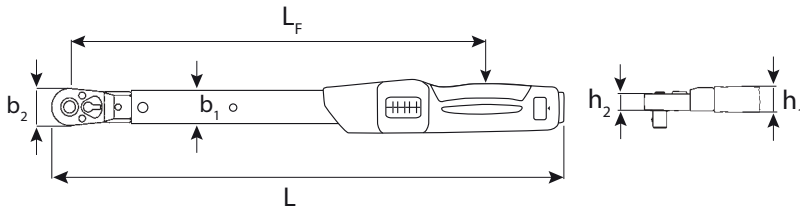


Code	size					Fine scale 	■ "	b <sub>1</sub> mm	b <sub>2</sub> mm	h <sub>1</sub> mm	h <sub>2</sub> mm	L mm	L <sub>F</sub> mm	ΔΔ g	ΔΔ g with box
96 50 31 05	5 FK	10-50 N·m	7-37 ft·lb	5 N·m	1 ft·lb	0.25 N·m	3/8	28	33	23	24	364	280.5	973	1763
96 50 31 10	10 FK	20-100 N·m	15-75 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	1/2	28	33	23	24	420	336.5	1146	1934
96 50 31 20	20 FK	40-200 N·m	30-150 ft·lb	10 N·m	5 ft·lb	1 N·m	1/2	28	43	23	26	513.5	425	1583	2370
96 50 21 40	40 FK	80-400 N·m	60-300 ft·lb	20 N·m	10 ft·lb	2 N·m	3/4	28	50	23	31.5	657	564.5	2122	2657
96 50 22 65	65 FK-HD	130-650 N·m	100-480 ft·lb	50 N·m	20 ft·lb	2.5 N·m	3/4	30.6	58	25.6	36	944	848	3698	6188

## 730NR Service MANOSKOP® torque wrench with permanently installed QuickRelease ratchet



in sturdy plastic case (size 65 in steel case). Ratchet has QuickRelease safety lock. Deviation of indication  $\pm 4\%$ .



Code	size					Fine scale 	■ "	b <sub>1</sub> mm	b <sub>2</sub> mm	h <sub>1</sub> mm	h <sub>2</sub> mm	L mm	L <sub>F</sub> mm	ΔΔ g	ΔΔ g with box
96 50 21 05	5QR FK	10-50 N·m	7-37 ft·lb	5 N·m	1 ft·lb	0.25 N·m	3/8	28	29	23	14.5	372.5	291	961	1386
96 50 21 10	10QR FK	20-100 N·m	15-75 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	1/2	28	29	23	14.5	428.5	346.5	1129	1554
96 50 21 20	20QR FK	40-200 N·m	30-150 ft·lb	10 N·m	5 ft·lb	1 N·m	1/2	28	41	23	18	526	438.5	1589	2014





# SENSOTORK® 701

## Electronic torque wrench



### Advantages at a glance

- Slim, compact shape for smaller torques from 1 N·m upwards
- Units of measure: N·m, cN·m, ft·lb, in·lb
- Readings independent of point of application of force
- Indicating - for a broad torque range from 1 to 20 N·m.
- With additional SENSOMASTER 4 software:
  - Adjustable joints
  - Evaluation of tightening operation by means of coloured LEDs, buzzer and vibration
  - Calibrating interval adjustable
  - Logging function
- Supplied with battery
- For use in conjunction with perfectControl calibrating unit No 7794 or calibration system No 7706. Readjustment does not require disassembly
- With certificate
- Display deviation value  $\pm 4\%$

1

**Safe.** Thanks to the permanently integrated fine-tooth ratchet and QuickRelease technology.

2

**Compact.** The ergonomically constructed design is extremely slim and enables working even in the most awkward places.

3

**Versatile.** Three measuring methods: track, peak hold, joint evaluation.

4

**Accurate.** SENSOTORK® 701 measures to within  $\pm 4\%$ . Always.

5

**Intuitive.** The required mode of operation can be quickly and easily set using the single-button setting system.

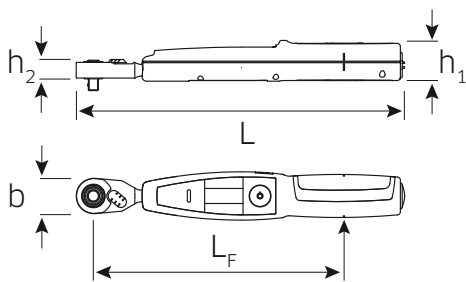
6

**Ergonomically designed.** Strain-free working thanks to the specially designed handle.

## SENSOTORK® 701 electronic torque wrench

- indicating
- slim, compact shape for smaller torques from 1 N·m upwards
- measuring units: N·m, cN·m, ft·lb, in·lb
- measurements independent of the point of application of force
- additional functions using SENSOMASTER 4 software (freely available after registration at [www.stahlwille.de/sensomaster](http://www.stahlwille.de/sensomaster)):
  - adjustable joints
  - evaluation of tightening operation by means of coloured LEDs, buzzer and vibration
- calibrating interval adjustable
- logging function
- supplied with 3.6 V lithium battery, type 14500
- calibration in conjunction with perfectControl calibrating unit No 7794 or complete calibration system No 7706. Readjustment does not require disassembly
- with certificate
- display deviation value  $\pm 4\%$

### 701/2 Electronic torque wrench with permanently installed fine-tooth ratchet



Code					"	b mm	h <sub>1</sub> mm	h <sub>2</sub> mm	L mm	L <sub>F</sub> mm	$\Delta \varnothing$ g	$\Delta \varnothing$ g with box
<b>96 50 45 02</b>	1-20 N·m	100-2000 cN·m	0.7-15 ft·lb	9-180 in·lb	1/4	22.6	26	10	210	160	145	710



### Note!

Torque tightening tools are measuring instruments. They must be regularly calibrated with suitable instruments and adjusted accordingly (see DIN EN ISO 6789, 5.3 Recalibrating).





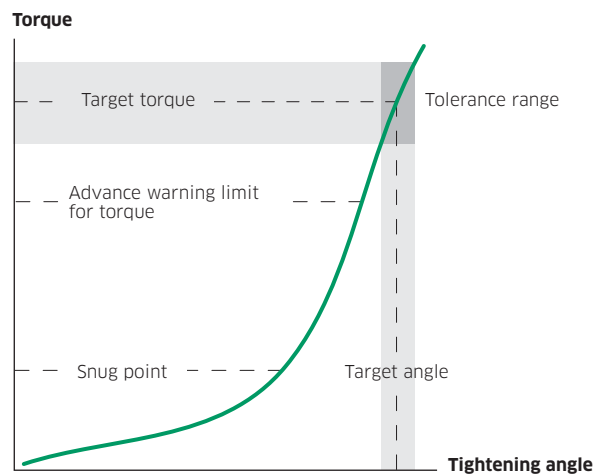
# STAHLWILLE angle-controlled torque wrenches.

For absolute accuracy.



**For high-accuracy applications - Category A bolted connections, for example - just checking the torque is not enough. As well as the torque, it is crucial to tighten to the correct tightening angle**

5



The torque reading specifies how much force was applied to tighten a fastener. For many applications, this is perfectly good enough. However, in certain cases, the additional measure of accuracy is an essential requirement. The tightening force that is generated between the workpieces in a bolted joint has to be exactly adhered to: if the force is too great, there is a risk of breakage. If it is too low, on the other hand, the connection will not be firm enough and may lead to failure in the assembly under normal operating conditions. Since the tightening force is dependent on the tightening torque and the angle, measuring equipment that can measure both quantities exactly is required. For applications of this kind, STAHLWILLE has precisely the solutions industry needs.



MANOSKOP® 730D  
+ Angle Module 7395-1

→ 198



MANOSKOP® 714

→ 202



SENSOTORK® 713R

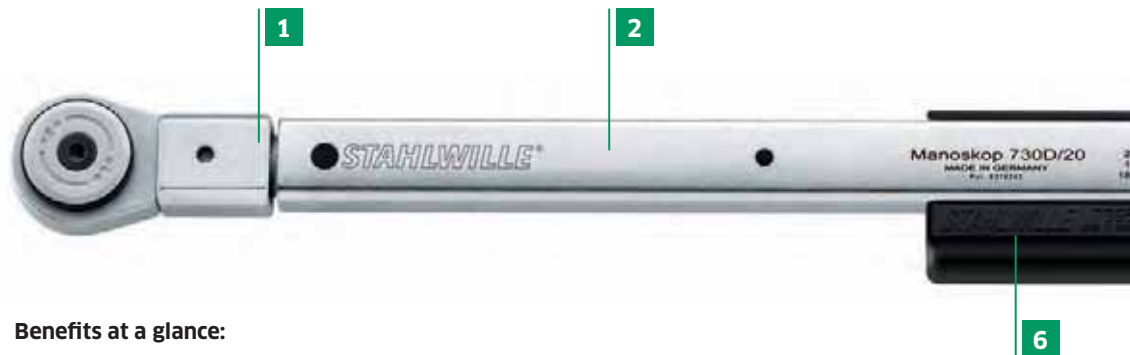
→ 206

- **Accurate control:** Uncertainty is reduced to a minimum to guarantee accurate readings.
- **Higher quality bolted connections:** Including the tightening angle as the second measured quantity makes the bolted joint even more secure.
- **Perfect procedures:** Easily readable, unmistakable displays and automatic switch-over to angle-controlled measurement once the target tightening torque has been reached – key features in efficient, safe work practice.
- **Excellent economy:** Thanks to the considerably extended measuring range, every angle-controlled torque wrench can replace as many as four mechanical torque wrenches (two indicating and two clicking), which simultaneously reduces the costs of maintenance, calibration and adjustment. All these models are suitable for clockwise and anticlockwise tightening.
- **Better monitoring:** All our angle-controlled torque wrenches have a logging function. Using the corresponding software (in some cases this is an optional extra), it is possible to read out programmed, stored readings and archive them on the PC – for example by the serial number of the tool, date and timestamp of the tightening operation, target torque and angle and the torques and angles actually recorded.



# MANOSKOP® 730D

## Electromechanical torque wrench



### Benefits at a glance:

- Indicating and click-type
- Displays the torque actually applied after the wrench cuts out. In this way, the user has the opportunity to optimise his or her working methods.
- Units of measurement: N·m / ft·lb / in·lb
- Automatic keypad lock
- Display also works for anticlockwise torque
- Angle-controlled measurement without a reference arm using a supplementary module
- Overload protection by means of acoustic and visual signals
- Automatic compensation to achieve correct tightening torque even if a changed extension is entered
- Different tolerance limits can be set for each joint
- Visual red and green signals in the display confirm the status of the joint
- Additional security for presets using PIN code
- Automatic notification of the next calibration date
- Deviation of indication  $\pm 2\%$

Measure, cut-out and record: When the preset torque is reached, the torque wrench cuts out and indicates this fact to the user via a definite tactile and audible signal. The tightening torques are stored. The data can be transferred to a PC for evaluation and documentation.

1

The square drive enables a broad range of insert tools

2

Dual stop signal with tactile and acoustic cut-out signals

3

Easy-to-read display

4

Rapid setting

The convenient keypad enables the torque wrench to be quickly and easily set

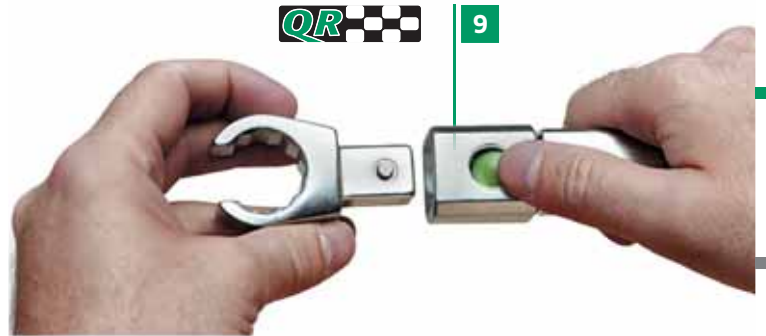


**Also available with adaptor for 22x28 mm**

- Tighten large torques effortlessly
- High long-term durability
- 650 - 1000 N·m



7395-1



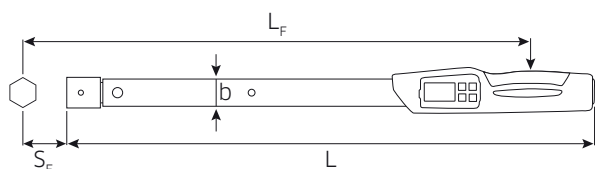
- 5** Power supply two 1.5 V AA batteries
- 6** Angle controlled tightening  
Simply attach the Angle Module No 7395-1 and connect the cable to the interface
- 7** Data output USB interface
- 8** 2-component handle has ergonomically designed, green softer layers and is resistant to oils, grease, fuels, brake fluids and Skydrol.
- 9** QuickRelease safety lock

**!** Further details  
on page 200

## Service work & series production MANOSKOP® - indicating and click-type

- tactile and acoustic trigger signal
  - mount for interchangeable insert tools
  - QuickRelease safety lock
  - fast setting using convenient keypad
  - automatic compensation to achieve correct tightening torque even if a changed extension is entered
  - overload protection by means of acoustic and visual signals
  - automatic keypad lock prevents inadvertent changes
  - angle-controlled measurements without a reference arm using Angle Module No 7395-1 (refer to page 205)
  - display also works for anticlockwise torque
  - units of measurement: N·m, ft·lb, in·lb
  - different tolerance limits can be set for each joint
  - visual red and green signals in the display confirm the status of the joint
- 211-217
- additional security for presets (function mode, trigger or preset value, unit of measurement, tolerance, save, deviating extension) using PIN code
  - up to 7.500 measurements can be stored
  - USB interface
  - automatic notification of the next calibration date
  - calibration using perfectControl calibrating unit No 7794 or calibration system No 7706
  - two-component handle with ergonomically designed green softer layers (resistant to oils, grease, fuels, brake fluids and Skydrol)
  - with certificate
  - in sturdy plastic case (sizes 40-100 in steel case)
  - patent
  - supplied with two 1.5 V AA batteries. AA/LR6, 1.2 V rechargeable cells may also be used
  - display deviation value  $\pm 2\%$ ,  $\pm 1$  digit

### 730D Service/Series MANOSKOP® torque wrenches with mount for insert tools



Code	size	Setting/display resolution			mm	b	h	L	L <sub>F</sub>	S <sub>F</sub>	Δ <sub>g</sub>	Δ <sub>g</sub> with box			
		N·m	ft·lb	in·lb											
96 50 17 10	10	10-100 N·m	7.4-75 ft·lb	90-900 in·lb	0.2/0.1	0.2/0.1	2/1.0	9x12	28	23	467	426.5	17.5	1085	1510
96 50 17 20	20	20-200 N·m	15-150 ft·lb	180-1800 in·lb	0.5/0.1	0.5/0.1	5/1.0	14x18	28	23	548	515	25	1361	1896
96 50 17 40	40	40-400 N·m	30-300 ft·lb	360-3600 in·lb	1.0/0.1	1.0/0.1	10/1.0	14x18	28	23	688	655	25	1765	5155
96 50 17 65	65*	65-650 N·m	48-480 ft·lb	580-5800 in·lb	1.0/0.1	1.0/0.1	10/1.0	14x18	30.6	25.6	870	837	25	3300	6000
96 50 19 65 II/65	65	65-650 N·m	48-480 ft·lb	580-5800 in·lb	1.0/0.1	1.0/0.1	10/1.0	22x28	30.6	25.6	892	889	55	3224	7500
96 50 20 80	80	80-800 N·m	60-600 ft·lb	720-7200 in·lb	1.0/1.0	1.0/1.0	10/1.0	22x28	30.6	25.6	1160	1157	55	4577	10500
96 50 21 00	100	100-1000 N·m	74-750 ft·lb	900-9000 in·lb	1.0/1.0	1.0/1.0	10/1.0	22x28	30.6	25.6	1344	1341	55	4995	11000

\* recommended ratchet insert tool No 735/40HD

### 730DR Service/Series MANOSKOP® torque wrenches with reversible ratchet insert tool



Code	size	Setting/display resolution			mm	"	Δ <sub>g</sub>	Δ <sub>g</sub> with box			
		N·m	ft·lb	in·lb							
96 50 18 10	10	10-100 N·m	7.4-75 ft·lb	90-900 in·lb	0.2/0.1	0.2/0.1	2/1.0	9x12	1/2	1232	1657
96 50 18 20	20	20-200 N·m	15-150 ft·lb	180-1800 in·lb	0.5/0.1	0.5/0.1	5/1.0	14x18	1/2	1663	2198
96 50 18 40	40	40-400 N·m	30-300 ft·lb	360-3600 in·lb	1.0/0.1	1.0/0.1	10/1.0	14x18	3/4	2232	4722
96 50 18 65	65	65-650 N·m	48-480 ft·lb	580-5800 in·lb	1.0/0.1	1.0/0.1	10/1.0	14x18	3/4	3767	6530
96 50 20 65 II/65	65	65-650 N·m	48-480 ft·lb	580-5800 in·lb	1.0/0.1	1.0/0.1	10/1.0	22x28	3/4	3994	9000
96 50 18 80	80	80-800 N·m	60-600 ft·lb	720-7200 in·lb	1.0/0.1	1.0/0.1	10/1.0	22x28	3/4	6492	12500
96 50 18 00	100	100-1000 N·m	74-750 ft·lb	900-9000 in·lb	1.0/0.1	1.0/0.1	10/1.0	22x28	3/4	6910	12500



### 7759-3 USB adaptor, jack cable and software No 7732 for No 730D

- Documentation and management of readings on a PC
- Read out stored wrench data and joint readings:
    - Joint identifier
    - Tool serial number
    - Date and time of tightening operation
    - Target torque or target angle
    - Torque level at which the tool cuts out
    - Tightening torque or angle reached
    - Tolerances
    - Joint evaluation
  - Storage of joint data in a database
  - Delete or print highlighted joints from the database
  - Export displayed joint data to a CSV file (compatible with Excel)
  - 13 languages
  - User management
  - Define new PIN
  - Delete joint data stored in wrench

System requirements:

- PC
- Microsoft Windows 98 SE or compatible operating system with USB support
- USB connection
- Installed ODBC driver for Access data



Code	L	△▽
	m	g
<b>96 58 36 27</b>	1.5	137

### 7757-1 USB adaptor



Code	△▽
	g
<b>52 11 10 57</b>	10

### 7395-1 Angle Module for No 730D

Patents applied for, angle-controlled measurement without a reference arm. For torque wrench No 730D (sizes 10-65) from software release 1.5.8. Torque wrenches No 730D fitted with older releases of the software can be upgraded. Simply attach the module and connect to the torque wrench interface and the No 730D can be used for angle controlled tightening. The measurements are read off and settings made via the torque wrench.

When the preset snug point is reached, the torque wrench automatically switches over to angle-controlled measurement in degrees. Depending on the options selected, the torque wrench will either cut out when the preset angle is reached or an alarm is heard. One 1.5 V battery is included in the package. Deviation of indication ± 1%.



Code	△▽
	g
<b>96 58 46 28</b>	500

### 7751 Jack cable

with jacks at both ends, 90° angled.



Code	L	△▽
	m	g
<b>52 11 00 51</b>	1.5	50



# MANOSKOP® 714

Electromechanical angle-controlled torque wrench



### Benefits at a glance:

- Indicating and click-type
- 4 measuring methods (torque, angle, torque backed up by angle, angle backed up by torque)
- Freely configurable menu structure
- Includes SENSOMASTER software for easy configuration of the tool
- 3 function modes: click-type, peak (indicating mode displaying peak reading) and track (indicating mode displaying current value)
- Angle-controlled measurement without a reference arm
- Data storage ( $\leq 2,500$  tightening jobs)
- Acoustic and visual assessment of the joint
- Clockwise and anticlockwise tightening
- Tactile and acoustic trigger signals
- Torque and angle are simultaneously visible
- All readings are independent of the point of application of force with sizes 1, 2 and 4
- Display deviation value  $\pm 2\%$  for torque and  $\pm 1\%$  for angle

1

High-definition graphical colour display with additional side-mounted indicator lamps

2

Automatic key-lock prevents inadvertent changes

3

Fast, accurate setting via keypad

4

Own ident number can be stored in the wrench

5

Indicator lamps clearly visible from all sides  
Yellow light: advance warning threshold reached  
Green light: within the target range  
Red light: reading is outside the tolerance range

6

In a sturdy plastic case with foam inlays (sizes 40-100 in steel case)  
With certificate



**Also available with adaptor for 22x28 mm**

- Tighten large torques effortlessly
- High long-term durability
- 650 - 1000 N·m



No 7195-2



No 7160



5

**7** Optional extras: Li-Ionen battery No 7195-2 and charger No 7160

**8** Individually configurable menus



**9** Micro USB interface

**10** Battery compartment with smooth-action bayonet fitting



**11** Up to 200 joints can be programmed in up to 25 sequences

**12** The wrench reminds the user automatically when calibration is due - either by the number of joints or the time interval

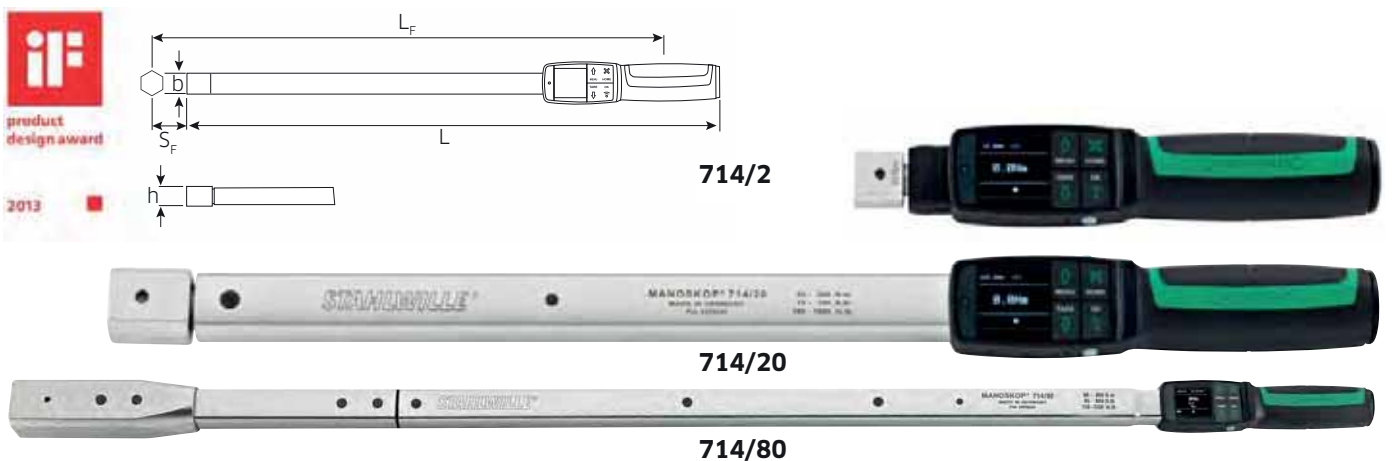
**!** Further details on page 204

## MANOSKOP® 714 - indicating and click-type Electromechanical angle-controlled torque wrench

- 4 measuring modes (torque, angle, torque backed up by angle, angle backed up by torque)
- high-definition colour display with additional side-mounted indicator lamps
- freely configurable menu structure
- optionally: Li-ion battery No 7195-2 and charger No 7160
- 3 function modes: cut-out, peak hold (indicating mode with peak value) and track (indicating mode with current value)
- Micro USB interface
- bayonet connection for battery compartment
- QuickRelease safety lock change system for insert tools
- angle-controlled measurement without a reference arm
- Data storage (≤ 2500 tightening jobs)
- as many as 200 joints can be programmed in up to 25 preset sequences.
- different tolerance limits can be set for each joint
- acoustic and visual assessment of the joint
- rapid, accurate setting via keypad
- the automatic keypad lock prevents inadvertent changes
- overload protection by means of acoustic and visual signals and a fail-safe system (clockwise)
- automatic notification of the next calibration date, either by the number of joints or the time interval
- fully automated calibrating and adjusting using the perfectControl calibrating and adjusting unit
- No 7794-2 (torque) or 7794-3 (torque and angle)
- units of measure: N·m, ft·lb, in·lb.
- tightening torque is automatically corrected if a deviating extension is entered
- immediately reusable after release
- clockwise and anticlockwise tightening - it may be necessary to refit the insert tool rotated through 180° for anticlockwise tightening in the cut-out mode
- tactile and acoustic trigger signal.
- torque and angle are simultaneously visible
- all readings are independent of the point of application of force (with sizes 1, 2 and 4)
- safe handling due to ergonomically designed handle (resistant to oils, grease, fuels, brake fluid and Skydrol)
- 2 certificates (torque, angle)
- in sturdy plastic case (size 40-100 in steel case)
- design patent, patent
- supplied with SENSOMASTER Basic software, USB cable, 4 AAA/LR03 micro-batteries, 1.5 V. AAA, 1.2 V, micro NiMH rechargeable batteries can be used
- display resolution, angle 0.1°
- display deviation value, angle ±1%, ±1 digit
- display resolution, torque d 60 N·m: 0.01 N·m; > 60 N·m: 0.1 N·m
- display deviation value, torque ±2%, ±1 digit

5

### 714 MANOSKOP® tightening angle torque wrenches with mount for insert tools



Code	size					b mm	h mm	L mm	L <sub>F</sub> mm	S <sub>F</sub> mm	Δ <sub>g</sub> g	Δ <sub>g</sub> g with box
96 50 09 01	1	1-10 N·m	0.7-7.5 ft·lb	9-90 in·lb	9x12	28	23	226	188	17.5	370	795
96 50 09 02	2	2-20 N·m	1.5-15 ft·lb	18-180 in·lb	9x12	28	23	226	188	17.5	380	805
96 50 09 04	4	4-40 N·m	3-30 ft·lb	36-360 in·lb	9x12	28	23	252	214	17.5	420	845
96 50 09 06	6	6-60 N·m	4.5-45 ft·lb	54-540 in·lb	9x12	28	23	393	355	17.5	810	1235
96 50 09 10	10	10-100 N·m	7.4-75 ft·lb	90-900 in·lb	9x12	28	23	466	428	17.5	1085	1655
96 50 09 20	20	20-200 N·m	15-150 ft·lb	180-1800 in·lb	14x18	28	23	547	516	25	1361	1896
96 50 09 40	40	40-400 N·m	30-300 ft·lb	360-3600 in·lb	14x18	28	23	687	656	25	1765	5155
96 50 09 65	65	65-650 N·m	48-480 ft·lb	580-5800 in·lb	22x28	30.6	25.6	890	890	55	3222	7000
96 50 09 80	80	80-800 N·m	60-600 ft·lb	720-7200 in·lb	22x28	30.6	25.6	1158	1158	55	4572	10400
96 50 01 00	100	100-1000 N·m	74-750 ft·lb	900-9000 in·lb	22x28	30.6	25.6	1343	1343	55	4990	10500

## 714R MANOSKOP® tightening angle torque wrenches with reversible ratchet insert tool



Code	size					"		
		N·m	ft·lb	in·lb	mm		g	g with box
96 50 1001	1	1-10	0.7-7.5	9-90	9x12	1/4	432	857
96 50 1002	2	2-20	1.5-15	18-180	9x12	1/4	442	867
96 50 1004	4	4-40	3-30	36-360	9x12	1/4	482	907
96 50 1006	6	6-60	4.5-45	54-540	9x12	3/8	965	1390
96 50 1010	10	10-100	7.4-75	90-900	9x12	1/2	1232	1657
96 50 1020	20	20-200	15-150	180-1800	14x18	1/2	1663	2198
96 50 1040	40	40-400	30-300	360-3600	14x18	3/4	2275	5665
96 50 1065	65	65-650	48-480	580-5800	22x28	3/4	5137	9000
96 50 1080	80	80-800	60-600	720-7200	22x28	3/4	6487	12300
96 50 1100	100	100-1000	73-735	885-8850	22x28	3/4	6905	12500

### 7732-2 SENSO MASTER Live software

- Record tightening operations with the MANOSKOP® 714.
- Representation of torque over time, angle over time, torque over angle.
- Representation of several curves simultaneously.
- Data export for further processing.
- The software is for a single-seat licence.
- Torque wrenches 714/1 ... /100 must have firmware version 02.01.02.



Code	
	g
96 58 52 35	111

### 7195-2 Li-ion battery for No 714

max. charge voltage 4.2 V,  
capacity 2600 mAh



Code	
	g
54 10 11 95	100

### 7160 Charging dock for Li-ion battery No 7195-2

including charger  
Input: 100 V-240 V AC,  
Output: 4.2 V DC,  
with interchangeable socket adaptors.



Code	
	g
54 10 00 60	200

### 7762 Docking station for No 714

stationary base for securely  
connecting angle-controlled torque  
wrench No 714 to a PC via a USB  
port.



Code	
	g
52 11 00 62	421



### 7762-1 Rest for docking station No 7762

for securely supporting long angle-controlled  
torque wrenches No 714 from size 6 up.



Code	
	g
52 11 01 62	520

### 7761/3 Interface adaptor set

required for automated calibration and adjustment of angle-controlled  
torque wrench No 714 using calibrating and adjusting units  
perfectControl No 7794-2 and 7794-3.

Contents  
No 7761 interface adaptor  
No 7752 spiral cable  
No 7760 mains adaptor



Code	
	g
96 52 11 61	446





### Sensotork® 713R

Electronic angle-controlled torque wrench



#### Benefits at a glance:

- Angle-controlled measurements without a reference arm
- Broad measuring range (5% - 100% of rated value)
- Extremely wide range of angle measurement
- Units of measurement N·m / ft·lb / in·lb
- Clockwise and anticlockwise use
- For use with all insert tools 9x12 and 14x18 mm
- QuickSelect rapid recall of predefined sets of operating parameters
- Defined sequence - a number of repeated joints can be grouped as a defined sequence
- Tightening jobs are stored with a timestamp
- Readings can either be directly stored, transmitted to the PC or simply displayed
- Password protection tamper proof use
- Freely selectable names for each series of test
- Various languages available
- Works-specific identifier
- Programmable via PC
- Resistant to oils, grease, fuels, brake fluids and Skydrol
- Wide range of application: -20°C to +60°C
- Meets requirements of DKD-R 3-7, Class 2
- Deviation of indication  $\pm 1\%$

1





- 1** Backlit display improves legibility and evaluation of the tightening operation (traffic-light colours).
- 2** All functions are selected using the arrow keys. The visual guidance system makes operation a simple matter
- 3** Improved ergonomics for strain-free working. Measurements independent of the point of application of force.
- 4** Convenient angle measurement across a very wide angle range without a reference arm.
- 5** Warning signals: acoustic (buzzer), tactile (vibration in the handle), visual (LEDs and display). The point at which the warning signal is triggered can be freely set
- 6** Data output USB interface
- 7** Easy extension setting. Where the insert tool requires an extension adjustment, simply enter the new value. Recalculation using complicated formulae is no longer necessary
- 8** QuickRelease  
Firm locking and rapid change of any insert tools



Further details  
on page 208

## Electronic angle-controlled torque wrenches SENSOTORK® 713R

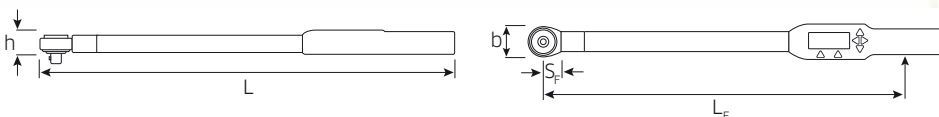
- simple, flexible operation thanks to operator guidance on large-format display
- very broad measuring range (5% to 100% of rated value)
- supplied with insert tool reversible ratchet, more insert tools
- QuickRelease safety lock
- for clockwise and anticlockwise torquing
- measurements independent of the point of application of force
- units of measurement: N·m, ft·lb, in·lb
- advance warning points programmable for visual, tactile and acoustic signals
- torque and angle are simultaneously visible
- new: backlit display aids evaluation of the tightening operation (traffic-light colours).
- convenient angle measurement across a very wide angle range without a reference arm
- insert tool lengths can be individually set
- maintenance friendly due to easy adjustment and automatic reminder of next calibration date
- repeated joints can be collated to form a single menu-guided sequence
- new: tightening jobs are stored with a timestamp
- individual identification markings possible
- password protection to prevent inadvertent changes and make the tool tamper-proof
- meets requirements of DKD-R 3-7, Class 2
- with certificate
- in sturdy plastic case (size 40 in tough steel case)
- supplied with two 1.5 V AA batteries. AA/LR6, 1.2 V NiMH rechargeable cells may also be used.
- fully automated calibration (torque) using perfectControl calibrating unit No 7794-2. Adjustment without disassembly.
- registered design
- display deviation value for angle  $\pm 1^\circ$
- display deviation value  $\pm 1\%$

211-217

713R

Electronic SENSOTORK® tightening angle torque wrenches with reversible ratchet insert tool

QR



Code	size			"	mm	b mm	h mm	L mm	L <sub>F</sub> mm	S <sub>F</sub> mm	Δ g	Δ g with box
96 50 16 06	6	3-60 N·m	2.5-44 ft·lb	3/8	9x12	50	33.5	378	299	17.5	856	1500
96 50 16 20	20	10-200 N·m	7-148 ft·lb	1/2	14x18	50	33.5	608	524	25	1552	2430
96 50 16 40	40	20-400 N·m	15-296 ft·lb	3/4	14x18	50	33.5	838	750	25	2332	5555

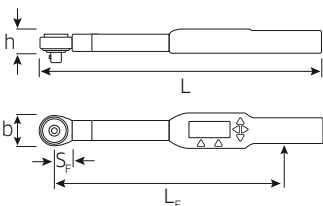
## Electronic torque wrench SENSOTORK® 712R

712R/6

Electronic SENSOTORK® torque wrench with reversible ratchet insert tool

QR

Same design as No 713 but without angle function.



Code			"	mm	b mm	h mm	L mm	L <sub>F</sub> mm	S <sub>F</sub> mm	Δ g	Δ g with box
96 50 15 06	3-60 N·m	2.5-44 ft·lb	3/8	9x12	50	33.5	378	299	17.5	856	1500

## Accessories for electronic angle-controlled torque wrench Sensotork® No 713R and electronic torque wrench SENSOTORK® No 712R

### 7759-1 USB adaptor, jack cable and software SENSOMASTER for No 712R, 713R

for documenting and managing readings on a PC and carrying out statistical analyses.

- Read out stored wrench data and joint readings: Joint identifier, Tool serial number, Target torque or target angle, Torque level at which the tool cuts out, Tightening torque or angle reached, Tolerances, Joint evaluation
- Storage of joint data in a database
- Delete or print highlighted joints from the database
- Export displayed joint data to a CSV file (compatible with Excel)
- 13 languages
- User management
- Define new PIN
- Delete joint data stored in wrench

System requirements:

- PC
- Microsoft Windows 98 SE or compatible operating system with USB support
- USB connection
- Installed ODBC driver for Access data



Code	L m	Δ∇ g
<b>96 58 36 25</b>	1.5	137

### 7757-1 USB adaptor



Code	Δ∇ g
<b>52 11 10 57</b>	10

### 7751 Jack cable

with jacks at both ends, 90° angled.



Code	L m	Δ∇ g
<b>52 11 00 51</b>	1.5	50

## SENSOTORK® 713R.

The decisive moment. Improved.



## Accessories

### 7301/7302 Plastic case, empty

for safe storage and transport of torque wrenches (please order inlays separately). Supplied without torque wrench.



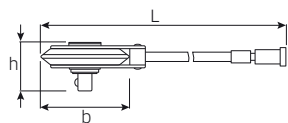
Code	No	for torque wrenches No	L mm	Δ g
<b>81 37 0002</b>	<b>7301</b>	712R/6; 713R/6; 714/1; 714/2; 714/4; 714/6; 714/10; 721/5; 721/15; 730/5; 730/10; 730/12; 730/20; 730a/5; 730a/10; 730a/12; 730a/20; 730N/5; 730N/10; 730N/12; 730N/20; 730Na/5; 730Na/10; 730Na/20; 730D/10	550	425
<b>81 37 0003</b>	<b>7302</b>	713R/20; 714/20; 721/30; 730/40; 730N/40; 730Na/40; 730D/20	680	535

### 7303/7304 Inlays for plastic case

Code	No	for torque wrenches No	Δ g
<b>83 07 1004</b>	<b>7303</b>	712R/6; 713R/6; 721/5; 721/15; 730/5; 730/10; 730/12; 730/20; 730a/5; 730a/10; 730a/12; 730a/20; 730N/5; 730N/10; 730N/12; 730N/20; 730Na/5; 730Na/10; 730Na/20; 730D/10	88
<b>83 07 1002</b>	<b>7304</b>	713R/20; 721/30; 730/40; 730N/40; 730Na/40; 730D/20	113

### 7380N/7385N Torque angle gauges

for angle controlled bolt/screw tightening, with static read-off point. Read-off possible from any angle thanks to a pair of angled scales. Removable magnet for attaching sockets with 1/2" internal square drive. For use in conjunction with tightening tools such as Service MANOSKOP® No 730N. Since this tightening method requires a pre-determined snug torque to be applied, it is essential to choose a torque wrench covering both snug torque as well as maximum torque required to reach the recommended tightening angle. Whether 1/2" or 3/4" sq.dr. Torque Angle Gauge is used depends upon the square drive of the appropriate torque wrench employed.



Code	No	□	■	□	■	b mm	h mm	L mm	Δ g
<b>54 01 0001</b>	<b>7380N</b>	1/2	1/2	± 360°	2°	78	43	416	494
<b>54 01 0002</b>	<b>7385N</b>	3/4	3/4	± 360°	2°	78	76	416	720

### 1299 BITS

for inside hexagon screws, for operating the adjusting screws on torque wrenches No 720, 721, 730 and 730N.



Code	□	outside mm	"	L mm	Δ g	□
<b>08 09 0002</b>	2	C 6.3	1/4	34	4	10

outside ● DIN 3126/ISO 1173

### 7161 QuickRelease safety lock

prevents insert tools being swapped. The system is locked in place on the head of the torque wrench by means of a safety screw. Once the protection system has been fitted, it is possible to attach an insert tool but not to remove it because the QuickRelease unlock button itself is locked. After the safety screw has been removed, the torque wrench reverts to being a standard, versatile tool.



The safety screw can be fitted and removed using a TORX® screwdriver with a central bore in the tip (No 4656, Size T20, Code 46 56 00 20) or a BITS screwdriver insert with a central bore in the tip (No 1442, Size T20, Code 08 16 00 20).

Code	size	for torque wrenches No	Δ g
<b>54 10 00 70</b>	<b>1</b>	714/1; 714/2; 714/4	4
<b>54 10 00 71</b>	<b>2</b>	712R/6; 713R/6; 714/6; 714/10; 730/10; 730a/10; 730N/10; 730Na/10; 730D/10	5
<b>54 10 00 72</b>	<b>3</b>	713R/20; 713R/40; 714/20; 714/40; 730/12; 730/20; 730/40; 730/65; 730a/12; 730a/20; 730N/12; 730N/20; 730N/40; 730N/65; 730Na/20; 730Na/40; 730D/20; 730D/40; 730D/65	11
<b>54 10 00 73</b>	<b>4</b>	730/5; 730N/5	2
<b>54 10 00 74</b>	<b>5</b>	714/65; 714/80; 714/100; 730II/65; 730NII/65; 730N/80; 730N/100; 730DII/65; 730D/80; 730D/100	15

for other torque wrenches on request.

### 7396 LED lighting

for torque wrenches  
If light is poor, simply attach this LED lamp to illuminate the work site. Included in the delivery is a 1.5 V micro battery. Supplied without torque wrench.



Code	for torque wrenches No	Δ g
<b>54 01 00 04</b>	712R/6; 713R/6; 713R/20; 713R/40; 714/6; 714/10; 714/20; 714/40; 721/5; 721/15; 721/20; 721/30; 730/5; 730/10; 730/12; 730/20; 730/40; 730a/5; 730a/10; 730a/12; 730a/20; 730N/5; 730N/10; 730N/12; 730N/20; 730N/40; 730Na/5; 730Na/10; 730Na/20; 730Na/40; 730D/10; 730D/20; 730D/40	51



## Insert/shell tools for torque wrenches

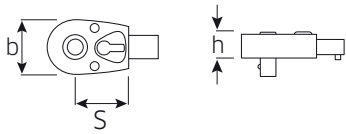
Output square drive in accordance with DIN 3120

Long-term loading of the input and output square drive is in accordance with DIN EN ISO 6789:2003. This limit must not be exceeded if larger torque wrenches and tool holders are used.

### 725QR QuickRelease ratchet insert tools



reversible, with QuickRelease safety lock, size 4: 22 teeth, sizes 5 and 10: 30 teeth

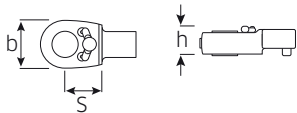


Code	size	"	mm	b mm	h mm	S mm	M N-m	$\Delta\varnothing$ g
<b>58 25 30 04</b>	<b>4</b>	1/4	9x12	22	13.8	17.5	40	60
<b>58 25 30 05</b>	<b>5</b>	3/8	9x12	29	18	28*	100	130
<b>58 25 30 10</b>	<b>10</b>	1/2	9x12	29	18	28*	100	141

\* Caution! Modified settings on torque wrench (refer to note on page 189).

### 725B Bit ratchet insert tool

reversible, with inside hexagon, 1/4" or 5/16", DIN 3126/ISO 1173 D 6.3 or D8, for direct acceptance of bits 1/4" or 5/16" outside hexagon C 6.3 (size 4: 22 teeth, size 5: 30 teeth). Internal hex drive with a collar-thrust spring. Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173). Supplied without bits.

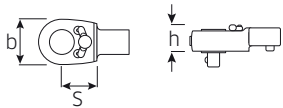


Code	size	inside $\varnothing$ "	mm	b mm	h mm	S mm	$\Delta\varnothing$ g
<b>58 25 50 04</b>	<b>4</b>	1/4	9x12	22	13.6	17.5	54
<b>58 25 50 05</b>	<b>5</b>	5/16	9x12	29	17.9	28*	117

\* Caution! Modified settings on torque wrench (refer to note on page 189).

### 725/4 Ratchet insert tool

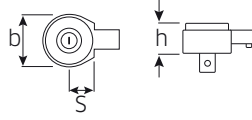
reversible, 22 teeth.



Code	"	mm	b mm	h mm	S mm	M N-m	$\Delta\varnothing$ g
<b>58 25 40 04</b>	1/4	9x12	22	13.8	17.5	40	62

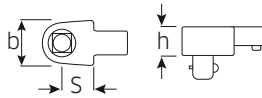
### 735 Ratchet insert tools, fine tooth

reversible, 60 teeth.



Code	size	"	mm	b mm	h mm	S mm	M N-m	$\Delta\varnothing$ g
<b>58 25 00 05</b>	<b>5</b>	3/8	9x12	33	24	17.5	100	155
<b>58 25 00 10</b>	<b>10</b>	1/2	9x12	33	24	17.5	100	147

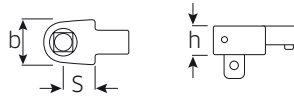
### 734 Square drive insert tools



Code	size	"	mm	b mm	h mm	S mm	M N-m	$\Delta\varnothing$ g
<b>58 24 00 04</b>	<b>4</b>	1/4	9x12	20	14	17.5	40	71
<b>58 24 00 05</b>	<b>5</b>	3/8	9x12	20	14	17.5	80	76
<b>58 24 00 10</b>	<b>10</b>	1/2	9x12	20	14	17.5	100	82

### 734F Square drive insert tools

with permanently attached, captive square drive.

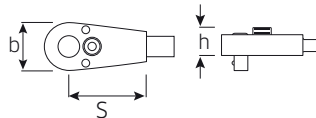


Code	size	"	mm	b mm	h mm	S mm	$\Delta\varnothing$ g
<b>58 24 10 04</b>	<b>4</b>	1/4	9x12	22	14	17.5	72
<b>58 24 10 05</b>	<b>5</b>	3/8	9x12	22	14	17.5	75

### 725L/5 Ratchet insert tool

reversible, 30 teeth.

Caution! Modified settings on torque wrench (refer to note on p. 189). This ratchet insert tool has the same extension length as ring insert tool No 732G/10 (see p. 213) and square drive insert tool No 734L/5 (see p. 212).

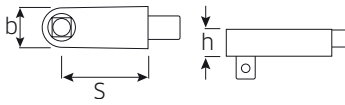


Code	"	mm	b mm	h mm	S mm	$\Delta\varnothing$ g
<b>58 15 10 05</b>	3/8	9x12	27.5	19.6	45	164

# Insert/shell tools

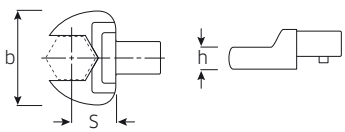
## 734L/5 Square drive insert tool

Caution! Modified settings on torque wrench (refer to note on p. 189). This square-drive insert tool has the same extension length as ring insert tool No 732G/10 (see p. 213) and ratchet insert tool No 725L/5 (see p. 211).



Code	"	mm	b mm	h mm	S mm	Δ g
58 24 2005	3/8	9x12	20	14	45	141

## 731/10 Open ended insert tools



Code	mm	mm	b mm	h mm	S mm	Δ g
58 21 1007	7	9x12	22	5	17.5	40
58 21 1008	8	9x12	22	5	17.5	39
58 21 1009	9	9x12	26	5.5	17.5	38
58 21 1010	10	9x12	26	5.5	17.5	42
58 21 1011	11	9x12	26	5.5	17.5	41
58 21 1012	12 <sup>1)</sup>	9x12	30	7	17.5	43
58 21 1013	13	9x12	30	7	17.5	48
58 21 1014	14	9x12	35	8	17.5	52
58 21 1015	15	9x12	35	8	17.5	51
58 21 1016	16	9x12	38	8.5	17.5	58
58 21 1017	17	9x12	38	8.5	17.5	60
58 21 1018	18	9x12	42	9	20*	71
58 21 1019	19	9x12	42	9	20*	74

<sup>1)</sup> For flare nuts of hydraulic pipes on French vehicles

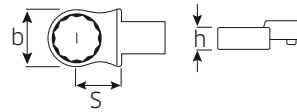
## 731a/10 Open ended insert tools

Code	"	mm	b mm	h mm	S mm	Δ g
58 61 1016	1/4	9x12	22	5	17.5	36
58 61 1020	5/16	9x12	22	5	17.5	53
58 61 1024	3/8	9x12	26	5.5	17.5	38
58 61 1028	7/16	9x12	26	5.5	17.5	37
58 61 1032	1/2	9x12	30	7	17.5	44
58 61 1034	9/16	9x12	35	8	17.5	49
58 61 1036	5/8	9x12	38	8.5	17.5	64
58 61 1038	11/16	9x12	42	9	20*	76
58 61 1040	3/4	9x12	42	9	20*	73

\* Caution! Modified settings on torque wrench (refer to note on page 189)

## 732/10 Ring insert tools

AS-drive



Code	mm	mm	b mm	h mm	S mm	Δ g
58 22 1007	7	9x12	13	8	17.5	37
58 22 1008	8	9x12	14.2	8	17.5	40
58 22 1010	10	9x12	17.2	9	17.5	44
58 22 1011	11	9x12	18.5	9	17.5	41
58 22 1012	12	9x12	20.5	11	17.5	49
58 22 1013	13	9x12	21.5	11	17.5	55
58 22 1014	14	9x12	22.5	11	17.5	52
58 22 1015	15	9x12	24.5	12	17.5	52
58 22 1016	16	9x12	26	12	17.5	54
58 22 1017	17	9x12	27	13	17.5	59
58 22 1018	18	9x12	28	13	17.5	56
58 22 1019	19	9x12	30.5	13	17.5	65
58 22 1021	21	9x12	33	15	17.5	71
58 22 1022	22	9x12	34.5	15	17.5	74

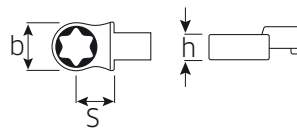
## 732a/10 Ring insert tools

AS-drive

Code	"	mm	b mm	h mm	S mm	Δ g
58 62 1016	1/4	9x12	13	8	17.5	36
58 62 1020	5/16	9x12	14.2	8	17.5	37
58 62 1024	3/8 <sup>1)</sup>	9x12	17.2	9	17.5	37
58 62 1028	7/16	9x12	18.5	9	17.5	40
58 62 1032	1/2	9x12	21.5	11	17.5	53
58 62 1034	9/16	9x12	22.5	11	17.5	52
58 62 1036	5/8	9x12	26	12	17.5	54
58 62 1038	11/16	9x12	28	13	17.5	58
58 62 1040	3/4	9x12	30.5	13	17.5	58
58 62 1042	13/16	9x12	33	15	17.5	68
58 62 1044	7/8	9x12	34.5	15	17.5	69

<sup>1)</sup> For Volvo aero-engines, types "JAS"

## 732TX/10 TORX® insert tools

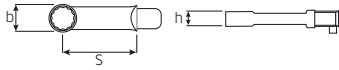


Code	size	mm	b mm	h mm	S mm	Δ g
58 29 1006	E6	9x12	13	8	17.5	40
58 29 1008	E8	9x12	14.2	8	17.5	45
58 29 1010	E10	9x12	17.2	9	17.5	45
58 29 1012	E12	9x12	18.5	9	17.5	50
58 29 1014	E14	9x12	21.5	11	17.5	60

## 732G/10 Ring insert tools



Caution! Modified settings on torque wrench (refer to note on p. 189). This insert tool has the same extension length as insert tool No 725L/5 (see p. 211) and square-drive insert tool No 734L/5 (see p. 212); HPQ® high performance steel, gunmetal finish.



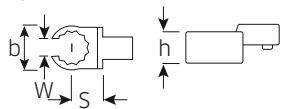
Code	mm	mm	b mm	h mm	S mm	Δg
58 62 00 07	7	9x12	11.5	6	45	31
58 62 00 08	8	9x12	12.4	6	45	33
58 62 00 09	9	9x12	14	8	45	40
58 62 00 10	10	9x12	15.6	8	45	44
58 62 00 13	13	9x12	19.3	9.2	45	60

## 732aG/10 Ring insert tools

Code	"	mm	b mm	h mm	S mm	Δg
58 62 12 16	1/4	9x12	10.4	6	45	28
58 62 12 20	5/16	9x12	12.4	6	45	31
58 62 12 24	3/8	9x12	14.9	8	45	42
58 62 12 28	7/16	9x12	17	8	45	43
58 62 12 32	1/2	9x12	19	9.2	45	58
58 62 12 34	9/16	9x12	21	9.2	45	58
58 62 12 36	5/8	9x12	23	12	45	74

for assembling and dismantling aero-engines.

## 733/10 Open ring insert tools



Code	mm	mm	b mm	h mm	W mm	S mm	Δg
58 23 10 10	10	9x12	21.5	11	7.1	17.5	57
58 23 10 11	11	9x12	22.5	11	8.6	17.5	55
58 23 10 12	12	9x12	24.5	12	9	17.5	59
58 23 10 13	13	9x12	26	12	10	17.5	55
58 23 10 14	14	9x12	27	13	11	17.5	60
58 23 10 16	16	9x12	30.5	13	13	17.5	65
58 23 10 17	17	9x12	31.5	13	14	17.5	64
58 23 10 18	18	9x12	33	15	14.8	17.5	74
58 23 10 19	19	9x12	34	15	15.8	17.5	80
58 23 10 21	21	9x12	38.5	15	16.2	20*	88
58 23 10 22	22	9x12	39.5	15	17	20*	92
58 23 10 24	24	9x12	40	15	18	20*	75

\* Caution! Modified settings on torque wrench (refer to note on page 189)

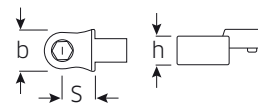
## 733a/10 Open ring insert tools



Code	"	mm	b mm	h mm	W mm	S mm	Δg
58 63 10 24	3/8	9x12	21.5	11	7.1	17.5	55
58 63 10 28	7/16	9x12	22.5	11	8.6	17.5	56
58 63 10 32	1/2	9x12	26	12	9.5	17.5	58
58 63 10 34	9/16	9x12	27.5	13	11	17.5	59
58 63 10 36	5/8	9x12	30.5	13	12.7	17.5	61
58 63 10 38	11/16	9x12	33	15	14	17.5	48
58 63 10 40	3/4	9x12	34	15	15.8	17.5	76

## 736 BIT holder insert tools

Internal hex drive with a collar-thrust spring. Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).

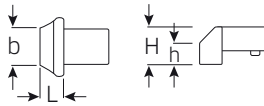


Code	size	inside	mm	b mm	h mm	S mm	Δg
58 26 10 10	10	D 8	5/16	9x12	16	12.5	17.5
58 26 26 10	10-1	D 6.3	1/4	9x12	14	10	17.5

inside ○ DIN 3126/ISO 1173

## 737/10 Blank end insert tool

gunmetal finish. To prevent damage from excessive temperatures, the locking pin, spring and washer are not fitted until the welding work has been completed. Instructions are supplied.



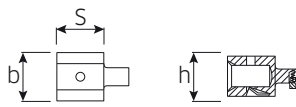
Code	Welding surface	mm	H mm	L mm	Δg
58 27 00 10	h x b mm	9x12	14.5	8	35

## 7370/10 Adaptor



for using insert tools with an outer square drive of 14 x 18 mm on torque wrenches with an internal square drive of 9 x 12 mm.

Caution! Modified settings on torque wrench (refer to note on p. 189).

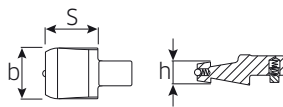


Code	mm	mm	b mm	h mm	S mm	Δg
58 29 00 10	9x12	14x18	31	26	30.5	114

## 7370/10-2 Adaptor

for use with insert tools with a lateral dovetail profile in torque wrenches with 9 x 12 mm internal square drives.

Caution! Modified settings on torque wrench (refer to note on p. 189).



Code	mm	b mm	h mm	S mm	Δg
58 29 00 12	9x12	23.5	9.5	24	51

## 1820 Tool holder

with tool carrier to receive insert/shell tools (without torque function).



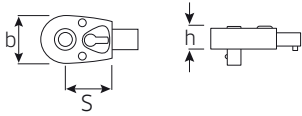
Code	mm	L mm	Δg
18 20 00 01	9x12	382.5	490

# Insert/shell tools

## 725QR/20 QuickRelease ratchet insert tool



reversible, with QuickRelease safety lock, 36 teeth.

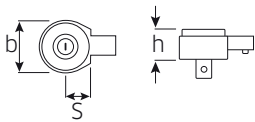


Code	size	"	mm	b mm	h mm	S mm	M N-m	ΔΔ g
58 25 30 20	20	1/2	14x18	41	22.3	38.5*	200	325

\* Caution! Modified settings on torque wrench (refer to note on page 189).

## 735 Ratchet insert tools, fine tooth

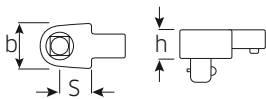
reversible, 60 teeth.



Code	size	"	mm	b mm	h mm	S mm	M N-m	ΔΔ g
58 25 00 20	20	1/2	14x18	43	26	25	300	302
58 25 00 40	40	3/4	14x18	50	31.5	25	400	510
58 25 00 65	40HD	3/4	14x18	58	36	30*	650	737

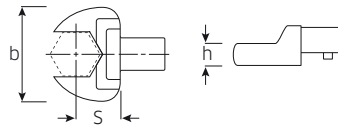
\* Caution! Modified settings on torque wrench (refer to note on page 189).

## 734 Square drive insert tools



Code	size	"	mm	b mm	h mm	S mm	M N-m	ΔΔ g
58 24 00 20	20	1/2	14x18	27	18	25	300	203
58 24 00 40	40	3/4	14x18	40	25	25	650	396

## 731/40 Open ended insert tools



Code	mm	mm	b mm	h mm	S mm	ΔΔ g
58 21 40 13	13	14x18	30	7	25	128
58 21 40 14	14	14x18	35	8	25	129
58 21 40 15	15	14x18	35	8	25	132
58 21 40 16	16	14x18	38	9	25	140
58 21 40 17	17	14x18	38	9	25	136
58 21 40 18	18	14x18	42	10	25	147
58 21 40 19	19	14x18	42	10	25	145
58 21 40 21	21	14x18	50	11	25	171
58 21 40 22	22	14x18	50	11	25	165
58 21 40 24	24	14x18	53	12	25	167
58 21 40 25	25	14x18	53	12	25	170
58 21 40 27	27	14x18	60	13	30*	219
58 21 40 30	30	14x18	66	14	30*	245
58 21 40 32	32	14x18	66	14	32.5*	246
58 21 40 34	34	14x18	66	14	32.5*	239
58 21 40 36	36	14x18	74	15	32.5*	275
58 21 40 38	38	14x18	74	15	32.5*	265
58 21 40 41	41	14x18	82	15	36.5*	307

\* Caution! Modified settings on torque wrench (refer to note on page 189).

## 731a/40 Open ended insert tools

Code	mm	mm	b mm	h mm	S mm	ΔΔ g
58 61 40 28	7/16	14x18	30	7	25	127
58 61 40 32	1/2	14x18	30	7	25	125
58 61 40 34	9/16	14x18	35	8	25	129
58 61 40 36	5/8	14x18	38	9	25	136
58 61 40 38	11/16	14x18	42	10	25	148
58 61 40 40	3/4	14x18	42	10	25	144
58 61 40 42	13/16	14x18	50	11	25	171
58 61 40 44	7/8	14x18	50	11	25	165
58 61 40 46	15/16	14x18	53	12	25	177
58 61 40 48	1	14x18	60	13	30*	224
58 61 40 52	1 1/8	14x18	66	14	30*	258

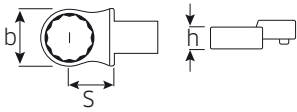
\* Caution! Modified settings on torque wrench (refer to note on page 189).

**STAHLWILLE insert tools.**  
More diversity. More options.



### 732/40 Ring insert tools

AS-drive



Code	mm	mm	b mm	h mm	S mm	Δg
58 22 40 13	13	14x18	22.5	11	25	130
58 22 40 14	14	14x18	23	11	25	123
58 22 40 15	15	14x18	24	11	25	128
58 22 40 16	16	14x18	25.5	12	25	133
58 22 40 17	17	14x18	27	12	25	135
58 22 40 18	18	14x18	29	13	25	134
58 22 40 19	19	14x18	30.5	13	25	138
58 22 40 21	21	14x18	33	15	25	144
58 22 40 22	22	14x18	34.5	15	25	145
58 22 40 24	24	14x18	37.5	15	25	153
58 22 40 27	27	14x18	42.5	17	25	162
58 22 40 28	28	14x18	45.5	19	25	175
58 22 40 30	30	14x18	46	19	25	182
58 22 40 32	32	14x18	47.5	19	25	181
58 22 40 34	34	14x18	52	19	28*	210
58 22 40 36	36	14x18	54	19	28*	203
58 22 40 41	41	14x18	60	20	30*	240

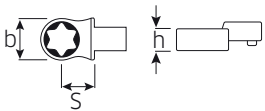
\* Caution! Modified settings on torque wrench (refer to note on page 189).

### 732a/40 Ring insert tools

AS-drive

Code	"	mm	b mm	h mm	S mm	Δg
58 62 40 32	1/2	14x18	22.5	11	25	122
58 62 40 34	9/16	14x18	23	11	25	122
58 62 40 36	5/8	14x18	25.5	12	25	134
58 62 40 38	11/16	14x18	29	13	25	132
58 62 40 40	3/4	14x18	30.5	13	25	138
58 62 40 42	13/16	14x18	33	15	25	142
58 62 40 44	7/8	14x18	34.5	15	25	147
58 62 40 46	15/16	14x18	37.5	15	25	151
58 62 40 48	1	14x18	41	17	25	160

### 732TX/40 TORX® insert tools



Code	size	mm	b mm	h mm	S mm	Δg
58 29 40 14	E14	14x18	22.5	11	25	130
58 29 40 18	E18	14x18	24	11	25	135
58 29 40 20	E20	14x18	29	13	25	150
58 29 40 24	E24	14x18	30.5	13	25	150

### 7370/40-1 Adaptor

for using shell tools with an internal square drive of 24.5 x 28 mm on torque wrenches with an internal square drive of 14 x 18 mm. Caution! Modified settings on torque wrench (refer to note on p. 189).



Code	mm	mm	L mm	Δg
58 29 00 41	14x18	24,5x28	66	251

### 736/40 BIT holder insert tool

Internal hex drive with a collar-thrust spring. Bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173).

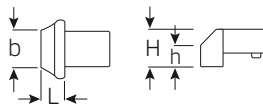


Code	inside	"	mm	b mm	h mm	S mm	Δg
58 26 10 40	D 8	5/16	14x18	16	12.5	25	114

inside ○ DIN 3126/ISO 1173

### 737/40 Blank end insert tool

gunmetal finish. To prevent damage from excessive temperatures, the locking pin, spring and washer are not fitted until the welding work has been completed. Instructions are supplied.

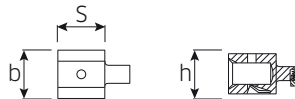


Code	Welding surface	mm	H mm	L mm	Δg
58 27 00 40	h x b mm	14x18	21.5	12	98

### 7370/40 Adaptor



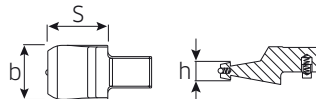
for using insert tools with an outer square drive of 9 x 12 mm on torque wrenches with an internal square drive of 14 x 18 mm. Caution! Modified settings on torque wrench (refer to note on p. 189).



Code	mm	mm	b mm	h mm	S mm	Δg
58 29 00 40	14x18	9x12	28	21	21.5	115

### 7370/40-2 Adaptor

for use with insert tools with a lateral dovetail profile in torque wrenches with 14 x 18 mm internal square drives. Caution! Modified settings on torque wrench (refer to note on p. 189).



Code	mm	b mm	h mm	S mm	Δg
58 29 00 42	14x18	31.5	9.5	34.6	138

### 1821 Tool holder

with tool carrier to receive insert/shell tools (without torque function).



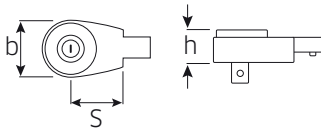
Code	mm	L mm	Δg
18 21 00 01	14x18	575	720



## Insert/shell tools

### 735/65 Ratchet insert tool, fine tooth

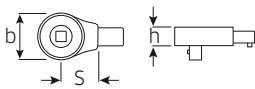
reversible, 60 teeth, load capacity up to 650 N·m, for size 65 torque wrenches.



Code	"	mm	b mm	h mm	S mm	Δg
58 25 10 65	3/4	22x28	61	35	55	1100

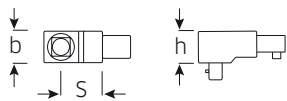
### 735/100 Ratchet insert tool

with push through square drive, 30 teeth.



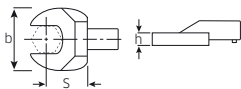
Code	"	mm	b mm	h mm	S mm	Δg
58 25 01 00	3/4	22x28	76	42	55	1893

### 734/100 Square drive insert tool



Code	"	mm	b mm	h mm	S mm	Δg
58 24 01 00	3/4	22x28	43	42	55	1171

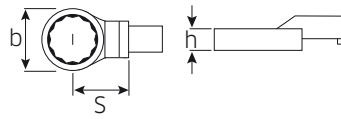
### 731/100 Open ended insert tools



Code	mm	mm	b mm	h mm	S mm	Δg
58 21 10 24	24	22x28	50	13	55	628
58 21 10 27	27	22x28	56	14	55	648
58 21 10 30	30	22x28	63	15	55	695
58 21 10 32	32	22x28	67	15	55	713
58 21 10 34	34	22x28	72	15	55	739
58 21 10 36	36	22x28	74	15	55	727
58 21 10 41	41	22x28	84	16	55	902
58 21 10 46	46	22x28	94	17	55	952
58 21 10 50	50	22x28	104	18	55	1074
58 21 10 55	55	22x28	114	19	55	1174
58 21 10 60	60	22x28	124	20	55	1230

### 732/100 Ring insert tools

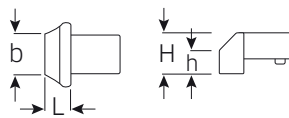
AS-drive



Code	mm	mm	b mm	h mm	S mm	Δg
58 22 10 24	24	22x28	43	15	55	629
58 22 10 27	27	22x28	43	15	55	619
58 22 10 30	30	22x28	46	16	55	632
58 22 10 32	32	22x28	49	16	55	625
58 22 10 34	34	22x28	52	17	55	638
58 22 10 36	36	22x28	54	17	55	631
58 22 10 41	41	22x28	61	18	55	642
58 22 10 46	46	22x28	66	19	55	640
58 22 10 50	50	22x28	75	20	55	713
58 22 10 55	55	22x28	84	21	55	791
58 22 10 60	60	22x28	93	22	55	885

### 737/100 Blank end insert tool

gunmetal finish. To prevent damage from excessive temperatures, the locking pin, spring and washer are not fitted until the welding work has been completed. Instructions are supplied.



Code	Welding surface h x b mm	mm	H mm	L mm	Δg
58 27 01 00	15 x 50	22x28	32	24	521

### 7370/100 Adaptor

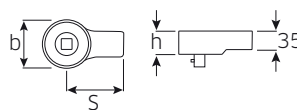
for using shell tools with an internal square drive of 24.5 x 28 mm on torque wrenches with an internal square drive of 22 x 28 mm. Caution! Modified settings on torque wrench (refer to note on p. 189).



Code	mm	mm	L mm	S mm	Δg
58 29 11 00	22x28	24,5x28	85	100	563

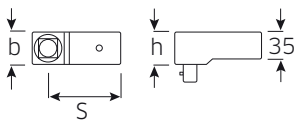
### 735/80 Ratchet shell tool

with push through square drive, 30 teeth.



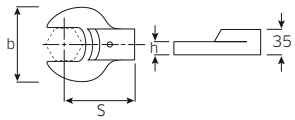
Code	"	mm	b mm	h mm	S mm	Δg
58 25 00 80	3/4	24,5x28	76	43	95	2000

### 734/80 Square drive shell tool



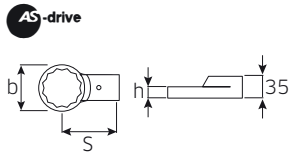
Code	"	mm	b mm	h mm	S mm	Δ g
<b>58 24 00 80</b>	3/4	24,5x28	42	42	95	1200

### 731/80 Open ended shell tools



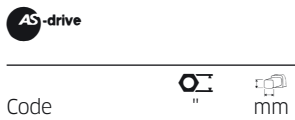
Code	mm	mm	b mm	h mm	S mm	Δ g
<b>58 21 80 24</b>	24	24,5x28	50	13	95	601
<b>58 21 80 27</b>	27	24,5x28	56	14	95	620
<b>58 21 80 30</b>	30	24,5x28	63	15	95	655
<b>58 21 80 32</b>	32	24,5x28	67	15	95	670
<b>58 21 80 34</b>	34	24,5x28	72	15	95	699
<b>58 21 80 36</b>	36	24,5x28	74	15	95	740
<b>58 21 80 41</b>	41	24,5x28	84	16	95	810
<b>58 21 80 46</b>	46	24,5x28	94	17	95	867
<b>58 21 80 50</b>	50	24,5x28	104	18	95	1010
<b>58 21 80 55</b>	55	24,5x28	114	19	95	1150
<b>58 21 80 60</b>	60	24,5x28	124	20	95	1330

### 732/80 Ring shell tools



Code	mm	mm	b mm	h mm	S mm	Δ g
<b>58 22 80 24</b>	24	24,5x28	36	15	95	605
<b>58 22 80 27</b>	27	24,5x28	40,5	15	95	610
<b>58 22 80 30</b>	30	24,5x28	46	16	95	630
<b>58 22 80 32</b>	32	24,5x28	49	16	95	635
<b>58 22 80 34</b>	34	24,5x28	52	17	95	650
<b>58 22 80 36</b>	36	24,5x28	54	17	95	650
<b>58 22 80 41</b>	41	24,5x28	61	18	95	675
<b>58 22 80 46</b>	46	24,5x28	66	19	95	720
<b>58 22 80 50</b>	50	24,5x28	75	20	95	803
<b>58 22 80 55</b>	55	24,5x28	84	21	95	889
<b>58 22 80 60</b>	60	24,5x28	93	22	95	995

### 732a/80 Ring shell tools

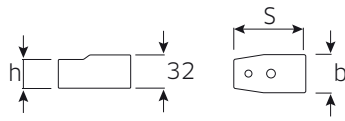


Code	mm	mm	b mm	h mm	S mm	Δ g
<b>58 62 80 46</b>	15/16 <sup>1)</sup>	24,5x28	36	14	95	604
<b>58 62 80 50</b>	1 1/16 <sup>1)</sup>	24,5x28	40,5	14	95	608

<sup>1)</sup> for jet engine pins (Airbus A320/A321)

### 7370/80 Shell adaptor

for attaching 14 x 18 mm insert tools.  
Caution! Modified settings on torque wrench (refer to note on p. 189).



Code	mm	mm	b mm	h mm	S mm	Δ g
<b>58 29 00 80</b>	24,5x28	14x18	36	26	70	281

### 1822 Tool holder

with tool carrier to receive insert/shell tools (without torque function).



Code	mm	L mm	Δ g
<b>18 22 00 03</b>	24,5x28	1000	2000

### 540a HD CROW-FOOT spanners Heavy Duty

For particularly high loadings, e.g. stainless steel screw fittings.  
Full use of jaws in conjunction with standard ratchets.  
Caution! Modified settings on torque wrench (refer to note on page 189),  
chrome plated. Supplied without ratchet.



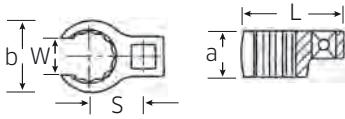
Code	"	"	L mm	b mm	a mm	S mm	Δ g	
<b>02 50 10 34</b>	9/16	3/8	43.4	32	11	26.8	52	1
<b>02 50 10 36</b>	5/8	3/8	45	34.8	11	27.7	58	1
<b>02 50 10 38</b>	11/16	3/8	47.2	38	11	28.6	69	1
<b>02 50 10 42</b>	13/16	3/8	51	46.4	11	30.5	113	1
<b>02 50 10 44</b>	7/8	3/8	52	48	11	31.3	99	1
<b>02 50 10 46</b>	15/16	3/8	54	51.2	11	32.3	129	1
<b>02 50 10 48</b>	1	3/8	56	53.4	11	33.2	133	1
<b>02 50 10 50</b>	1 1/16	3/8	57	53.8	11	34.1	124	1
<b>02 50 10 52</b>	1 1/8	3/8	59	53.8	11	35	128	1
<b>02 50 10 56</b>	1 1/4	3/8	62	60	11	36.8	153	1
<b>02 50 10 62</b>	1 7/16	3/8	66.5	66	11	39.6	172	1
<b>03 50 10 64</b>	1 1/2	1/2	76	70	16	45	310	1
<b>03 50 10 69</b>	1 13/16	1/2	85	84	16	49.6	400	1
<b>03 50 10 72</b>	2	1/2	89	90	16	52.3	451	1
<b>03 50 10 74</b>	2 1/8	1/2	91.5	92.8	16	54.2	460	1
<b>03 50 10 75</b>	2 3/16	1/2	93	96	16	55.1	480	1
<b>03 50 10 76</b>	2 1/4	1/2	95	99	16	56	500	1

# Insert/shell tools

## 440 CROW-RING spanners



Caution! Modified settings on torque wrench (refer to note on page 189).  
Chrome Alloy Steel, chrome plated.



Code	mm	"	L mm	b mm	a mm	S mm	W mm	g	
01 19 00 08	8	1/4	23.8	12.7	8	12.3	6.3	11	1
01 19 00 09	9	1/4	28.5	18.2	13.5	14	6.7	21	1
01 19 00 10	10 <sup>1)</sup>	1/4	28.4	18.2	13.5	14	7.1	16	1
01 19 00 11	11	1/4	28	18.2	13.5	14	8.6	17	1
01 19 00 12	12 <sup>1)</sup>	1/4	30.8	20.6	14	15.7	9	20	1
01 19 00 13	13	1/4	32	22.2	14	16.4	10	30	1
01 19 00 14	14 <sup>1)</sup>	1/4	31.7	22.2	14	16.4	11.1	20	1
02 19 00 15	15	3/8	36.5	24.6	17.5	19.1	11.9	34	1
02 19 00 16	16	3/8	36.1	24.6	17.5	19.1	13	27	1
02 19 00 17	17 <sup>2)</sup>	3/8	39.2	27.3	17.5	20.5	14	40	1
02 19 00 18	18	3/8	40.8	29	18.5	21.3	14.8	45	1
02 19 00 19	19 <sup>2)</sup>	3/8	40.5	29	18.5	21.3	15.8	40	1
02 19 00 20	20	3/8	42.9	31.3	18.5	22.5	15.8	54	1
02 19 00 21	21	3/8	42.8	31.3	18.5	22.5	16.2	45	1
02 19 00 22	22 <sup>2)</sup>	3/8	45.3	33.5	19	23.6	17	57	1
02 19 00 23	23	3/8	47.5	35.7	19.5	24.6	17.5	71	1
02 19 00 24	24 <sup>2)</sup>	3/8	47.3	35.7	19.5	24.6	18	57	1
02 19 00 25	25	3/8	49.3	37.7	20	25.7	19	80	1
02 19 00 26	26	3/8	49.3	37.7	20	25.7	19	63	1
02 19 00 27	27	3/8	52.8	40	21.4	28.2	20	100	1
02 19 10 27	27MB <sup>3)</sup>	3/8	57.1	42.1	15	29.3	20	92	1
03 19 00 28	28	1/2	56.8	42.1	22.5	29.3	21	120	1
03 19 00 30	30	1/2	63	48	22.5	32.5	22	155	1
03 19 00 32	32	1/2	62.5	48	22.5	32.5	24	145	1
03 19 00 34	34	1/2	64.2	50	24	33.5	27	146	1
03 19 00 36	36	1/2	66.5	51.9	24	34.6	27	150	1
03 19 00 38	38	1/2	68.1	53.9	24	35.6	28.6	147	1
03 19 00 40	40	1/2	71.8	57.9	24.5	37.7	31	160	1
03 19 00 41	41	1/2	71.8	57.9	24.5	37.7	31	169	1
03 19 00 42	42	1/2	71	57.9	24.5	37.7	33.2	189	1
03 19 00 46	46	1/2	77.7	64.2	26	40.9	34.1	215	1
03 19 00 50	50	1/2	83.2	70.5	27.5	44.1	39.7	295	1

<sup>1)</sup> For union nuts on fuel injection leads on 4-cylinder Mercedes-Benz diesel engines

<sup>2)</sup> For use on suction or pressure lines within expansion valve of air conditioning unit (Mercedes-Benz)

<sup>3)</sup> Slim-line version for setting of electronic injection on 440-HP-engines Mercedes-Benz series OM 442

## 440a CROW-RING spanners

Code	"	"	L mm	b mm	a mm	S mm	W mm	g	
01 49 00 24	3/8 <sup>1)</sup>	1/4	28.4	18.2	13.5	14	7.1	16	1
01 49 00 28	7/16	1/4	28	18.2	13.5	14	8.6	14	1
01 49 00 32	1/2	1/4	30.5	20.6	14	15.7	10	19	1
01 49 00 34	9/16	1/4	31.7	22.2	14	16.4	11.1	23	1
02 49 00 36	5/8	3/8	36.5	24.6	17.5	19.1	11.9	33	1
02 49 00 38	11/16	3/8	39.2	27.3	17.5	20.5	14	36	1
02 49 00 40	3/4	3/8	40.9	29	18.5	21.3	14.2	44	1
02 49 00 42	13/16	3/8	42.9	31.3	18.5	22.5	15.8	51	1
02 49 00 44	7/8	3/8	45.2	33.5	19	23.6	17.5	62	1
02 49 00 46	15/16	3/8	47.2	35.7	19.5	24.6	18.3	63	1
02 49 00 48	1	3/8	49.3	37.7	20	25.7	19	71	1
02 49 00 50	1 1/16	3/8	52.8	40	21.4	28.2	20	84	1
03 49 00 52	1 1/8	1/2	56.8	42.1	22.5	29.3	21	110	1
03 49 00 56	1 1/4	1/2	62.5	48	22.5	32.5	23.8	137	1
03 49 00 58	1 5/16	1/2	62.3	48	22.5	32.5	24.6	130	1
03 49 00 60	1 3/8	1/2	64.2	50	24	33.5	27	138	1
03 49 00 62	1 7/16	1/2	66.5	51.9	24	34.6	27	143	1
03 49 00 64	1 1/2	1/2	68.1	53.9	24	35.6	28.6	152	1
03 49 00 65	1 9/16	1/2	70.1	55.9	24	36.7	29.4	172	1
03 49 00 66	1 5/8	1/2	71.8	57.9	24.5	37.7	31	169	1
03 49 00 68	1 3/4	1/2	75.6	62	25.5	39.8	33.2	199	1
03 49 00 69	1 13/16	1/2	77.7	64.2	26	40.9	34.1	229	1
03 49 00 72	2	1/2	83.2	70.5	27.5	44.1	39.7	277	1
03 49 00 76	2 1/4	1/2	91.2	78.7	29.5	48.2	42.8	337	1
03 49 00 77	2 5/16	1/2	93.3	80.9	30	49.2	43.6	309	1
03 49 00 78	2 3/8	1/2	95.2	83	30.5	50.2	46	385	1

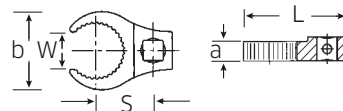
<sup>1)</sup> For Volvo aero-engines, types "JAS"

## 440S MJ CROW-RING spanners



Supersedes No 440 MJ

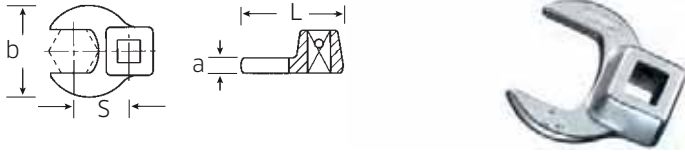
Caution! Modified settings on torque wrench (refer to note on page 189), EN 4108, for pipe unions with straight cylindrical involute toothing, HPQ® high performance steel, chrome plated.



Code	Threaded nut	mm	"	L mm	b mm	a mm	S mm	W mm	g	
01 21 10 10	MJ10	DN04	1/4	31.9	22	8	17	6.5	54	1
01 21 10 14	MJ14	DN06	1/4	36.5	27	8	19.5	8.5	29	1
02 21 10 16	MJ16	DN08	3/8	43.8	31	8	24	10.5	47	1
02 21 10 18	MJ18	DN10	3/8	45.2	33	8	25	13	45	1
02 21 10 20	MJ20	DN12	3/8	46.2	35	8	26	15	49	1
02 21 10 22	MJ22	DN14	3/8	48.4	37	9	27	17.5	54	1
02 21 10 24	MJ24	DN16	3/8	49.5	39	9	28	19.7	56	1
02 21 10 27	MJ27	DN18	3/8	54.4	44	10	31	21.5	70	1
02 21 10 30	MJ30	DN20	3/8	60.8	50	10	36	23.7	93	1

## 540 CROW-FOOT spanners

Caution! Modified settings on torque wrench (refer to note on page 189), Chrome Alloy Steel, chrome plated.



Code	mm	"	L mm	b mm	a mm	S mm	Δg	g	
01 20 00 08	8	1/4	25.5	19.8	6.3	14.6	19	1	
01 20 00 09	9	1/4	25.5	19.8	6.3	14.6	21	1	
01 20 00 10	10	1/4	25.5	19.8	6.3	14.6	20	1	
02 20 00 11	11	3/8	32	22.2	6.3	17.4	36	1	
02 20 00 12	12	3/8	34.3	25.4	6.3	18.2	37	1	
02 20 00 13	13	3/8	34.3	25.4	6.3	17.8	36	1	
02 20 00 14	14	3/8	37.7	30	6.3	20.8	46	1	
02 20 00 15	15	3/8	37.7	30	6.3	20.4	45	1	
02 20 00 16	16	3/8	37.7	30	6.3	19.9	45	1	
02 20 00 17	17	3/8	42.5	38	6.3	23.8	62	1	
02 20 00 18	18	3/8	42.5	38	6.3	22.9	61	1	
02 20 00 19	19	3/8	42.5	38	6.3	22.4	64	1	
02 20 00 20	20	3/8	42.4	38	6.3	25	55	1	
02 20 00 21	21	3/8	44.5	41	6.3	23.6	59	1	
02 20 00 22	22	3/8	44.5	41	6.3	24.2	64	1	
02 20 00 23	23	3/8	44.5	41	6.3	25.8	64	1	
02 20 00 24	24	3/8	44.4	41	6.3	26.2	60	1	
02 20 00 25	25	3/8	47	45	8	26.4	75	1	
02 20 00 26	26	3/8	47	45	8	27.6	80	1	
02 20 00 27	27	3/8	47	45	8	27.6	76	1	
02 20 00 28	28	3/8	50	50	8	29.3	78	1	
02 20 00 30	30	3/8	50	50	8	29.3	84	1	
02 20 00 32	32	3/8	53	57	8	30.5	95	1	
02 20 00 34	34	3/8	54.5	60	8	31.6	107	1	
02 20 00 36	36	3/8	56.5	62	8	32.8	100	1	
02 20 00 40	40	3/8	63	70	8	37.6	130	1	
02 20 00 41	41	3/8	63	70	8	37.2	130	1	
02 20 00 42	42	3/8	63	70	8	37.7	125	1	
02 20 00 46	46	3/8	72	82	8	43.1	191	1	
02 20 00 50	50	3/8	75	88	8	45.4	217	1	

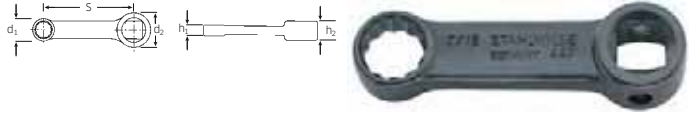
## 540a CROW-FOOT spanners

Code	mm	"	L mm	b mm	a mm	S mm	Δg	g	
01 50 00 24	3/8	1/4	25.5	19.8	6.3	14.6	17	1	
02 50 00 28	7/16	3/8	32	22.2	6.3	17.2	34	1	
02 50 00 32	1/2	3/8	34.3	25.4	6.3	18.1	37	1	
02 50 00 34	9/16	3/8	37.7	30	6.3	20.9	40	1	
02 50 00 36	5/8	3/8	37.7	30	6.3	20.4	44	1	
02 50 00 38	11/16	3/8	42.5	38	6.3	24.1	62	1	
02 50 00 40	3/4	3/8	42.5	38	6.3	24	66	1	
02 50 00 42	13/16	3/8	42.3	38	6.3	24	59	1	
02 50 00 44	7/8	3/8	44.5	41	6.3	25.8	65	1	
02 50 00 48	1	3/8	47	45	8	26.7	78	1	
02 50 00 50	1 1/16	3/8	47	45	8	27.2	78	1	
02 50 00 52	1 1/8	3/8	50	50	8	28.5	84	1	
02 50 00 54	1 3/16	3/8	50	50	8	29.2	83	1	
02 50 00 56	1 1/4	3/8	53	57	8	30.3	101	1	
02 50 00 58	1 5/16	3/8	53	57	8	31.2	101	1	
02 50 00 60	1 3/8	3/8	54.5	60	8	32.3	105	1	
02 50 00 62	1 7/16	3/8	56.5	62	8	33.1	107	1	
02 50 00 64	1 1/2	3/8	58	65	8	34.5	118	1	
02 50 00 65	1 9/16	3/8	59.5	68	8	35.7	126	1	
02 50 00 66	1 5/8	3/8	63	70	8	37.3	140	1	
02 50 00 67	1 11/16	3/8	63	70	8	37.7	126	1	
02 50 00 68	1 3/4	3/8	68	76	8	40.4	161	1	
02 50 00 70	1 7/8	3/8	72	82	8	42	205	1	
02 50 00 72	2	3/8	75	88	8	44.8	214	1	
02 50 00 74	2 1/8	3/8	75.6	91	10	46	265	1	
02 50 00 76	2 1/4	3/8	80.5	96	10	49.5	297	1	
03 50 00 78	2 3/8	1/2	81.5	96	8	51.3	214	1	

## 447 Adaptor



Caution! Modified settings on torque wrench (refer to note on page 189), American sizes: SAE AS 954-E, HPQ® high performance steel, gunmetal finish.



Code	mm	"	d1 mm	d2 mm	h1 mm	h2 mm	S mm	Δg	g	
02 18 10 07	7	3/8	11.5	19	6	11	50.8	30	1	
02 18 10 08	8	3/8	12.4	19	6	11	50.8	30	1	
02 18 10 09	9	3/8	14	19	8	11	50.8	40	1	
02 18 10 10	10	3/8	15.6	19	8	11	50.8	40	1	
02 18 10 13	13	3/8	19.3	19	9.2	11	50.8	55	1	

## 447a Adaptor

Code	mm	"	d1 mm	d2 mm	h1 mm	h2 mm	S mm	Δg	g	
02 47 00 16	1/4	3/8	10.4	19	6	11	50.8	27	1	
02 47 00 20	5/16	3/8	12.4	19	6	11	50.8	29	1	
02 47 00 24	3/8	3/8	14.9	19	8	11	50.8	41	1	
02 47 00 28	7/16	3/8	17	19	8	11	50.8	40	1	
02 47 00 32	1/2	3/8	19	19	9.2	11	50.8	56	1	
02 47 00 34	9/16	3/8	21	19	9.2	11	50.8	61	1	
02 47 00 36	5/8	3/8	23	19	12	11	50.8	73	1	

## 1225 Special extension

3/8" ■, offset



Code	L mm	d mm	Δg	g	
12 25 00 01	150	17	128	5	

## 447aSP Spline-Drive adaptor



Caution! Modified settings on torque wrench (refer to note on page 189), MS-33787, MIL-W-8982, HPQ® high performance steel, gunmetal finish.



Code	Spline size	mm	"	d1 mm	d2 mm	h1 mm	h2 mm	S mm	Δg	g	
02 48 00 14	7	7/32	3/8	9.4	19	6	11	50.8	38	1	
02 48 00 16	8	1/4	3/8	10.4	19	6	11	50.8	27	1	
02 48 00 18	9	9/32	3/8	11.5	19	6	11	50.8	29	1	
02 48 00 20	10	5/16	3/8	12.4	19	6	11	50.8	29	1	
02 48 00 24	12	3/8	3/8	14.9	19	8	11	50.8	40	1	
02 48 00 28	14	7/16	3/8	17	19	9.2	11	50.8	39	1	
02 48 00 32	16	1/2	3/8	19	19	9.2	11	50.8	59	1	
02 48 00 34	18	9/16	3/8	21	19	9.2	11	50.8	55	1	
02 48 00 36	20	5/8	3/8	23	19	12	11	50.8	74	1	

**Allocation of coefficients of friction and recommended values to various materials, surfaces and joint lubrication states**

Class of friction coefficient	Range for $\mu_K$ and $\mu_K$	Selection of typical examples for	
		Material/surfaces	Lubricants
<b>A</b>	0.04 to 0.10	bright metal, hardened and tempered black, phosphated electrocoatings like Zn, Zn/Fe, Zn/Ni, zinc flake coatings	solid lubricants such as MoS <sub>2</sub> , graphite, PTFE, PA, PE, PI in bonded coatings, as topcoats or in pastes; melted wax, wax dispersion
<b>B</b>	0.08 to 0.16	bright metal, hardened and tempered black, phosphated electrocoatings like Zn, Zn/Fe, Zn/Ni, zinc flake coatings, Al and Mg alloyscoatings hot-dip zinc-plated organic coatings	solid lubricants, such as MoS <sub>2</sub> , graphite, PTFE, PA, PE, PI in bonded coatings, as topcoats or in pastes; melted wax; wax dispersions; greases; oils; delivery state
<b>C</b>	0.14 to 0.24	austenitic steel austenitic steel bright metal, phosphatised electroplated coatings like Zn, Zn/Fe, Zn/Ni, zinc flake coatings, adhesive	MoS <sub>2</sub> ; graphite; wax dispersions with integrated solid lubricant or wax dispersion
<b>D</b>	0.20 to 0.35	austenitic steel electroplated coatings like Zn, Zn/Fe	oil without
<b>E</b>	$\geq 0.30$	electroplated coatings like Zn, Zn/Fe Zn/Ni, austenitic steel, Al, and Mg alloys	without

**Approximate values for static friction  $\mu_T$  in the joint**

Material pairings	Coefficient of static friction in this state	
	dry	lubricated
steel - steel/cast steel	0.1 to 0.23	0.07 bis 0.12
steel - soft cast iron	0.12 to 0.24	0.06 to 0.1
soft cast iron - soft cast iron	0.15 to 0.3	0.2
bronze - steel	0.12 to 0.28	0.18
soft cast iron - bronze	0.28	0.15 to 0.2
steel - copper alloy	0.07	
steel - aluminum alloy	0.1 to 0.28	0.05 to 0.18
aluminum - aluminum	0.21	

Assembly pretension forces  $F_{MTab}$  and tightening torque  $M_A$  at  $\nu = 0.9$  for **setscrews** with standard metric threads to DIN ISO 262; head sizes of hex screws to DIN EN ISO 4014 to 4018, screws with outer hex to DIN 34800 and cheese head to DIN EN ISO 4762 and central bore "medium" to DIN EN 20273.

5

Dim.	Strength class	Assembly pretension forces $F_{M Tab}$ in kN for $\mu_c =$							Tightening torque $M_A$ in N-m for $\mu_K = \mu_c =$						
		0.08	0.10	0.12	0.14	0.16	0.20	0.24	0.08	0.10	0.12	0.14	0.16	0.20	0.24
<b>M 4</b>	8.8	4.6	4.5	4.4	4.3	4.2	3.9	3.7	2.3	2.6	3.0	3.3	3.6	4.1	4.5
	10.9	6.8	6.7	6.5	6.3	6.1	5.7	5.4	3.3	3.9	4.6	4.8	5.3	6.0	6.6
	12.9	8.0	7.8	7.6	7.4	7.1	6.7	6.3	3.9	4.5	5.1	5.6	6.2	7.0	7.8
<b>M 5</b>	8.8	7.6	7.4	7.2	7.0	6.8	6.4	6.0	4.4	5.2	5.9	6.5	7.1	8.1	9.0
	10.9	11.1	10.8	10.6	10.3	10.0	9.4	8.8	6.5	7.6	8.6	9.5	10.4	11.9	13.2
	12.9	13.0	12.7	12.4	12.0	11.7	11.0	10.3	7.6	8.9	10.0	11.2	12.2	14.0	15.5
<b>M 6</b>	8.8	10.7	10.4	10.2	9.9	9.6	9.0	8.4	7.7	9.0	10.1	11.3	12.3	14.1	15.6
	10.9	15.7	15.3	14.9	14.5	14.1	13.2	12.4	11.3	13.2	14.9	16.5	18.0	20.7	22.9
	12.9	18.4	17.9	17.5	17.0	16.5	15.5	14.5	13.2	15.4	17.4	19.3	21.1	24.2	26.8
<b>M 7</b>	8.8	15.5	15.1	14.8	14.4	14.0	13.1	12.3	12.6	14.8	16.8	18.7	20.5	23.6	26.2
	10.9	22.7	22.5	21.7	21.1	20.5	19.3	18.1	18.5	21.7	24.7	27.5	30.1	34.7	38.5
	12.9	26.6	26.0	25.4	24.7	24.0	22.6	21.2	21.6	25.4	28.9	32.2	35.2	40.6	45.1
<b>M 8</b>	8.8	19.5	19.1	18.6	18.1	17.6	16.5	15.5	18.5	21.6	24.6	27.3	29.8	34.3	38.0
	10.9	28.7	28.0	27.3	26.6	25.8	24.3	22.7	27.2	31.8	36.1	40.1	43.8	50.3	55.8
	12.9	33.6	32.8	32.0	31.1	30.2	28.4	26.6	31.8	37.2	42.2	46.9	51.2	58.9	65.3
<b>M 10</b>	8.8	31.0	30.3	29.6	28.8	27.9	26.3	24.7	36	43	48	54	59	68	75
	10.9	45.6	44.5	43.4	42.2	41.0	38.6	36.2	53	63	71	79	87	100	110
	12.9	53.3	52.1	50.8	49.4	48.0	45.2	42.4	62	73	83	93	101	116	129
<b>M 12</b>	8.8	45.2	44.1	43.0	41.9	40.7	38.3	35.9	63	73	84	93	102	117	130
	10.9	66.3	64.8	63.2	61.5	59.8	56.3	52.8	92	108	123	137	149	172	191
	12.9	77.6	75.9	74.0	72.0	70.0	65.8	61.8	108	126	144	160	175	201	223
<b>M 14</b>	8.8	62.0	60.6	59.1	57.5	55.9	52.6	49.3	100	117	133	148	162	187	207
	10.9	91.0	88.9	86.7	84.4	82.1	77.2	72.5	146	172	195	218	238	274	304
	12.9	106.5	104.1	101.5	98.8	96.0	90.4	84.8	171	201	229	255	279	321	356
<b>M 16</b>	8.8	84.7	82.9	80.9	78.8	76.6	72.2	67.8	153	180	206	230	252	291	325
	10.9	124.4	121.7	118.8	115.7	112.6	106.1	99.6	224	264	302	338	370	428	477
	12.9	145.5	142.4	139.0	135.4	131.7	124.1	116.6	262	309	354	395	433	501	558
<b>M 18</b>	8.8	107	104	102	99	96	91	85	220	259	295	329	360	415	462
	10.9	152	149	145	141	137	129	121	314	369	421	469	513	592	657
	12.9	178	174	170	165	160	151	142	367	432	492	549	601	692	769
<b>M 20</b>	8.8	136	134	130	127	123	116	109	308	363	415	464	509	588	655
	10.9	194	190	186	181	176	166	156	438	517	592	661	725	838	933
	12.9	227	223	217	212	206	194	182	513	605	692	773	848	980	1092
<b>M 22</b>	8.8	170	166	162	158	154	145	137	417	495	567	634	697	808	901
	10.9	242	237	231	225	219	207	194	595	704	807	904	993	1151	1284
	12.9	283	277	271	264	257	242	228	696	824	945	1057	1162	1347	1502
<b>M 24</b>	8.8	196	192	188	183	178	168	157	529	625	714	798	875	1011	1126
	10.9	280	274	267	260	253	239	224	754	890	1017	1136	1246	1440	1604
	12.9	327	320	313	305	296	279	262	882	1041	1190	1329	1458	1685	1877
<b>M 27</b>	8.8	257	252	246	240	234	220	207	772	915	1050	1176	1292	1498	1672
	10.9	367	359	351	342	333	314	295	1100	1304	1496	1674	1840	2134	2381
	12.9	429	420	410	400	389	367	345	1287	1526	1750	1959	2153	2497	2787
<b>M 30</b>	8.8	313	307	300	292	284	268	252	1053	1246	1428	1597	1754	2031	2265
	10.9	446	437	427	416	405	382	359	1500	1775	2033	2274	2498	2893	3226
	12.9	522	511	499	487	474	447	420	1755	2077	2380	2662	2923	3386	3775
<b>M 33</b>	8.8	389	381	373	363	354	334	314	1415	1679	1928	2161	2377	2759	3081
	10.9	554	543	531	517	504	475	447	2015	2392	2747	3078	3385	3930	4388
	12.9	649	635	621	605	589	556	523	2358	2799	3214	3601	3961	4598	5135
<b>M 36</b>	8.8	458	448	438	427	415	392	368	1825	2164	2482	2778	3054	3541	3951
	10.9	652	638	623	608	591	558	524	2600	3082	3535	3957	4349	5043	5627
	12.9	763	747	729	711	692	653	614	3042	3607	4136	4631	5089	5902	6585
<b>M 39</b>	8.8	548	537	525	512	498	470	443	2348	2791	3208	3597	3958	4598	5137
	10.9	781	765	748	729	710	670	630	3345	3975	4569	5123	5637	6549	7317
	12.9	914	895	875	853	831	784	738	3914	4652	5346	5994	6596	7664	8562

**Assembly pretension forces and tightening torques**

MAsssembly pretension forces  $F_{M Tab}$  and tightening torques  $M_A$  for screws with standard metric threads to DIN 13, Page 43 (M 1.6-M 2.5-M 3 to M 39) and head contact sizes such as DIN 912 (DIN EN ISO 4762), DIN 931 (DIN EN 24014), DIN 934 (DIN EN 24032), DIN 6912, DIN 7984, DIN 77990. The table readings  $F_{M Tab}$  and  $M_A$  are based on the SI unit N (Newton). 1 N = 0.102 kp, 1 N-cm = 0.102 kpc-m, 1 N-m = 0.102 kpm, 1 kp = 9.81 N, 1 kpc-m = 9.81 N-cm, 1 kpm = 9.81 N-m. The assembly pretension forces  $F_{M Tab}$  listed in the table above result in 90% exploitation of a screw's yield strength  $\sigma_{0.2}$  (DIN ISO 898 Part 1) through the comparative tension  $\sigma_{rel}$ , which depends on the coefficient of thread friction  $\mu_c$ . The table of assembly pretension forces shows what quality of which

screw is required for a particular thread friction to generate a certain required assembly pretension force  $F_{M Tab}$ . The tightening torque  $M_A$  required to achieve 90% yield strength exploitation for a screw whose dimensions and quality are given can be determined from the right-hand table having regard to a specific underhead friction ( $\mu_u$ ). To determine the rated torque to be applied, deduct half the spread of the corresponding torque wrench from the applicable tightening torque  $M_A$  in the table. Calculation of the table entries and notes on their application to VDI 2230, Page 1.



## MULTIPOWER

Makes child's play of the largest torques.

MULTIPOWER – or really “tough work”.

STAHLWILLE MULTIPOWER torque multipliers with planetary gears take the fatigue out of tightening or loosening stiff or large bolt connections. A long lever is not necessary.

STAHLWILLE MULTIPOWER multiplies human strength; steady torque transfer is easy on nuts and bolts. Even the largest torques are transferred with ease and precision over long periods.

Accordingly, construction materials and workmanship are extremely robust.

When combined with STAHLWILLE torque wrenches, MULTIPOWER really shows its strength.

The MULTIPOWER range extends to 5000 N·m/3687 ft·lb.

MULTIPOWER tools are also available on request up to 12000 N·m/8850 ft·lb.

The MULTIPOWER from 2000 N·m are fitted with an anti-backlash device.

Spare parts, see p. 223.

### MP300 MULTIPOWER

with overload protection and planetary gears, in carrying case, with one spare sun wheel (overload cut-out), deviation of indication  $\pm 5\%$ .



Code	size	N·m <sup>1)</sup>	ft·lb <sup>1)</sup>	N·m <sup>2)</sup>	ft·lb <sup>2)</sup>	Gear ratio	Torque ratio	□ "	■ "	b mm	h mm	L mm	Δ g	Δ g with box
<b>53 03 08 00</b>	<b>800</b>	800	590	229	169	4 : 1	1 : 3.5	1/2	3/4	66	85	215	2000	5838
<b>53 03 13 50</b>	<b>1350</b>	1350	996	375	277	4 : 1	1 : 3.6	3/4	3/4	90	106	265	3400	7500
<b>53 03 20 00</b>	<b>2000<sup>*)</sup></b>	2000	1475	160	118	16 : 1	1 : 12.5	1/2	1	95	161	330	7000	11000
<b>53 03 30 00</b>	<b>3000<sup>*)</sup></b>	3000	2212	240	177	16 : 1	1 : 12.5	3/4	1	95	161	330	7000	10805
<b>53 03 50 00</b>	<b>5000<sup>*)</sup></b>	5000	3687	294	217	20 : 1	1 : 17.0	3/4	1 1/2	120	180	400	10400	14000

MULTIPOWER tools are also available on request up to 12000 N·m/8850 ft·lb.

<sup>\*)</sup> with anti-backlash device    <sup>1)</sup> max. output    <sup>2)</sup> max. input

### MP100-1500 MULTIPOWER

- particularly compact construction
- light and easy to handle
- with ratchet function
- working angle 8°
- with rotary scale
- for use with a torque wrench with a fixed 1/2" square drive
- patents applied for
- in carry-case
- included in the set: 3 hexagon inserts sizes 30; 32; 36 mm,  
1 insert with 1" outer square drive,  
1 reaction arm 400 mm
- display deviation value  $\pm 5\%$



Code	N·m <sup>1)</sup>	ft·lb <sup>1)</sup>	N·m <sup>2)</sup>	ft·lb <sup>2)</sup>	Gear ratio	Torque ratio	□ "	b mm	h mm	L mm	Δ g	Δ g with box
<b>96 53 15 00</b>	1500	1106	300	221	5.62 : 1	1 : 5	1/2	105	30	165	1890	3630

<sup>1)</sup> max. output

<sup>2)</sup> max. input

## Spare parts

### Sets of spare parts for ratchet insert tools

#### 4150QR Spare parts set



Content:  
1 pinion; 1 pawl; 2 lever with pin; 1 ball; 2 compression springs; 2 screws  
M 1.7 x 8; 2 cover plates

Code	for No	g	
1901 1020	725QR/4	24	1

#### 4350QR Spare parts set



Content:  
1 pinion, 1 pawl, 1 lever with pin, 1 ball, 2 compression springs, 2 screws

Code	for No	g	
19020020	725QR/5	51	1

#### 7250QR/10 Spare parts set



Content:  
1 pinion, 1 pawl, 1 lever with pin, 1 ball, 2 compression springs, 2 screws

Code	for No	g	
1904 1020	725QR/10	64	1

#### 5120QR Spare parts set



Content:  
1 pinion, 1 pawl, 1 lever with pin, 1 ball, 2 compression springs, 2 screws

Code	for No	g	
19040020	725QR/20	118	1

#### 7250B Spare parts sets

Content:  
1 pinion, 1 pawl, 1 lever with pin, 1 ball, 2 compression springs, 2 screws,  
1 cover plate

Code	size	for No	g	
1901 2022	4	725B/4	21	1
1901 2023	5	725B/5	48	1

#### 7250L/5 Spare parts set

Content:  
1 pinion, 1 pawl, 1 change-over button with pin, 1 ball, 2 compression  
springs, 2 screws, 1 cover plate

Code	for No	g	
1902 1000	725L/5	70	1

#### 7250/4 Spare parts set

Content:  
1 pinion, 1 pawl, 1 lever with pin, 1 ball, 2 compression springs, 2 screws,  
1 cover plate

Code	for No	g	
1901 2021	725/4	26	1

#### 7350/5 Spare parts set

Content:  
1 pinion, 1 pawl, 1 switching disk, 1 spring, 3 screws.

Code	for No	g	
5925 1005	735/5	85	1

for ratchets from 12/97

#### 7350/10 Spare parts set

Content:  
1 pinion, 1 pawl, 1 switching disk, 1 spring, 3 screws.

Code	for No	g	
5925 1010	735/10	96	1

for ratchets from 12/97

#### 7350/20 Spare parts set

Content:  
1 pinion, 1 pawl, 1 switching disk, 1 spring, 3 screws.

Code	for No	g	
5925 1020	735/20	146	1

for ratchets from 4/96

#### 7350/40 Spare parts set

Content:  
1 pinion, 1 pawl, 1 switching disk, 1 spring, 3 screws.

Code	for No	g	
5925 1040	735/40	219	1

for ratchets from 5/97

#### 7350/40HD-65 Spare parts set

Content:  
1 pinion, 1 pawl, 1 switching disk, 1 spring, 3 screws.

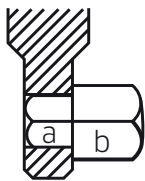
Code	for No	g	
5925 1065	735/40HD, 735/65	300	1

## 7210 Ratchet spare parts sets for torque wrenches No 721

Code	No	Content	Δg
<b>59 19 1005</b>	<b>7210/5</b>	For ratchet/torque wrench No 721/5: 1 pinion, 1 pawl, 1 switch-over button and pin, 1 ball, 2 compression springs, 2 screws	53
<b>19 04 0000</b>	<b>5120 + 7210/15</b>	For ratchet/torque wrench No 721/15: 1 pinion, 1 pawl, 1 lever, 1 lever pin, 1 ball, 2 compression springs, 2 screws	127
<b>59 19 1030</b>	<b>7210/30</b>	For ratchet/torque wrench No 721/30: 1 pinion, 1 pawl, 1 lever, 1 lever pin, 1 ball, 2 compression springs, 2 screws	134
<b>59 19 1080</b>	<b>7210/80</b>	For ratchet/torque wrench No 721Nf/80, 721Nf/100, 735/80, 735/100: 1 pinion, 2 pawls, 2 spring contact points, 2 compression springs	448

## 70V Square drive units

for torque wrenches and insert tools.



502 1/2



70V 16

Code	size	for No	a	b	L	Δg	
			"	"	mm	g	
<b>59 01 0001</b>	<b>1</b>	71...V/1	1/4	1/4	17.5	5	5
<b>59 01 0014</b>	<b>11</b>	734/4	3/8	1/4	22	12	5
<b>59 01 0003</b>	<b>3</b>	734/5	3/8	3/8	25.8	17	5
<b>59 01 0005</b>	<b>5</b>	734/10	3/8	1/2	30	28	5
<b>59 01 0011</b>	<b>502 1/2</b>	720/30; 734/20	1/2	1/2	33.5	39	5
<b>59 01 0007</b>	<b>7</b>	721/30	1/2	1/2	44.3	52	5
<b>59 01 0008</b>	<b>8</b>	734/40	3/4	3/4	52.2	138	5
<b>59 01 0015</b>	<b>12</b>	720Nf/80; 721Nf/80+100; 734/80; 734/100; 735/80; 735/100	3/4	3/4	65	179	1
<b>59 01 0016</b>	<b>16*</b>	720Nf/80; 721Nf/80+100; 734/40; 734/80; 734/100; 735/80; 735/100	3/4	3/4	88	240	1

\* extra-long, firmly locked, so usable from both sides

## Spares for MULTIPOWER

### SR290-393 Sun wheel with overload cutout



Code	No	for No	Δg
			g
<b>59 03 08 00</b>	<b>SR300-800</b>	MP300-800	45
<b>59 03 13 50</b>	<b>SR300-1350</b>	MP300-1350	106
<b>59 03 20 00</b>	<b>SR300-2000</b>	MP300-2000	120
<b>59 03 30 00</b>	<b>SR300-3000</b>	MP300-3000	130
<b>59 03 50 00</b>	<b>SR300-5000</b>	MP300-5000	127
<b>59 30 00 39</b>	<b>SR290N</b>	STW 290N	41
<b>59 30 00 67</b>	<b>SR295N</b>	STW 295N	95
<b>59 30 00 68</b>	<b>SR391N</b>	STW 391N	95
<b>59 30 00 69</b>	<b>SR392N</b>	STW 392N	105
<b>59 30 00 70</b>	<b>SR393N</b>	STW 393N	105

Made in Germany

## Electronic torque tester for torque wrenches **SENSOTORK® 7707 W** (For complete calibration systems, see p. 227, 231)

Compact torque tester for easy adaptation by replacement of the transducers.

High degree of accuracy thanks to flat transducer and conversion and digitalisation of readings within the transducer (see p. 225).

High degree of safety through display showing actual torque read-off where clicking torque wrenches are used.

### 7707 W Torque tester **SENSOTORK®**

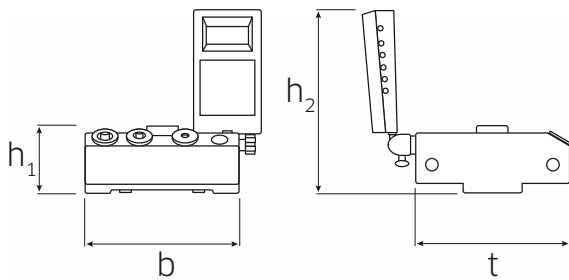
Electronic torque tester for torque wrenches, consisting of:

- transducer, patent
- holder
- display unit (registered design)
- tripod for display unit (with 1.5 m cable)
- spiral cable
- mains adaptor (110 V-230 V with interchangeable socket adaptors) or direct connection to 12 V in-car supply is possible
- square drive adaptor (No 7707-2W, No 7707-2-1W, No 7707-2-2W, No 7707-3W)
- kit for attaching the unit to a workbench or wall in a horizontal or vertical testing position for clockwise and anticlockwise use. Units of measurement: N·m, ft·lb, in·lb.

The easily interchangeable transducers are attached to the holder by means of a QuickRelease safety lock. Low lateral forces thanks to low-profile transducers, automatic detection of the transducer, flexible and user friendly because the unit can be used horizontally or vertically and the display unit can be placed in many positions, additional tripod with 1.5 m cable for mounting the display unit to facilitate visual monitoring when using longer torque wrenches, especially broad measuring range from approx. 2% to 100% of rated value.

The software No 7759-4, including USB hub and jack cable (see p. 234), enables readings to be transferred to the PC for documenting and for generating calibration certificates in accordance with DIN EN 6789:2003 (no separate power supply needed, power comes from PC). While individual transducers are being recalibrated, the torque tester itself remains on-site for further use. Wide range of application (-20°C to +60°C). Complies with DIN 51309: 2005, Class 2 and DKD-R 3-8: 2003. With certificate. Supplied in sturdy plastic case.

5



#### QR QuickRelease

Rapid change and firm locking of the transducers thanks to the QuickRelease safety lock.

#### Interchangeable square drive adapters:

A set of interchangeable square drive adapters are conveniently stored in the mounting block for a range of different drive sizes.



Code	No	Capacity N·m	Capacity ft·lb	Capacity in·lb	Ø"	b mm	h <sub>1</sub> mm	h <sub>2</sub> mm	t mm	Δg g	Δg g with box
96 52 10 86	7707-1-3W <sup>1)</sup>	0.2-10	0.15-7.4	1.8-88.5	1/4	180	79	215	180	6255	9500
96 52 10 85	7707-1-2W	0.2-10	0.15-7.4	1.8-88.5	1/4	180	79	215	180	6255	9500
96 52 10 80	7707-1W	0.4-20	0.3-15	3.5-177	1/4	180	79	215	180	6255	9500
96 52 10 72	7707-2W <sup>2)</sup>	2-100	1.5-74	18-885	3/8	180	79	215	180	7025	10300
96 52 10 83	7707-2-1W <sup>3)</sup>	4-200	3-148	35-1770	1/2	180	79	215	180	7511	10975
96 52 10 84	7707-2-2W <sup>4)</sup>	8-400	6-295	71-3540	3/4	180	79	215	180	7654	11100
96 52 10 82	7707-3W <sup>4)</sup>	25-1100	18-812	221-9736	3/4	180	79	215	180	7495	11000

<sup>1)</sup> for calibrating torque screwdrivers

<sup>2)</sup> with square drive adaptor No 409M (1/4" □ x 3/8" ■)

<sup>3)</sup> with square drive adaptors No 7789-4 (1/4" □ x 1/2" ■), No 7789-5 (3/8" □ x 1/2" ■)

<sup>4)</sup> with square drive adaptors No 7787 (1/4" □ x 3/4" ■), No 7788 (3/8" □ x 3/4" ■), No 7789 (1/2" □ x 3/4" ■)

# Which transducer is for which torque wrench?

(Calibration in accordance with DIN EN ISO 6789: 2003)

STAHLWILLE's recommendation:

+++ very well suited ++ well suited + suitable

No	7721-1	7722	7723-1	7723-2	7723-3
730D/10		+++			
730D/20			+++		
730D/40				+++	
730D/65					+++
730N/2	+++				
730N/5		+++			
730N/10		+++	++		
730N/12			+++		
730N/20			+++	++	
730N/40				+++	
730N/65					+++
730Na/2	+++				
730Na/5		+++			
730Na/10		+++	++		
730Na/20			+++	++	
730Na/40				+++	
730/2	+++	++	+		
730/4		+++	++	+	
730a/2	+++	++	+		
730a/4		+++	++	+	
730/5		+++	++		
730/10		+++	++	+	
730/12			+++	+++	
730/20			+++	++	+
730/40				+++	++
730/65					+++

No	7721-1	7722	7723-1	7723-2	7723-3	7724-1
730a/5		+++	++			
730a/10		+++	++	+		
730a/12			+++	++	+	
730a/20			+++	++	+	
730/80					+++	+
720Nf/80					+++	+
721/5		+++	++			
721/15			+++	++	+	
721/30				+++	++	
721Nf/80					+++	+
721Nf/100					+++	+
755R/1	+++					
755/4		+++	++			
755/10		+++	++	+		
755/20			+++	++	+	
755/30				+++	++	
71/40				+++	++	
71/80					+++	+
71aR/80					+++	+
73Nm/15	+++	++				
712R/6		+++				
712R/20			+++			
712R/40				+++		
713R/6		+++				
713R/20			+++			
713R/40				+++		

## 7721-7724 Transducers



Patent, for calibration of torque wrenches and torque screwdrivers, high degree of accuracy thanks to conversion and digitization of readings within the transducer itself. Not susceptible to lateral forces due to low-profile construction. Can also be used as part of a calibration system (see p. 227, 231). With certificate. Supplied in sturdy plastic case.



		Measuring ranges by deviation of indication												
Code	No	Display deviation value ± 1% of the reading			Display deviation value ± 0.5% of the reading			Display deviation value ± 0.25% of the reading			∅ mm	∅ "	ΔΔ g	ΔΔ g with box
		N-m	ft-lb	in-lb	N-m	ft-lb	in-lb	N-m	ft-lb	in-lb				
<b>96 52 10 21</b>	<b>7721<sup>1)</sup></b>	0.2-10	0.15-7.4	1.8-88.5	1-10	0.74-7.4	8.9-88.5	2-10	1.5-7.4	17.7-88.5	120	1/4	1735	2411
<b>96 52 10 00</b>	<b>7721-0</b>	0.2-10	0.15-7.4	1.8-88.5	1-10	0.74-7.4	8.9-88.5	2-10	1.5-7.4	17.7-88.5	120	1/4	1735	2411
<b>96 52 10 26</b>	<b>7721-1</b>	0.4-20	0.3-15	3.5-177	2-20	1.5-15	18-177	4-20	3-15	35-177	120	1/4	1735	2411
<b>96 52 10 22</b>	<b>7722</b>	2-100	1.5-74	18-885	10-100	7-74	89-885	12-100	9-74	106-885	120	3/8	2486	3223
<b>96 52 10 23</b>	<b>7723-1</b>	4-200	3-148	35-1770	20-200	15-148	177-1770	40-200	30-148	354-1770	120	1/2	2983	3605
<b>96 52 20 23</b>	<b>7723-2</b>	8-400	6-295	71-3540	40-400	30-295	354-3540	80-400	59-295	708-3540	120	3/4	3134	3745
<b>96 52 10 28</b>	<b>7723-3</b>	25-1100	18-812	221-9736	110-1100	81-812	974-9736	220-1100	162-812	1947-9736	120	3/4	2998	3761
<b>96 52 10 29</b>	<b>7724-1<sup>2)</sup></b>	150-3000	111-2214	1328-26553	300-3000	221-2214	2655-26553	600-3000	443-2214	5311-26553	195	1 1/2	10500	12000

<sup>1)</sup> for calibrating torque screwdrivers

<sup>2)</sup> for use with mechanical loader No 7792 and 7792-1 (see p. 229)

### Note!

**Torque testers are measuring instruments! They have to be regularly calibrated and, where necessary, adjusted, using suitable calibration equipment. We recommend recalibrating every 12 months.**





# Accurate. Reliable. Safe.

## STAHLWILLE calibration

**Calibration** - Calibration is the regular examination of the accuracy and reliability of torque tools. This is done using special-purpose calibrating equipment which is subject to stringent monitoring. This is essential because torque tools are precision instruments which are very often in use in safety-relevant environments. They are expected to provide the same level of accuracy in their readings reliably over long periods of time. In order to ensure these standards are guaranteed, it is essential that examination by means of calibration takes place at regular intervals and is documented.

**At the very least, a calibration system must include the following components:**

1

**Mechanical loader** - The mechanical loader is required for rapid, accurate fixing and operation of the torque wrench. The mechanical loader also ensures that the DIN EN ISO 6789 requirement for clicking torque wrenches is fulfilled, i.e. that, above 80% of the final torque value, the force is applied slowly and steadily within a period of 0.5 to 4 seconds.



2

**Transducer** - The torque applied using the torque wrench is digitalised within the transducer and transmitted via USB cable to the PC, which ensures error-free transmission.



3

**USB-Adaptor** - From here, the data are transferred to the PC.



4

**Cable** - for connecting laboratory transducers No 7728 to USB adaptor, with jack plug and self-locking precision plug.



5

**Square drive adaptor** - The set includes the square drive adapters necessary to make full use of the measuring range of the transducers; e.g. for transducer No 7723-3 (internal square drive 3/4"), square drive adapter No 7787 (1/4" female to 3/4" male), No 7788 (3/8" female to 3/4" male) and No 7789 (1/2" female to 3/4" male).



6

**Software** - The data received in this way can then be used to issue a calibration certificate in accordance with DIN/ISO 6789.





# Complete calibration systems with matched components



Mechanical base unit



Transducer laboratory



Cable  
No 7751-1



USB adaptor No 7757-1



USB adaptor



PC/Printer - not included  
in the delivery



Calibration systems No	7706-8 PC	7706-9 PC	7706-10 PC	7706-11 PC
<b>Code</b>	<b>96 52 10 68</b>	<b>96 52 10 69</b>	<b>96 52 10 70</b>	<b>96 52 10 74</b>
Weight/kg	14.2	67.6	70.6	108.4
Range/N·m	1-10	2-100	2-1000	20-3000
Mechanical loader	-	No 7791	No 7791	No 7792
Stand alone test attachment for torque screwdrivers	No 7790	-	-	-
Extension unit	-	-	No 7791-1	No 7792-1
Transducer laboratory	No 7728-1S (1-10 N·m)	No 7728-2 (2-20 N·m) No 7728-10 (10-100 N·m)	No 7728-2 (2-20 N·m) No 7728-10 (10-100 N·m) No 7728-40 (40-400 N·m) No 7728-100 (100-1000 N·m)	No 7728-20 (20-200 N·m) No 7728-100 (100-1000 N·m) No 7728-300 (300-3000 N·m)
USB adaptor	No 7757-1	No 7757-1	No 7757-1	No 7757-1
Jack cable	No 7751	No. 7751	No 7751	No 7751
Cable for No 7728 (connection between transducer and USB adaptor)	No 7751-1	No 7751-1	No 7751-1	No 7751-1
Square drive adaptor	No 431 (3/8" $\odot$ x 1/4" $\blacksquare$ )	No 431 (3/8" $\odot$ x 1/4" $\blacksquare$ ) No 409M (1/4" $\odot$ x 3/8" $\blacksquare$ )	No 7787 (1/4" $\odot$ x 3/4" $\blacksquare$ ) No 7788 (3/8" $\odot$ x 3/4" $\blacksquare$ ) No 7789 (1/2" $\odot$ x 3/4" $\blacksquare$ ) No 409M (1/4" $\odot$ x 3/8" $\blacksquare$ )	No 7787 (1/4" $\odot$ x 3/4" $\blacksquare$ ) No 7788 (3/8" $\odot$ x 3/4" $\blacksquare$ ) No 7789 (1/2" $\odot$ x 3/4" $\blacksquare$ ) No 7789-2 (3/4" $\odot$ x 1 1/2" $\blacksquare$ ) No 7789-3 (1" $\odot$ x 1 1/2" $\blacksquare$ ) No 7789-4 (1/4" $\odot$ x 1/2" $\blacksquare$ ) No 7789-5 (3/8" $\odot$ x 1/2" $\blacksquare$ )
Calibrating square drive insert tools	-	No 734K/4 (1/4" $\blacksquare$ ) No 734K/5 (3/8" $\blacksquare$ )	No 734K/4 (1/4" $\blacksquare$ ) No 734K/5 (3/8" $\blacksquare$ ) No 734K/20 (1/2" $\blacksquare$ ) No 734K/40 (3/4" $\blacksquare$ )	No 734K/4 (1/4" $\blacksquare$ ) No 734K/5 (3/8" $\blacksquare$ ) No 734K/20 (1/2" $\blacksquare$ ) No 734K/40 (3/4" $\blacksquare$ )
Adaptors	No 3115 (1/4" $\blacksquare$ x 1/4" $\bullet$ E 6,3) - No 3115/1 (1/4" $\blacksquare$ x 1/4" $\bullet$ C 6,3) -	-	-	-
Calibration software	TORKMASTER 4	TORKMASTER 4	TORKMASTER 4	TORKMASTER 4
DAkkS calibration certificates	1	2	4	3

**Manu|tor|k®**

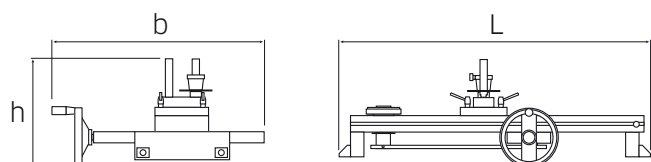
## Mechanical loaders for torque wrenches and torque screwdrivers

Thanks to the modular design, end users can put together their own mechanical loader according to their specific requirements. Extensions with additional components are possible any time. All the components are carefully matched to ensure compatibility and can be easily fitted. This slot-in system is easy to use and has a very accurate fit. The components can be quickly and easily locked together using the integrated screw joints. The display unit can be attached at various points of the system via a holder. In this way, every user can organise his or her work to suit themselves.

### 7791 Mechanical loaders up to 400 N·m

**Measurement possible without moving the point of application of force.**

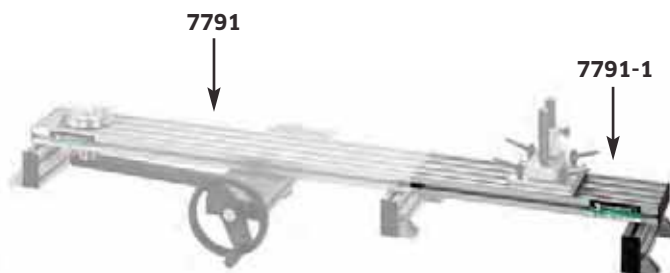
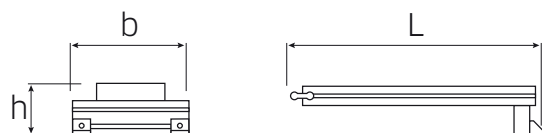
Thanks to a specially designed force transmission system, mechanical loader No 7791 avoids the risk of the point of force application shifting during the calibration process. The lever below the test rail is actuated in a linear direction by the handwheel acting on a spindle. The linear motion is translated into a rotary movement which acts on the transducer. The torque wrench to be calibrated remains in the same position throughout the calibration process. This prevents measuring errors caused by the point of force application being moved. Thanks to a low-friction linear ball bearing, the torque wrench is automatically levelled as it is placed in the unit. A further linear ball bearing ensures the contact with the torque wrench is friction-free. The reduction in lateral forces acting on the transducer and in the friction on the point of contact with the torque wrench results in a corresponding reduction in mismeasurement. Patents applied for.



Code	Capacity N·m	for transducer	for torque wrenches with functional length (L <sub>F</sub> ) max. mm	Profile width mm	b mm	h mm	L mm	⊕⊖ kg
52 11 0091	-400	sizes 1-100	815	180	704	323	1069	26.5

### 7791-1 Extension unit for No 7791, 7794-1 and 7794-2 up to 1000 N·m

with one pair of adapter plates No 7770-3 for height compensation between extension unit No 7791-1 and perfectControl calibrating units No 7794-1 and No 7794-2.



Code	Capacity N·m	for torque wrenches with functional length (L <sub>F</sub> ) max. mm	Profile width mm	b mm	h mm	L mm	⊕⊖ kg
52 11 0191	-1000	1390 (7791 + 7791-1)	180	308	135	673	5.4

## 7792 Mechanical loaders unit to 1000 N-m

Patents applied for.



Code	Capacity N-m	for transducer sizes 20; 100; 300	for torque wrenches with functional length (L <sub>F</sub> ) max. mm	Profile width mm	b mm	h mm	L mm	Δ± kg
<b>52 11 0092</b>	-1000		1390	270	722	323	1668.5	57

## 7792-1 Extension unit for No 7792 up to 3000 N-m

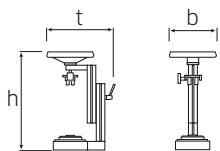


Code	Capacity N-m	for torque wrenches with functional length (L <sub>F</sub> ) max. mm	Profile width mm	b mm	h mm	L mm	Δ± kg
<b>52 11 0192</b>	-3000	2390 (7792 + 7792-1)	270	558	135	1073	23.9

## Test attachments for torque screwdrivers

### 7790 Mechanical loaders for torque screwdrivers

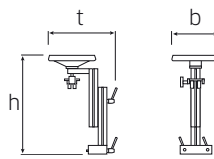
Can be bolted to mechanical loader No 7792. The torque screwdriver to be calibrated is inserted in the square mount of the transducer and fixed using the universal central clamp. The handwheel ensures that the required force is applied in a controlled manner to the torque screwdriver. Supplied without transducer or torque screwdriver.



Code	Capacity N-m	for transducer	b mm	h mm	t mm	Δ± kg
<b>58 52 1090</b>	-10	7721; 7728-15	250	442-593	351	7.9

### 7791-2 Test attachment for torque screwdrivers

Can be bolted onto mechanical loader No 7791. The torque screwdriver to be calibrated is inserted in the square mount of the transducer and fixed using the universal central clamp. The handwheel ensures that the required force is applied in a controlled manner to the torque screwdriver.



Code	Capacity N-m	b mm	h mm	t mm	Δ± kg
<b>52 11 0291</b>	-10	250	442-593	351	3.9

## Accessory

### 7750-1 Holder

for display unit No 7750.  
Can be bolted to test attachments.



Code	Δ± g
<b>52 10 1050</b>	165



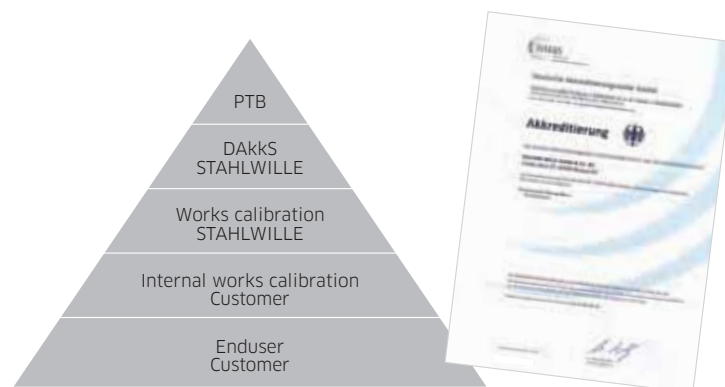
# Audited. Documented. Certified.

## STAHLWILLE DAKkS calibration laboratory

**You can ensure controlled tightening, record the results of tightening processes, monitor torque tools.**

STAHLWILLE's DAKkS calibration laboratory for torque is accredited by the German Accreditation Body (DAkkS) in accordance with DIN EN ISO/IEC 17025: 2005. Which means the specific requirements listed in Technical Specification ISO/TS 16949 relating to testing laboratories are met. Absolutely essential: This is absolutely essential to all suppliers in the automotive sector!

The transfer torque wrenches and torque transducers in use at STAHLWILLE's DAKkS calibration laboratory are subject to regular examination by the German Federal Physics Institute (PTB) in Braunschweig. The accuracy of the torque wrenches must be proved in a series of steps and these must be traceable. Only in this way can the reliability of the readings be guaranteed. During the first stage, the end-user checks the accuracy of the torque tools in-house using suitable calibrated testing equipment. At the next stage, this test equipment is checked in STAHLWILLE's DAKkS calibrating laboratory. This accreditation by the German Accreditation Body (DAkkS) in accordance with DIN EN ISO/IEC 17025: 2005 guarantees the direct link between the measuring equipment and the national standard as laid down in DIN EN ISO 9001: 2008.



Relationship between the national standard and the equipment







# Complete calibration systems perfectControl with matched components



**Motorised calibrating tool  
No 7794-2**



**Manual calibrating unit  
No 7794-1**



**Transducer laboratory**



**USB adaptor No 7757-1**



**PC/Printer - not included  
in the delivery**



Calibration systems No	7794-2/400	7794-2/1000	7794-1/400	7794-1/1000
<b>Code</b>	<b>96 52 10 78</b>	<b>96 52 10 79</b>	<b>96 52 10 76</b>	<b>96 52 10 77</b>
Weight/kg	61.9	69.6	53	60.7
Range/N-m	1-400	1-1000	1-400	1-1000
Motorised calibrating unit	No 7794-2	No 7794-2	-	-
Manual calibrating unit	-	-	No 7794-1	No 7794-1
Extension unit	-	No 7791-1	-	No 7791-1
Transducer laboratory	No 7728-1 (1-10 N-m) No 7728-6 (6-60 N-m) No 7728-40 (40-400 N-m)	No 7728-1 (1-10 N-m) No 7728-6 (6-60 N-m) No 7728-40 (40-400 N-m) No 7728-100 (100-1000 N-m)	No 7728-1 (1-10 N-m) No 7728-6 (6-60 N-m) No 7728-40 (40-400 N-m)	No 7728-1 (1-10 N-m) No 7728-6 (6-60 N-m) No 7728-40 (40-400 N-m) No 7728-100 (100-1000 N-m)
USB Adaptor	No 7757-1	No 7757-1	No 7757-1	No 7757-1
Jack cable	No 7751	No. 7751	No 7751	No 7751
Spiral cable	No 7752	No 7752	No 7752	No 7752
Cable for No 7728	No 7751-1	No 7751-1	No 7751-1	No 7751-1
Square drive adaptor	No 409M (1/4" $\circ$ x 3/8" $\blacksquare$ ) No 7787 (1/4" $\circ$ x 3/4" $\blacksquare$ ) No 7788 (3/8" $\circ$ x 3/4" $\blacksquare$ ) No 7789 (1/2" $\circ$ x 3/4" $\blacksquare$ ) No 7789-4 (1/4" $\circ$ x 1/2" $\blacksquare$ ) No 7789-5 (3/8" $\circ$ x 1/2" $\blacksquare$ )	No 409M (1/4" $\circ$ x 3/8" $\blacksquare$ ) No 7787 (1/4" $\circ$ x 3/4" $\blacksquare$ ) No 7788 (3/8" $\circ$ x 3/4" $\blacksquare$ ) No 7789 (1/2" $\circ$ x 3/4" $\blacksquare$ ) No 7789-4 (1/4" $\circ$ x 1/2" $\blacksquare$ ) No 7789-5 (3/8" $\circ$ x 1/2" $\blacksquare$ )	No 409M (1/4" $\circ$ x 3/8" $\blacksquare$ ) No 7787 (1/4" $\circ$ x 3/4" $\blacksquare$ ) No 7788 (3/8" $\circ$ x 3/4" $\blacksquare$ ) No 7789 (1/2" $\circ$ x 3/4" $\blacksquare$ ) No 7789-4 (1/4" $\circ$ x 1/2" $\blacksquare$ ) No 7789-5 (3/8" $\circ$ x 1/2" $\blacksquare$ )	No 409M (1/4" $\circ$ x 3/8" $\blacksquare$ ) No 7787 (1/4" $\circ$ x 3/4" $\blacksquare$ ) No 7788 (3/8" $\circ$ x 3/4" $\blacksquare$ ) No 7789 (1/2" $\circ$ x 3/4" $\blacksquare$ ) No 7789-4 (1/4" $\circ$ x 1/2" $\blacksquare$ ) No 7789-5 (3/8" $\circ$ x 1/2" $\blacksquare$ )
Calibrating square drive insert tools	No 734K/4 (1/4" $\blacksquare$ ) No 734K/5 (3/8" $\blacksquare$ ) No 734K/12 (3/8" $\blacksquare$ ) No 734K/20 (1/2" $\blacksquare$ ) No 734K/40 (3/4" $\blacksquare$ ) No 734K/100 (3/4" $\blacksquare$ )	No 734K/4 (1/4" $\blacksquare$ ) No 734K/5 (3/8" $\blacksquare$ ) No 734K/12 (3/8" $\blacksquare$ ) No 734K/20 (1/2" $\blacksquare$ ) No 734K/40 (3/4" $\blacksquare$ ) No 734K/100 (3/4" $\blacksquare$ )	No 734K/4 (1/4" $\blacksquare$ ) No 734K/5 (3/8" $\blacksquare$ ) No 734K/12 (3/8" $\blacksquare$ ) No 734K/20 (1/2" $\blacksquare$ ) No 734K/40 (3/4" $\blacksquare$ ) No 734K/100 (3/4" $\blacksquare$ )	No 734K/4 (1/4" $\blacksquare$ ) No 734K/5 (3/8" $\blacksquare$ ) No 734K/12 (3/8" $\blacksquare$ ) No 734K/20 (1/2" $\blacksquare$ ) No 734K/40 (3/4" $\blacksquare$ ) No 734K/100 (3/4" $\blacksquare$ )
Calibration software	TORKMASTER 4	TORKMASTER 4	TORKMASTER 4	TORKMASTER 4
DAKKS calibration certificates	3	4	3	4

### 7794-2 Motorised calibrating and adjusting tool from 1 to 400 N-m

The electronic perfectControl calibrating unit with its electric drive considerably reduces the amount of effort and time required for calibration and adjustment tasks on torque wrenches.



product  
design  
award

2011

- measurement possible without moving the point of application of force.
- prevents faulty readings thanks to precision-mounted spindle and finely regulated motor.
- extremely accurate calibration thanks to optimised bearings and square drives for the transducers.
- rapid, easy change of transducers thanks to quick-release latching system.
- convenient pushbutton controls for clockwise and anticlockwise measurements with automatic speed compensation.
- saves time because the bridge support is locked in place using a single-handed eccentric lever.
- transmission of readings to a PC via USB interface for further processing, analysis and archiving.
- calibration certificates can be printed or saved as a PDF file after calibration.
- as found / as left calibrations can be documented.
- during calibration, DIN EN ISO 6789:2003 in numerous languages is supported. Additional standards and works standards are available on request.
- can be upgraded to perfectControl calibrating unit No 7794-3 for angle-controlled wrenches.
- **calibration up to 1000 N-m is possible using the easily attached extension unit No 7791-1** (see p. 228)
- design patent, other patents applied for

Both clicking and indicating torque wrenches can be calibrated. Calibration of transducers is possible using reference torque wrenches No 7770-100 and 7770-1000, available on request.

6 calibrating square drive insert tools No 734K (sizes 4, 5, 12, 20, 40, 100), 6 square drive adaptors (No 409M, No 7787, No 7788, No 7789, No 7789-4, No 7789-5), 1 USB adaptor No 7757-1, 1 software Torkmaster 7731-1, 1 jack cable No 7751, 1 spiral cable No 7752, 1 cable No 7751-1 with jack plug and self-locking precision plug, 1 low-temperature cable connector, 1 hexagon key wrench No 10760CV size 2 mm are included.

The unit is supplied without the torque wrench, transducers or notebook.

**Transducers laboratory No 7728** (see p. 233).



7794-2

Code	Capacity N-m	for transducer	for torque wrenches with functional length ( $L_F$ ) max. mm	Profile width mm	b mm	h mm	L mm	$\delta$ kg
96 52 1093	1-400	7728 (sizes 1-100)	815	180	640	328	1060	57

### 7794-1 Manual calibrating unit from 1 to 400 N-m

As for perfectControl No 7794-2, but the drive is via an ergonomically designed handwheel.

**Calibration up to 1000 N-m is possible using the easily attached extension unit No 7791-1** (see p. 228). Patents applied for. 6 calibrating square drive insert tools No 734K (sizes 4, 5, 12, 20, 40, 100), 6 square drive adaptors (No 409M, No 7787, No 7788, No 7789, No 7789-4, No 7789-5), 1 USB adaptor No 7757-1, 1 software Torkmaster 7731-1, 1 jack cable No 7751, 1 spiral cable No 7752, 1 cable No 7751-1 with jack plug and self-locking precision plug, 1 low-temperature cable connector, 1 hexagon key wrench No 10760CV size 2 mm are included.

Supplied without torque wrench, transducer or notebook.

**Transducers laboratory No 7728** (see p. 233).



7794-1

Code	Capacity N-m	for transducer	for torque wrenches with functional length ( $L_F$ ) max. mm	Profile width mm	b mm	h mm	L mm	$\delta$ kg
96 52 1092	1-400	7728 (sizes 1-100)	815	180	705	355	1060	47

## 7794-3 Automated calibrating and adjusting unit from 1 to 400 N·m

Automatically calibrates electronic torque and angle-controlled wrenches made by STAHLWILLE

Design patent, other patents applied for.

Model is the same as perfectControl No 7794-2, except it is additionally suited to calibrating angle-controlled wrenches.

Optimum adaptation to working height with motorised height adjustment.

6 calibrating square drive insert tools No 734K (sizes 4, 5, 12, 20, 40, 100), 6 square drive adaptors (No 409M, No 7787, No 7788, No 7789, No 7789-4, No 7789-5), 1 USB adaptor No 7757-1, 1 software Torkmaster 7731-1, 1 jack cable No 7751, 1 spiral cable No 7752, 1 cable No 7751-1 with jack plug and self-locking precision plug, 1 low-temperature cable connector, 1 hexagon key wrench No 10760CV size 2 mm are included.

Supplied without torque wrench, transducer or notebook.



Code	Capacity N·m	for transducer	for torque wrenches with functional length (L <sub>F</sub> ) max. mm	Profile width mm	b mm	h mm	L mm	Δ∅ kg
96 52 1094	1-400	7728 (sizes 1-100)	815	180	640	884-1134	1060	230

## 7728 Transducers laboratory



patented, for laboratory environments, with optimised measuring range, for calibrating torque wrenches and torque screwdrivers, for use together with perfectControl calibrating unit No 7794 or calibration system No 7706.

High degree of accuracy thanks to conversion and digitization of readings within the transducer itself. With high-grade self-locking precision plug. Not susceptible to lateral forces due to low-profile construction.

With DAKKS calibration certificate. Max. display deviation value ± 0.5% of the reading.

Further details on request. Supplied in sturdy plastic case.



Code	size	Measuring ranges by deviation of indication						∅ mm	∅"	Δ∅ g	Δ∅ g with box
		Display deviation value ± 0.5% of the reading			Display deviation value ± 0.25% of the reading						
		N·m	ft·lb	in·lb	N·m	ft·lb	in·lb				
96 52 40 11	15 <sup>1)</sup>	1-10	0.74-7.4	8.9-88.5	2-10	1.5-7.4	18-88.5	120	1/4	1735	2415
96 52 40 01	1	1-10	0.74-7.4	8.9-88.5	2-10	1.5-7.4	18-88.5	120	1/4	1735	2415
96 52 40 02	2	2-20	1.5-15	18-177	4-20	3-15	35-177	120	1/4	1735	2415
96 52 40 04	4	4-40	3-30	35-354	8-40	6-30	71-354	120	3/8	2486	3136
96 52 40 06	6	6-60	4.5-45	53-531	12-60	9-45	106-531	120	3/8	2486	3136
96 52 40 10	10	10-100	7-74	89-885	20-100	14-74	177-885	120	3/8	2486	3136
96 52 40 20	20	20-200	15-148	177-1770	40-200	30-148	354-1770	120	1/2	2983	3170
96 52 40 40	40	40-400	30-295	354-3540	80-400	60-295	708-3540	156	3/4	4846	5507
96 52 40 65	65	65-650	48-479	575-5753	130-650	96-479	1151-5753	156	3/4	4846	5507
96 52 40 80	80	80-800	59-590	708-7081	160-800	118-590	1416-7081	156	3/4	4846	5507
96 52 41 00	100	100-1000	74-738	885-8851	200-1000	148-738	1770-8851	156	3/4	4846	5507
96 52 43 00	300 <sup>2)</sup>	300-3000	221-2214	2655-26553	600-3000	443-2214	5310-26553	195	1 1/2	10500	12000

<sup>1)</sup> for calibrating torque screwdrivers

<sup>2)</sup> for use with mechanical loader No 7792 and 7792-1 (see p. 229)

## Accessories for workshop torque tester and calibration systems

### 7750 Display unit

registered design, for displaying the actual torque as measured.

Units of measurement: N·m, ft·lb, in·lb.

Modes of operation: track, peak hold, first peak (only with manual operation), additional display of actual torque applied with clicking torque wrenches. Swivels to any desired position thanks to universal ball-joint.



Code	L m	Δ⊗ g
<b>52 10 00 50</b>	1.5	182

### 7759-4 USB adaptor, jack cable and software Torkmaster

Link between perfectControl or transducer and PC. For adjusting and calibrating torque wrenches and torque screwdrivers.

Produces calibration certificates in accordance with DIN EN ISO 6789: 2003, which can be printed out or saved as PDF files.

- as found / as left calibrations can be documented.
- graphical representation of the torque progression
- user management
- 17 languages
- equipment testing system

System requirements:

- PC
- Microsoft Windows XP SP3 or later operating system
- USB connection



Code	L m	Δ⊗ g
<b>96 58 36 29</b>	1.5	137

### 7751 Jack cable

Connection between transducers 7721-7724 and USB adaptor or display unit, with jacks at both ends, 90° angled.



Code	L m	Δ⊗ g
<b>52 11 00 51</b>	1.5	50

### 7752 Spiral cable

Connection between transducer and display unit or USB adaptor, with jacks at both ends, 90° angled.



Code	L max. mm	Δ⊗ g
<b>52 11 00 52</b>	500	35

### 7751-1 Cable for No 7728

for connecting laboratory transducers 7728 to a USB hub or display unit, with jack plug, 90° angled, and self-locking precision plug.



Code	L m	Δ⊗ g
<b>52 11 00 54</b>	1.5	50

### 7751-2 Spiral cable for No 7728



for connecting laboratory transducers 7728 to a USB hub or display unit, with jack plug, 90° angled, and self-locking precision plug.



Code	L max. mm	Δ⊗ g
<b>52 11 00 57</b>	500	32

### 7760 Mains adaptor

Input: 110 V-230 V AC, Output: 9 V DC, with interchangeable socket adaptors.



Code	Volt	Δ⊗ g
<b>52 11 00 56</b>	110-230	385

### 7761 Interface adaptor

required for automated calibration and adjustment of angle-controlled torque wrenches No 714 using calibrating and adjusting units perfectControl No 7794-2 and 7794-3.



Code	Δ⊗ g
<b>52 11 00 61</b>	26

### 7761/3 Interface adaptor set

Contents  
No 7761 interface adaptor  
No 7752 spiral cable  
No 7760 mains adaptor



Code	Δ⊗ g
<b>96 52 11 61</b>	446



### 7311/7312 Plastic case, empty



for safe storage and transport of transducers (please order inlays separately).



Code	No	for transducer	$\Delta\Delta$ g
<b>81 50 0003</b>	<b>7311</b>	7721; 7722; 7723; 7728 1-20	554
<b>81 50 0004</b>	<b>7312</b>	7728 40-100	1346

### 7313/7314 Inlays for plastic case



Code	No	for transducer	$\Delta\Delta$ g
<b>83 07 1030</b>	<b>7313</b>	7721; 7722; 7723; 7728 1-20	77
<b>83 07 1031</b>	<b>7314</b>	7728 40-100	242

### 409M Square drive adaptor

1/4" socket x 3/8" plug (6.3 x 10).

Code	L mm	$\phi$ mm	$\Delta\Delta$ g
<b>11 03 00 10</b>	13	28	14



### 7787 Square drive adaptor

1/4" socket x 3/4" plug (6.3 x 20).

Code	L mm	$\phi$ mm	$\Delta\Delta$ g
<b>58 52 1087</b>	15.5	29	41



### 7788 Square drive adaptor

3/8" socket x 3/4" plug (10 x 20).

Code	L mm	$\phi$ mm	$\Delta\Delta$ g
<b>58 52 1088</b>	23.5	29	52



### 7789 Square drive adaptor

1/2" socket x 3/4" plug (12.5 x 20).

Code	L mm	$\phi$ mm	$\Delta\Delta$ g
<b>58 52 1089</b>	23.5	29	42



### 7789-2 Square drive adaptor

3/4" socket x 1 1/2" plug (20 x 40).

Code	L mm	$\phi$ mm	$\Delta\Delta$ g
<b>58 52 3089</b>	44	60	383



### 7789-3 Square drive adaptor

1" socket x 1 1/2" plug (25 x 40).

Code	L mm	$\phi$ mm	$\Delta\Delta$ g
<b>58 52 4089</b>	44	60	291



### 7789-4 Square drive adaptor

1/4" socket x 1/2" plug (6.3 x 12.5).

Code	L mm	$\phi$ mm	$\Delta\Delta$ g
<b>58 52 4090</b>	15.5	29	25



### 7789-5 Square drive adaptor

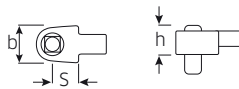
3/8" socket x 1/2" plug (10 x 12.5).

Code	L mm	$\phi$ mm	$\Delta\Delta$ g
<b>58 52 4091</b>	15.5	29	28



### 734K Calibrating square drive insert tools

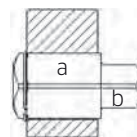
Without a ball or pin (so not suitable for bolt tightening). Optimum measuring results during calibration thanks to reduced lateral forces.



Code	size	"	mm	b mm	h mm	S mm	$\Delta\Delta$ g
<b>58 24 30 04</b>	<b>4</b>	1/4	9x12	20	17.2	17.5	76
<b>58 24 30 05</b>	<b>5</b>	3/8	9x12	20	16.7	17.5	80
<b>58 24 30 12</b>	<b>12</b>	3/8	14x18	27	21.5	25	199
<b>58 24 30 20</b>	<b>20</b>	1/2	14x18	27	21.5	25	218
<b>58 24 30 40</b>	<b>40</b>	3/4	14x18	40	29.3	25	410
<b>58 24 11 00</b>	<b>100</b>	3/4	22x28	43	29.3	55	895

### 70VK Calibrating square drive units

Without a ball or pin (so not suitable for bolt tightening). Optimum measuring results during calibration thanks to reduced lateral forces.



Code	size	for No	a "	b "	L mm	$\Delta\Delta$ g	
<b>59 01 10 14</b>	<b>11</b>	734/4	3/8	1/4	24.7	15	5
<b>59 01 10 03</b>	<b>3</b>	734/5	3/8	3/8	27.6	20	5
<b>59 01 10 12</b>	<b>12</b>	734/10, 734/20	1/2	3/8	32.5	34	5
<b>59 01 10 11</b>	<b>502 1/2</b>	734/20	1/2	1/2	36.9	60	5
<b>59 01 10 08</b>	<b>8</b>	734/40, 734/80, 734/100	3/4	3/4	52.2	147	5





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## Great freedom of choice – DRALL+ screwdrivers



A new challenge every day, a new tool every day to meet that challenge. The **DRALL+** series was developed for professionals faced with new challenges on a daily basis. Development focussed on three crucial user requirements: durability and reliability, safety in use, pleasant to handle. These requirements are met in full by **DRALL+** screwdrivers – in fact, they feel so natural, you will hardly notice them.

### The profiles

**DRALL+** is available for the following screwhead profiles:

- ⊖ Slotted
- ⊕ PH cross-head
- ⊕ PZ cross-head
- ⊕ TORX®
- ⊕ TORX® Tamper Resistant with a central bore
- Hex
- ⊕ TORQ-SET®



### 4 handle sizes

The handle sizes for the **DRALL+** screwdrivers are designed specifically to match the drive profiles.



6



- 1** **The hand-stop helps to stop injuries** – Flange-like design. Supports your hand in the direction of the blade to prevent it slipping off the handle. Features integrated anti-roll shape.
- 2** **The multifunctional section** – The lower end of the handle is deliberately made extra-long. This enables the thumb and index finger to wrap around more easily and spin the screwdriver.
- 3** **The transmission zone** – The rounded cross-section in the central area combines maximum grip and easy turning.
- 4** **The elastic handle components** – The soft rubber textured thermoplastic elastomer (TPE) fits snugly in the hand. These sections are injection moulded around the hard core and bonded to it inseparably.
- 5** **The firm handle components** – The green zones are made of high-grade, impact-safe polypropylene (PP). The tang is anchored in the core to allow force to be transferred through it.
- 6** **Impact-resistant cap** – For use under extreme conditions, the **DRALL+** is also available with a metal impact cap.



VDE insulated screwdrivers: High-grade materials and durability testing guarantee absolute safety when working on AC systems up to 1000 V (effective voltage) or 1500 V DC.

### 4620 Screwdrivers for slotted screws DRALL<sup>+</sup>

DIN ISO 2380-1, -2, DIN 5264, ISO 2380-1, -2, Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	
<b>46 20 1035</b>	<b>1</b>	0.6	3.5	75	160	37	10
<b>46 20 1040</b>	<b>2</b>	0.8	4.0	100	185	40	10
<b>46 20 1055</b>	<b>3</b>	1.0	5.5	125	240	79	10
<b>46 20 1065</b>	<b>4</b>	1.2	6.5	150	265	100	10
<b>46 20 1080</b>	<b>5</b>	1.6	8.0	175	300	136	10
<b>46 20 1100</b>	<b>6</b>	1.6	10.0	200	325	163	5
<b>46 20 1120</b>	<b>7</b>	2.0	12.0	250	375	215	5

### 4621 Screwdrivers for slotted screws DRALL<sup>+</sup>

parallel blades, as per VSM (Swiss Standard), Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	
<b>46 21 1025</b>	<b>0</b>	0.4	2.5	80	165	36	10
<b>46 21 1035</b>	<b>1</b>	0.5	3.5	90	175	40	10
<b>46 21 1040</b>	<b>2</b>	0.6	4.0	100	185	42	10
<b>46 21 1055</b>	<b>3</b>	0.8	5.5	120	235	78	10
<b>46 21 1065</b>	<b>4</b>	1.0	6.5	140	255	96	10
<b>46 21 1080</b>	<b>5</b>	1.2	8.0	160	275	117	10
<b>46 21 1100</b>	<b>6</b>	1.6	10.0	180	305	160	10

### 4622 Screwdrivers for slotted screws DRALL<sup>+</sup>

DIN ISO 2380-1, -2, DIN 5264, ISO 2380-1, -2, with hexagon, Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	
<b>46 22 1055</b>	<b>1</b>	1.0	5.5	100	215	85	10
<b>46 22 1065</b>	<b>2</b>	1.2	6.5	125	240	100	10
<b>46 22 1080</b>	<b>3</b>	1.2	8.0	150	275	159	10
<b>46 22 1100</b>	<b>4</b>	1.6	10.0	175	300	174	10
<b>46 22 1120</b>	<b>5</b>	2.0	12.0	200	325	240	5
<b>46 22 1140</b>	<b>6</b>	2.5	14.0	250	375	310	5

### 4622SK Screwdrivers for slotted screws DRALL<sup>+</sup>

DIN ISO 2380-1, -2, DIN 5264, ISO 2380-1, -2, with impact cap and hexagonal shank, Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	
<b>46 22 0040</b>	<b>1</b>	0.8	4.0	90	195	50	10
<b>46 22 0055</b>	<b>2</b>	1.0	5.5	100	215	106	10
<b>46 22 0065</b>	<b>3</b>	1.2	6.5	125	240	135	5
<b>46 22 0080</b>	<b>4</b>	1.2	8.0	150	275	191	5
<b>46 22 0100</b>	<b>5</b>	1.6	10.0	175	300	226	5
<b>46 22 0120</b>	<b>6</b>	2.0	12.0	200	325	267	5
<b>46 22 0140</b>	<b>7</b>	2.5	14.0	250	375	340	5

### 4724 Carburettor screwdrivers DRALL

DIN ISO 2380-1, -2, DIN 5264, ISO 2380-1, -2, stubby, Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	
<b>47 24 1045</b>	<b>1</b>	0.6	3.5	25	80	34	10
<b>47 24 1060</b>	<b>2</b>	1.0	5.5	25	80	32	10
<b>47 24 1080</b>	<b>3</b>	1.2	8.0	25	80	39	10

### 4628 Electricians screwdrivers for slotted screws DRALL<sup>+</sup>

DIN ISO 2380-1, -2, DIN 5264, ISO 2380-1, -2, Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	
<b>46 28 1025</b>	<b>1</b>	0.4	2.5	60	145	20	10
<b>46 28 1035</b>	<b>2</b>	0.6	3.5	75	160	40	10
<b>46 28 2035</b>	<b>3</b>	0.6	3.5	100	185	41	10
<b>46 28 1040</b>	<b>4</b>	0.8	4.0	125	210	46	10
<b>46 28 1055</b>	<b>5</b>	1.0	5.5	150	265	92	10
<b>46 28 2055</b>	<b>6</b>	1.0	5.5	200	315	102	10

### 4630 Cross-head screwdrivers DRALL<sup>+</sup>

Phillips-Recess<sup>®</sup>, DIN ISO 8764-1, -2, ISO 8764-1, -2, Chrome Alloy Steel, chrome plated, black tips.



Code	PH size	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	
<b>46 30 1000</b>	<b>0</b>	60	145	35	10
<b>46 30 1001</b>	<b>1</b>	80	185	44	10
<b>46 30 1002</b>	<b>2</b>	100	215	90	10
<b>46 30 1003</b>	<b>3</b>	150	275	146	10

### 4631 Cross-head screwdrivers DRALL<sup>+</sup>

Phillips-Recess<sup>®</sup>, extra long, DIN ISO 8764-1, -2, ISO 8764-1, -2, Chrome Alloy Steel, chrome plated, black tips.



Code	PH size	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	
<b>46 31 1001</b>	<b>1</b>	250	355	110	1
<b>46 31 1002</b>	<b>2</b>	250	365	122	1

### 4632 Cross-head screwdrivers DRALL<sup>+</sup>

with hexagon, Phillips-Recess<sup>®</sup>, DIN ISO 8764-1, -2, ISO 8764-1, -2, Chrome Alloy Steel, chrome plated, black tips.



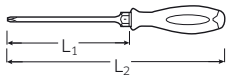
Code	PH size	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	
<b>46 32 1001</b>	<b>1</b>	80	185	45	10
<b>46 32 1002</b>	<b>2</b>	100	215	100	10
<b>46 32 1003</b>	<b>3</b>	150	275	170	5
<b>46 32 1004</b>	<b>4</b>	200	325	237	5

# Screwdrivers

**4632SK**

**+** Cross-head screwdrivers **DRALL<sup>+</sup>**

with impact cap and hexagonal shank, Phillips-Recess®, DIN ISO 8764-1, -2, ISO 8764-1, -2, Chrome Alloy Steel, chrome plated, black tips.

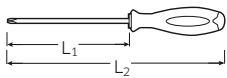


Code	PH size	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
<b>46 32 00 01</b>	<b>1</b>	85	190	58	10
<b>46 32 00 02</b>	<b>2</b>	100	215	130	10
<b>46 32 00 03</b>	<b>3</b>	150	275	194	5

**4640**

**+** Cross-head screwdrivers **DRALL<sup>+</sup>**

POZIDRIV/SUPADRIV®, DIN ISO 8764-1, -2, ISO 8764-1, -2, Chrome Alloy Steel, chrome plated, black tips.



Code	PZ size	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
<b>46 40 10 00</b>	<b>0</b>	60	145	35	10
<b>46 40 10 01</b>	<b>1</b>	80	185	44	10
<b>46 40 10 02</b>	<b>2</b>	100	215	89	10
<b>46 40 10 03</b>	<b>3</b>	150	275	145	5

**4636**

**+** TORQ-SET® screwdrivers **DRALL<sup>+</sup>**

TORQ-SET®, hexagonal blade, phosphatised.



Code	No	L <sub>1</sub> mm	L <sub>2</sub> mm	outside " mm	△△ g	📦
<b>46 36 00 02</b>	<b>2</b>	100	215	1/4	92	5
<b>46 36 00 04</b>	<b>4</b>	100	215	1/4	93	5
<b>46 36 00 06</b>	<b>6</b>	100	215	1/4	92	5
<b>46 36 00 08</b>	<b>8</b>	100	215	1/4	93	5
<b>46 36 00 10</b>	<b>10</b>	100	215	1/4	93	5
<b>46 36 00 16</b>	<b>1/4</b>	150	265	5/16	138	5

**4650**

**+** TORX® screwdrivers **DRALL<sup>+</sup>**

for inside TORX® screws, Chrome Alloy Steel, chrome plated, black tips.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
<b>46 50 10 05</b>	<b>T5</b>	1.4	60	145	30	5
<b>46 50 10 06</b>	<b>T6</b>	1.6	60	145	35	5
<b>46 50 10 07</b>	<b>T7</b>	2.0	60	145	35	5
<b>46 50 10 08</b>	<b>T8</b>	2.3	60	145	33	5
<b>46 50 10 09</b>	<b>T9</b>	2.5	60	145	35	5
<b>46 50 10 10</b>	<b>T10</b>	2.7	80	165	40	5
<b>46 50 10 15</b>	<b>T15</b>	3.3	80	165	38	5
<b>46 50 10 20</b>	<b>T20</b>	3.8	100	205	46	5
<b>46 50 10 25</b>	<b>T25</b>	4.4	100	205	50	5
<b>46 50 10 27</b>	<b>T27</b>	5.0	115	230	90	5
<b>46 50 10 30</b>	<b>T30</b>	5.5	115	230	90	5
<b>46 50 10 40</b>	<b>T40</b>	6.6	115	240	131	5
<b>46 50 10 45</b>	<b>T45</b>	7.8	130	255	136	5

**4650L**

**+** TORX® screwdrivers **DRALL<sup>+</sup>**

for inside TORX® screws, extra long, Chrome Alloy Steel, chrome plated, black tips.

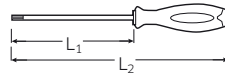


Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
<b>46 50 11 15</b>	<b>T15</b>	3.3	250	335	52	5
<b>46 50 11 20</b>	<b>T20</b>	3.8	250	355	64	5
<b>46 50 11 25</b>	<b>T25</b>	4.4	250	355	66	5
<b>46 50 11 30</b>	<b>T30</b>	5.5	250	365	122	5

**4656**

**+** TORX® screwdrivers **DRALL<sup>+</sup>**

with hollow point (TORX® TAMPER RESISTANT), Chrome Alloy Steel, chrome plated, black tips.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
<b>46 56 00 08</b>	<b>T8</b>	2.3	60	145	35	5
<b>46 56 00 09</b>	<b>T9</b>	2.5	60	145	35	5
<b>46 56 00 10</b>	<b>T10</b>	2.7	80	165	39	5
<b>46 56 00 15</b>	<b>T15</b>	3.3	80	165	39	5
<b>46 56 00 20</b>	<b>T20</b>	3.8	100	205	42	5
<b>46 56 00 25</b>	<b>T25</b>	4.4	100	205	46	5
<b>46 56 00 27</b>	<b>T27</b>	5.0	115	230	90	5
<b>46 56 00 30</b>	<b>T30</b>	5.5	115	230	90	5
<b>46 56 00 40</b>	<b>T40</b>	6.6	115	240	120	5
<b>46 56 00 45</b>	<b>T45</b>	7.8	130	255	118	5

**4734**

**+** Cross-head screwdrivers **DRALL**

Phillips-Recess®, DIN ISO 8764-1, -2, ISO 8764-1, -2, stubby, Chrome Alloy Steel, chrome plated, black tips.



Code	PH size	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
<b>47 34 10 01</b>	<b>1</b>	25	80	27	10
<b>47 34 10 02</b>	<b>2</b>	25	80	31	10

**4744**

**+** Cross-head screwdrivers **DRALL**

POZIDRIV/SUPADRIV®, DIN ISO 8764-1, -2, ISO 8764-1, -2, stubby, Chrome Alloy Steel, chrome plated, black tips.



Code	PZ size	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
<b>47 44 10 01</b>	<b>1</b>	25	80	28	10
<b>47 44 10 02</b>	<b>2</b>	25	80	34	10

**10507N KK**

**+** Ball ended hexagon drivers **DRALL<sup>+</sup>**

for use on hexagon socket head screws, swivel angle up to 25° each side, Chrome Alloy Steel, chrome plated, black tips.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
<b>73 10 10 03</b>	<b>3</b>	300	385	56	5
<b>73 10 10 05</b>	<b>5</b>	300	415	132	5



### 12500N ○ Nut spinners DRALL<sup>+</sup>

DIN 3125, Chrome Vanadium, chrome plated.



Code	Ø mm	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
43 09 1004	4	125	230	58	10
43 09 1045	4.5	125	230	49	10
43 09 1005	5	125	230	58	10
43 09 1055	5.5	125	230	58	10
43 09 1006	6	125	240	98	10
43 09 1007	7	125	240	114	10
43 09 1008	8	125	240	115	10
43 09 1009	9	125	240	118	10
43 09 10 10	10	125	240	122	10
43 09 10 11	11	125	250	160	5
43 09 10 12	12	125	250	168	5
43 09 10 13	13	125	250	170	5

### 12506 ○ Nut spinners DRALL<sup>+</sup>

flexible, max. torque 8 N-m, matt chrome plated.



Code	Ø mm	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
43 10 02 06	6	150	265	167	10
43 10 02 07	7	150	265	168	10
43 10 02 08	8	150	265	170	10

### ES 12500N/7



175 x 350 x 39 mm, 7 pieces

Code	⚖ g
96 83 82 00	1060

No 12500N	sizes 7; 8; 9; 10; 11; 12; 13 mm	
83 81 30 85	Empty tray	99

### TCS 12500N/5



175 x 350 x 45 mm, 5 pieces

Code	⚖ g
96 83 87 57	730

No 12500N	sizes 7; 8; 10; 12; 13 mm	
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### 4691 DRALL<sup>+</sup> set of screwdrivers

Set of 7 DRALL<sup>+</sup> screwdrivers.

Content:

- ⊖ 4620: size 1 (0.6 x 3.5 x 75 mm)
- size 2 (0.8 x 4.0 x 100 mm)
- size 3 (1.0 x 5.5 x 125 mm)
- size 4 (1.2 x 6.5 x 150 mm)

⊖ 4628: size 1 (0.4 x 2.5 x 60 mm)

⊕ 4630: size 1; size 2



Code	⚖ g	📦
96 46 91 10	610	1

### 4692 DRALL<sup>+</sup> set of screwdrivers

Set of 8 DRALL<sup>+</sup> screwdrivers.

Content:

- ⊖ 4620: size 1 (0.6 x 3.5 x 75 mm)
- size 2 (0.8 x 4.0 x 100 mm)
- size 3 (1.0 x 5.5 x 125 mm)
- size 4 (1.2 x 6.5 x 150 mm)
- size 5 (1.6 x 8.0 x 175 mm)

⊕ 4630: size 1; size 2; size 3



Code	⚖ g	📦
96 46 92 10	870	1

### 4693 DRALL<sup>+</sup> set of screwdrivers

Set of 9 DRALL<sup>+</sup> screwdrivers.

Content:

- ⊖ 4622: size 1 (1.0 x 5.5 x 100 mm)
- size 2 (1.2 x 6.5 x 125 mm)
- size 3 (1.2 x 8.0 x 150 mm)
- size 4 (1.6 x 10.0 x 175 mm)

⊖ 4628: size 1 (0.4 x 2.5 x 60 mm)

⊕ 4632: size 1; size 2

⊖ 4724: size 2 (1.0 x 5.5 x 25 mm)

⊕ 4734: size 2



Code	⚖ g	📦
96 46 93 10	950	1

### 4696 DRALL<sup>+</sup> set of screwdrivers

Set of 6 DRALL<sup>+</sup> screwdrivers with an impact cap.

Content:

- ⊖ 4622SK: size 1 (0.8 x 4.0 x 90 mm)
- size 2 (1.0 x 5.5 x 100 mm)
- size 3 (1.2 x 6.5 x 125 mm)
- size 4 (1.2 x 8.0 x 150 mm)

⊕ 4632SK: size 1; size 2



Code	⚖ g	📦
96 46 96 10	870	1

# Screwdrivers

## 4697 DRALL<sup>+</sup> set of screwdrivers

Set of 8 DRALL<sup>+</sup> screwdrivers.  
Content:

- ⊖ 4620: size 1 (0.6 x 3.5 x 75 mm)  
size 2 (0.8 x 4.0 x 100 mm)
- ⊖ 4622: size 1 (1.0 x 5.5 x 100 mm)  
size 2 (1.2 x 6.5 x 125 mm)  
size 3 (1.2 x 8.0 x 150 mm)
- ⊕ 4732: size 1; size 2; size 3



Code	g	g	g
96 46 97 10	930	1	

## 4694 DRALL<sup>+</sup> set of TORX<sup>®</sup> screwdrivers

Set of 9 DRALL<sup>+</sup> screwdrivers for TORX<sup>®</sup> screws.  
Content:

- ⊙ 4650: T8, T9, T10, T15, T20, T25, T27, T30, T40



Code	g	g	g
96 46 94 10	730	1	

## 4699 DRALL<sup>+</sup> set of TORX<sup>®</sup> screwdrivers

Set of 9 DRALL<sup>+</sup> screwdrivers for TORX<sup>®</sup> screws (TORX<sup>®</sup> TAMPER RESISTANT).  
Content:

- ⊕ 4656: T8, T9, T10, T15, T20, T25, T27, T30, T40 (with hollow point)



Code	g	g	g
96 46 99 10	740	1	

## TCS 4620/4630



175 x 350 x 35 mm, 7 pieces

Code	g	g	g
96 83 82 78	590		

⊖ No 4620	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm)
⊖ No 4630	sizes 1; 2; 3

## TCS 4620/4640



175 x 350 x 40 mm, 7 pieces

Code	g	g	g
96 83 87 84	410		

⊖ No 4620	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm)
⊖ No 4640	size PZ1; PZ2; PZ3

## TCS 4622/4632



175 x 350 x 35 mm, 6 pieces

Code	g	g	g
96 83 87 83	845		

⊖ No 4622	size 1 (1.0 x 5.5 x 100 mm) size 2 (1.2 x 6.5 x 125 mm) size 3 (1.2 x 8.0 x 150 mm) size 4 (1.6 x 10.0 x 175 mm)
⊖ No 4632	sizes 2; 3

## TCS 4620-4734/8



175 x 350 x 40 mm, 8 pieces

Code	g	g	g
96 83 87 69	503		

⊖ No 4620	size 1 (0.6 x 3.5 x 75 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm)
⊖ No 4628	size 1 (0.4 x 2.5 x 60 mm)
⊖ No 4630	sizes 1; 2
⊖ No 4724	size 2 (1.0 x 5.5 x 25 mm)
⊖ No 4734	size 2



### TCS 4620/4660VDE+10767



530 x 350 x 35 mm, 27 pieces

Code		Δ	g
<b>96 83 11 68</b>			2080
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm) size 6 (1.6 x 10.0 x 200 mm) size 7 (2.0 x 12.0 x 200 mm)		
<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)		
<b>No 4630</b>	sizes 1; 2; 3		
<b>No 4632</b>	size 4		
<b>No 4640</b>	sizes 0; 1; 2		
<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm)		
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)		
<b>No 4734</b> <b>No 4744</b>	size 2 size 1		
<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm		

### TCS 4620/4660VDE



530 x 350 x 40 mm, 18 pieces

Code		Δ	g
<b>96 83 11 79</b>			1689
<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm) size 6 (1.6 x 10.0 x 200 mm) size 7 (2.0 x 12.0 x 200 mm)		
<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)		
<b>No 4630</b>	sizes 1; 2; 3		
<b>No 4632</b>	size 4		
<b>No 4640</b>	sizes 0; 1; 2		
<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm)		
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)		
<b>No 4734</b> <b>No 4744</b>	size 2 size 1		



### TCS 4621/4734/16



530 x 350 x 40 mm, 16 pieces

Code		Δ	g
<b>96 83 20 98</b>			1490
<b>No 4621</b>	size 0 (0.4 x 2.5 x 80 mm) size 1 (0.5 x 3.5 x 90 mm) size 2 (0.6 x 4.0 x 100 mm) size 4 (1.0 x 6.5 x 140 mm) size 5 (1.2 x 8.0 x 160 mm)		
<b>No 4631</b>	size 1; 2		
<b>No 4632</b>	size 1; 2; 3		
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)		
<b>No 4734</b>	size 2		
<b>No 10506</b>	0.8 x 4.0 x 300 mm		
<b>No 10518</b>	1.0 x 5.5 x 410 mm		
<b>No 12600</b>	500 g		
<b>No 12922E</b>	∅ 6 mm		

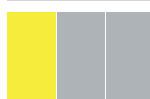
### TCS 4622/4650+10760+10766



530 x 350 x 40 mm, 36 pieces

Code		Δ	g
<b>96 83 11 96</b>			1895
<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 2 (1.2 x 6.5 x 125 mm) size 4 (1.6 x 10.0 x 175 mm) size 5 (2.0 x 12.0 x 200 mm)		
<b>No 4630</b>	size 1		
<b>No 4632</b>	size 3		
<b>No 4650</b>	sizes T6; T7; T8; T9; T10; T15; T20; T25; T27; T30		
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)		
<b>No 4734</b>	size 2		
<b>No 10760CV/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm		
<b>No 10766/9</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30; T40		

### TCS 4650



175 x 350 x 35 mm, 8 pieces

Code		Δ	g
<b>96 83 87 67</b>			340
<b>No 4650</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30		

# VDE-insulated screwdrivers

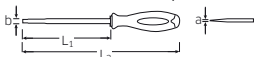
Safe. Textured. Robust.

STAHLWILLE **VDE screwdrivers** are manufactured to meet the current demands of IEC 60900 C and are individually tested in a water bath to 10,000 V. High-grade materials guarantee absolute safety when working on AC systems up to 1000 V (effective voltage) or 1500 V DC.



## 4660 VDE VDE electricians screwdrivers DRALL+

- for slotted screws
- Chrome Alloy Steel
- blade gunmetal finished
- VDE insulated up to 1000 V
- DIN EN 60900
- AC/1000 V



Code	size	a mm	b mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	boxes
4660 10 25	1	0.4	2.5	75	160	43	10
4660 10 30	2	0.5	3.0	100	185	39	10
4660 10 35	3	0.6	3.5	100	205	42	10
4660 10 40	4	0.8	4.0	100	205	46	10
4660 10 55	5	1.0	5.5	125	240	93	10
4660 10 65	6	1.2	6.5	150	265	120	10
4660 10 80	7	1.2	8.0	175	300	170	10

## 4665 VDE VDE cross-head screwdrivers DRALL+

- Phillips-Recess®
- Chrome Alloy Steel
- blade gunmetal finished
- VDE insulated up to 1000 V
- DIN EN 60900
- AC/1000 V



Code	PH size	L <sub>1</sub> mm	L <sub>2</sub> mm	g	boxes
4665 1000	0	60	145	35	10
4665 1001	1	80	185	47	10
4665 1002	2	100	215	89	10
4665 1003	3	150	275	159	10

## 4670 VDE VDE cross-head screwdrivers DRALL+

- POZIDRIV/SUPADRIV®
- Chrome Alloy Steel
- blade gunmetal finished
- VDE insulated up to 1000 V
- DIN EN 60900
- AC/1000 V



Code	PZ size	L <sub>1</sub> mm	L <sub>2</sub> mm	g	boxes
4670 1000	0	60	145	36	10
4670 1001	1	80	185	46	10
4670 1002	2	100	215	89	10

## 4675 VDE VDE TORX® screwdrivers DRALL+

- for inside TORX® screws
- Chrome Alloy Steel
- blade gunmetal finished
- VDE insulated up to 1000 V
- DIN EN 60900
- AC/1000 V



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	boxes
4675 00 08	T8	2.3	60	145	22	10
4675 00 10	T10	2.7	60	145	22	10
4675 00 15	T15	3.3	75	180	40	10
4675 00 20	T20	3.8	100	205	47	10
4675 00 25	T25	4.4	100	205	51	10
4675 00 30	T30	5.5	100	215	93	10

## 4695 VDE VDE screwdriver set DRALL+

Set with 6 screwdrivers DRALL+

- VDE insulated up to 1000 V
- DIN EN 60900
- AC/1000 V

Content:

- 4660 VDE:
  - size 1 (0.4 x 2.5 x 75 mm)
  - size 3 (0.6 x 3.5 x 100 mm)
  - size 5 (1.0 x 5.5 x 125 mm)
  - size 6 (1.2 x 6.5 x 150 mm)
- 4665 VDE: size 1, size 2



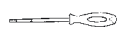
Code	g	boxes
96 46 95 10	620	1

## TCS 4660/4665



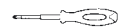
175 x 350 x 40 mm, 6 pieces

Code	g
96 83 87 66	391



No 4660 VDE

- size 1 (0.4 x 2.5 x 75 mm)
- size 3 (0.6 x 3.5 x 100 mm)
- size 5 (1.0 x 5.5 x 125 mm)
- size 6 (1.2 x 6.5 x 150 mm)



No 4665 VDE

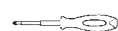
- size 1; 2

## TCS 4665/4670



175 x 350 x 40 mm, 7 pieces

Code	g
96 83 87 85	580



No 4665VDE  
No 4670VDE

- sizes PH0; PH1; PH2; PH3
- sizes PZ0; PZ1; PZ2





## The power is where you put it with the **3K DRALL®** screwdriver series



The efficiency with which you use a screwdriver in your daily work, and the safety with which you work, depend to a large extent on the quality of the tool. It is not just the use of high-grade materials but also the shape that matters – in particular the shape of the handles – if you want to stay in control. STAHLWILLE's **3K DRALL®** screwdrivers unite these positive qualities in a manner which is close to perfect. The result is a longlife, ergonomically designed tool providing easy working combined with maximum force transmission – even with greasy hands.

**3K DRALL®** screwdrivers are available in sets conveniently positioned in plastic inlays or TCS safety inlays, designed for use with STAHLWILLE Tool Trolleys and Tool Boxes.



6



- 1** **3K DRALL®** handles are made up of 3 components:  
**1<sup>st</sup> component** - Extremely resistant, impact-safe core made of black polypropylene (PP).
- 2** **2<sup>nd</sup> component** - Soft, heat-bonded inlay made of easy-to-grip thermoplastic elastomer (TPE).
- 3** **3<sup>rd</sup> component** - Two large surfaces coated with special fibres, resistant long-term to solvents to improve force transmission and work safety.
- 4** **Additional Tommy-bar hole** - When things get really tough, the additional Tommy-bar hole will cope with a fair amount of torque.



**Blades** - Made of high-grade Chrome Alloy Steel. Through-hardened. Anchored firmly in the haft due to the extra-wide, forged tang. High resistance to bending.



**Tips** - Black, extremely tough, retain their shape. Whether you use the straight-bladed or Phillips type – the crosshatched blade tips will accurately transmit maximum force to the screw head.



# Screwdrivers

## 4820 3K DRALL® screwdrivers for slotted screws

DIN 5265, ISO 2380, Chrome Alloy Steel, matt chrome plated, black tips.



Code	a mm	b mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
48 20 10 35	0.6	3.5	75	170	23	10
48 20 10 40	0.8	4.0	100	195	32	10
48 20 20 55	1.0	5.5	125	220	58	10
48 20 10 65	1.2	6.5	150	265	100	10
48 20 10 80	1.6	8.0	175	290	118	10
48 20 11 00	1.6	10.0	200	315	158	5
48 20 21 00	2.0	12.0	250	375	218	5

## 4830 3K DRALL® cross-head screwdrivers

Phillips-Recess®, DIN 5262, ISO 8764, Chrome Alloy Steel, matt chrome plated, black tips.



Code	PH size	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
48 30 10 00	0	60	155	28	10
48 30 10 01	1	80	175	33	10
48 30 10 02	2	100	215	70	10
48 30 10 03	3	150	275	126	5
48 30 10 04	4	200	325	251	5

## 4840 3K DRALL® cross-head screwdrivers

POZIDRIV/SUPADRIV®, DIN 5262, ISO 8764, Chrome Alloy Steel, matt chrome plated, black tips.



Code	PZ size	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
48 40 10 01	1	80	175	33	10
48 40 10 02	2	100	215	70	10

## 4856 3K DRALL® TORX® screwdrivers

with hollow point (TORX® TAMPER RESISTANT), Chrome Alloy Steel, matt chrome plated, black tips.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△△ g	📦
48 56 00 06	T6*	1.6	50	145	45	5
48 56 00 07	T7	2.0	50	145	37	5
48 56 00 08	T8	2.3	60	155	39	5
48 56 00 09	T9	2.5	60	155	50	5
48 56 00 10	T10	2.7	80	175	26	5
48 56 00 15	T15	3.3	80	175	52	5
48 56 00 20	T20	3.8	100	215	32	5
48 56 00 25	T25	4.4	100	215	55	5
48 56 00 27	T27	5.0	115	230	58	5
48 56 00 30	T30	5.5	115	230	63	5
48 56 00 40	T40	6.6	115	240	86	5

\* without hollow point

## 4891 3K DRALL® set of screwdrivers

Set of 6 3K DRALL® screwdrivers.

Content:

- ⊖ 4820: 0.6 x 3.5 x 75 mm
- 0.8 x 4.0 x 100 mm
- 1.0 x 5.5 x 125 mm
- 1.2 x 6.5 x 150 mm

⊕ 4830: size 1; size 2



Code	△△ g	📦
96 48 91 10	530	1

## 4892 3K DRALL® set of screwdrivers

Set of 8 3K DRALL® screwdrivers

Content:

- ⊖ 4820: 0.6 x 3.5 x 75 mm
- 0.8 x 4.0 x 100 mm
- 1.0 x 5.5 x 125 mm
- 1.2 x 6.5 x 150 mm
- 1.6 x 8.0 x 175 mm

⊕ 4830: size 1; size 2; size 3



Code	△△ g	📦
96 48 92 10	745	1

## 4899 3K DRALL® set of TORX® screwdrivers

Set of 9 3K DRALL® screwdrivers for TORX® screws (TORX® TAMPER RESISTANT)

Content:

- ⊕ 4856: T8; T9; T10; T15; T20; T25; T27; T30; T40 (with hollow point)




Code	△△ g	📦
96 48 99 10	513	1

## TCS 4820/4830



175 x 350 x 35 mm, 7 pieces

Code	△△ g
96 83 81 84	555

 **No 4820** 0.6 x 3.5 x 75 mm  
0.8 x 4.0 x 100 mm  
1.0 x 5.5 x 125 mm  
1.2 x 6.5 x 150 mm

 **No 4830** sizes 1; 2; 3

### TCS 4724/4840+10767



530 x 350 x 45 mm, 24 pieces

Code		g
<b>96 83 07 06</b>		1755
<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)	
<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)	
<b>No 4734</b>	size 2	
<b>No 4744</b>	size 1	
<b>No 4820</b>	0.6 x 3.5 x 75 mm 0.8 x 4.0 x 100 mm 1.2 x 6.5 x 150 mm 1.6 x 10.0 x 200 mm 2.0 x 12.0 x 250 mm	
<b>No 4830</b> <b>No 4840</b>	sizes 1; 2; 3 size 1	
<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm	
<b>No 7756</b>		
<b>No 12922E</b>	∅ 6 mm	

### TCS 4856



175 x 350 x 40 mm, 7 pieces

Code		g
<b>96 83 87 55</b>		447
<b>No 4856</b>	sizes T8; T9; T10; T15; T20; T25; T30	

### 4798 Set of reversible screwdrivers

11 pieces

Content:

- ⊖ 0.6 x 3.5; 0.8 x 4.0; 1.0 x 5.5;  
1.2 x 6.5 mm
- ⊕ sizes 1; 2
- ⊕ sizes 1; 2
- 3; 4; 5; 6 mm
- 3; 4; 5; 6 mm (ball end)
- T10; T15; T20; T25; T30; T40

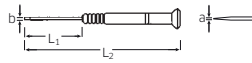


Code		g	
<b>96 47 98 01</b>		745	1

## Electronics Screwdrivers

### 4751 ⊖ Screwdrivers for slotted screws

DIN ISO 8764



Code	size	a mm	b mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	
<b>47 51 00 01</b>	<b>1</b>	0.16	0.8	40	140	12	5
<b>47 51 00 02</b>	<b>2</b>	0.18	1.0	40	140	12	5
<b>47 51 00 03</b>	<b>3</b>	0.25	1.2	40	140	12	5
<b>47 51 00 04</b>	<b>4</b>	0.3	1.5	40	140	19	5
<b>47 51 00 05</b>	<b>5</b>	0.3	1.8	60	160	10	5
<b>47 51 00 06</b>	<b>6</b>	0.4	2.0	60	160	19	5
<b>47 51 00 07</b>	<b>7</b>	0.4	2.5	75	175	14	5
<b>47 51 00 08</b>	<b>8</b>	0.5	3.0	75	175	16	5

### 4752 ⊕ Cross-head screwdrivers

Phillips-Recess®, DIN ISO 2380.



Code	size	L <sub>1</sub> mm	L <sub>2</sub> mm	⊕ M	americ. No	∅ mm	g	
<b>47 52 00 10</b>	<b>00</b>	40	140	-	-	2.5	19	5
<b>47 52 00 20</b>	<b>0</b>	60	160	-2	0-1	3	13	5
<b>47 52 00 01</b>	<b>1</b>	80	180	2-3	2-4	4.5	24	5

### 4753 ● Hexagon socket screwdrivers



Code	mm/"	L <sub>1</sub> mm	L <sub>2</sub> mm	g	
<b>47 53 00 07</b>	<b>0.7 / 0.028</b>	40	140	14	5
<b>47 53 00 09</b>	<b>0.9 / 0.035</b>	40	140	14	5
<b>47 53 00 13</b>	<b>1.3 / 0.050</b>	40	140	19	5
<b>47 53 00 15</b>	<b>1.5</b>	50	150	18	5

### 4797 Electronics screwdrivers set

7 pieces

Content:

- ⊖ 4751: size 4 (0.3 x 1.5 x 40 mm)  
size 6 (0.4 x 2.0 x 60 mm)  
size 7 (0.4 x 2.5 x 75 mm)  
size 8 (0.5 x 3.0 x 75 mm)
- ⊕ 4752: size 00, size 0, size 1

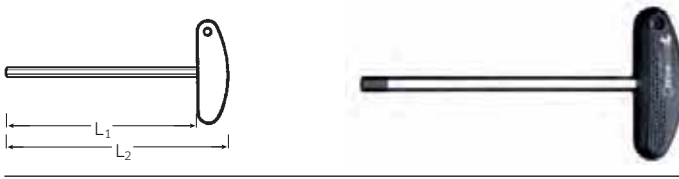


Code		g	
<b>96 47 97 10</b>		285	1

# Screwdrivers

## 10768 T-handled screwdrivers

for socket head screws, Chrome Vanadium, matt chrome plated, black tips.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	boxes
43 25 00 20	2	100	116	10	10
43 25 00 25	2.5	100	116	12	10
43 25 00 30	3	150	166	17	10
43 25 00 40	4	150	175	43	10
43 25 00 50	5	200	225	63	10
43 25 00 60	6	200	225	78	10
43 25 00 80	8	200	235	150	5
43 25 01 00	10	200	235	210	5

### ES 10768/6



350 x 350 x 37 mm, 6 pieces

Code	g
96 83 81 19	780

No 10768	sizes 3; 4; 5; 6; 8; 10 mm
83 81 20 42	Empty tray 209

### TCS 10768/8



350 x 350 x 40 mm, 8 pieces

Code	g
96 83 87 86	745

No 10768	sizes 2; 2.5; 3; 4; 5; 6; 8; 10 mm
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## 10768-2K Hexagon key wrenches

with 2-component T-handle, for socket head screws, with two tips, Chrome Vanadium, matt chrome plated, black tips.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	boxes
43 25 20 20	2	100	125	33	10
43 25 20 25	2.5	100	125	42	10
43 25 20 30	3	150	174	42	10
43 25 20 40	4	150	176	51	10
43 25 20 50	5	200	227	73	10
43 25 20 60	6	200	228	92	10
43 25 20 80	8	200	235	178	5
43 25 21 00	10	200	235	247	5

### TCS 10768-2K/6



350 x 350 x 40 mm, 6 pieces

Code	g
96 83 87 53	792

No 10768-2K	sizes 3; 4; 5; 6; 8; 10 mm
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## 10769 TORX®-T-handled screwdrivers

for inside TORX® screws, shaft nickel-plated and chrome plated, tips hardened, Chrome Vanadium, matt chrome plated, black tips.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	boxes
43 29 00 08	T8	2.3	80	96	12	5
43 29 00 09	T9	2.5	80	96	13	5
43 29 00 10	T10	2.7	100	116	14	5
43 29 00 15	T15	3.3	100	116	16	10
43 29 00 20	T20	3.8	100	125	36	10
43 29 00 25	T25	4.4	110	135	41	10
43 29 00 27	T27	5	110	135	49	10
43 29 00 30	T30	5.5	130	155	59	10
43 29 00 40	T40	6.6	130	165	102	10
43 29 00 45	T45	7.8	130	165	119	10
43 29 00 50	T50	8.8	130	165	137	5

### ES 10769/7



175 x 350 x 35 mm, 7 pieces

Code	$\Delta$ g
<b>96 83 81 20</b>	450

<b>No 10769</b>	sizes T10; T15; T20; T25; T27; T30; T40
<b>83 81 20 43</b>	Empty tray 116

### ES 10769B/7



175 x 350 x 35 mm, 7 pieces

Code	$\Delta$ g
<b>96 83 81 29</b>	430

<b>No 10769B</b>	sizes T10; T15; T20; T25; T27; T30; T40
<b>83 81 20 43</b>	Empty tray 116

### TCS 10769+10771/17



350 x 350 x 30 mm, 17 pieces

Code	$\Delta$ g
<b>96 83 20 99</b>	940

<b>No 10769</b>	sizes T9; T10; T15; T20; T25; T30; T40; T45; T50
<b>No 10771/8</b>	sizes T9; T10; T15; T20; T25; T27; T30; T40

### 10769B

#### TORX® screwdrivers with hollow point

with hollow point (TORX® TAMPER RESISTANT), shaft nickel-plated and chrome plated, tips hardened, Chrome Vanadium, matt chrome plated, black tips.

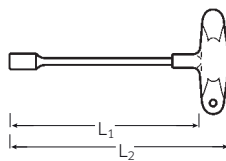


Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	$\Delta$ g	
<b>43 30 00 10</b>	<b>T10</b>	2.7	100	116	14	5
<b>43 30 00 15</b>	<b>T15</b>	3.3	100	116	16	5
<b>43 30 00 20</b>	<b>T20</b>	3.8	100	125	36	5
<b>43 30 00 25</b>	<b>T25</b>	4.4	110	135	41	5
<b>43 30 00 27</b>	<b>T27</b>	5.0	110	135	49	5
<b>43 30 00 30</b>	<b>T30</b>	5.5	130	155	59	5
<b>43 30 00 40</b>	<b>T40</b>	6.6	130	165	119	5
<b>43 30 00 45</b>	<b>T45</b>	7.8	130	165	110	5

### 12507-2K

#### T-handed nut spinners

with 2-component T-handle, Chrome Vanadium, matt chrome plated.



Code	$\Delta$ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	$\Delta$ g	
<b>43 23 20 60</b>	<b>6</b>	200	224	83	10
<b>43 23 20 70</b>	<b>7</b>	200	234	133	10
<b>43 23 20 80</b>	<b>8</b>	200	234	135	10
<b>43 23 20 90</b>	<b>9</b>	200	234	137	10
<b>43 23 21 00</b>	<b>10</b>	200	234	141	10
<b>43 23 21 10</b>	<b>11</b>	200	240	169	5
<b>43 23 21 20</b>	<b>12</b>	200	240	171	5
<b>43 23 21 30</b>	<b>13</b>	200	240	176	5

### TCS 12507-2K/5



175 x 350 x 40 mm, 5 pieces

Code	$\Delta$ g
<b>96 83 87 61</b>	792

<b>No 12507-2K</b>	sizes 7; 8; 10; 12; 13 mm
--------------------	---------------------------

# Screwdrivers

## TCS 10765/10768/12507/19



530 x 350 x 30 mm, 19 pieces

Code	Weight (g)
<b>9683 06 21</b>	1640
<b>No 10765/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
<b>No 10768</b>	sizes 2.5; 3; 4; 5; 6; 8; 10 mm
<b>No 12507-2K</b>	sizes 8; 10; 13 mm

## 10546 Offset screwdrivers

DIN 5200, for slotted screws, centre handle covered with impact proof plastic, Chrome Vanadium, chrome plated.



Code	size	a mm	b mm	L mm	Weight (g)	Quantity
<b>73 27 20 01</b>	<b>1</b>	0.6	3.5	90	9	10
<b>73 27 20 02</b>	<b>2</b>	0.8	4	100	12	10
<b>73 27 20 03</b>	<b>3</b>	1	5.5	125	29	10
<b>73 27 20 04</b>	<b>4</b>	1.2	8	150	69	10

## 10551 Offset screwdrivers

DIN 5208, for recessed head screws, Phillips-Recess®, centre handle covered with impact proof plastic, Chrome Vanadium, chrome plated.

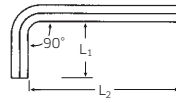


Code	PH size	L mm	Weight (g)	Quantity
<b>73 28 20 12</b>	<b>1 x 2</b>	125	29	10
<b>73 28 20 23</b>	<b>2 x 3</b>	150	73	10



## 10760CV Hexagon key wrenches

DIN ISO 2936 (metric), for socket head screws, Chrome Vanadium, nickel-plated (sizes 0.7; 0.9; 1.3 mm, gunmetal finish).



Code	Size (mm)	L <sub>1</sub> mm	L <sub>2</sub> mm	Weight (g)	Quantity
<b>43 15 00 70</b>	<b>0.7</b>	8	32	1	10
<b>43 15 00 90</b>	<b>0.9</b>	10	32	1	10
<b>43 15 01 30</b>	<b>1.3</b>	12	40	1	10
<b>43 15 01 50</b>	<b>1.5</b>	14	45	1	10
<b>43 15 00 02</b>	<b>2</b>	16	50	2	10
<b>43 15 02 50</b>	<b>2.5</b>	18	56	3	10
<b>43 15 00 03</b>	<b>3</b>	20	63	4	10
<b>43 15 03 50</b>	<b>3.5</b>	22	66	7	10
<b>43 15 00 04</b>	<b>4</b>	25	70	10	10
<b>43 15 00 05</b>	<b>5</b>	28	80	18	10
<b>43 15 00 06</b>	<b>6</b>	32	90	29	10
<b>43 15 00 07</b>	<b>7</b>	34	95	42	10
<b>43 15 00 08</b>	<b>8</b>	36	100	59	10
<b>43 15 00 09</b>	<b>9</b>	38	105	80	10
<b>43 15 00 10</b>	<b>10</b>	40	112	103	10
<b>43 15 00 11</b>	<b>11</b>	42	119	130	10
<b>43 15 00 12</b>	<b>12</b>	45	125	169	5
<b>43 15 00 14</b>	<b>14</b>	56	140	261	5
<b>43 15 00 17</b>	<b>17</b>	63	160	442	5
<b>43 15 00 19</b>	<b>19</b>	70	180	603	5
<b>43 15 00 22</b>	<b>22</b>	80	200	938	1
<b>43 15 00 24</b>	<b>24</b>	90	224	1248	1
<b>43 15 00 27</b>	<b>27</b>	100	250	1692	1
<b>43 15 00 30</b>	<b>30</b>	112	280	2434	1
<b>43 15 00 32</b>	<b>32</b>	125	315	3117	1
<b>43 15 00 36</b>	<b>36</b>	140	355	4430	1

## 10760aCV Hexagon key wrenches

Code	Size (mm)	L <sub>1</sub> mm	L <sub>2</sub> mm	Weight (g)	Quantity
<b>43 15 00 70</b>	<b>0.028</b>	8	32	1	10
<b>43 15 00 90</b>	<b>0.035</b>	10	32	1	10
<b>43 15 01 30</b>	<b>0.050</b>	12	40	1	10
<b>43 55 00 03</b>	<b>3/64</b>	14	45	1	10
<b>43 55 00 04</b>	<b>1/16</b>	15	45	1	10
<b>43 55 00 05</b>	<b>5/64</b>	16	50	2	10
<b>43 55 00 06</b>	<b>3/32</b>	17	51	3	10
<b>43 55 00 07</b>	<b>7/64</b>	20	54	4	10
<b>43 55 00 08</b>	<b>1/8</b>	22	57	5	10
<b>43 55 00 09</b>	<b>9/64</b>	23	63	7	10
<b>43 55 00 10</b>	<b>5/32</b>	25	65	10	10
<b>43 55 00 12</b>	<b>3/16</b>	29	70	15	10
<b>43 55 00 14</b>	<b>7/32</b>	32	80	23	10
<b>43 55 00 16</b>	<b>1/4</b>	32	87	32	10
<b>43 55 00 18</b>	<b>9/32</b>	35	95	45	10
<b>43 55 00 20</b>	<b>5/16</b>	40	98	59	10
<b>43 55 00 22</b>	<b>11/32</b>	41	105	75	10
<b>43 55 00 24</b>	<b>3/8</b>	45	110	95	10
<b>43 55 00 28</b>	<b>7/16</b>	48	124	143	10
<b>43 55 00 32</b>	<b>1/2</b>	50	133	201	5
<b>43 55 00 34</b>	<b>9/16</b>	57	152	292	5
<b>43 55 00 36</b>	<b>5/8</b>	59	160	380	5
<b>43 55 00 40</b>	<b>3/4</b>	70	180	605	5
<b>43 55 00 44</b>	<b>7/8</b>	80	200	945	1



### 10760CV R/8\* Hexagon key wrenches

on ring, for socket head screws,  
Chrome Vanadium, nickel-plated.



Code	g	g	g
<b>96 43 15 21</b>	269	1	

Content: 2; 2.5; 3; 4; 5; 6; 8; 10 mm  
\* to be discontinued

### 10760CV Hexagon key wrenches

in holder, DIN ISO 2936 (metric),  
for socket head screws,  
Chrome Vanadium, nickel-plated.



Code	No	g	g
<b>96 43 15 01</b>	<b>10760CV/9<sup>1)</sup></b>	252	1
<b>96 43 55 01</b>	<b>10760aCV/10Pc<sup>2)</sup></b>	269	1
<b>96 43 55 02</b>	<b>10760aCV/13<sup>3)</sup></b>	126	1

<sup>1)</sup> Content: 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm

<sup>2)</sup> Content: 1/16; 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8" (in plastic-wallet)

<sup>3)</sup> Content (in two holders): 0.028; 0.035; 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4"

### 10765 Hexagon key wrenches

DIN ISO 2936, for socket head screws, extra long, Chrome Vanadium,  
nickel-plated.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	g
<b>43 21 00 15</b>	<b>1.5</b>	14	90	3	10
<b>43 21 00 02</b>	<b>2</b>	16	100	3	10
<b>43 21 00 25</b>	<b>2.5</b>	18	112	5	10
<b>43 21 00 03</b>	<b>3</b>	20	126	9	10
<b>43 21 00 04</b>	<b>4</b>	25	140	17	10
<b>43 21 00 05</b>	<b>5</b>	28	160	31	10
<b>43 21 00 06</b>	<b>6</b>	32	180	50	10
<b>43 21 00 07</b>	<b>7</b>	34	190	74	10
<b>43 21 00 08</b>	<b>8</b>	36	200	100	10
<b>43 21 00 09</b>	<b>9</b>	38	210	135	10
<b>43 21 00 10</b>	<b>10</b>	40	224	179	10
<b>43 21 00 12</b>	<b>12</b>	45	250	287	5
<b>43 21 00 14</b>	<b>14</b>	56	280	440	5
<b>43 21 00 17</b>	<b>17</b>	63	320	742	5
<b>43 21 00 19</b>	<b>19</b>	70	360	1048	5

### 10765/9 Hexagon key wrenches

for socket head screws,  
DIN ISO 2936, extra long,  
in holder, Chrome Vanadium,  
nickel-plated.  
Content:  
1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm



Code	g	g
<b>96 43 21 01</b>	414	5

### 10766 Key wrenches

for inside TORX® screws,  
Chrome Vanadium, chrome plated.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	g
<b>43 22 00 06</b>	<b>T6</b>	1.6	16	38	2	10
<b>43 22 00 07</b>	<b>T7</b>	2.0	16	41	3	10
<b>43 22 00 08</b>	<b>T8</b>	2.3	16	44	3	10
<b>43 22 00 09</b>	<b>T9</b>	2.5	16	48	3	10
<b>43 22 00 10</b>	<b>T10</b>	2.7	17	51	3	10
<b>43 22 00 15</b>	<b>T15</b>	3.3	18	54	5	10
<b>43 22 00 20</b>	<b>T20</b>	3.8	19	57	7	10
<b>43 22 00 25</b>	<b>T25</b>	4.4	20	60	9	10
<b>43 22 00 27</b>	<b>T27</b>	5.0	21	64	15	10
<b>43 22 00 30</b>	<b>T30</b>	5.5	24	70	20	10
<b>43 22 00 40</b>	<b>T40</b>	6.6	26	76	29	10
<b>43 22 00 45</b>	<b>T45</b>	7.8	29	83	42	10
<b>43 22 00 50</b>	<b>T50</b>	8.8	32	95	61	10
<b>43 22 00 55</b>	<b>T55</b>	11.2	35	108	122	10
<b>43 22 00 60</b>	<b>T60</b>	13.2	38	120	185	10

### 10766 Key wrenches

for inside TORX® screws,  
in holder, Chrome Vanadium,  
chrome plated.



Code	No	g	g
<b>96 43 22 01</b>	<b>10766/6<sup>1)</sup></b>	105	1
<b>96 43 22 02</b>	<b>10766/9<sup>2)</sup></b>	120	1

<sup>1)</sup> Content: sizes T15; T20; T25; T27; T30; T40


<sup>2)</sup> Content: sizes T8; T9; T10; T15; T20; T25; T27; T30; T40

# Screwdrivers

## 10771 Key wrenches

for inside TORX® screws,  
extra long,  
with ball end on long arm,  
swivel angle up to 25° each side,  
Chrome Vanadium, gunmetal finish.



Code	size	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	
43 27 00 10	T10	2.7	23	121	10	5
43 27 00 15	T15	3.3	27	136	10	5
43 27 00 20	T20	3.8	29	148	20	5
43 27 00 25	T25	4.4	33	163	24	5
43 27 00 27	T27	5.0	36	176	28	5
43 27 00 30	T30	5.5	38	191	30	5
43 27 00 40	T40	6.6	43	210	35	5

## 10771/8 Key wrenches

for inside TORX® screws,  
extra long,  
with ball end on long arm,  
swivel angle up to 25° each side,  
in holder, Chrome Vanadium,  
gunmetal finished.  
Content:  
sizes T9; T10; T15; T20; T25; T27;  
T30; T40




Code	g	
96 43 27 01	290	1


## 10767 Ball ended hexagon key wrenches

for hexagon socket head screws,  
with ball end on long arm,  
swivel angle up to 25° each side,  
Chrome Vanadium, gunmetal finish.



Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	
43 57 01 30	1.3	12	72	1	10
43 26 00 15	1.5	14	89	2	10
43 26 00 02	2	16	99	3	10
43 26 00 25	2.5	18	112	5	10
43 26 00 03	3	20	124	9	10
43 26 00 04	4	25	138	17	10
43 26 00 05	5	28	158	30	10
43 26 00 06	6	32	178	50	10
43 26 00 08	8	36	198	99	10
43 26 00 10	10	40	222	175	10
43 26 00 12	12	45	248	280	10


## 10767a Ball ended hexagon key wrenches

Code	"	L <sub>1</sub> mm	L <sub>2</sub> mm	g	
43 57 01 30	0.050	12	72	1	10
43 57 00 04	1/16	14	78	2	10
43 57 00 05	5/64	16	87	4	10
43 57 00 06	3/32	18	99	5	10
43 57 00 07	7/64	20	108	8	10
43 57 00 08	1/8	20	119	10	10
43 57 00 09	9/64	23	132	13	10
43 57 00 10	5/32	25	145	17	10
43 57 00 12	3/16	26	159	26	10
43 57 00 14	7/32	29	170	39	10
43 57 00 16	1/4	31	184	60	10
43 57 00 20	5/16	36	202	100	10
43 57 00 24	3/8	38	222	157	10

## 10767 Ball ended hexagon key wrenches

in holder,  
Chrome Vanadium,  
gunmetal finish.



Code	No	g	
96 43 26 01	10767/9 <sup>1)</sup>	411	5
96 43 57 01	10767a/8 <sup>2)</sup>	280	1
96 43 57 02	10767a/13 <sup>3)</sup>	465	1

<sup>1)</sup> Content: 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm


<sup>2)</sup> Content: 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4; 5/16"

<sup>3)</sup> Content: 0.050; 1/16; 5/64; 3/32; 7/64; 1/8; 9/64; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8"

## 10767H Ball ended hexagon key wrenches

for hexagon key wrenches,  
swivel angle up to 25° each side,  
with ball end on long arm,  
facilitates quick,  
safe work in awkward places,  
screws stay on the head once attached,  
Chrome Vanadium, gunmetal finish.




Code	mm	L <sub>1</sub> mm	L <sub>2</sub> mm	g	
46 23 10 03	3	20	126	8	10
46 23 10 04	4	25	140	17	10
46 23 10 05	5	28	160	30	10
46 23 10 06	6	32	180	50	5
46 23 10 08	8	36	200	100	5
46 23 10 10	10	40	224	175	5

## 10767H/9 Set: Ball ended hexagon key wrenches

for recessed hexagonal screws,  
swivel angle up to 25° each side,  
from size 3 mm with ring,  
with ball end on long arm,  
facilitates quick, safe work in  
awkward places, screws stay on the head once attached,  
in holder, Chrome Vanadium, gunmetal finish.  
Content: 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm




Code	g	
96 43 26 02	401	5

## 10757 Four-sided bradawl

for punching and preparing  
leather, plastics and other soft  
materials and for marking holes  
in wood to prevent wood screws slipping off the mark.




Code	L mm	Blade mm	g	
77 59 10 00	215	6 x 100	100	1

## 10554 EURO voltage tester

built to conform to the new  
EN standard, tested to conform  
to the currently valid VDE GS standard,  
with plastic handle, AC 125-250 V.



Code	a mm	b mm	L mm	g	
77 45 00 01	1	3.5	190	37	10





## 7 | PLIERS

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## Accurate. Strong. Dependable. **STAHLWILLE** pliers, cutters and wrenches

### **For accurate work and a powerful grip – with comfy-fit multi-component handles.**

When you are working with pliers, your hand needs optimum support and protection in the places where the pressure exerted on the hand is felt most keenly – through ergonomic handle design. STAHLWILLE has integrated softer layers in these sections of the handles. In this way, they fulfil two important functions. They prevent the hand slipping off the handle and, at the same time, absorb the shock produced when hard wires are cut. Even with oily or greasy hands, the textured surface ensures you still have a good grip on things. The special plastic we have used is also resistant to aggressive fluids and, at the end of the lifecycle, can be properly disposed of, because it does not contain PVC.



7

1

Accurate gripping! By using high-grade materials and applying our sophisticated manufacturing techniques, we are able to achieve remarkable accurately shaped jaws.

2

Clean, effortless cutting! Thanks to specially hardened, high-precision cutters.

3

Strain-free working and longer tool lifetimes! Thanks to smooth-action lap-joints.

4

Prevents injuries! The anti-slip protection prevents your hands slipping off towards the jaws.

5

Longer tool lifetime and resistance to aggressive fluids! Thanks to impact-resistant, extremely hard-wearing special plastic.

6

No pinch marks and strain-free working! The ergonomically positioned softer layers improve force transmission.

## Combination Pliers

### 6501 Combination pliers

DIN ISO 5746, precision cutting edges for all wires, incl. piano wire, induction hardened cutting edges, approx. 62 HRC, for long life.



6501 3 160



6501 5 160



6501 6 160

Code	L mm	Head	Handles	③	④	⑤	⑥	△ g
6501 3 160	160	polished	multi-component handles with softer layers	1.8	1.5	10	16	183
6501 3 180	180			2	1.8	12	16	226
6501 3 200	200			2.5	2	13	16	312
6501 5 160	160	chrome plated	multi-component handles with softer layers	1.8	1.5	10	16	210
6501 5 180	180			2	1.8	12	16	235
6501 5 200	200			2.5	2	13	16	368
6501 6 160	160	polished	dip-coated with sure-grip surface	1.8	1.5	10	16	165
6501 6 180	180			2	1.8	12	16	190
6501 6 200	200			2.5	2	13	16	288

③ Cutting capacity in mm for hard wire

④ Cutting capacity in mm for piano wire

⑤ Cutting capacity in mm for cable

⑥ Cutting capacity in mm<sup>2</sup> for cable

## Flat Nose Pliers

### 6507 Flat nose pliers, short

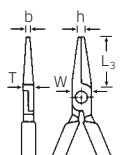
DIN ISO 5745, short, flat serrated jaws.



6507 5 160



6507 6 160



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	△ g
6507 5 160	160	chrome plated	multi-component handles with softer layers	30	17	10	5	9	180
6507 6 160	160	polished	dip-coated with sure-grip surface	30	17	10	5	9	151

### 6508 Flat nose pliers, long

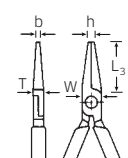
DIN ISO 5745, long, flat serrated jaws.



6508 5 160



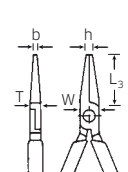
6508 6 160



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	△ g
6508 5 160	160	chrome plated	multi-component handles with softer layers	50	15	8	3	5	160
6508 6 160	160	polished	dip-coated with sure-grip surface	50	15	8	3	5	113

### 6509 Flat nose pliers, long, with cutter

designed for gripping and manipulating electronic components, long, thin, flat serrated jaws, induction hardened cutting edges, approx. 60 HRC, for soft and hard wires.

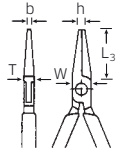


Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	△ g
6509 5 160	160	chrome plated	multi-component handles with softer layers	50	15	8	3	5	164

# Pliers

## 6510 Mechanics flat nose pliers

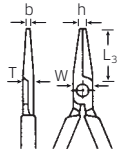
designed for use in fine mechanical and electronics industries, flat, slim, long serrated jaws, box joint, for long life, serrated gripping areas.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	$\frac{\Delta}{g}$
65 10 5 190	190	chrome plated	dip-coated with sure-grip surface	75	13.5	8.5	2	4.5	121

## 6516 Mechanics flat nose pliers

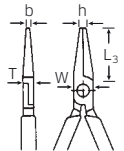
designed for use by instrument mechanics, flat blunt, serrated jaws, wear resistant.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	$\frac{\Delta}{g}$
65 16 5 200	200	chrome plated	dip-coated with sure-grip surface	40	13.5	9.5	2.5	9.5	158

## 6511 Relay pliers

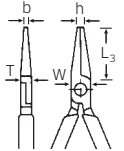
DIN 5235, Form A, flat pointed, for use on contact and relay springs and on small components, smooth jaws.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	$\frac{\Delta}{g}$
65 11 5 135	140	chrome plated	dip-coated with sure-grip surface	33	13	7.5	1	1.5	72

## 6512 Relay pliers

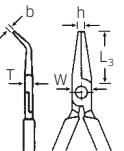
DIN 5235, Form B, flat blunt, for use on contact and relay springs and on small components, smooth jaws.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	$\frac{\Delta}{g}$
65 12 5 135	140	chrome plated	dip-coated with sure-grip surface	33	13	7.5	1	3.5	78

## 6513 Relay pliers

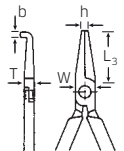
DIN 5235, Form C, flat bent, 45° in line with jaws, for use on contact and relay springs and on small components, smooth jaws.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	$\frac{\Delta}{g}$
65 13 5 135	140	chrome plated	dip-coated with sure-grip surface	31	13	7.5	1	3.5	78

## 6514 Relay pliers

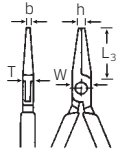
DIN 5235, Form E, flat bent, 90° angle to jaws, for use on contact and relay springs and on small components, smooth jaws.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	$\frac{\Delta}{g}$
65 14 5 135	140	chrome plated	dip-coated with sure-grip surface	33	13	7.5	1	4	76

### 6518 Mechanics gripping pliers

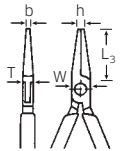
Form A, flat blunt, designed for use by instrument mechanics, wide precision jaws, smooth, tapering, box joint for precise movement.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	$\frac{\Delta}{g}$
65 18 5 130	130	chrome plated	dip-coated with sure-grip surface	24	11.5	7	2	6.5	76

### 6519 Mechanics gripping pliers

Form B, flat pointed, designed for use by instrument mechanics, flat pointed precision jaws, smooth, tapering, box joint for precise movement.

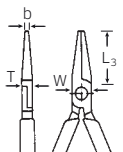


Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	$\frac{\Delta}{g}$
65 19 5 130	130	chrome plated	dip-coated with sure-grip surface	24	11.5	7	1.5	2	72

## Round Nose Pliers

### 6523 Round nose pliers, short

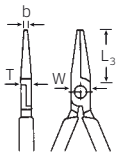
DIN ISO 5745, for bending wire loops and rings, short, round, ground jaws, fine serrations on gripping areas.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	b mm	$\frac{\Delta}{g}$
65 23 5 160	160	chrome plated	multi-component handles with softer layers	30	18	10	3	185

### 6524 Round nose pliers, long

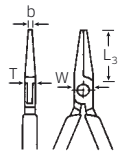
DIN ISO 5745, for bending wire loops and rings, long, round, ground jaws, fine serrations on gripping areas.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	b mm	$\frac{\Delta}{g}$
65 24 5 160	160	chrome plated	multi-component handles with softer layers	47	15.5	8.5	2.5	155

### 6525 Mechanics round nose pliers

for bending wire loops, round precision jaws, smooth, box joint for precise movement.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	b mm	$\frac{\Delta}{g}$
65 25 5 130	130	chrome plated	dip-coated with sure-grip surface	22	11.5	7	1.5	73

# Pliers

## Snipe Nose Pliers

### 6529 Snipe nose pliers with cutter (radio- or telephone pliers)

DIN ISO 5745, Form A (straight), half round, long tapering, serrated jaws, with burner hole, precision cutting edges for soft and hard wires, induction hardened cutting edges, approx. 60 HRC.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	g
65 29 3 145	140	polished	multi-component handles with softer layers	44	15	8	2.5	2	115
65 29 3 160	160			51	16	9	3	2.5	155
65 29 3 200	200			73	17	9	3	2.5	197
65 29 5 145	140	chrome plated	multi-component handles with softer layers	44	15	8	2.5	2	115
65 29 5 160	160			51	16	9	3	2.5	170
65 29 5 200	200			73	17	9	3	2.5	220
65 29 6 145	140	polished	dip-coated with sure-grip surface	44	15	8	2.5	2	92
65 29 6 160	160			51	16	9	3	2.5	148
65 29 6 200	200			73	17	9	3	2.5	187

### 6530 Snipe nose pliers with cutter (radio- or telephone pliers)

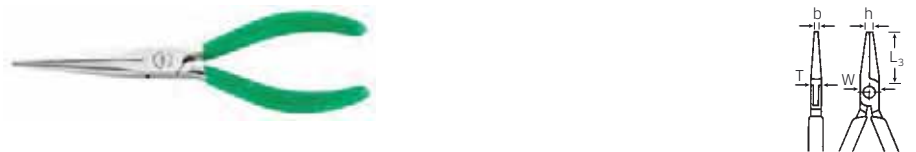
DIN ISO 5745, Form B, bent 45°, half round, long tapering, serrated jaws, with burner hole, precision cutting edges for soft and hard wires, induction hardened cutting edges, approx. 60 HRC.



Code	L mm	Head	Handles	L <sub>2</sub> mm	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	g
65 30 3 160	160	polished	multi-component handles with softer layers	24	55	16	9	3	2.5	145
65 30 3 200	200			28	76	17	9	3.5	2.5	198
65 30 5 160	160	chrome plated	multi-component handles with softer layers	24	55	16	9	3	2.5	170
65 30 5 200	200			28	76	17	9	3.5	2.5	210
65 30 6 160	160	polished	dip-coated with sure-grip surface	24	55	16	9	3	2.5	146
65 30 6 200	200			28	76	17	9	3.5	2.5	178

### 6531 Mechanics snipe nose pliers

Form A (straight), designed for use on miniature electronic and mechanical components, half round extra thin, long tapering jaws with fine serration, box joint for precise movement.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	g
65 31 5 170	170	chrome plated	dip-coated with sure-grip surface	63	13.5	8	2.5	2	98

### 6532 Mechanics snipe nose pliers

Form B, bent 45°, designed for use on miniature electronic and mechanical components, half round extra thin, long tapering jaws with fine serrations, box joint for precise movement.

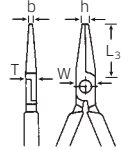


Code	L mm	Head	Handles	L <sub>2</sub> mm	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	g
65 32 5 170	170	chrome plated	dip-coated with sure-grip surface	24	54	13.5	8	2.5	2	102



### 6533 Mechanics snipe nose pliers

half round, long tapering, serrated jaws.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	Δg
<b>6533 5 160</b>	160	chrome plated	dip-coated with sure-grip surface	50	15	8	3	2.5	129

### 6534 Mechanics snipe nose pliers

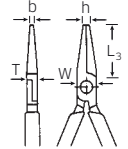
Form A (straight), half round, long tapering, serrated jaws.



**6534 5 200**



**6534 5 280**



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	Δg
<b>6534 5 200</b>	200	chrome plated	multi-component handles with softer layers	76	16	10	3	2.5	220
<b>6534 5 280</b>	280	chrome plated	dip-coated with sure-grip surface	73	20	9.5	3	2.5	255

### 6535 Mechanics snipe nose pliers

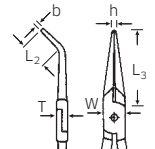
Form B (bent 45°), half round, long tapering, serrated jaws.



**6535 5 200**



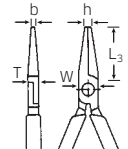
**6535 5 280**



Code	L mm	Head	Handles	L <sub>2</sub> mm	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	Δg
<b>6535 5 200</b>	200	chrome plated	multi-component handles with softer layers	28	68	17	9.5	3.5	2.5	220
<b>6535 5 280</b>	280	chrome plated	dip-coated with sure-grip surface	28	66	20	9.5	3	2.5	255

### 6536 Snipe nose pliers (needle pliers)

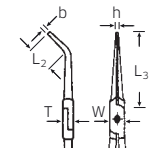
DIN ISO 9655, Form A (straight), designed for use on electronic components, half round, extra long tapering jaws, fine serration.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	Δg
<b>6536 5 160</b>	160	chrome plated	dip-coated with sure-grip surface	58	15	8.5	4	3	110

### 6537 Snipe nose pliers (needle pliers)

Form B, bent 45°, designed for use on electronic components, half round, extra long tapering jaws, fine serration.

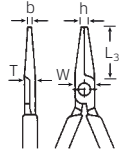


Code	L mm	Head	Handles	L <sub>2</sub> mm	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	Δg
<b>6537 5 160</b>	160	chrome plated	dip-coated with sure-grip surface	25	54	14	8	1	3	115

# Pliers

## 6538 Mechanics snipe nose pliers

designed for use on miniature mechanical components, half round tapering jaws, wear resisting serration.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	△g
<b>65 38 5 200</b>	200	chrome plated	dip-coated with sure-grip surface	38	13	9.5	2.5	2	157

# Circlip Pliers

## 6543 Circlip pliers for inside circlips

DIN 5256 C, straight, H.D. drop forged, precision points.



**65 43 4 002**



**65 43 6 002**

Code	size	L mm	tips ∅ mm	for circlip sizes mm	Head	Handles	△g
<b>65 43 4 000</b>	<b>J 0</b>	140	0.9	8-13	matt chrome plated	chrome plated, chequered	90
<b>65 43 4 001</b>	<b>J 1</b>	140	1.3	12-25			90
<b>65 43 4 002</b>	<b>J 2</b>	180	1.8	19-60			135
<b>65 43 4 003</b>	<b>J 3</b>	225	2.3	40-100			195
<b>65 43 4 004</b>	<b>J 4</b>	320	3.2	85-140			419
<b>65 43 6 000</b>	<b>J 0</b>	140	0.9	8-13	polished	dip-coated with sure-grip surface	100
<b>65 43 6 001</b>	<b>J 1</b>	140	1.3	12-25			100
<b>65 43 6 002</b>	<b>J 2</b>	180	1.8	19-60			150
<b>65 43 6 003</b>	<b>J 3</b>	225	2.3	40-100			215
<b>65 43 6 004</b>	<b>J 4</b>	320	3.2	85-140			462

## 6544 Circlip pliers for inside circlips

DIN 5256 D, bent 90°, H.D. drop forged, precision points.



**65 44 4 021**



**65 44 6 021**

Code	size	L mm	tips ∅ mm	for circlip sizes mm	Head	Handles	△g
<b>65 44 4 001</b>	<b>J 01</b>	130	0.9	8-13	matt chrome plated	chrome plated, chequered	90
<b>65 44 4 011</b>	<b>J 11</b>	130	1.3	12-25			90
<b>65 44 4 021</b>	<b>J 21</b>	170	1.8	19-60			135
<b>65 44 4 031</b>	<b>J 31</b>	215	2.3	40-100			195
<b>65 44 4 041</b>	<b>J 41</b>	300	3.2	85-140			416
<b>65 44 6 001</b>	<b>J 01</b>	130	0.9	8-13	polished	dip-coated with sure-grip surface	100
<b>65 44 6 011</b>	<b>J 11</b>	130	1.3	12-25			100
<b>65 44 6 021</b>	<b>J 21</b>	170	1.8	19-60			150
<b>65 44 6 031</b>	<b>J 31</b>	215	2.3	40-100			215
<b>65 44 6 041</b>	<b>J 41</b>	300	3.2	85-140			432



### 6545 Circlip pliers for outside circlips

DIN 5254 A, straight,  
H.D. drop forged, precision points,  
with wear resistant compression spring.



Code	size	L mm	tips Ø mm	for circlip sizes mm	Head	Handles	⚖ g
<b>6545 4 000</b>	<b>A 0</b>	140	0.9	3-10	matt chrome plated	chrome plated, chequered	95
<b>6545 4 001</b>	<b>A 1</b>	140	1.3	10-25			95
<b>6545 4 002</b>	<b>A 2</b>	180	1.8	19-60			145
<b>6545 4 003</b>	<b>A 3</b>	210	2.3	40-100			205
<b>6545 4 004</b>	<b>A 4</b>	315	3.2	85-140			437
<b>6545 6 000</b>	<b>A 0</b>	140	0.9	3-10	polished	dip-coated with sure-grip surface	105
<b>6545 6 001</b>	<b>A 1</b>	140	1.3	10-25			105
<b>6545 6 002</b>	<b>A 2</b>	180	1.8	19-60			160
<b>6545 6 003</b>	<b>A 3</b>	210	2.3	40-100			232
<b>6545 6 004</b>	<b>A 4</b>	315	3.2	85-140			491

### 6546 Circlip pliers for outside circlips

DIN 5254 B, bent 90°,  
H.D. drop forged, precision points,  
with wear resistant compression spring.



Code	size	L mm	tips Ø mm	for circlip sizes mm	Head	Handles	⚖ g
<b>6546 4 001</b>	<b>A 01</b>	125	0.9	3-10	matt chrome plated	chrome plated, chequered	95
<b>6546 4 011</b>	<b>A 11</b>	125	1.3	10-25			95
<b>6546 4 021</b>	<b>A 21</b>	170	1.8	19-60			145
<b>6546 4 031</b>	<b>A 31</b>	200	2.3	40-100			111
<b>6546 4 041</b>	<b>A 41</b>	290	3.2	85-140			431
<b>6546 6 001</b>	<b>A 01</b>	125	0.9	3-10	polished	dip-coated with sure-grip surface	105
<b>6546 6 011</b>	<b>A 11</b>	125	1.3	10-25			105
<b>6546 6 021</b>	<b>A 21</b>	170	1.8	19-60			160
<b>6546 6 031</b>	<b>A 31</b>	200	2.3	40-100			236
<b>6546 6 041</b>	<b>A 41</b>	290	3.2	85-140			468

### 6547 Special circlip pliers for slotted circlips

for slotted circlips (as used on shafts of engines,  
gearboxes, differentials, clutches etc.),  
with wear resistant compression spring.



Code	L mm	Head	Handles	⚖ g
<b>6547 4 170</b>	170	matt chrome plated	chrome plated, chequered	154
<b>6547 6 170</b>	170	polished	dip-coated with sure-grip surface	162

# Pliers

## Waterpump Pliers

### 6551 Waterpump pliers

DIN ISO 8976 (No 207 c), box joint, 7 adjustment positions (175 mm 6 adjustment positions), anti-squeeze protection, Chrome Vanadium.



6551 5 240



6551 6 175

Code	L mm	Jaw opening max. mm	Head	Handles	⚖ g
6551 5 240	240	43	chrome plated	multi-component handles with softer layers	365
6551 6 175	175	26	black lacquered, jaws polished	black lacquered, box frame polished, dip-coated	173
6551 6 240	240	43			330
6551 6 300	300	51			520

### 6572 Waterpump pliers FastGRIP

**patent**, box joint with dual support, fast adjustment on the work piece via push button, freely adjustable, easy super fine adjustment with 10 snap-in points (180 mm), 12 snap-in points (240 mm), 15 snap-in points (300 mm), induction hardened jaw toothing - extremely hard and durable, safety clamping protection against squeezing injuries, Chrome Vanadium.



6572 6 240

Code	L mm	Jaw opening max. mm	Head	Handles	⚖ g
6572 6 180	180	28	polished	dip-coated with sure-grip surface	236
6572 6 240	240	37			393
6572 6 300	300	44			530

### 6573 PowerGRIP pliers wrench

**patent**, box joint, fast adjustment via button press directly on the work piece, freely adjustable, easy super fine adjustment, high transmission ratio for noticeable amplification of manual force, for work pieces with parallel surfaces (nuts, screws etc.), also ideal for bending thin parallel work pieces (e.g. metal sheet), parallel jaws without profile to protect surface coated work pieces, "Ratchet effect" for screws by using the jaw stroke, extremely resistant overall construction, high quality tempered.



6573 5 300

Code	L mm	Jaw opening max. mm	Head	Handles	⚖ g
6573 5 180	192	36	chrome plated	dip-coated with sure-grip surface	291
6573 5 250	253	46			485
6573 5 300	300	60			661

### 6554 Waterpump pliers, with rapid adjustment

DIN ISO 8976 (No 207 c), box joint "hook" adjustment, jaw with slot, Chrome Vanadium.



6554 4 250

Code	L mm	Jaw opening max. mm	Head	Handles	⚖ g
6554 4 250	250 <sup>1)</sup>	50	chrome plated	chrome plated, chequered	476
6554 4 375	375	70			1066

<sup>1)</sup> anti-squeeze protection

### 6954 Spare springs for No 6554

Code	Spare spring for No	⚖ g
6954 0 002	65544250	3
6954 0 003	65544375	4

## 6555 MINI-waterpump pliers

Chrome Vanadium.



Code	L mm	Jaw opening max. mm	Head	Handles	Δ g
<b>65 55 5 125</b>	125	15	chrome plated	dip-coated	78

## Pipe wrenches

### 6549 Pipe wrenches

Type B, 45°, DIN 5234.



Code	size	L mm	Jaw opening max. mm	Head	Handles	Δ g
<b>65 49 0 315</b>	<b>1</b>	326	45	red lacquered	red lacquered	780
<b>65 49 0 420</b>	<b>1 1/2</b>	440	61			1626
<b>65 49 0 555</b>	<b>2</b>	560	82			2780

### 6556 Swedish pattern wrenches

Type A, 90°, DIN 5234.



Code	size	L mm	Jaw opening max. mm	Head	Handles	Δ g
<b>65 56 0 310</b>	<b>1</b>	316	47	red lacquered	red lacquered	780
<b>65 56 0 420</b>	<b>1 1/2</b>	422	63			1560
<b>65 56 0 560</b>	<b>2</b>	542	82			2676

### 6557 S-shaped Swedish pattern wrenches

Type C, DIN 5234.



Code	size	L mm	Jaw opening max. mm	Head	Handles	Δ g
<b>65 57 0 320</b>	<b>1</b>	327	47	red lacquered	red lacquered	811
<b>65 57 0 416</b>	<b>1 1/2</b>	440	66			1595
<b>65 57 0 535</b>	<b>2</b>	560	81			2677

### 6558 "Heavy Duty" pipe wrenches

US-standard GGG-W-651 Type II, category A.



Code	size	L mm	Jaw opening max. mm	Head	Handles	Δ g
<b>65 58 0 250 10"</b>	<b>10"</b>	250	49	black lacquered	red lacquered	805
<b>65 58 0 300 12"</b>	<b>12"</b>	300	61			1255
<b>65 58 0 350 14"</b>	<b>14"</b>	350	61			1665
<b>65 58 0 450 18"</b>	<b>18"</b>	450	77			2660
<b>65 58 0 600 24"</b>	<b>24"</b>	600	90			4295



## Pliers

### 6559 "Stillson" pipe wrenches

US-standard GGG-W-651 Type I, category A.



Code	size	L mm	Jaw opening max. mm	Head	Handles	⚖ g
<b>65 59 0 250</b>	<b>10"</b>	250	35	black lacquered	red lacquered	550
<b>65 59 0 300</b>	<b>12"</b>	300	43			750
<b>65 59 0 350</b>	<b>14"</b>	350	49			1080
<b>65 59 0 450</b>	<b>18"</b>	450	61			1725
<b>65 59 0 600</b>	<b>24"</b>	600	77			3000

## Self Grip Wrenches

### 6561 Wide jaw self grip wrench

80 mm jaw width, quick release lever,  
Chrome Vanadium.



Code	L mm	S mm	Head	Handles	⚖ g
<b>65 61 2 175</b>	175	20	bright nickel-plated	bright nickel-plated	364

### 6562 Parallel jaw self grip wrench

forged jaws, quick release lever,  
Chrome Vanadium.



Code	L mm	S mm	Head	Handles	⚖ g
<b>65 62 2 250</b>	250	50	bright nickel-plated	bright nickel-plated	700

### 6562/1 6562/2 Parallel jaw self grip wrenches

forged jaws, quick release lever, for small round parts (V-cutout in one jaw) and also suitable for larger workpieces, also ideal for gently gripping sensitive workpieces, Chrome Vanadium.



6562/1



6562/2

Code	L mm	S mm	Head	Handles	⚖ g
<b>65 62 2 100</b>	250	100	bright nickel-plated	bright nickel-plated	985
<b>65 62 2 200</b>	250	200			1154

### 6962 Plastic protective jaws for parallel jaw self grip wrenches No 6562/1 and No 6562/2

1 pair, provides additional protection for clamped workpieces.

Code	⚖ g
<b>69 62 0 001</b>	10

### 6563 Universal self grip wrenches

forged jaws (one straight, one contoured), quick release lever, Chrome Vanadium.



6563 2 175

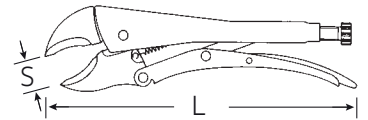
Code	L mm	S mm	Head	Handles	Δ g
6563 2 175	175	25	bright nickel-plated	bright nickel-plated	320
6563 2 250	250	30			500

### 6564 Self grip wrenches

forged contoured jaws, quick release lever, wire cutter, Chrome Vanadium.



6564 2 175



Code	L mm	S mm	Head	Handles	Δ g
6564 2 145	145	14	bright nickel-plated	bright nickel-plated	175
6564 2 175	175	30			323
6564 2 250	250	40			550
6564 2 300	300	65			977

### 6565 Welders self grip wrench

with quick release lever, Chrome Vanadium.



Code	L mm	S mm	Head	Handles	Δ g
6565 2 280	280	65	bright nickel-plated	bright nickel-plated	941

### 6566 Pipe welders self grip wrench

with quick release lever, Chrome Vanadium.



Code	L mm	S mm	Head	Handles	Δ g
6566 2 280	280	85	bright nickel-plated	bright nickel-plated	944

### 6567 C-Clamp self grip wrenches

with quick release lever, Chrome Vanadium.



6567 2 280

Code	L mm	S mm	Head	Handles	Δ g
6567 2 175	175	75	bright nickel-plated	bright nickel-plated	236
6567 2 280	280	85			694

## Pliers

### 6568 Long reach grip wrenches

extra large capacity, quick release lever, Chrome Vanadium.



65 68 2 460

Code	L mm	S mm	Head	Handles	⌀ g
65 68 2 460	460	180	bright nickel-plated	bright nickel-plated	1100
65 68 2 600	600	240			1372

### 6571 Long nose self grip wrench

specially suitable for narrow, tapering access, with quick-release lever, Chrome Vanadium.



Code	L mm	S mm	Head	Handles	⌀ g
65 71 2 165	165	23	bright nickel-plated	bright nickel-plated	190

## Wire Twisting Pliers

### 6575 Wire twisting pliers

for wire locking of metal fasteners, with side cutter, serrated jaws for positive grip, jaws angled by 40°, suitable for locking wires up to  $\varnothing$  1.6 mm (dec. in. 0.06), **for clockwise and anticlockwise use**, with automatic return action, Chrome Vanadium.



65 75 1 220

65 75 1 280



Code	L mm	Head	Handles	⌀ g
65 75 1 220	230	gunmetal finish, polished	gunmetal finish	330
65 75 1 280	280			440

## Various Gripping Pliers

### 6576N Connector pliers

replaceable plastic jaws, 4 adj. positions, for use on screw connections incl. Canon-connectors, or any light alloy or other tube connections, surfaces of which must not be damaged, Chrome Vanadium.



Code	L mm	Head	Handles	⌀ g
65 76 5 231	230	chrome plated	dip-coated	288

### 6976 Loose plastic jaws for No 6576N

Code	⌀ g
69 76 0 001	4

## Side Cutters

### 6600 Side cutters ✂

DIN ISO 5749, Form B, precision cutting edges for all wires incl. piano wire, high quality alloy steel, bevelled cutting edges induction hardened, approx. 63 HRC.



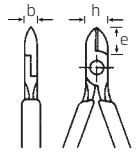
6600 3 160



6600 5 160



6600 6 160



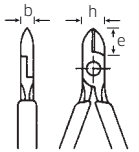
Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	$\Delta$ g
6600 3 130	125	polished	multi-component handles with softer layers	24	17	8.6	2.8	2.3	1.5	1.25	110
6600 3 145	140			25.7	18.5	8.2	3	2.5	1.8	1.6	147
6600 3 160	160			29.5	22.5	9.5	3	2.8	2	1.6	188
6600 3 180	180			32	23.5	11	3.8	3	2.5	2	242
6600 5 130	125	chrome plated	multi-component handles with softer layers	24	17	8.6	2.8	2.3	1.5	1.25	105
6600 5 145	140			25.7	18.5	8.2	3	2.5	1.8	1.6	160
6600 5 160	160			29.5	22.5	9.5	3	2.8	2	1.6	190
6600 5 180	180			32	23.5	11	3.8	3	2.5	2	255
6600 6 130	125	polished	dip-coated with sure-grip surface	24	17	8.6	2.8	2.3	1.5	1.25	92
6600 6 145	140			25.7	18.5	8.2	3	2.5	1.8	1.6	121
6600 6 160	160			29.5	22.5	9.5	3	2.8	2	1.6	165
6600 6 180	180			32	23.5	11	3.8	3	2.5	2	205

① Cutting capacity in mm for soft wire  
③ Cutting capacity in mm for hard wire

② Cutting capacity in mm for medium hard wire  
④ Cutting capacity in mm for piano wire

### 6601 Side cutter ✂

as No 6600, mini bevel, fitted with double leaf spring.



Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	$\Delta$ g
6601 6 110	110	polished	dip-coated with sure-grip surface	15	15	8.5	2.5	1.5	1.2	0.8	69

① Cutting capacity in mm for soft wire  
③ Cutting capacity in mm for hard wire

② Cutting capacity in mm for medium hard wire  
④ Cutting capacity in mm for piano wire

### 6602 Heavy duty side cutters ✂

DIN ISO 5749, Form A, precision cutting edges for all wires incl. piano wire, high quality alloy steel, bevelled cutting edges induction hardened, approx. 63 HRC.



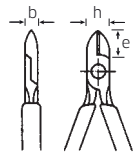
6602 3 200



6602 5 200



6602 6 200



Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	$\Delta$ g
6602 3 140	140	polished	multi-component handles with softer layers	23.5	20	9	4	3.1	2	1.5	156
6602 3 160	160			25.5	25	9.5	4	3.4	2.5	2	203
6602 3 180	180			27.5	26.5	10.5	4	3.8	2.7	2.2	251
6602 3 200	200			31	28	11.5	4	4	3	2.5	305
6602 3 250	250			32	29.5	12	4	4	3.5	3	407
6602 5 140	140	chrome plated	multi-component handles with softer layers	23.5	20	9	4	3.1	2	1.5	145
6602 5 160	160			25.5	25	9.5	4	3.4	2.5	2	200
6602 5 180	180			27.5	26.5	10.5	4	3.8	2.7	2.2	290
6602 5 200	200			31	28	11.5	4	4	3	2.5	310
6602 5 250	250			32	29.5	12	4	4	3.5	3	409
6602 6 140	140	polished	dip-coated with sure-grip surface	23.5	20	9	4	3.1	2	1.5	140
6602 6 160	160			25.5	25	9.5	4	3.4	2.5	2	170
6602 6 180	180			27.5	26.5	10.5	4	3.8	2.7	2.2	230
6602 6 200	200			31	28	11.5	4	4	3	2.5	260
6602 6 250	250			32	29.5	12	4	4	3.5	3	375

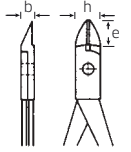
① Cutting capacity in mm for soft wire  
③ Cutting capacity in mm for hard wire

② Cutting capacity in mm for medium hard wire  
④ Cutting capacity in mm for piano wire

## Oblique Cutter

### 6612 Mechanics oblique cutter

suitable for use on miniature mechanical and electronic components, precision cutting edges for hard and soft wire, head angled by 28°, Cu-wire 0.25 mm Ø may be cut at tips, alloy steel of highest quality, induction hardened mini-bevelled cutting edges, approx. 60 HRC.



Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	$\frac{\Delta}{g}$
<b>66 12 5 185</b>	185	chrome plated	dip-coated with sure-grip surface	14	13.5	9.5	2	1.8	1.5	145

① Cutting capacity in mm for soft wire

② Cutting capacity in mm for medium hard wire

③ Cutting capacity in mm for hard wire

## Top Cutters

### 6618 Top cutters, heavy duty

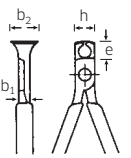
DIN ISO 5748, precision cutting edges for all wires, incl. piano wire, alloy steel of highest quality, induction hardened bevelled cutting edges, approx. 63 HRC.



**66 18 5 160**



**66 18 6 160**



Code	L mm	Head	Handles	e mm	h mm	b <sub>1</sub> mm	b <sub>2</sub> mm	①	②	③	④	$\frac{\Delta}{g}$
<b>66 18 5 160</b>	160	chrome plated	multi-component handles with softer layers	17	26	11.5	24	3.8	3	2.5	2	240
<b>66 18 6 160</b>	160	polished	dip-coated with sure-grip surface	17	26	11.5	24	3.8	3	2.5	2	211

① Cutting capacity in mm for soft wire

② Cutting capacity in mm for medium hard wire

③ Cutting capacity in mm for hard wire

④ Cutting capacity in mm for piano wire

### 6617 Lever action top cutters

DIN ISO 5748, for piano wire, special steel.



**66 17 0 215**

Code	L mm	Head	Handles	①	②	③	④	$\frac{\Delta}{g}$
<b>66 17 0 180</b>	180	polished	black lacquered	3.5	3	2.5	2.25	394
<b>66 17 0 215</b>	215			4	3.5	2.8	2.5	440
<b>66 17 0 235</b>	235			4	3.5	3	2.75	467

① Cutting capacity in mm for soft wire

② Cutting capacity in mm for medium hard wire

③ Cutting capacity in mm for hard wire

④ Cutting capacity in mm for piano wire



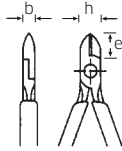
Made in  
Germany



## Plastic side-cutters

### 6670 Plastic side-cutter

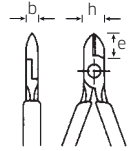
for plastic injection mouldings, with particularly narrow, straight cutting edges, with no bevel to enable flush trimming of sprues and burrs, only for thin sprues made of soft thermoplastic, with spring-loaded opening, induction-hardened cutting edges.



Code	L mm	Head	Handles	e mm	h mm	b mm	$\Delta$ g
<b>6670 6 120</b>	120	polished	dip-coated with sure-grip surface	13	11	7	56

### 6673 Plastic side-cutters

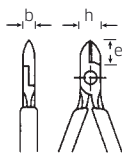
for plastic injection mouldings, with raised cutting edges, 20° angled, with no bevel to enable flush trimming of sprues and burrs, with spring-loaded opening, induction-hardened cutting edges.



Code	L mm	Head	Handles	e mm	h mm	b mm	$\Delta$ g
<b>6673 6 130</b>	130	polished	dip-coated with	22	17	8.5	107
<b>6673 6 145</b>	145		sure-grip surface	23	18	9.5	119
<b>6673 6 160</b>	160			28	18	10.5	165

### 6671 Plastic side-cutter

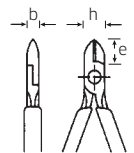
for plastic injection mouldings, with particularly narrow, straight cutting edges, 45° angled, with no bevel to enable flush trimming of sprues and burrs, only for thin sprues made of soft thermoplastic, with spring-loaded opening, induction-hardened cutting edges.



Code	L mm	Head	Handles	e mm	h mm	b mm	$\Delta$ g
<b>6671 6 120</b>	120	polished	dip-coated with sure-grip surface	12	11	7	56

### 6674 Plastic side-cutter

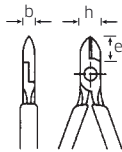
for plastic injection mouldings, with convex cutting edge, with no bevel to enable flush trimming of sprues and burrs, with spring-loaded opening, induction-hardened cutting edges.



Code	L mm	Head	Handles	e mm	h mm	b mm	$\Delta$ g
<b>6674 6 160</b>	160	polished	dip-coated with sure-grip surface	28	20	11	162

### 6672 Plastic side-cutters

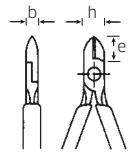
for plastic injection mouldings, with straight cutting edges, 20° angled, with no bevel to enable flush trimming of sprues and burrs, with spring-loaded opening, induction-hardened cutting edges.



Code	L mm	Head	Handles	e mm	h mm	b mm	$\Delta$ g
<b>6672 6 130</b>	130	polished	dip-coated with	22	16	9	107
<b>6672 6 145</b>	145		sure-grip surface	25	17	10	120
<b>6672 6 160</b>	160			28	18	10	161

### 6676 Plastic side-cutters

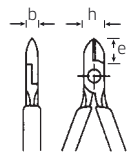
For plastic injection mouldings, with straight cutting edges, 30° angled, with no bevel to enable flush trimming of sprues and burrs, with spring-loaded opening, induction-hardened cutting edges.



Code	L mm	Head	Handles	e mm	h mm	b mm	$\Delta$ g
<b>6676 6 130</b>	130	polished	dip-coated with	19	16.5	8.5	105
<b>6676 6 145</b>	145		sure-grip surface	21	18.5	9.5	125
<b>6676 6 160</b>	160			28	20	11	165

### 6677 Plastic side-cutter

for plastic injection mouldings, with straight cutting edges, 90° angled, with no bevel to enable flush trimming of sprues and burrs, with spring-loaded opening, induction-hardened cutting edges.



Code	L mm	Head	Handles	e mm	h mm	b mm	$\Delta$ g
<b>6677 6 160</b>	160	polished	dip-coated with sure-grip surface	25	21	10	166

# Pliers

## Wire Stripping Pliers

### 6622 Wire stripping pliers

with adjustment screw to cut insulation only on wire or cable, max. 5 mm Ø 10 mm<sup>2</sup> conductor cross-section.



66 22 5 160



66 22 6 160

Code	L mm	Head	Handles	⚖ g
66 22 5 160	160	chrome plated	multi-component handles with softer layers	195
66 22 6 160	160	polished	dip-coated with sure-grip surface	134

### 6623 Wire stripping pliers

for wires from 0.5 to 5 mm Ø, self adjusting, cutter hole for cutting wire or stranded wires up to 5 mm Ø, special steel.



Code	L mm	Head	Handles	⚖ g
66 23 5 160	160	chrome plated	multi-component handles with softer layers	180

### 6923 Replacement stripping knives (1 pair) for No 6623

Code	⚖ g
69 23 0 001	11

### 6624 Wire stripping pliers

for wires from 0.3 to 1.2 mm Ø, self adjusting, cutter hole for cutting wire or stranded wires up to 5 mm Ø, special alloy steel.



Code	L mm	Head	Handles	⚖ g
66 24 5 160	160	chrome plated	multi-component handles with softer layers	186

## Cable Shear

### 6630 Cable shear

for copper- and light alloy cables. Easy, single handed operation. Special cutting edges geometry to avoid pressure marks and frayed ends, adjustable joint, anti-squeeze protection, not suitable for steel- or armoured cables.



Code	L mm	Head	Handles	⑦	⑧	⑨	⚖ g
66 30 5 220	220	chrome plated	dip-coated with sure-grip surface	16	35	70	332

⑦ cutting capacity in mm<sup>2</sup> for single wire Al-/Cu-Cable

⑨ cutting capacity in mm<sup>2</sup> for thin wire Al-/Cu-Cable

⑧ cutting capacity in mm<sup>2</sup> for multiple wire Al-/Cu-Cable

# Crimping Pliers

## 6634 Crimping pliers

with half round profile, for reliable crimping of terminal sleeves DIN 46228, 8 deep slots with tapering side walls, crimping within the size marked profiles in one operation.



Code	L mm	Head	Handles	crimping range mm <sup>2</sup>	⌀ g
6634 6220	220	gunmetal finish	dip-coated with sure-grip surface	0.25; 0.5; 0.75; 1; 1.5; 2.5; 4; 6; 10; 16	240

## 6637 Crimping pliers

for use with terminal sleeves with or without an insulating collar in accordance with DIN 46228

- high precision crimping
- easy-action force transmission coupled with simple handling
- unlockable autolock
- accurately ground profiles
- crimp shape: □



Code	L mm	Head	Handles	crimping range mm <sup>2</sup>	⌀ g
6637 0195	195	gunmetal finish	with plastic sleeves	0.08 - 10	298

## 6638 Crimping pliers

for red/blue/yellow insulated cable lugs, pin-type cable lugs, flat plugs and sleeves, round plugs and sleeves, butt and parallel connectors

- unlockable autolock
- easy handling
- stripping and cutting device, refer to No 6966
- crimp shape: ○

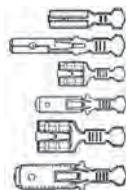


Code	L mm	Head	Handles	crimping range mm <sup>2</sup>	⌀ g
6638 0220	220	gunmetal finish	with plastic sleeves	red = 0.5-1(AWG 20-18); blue = 1.5-2.5 (AWG 16-14); yellow = 4-6 (AWG 12-10)	477

## 6639 Crimping pliers

for non-insulated flat plugs and flat sleeves for nominal DIN widths F2.8; F4.8; F6.3; F9.5

- unlockable autolock
- easy handling
- stripping and cutting device, refer to No 6966
- crimp shape: ☺

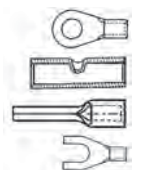


Code	L mm	Head	Handles	crimping range mm <sup>2</sup>	⌀ g
6639 0220	220	gunmetal finish	with plastic sleeves	0.25-0.5 (AWG 24-20); 0.5-1 (AWG 20-18); 4-6 (AWG 12-10); 1.5-2.5 (AWG 16-14)	483

## 6640 Crimping pliers

for non-insulated cable lugs and tubular cable lugs with closed crimp sleeves

- unlockable autolock
- easy handling
- stripping and cutting device, refer to No 6966
- crimp shape: ☺



Code	L mm	Head	Handles	crimping range mm <sup>2</sup>	⌀ g
6640 0220	220	gunmetal finish	with plastic sleeves	0.1-0.35 (AWG 26-22); 0.5-1 (AWG 20-18); 1.5-2.5 (AWG 16-14); 4-6 (AWG 12-10); 10-16 (AWG 8-6)	465

## Pliers

### 6641 Crimping pliers

for use with terminal sleeves with or without an insulating collar in accordance with DIN 46228

- unlockable autolock
- easy handling
- stripping and cutting device, refer to No 6966
- crimp shape: □



Code	L mm	Head	Handles	crimping range mm <sup>2</sup>	Δ g
<b>66 41 0 220</b>	220	gunmetal finish	with plastic sleeves	0.14-0.5; 0.75-1.5; 2.5; 4; 6; 10	536

### 6966 Stripping and cutting tool

for stripping wires from 0.5 to 6 mm Ø.

Cables can also be cut.

For use with crimping pliers No 6638, 6639, 6640 and 6641.



Code	Δ g
<b>69 66 0 000</b>	37

## Various Cutting Pliers

### 6660 Steel fixers pincers

DIN ISO 9242, limit on opening angle to ensure single-handed closure (registered design), little effort required due to optimised cutter geometry, induction-hardened cutters provide excellent resistance to wear, special steel, drop-forged, oil hardened



Code	L mm	Head	Handles	Δ g
<b>66 60 1 220</b>	224	polished	black lacquered	318
<b>66 60 1 250</b>	250			390
<b>66 60 1 280</b>	280			434

### 6661 Pincers

DIN ISO 9243, special steel, drop-forged, oil hardened.



Code	L mm	Head	Handles	Δ g
<b>66 61 1 180</b>	180	polished	black lacquered	322
<b>66 61 1 200</b>	200			350

### 6662 Heavy Duty steel fixer pincers

DIN ISO 9243, induction-hardened cutting edges, high wear resistance, extremely low cutting force effort due to very large lever effect and optimum cutting edges geometry. Clearly damped cutting shock due to "elastic" pliers body, therefore ideal for continuous use special steel.

Ultra-slim design, ideal for binding recessed reinforcing bars. Special steel, drop-forged, oil hardened.



Code	L mm	Head	Handles	Δ g
<b>66 62 4 300</b>	300	chrome plated, polished	chrome plated	478

### 6702 Set with 4 pliers, chrome plated

Handles chequered, in plastic inlay

Content:

- 6543** Circlip pliers, J2
- 6544** Circlip pliers, J21
- 6545** Circlip pliers, A2
- 6546** Circlip pliers, A21



Code	⚖ g
<b>96 65 0004</b>	590

### 6706 Set with 3 pliers, polished

dip-coated, in plastic inlay

Content:

- 6501** Combination pliers, 180 mm
- 6602** Heavy duty side cutter, 160 mm
- 6529** Snipe nose pliers, 200 mm



Code	⚖ g
<b>96 65 0008</b>	750

### 6703 Set with 3 pliers, chrome plated

multi-component handles with softer layers, in plastic inlay

Content:

- 6501** Combination pliers, 180 mm
- 6602** Heavy duty side cutter, 160 mm
- 6529** Snipe nose pliers, 200 mm



Code	⚖ g
<b>96 65 0005</b>	810

### 6705 Set with 3 pliers, polished

dip-coated, in plastic inlay

Content:

- 6551** Waterpump pliers, 240 mm, lacquered
- 6501** Combination pliers, 180 mm
- 6602** Heavy duty side cutter, 160 mm



Code	⚖ g
<b>96 65 0007</b>	880

### 6704 Set with 3 pliers, chrome plated

multi-component handles with softer layers (No 6501, 6602), in plastic inlay

Content:

- 6551** Waterpump pliers, 240 mm
- 6501** Combination pliers, 180 mm
- 6602** Heavy duty side cutter, 160 mm



Code	⚖ g
<b>96 65 0006</b>	950

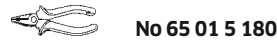
Sets of pliers in plastic inlays also suitable for Workbench No 92KM G, Tool trolleys No 90, 95, 95VA, 98VA, Magazine case No 920 and Wheely box No 922N (Modular system see page 42-71)

#### ES 6501-6602/7A

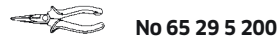


530 x 350 x 40 mm, 7 pieces

Code	⚖ g
<b>96 83 81 21</b>	2085



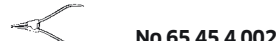
No 65 01 5 180



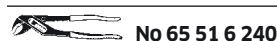
No 65 29 5 200



No 65 43 4 002



No 65 45 4 002



No 65 51 6 240



No 65 64 2 250



No 66 02 5 160

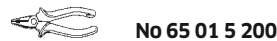
<b>83 81 20 21</b>	Empty tray	307
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#### ES 6501-6602/7B



530 x 350 x 40 mm, 7 pieces

Code	⚖ g
<b>96 83 81 32</b>	2055



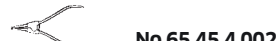
No 65 01 5 200



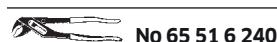
No 65 29 5 160



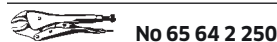
No 65 43 4 002



No 65 45 4 002



No 65 51 6 240



No 65 64 2 250



No 66 02 5 160

<b>83 81 20 21</b>	Empty tray	307
--------------------	------------	-----



# Pliers

## TCS 6501-6602/3



175 x 350 x 40 mm, 3 pieces

Code	△△ g
<b>96 83 87 75</b>	1125

- No 65 01 5 200**
- No 65 51 6 300**
- No 66 02 5 180**

## TCS 6501-6602/4



175 x 350 x 35 mm, 4 pieces

Code	△△ g
<b>96 83 81 79</b>	1000

- No 65 01 5 180**
- No 65 29 5 200**
- No 65 51 6 240**
- No 66 02 5 160**

## TCS 6501-6602/4N



175 x 350 x 35 mm, 4 pieces

Code	△△ g
<b>96 83 06 22</b>	1080

- No 65 01 5 180**
- No 65 29 5 200**
- No 65 72 6 240**
- No 66 02 5 160**

## TCS 6543-6564/3



175 x 350 x 30 mm, 3 pieces

Code	△△ g
<b>96 83 81 80</b>	815

- No 65 43 4 002**
- No 65 45 4 002**
- No 65 64 2 250**

## TCS 6543-6546/4

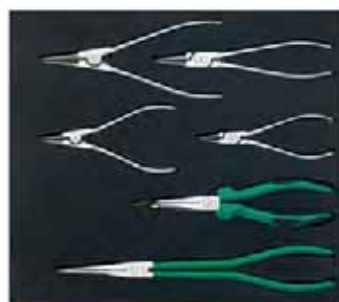


175 x 350 x 30 mm, 4 pieces

Code	△△ g
<b>96 83 06 08</b>	626

- No 65 43 4 002**
- No 65 44 4 021**
- No 65 45 4 002**
- No 65 46 4 021**

## TCS 6534-6545/6



350 x 350 x 30 mm, 6 pieces

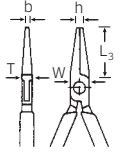
Code	△△ g
<b>96 83 21 00</b>	1070

- No 65 34 5 280**
- No 65 35 5 200**
- No 65 43 4 001**  
**No 65 43 4 002**
- No 65 45 4 001**  
**No 65 45 4 002**

## Electronics Pliers, suitable for electrostatic discharge (ESD) applications

### 6517 Electronics flat nose pliers

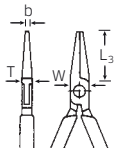
DIN ISO 9655, designed for use on miniature electronic and mechanical components, welded on double leaf spring, precision jaws, smooth, tapering, box joint for precise movement.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	g
65 17 6 120	125	polished	dip-coated with sure-grip surface, ESD applications	20	9	6.5	1.5	3	47

### 6526 Electronics round nose pliers

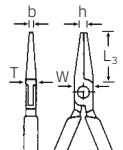
DIN ISO 9655, designed for use on miniature electronic and mechanical components, welded on double leaf spring, round precision jaws, smooth, thin, box joint for precise movement.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	b mm	g
65 26 6 120	125	polished	dip-coated with sure-grip surface, ESD applications	22	9	6.5	1.25	45

### 6540 Electronics snipe nose pliers

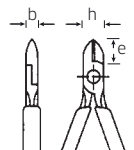
DIN ISO 9655, designed for use on miniature electronic and mechanical components, welded on double leaf spring, half round, smooth precision jaws, tapering, box joint for precise movement.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	g
65 40 6 120	125	polished	dip-coated with sure-grip surface, ESD applications	21	9	6.5	1	1	50

### 6603 Electronics side cutter

strong, slim pattern, suitable for use on miniature electronic components, precision cutting edges, mini bevel, suitable for soft and hard wire, incl. piano wire, Cu-wire of 0.2 mm  $\varnothing$  can be cut at the tips, welded on double leaf spring, alloy steel of highest quality, induction hardened cutting edges approx. 63 HRC.



Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	g
66 03 6 115	115	polished	dip-coated with sure-grip surface, ESD applications	14	11	6.5	1.5	1	0.8	0.5	60

① Cutting capacity in mm for soft wire

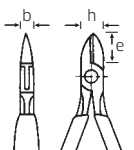
② Cutting capacity in mm for medium hard wire

③ Cutting capacity in mm for hard wire

④ Cutting capacity in mm for piano wire

### 6605 Electronics side cutter

DIN ISO 9654, with wire catch to prevent uncontrolled disposal of off-cuts, box joint for precise movement, precision cutting edges, mini bevel, suitable for soft and hard wire, welded on double leaf spring, alloy steel of highest quality, induction hardened cutting edges, approx. 63 HRC.



Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	g
66 05 6 110	112	polished	dip-coated with sure-grip surface, ESD applications	13	10.5	7	1.5	1	0.8	0.6	64

① Cutting capacity in mm for soft wire

② Cutting capacity in mm for medium hard wire

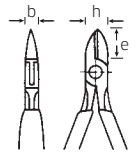
③ Cutting capacity in mm for hard wire

④ Cutting capacity in mm for piano wire

# Pliers

## 6606 Electronics side cutters

DIN ISO 9654, strong model, box joint for precise movement, precision cutting edges, mini bevel, suitable for piano wire, Cu-wire 0.25 mm  $\varnothing$  can be cut at tips, welded on double leaf spring, alloy steel of highest quality, induction hardened cutting edges, approx. 63 HRC.



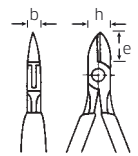
Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	$\frac{\Delta}{g}$	
6606 6110	112	polished	dip-coated with sure-grip surface, ESD applications	13	12	7.5	1.5	1	0.8	0.6	0.6	64
6606 6130	125			18	16	10	1.7	1.2	1	0.8	104	

① Cutting capacity in mm for soft wire  
③ Cutting capacity in mm for hard wire

② Cutting capacity in mm for medium hard wire  
④ Cutting capacity in mm for piano wire

## 6607 Electronics side cutters

DIN ISO 9654, slim tapered head for use in confined spaces, box joint for precise movement, precision cutting edges, no bevel suitable for flush cutting of soft and medium hard wire, Cu- and diode wires, welded on double leaf spring, alloy steel of highest quality, induction hardened cutting edges, approx. 63 HRC.



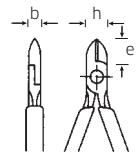
Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	$\frac{\Delta}{g}$
6607 6110	112	polished	dip-coated with sure-grip surface, ESD applications	13	12	7.5	1.5	1	64
6607 6130	125			18	16	10	1.5	1	104

① Cutting capacity in mm for soft wire

② Cutting capacity in mm for medium hard wire

## 6604 Mini-electronics side cutter

DIN ISO 9654, light, slim pattern, especially suitable for use on miniature electronic components, precision cutting edges, mini bevel, suitable for soft and hard wire, Cu-wire of 0.2 mm  $\varnothing$  can be cut at the tips, welded on double leaf spring, alloy steel of highest quality, induction hardened cutting edges, approx. 63 HRC.



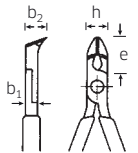
Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	$\frac{\Delta}{g}$
6604 6110	112	polished	dip-coated with sure-grip surface, ESD applications	11	9	6	1	0.8	0.6	0.4	49

① Cutting capacity in mm for soft wire  
③ Cutting capacity in mm for hard wire

② Cutting capacity in mm for medium hard wire  
④ Cutting capacity in mm for piano wire

## 6613 Electronics oblique cutter

DIN ISO 9654, tapered head for use in confined spaces, precision cutting edges for hard and soft wire, head angled by 55°, Cu-wire 0.25 mm  $\varnothing$  may be cut at the tips, welded on double leaf spring, alloy steel of highest quality, induction hardened mini-bevelled cutting edges, approx. 62 HRC.



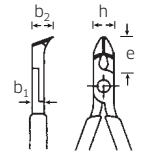
Code	L mm	Head	Handles	e mm	h mm	b <sub>1</sub> mm	b <sub>2</sub> mm	①	②	③	④	$\frac{\Delta}{g}$
6613 6115	112	polished	dip-coated with sure-grip surface, ESD applications	11	11	7.5	10.5	1	0.8	0.6	0.4	82

① Cutting capacity in mm for soft wire  
③ Cutting capacity in mm for hard wire

② Cutting capacity in mm for medium hard wire  
④ Cutting capacity in mm for piano wire

### 6614 Electronics oblique cutter

DIN ISO 9654, as No 6613, but without bevelled cutting edges, for flush cutting of soft and medium hard Cu- and diode wires.

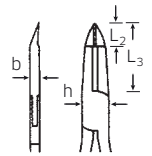


Code	L mm	Head	Handles	e mm	h mm	b <sub>1</sub> mm	b <sub>2</sub> mm	①	②	$\Delta$ g
<b>6614 6115</b>	112	polished	dip-coated with sure-grip surface, ESD applications	11	11	7.5	10.5	1	0.6	55

① Cutting capacity in mm for soft wire      ② Cutting capacity in mm for medium hard wire

### 6615 Electronics oblique cutter

DIN ISO 9654, slim, extended head for delicate cuts in confined spaces, box joint for precise movement, precision cutting edges with mini bevel for Cu- and diode wires, head angled by 30°, welded on double leaf spring, alloy steel of highest quality.

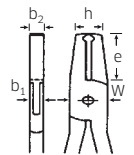


Code	L mm	Head	Handles	L <sub>2</sub> mm	L <sub>3</sub> mm	h mm	b mm	①	②	$\Delta$ g
<b>6615 6115</b>	112	polished	dip-coated with sure-grip surface, ESD applications	8	18	8	6	0.6	0.3	47

① Cutting capacity in mm for soft wire      ② Cutting capacity in mm for medium hard wire

### 6619 Electronics top cutter

DIN ISO 9654, slim long head for use in confined space, box joint for precise movement, precision cutting edges for Cu- and diode wires, mini-bevel, welded on double leaf spring, alloy steel of highest quality.

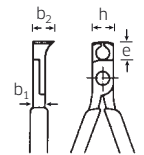


Code	L mm	Head	Handles	e mm	W mm	h mm	b <sub>1</sub> mm	b <sub>2</sub> mm	①	②	$\Delta$ g
<b>6619 6115</b>	112	polished	dip-coated with sure-grip surface, ESD applications	15.5	8.5	5.5	6	5	0.6	0.3	65

① Cutting capacity in mm for soft wire      ② Cutting capacity in mm for medium hard wire

### 6620 Electronics top cutter

DIN ISO 9654, precision cutting edges for soft and hard wires, mini-bevel, head angled 90°, pointed head, Cu-wire 0.25 mm  $\varnothing$  may be cut at the tips, welded on double leaf spring, alloy steel of highest quality, induction hardened cutting edges, approx. 60 HRC.

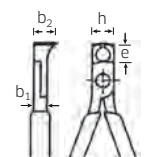


Code	L mm	Head	Handles	e mm	h mm	b <sub>1</sub> mm	b <sub>2</sub> mm	①	②	③	④	$\Delta$ g
<b>6620 6115</b>	112	polished	dip-coated with sure-grip surface, ESD applications	6.5	11	7.5	11	1	0.8	0.6	0.4	82

① Cutting capacity in mm for soft wire      ② Cutting capacity in mm for medium hard wire  
③ Cutting capacity in mm for hard wire      ④ Cutting capacity in mm for piano wire

### 6621 Electronics top cutter

DIN ISO 9654, as No 6620, but without bevelled cutting edge, for flush cutting of soft and medium hard Cu- and diode wires, alloy steel of highest quality, induction hardened cutting edges, approx. 60 HRC.



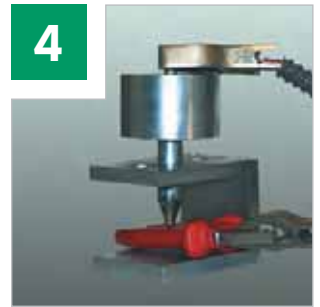
Code	L mm	Head	Handles	e mm	h mm	b <sub>1</sub> mm	b <sub>2</sub> mm	①	②	$\Delta$ g
<b>6621 6115</b>	112	poliert	Kunststoff-Überzug mit gerauter Oberfläche, ESD-gesignt	6.5	11	7.5	11	1	0.6	84

① Cutting capacity in mm for soft wire      ② Cutting capacity in mm for medium hard wire



# 1,000 volts – no problem. STAHLWILLE pliers and cutters

**STAHLWILLE VDE pliers & cutters** are manufactured to meet the current demands of EN 60900 and are individually tested. They are designed to provide maximum possible protection when the user is working with voltages of 1,000 volts AC.



1

2

3

4

### 1 Voltage testing

All STAHLWILLE VDE pliers and cutters are tested to AC 10,000 volts and are certified up to 1,000 volts. In other words, with a tenfold safety margin.

1

### 2 The electrical insulation

After being submerged in water for 24 hours, the pliers and cutters are subjected to 10,000 volts AC and, at the same time, the leakage current is measured for three minutes. There must be no dielectric breakdown or arcing.

2

### 3 Testing resistance to fire

The danger of fire can only be combatted through the use of non-flammable PVC. During the test, the flame on the handle must not exceed a height of 120 mm within 20 seconds.

3

### 4 Pressure tests

When they are subjected to a load of 20 N·m and a temperature of 70°C, there must be no dielectric breakdown or arcing when the tools are subjected to 5,000 volts AC.

4

### 5 Cold impact tests

The insulated handles are subjected to 2 hours at -25°C in a freezer and must still be tough enough not to shatter or break when knocked.

5

### 6 Testing the adherence of the PVC coating

The handles must still be firmly attached to the tools after about 168 hours in a heat cabinet at 70°C. This stripping test on the PVC covers is carried out for three minutes at 500 N.

6





## VDE Pliers

### 6501 VDE combination pliers

DIN ISO 5746, precision cutting edges for all wires, incl. piano wire, induction hardened cutting edges, approx. 62 HRC, for long life.



6501 7 160



6501 8 160

Code	L mm	Head	Handles	③	④	⑤	⑥	$\frac{\Delta}{g}$
<b>6501 7 160</b>	160	chrome plated	dip-coated insulation, DIN EN 60900, $\triangle$ $\triangle$ AC/1000 V	1.8	1.5	10	16	202
<b>6501 7 180</b>	180			2	1.8	12	16	279
<b>6501 7 200</b>	200			2.5	2	13	16	359
<b>6501 8 160</b>	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900, $\triangle$ $\triangle$ AC/1000 V	1.8	1.5	10	16	186
<b>6501 8 180</b>	180			2	1.8	12	16	165
<b>6501 8 200</b>	200			2.5	2	13	16	317

③ Cutting capacity in mm for hard wire

④ Cutting capacity in mm for piano wire

⑤ Cutting capacity in mm for cable

⑥ Cutting capacity in mm<sup>2</sup> for cable

### 6507 VDE flat nose pliers, short

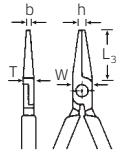
DIN ISO 5745, short, flat serrated jaws.



6507 7 160



6507 8 160



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	$\frac{\Delta}{g}$
<b>6507 7 160</b>	160	chrome plated	dip-coated insulation, DIN EN 60900, $\triangle$ $\triangle$ AC/1000 V	30	17	10	5	9	200
<b>6507 8 160</b>	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900, $\triangle$ $\triangle$ AC/1000 V	30	17	10	5	9	181

### 6508 VDE flat nose pliers, long

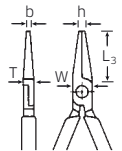
DIN ISO 5745, long, flat serrated jaws.



6508 7 160



6508 8 160



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	$\frac{\Delta}{g}$
<b>6508 7 160</b>	160	chrome plated	dip-coated insulation, DIN EN 60900, $\triangle$ $\triangle$ AC/1000 V	50	15	8	3	5	148
<b>6508 8 160</b>	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900, $\triangle$ $\triangle$ AC/1000 V	50	15	8	3	5	166

### 6523 VDE round nose pliers, short

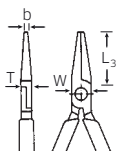
DIN ISO 5745, for bending wire loops and rings, short, round, ground jaws, fine serrations on gripping areas.



6523 7 160



6523 8 160

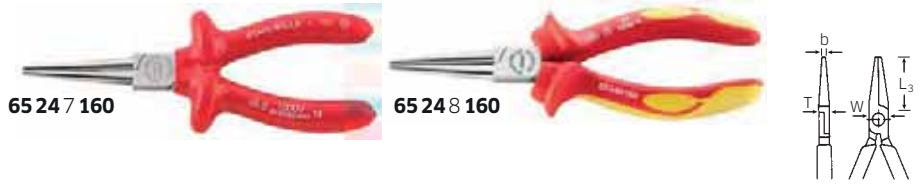


Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	b mm	$\frac{\Delta}{g}$
<b>6523 7 160</b>	160	chrome plated	dip-coated insulation, DIN EN 60900, $\triangle$ $\triangle$ AC/1000 V	30	18	10	3	201
<b>6523 8 160</b>	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900, $\triangle$ $\triangle$ AC/1000 V	30	18	10	3	176

# Pliers

## 6524 VDE round nose pliers, long

DIN ISO 5745, for bending wire loops and rings, long, round, ground jaws, fine serrations on gripping areas.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	b mm	△△ g
65 24 7 160	160	chrome plated	dip-coated insulation, DIN EN 60900, ⚡ AC/1000 V	47	15.5	8.5	2.5	162
65 24 8 160	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900, ⚡ AC/1000 V	47	15.5	8.5	2.5	156

## 6529 VDE snipe nose pliers with cutter (radio- or telephone pliers)

DIN ISO 5745, Form A (straight), half round, long tapering, serrated jaws, with burner hole, precision cutting edges for soft and hard wires, induction hardened cutting edges, approx. 60 HRC.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	△△ g
65 29 7 160	160	chrome plated	dip-coated insulation, DIN EN 60900, ⚡ AC/1000 V	51	16	9	3	2.5	174
65 29 7 200	200			73	17	9	3	2.5	226
65 29 8 160	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900, ⚡ AC/1000 V	51	16	9	3	2.5	158
65 29 8 200	200			73	17	9	3	2.5	202

## 6530 VDE snipe nose pliers with cutter (radio- or telephone pliers)

DIN ISO 5745, Form B, bent 45°, half round, long tapering, serrated jaws, with burner hole, precision cutting edges for soft and hard wires, induction hardened cutting edges, approx. 60 HRC.



Code	L mm	Head	Handles	L <sub>2</sub> mm	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	△△ g
65 30 7 160	160	chrome plated	dip-coated insulation, DIN EN 60900, ⚡ AC/1000 V	24	55	16	9	3	2.5	185
65 30 7 200	200			28	76	17	9	3.5	2.5	230
65 30 8 160	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900, ⚡ AC/1000 V	24	55	16	9	3	2.5	154
65 30 8 200	200			28	76	17	9	3.5	3	201

## 6533 VDE mechanics snipe nose pliers

half round, long tapering, serrated jaws.



Code	L mm	Head	Handles	L <sub>3</sub> mm	W mm	D mm	h mm	b mm	△△ g
65 33 7 160	160	chrome plated	dip-coated insulation, DIN EN 60900, ⚡ AC/1000 V	50	15	8	3	2.5	147
65 33 8 160	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900, ⚡ AC/1000 V	50	15	8	3	2.5	160

## 6551 VDE waterpump wrench



- DIN ISO 8976 (No 207 c)
- with box joint and recess
- 7 positions
- anti-pinch mechanism
- chrome vanadium



Code	L mm	Jaw opening max. mm	Head	Handles	⚖ g
<b>6551 7 240</b>	250	33	chrome plated	dip-coated insulation, DIN EN 60900,  AC/1000 V	358

## 6600 VDE side cutters

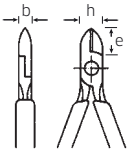
DIN ISO 5749, Form B, precision cutting edges for all wires incl. piano wire, high quality alloy steel, bevelled cutting edges induction hardened, approx. 63 HRC.



**6600 7 160**



**6600 8 160**



Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	⚖ g
<b>6600 7 145</b>	140	chrome plated	dip-coated insulation, DIN EN 60900,  AC/1000 V	19	20	8.2	3	2.5	1.8	1.6	155
<b>6600 7 160</b>	160			23.5	20	9	3	2.8	2	1.6	215
<b>6600 7 180</b>	180			25.5	25	9.5	3.8	3	2.5	2	270
<b>6600 8 145</b>	140	chrome plated	insulated, with plastic sleeves, DIN EN 60900,  AC/1000 V	19	20	8.2	3	2.5	1.8	1.6	149
<b>6600 8 160</b>	160			23.5	20	9	3	2.8	2	1.6	190
<b>6600 8 180</b>	180			25.5	25	9.5	3.8	3	2.5	2	249

- ① Cutting capacity in mm for soft wire  
③ Cutting capacity in mm for hard wire

- ② Cutting capacity in mm for medium hard wire  
④ Cutting capacity in mm for piano wire

## 6602 VDE heavy duty side cutters

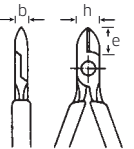
DIN ISO 5749, Form A, precision cutting edges for all wires incl. piano wire, high quality alloy steel, bevelled cutting edges induction hardened, approx. 63 HRC.



**6602 7 200**



**6602 8 200**



Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	⚖ g
<b>6602 7 160</b>	160	chrome plated	dip-coated insulation, DIN EN 60900,  AC/1000 V	25.5	25	9.5	4	3.4	2.5	2	220
<b>6602 7 200</b>	200			31	28	11.5	4	4	3	2.5	325
<b>6602 7 250</b>	250			32	29.5	12	4	4	3.5	3	475
<b>6602 8 160</b>	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900,  AC/1000 V	25.5	25	9.5	4	3.4	2.5	2	210
<b>6602 8 180</b>	180			27.5	26.5	10.5	4	3.8	2.7	2.2	250
<b>6602 8 200</b>	200			31	28	11.5	4	4	3	2.5	305

- ① Cutting capacity in mm for soft wire  
③ Cutting capacity in mm for hard wire

- ② Cutting capacity in mm for medium hard wire  
④ Cutting capacity in mm for piano wire

## 6622 VDE wire stripping pliers

with adjustment screw to cut insulation only on wire or cable, max. 5 mm  $\varnothing$  10 mm<sup>2</sup> conductor cross-section.



**6622 7 160**



**6622 8 160**

Code	L mm	Head	Handles	⚖ g
<b>6622 7 160</b>	160	chrome plated	dip-coated insulation, DIN EN 60900,  AC/1000 V	180
<b>6622 8 160</b>	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900,  AC/1000 V	168

# Pliers

## 6623 VDE wire stripping pliers

for wires from 0.5 to 5 mm Ø, self adjusting, cutter hole for cutting wire or stranded wires up to 5 mm Ø, special steel.



Code	L mm	Head	Handles	g
66 23 7 160	160	chrome plated	dip-coated insulation, DIN EN 60900,  AC/1000 V	214
66 23 8 160	160	chrome plated	insulated, with plastic sleeves, DIN EN 60900  AC/1000 V	184

## 6923 Replacement stripping knives (1 pair) for No 6623

Code	g
69 23 0 001	11

## 6630 VDE cable shear

for copper and light alloy cables. Easy, single handed operation. Special cutter geometry to avoid pressure marks and frayed ends, adjustable joint, anti-squeeze protection, not suitable for steel or armoured cables.



Code	L mm	Head	Handles	⑦	⑧	⑨	g
66 30 7 220	220	chrome plated	dip-coated insulation, DIN EN 60900,  AC/1000 V	16	35	70	380

⑦ cutting capacity in mm<sup>2</sup> for single wire Al-/Cu-Cable      ⑧ cutting capacity in mm<sup>2</sup> for multiple wire Al-/Cu-Cable  
 ⑨ cutting capacity in mm<sup>2</sup> for thin wire Al-/Cu-Cable

## TCS 6501-6600/3



175 x 350 x 40 mm, 3 pieces

Code	g
96 83 8 770	725

- No 65 01 7 180
- No 65 29 7 200
- No 66 00 7 160

## Tool Control System The safety inlay system

- Designed to fit our Tool Trolleys and Tool Boxes
- With yellow signal cut-outs to show whether all tools are in their places









# 8 | PIPE TOOLS, MISCELLANEOUS TOOLS

**PIPE TOOLS**  
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**HAMMERS**  
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**CHISELS, DRIFT PINS, CENTRE PUNCHES, PIN PUNCHES**  
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**SCRAPERS, FILES, HACKSAWS**  
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**THREAD TOOLS**  
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**SCREW EXTRACTOR, STUD REMOVER,  
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**MISCELLANEOUS TOOLS**  
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**TWEEZERS, WIRE CUTTER**  
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# Original STAHLWILLE pipe and tube tools

These extremely robust pipe cutters guarantee accurate cutting without the danger of the cut running off at an angle. Pipes can be directly passed on to the next processing stage.

### EXPRESS Pipe Cutter No 150

Ideal for pipes made of steel, copper, brass, light alloy and hard plastics. This tool is available in two sizes to cover outer diameters from 6 to 63 mm.

#### Essential product advantages when cutting pipes with STAHLWILLE pipe cutters:

##### Straight-line cutting

STAHLWILLE EXPRESS pipe cutters ensure a perfectly perpendicular cut. The broad support rolls ensure that the cutting wheels are accurately guided throughout the cut. In this way, the cut cannot run off at an angle on the pipe surface or enter the pipe at a tilted angle. The robust drop forged upper-jaw section with its reinforced cutter-wheel guides prevents spiral cuts.

##### Deburring and chamfering

The wide guide rolls flatten the burr created during the cutting process back into the material. Separate deburring is not required. The cut-to-length pipe is automatically chamfered and can be passed directly to the next processing step. The cut edge is angled in accordance with the cutting wheel geometry.

##### Universally applicable - Work on pipes in situ

STAHLWILLE EXPRESS pipe cutters can also be equipped with three cutting wheels. This enables extremely efficient work on pipes in situ involving only a small angle of movement.



1

Pin for wheels and rolls



2

Cutting wheels for steel, non-ferrous metal and plastic pipes



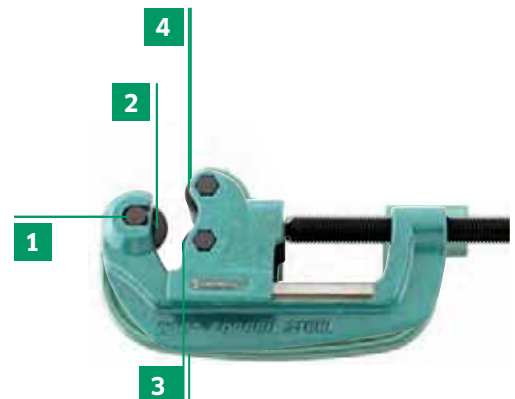
3

Guide rolls for pipe cutters



4

Additional rings for versions with three cutting wheels



### METAL Pipe Cutter No 153

This light-weight, extremely convenient tool is specially suitable for cutting tubes made of copper, brass, light alloy or hard plastics and for thin-walled steel tubes with outer diameters of from 3 to 35 mm and maximum cutting depths of 2.5 mm. The integrated internal three-bladed cutter in the handle removes burrs.



### Midget tube cutter No 155

For pipes and tubes made of copper, brass, light alloy, hard plastics and for thin-walled steel tubes with outer diameters of from 3 to 16 mm where the maximum cutting depth is 2.0 mm - we recommend this extremely compact and accurate tube cutter.



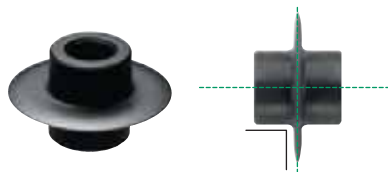
### Chain Pipe Cutter No 157

Special pipe cutter, infinitely variable, with rotating handle, also for cutting stainless steel pipes with wall thicknesses of up to 1.8 mm and outer diameters of from 25 to 75 mm. Chain lengths up to 270 mm.



### STAHLWILLE cutting wheels for steel pipes

Especially high-grade, wear-resistant steel enables extraordinarily high cutting force. The cutting wheels are made of very tough special steel which guarantees long service lifetimes.

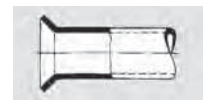


### STAHLWILLE Double Flaring Tools No 165N

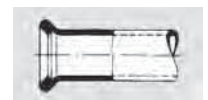
Double Flaring Tools are used for making permanent connections between pressurised pipes. DIN standard double flares in accordance with DIN 74234 can be made with this convenient easy-to-use and tough tool made by STAHLWILLE to create safe connections (e.g. in car brake leads) without the need for special skills. Simply clamp the tool in the vice - and it is ready for use. This tool guarantees rapid, safe processing of seamless drawn and double-walled rolled pipes (Bundy®) with wall thicknesses of 0.7 or 1.0 mm with a single flaring bit.



STAHLWILLE flaring tools - simple to use and guaranteed optimum results.



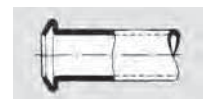
Single flaring cone D



Double flaring cone E



Double flaring cone F



Double flaring cone F 180°

## Pipe cutters, Miscellaneous tools

### 150 EXPRESS pipe cutters

with one cutting wheel and two guide rollers; for steel, copper, brass, aluminium and hard plastic tubes.



Code	size	⌀ "	⌀ mm	⌀ mm	Cutting depth max. mm	⚖ g	📦
<b>60021001</b>	<b>1<sup>1)</sup></b>	1/8-1 1/4	3-32	6-43	4.5	1220	1
<b>60021002</b>	<b>2<sup>1)</sup></b>	1/8-2	3-50	10-63	7	2149	1
<b>60121001</b>	<b>1/3<sup>2)</sup></b>	1/8-1 1/4	3-32	6-43	4.5	1113	1
<b>60121002</b>	<b>2/3<sup>2)</sup></b>	1/8-2	3-50	10-63	7	1975	1

<sup>1)</sup> with wide guide rollers

<sup>2)</sup> with three cutting wheels

### 153 METAL pipe cutter

for use on copper, brass, light alloy, PVC and thin walled steel tubes, with deburring tool (3 cutting edges) inside handle, forged, chrome plated.



Code	⌀ "	⌀ mm	Cutting depth max. mm	⚖ g	📦
<b>60010000</b>	1/8-1 3/8	3-35	2.5	356	1

### 155 Small bore pipe cutter

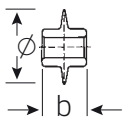
for use on copper, brass, light alloy, PVC and thin walled steel tubes.



Code	⌀ "	⌀ mm	Cutting depth max. mm	⚖ g	📦
<b>60070001</b>	1/8-5/8	3-16	2	102	1

### SR150 Cutting wheels

for steel pipes.



Code	size	for pipe cutter	⌀ mm	b mm	⚖ g	📦
<b>69020101</b>	<b>1</b>	150/1	25	14	14	10
<b>69020201</b>	<b>2</b>	150/2	32	19	28	10
<b>69020301</b>	<b>3/4</b>	150/3 + 4	41	19	38	10

### SR153 Cutting wheels



Code	for pipe cutter	⌀ mm	b mm	⚖ g	📦
<b>69010001</b>	153	20	6	6	10

### SR155 Cutting wheels

Code	for pipe cutter	⌀ mm	b mm	⚖ g	📦
<b>69110001</b>	155	20	5	5	10

### 157 Chain pipe cutter

infinitely adjustable, with twist handle, also suitable for special steel pipes up to 1.8 mm wall thickness, chain length 270 mm.



Code	⌀ mm	Cutting depth max. mm	⚖ g	📦
<b>60110001</b>	25-75	2	705	1

### K157 Chain

Code	⚖ g	📦
<b>69130001</b>	183	1

### RL 150/153/1500 Guide rollers

for pipe cutters.



Code	No	for pipe cutter	⌀ mm	b mm	⚖ g	📦
<b>69020107</b>	<b>RL 1500/1</b>	150/1	23	21.5	62	2
<b>69070202</b>	<b>RL 1500/2</b>	150-151/2	28	27.5	117	5
<b>69020302</b>	<b>RL 150/3/4</b>	150-151/3 + 4	33	19	115	5
<b>69010002</b>	<b>RL 153</b>	153	12	12	10	5

### BL/BZ 150/153/1500 Spindles

for wheels and guide rollers.



Code	No	wheelbolt	rollerbolt	for pipe cutter	L mm	⌀ mm	⚖ g	📦
<b>69020104</b>	<b>BL 150/1</b>	x <sup>1)</sup>		150/1	29	7.5	10	1
<b>69020103</b>	<b>BZ 1500/1</b>		x <sup>2)</sup>	150/1	38.5	7.5	14	10
<b>69070203</b>	<b>BZ 1500/2</b>		x	150-151/2	46	9	23	10
<b>69070204</b>	<b>BL 1500/2</b>	x		150-151/2	38	9	19	10
<b>69020303</b>	<b>BZ 150/3/4</b>	x	x	150-151/3 + 4	36	9	17	10
<b>69020304</b>	<b>BL 150/4N</b>	x <sup>3)</sup>		150/4	40	9	20	1
<b>69010003</b>	<b>BZ 153</b>		x	153	18.5	4	2	10
<b>69010004</b>	<b>BL 153</b>	x		153	13	4.75	2	1

BL = wheel bolt

BZ = roller bolt

<sup>1)</sup> wheel- and roller bolt for 150/1 until 1985, wheel bolt for 150/1 from 1986

<sup>2)</sup> roller bolt for 150/1 from 1986

<sup>3)</sup> wheel bolt for 150/4 from 2009

### RI 1500 Spacing washers

When required to fit pipe cutters No 150/1, 150/2 or No 150/4 with 3 cutting wheels (to work in confined spaces), a total of 4 spacing washers is required.

Simply exchange the 2 guide rollers for 2 cutting wheels No SR150 with 2 spacing washers to each.



Code	size	for pipe cutter	⌀ mm	b mm	⚖ g	📦
<b>68020101</b>	<b>1</b>	150/1	14	3.9	8	6
<b>68020201</b>	<b>2</b>	150/2, 151/2	16	4.45	4	6
<b>68020301</b>	<b>4</b>	150/4 <sup>*)</sup>	18	9.5	18	1

<sup>\*)</sup> For 150/4 from 2009



## 158\* Plastic pipe shears

for plastic pipes made of PE, PP, PB, PE-X, MLP/MSR, VPE, CPVC, PVC, PVDF and for dip-coated aluminium tubes.



- low force needed thanks to optimised force transmission
- high cutting force thanks to Teflon coated blade
- rapid blade changing without tools
- size 42 with ratchet function and single-handed rapid blade retraction
- Cutter body made of die-cast magnesium. Light but robust.

Code	∅ mm	∅"	L mm	g	g	g
<b>60 12 00 35</b>	<b>35</b>	1 3/8	225	276	1	1
<b>60 12 00 42</b>	<b>42</b>	1 5/8	245	441	1	1

\* to be discontinued

## KL158\* Spare blades



Code	for No	g	g
<b>69 12 00 35</b>	158-35	60	1
<b>69 12 00 42</b>	158-42	83	1

\* to be discontinued

## 1650N Clamping blocks

1 pair



Code	∅ mm	g	g
<b>68 03 10 01</b>	4.75; 5; 6; 8; 9; 10 mm; 3/16; 1/4; 5/16; 3/8"	198	1

## 1650K Clamping blocks

1 pair, for dip-coated brake leads.



Code	∅ mm	g	g
<b>68 03 00 03</b>	5; 6 mm	234	1

## 1651 Flaring cones



Code	size	∅ mm	g	g
<b>68 04 07 08</b>	<b>6+8 mm+1/4+5/16"</b>	8	56	1
<b>68 04 09 10</b>	<b>9+10 mm+3/8"</b>	10	56	1

## 1652N Thrust piece/flaring cone

45°; 4.75/5 mm+3/16", for Double flaring tool No 165N.



Code	∅ mm	g	g
<b>68 05 10 01</b>	4.75/5 mm + 3/16"	55	1

## 1655N Flaring spindle

for Double flaring tool No 165N.



Code	g	g
<b>69 10 10 02</b>	54	1

## 1656N Clamping screw

for Double flaring tool No 165N.



Code	g	g
<b>69 10 10 03</b>	102	1

**D**  
45° side of Clamping blocks to face spindle. Replace Flaring cone with Thrust piece.

**E**  
45° side of Clamping blocks to face spindle. Pre-form with Flaring cone, finish with Forming cone.

**F**  
45° side of Clamping blocks to face spindle. Form with Flaring cone.

**F180°**  
By using the 90° sides of Clamping block, Flare "F" receives a flat collar.

## Double flaring tool

This simple-to-use STAHLWILLE Double Flaring tool will form accurate flares (to DIN 74234) on seamless drawn- and double walled (BUNDY®) tubes.

Clamped in a vice, the tool is instantly ready for use. Flaring and Pressure Cones are quickly changed.

**The robust construction** of the tool, plus the shape of Flaring cones, enables single cone flaring on tubes of 0.7 or 1.0 mm wall thickness.

**Tubing is held horizontally by 25 mm wide Clamping blocks.** This is important when endless tubing is used. A distance pin controls length of tube required for flaring.

## 165N Double flaring tool

with  
1 pair of Clamping blocks No 1650N,  
2 Flaring cones No 1651 and  
1 Thrust piece/flaring cone No 1652N.

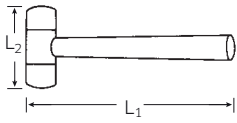


Code	∅ mm	g	g
<b>63 03 10 00</b>	4.75; 5; 6; 8; 9; 10 mm; 3/16; 1/4; 5/16; 3/8"	1420	1

## Pipe cutters, Miscellaneous tools

### 10940 Rubber composition hammers

DIN 5128, with two plane faces.



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
70 14 00 01	55	320	90	317	2
70 14 00 02	65	350	115	527	2
70 14 00 03	75	350	130	780	2
70 14 00 04	90	380	140	1193	2

### 10955 Plastic hammers

with interchangeable heads of impact resisting cellulose acetate and ash handles.



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
70 16 00 27	27	265	90	225	6
70 16 00 32	32	280	100	320	6
70 16 00 35	35	290	105	376	2
70 16 00 40	40	320	110	545	2
70 16 00 50	50	340	115	873	2

### 10955R Spare plastic heads

of impact resisting cellulose acetate, these are lightly heated and then tapped into position.

Code	∅ mm	⚖ g	📦
79 04 00 27	27	14	5
79 04 00 32	32	22	10
79 04 00 35	35	29	10
79 04 00 40	40	39	10
79 04 00 50	50	69	10

### 10956 Nylon hammers

with interchangeable heads of shockproof nylon vestamid and hickory handles.



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
70 17 10 27	27	265	90	232	6
70 17 10 32	32	280	100	336	6
70 17 10 35	35	290	105	413	2
70 17 10 40	40	320	110	546	2
70 17 10 50	50	340	115	898	2
70 17 10 60	60	380	135	1339	2

### 10956R Spare nylon heads

these are lightly heated and then tapped into position.

Code	∅ mm	⚖ g	📦
79 05 00 27	27	11	10
79 05 00 32	32	18	10
79 05 00 35	35	23	10
79 05 00 40	40	31	10
79 05 00 50	50	53	10
79 05 00 60	60	83	10

### 10957 Plastic hammers

the hollow head is partially filled with steel shot which adds to the weight, prevents recoil; with interchangeable heads made of medium-hard polyurethane and with a hickory handle.



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
70 19 00 25	25	320	108	320	6
70 19 00 30	30	350	115	460	6
70 19 00 35	35	355	118	580	6
70 19 00 40	40	375	125	760	2
70 19 00 50	50	385	135	1250	2
70 19 00 60	60	420	165	1900	2

### 10957R Spare plastic heads

Code	∅ mm	⚖ g	📦
79 09 00 25	25	14	10
79 09 00 30	30	19	10
79 09 00 35	35	26	10
79 09 00 40	40	38	10
79 09 00 50	50	72	10
79 09 00 60	60	118	10

### 10958 Embossing hammer

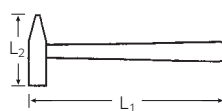
aluminium, cylindrical, with hickory handle.



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
70 24 00 40	40	340	155	648	2

### 10960 Engineers hammers

with ash handles, DIN 1041.



Code	g	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
70 11 00 05	100	260	82	148	6
70 11 00 01	200	280	95	254	6
70 11 00 04	300	300	105	400	6
70 11 00 02	500	320	118	600	6
70 11 00 06	800	350	130	951	2
70 11 00 03	1000	360	135	1132	2
70 11 00 07	1500	380	145	1617	2
70 11 00 08	2000	400	155	2285	2



## 10970 Engineers hammers

with ash handles.



Code	lb.	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
<b>70 12 0001</b>	<b>1/4</b>	270	67	176	6
<b>70 12 0005</b>	<b>1/2</b>	290	82	320	6
<b>70 12 0006</b>	<b>3/4</b>	310	93	454	6
<b>70 12 0002</b>	<b>1</b>	320	99	572	6
<b>70 12 0004</b>	<b>1 1/2</b>	350	118	790	2
<b>70 12 0003</b>	<b>2</b>	380	126	1044	2

## ES 10956/10960/2



175 x 350 x 45 mm, 2 pieces

Code	⚖ g
<b>96 83 81 25</b>	1130



**No 10956**

∅ 35 mm



**No 10960**

500 g

<b>83 81 20 25</b>	Empty tray	114
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## ES 10956/10970/2



175 x 350 x 45 mm, 2 pieces

Code	⚖ g
<b>96 83 81 31</b>	1075



**No 10956**

∅ 35 mm



**No 10970**

1 lb.

<b>83 81 20 25</b>	Empty tray	114
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## 100 Ribbed cold chisels

of tough tempered special steel,  
chrome plated.



Code	size	L mm	b mm	⚖ g	📦
<b>70 01 0005</b>	<b>5*</b>	125	18	93	10
<b>70 01 0006</b>	<b>6</b>	150	20	165	10
<b>70 01 0008</b>	<b>8</b>	200	26	305	5
<b>70 01 0010</b>	<b>10</b>	250	30	507	5
<b>70 01 0012</b>	<b>12</b>	300	35	807	5

\* to be discontinued

## 101\* Ribbed cross-cut chisel

of tough tempered special steel,  
chrome plated.



Code	size	L mm	b mm	⚖ g	📦
<b>70 03 0006</b>	<b>6</b>	150	4	143	10

\* to be discontinued

## 102 Cold chisels

DIN 6453,  
chrome vanadium steel,  
lacquered silver.



Code	size	L mm	b mm	⚖ g	📦
<b>70 02 0002</b>	<b>125</b>	125	15	96	10
<b>70 02 0003</b>	<b>150</b>	150	18	172	10
<b>70 02 0004</b>	<b>175</b>	175	21	269	10
<b>70 02 0005</b>	<b>200</b>	200	24	379	5
<b>70 02 0007</b>	<b>250</b>	250	25	479	5
<b>70 02 0008</b>	<b>300</b>	300	26	591	5

## 103 Cross-cut chisels

DIN 6451, flat,  
chrome vanadium steel,  
lacquered silver.



Code	size	L mm	b mm	⚖ g	📦
<b>70 04 0003</b>	<b>150</b>	150	16	147	10
<b>70 04 0004</b>	<b>175</b>	175	17	239	10
<b>70 04 0005</b>	<b>200</b>	200	18	340	5

## 110 Grooving chisel

flat,  
chrome vanadium steel,  
lacquered silver.



Code	L mm	b mm	⚖ g	📦
<b>70 08 0001</b>	240	26	298	5

## 112 Grooving chisel

as No 110,  
but with finger protector.



Code	L mm	b mm	⚖ g	📦
<b>70 08 0002</b>	240	26	434	5

## 112/1 Finger protector

for Cold Chisels No 102 and Cross-cut chisels No 103 from  
200 mm onward, for Grooving chisel No 110, shaft section 23 x 13 mm.

Code	⚖ g	📦
<b>79 16 0001</b>	101	5

# Pipe cutters, Miscellaneous tools

## 104 Drift pins

DIN 6458, octagonal, chrome vanadium, lacquered silver.



Code	size	● mm	● mm	L mm	⚖ g	📦
70060007	120 x 2	2	10	120	60	10
70060010	120 x 3	3	10	120	60	10
70060002	120 x 4	4	10	120	62	10
70060008	120 x 5	5	10	120	64	10
70060003	120 x 6	6	10	120	66	10
70060009	120 x 8	8	12	120	68	10

## 105 Centre punches

DIN 7250, octagonal, chrome vanadium, lacquered silver.



Code	size	● mm	L mm	⚖ g	📦
70050001	100 x 10	10	100	52	10
70050005	120 x 10	10	120	63	10
70050002	120 x 12	12	120	90	10

## 108 Parallel pin punches

DIN 6450, octagonal, chrome vanadium, lacquered silver.



Code	size	● mm	● mm	L mm	⚖ g	📦
70071152	115 x 2	2	8	115	29	10
70070013	125 x 3	3	8	125	35	10
70070001	150 x 2.5	2.5	10	150	65	10
70070002	150 x 3	3	10	150	62	10
70070003	150 x 4	4	10	150	64	10
70070004	150 x 5	5	10	150	67	10
70070005	150 x 6	6	10	150	72	10
70070006	150 x 8	8	10	150	81	10
70070009	175 x 3	3	10	175	57	10
70070010	175 x 4 <sup>1)</sup>	4	10	175	64	10
70070012	175 x 6	6	10	175	69	10
70070008	200 x 8	8	12	200	141	10
70070011	200 x 10	10	12	200	159	10

<sup>1)</sup> for use on Mercedes-Benz (retaining pins of disc brake pads)

- diameter of tip
- size of handle, octagon

## 109 Pin punches

with guide bush.



Code	size	● mm	● mm	L mm	⚖ g	📦
70090001	1	0.9	5	80	7	10
70090002	2	1.4	5.5	82	12	10
70090003	3	1.8	6	86	12	10
70090004	4	2.4	7	95	18	10
70090005	5	2.8	7	97	19	10
70090006	6	3.4	8	100	25	10
70090007	7	3.9	9	100	27	10
70090008	8*	5.9	10	103	47	10

- diameter of tip
- diameter of handle
- \* without guide bush

## ES 102/108/109/4



175 x 350 x 30 mm, 4 pieces

Code	⚖ g
96838123	555
No 102	175 mm
No 108	150 x 6; 175 x 6 mm
No 109	size 6; 100 x 3.4 mm
83812027	Empty tray 115

## ES 102/105/108/8



175 x 350 x 33 mm, 8 pieces

Code	⚖ g
96838124	900
No 102	175 mm
No 105	120 x 12 mm
No 108	150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
83812036	Empty tray 114

## 102-5/6 Sets: Chisels, pins, punches

6 pieces  
content: 1 each  
No 106/125 mm  
No 106/150 mm  
No 107/125 mm  
No 104/120 x 2; 120 x 4 mm  
No 105/120 x 10 mm  
D = in plastic stand  
T = in textile bag



Code	No	⚖ g	📦
98812201	102-5/6 D	445	1
98812202	102-5/6 T	426	5

## 104-5/6D Set: Drift pins, centre punches

6 pieces  
Content: 1 each  
No 104/120 x 2; 120 x 3; 120 x 4;  
120 x 5; 120 x 6 mm  
No 105/120 x 10 mm  
in plastic stand



Code	⚖ g	📦
96700601	417	1

### 105-8/6K Pin punch-/centre punch set

6 pieces  
in transparent plastic container  
stand.

Content: 1 each  
No 108/150 x 2.5; 150 x 3;  
150 x 4; 150 x 5; 150 x 6 mm;  
DIN 6450/ Form C  
No 105/120 x 10 mm;  
DIN 7250



Code	g	Box
<b>96 70 07 11</b>	483	1

### 108/6 Sets: Parallel pin punches

6 pieces  
Content: 1 each  
No 108/150 x 2.5; 150 x 3;  
150 x 4; 150 x 5; 150 x 6;  
150 x 8 mm  
D = in plastic stand  
T = in textile bag



Code	No	g	Box
<b>96 70 07 01</b>	<b>108/6 D</b>	450	1
<b>96 70 07 02</b>	<b>108/6 T</b>	424	5

### TCS 102-109/10956/10960/6



175 x 350 x 40 mm, 6 pieces

Code	g
<b>96 83 81 81</b>	1500

	<b>No 10956</b>	∅ 35 mm
	<b>No 10960</b>	500 g
	<b>No 102</b>	175 mm
	<b>No 108</b>	150 x 6; 175 x 6 mm
	<b>No 109</b>	size 6; 100 x 3.4 mm

### TCS 102-108/11



175 x 350 x 33 mm, 11 pieces

Code	g
<b>96 83 87 54</b>	1665

	<b>No 102</b>	150; 200; 250 mm
	<b>No 105</b>	120 x 10; 120 x 12 mm
	<b>No 108</b>	150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm

### TCS 102-108/10957/10960 MF



530 x 350 x 40 mm, 12 pieces

Code	g
<b>96 83 03 55</b>	3343

	<b>No 102</b>	200 mm
	<b>No 103</b>	150 mm
	<b>No 105</b>	120 x 10 mm
	<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
	<b>No 10957</b>	∅ 40 mm
	<b>No 10960</b>	500; 800 g
	<b>No 12718</b>	

### TCS 102-108/10957/12718/13



530 x 350 x 40 mm, 13 pieces

Code	g
<b>96 83 02 26</b>	3730

	<b>No 102</b>	200 mm
	<b>No 103</b>	150 mm
	<b>No 105</b>	120 x 10 mm
	<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8; 200 x 8 mm
	<b>No 10957</b>	∅ 40 mm
	<b>No 10960</b>	500; 800 g
	<b>No 12718</b>	

### TCS 102-108/10960/10



175 x 350 x 40 mm, 10 pieces

Code	g
<b>96 83 03 61</b>	1569

	<b>No 102</b>	200 mm
	<b>No 105</b>	120 x 12 mm
	<b>No 108</b>	115 x 2; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 175 x 4; 200 x 8 mm
	<b>No 10960</b>	500 g



## Pipe cutters, Miscellaneous tools

### TCS 102-108/10957/10960/13



530 x 350 x 60 mm, 13 pieces

Code		g
<b>96830177</b>		5540
<b>No 102</b>	200; 300 mm	
<b>No 103</b>	175 mm	
<b>No 105</b>	120 x 12 mm	
<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm	
<b>No 10957</b>	∅ 50 mm	
<b>No 10960</b>	500; 800; 1000 g	

### TCS 102-108/10957/10960/16



530 x 350 x 45 mm, 16 pieces

Code		g
<b>96830609</b>		3715
<b>No 102</b>	200 mm	
<b>No 103</b>	150 mm	
<b>No 105</b>	120 x 10 mm	
<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm	
<b>No 10957</b>	∅ 40 mm	
<b>No 10960</b>	500 g	
<b>No 12373</b>		
<b>No 12600</b>	500 g	
<b>No 12718</b>		
<b>No 12931</b>	3 m	
<b>No 65 64 2 250</b>		
<b>No 39 cars</b>	400 mm	

### TCS 102-108/10956/10960/18



530 x 350 x 55 mm, 18 pieces

Code		g
<b>96830620</b>		3653
<b>No 102</b>	150 mm	
<b>No 103</b>	150 mm	
<b>No 105</b>	120 x 10 mm	
<b>No 108</b>	150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm	
<b>No 10956</b>	∅ 50 mm	
<b>No 10960</b>	300; 500 g	
<b>No 10356</b>		
<b>No 10670</b>	285 mm	
<b>No 10672</b>	20 x 315 mm	
<b>No 12374</b>		
<b>No 12900N</b>		
<b>No 12965N</b>		

#### 10669 Fine scraper



- three-sided hollow-profile scraper with black plastic protective cap
- black plastic handle



Code	L mm	Blade mm	g	Box
<b>72060100</b>	147	25 x 8	28	1

#### 10670 Three square engineers scrapers

special steel.



Code	L mm	g	Box
<b>72060101</b>	<b>210</b>	106	5
<b>72060103</b>	<b>260</b>	124	5
<b>72060104</b>	<b>285</b>	140	5
<b>72060105</b>	<b>310</b>	152	5

#### 10672 Flat engineers scrapers

special steel.



Code	mm	g	Box
<b>72050104</b>	<b>20 x 315</b>	227	5
<b>72050105</b>	<b>25 x 365</b>	367	5

#### 10676 Three square engineers bearing scraper

special steel.



Code	mm	g	Box
<b>72080103</b>	85 x 12 x 315	160	5

Made in Germany

### 12025 Engineers file, round

DIN 8349, cut 2



Code	L mm	g	
<b>72 12 01 00</b>	210	118	5

### 12030 Engineers file, half round

DIN 8349, cut 2



Code	L mm	g	
<b>72 13 01 00</b>	260	317	5

### 12035 Engineers file, three-square

DIN 8349, cut 2



Code	L mm	g	
<b>72 14 01 00</b>	210	201	5

### 12036 Engineers file, hand

DIN 8349, cut 2



Code	L mm	g	
<b>72 17 01 02</b>	260	339	5

### 12800 Set warding files

6 pieces, in textile bag, DIN 7283,  
Content:  
1 file each, hand, flat, half round,  
three square, square, round.



Code	L mm	g	
<b>72 23 00 01</b>	100	111	5

### 13100 Set of needle files

6 pieces, in textile bag,  
Content:  
1 file each, round, half round,  
three square, square, hand, flat.



Code	L mm	g	
<b>96 72 28 01</b>	140	50	1

### 12200 Hand vice

forged C 35,  
width of jaws 48 mm.



Code	L mm	g	
<b>71 20 00 00</b>	145	673	1

### 12050 Tubular hacksaw

with blade size 300 mm/12".



Code	L mm	g	
<b>72 21 00 00</b>	465	490	1

### 12050R Spare hacksaw blades for No 12050

10 pieces, H.S. Steel, 24 teeth per inch.

Code	L mm	g	
<b>79 18 00 01</b>	300	174	1

### 12053 Hacksaw frame



Code	L mm	g	
<b>72 21 00 02</b>	252	159	1

### 12053R Spare hacksaw blades for No 12053

6 pieces, Chrome Alloy Tool Steel, 32 teeth per inch.

Code	L mm	g	
<b>79 18 00 02</b>	158	23	1

### ES 10670-13110/11



530 x 350 x 35 mm, 11 pieces

Code	g
<b>96 83 81 73</b>	2120

<b>No 10670</b>	265 mm
<b>No 12025</b>	210 mm
<b>No 12030</b>	260 mm
<b>No 12035</b>	210 mm
<b>No 12036</b>	260 mm
<b>No 12050</b>	465 mm
<b>No 12320</b>	
<b>No 12321</b>	
<b>No 12377</b>	
<b>No 12931</b>	3 m
<b>No 13110</b>	300 mm
<b>83 81 20 88</b> Empty tray	301





## Pipe cutters, Miscellaneous tools

### TCS 10356-12965/5



175 x 350 x 40 mm, 5 pieces

Code	△△ g
<b>96 83 87 90</b>	595









 <b>No 12053</b>	158 mm
 <b>No 10356</b>	40 mm
 <b>No 10356R</b>	10 pieces
 <b>No 12320</b>	
 <b>No 12965</b>	

### TCS 11095-13110/8



175 x 350 x 40 mm, 8 pieces

Code	△△ g
<b>96 83 87 89</b>	700












 <b>No 12000</b>	ISO
 <b>No 11095/20</b>	0.05 - 1.00 mm
 <b>No 12931</b>	3 m
 <b>No 12321</b>	
 <b>No 12322</b>	
 <b>No 12665/52</b>	0.25 - 6 mm
 <b>No 12900</b>	
 <b>No 13110</b>	300 mm

### TCS 12025-13110/11



530 x 350 x 35 mm, 11 pieces

Code	△△ g
<b>96 83 87 59</b>	2070

 <b>No 12025</b>	210 mm
 <b>No 12030</b>	260 mm
 <b>No 12035</b>	210 mm
 <b>No 12036</b>	260 mm
 <b>No 12050</b>	300 mm
 <b>No 12320</b>	
 <b>No 12321</b>	
 <b>No 12718</b>	
 <b>No 12931</b>	3 m
 <b>No 12965N</b>	
 <b>No 13110</b>	300 mm

### 905/25 Stud remover set

M 5-M 16, 3/16"-5/8", 25 pieces, in green plastic box.

Content:


- 5 HSS twist drills sizes (3.2; 4.8; 6.4; 8; 8.7 mm)
- 5 Fluted Removal Pins sizes 1-5 for threads M5-M16
- 5 Splined Nuts, sizes 1-5
- 10 Drill Guides, sizes 1-10



Code	△△ g	
<b>96 71 30 25</b>	555	1

### 906 Spare parts

Removal pins and splined nuts, in pairs in plastic bags.

Code	size	for threads	△△ g	
<b>71 31 00 01</b>	<b>1</b>	M5-M6 3/16-1/4"	14	1
<b>71 31 00 02</b>	<b>2</b>	M7-M8 1/4-5/16"	20	1
<b>71 31 00 03</b>	<b>3</b>	M10 3/8"	33	1
<b>71 31 00 04</b>	<b>4</b>	M12 7/16"	46	1
<b>71 31 00 05</b>	<b>5</b>	M14-M16 1/2-9/16"	64	1

8

## Tool Control System

### The safety inlay system

- Designed to fit our Tool Trolleys and Tool Boxes
- With yellow signal cut-outs to show whether all tools are in their places



## 12000 Universal thread restorers

suitable for inside and outside threads.



Code	size	L mm	$\Delta\Delta$ g	
<b>72 10 0004</b>	<b>ISO</b>	230	119	10
<b>72 10 0003</b>	<b>SAE</b>	230	118	10
<b>72 10 0002</b>	<b>WW</b>	230	122	10

---- ISO ----		---- Ww ----		SAE/USS
Pitch mm	metr. thread	threads per inch	Whitworth thread	threads per inch
0.80	5	24	3/16 + 7/32	24
1.00	6 + 7	20	1/4	20
1.25	8 + 9	18	5/16	18
1.50	10 + 11	16	3/8	16
1.75	12	14	7/16	14
2.00	14 + 16	12	1/2 + 9/16	13
2.50	18, 20, 22	11	5/8 + 11/16	12
3.00	24 + 27	10	3/4 + 13/16	11

## 12665 Screw pitch gauge

0.25 to 6 mm and 4 to 62 t.p.i.  
(metric/Whitworth threads).



Code	size	$\Delta\Delta$ g	
<b>77 27 0003</b>	<b>52</b>	79	10

## 900/6T Screw EXTRACTOR set

in textile bag.



Code	Content	$\Delta\Delta$ g	
<b>96 71 01 01</b>	1 each No 900 size 1-6	190	5

## 900 Screw EXTRACTOR



Code	size	for bolts	■ mm	■ "	L mm	recomm. Drill	$\Delta\Delta$ g	
<b>71 01 0001</b>	<b>1</b>	M3-M4 1/8-5/32"	3	1/8	49	2 mm 5/64"	3	10
<b>71 01 0002</b>	<b>2</b>	M5-M7 3/16-1/4"	3.4	9/64	54	3 mm 7/64"	6	10
<b>71 01 0003</b>	<b>3</b>	M8 5/16"	4.9	3/16	59	5 mm 3/16"	12	10
<b>71 01 0004</b>	<b>4</b>	M10-M12 3/8-7/16"	7	9/32	65	6.4 mm 1/4"	25	5
<b>71 01 0005</b>	<b>5</b>	M14-M16 1/2-9/16"	9	23/64	88	8 mm 5/16"	50	5
<b>71 01 0006</b>	<b>6</b>	M18-M22 5/8-3/4"	12	31/64	95	12 mm 15/32"	103	5

## 904 Stud remover

- Suitable for all sizes of studs from 6-12 mm.
- Also suitable for percussion screwdriver use.
- Will cope with rusted or scale-coated screws with a minimum of 3 mm protruding.  
Chuck: size 36 mm  
Clamping screw: size 24 mm



Code	$\Delta\Delta$ g	
<b>71 34 00 00</b>	346	1

## 12615 Nut splitters

zinc plated, mechanical, for splitting seized or overtightened nuts up to class 8.

Does not damage the threaded pin. As the spindle is tightened, the nutsplitter body has to be locked with an open-jaw spanner to prevent it turning. Cutting chisel made of high-grade alloy tool steel.



Code	size	for nuts mm	Max. torque in N·m	$\Delta\Delta$ g	
<b>71 25 00 11</b>	<b>1</b>	10-18	40	193	1
<b>71 25 00 12</b>	<b>2</b>	19-27	60	386	1

## 12900N Vernier calliper

as per DIN 862,  
vernier readings 1/20 mm and 1/128", stainless steel,  
in plastic pouch.



Code	measuring range mm/"	$\Delta\Delta$ g	
<b>77 37 10 01</b>	150/6	185	1

## 12900/1N Vernier calliper

- with metal housing cover and metal buttons
- with data output (mini USB)
- mechanical system made of stainless, hardened steel
- with or without thumb wheel  
(included in delivery for customer to fit if required)
- large LCD display with clear read-offs, figures 9 mm high
- display accuracy 0.01 mm/ 0.0005"
- measuring tips ground fine and lapped
- ON/OFF button
- with depth gauge
- unit of measure in mm or imperial, zeroing possible at any position
- incl. 2 x 3 V batteries (type CR 2032)
- in plastic case



Code	measuring range mm/"	$\Delta\Delta$ g	
<b>77 37 10 02</b>	150/6	312	1

## 12900/2N Brake disc gauge

DIN 862, for measuring the thickness of car and motorcycle brake discs in situ, stainless steel, with locking screw and trailing vernier scale (1/10 mm), in plastic pouch.



Code	measuring range mm	throat depth mm	$\Delta\Delta$ g	
<b>77 37 10 03</b>	60	55	233	1

## Pipe cutters, Miscellaneous tools

### 12900/3 Tyre tread Vernier calliper



- sturdy brass construction
- smooth ground surface



Code	measuring range mm	△△ g	☐
<b>77 37 1004</b>	30	41	1

### 12900/4 Electronic tyre tread Vernier calliper



- large LCD display with clear read-offs, figures 9.5 mm high
- display accuracy 0.01 mm/0.0005"
- ON/OFF push button
- unit of measure switchable mm/inch
- zeroing possible in any position
- incl. 1 x 3 V battery (type CR2032)



Code	measuring range mm/"	△△ g	☐
<b>77 37 1005</b>	25/1	64	1

### 12931 Tape measure

with tape lock. Metric-Inch scales.



Code	L m	△△ g	☐
<b>77 04 0004</b>	3	104	10

### 13110 Steel rule

Metric-Inch scales, length 300 mm.



Code	Divisions Top Edge "	Divisions Lower Edge mm	△△ g	☐
<b>77 46 0001</b>	1/16, 1/32, 1/64	0.5; 1	26	5

### 12915 Ratchet tap holders

steel, chrome plated.



Code	size	Capacity mm	DIN <sup>1)</sup>	ISO <sup>2)</sup>	L mm	△△ g	☐
<b>77 39 0001</b>	<b>1</b>	2.0-5.0	M3-8	M1-6	85	180	1
<b>77 39 0002</b>	<b>2</b>	4.6-8	M5-12	M6-12	110	305	1

<sup>1)</sup> for taps DIN

<sup>2)</sup> for taps ISO

### 12932 Padlock



Code	△△ g	☐
<b>77 21 0002</b>	85	1

### 12250 Force feed oil can

metal container, brass pump.  
Content:  
500 ccm



Code	△△ g	☐
<b>77 01 0001</b>	270	1

### 12251 Plastic oil can

Content:  
250 ccm



Code	△△ g	☐
<b>77 11 0002</b>	80	5

### 12320 Electricians cable knife

with stainless blade.



Code	Blade mm	△△ g	☐
<b>77 02 00 00</b>	90	81	10

### 12321 Scribing iron

with knurled centre-section.  
1 straight and 1 offset blade;  
blades gunmetal finished.



Code	L mm	△△ g	☐
<b>77 10 00 00</b>	250	31	10



### 12322 Tungsten carbide scribing iron

straight type; sturdy shank with tungsten carbide tip. Can be reground. Holder and clip.



Code	L mm	⚖ g	📦
<b>77 10 0001</b>	150	40	10

### 12374 Wire brush

wood, steel wire dia. 0.35 mm.



Code	L mm	Rows	⚖ g	📦
<b>77 09 0000</b>	290	4	129	10

### 12377 Wire brush

with brass coated steel bristles.



Code	L mm	⚖ g	📦
<b>77 09 00 10</b>	270	140	24

### 12378 File brush



Code	L mm	⚖ g	📦
<b>77 25 0000</b>	260	74	5

### 13115 Brass wire brush

for use on light alloys.



Code	L mm	Rows	⚖ g	📦
<b>77 47 0001</b>	280	4	134	1

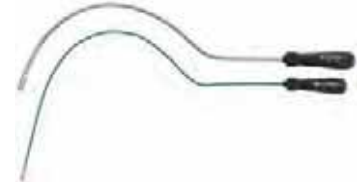
### 12481 Scraper



Code	L mm	b mm	⚖ g	📦
<b>77 07 0000</b>	212	60	65	10

### 12600 Magnetic lifters

Loss of adhesion above 80°C.



Code	lifting power g	∅ mm	L mm	⚖ g	📦
<b>77 26 00 27</b>	<b>270</b> <sup>1)</sup>	5	500	30	1
<b>77 26 00 25</b>	<b>500</b>	8	460	70	1
<b>77 26 00 60</b>	<b>1800</b>	15	525	232	1
<b>77 26 02 00</b>	<b>3000</b>	19	535	297	1

<sup>1)</sup> Miniature magnetic lifter with tiny head, very powerful

### 12910 Adjustable hook spanners

for slotted nuts as per DIN 1810, adjustable.



Code	size	∅ mm	⚖ g	📦
<b>44 01 00 01</b>	<b>1</b>	20-42	90	5
<b>44 01 00 02</b>	<b>2</b>	45-90	245	5
<b>44 01 00 03</b>	<b>3</b>	95-165	686	5

### 12921M Telescopic stainless steel mirror

- Unbreakable mirrors made of stainless steel (FOD)
- No bolted joints (FOD)
- Rust-proof stainless steel telescopic arm
- Universal joint (180° action), self-tensioning
- Special plastic handle ensures a firm grip and safe working, resistant to chemicals



Code	size	mm	L mm	⚖ g	📦
<b>77 40 10 32</b>	<b>1 3/4"/32 mm</b>	∅ 32	171-699	56	1
<b>77 40 10 45</b>	<b>1 3/4" x 2 3/4"/45 x 70 mm</b>	□ 45 x 70	178-927	76	1
<b>77 40 10 57</b>	<b>2 1/4"/57 mm</b>	∅ 57	178-921	70	1
<b>77 40 25 50</b>	<b>1" x 2"/ 25 x 50 mm</b>	○ 25 x 50	178-914	59	1

### 12921MR Replacement mirror for No 12921M

Code	size	mm	⚖ g	📦
<b>79 40 10 32</b>	<b>32</b>	∅ 32	10	5
<b>79 40 10 45</b>	<b>45</b>	□ 45 x 70	30	5
<b>79 40 10 57</b>	<b>57</b>	∅ 57	24	5
<b>79 40 25 50</b>	<b>50</b>	○ 25 x 50	13	5

### 12920N Telescopic mirror



with non-twisting, oval-section telescopic rod.



Code	mm	L mm	⚖ g	📦
<b>77 40 10 01</b>	65 x 43	310-750	65	1

## Pipe cutters, Miscellaneous tools

### 12920NR-1 Replacement mirror for No 12920N



Code	 g	
<b>79 40 1001</b>	39	1

### 12920NR-2 Stainless steel replacement mirror for No 12920N



Code	 g	
<b>79 40 1002</b>	43	1

### 12921N Telescopic mirrors



Code	∅ mm	L mm	 g	
<b>77 40 10 30</b>	<b>30</b>	265-705	108	1
<b>77 40 10 40</b>	<b>40</b>	275-715	115	1
<b>77 40 10 50</b>	<b>50</b>	285-725	110	1
<b>77 40 10 60</b>	<b>60</b>	295-735	130	1

### 12921NR Replacement mirror for 12921N



Code	∅ mm	 g	
<b>79 40 10 30</b>	<b>30</b>	10	1
<b>79 40 10 40</b>	<b>40</b>	15	1
<b>79 40 10 50</b>	<b>50</b>	20	1
<b>79 40 10 60</b>	<b>60</b>	27	1

### 13120-1 Telescopic mirror

with light unit (LED) and batteries, for inspecting numerous kinds of joints.

The concave mirror provides 5-times magnification. With non-twisting, oval-section telescopic rod.





Code	∅ mm	L mm	 g	
<b>77 48 02 02</b>	55	310-750	127	1

### 13120N Telescopic mirror


Illuminated (LED) and with batteries (approx. 150 hours of light), for inspecting numerous kinds of joints. The LED light source can be detached and used as a separate penlight.

The concave mirror provides 5-times magnification. With non-twisting, oval-section telescopic rod.



Code	∅ mm	L mm	 g	
<b>77 48 00 02</b>	55	310-750	235	1



### 13120R Replacement concave mirror for No 13120N, No 13120-1

Code	 g	
<b>79 40 10 55</b>	22	1

### 12922E Claw lifter

with ergonomic handle.



Code	∅ mm	L mm	 g	
<b>77 40 11 03</b>	<b>6</b>	540	113	1
<b>77 40 72 03</b>	<b>8</b>	540	148	1

### 12941N Soldering gun

230 V, 50-60 Hz, 100 W.



Code	 g	
<b>96 77 42 00</b>	839	1



### 12941R/4 Replacement tip for soldering gun No 12941N

Code	 g	
<b>79 14 00 06</b>	9	1

### 12943N Soldering iron

230 V, 50-60 Hz.



Code	W	 g	
<b>77 42 00 30</b>	<b>30</b>	224	1
<b>77 42 00 60</b>	<b>60</b>	276	1


### 12943R Replacement tips for No 12943N

Code	size	 g	
<b>79 14 00 30</b>	<b>30</b>	7	1
<b>79 14 00 60</b>	<b>60</b>	31	1

### 12965N Safety knife

- Blade adjustable by means of slider
- Spare blades can be stored inside the handle
- Blade changes without tools
- With hanging hole
- Ideally suited for cutting card, rubber, leather, wood etc.
- Tool body made of cast zinc.



Code	L mm	 g	
<b>77 62 10 01</b>	174	200	1

### 12965-1 Self-retracting cutter

- With automatic blade retraction
- Spare blades can be stored inside the handle
- Blade changes without tools
- With hanging hole
- Ideally suited for cutting card, rubber, leather, wood etc.
- Tool body made of cast zinc.



Code	L mm	 g	
<b>77 62 1002</b>	174	197	1

### 12965R Spare blades

5 pieces, for No 12965N, 12965-1.



Code	 g	
<b>79 25 0001</b>	25	20

### 12965-2 Snap-off blade cutter 9 mm

- With three 9 mm snap-off blades (one blade fitted, two in the magazine)
- Slider with blade-locking function
- Includes blade snap-off tool and protective cap
- With stainless steel blade guide
- Ideally suited for cutting card, rubber, leather, wood etc.
- Tool body made of cast zinc.



Code	L mm	 g	
<b>77 62 1003</b>	145	60	1

### 12965-2R Spare blades 9 mm

10 pieces, für No 12965-2.



Code	 g	
<b>79 25 1003</b>	26	1

### 12965-3 Snap-off blade cutter 18 mm

- With three 18 mm snap-off blades (one blade fitted, two in the magazine)
- Slider with blade-locking function
- Automatic blade reloading
- Ergonomic design with synthetic caoutchouc inlay
- With stainless steel blade guide and hanging hole
- Ideally suited for cutting card, rubber, leather, wood etc.
- Tool body made of cast zinc.



Code	L mm	 g	
<b>77 62 1004</b>	168	249	1

### 12965-3R Spare blades 18 mm

10 pieces, for No 12965-3.



Code	 g	
<b>79 25 1004</b>	75	1

### 12966 Wire stripping knife with hooked blade



for cutting round the outer cable insulation and longitudinal cuts.

- accurate, fast and safe stripping of all popular round cables from 4-28 mm Ø.
- no damage to the inner conductors thanks to infinitely variable adjustment of the cutting depth.



Code	 g	
<b>77 62 0003</b>	80	1

### 12966R Spare blade for No 12966



Code	 g	
<b>79 25 0003</b>	2	1

### 13126-1 LED torch



- Ex-rated for zone 1
- Certifications: SEV 08 ATEX 0164, II 2G Ex e ib IIC T4, II 2D Ex e ibD 21 T98°C.
- Powerful, extremely durable 2 watt LEDs
- Robust, electrically non-conducting, corrosion-proof housing made of ABS/polycarbonate
- High impact resistance and reduced glare thanks to rubber sheathed bezel
- Consistently bright beam throughout 80% of the lifetime of the alkaline batteries due to eLED circuitry
- Zoom with a twist of the bezel
- Rubberised front pushbutton for continuous or momentary action
- Waterproof to IP 68 down to 3 m depth of water
- Hydrogen scrubber catalyst, polarised battery contacts and 0-psi vent minimize explosive risk from leaking batteries
- Battery compartment designed to facilitate rapid battery change
- Brightness: 77 lumen
- Range: 100 m
- Burn time: 5 hrs.
- Batteries: 4 AA/LR06, alkaline, 1.5 V (not supplied).



Code	dimensions	 g	
<b>77 49 00 11</b>	170 x 40 x 35 mm	79	1

## Pipe cutters, Miscellaneous tools

### 13126-2 LED penlight



- Ex-rated for zone 1
- Certifications: II 2G Ex e ib IIB T4 Gb, II 2D Ex ib IIIC T60°C IP6X Db.
- Three times brighter than conventional pen torches thanks to powerful LEDs
- Robust, electrically non-conducting, corrosion-proof housing made of ABS/polycarbonate
- High impact resistance and reduced glare thanks to rubber sheathed bezel
- Consistently bright beam throughout 80% of the lifetime of the alkaline batteries due to eLED circuitry
- Rubberised rear pushbutton for continuous or momentary action
- Easy storage due to integrated clip holder close to bezel
- Waterproof to IP 68 down to 3 m depth of water
- Brightness: 35 lumen
- Range: 64 m
- Burn time: 3 hrs.
- Batteries: 2 AAA/LR03, alkaline, 1.5 V (not supplied).



Code	dimensions	g	⊞
77 49 00 12	132 x 24 x 22 mm	32	1

### 13126-3 LED headlamp



- Ex-rated for zone 1
- Certifications: SEV 08 ATEX 0163X, II 2G Ex ib IIC T4, II 2D Ex ibD 21 T55°C.
- Waterproof construction for use in all weather conditions
- Three beam modes - white spot, white diffused and red diffused
- High and low power settings
- Large-format ON/OFF button can be easily operated even when wearing heavy gloves
- LED torch module can be removed from housing and used as stand-alone portable working torch
- Beam adjustable using twist knob - no breakable hinges
- With adjustable, elasticated textile strap
- Durable, high-impact construction made of ABS/polycarbonate
- Waterproof to IP 68 down to 10 m depth of water
- Brightness: 65 lumen
- Range: 60 m
- Burn time: 13 hrs.
- Batteries: 3 AAA/LR03, alkaline, 1.5 V (not supplied).



Code	dimensions	g	⊞
77 49 00 13	76 x 38 x 45 mm	81	1

### 13128 LED torch

- High-end power LED.
- Fast adjustment of light beam thanks to single-handed zoom action.
- Switch with textured profile for 2-stage steady light or flash-light function.
- Designed to facilitate rapid battery change.
- Convenient belt-mounted holder with Velcro fastener.
- Brightness: 320 lumen.
- Range: 260 m.
- Burn time: 50 hrs.
- Batteries: 4 batteries, AAA/LR03, 1.5 V.



Code	dimensions	g	⊞
77 49 00 04	130 x 37 x 37 mm	250	1

### 13130 Tweezers

straight, blunt, finely milled inside, stainless steel.



Code	L mm	g	⊞
77 50 00 01	160	26	5

### 13131 Tweezers

bent, blunt, finely milled inside, stainless steel.



Code	L mm	g	⊞
77 51 00 01	155	21	5

### 13135\* Wire cutter

with smooth cutting edges, nickel-plated, plastic covered handles.



Code	L mm	g	⊞
75 27 00 01	145	93	1

\* to be discontinued

### 13148 Wire cutter

- for cutting cables, brass, copper, aluminium
- strain-free working thanks to comfy-fit 2-component handle with finger rest
- cutting edges made of stainless steel (INOX HRC 56)
- one wavy/saw edge



Code	L mm	g	⊞
75 27 00 02	150	93	1









## 9 | PULLERS

**STANDARD** PULLERS, PULLERS  
→ PAGE 310

**COUNTER** STAYS, SLIDE HAMMERS, SEPARATING FIXTURES  
→ PAGE 312

**BALL JOINT** SEPARATORS  
→ PAGE 313





# STAHLWILLE Pullers

1

Designed with practical applications in mind, drop forged, precision machined on the latest machine tools, hardened and tempered. STAHLWILLE pullers are conscientiously assembled and tested under load. They are ideal tools for removing gearwheels, ball bearings and pulleys from shafts, axles etc.

2

**Product benefits at a glance**

- high flexural strength thanks to struts with accurately calculated profiles and milled, smooth guides.
- highly load-bearing extractor hooks made of oil-hardened chrome vanadium steel with milled-profile jaws and specially-designed grip geometry for use in confined spaces and optimised radii for shafts and axles.
- smooth running and high force transmission through the nut with its hard-wearing, smooth thread contours.
- high extraction force with ease is made possible even where there is high friction and counterforces due to the CNC milled precision thread.
- damage to the thread of the nut is effectively prevented, even if the full length of the thread is used, due to the clearance at the end of the thread.
- excellent running characteristics of the thread itself thanks to high-grade hardening and tempering and the special coatings on the thrust spindles.
- to enable stubborn parts to be loosened, it may be necessary to tap the puller with a hammer after it has been tensioned. For this reason, the spindle head is equipped with a rounded impact head.
- close-tolerance, performance-matched jaw sizes on the spindle head ensure non-slip contact with the drive tool.
- to prevent damage to the shafts while extraction force is applied, the centre is freely-swivelling.

3

**Numerous pullers are available for different applications:**

Standard pullers, battery terminal pullers, ball joint separators, internal pullers, counter stays, separating fixtures, wheel hub pullers.

4

After attaching and locking the puller No 11060/11061 **1** , the central threaded spindle **2** is turned to ease the bearing off its mount without causing damage.





Battery terminal puller in use on a car battery



How a two-armed puller works



Separating fixture in use for removing ball bearings



Puller in use for removing gearwheels



**Standard pullers**  
Two- or three-armed puller? A three-armed puller is generally preferable to a two-armed one provided there is sufficient space because it distributes the pulling forces more evenly.

# Pullers

## 11050 Standard pullers

**two-armed**, with sliding permanently parallel extractor hooks, zinc plated; for extracting gearwheels, ball bearings, pulleys and similar parts from shafts or axles; for removing ball bearings, bearing outer races and bushes from holes; hooks can be used as internal or external hooks.



Code	size	Clamp. width mm	Clamp. depth mm	Max. loading in t	Max. torque in N·m	△△ g	
<b>71 1300 11</b>	<b>1</b>	25-80	100	4.5	80	999	1
<b>71 1300 12</b>	<b>2</b>	25-130	100	4.5	80	1103	1
<b>71 1300 13</b>	<b>3</b>	50-160	150	6.5	150	2754	1
<b>71 1300 14</b>	<b>4</b>	60-200	150	6.5	150	3085	1
<b>71 1300 15</b>	<b>5</b>	80-250	200	11.0	320	7000	1
<b>71 1300 16</b>	<b>6</b>	80-350	200	11.0	320	8400	1

## H 11050 Arms for pullers No 11050/11051

1 piece

Code	size	for puller No	△△ g	
<b>79 1300 11</b>	<b>1</b>	11050-1, -2 11051-1, -2	238	1
<b>79 1300 12</b>	<b>3</b>	11050-3, -4 11051-3, -4	602	1
<b>79 1300 13</b>	<b>5</b>	11050-5, -6	1596	1



## 11053 Standard pullers

**two-armed**, with swivelling extractor hooks for larger reaches, zinc plated; for extracting gearwheels, ball bearings, pulleys and similar parts from shafts or axles; hooks can be used as internal or external hooks; for internal extraction, simply turn the hooks and spindle round; the large leverage effect ensures a firm grip on the part to be extracted, whether internal or external.



Code	size	Clamp. width mm	Clamp. depth mm	Max. loading in t	Max. torque in N·m	△△ g	
<b>71 1502 11</b>	<b>1</b>	50-300	270	6.0	120	4330	1
<b>71 1502 12</b>	<b>2</b>	50-400	400	6.0	120	6000	1

## 11051 Standard pullers

**three-armed**, with sliding permanently parallel extractor hooks, zinc plated; for extracting gearwheels, ball bearings, pulleys, fan wheels and similar parts from shafts or axles; for removing ball bearings, bearing outer races and bushes from holes; hooks can be used as internal or external hooks.



Code	size	Clamp. width mm	Clamp. depth mm	Max. loading in t	Max. torque in N·m	△△ g	
<b>71 0800 11</b>	<b>1</b>	25-80	100	5.5	55	1280	1
<b>71 0800 12</b>	<b>2</b>	25-120	100	5.5	55	1422	1
<b>71 0800 13</b>	<b>3</b>	25-160	150	7.0	70	3507	1
<b>71 0800 14</b>	<b>4</b>	25-200	150	7.0	70	3690	1

## 11054 Pullers

**three-armed**, with swivelling extractor hooks for larger reaches, zinc plated; for extracting gearwheels, ball bearings, pulleys and similar parts from shafts or axles; hooks can be used as internal or external hooks; for internal extraction, simply turn the hooks and spindle round; the efficient leverage effect forces the hooks firmly onto the part to be extracted.



Code	size	Clamp. width mm	Clamp. depth mm	Max. loading in t	Max. torque in N·m	△△ g	
<b>71 1503 11</b>	<b>1</b>	50-300	270	12.0	220	4990	1
<b>71 1503 12</b>	<b>2</b>	50-400	400	12.0	220	8000	1

## 11056 Set: Pullers

consisting of the most common two- and three-armed pullers with two- and three-armed, sliding, parallel extractor hooks. for extracting gearwheels, ball bearings, pulleys and similar parts from shafts or axles; hooks can be used as internal or external hooks; the efficient leverage effect forces the hooks firmly onto the part to be extracted.



Code	Clamp. width mm	Clamp. depth mm	△△ g	
<b>96 71 13 11</b>	120	100/200/250	7000	1



## 12150 Pullers

**two-armed** version with swivelling, double-action extractor hooks, zinc plated; for extracting gearwheels, ball bearings, pulleys and similar parts from shafts or axles; for removing ball bearings, bearing outer races and bushes from holes; for internal extraction, simply swivel the hooks and turn the spindle round or just turn the hooks round.



Code	size	Clamp. width mm	Clamp. depth mm	Max. loading in t	Max. torque in N-m	$\Delta$ g	
<b>71 1402 11</b>	<b>1</b>	20-150	80	3.5	50	708	1
<b>71 1402 12</b>	<b>2</b>	40-220	130	4.0	60	1675	1

## 12152 Three arm pullers

**three-armed** version with swivelling, double-action extractor hooks, zinc plated; for extracting gearwheels, ball bearings, pulleys and similar parts from shafts or axles; for removing ball bearings, bearing outer races and bushes from holes; for internal extraction, simply swivel the hooks and turn the spindle round or just turn the hooks round.



Code	size	Clamp. width mm	Clamp. depth mm	Max. loading in t	Max. torque in N-m	$\Delta$ g	
<b>71 1403 11</b>	<b>1</b>	20-150	80	4.0	60	920	1
<b>71 1403 12</b>	<b>2</b>	40-200	130	4.5	70	2235	1

## 11055 Two arm pullers

**two-armed**, with swivelling extractor hooks and lateral clamp clip, zinc plated; when the clamp clip is tightened, the claws of the extractor hooks locate under the part to be extracted and lever it free as force is applied before extraction begins; for extracting gearwheels, ball bearings, pulleys, drop arms and similar parts from shafts or axles; the clamp clip presses the extractor hooks firmly against the part being extracted.



Code	size	Clamp. width mm	Clamp. depth mm	Max. loading in t	Max. torque in N-m	$\Delta$ g	
<b>71 1900 11</b>	<b>1</b>	20-70	85	5.0	120	1211	1
<b>71 1900 12</b>	<b>2</b>	20-100	100	6.0	120	1643	1
<b>71 1900 13</b>	<b>3</b>	30-150	150	8.0	150	2907	1

## 11040 Battery terminal pullers

**two-armed**, with a self-centring quick-action clamp and automatic feed, zinc plated; for extracting battery terminal clamps, smaller ball bearings, pulleys etc.; as force is applied through the spindle, the extractor hooks automatically apply increasing force to the part being extracted; particularly suited to car electrics, compressed air system repairs and similar applications due to the compact design and small hooks.



Code	size	Clamp. width mm	Clamp. depth mm	Max. loading in t	Max. torque in N-m	$\Delta$ g	
<b>71 1200 11</b>	<b>1</b>	10-60	45	2.5	25	245	1
<b>71 1200 12</b>	<b>2</b>	10-70	65	3.0	35	261	1
<b>71 1200 13</b>	<b>3</b>	10-100	80	3.5	45	315	1

## 11042 Battery terminal pullers

**three-armed**, with a self-centring quick-action clamp and automatic feed, zinc plated; for extracting battery terminal clamps, smaller ball bearings, pulleys etc.; as force is applied through the spindle, the extractor hooks automatically apply increasing force to the part being extracted; particularly suited to car electrics, compressed air system repairs and similar applications due to the compact design and small hooks.



Code	size	Clamp. width mm	Clamp. depth mm	Max. loading in t	Max. torque in N-m	$\Delta$ g	
<b>71 1800 11</b>	<b>1</b>	10-60	45	2.5	25	299	1
<b>71 1800 12</b>	<b>2</b>	10-70	65	3.0	35	340	1
<b>71 1800 13</b>	<b>3</b>	10-100	80	3.5	45	692	1

## 11060 Internal pullers

for extracting ball bearings, bearing outer races and bushes, zinc plated; to be used with Counter stay No 11061 and Slide hammer No 11062; even bearings which are tight up against the walls are securely gripped due to the excellent clamping effect.



Code	size	Clamp. width mm	Max. torque in N-m	$\Delta$ g	
<b>71 1600 10</b>	<b>0</b>	8-12	30	102	1
<b>71 1600 11</b>	<b>1</b>	12-16	30	110	1
<b>71 1600 21</b>	<b>1a</b>	16-20	30	116	1
<b>71 1600 12</b>	<b>2</b>	20-27	30	131	1
<b>71 1600 13</b>	<b>3</b>	27-36	60	365	1
<b>71 1600 15</b>	<b>5</b>	36-46	60	385	1
<b>71 1600 16</b>	<b>6</b>	46-58	60	558	1
<b>71 1600 17</b>	<b>7</b>	58-70	60	612	1
<b>71 1600 18</b>	<b>8</b>	70-100	60	1659	1

# Pullers

## 11061 Counter stays

to be used with Internal Puller No 11060; zinc plated; insert and open up the internal puller; screw the spindle of the counter-stay into the internal puller; extract the workpiece.



Code	size	suitable for No 11060	Max. torque in N-m	ΔΔ g	📦
<b>71170011</b>	<b>1</b>	sizes 0-2	30	654	1
<b>71170012</b>	<b>2</b>	sizes 3-7	60	1518	1
<b>71170013</b>	<b>3</b>	size 8	60	2317	1

## 11062 Slide hammers

to be used with Internal Puller No 11060; zinc plated; for extracting ball bearings if it is not possible to use Puller No 11061 because there is insufficient space.



Code	size	suitable for No 11060	ΔΔ g	📦
<b>71161001</b>	<b>1</b>	sizes 0-2	650	1
<b>71161002</b>	<b>2</b>	sizes 3; 5	1435	1

## 12613 Separating fixtures

zinc plated; for use with No 12614 of same sizes; for separating and extracting ball bearings, roller bearings, bushes, wheels and other tightly fitting parts; applying uniform pulling force to the side bolts will gently separate workpieces; apply puller No 12614; apply force to pull off.



Code	size	Clamp. width mm	Opening mm	Max. loading in t	Max. torque in N-m	ΔΔ g	📦
<b>71030010</b>	<b>0</b>	5-60	60	2.0	30	562	1
<b>71030011</b>	<b>1</b>	12-75	75	2.5	40	787	1
<b>71030012</b>	<b>2</b>	22-115	115	4.0	70	2020	1
<b>71030013</b>	<b>3</b>	30-155	155	5.0	90	3740	1

## 12614 Pullers

zinc plated; for use with No 12613 of same sizes; for extracting ball bearings, roller bearings, bushes, wheels and other tight fitting parts; the puller is connected to separator No 12613 to enable the workpiece to be extracted.



Code	size	Clamp. width mm	Extraction bolts mm	Max. loading in t	Max. torque in N-m	ΔΔ g	📦
<b>71040010</b>	<b>0</b>	45-110	110	2.0	30	910	1
<b>71040011</b>	<b>1</b>	55-140	155	2.5	40	1220	1
<b>71040012</b>	<b>2</b>	60-215	200	4.0	70	2802	1
<b>71040013</b>	<b>3</b>	85-295	315	5.0	90	6820	1

## V 12614 Extensions

1 pair, for use with puller No 12614; extensions for the extraction bolts on the puller for use with longer workpieces.



Code	size	for No	L mm	ΔΔ g	📦
<b>79440011</b>	<b>1</b>	12614-0, -1	100	89	1
<b>79440012</b>	<b>2</b>	12614-2	150	233	1
<b>79440013</b>	<b>3</b>	12614-3	150	743	1

## 11030 Universal wheel hub pullers

with three extractor hooks, zinc plated; for extracting wheel hubs on HGV's and cars up to a hole diameter of 225 mm; the axially mounted threaded bush enables the workpiece to be freed by gently tapping the end of the spindle.



Code	size	Max. loading in t	Max. torque in N-m	ΔΔ g	📦
<b>71110013</b>	<b>1</b>	3	14.0	280	3566
<b>71110015</b>	<b>2</b>	5	14.0	280	4568

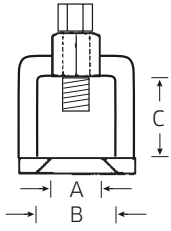
## H 11030 Arm for No 11030

1 piece

Code	ΔΔ g	📦
<b>79100010</b>	524	1

### 11041 Ball joint separators

for forcing out ball pins on vehicles, zinc plated.



Code	size	A mm	B mm	C mm	Max. torque in N-m	⚖️ g	📦
71 23 00 11	1	18	37	37	50	309	1
71 23 00 12	2	23	45	45	120	476	1
71 23 00 13	3	29	55	60	160	1321	1
71 23 00 14	4	39	70	80	280	2024	1

size 1 for passenger vehicles  
size 2 for passenger vehicles and vans  
size 3 + 4 for trucks

### SP 11040-12150 Spindles

Code	No	for puller No	⚖️ g	📦
79 28 10 11	SP 11040-1	11040-1; 11042-1	108	1
79 28 11 11	SP 11040-2	11040-2; 11042-2	120	1
79 28 10 12	SP 11040-3	11040-3; 11042-3	80	1
79 28 10 13	SP 11050-1	11050-1, -2; 11051-1, -2; 11056; 12150-1, 12152-1, 12614-0, -1	171	1
79 28 10 14	SP 11050-3	11050-3, -4; 11051-3, -4; 12614-2	590	1
79 28 10 15	SP 11050-5	11050-5, -6	1210	1
79 28 10 16	SP 11055-1	11055-1	177	1
79 28 10 17	SP 11055-2	11055-2	176	1
79 28 10 18	SP 11055-3	11055-3	592	1
79 28 10 19	SP 11041-1	11041-1	80	1
79 28 10 20	SP 11041-2	11041-2	94	1
79 28 10 21	SP 11041-3	11041-3	360	1
79 28 10 22	SP 11041-4	11041-4	231	1
79 28 10 23	SP 11053-1	11053-1, -2; 11054-1, -2	876	1
79 28 10 34	SP 12150-2	12150-2; 12152-2	440	1

### 12616 Universal ball joint separator

zinc plated, DIN/ISO 7803,  
for extracting ball-joints on cars  
and light delivery vans.



Code	size	Fork opening mm	Clear height mm	Max. loading in t	Max. torque in N-m	⚖️ g	📦
71 05 00 10	1	18-22	20-50	3.5	70	611	1

### 12623 Ball joint separator

zinc plated; for extracting ball-joints  
especially on BMW, Fiat, Ford, Mercedes-Benz, Nissan, Opel, Toyota, VW/Audi and Volvo cars.



Code	Fork opening mm	Clear height mm	Max. loading in t	Max. torque in N-m	⚖️ g	📦
71 05 00 11	20	12-50	3.5	40	1284	1

### 12623-1 Ball joint separator

for vehicles with aluminium chassis;  
zinc plated;  
for extracting ball-joints, especially on  
Audi A6 and A8 after model year 1999  
and for other vehicles with limited work  
space.



Code	Fork opening mm	Clear height mm	Max. loading in t	Max. torque in N-m	⚖️ g	📦
71 05 00 12	24	60-80	3.5	40	1577	1

### 12623-3 Ball joint separator

on heavy goods vehicles,  
buses and construction site vehicles;  
zinc plated.



Code	Fork opening mm	Clear height mm	Max. loading in t	Max. torque in N-m	⚖️ g	📦
71 05 00 14	35-45	115	20	200	6000	1

### 12623-4 Ball joint separator

on medium-sized and heavy HGV's,  
buses and construction site and other  
special vehicles; zinc plated.



Code	Fork opening mm	Clear height mm	Max. loading in t	Max. torque in N-m	⚖️ g	📦
71 05 00 15	27-36	90	10	100	2995	1



# 10 | SPECIAL AUTOMOTIVE TOOLS

**KABELEX®** TOOLS AND SETS

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**KABELEX®** RANGE

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**CAR BODY** REPAIR TOOLS

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**TOOLS** FOR VEHICLE DOORS

→ PAGE 326



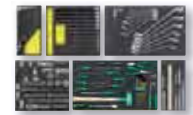
**TOOLS** FOR FITTING/REMOVING VEHICLE GLASS

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**WORKSHOP** SETS

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**SPECIAL** TOOLS FOR CARS

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**SPECIAL** TOOLS FOR HGVS

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**TORX®** SCREW SIZES

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# STAHLWILLE special automotive tools



**Together with leading automotive manufacturers, STAHLWILLE develops special-purpose tools and brand-specific sets of tools. This continuous development and enhancement process covering tools for production and workshops ensures that the tools we make keep pace with the latest developments in the industry.**

**1**

### **Tidy tool management: STAHLWILLE tool sets for car repairs**

Carefully selected suites of tools for Tool Trolleys and Tool Boxes ensure optimised workflows. Whether it is in the garage, in production or in the pits, many mechanics welcome the benefits afforded by model and marque specific tools to guarantee safe, timesaving work.

**2**

### **Problem solver: STAHLWILLE special-purpose car pliers**

Often enough, corroded or jammed parts in hard-to-reach places slow down repair and servicing jobs in the engine space. With diesels, this includes the heater plug sockets. STAHLWILLE heater plug socket pliers make it that much easier to remove and refit these plug sockets, especially when the engine is still hot.

**3**

### **Better safe than sorry: STAHLWILLE sockets**

It would be hard to imagine garage and production environments without compressed air tools. Hardly surprising, then, that STAHLWILLE offer such a wide range of tried-and-tested, job-specific sockets, e. g. the wheel-nut socket with the closely-fitting plastic sleeve. This prevents damage to wheel bolts, wheel nuts and the bolt holes especially on alloy wheels.

**4**

### **The specialists: STAHLWILLE KABELEX®**

Efficiency and economy in the workplace – at a time when it pays to be competitive, removing cables on vehicles safely and quickly gives you that advantage. This is why STAHLWILLE offers over 40 different cable removing tools for cars. They are available individually, in carefully selected sets or as special sets for specific vehicles. The fine but highly resistant blades are made of chrome vanadium and special spring steel.

**5**

### **Unbreakable: Special tools for car glass**

The professionals really appreciate STAHLWILLE products for quickly and accurately removing and fitting car glass. Twin suction lifters and a three-component glass removal set ensure that windscreens and other car glass are easily and safely removed, fitted and transported.



**6**

**A question of torque: Friction gauger**

Setting steering systems accurately is a critical job - and adhering to torque settings and coefficients of friction is a crucial part of it. This is what STAHLWILLE created the easily-operated Friction gauge No 73Nm/15 with a range of 2-15 N·m.



**7**

**Thick or thin: Measuring the thickness of brake discs**

Checking the state of the brake discs is a valuable contribution to safety on the roads. STAHLWILLE offers a vernier calliper which enables the garage to easily check the discs in situ and compare the dimensions with the manufacturer's instructions.

**1**



**2**



**3**

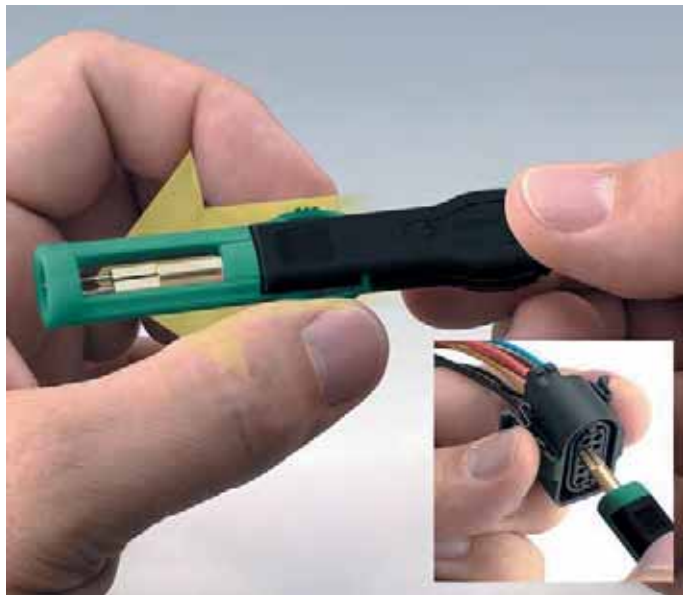


**4**



**5**





## STAHLWILLE KABELEX® Protect

For workshops and cable configuration

(KABELEX® table see page 322)

- Bicoloured handle:
  - with locking blade cover, to protect the fine blade and guard against injury.
  - easier to handle for fine and intricate work on miniature connectors.
- Releases cable connectors quickly and easily without cutting them off - saves time and money.
- Also available in carefully selected sets.
- Special sets for vehicle makes: BMW, Mercedes-Benz, Opel, VW/Audi/Seat/Skoda/Porsche, MAN/Volvo and Renault/PSA
- Over 40 different cable extractors available.
- Blades made of extremely tough and durable chrome vanadium and special spring steel.

### 1501-1508 Ejection tools KABELEX®

for round snap-in receptacles, including dismantling sleeve.



Code	No	for contact sizes ∅ mm	g	
96 74 62 30	1501 + 1511 (e.g. BMW, Mercedes-Benz, Fiat, MAN, Opel, Porsche, Seat, Skoda, VW/Audi)	1.5	45	1
96 74 62 31	1502 + 1512 (e.g. BMW, Mercedes-Benz, Fiat, MAN, Opel, Porsche, Seat, Skoda, VW/Audi)	3.5	59	1
96 74 62 32	1503 + 1513 for ABS (lorries) please order corresponding assembly sleeve No 1523 (e.g. Mercedes-Benz, MAN, Scania) separately	4.0	79	1
96 74 62 33	1504 + 1514 (e.g. BMW, Mercedes-Benz, Opel)	2.5	60	1
96 74 62 34	1505 + 1515 (e.g. Ford, Opel, PSA, Renault)	2.3	46	1
96 74 62 35	1506 + 1516 (e.g. Mercedes-Benz trucks, MAN, Scania)	4.0	72	1
96 74 62 36	1507 + 1517 (e.g. Scania gears GRS 900)	1.5	72	1
96 74 60 37	1508 + 1518 (e.g. BMW, Mercedes-Benz)	1.5	46	1

### 1511-1518 Dismantling sleeves KABELEX®



Code	No	for contact sizes ∅ mm	L mm	inside ∅ mm	outside ∅ mm	g	
78 60 00 01	1511 for No 1501	1.5	30	2.9	3.3	1	10
78 60 00 02	1512 for No 1502	3.5	30	4.4	5.0	1	10
78 60 00 03	1513 for No 1503	4.0	45	6.0	6.5	1	10
78 60 00 04	1514 for No 1504	2.5	30	4.0	4.4	1	10
78 60 00 05	1515 for No 1505	2.3	35	3.0	3.3	1	10
78 60 00 06	1516 for No 1506 (for MOLEX contacts 4.0 mm)	4.0	35	5.6	6.0	1	10
78 60 00 16	1516-A for No 1506 (for AMP contacts 4.0 mm)	4.0	30	5.4	5.8	1	10
78 60 00 07	1517 for No 1507	1.5	26	2.3	2.8	1	10
78 60 00 18	1518 for No 1508 (3 x 120° slotted)	1.5	32	2.7	3.5	1	5

### 1523 Assembly sleeve KABELEX® ABS

for No 1503



Code	for contact sizes ∅ mm	L mm	inside ∅ mm	outside ∅ mm	g	
78 61 00 01	4.0	50	4.0	6.5	5	3

### 1551/1552 Cable extractor tools KABELEX®

for flat snap-in receptacles e.g. BMW, Ford, Opel, Porsche, Seat, Skoda, VW/Audi.



Code	No	for contact sizes □ mm	g	
74 62 00 01	1551	2.8	19	1
74 64 00 02	1552	5.8	19	1

### 1553-1555 Cable extractor tools KABELEX®

for flat plug-in sockets locked in terminals with single release channel.



Code	No	for contact sizes □ mm	g	
74 62 00 03	1553 (e.g. BMW, Mercedes-Benz, Ford, MAN, Opel, Porsche, PSA, Renault, Seat, Skoda, VW/Audi)	2.8; 5.8	16	1
74 62 00 04	1554 (e.g. BMW, PSA, Renault)	2.8	16	1
74 62 00 05	1555 (e.g. BMW)	5.8	16	1

### 1556 Cable extractor tool KABELEX®

for flat plug-in sockets, Micro Timer II, III contacts, e.g. Mercedes-Benz, Opel, Porsche, PSA, Renault, Saab, Seat, Skoda, VW/Audi.



Code	for contact sizes □ mm	g	
74 62 00 06	1.6	17	1

### 1556-1 Cable extractor tool KABELEX®

for flat plug-in sockets with asymmetrically positioned latches in terminals with two release channels, Seat, Skoda, VW/Audi.



Code	for contact sizes □ mm	$\Delta$ g	
<b>7461 2006</b>	0.64	19	1

### 1557/1558 Cable extractor tools KABELEX®

for flat plug-in sockets with asymmetrically positioned latches in terminals with two release channels, Seat, Skoda, VW/Audi.



Code	No	for contact sizes □ mm	$\Delta$ g	
<b>7462 0007</b>	<b>1557</b>	2.8	21	1
<b>7462 0008</b>	<b>1558</b>	4.8	22	1

### 1559 Cable extractor tool KABELEX®

for flat plug-in sockets, Maxi Power Timer contacts, Mercedes-Benz, VW/Audi.



Code	for contact sizes □ mm	$\Delta$ g	
<b>7462 0009</b>	9.5	39	1

### 1562 Cable extractor tool KABELEX®

for flat plug-in sockets, Pit-Pod contacts, all vehicle makes.



Code	for contact sizes □ mm	$\Delta$ g	
<b>7462 0012</b>	various	25	1

### 1572 Cable extractor tool KABELEX®

for flat plug-in sockets with asymmetrically positioned latches in terminals with two release channels, Ford, Renault.



Code	for contact sizes □ mm	$\Delta$ g	
<b>7462 0022</b>	2.8	18	1

### 1574 Cable extractor tool KABELEX®

for flat plug-in sockets, Micro-Timer I contacts and ABS plug-in housing, Fiat, Ford, Mazda, Opel, PSA, Renault, Saab, VW/Audi.



Code	for contact sizes □ mm	$\Delta$ g	
<b>7462 0024</b>	1.6	15	1

### 1575 Cable extractor tool KABELEX®

for round soldered pin contacts, Ford, for flat plug-in sockets (retention by locking device on terminal), Fiat, Mazda, Toyota.



Code	for contact sizes ∅ mm	for contact sizes □ mm	$\Delta$ g	
<b>7462 0025</b>	1.5	2.8; 5.8	15	1

### 1576 Cable extractor tool KABELEX®

for flat plug-in sockets with single latch (flat plug without box), e.g. MAN.



Code	for contact sizes □ mm	$\Delta$ g	
<b>7462 0026</b>	2.8	18	1

### 1577 Cable extractor tool KABELEX®

for flat plug-in sockets, VKR Box contacts, e.g. MAN.



Code	$\Delta$ g	
<b>7462 0027</b>	49	1

### 1577-1 Cable extractor tool KABELEX®

for flat plug-in sockets, MKR/MKS contacts, e.g. MAN/Volvo.



Code	for contact sizes □ mm	$\Delta$ g	
<b>7461 5027</b>	1.5	23	1

### 1578K-1 Cable extractor tool KABELEX®

for flat plug-in sockets, SLK contacts (primary), e.g. BMW, Mercedes-Benz.



Code	for contact sizes □ mm	$\Delta$ g	
<b>7461 0028</b>	2.8	35	1

### 1578K-2 Cable extractor tool KABELEX®

for flat plug-in sockets, SLK contacts 97 (primary, secondary), e.g. BMW, Mercedes-Benz.



Code	for contact sizes □ mm	$\Delta$ g	
<b>7461 2028</b>	2.8	35	1

### 1584/1585 Cable extractor tools KABELEX®

for round soldered contacts, Mercedes-Benz.



Code	No	for contact sizes ∅ mm	$\Delta$ g	
<b>7462 0034</b>	<b>1584</b>	4.0	13	1
<b>7462 0035</b>	<b>1585</b>	2.5	11	1

## Special automotive tools

### 1587 Cable extractor tool KABELEX®

for flat plug-in sockets,  
E-95 contacts, Mercedes-Benz.



Code	for contact sizes □ mm	△ g	☐
<b>74620037</b>	1.65	23	1

### 1589K Cable extractor tool KABELEX®

for flat plug-in sockets,  
LSK contacts,  
e.g. BMW, Mercedes-Benz.



Code	for contact sizes □ mm	△ g	☐
<b>74610039</b>	8	45	1

### 1591 Cable extractor tool KABELEX®

for flat plug-in sockets in terminals  
with two release channels,  
Junior Power Timer contacts,  
Standard Power Timer contacts,  
e.g. BMW, Mercedes-Benz, Fiat, Ford,  
MAN, Opel, PSA, Renault, Saab, VW/Audi.



Code	for contact sizes □ mm	△ g	☐
<b>74620041</b>	2.8; 5.8	25	1

### 1510 VW/Audi Tool set KABELEX®

11 pieces, for VW/Audi, Seat, Skoda,  
Porsche.

Content:

No 1501, 1502: ejection tools  
for contact sizes  
∅ 1.5 and 3.5 mm

No 1511, 1512: dismantling  
sleeves for contact sizes  
∅ 1.5 and 3.5 mm

No 1553, 1557, 1558, 1591:  
cable extractor tools for contact sizes □ 2.8; 4.8 and 5.8 mm  
No 1556: cable extractor tool for Micro-Timer II, III contacts □ 1.6 mm  
No 1556-1: cable extractor tool for flat plug-in sockets with  
asymmetrically positioned latches in terminals with two release  
channels □ 0.64 mm  
No 1574: cable extractor tool for Micro Timer I contacts □ 1.6 mm



Code	△ g	☐
<b>96747203</b>	902	1

### 1520 Mercedes-Benz Tool set KABELEX®

16 pieces, for Mercedes-Benz.

Content:

No 1501, 1504, 1508: ejection tools  
for contact sizes  
∅ 1.5 and 2.5 mm

No 1511, 1514, 1518: dismantling  
sleeves for contact sizes  
∅ 1.5 and 2.5 mm

No 1553, 1591: cable extractor tools for contact sizes  
□ 2.8 and 5.8 mm

No 1556: cable extractor tool for Micro-Timer II, III contacts  
□ 1.6 mm

No 1559: cable extractor tool for Maxi-Power Timer contacts  
□ 9.5 mm

No 1578K-1: cable extractor tools for SLK contacts (primary) □ 2.8 mm  
No 1578K-2: cable extractor tool for SLK contacts 97 (primary and  
secondary) □ 2.8 mm

No 1584, 1585: cable extractor tools for soldered contacts with contact  
∅ 2.5 and 4.0 mm

No 1587: cable extractor tool for flat plug-in sockets,  
E-95 contacts □ 1.65 mm

No 1589K: cable extractor tool for flat plug-in sockets,  
LSK contacts □ 8 mm



Code	△ g	☐
<b>96747204</b>	1998	1

### 1550 BMW Tool set KABELEX®

13 pieces, for BMW.

Content:

No 1501, 1502, 1504, 1508:  
ejection tools for contact sizes  
∅ 1.5; 3.5 and 2.5 mm

No 1511, 1512, 1514, 1518:  
dismantling sleeves for contact  
sizes ∅ 1.5; 3.5 and 2.5 mm

No 1553: cable extractor for plugs  
with single release channel □ 2.8 mm and 5.8 mm

No 1578K-1: cable extractor for SLK contacts (primary) □ 2.8 mm

No 1578K-2: cable extractor for SLK contacts 97 (primary and secondary)  
□ 2.8 mm

No 1591: cable extractor tool for contact sizes □ 2.8 and 5.8 mm

No 1589K: cable extractor tool for flat plug-in sockets,  
LSK contacts □ 8 mm



Code	△ g	☐
<b>96747207</b>	1753	1



### 1700 Tool set KABELEX®

**MAN/Volvo**

14 pieces, for MAN/Volvo, Mercedes-Benz trucks.

- Content:
- No 1501, 1502, 1503, 1506: ejection tools for contact sizes  $\varnothing$  1.5; 3.5; 4.0 (ABS) and 4.0 mm
  - No 1511, 1512, 1513, 1516: dismantling sleeves for contact sizes  $\varnothing$  1.5; 3.5; 4.0 (ABS) and 4.0 mm
  - No 1523: assembly sleeve (ABS)
  - No 1553, 1591: cable extractor tools for contact sizes  $\square$  2.8 and 5.8 mm
  - No 1576: cable extractor tool for flat plugs without box  $\square$  2.8 mm
  - No 1577: cable extractor tool for VKR Box contacts  $\square$
  - No 1577-1: cable extractor tools for MKR/MKS contacts  $\square$  1.5 mm



Code		
<b>96747208</b>	1773 g	1

### 1560 Tool set KABELEX®

10 pieces, for round plug connections (incl. ABS).

- Content:
- 1 each No 1501: ejection tool for contact sizes  $\varnothing$  1.5 mm
  - 1 each No 1502: ejection tool for contact sizes  $\varnothing$  3.5 mm
  - 1 each No 1503: ejection tool for contact sizes  $\varnothing$  4.0 mm assembly or dismantling sleeve (ABS)
  - 2 each No 1511: dismantling sleeves for contact sizes  $\varnothing$  1.5 mm (1 each mounted)
  - 2 each No 1512: dismantling sleeves for contact sizes  $\varnothing$  3.5 mm (1 each mounted)
  - 2 each No 1513: dismantling sleeves for contact sizes  $\varnothing$  4.0 mm (1 each mounted)
  - 1 each No 1523: assembly sleeve (ABS)



Code		
<b>96747201</b>	733 g	1

### 1720 Tool set KABELEX®

**Renault/PSA**

7 pieces, for Renault/PSA (Citroën and Peugeot).

- Content:
- No 1505: ejection tool for contact sizes  $\varnothing$  2.3 mm
  - No 1515: dismantling sleeve for contact sizes  $\varnothing$  2.3 mm
  - No 1553, 1554, 1591: cable extractor tools for contact sizes  $\square$  2.8 and 5.8 mm
  - No 1556: cable extractor tool for Micro-Timer II, III contacts  $\square$  1.6 mm
  - No 1574: cable extractor tool for Micro-Timer I contacts  $\square$  1.6 mm



Code		
<b>96747210</b>	567 g	1

### 1570/1 Basic set KABELEX®

6 pieces.

- Content:
- No 1501, 1502: ejection tools for contact sizes  $\varnothing$  1.5 and 3.5 mm
  - No 1511, 1512: dismantling sleeves for contact sizes  $\varnothing$  1.5 and 3.5 mm
  - No 1553, 1591: cable extractor tools for contact sizes  $\square$  2.8 and 5.8 mm



Code		
<b>96747303</b>	607 g	1

### 1590 Tool set KABELEX®

5 pieces, for flat plug-in sockets.

- Content:
- No 1551, 1552: cable extractor tools for flat plug-in sockets  $\square$  2.8 and 5.8 mm in terminals with double release channel
  - No 1553, 1554, 1555: cable extractor tools for contact sizes  $\square$  2.8 and 5.8 mm in terminals with single release channel



Code		
<b>96747202</b>	573 g	1

### 1570/2 Universal set KABELEX®

12 pieces.

- Content:
- No 1501, 1502, 1505: ejection tools for contact sizes  $\varnothing$  1.5; 3.5; 2.3 mm
  - No 1511, 1512, 1515: dismantling sleeves for contact sizes  $\varnothing$  1.5; 3.5; 2.3 mm
  - No 1553: cable extractor tool for plugs with one release channel  $\square$  2.8 and 5.8 mm
  - No 1556: cable extractor tool for Micro-Timer II, III contacts  $\square$  1.6 mm
  - No 1559: cable extractor tool for Maxi-Power Timer contacts  $\square$  9.5 mm
  - No 1562: cable extractor tool for Pit-Pod contacts
  - No 1574: cable extractor tool for Micro-Timer I contacts and ABS plug-in housing  $\square$  1.6 mm
  - No 1591: cable extractor tool for plugs with two release channels  $\square$  2.8 and 5.8 mm



Code		
<b>96747304</b>	962 g	1





## Car body repair tools and pullers

### 10775 Dinging hammer



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0002</b>	30/40	300	155	516	2

### 10776 Special planishing hammer

large extra thin faces,  
square face chequered.



Code	∅ mm	□ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0010</b>	46	40	320	115	521	2

### 10780 Planishing hammer

short.



Code	∅ mm	□ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0003</b>	32	25	300	100	346	2

### 10785 Planishing hammer

short, round face chequered.



Code	∅ mm	□ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0004</b>	40	35	300	96	484	2

### 10790 Pecking hammer

with round face and ball pein.



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0005</b>	18/41	300	158	480	2

### 10795 Pecking hammer

with round face and  
acorn shaped pein.



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0006</b>	20/41	300	160	461	2

### 10800 Pecking hammer

short, round flat face  
and pointed pein.



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0007</b>	35	300	135	357	2

### 10805 Pecking hammer

round flat face,  
oblong, thin pein,  
approx. 1 mm thick.



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0008</b>	40	300	160	446	2

### 10806 Pecking hammer

extra large thin face and pein.



Code	∅ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0011</b>	40	300	135	382	2

### 10811 Planishing and grooving hammer



Code	∅ mm	□ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0012</b>	30	36 x 10	320	160	531	2

### 10812 Planishing and grooving hammer



Code	∅ mm	□ mm	L <sub>1</sub> mm	L <sub>2</sub> mm	△ g	
<b>70 13 0013</b>	30	25 x 5	300	115	344	2

## Special automotive tools

### 10830 Dolly



Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210001	80/100	70/45	65	1429	1

### 10832 Planishing anvil



Code	faces/mm	$\frac{\Delta}{g}$	
70210015	85 x 55 / 45 x 40	1146	1

### 10835 Wedge dolly



Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210002	130	55	32	958	1

### 10838 Anvil dolly



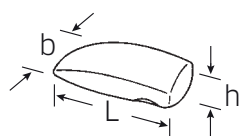
Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210003	75	60	50	1068	1

### 10840 Special anvil dolly



Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210004	70	57	70	1244	1

### 10841 Thin dolly



Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210005	107	66	28	984	1

### 10842 Diabolo dolly



Code	$\varnothing$ mm	h mm	$\frac{\Delta}{g}$	
70210006	57	60	658	1

### 10845 Toe dolly



Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210008	120	55	22	770	1

### 10850 Anvil block

axe shape.



Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210009	65/50	25/8	140	863	1

### 10855 Universal anvil dolly



Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210010	70/60	50/45	58	1200	1

### 10861 Toe dolly

chequered surface.



Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210014	120	55	30	1033	1

### 10865 Heel dolly



Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210012	80	60	35	1070	1

### 10866 Dolly

with three flat and three shaped faces.



Code	L mm	b mm	h mm	$\frac{\Delta}{g}$	
70210016	115	48	48	1504	1

**10880 Bumping spoon**


Code	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
<b>70 22 0001</b>	460	200	1866	1

L<sub>1</sub> = length overall  
L<sub>2</sub> = working length

**10885 Bumping spoon**


Code	L mm	⚖ g	📦
<b>70 22 0002</b>	500	2210	1

**10890 Body spoon**


Code	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
<b>70 22 0003</b>	270	130	520	1

**10895 Body spoon**


Code	L <sub>1</sub> mm	L <sub>2</sub> mm	⚖ g	📦
<b>70 22 0004</b>	390	200	1035	1

L<sub>1</sub> = length overall  
L<sub>2</sub> = working length

**10900 Flange tool**

with leather cap.



Code	L mm	⚖ g	📦
<b>70 22 0005</b>	400	1150	1

**11005 Pry bar**

head and point polished.



Code	L mm	∅ mm	⚖ g	📦
<b>72 09 0000</b>	400	14	477	6

**11006 Lever bar**

special steel, bright nickel-plated.



Code	L mm	W mm	⚖ g	📦
<b>72 09 0002</b>	400	14	498	6

**11007 Lever bar**

special steel, bright nickel-plated.



Code	L mm	W mm	⚖ g	📦
<b>72 09 0003</b>	400	17	641	6

**10905 Body file holder**

with coarse blade.



Code	L mm	b mm	h mm	⚖ g	📦
<b>72 16 0000</b>	365	35	110	765	2

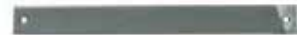
L = Length, b = Width, h = Height

**10923 Body file holder**

wooden, for flat blades.



Code	L mm	⚖ g	📦
<b>72 20 0002</b>	530	300	1

**10906-10916 Spare blades for No 10905 and No 10923**


Code	No	teeth per inch	L mm	⚖ g	📦
<b>79 06 0001</b>	<b>10906</b>	fine, radial cut	15	350	321 10
<b>79 06 0002</b>	<b>10907</b>	medium, radial cut	12	350	286 10
<b>79 06 0003</b>	<b>10908</b>	coarse, radial cut	9	350	279 10
<b>79 06 0012</b>	<b>10915</b>	medium, angled cut	12	350	282 10
<b>79 06 0013</b>	<b>10916</b>	coarse, angled cut	9	350	252 10

**10922 Body file holder**

wooden,  
for half round radius file blades.



Code	L mm	⚖ g	📦
<b>72 20 0001</b>	530	260	1

**10917/10921 File blades for No 10922**


Code	No	teeth per inch	L mm	⚖ g	📦
<b>79 06 0014</b>	<b>10917*</b>	coarse, without swarf breaker, half round, angled cut	9	350	208 5
<b>79 06 0004</b>	<b>10921</b>	coarse, without swarf breaker, half round, radial cut	9	350	216 5

\* to be discontinued



## Special automotive tools

### 12752 Tin snips

lever action, spring-assisted for self-opening action.  
Heavy duty cutting:  
sheet steel up to 1.8 mm  
or stainless steel sheet up to 1.2 mm.



Code	shape	L mm	L "	△△ g	☐
<b>75 23 00 01</b>	<b>L<sup>1)</sup></b>	260	10 1/2	532	1
<b>75 23 00 02</b>	<b>R<sup>2)</sup></b>	260	10 1/2	532	1

<sup>1)</sup> left hand cutting <sup>2)</sup> right hand cutting

### 12753 Tin snips

lever action, spring-assisted for self-opening action.  
Heavy duty cutting:  
sheet steel sheet up to 1.8 mm  
or stainless steel sheet up to 1.2 mm.



Code	shape	L mm	L "	△△ g	☐
<b>75 24 00 01</b>	<b>L<sup>1)</sup></b>	260	10 1/2	473	1
<b>75 24 00 02</b>	<b>R<sup>2)</sup></b>	260	10 1/2	473	1

<sup>1)</sup> left hand cutting <sup>2)</sup> right hand cutting

### 12727 Spot weld milling cutter

HSSE steel, for spot-weld removal on car body or sheet metal construction.  
Replaceable milling cutter size 10 mm.  
Cutting depth adjustment by set screw, avoids distortion damage to sheet metal.



Code	L mm	△△ g	☐
<b>72 26 00 01</b>	72	19	5

### 12728 Replacement milling cutter



Code	L mm	△△ g	☐
<b>79 26 00 01</b>	13	4	10

### 12729/12730 Spot weld drills

for clean, burr-free removal of spot-weld. Self-cutting centre point avoids running off spot weld. Can be reground.



Code	No	∅ mm	△△ g	☐
<b>72 27 00 07</b>	<b>12729</b>	7	18	5
<b>72 27 00 08</b>	<b>12730</b>	8	24	5

### 10998 Panel beating set

17 pieces, in steel case No 83/09.  
Content:  
Hammers: No 10775; 10785; 10790;  
10811; 10950; 10955/35  
Dollies: No 10830; 10835; 10840;  
10850; 10861  
Pliers: No 10910; 10930  
Special Spoons: No 10890; 10895;  
10900  
Body File Holder: No 10905  
Padlock: No 12932



Code	△△ kg	☐
<b>98 81 21 01</b>	18.3	1

## Tools for vehicle doors

### 12770 Lever bar

powder coated for improved slide effect, for removal of doors trims in cars.



Code	L mm	△△ g	☐
<b>74 59 11 01</b>	260	150	5

### 12770/2 Lever bar

for levering off fragile caps, decorative trim (strips and rings), switches, rubber or fabric trim without damaging them.  
Finely honed, rounded edges ensure the vehicle paintwork and surrounding materials are not damaged or scratched.



Code	L mm	△△ g	☐
<b>74 59 01 02</b>	185	20	1

### 12770/3 Plastic lever bar

for removing trim and rubbing strips of all kinds on bodywork and around windcreens, rear and side windows.  
The broad area of contact prevents damage such as scratching of painted surfaces, deformation of strips and damage of glass.



Code	L mm	△△ g	☐
<b>74 59 00 03</b>	300	209	1



## Tools for fitting/removing vehicle glass

### 10352 Two double suction lifters

Suction cap dia. 120 mm, mechanical action with safety lock. Special ABS-plastic, oil and acid resistant. With belt slots in the handles. Carrying capacity 60 kg.



Code	g	
<b>74 28 00 01</b>	1405	1



### 10352/1 Double suction lifter

Suction cap dia. 120 mm, mechanical action with safety lock. Special ABS-plastic, oil and acid resistant. With belt slots in the handles. Carrying capacity 30 kg.



Code	g	
<b>74 28 00 05</b>	695	1

### SD10351N Spare cutting wire

special alloy steel 0.6 x 0.6 mm. Easy wire removal without the rest unrolling.



Code	L m	g	
<b>79 27 00 11</b>	50	170	1

### 10350N Windscreen replacement set VERITRAC

1 guide handle  
1 draw handle  
1 coil cutting wire (50 m)  
2 double suction lifters



Code	g	
<b>98 74 27 11</b>	1760	1

### 10351/1 Draw handle

for drawing cutting wire through adhesive seal.



Code	g	
<b>74 27 00 01</b>	90	1



### 10351N Windscreen removal set VERITRAC

as 10350N, but without double suction lifters.



Code	g	
<b>96 74 27 11</b>	458	1



## Special automotive tools

### 10351/2 Guide handle

for fixing and clamping cutting wire inside vehicle.



Code	g	g	g
74 27 00 02	195	1	



### 10351/3 Guide handle

for fixing and clamping cutting wire inside vehicle.  
Extra long extension makes it especially suited to recessed glass.



Code	g	g	g
74 27 00 06	190	1	

### 1474/2 Wire insert awl

for feeding or pulling cutting wire through hardened adhesive.



Code	g	g	g
78 03 01 02	69	2	

### 12718 Flat scraper

for removing residues of sealant and adhesive.



Code	L mm	g	g
72 03 11 01	265	160	5

### 10356 Scraper

for removing residues of adhesive and stickers from vehicle glass.  
Blade 40 mm wide, 0.3 mm thick, interchangeable with cover.



Code	Length mm	Width mm	g	g
74 27 00 05	165	40	90	1

### 10356R Spare blades

10 pieces



Code	g	g	g
79 27 00 15	52	1	

### 12749 Scraper with reversible tungsten steel blade

for removing residues of adhesive and stickers from vehicle glass.  
Can also be used for scraping metal and seals.



Code	L mm	g	g
72 31 11 01	460	458	1

### 12749R Spare blade

for scraper No 12749.

Code	g	g	g
79 31 00 01	19	1	

### 10354 Tension strap with ratchet

for clamping and fixing freshly fitted vehicle glass, synthetic webbing.



Code	Width mm	Length mm	g	g
74 27 00 03	25	4500	310	1

### 10355 Wire insert probe

for threading cutting wire through hardened adhesive, 2.5 mm steel tubing with brass handle.



Code	g	g	g
74 27 00 04	91	1	



## Workshop sets

### 806/10 Tool set

99 Tools, in plastic inlays (modular system see page 42-52), 9x1/3 and 1x3/3 inlays for 4 drawers (No 98VA for 2 drawers), suitable for Workbench No 92KM G, Tool trolleys No 90, 95, 95VA, 98VA; Magazine case No 920 and Wheely box No 922N.

Code	kg
<b>98 83 00 01</b>	13.35



**96 83 81 26**



**96 83 81 27**



**96 83 81 28**



**96 83 81 10**



**96 83 81 12**



**96 83 81 13**



**96 83 82 37**



**96 83 81 21**



**96 83 81 23**



**96 83 81 25**

	<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm
	<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24 mm
	<b>No 40</b>	1/4"  sizes 5,5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 400</b>	1/4"  150 mm
	<b>No 404</b>	1/4"  116 mm
	<b>No 405/2</b>	1/4"   54 mm
	<b>No 405/6</b>	1/4"   150 mm
	<b>No 407</b>	1/4"   38 mm
	<b>No 412</b>	1/4"

	<b>No 415</b>	1/4"
	<b>No 10760CV</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10; 12 mm
	<b>No 52</b>	1/2"  sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm
	<b>No 506</b>	1/2"  300 mm
	<b>No 509/2</b>	1/2"   52 mm
	<b>No 509/5</b>	1/2"   130 mm
	<b>No 509/10</b>	1/2"   255 mm
	<b>No 510</b>	1/2"   71 mm
	<b>No 512</b>	1/2"
	<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm)
	<b>No 4630</b>	sizes 1; 2; 3
	<b>No 65 01 5 180</b>	
	<b>No 65 29 5 200</b>	
	<b>No 65 43 4 002</b>	
	<b>No 65 45 4 002</b>	
	<b>No 65 51 6 240</b>	
	<b>No 65 64 2 250</b>	
	<b>No 66 02 5 160</b>	
	<b>No 102</b>	175 mm
	<b>No 108</b>	150 x 6; 175 x 6 mm
	<b>No 109</b>	size 6; 100 x 3.4 mm
	<b>No 10956</b>	∅ 35 mm
	<b>No 10960</b>	500 g



**806/10** Tool Set, suitable for example for Trolley 90 and 95.

## Special automotive tools

### 806/9 TCS TCS tool set



98 Tools, in TCS inlays (Tool Control System see page 53-71), 7x1/3, 1x2/3 and 1x3/3 inlays for 4 drawers (No 98VA for 2 drawers), suitable for Workbench No 92KM G, Tool trolleys No 90, 95, 95VA, 98VA, Magazine case No 920 and Wheely box No 922N.

Code	kg
<b>98830004</b>	12.53



**96838175**



**96838176**



**96838177**



**96838278**



**96838179**



**96838180**



**96838181**



**96838182**

**96838183**

	<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 24 x 27; 30 x 32 mm
	<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24 mm
	<b>No 40</b>	1/4" $\bigcirc$ sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 400</b>	1/4" $\blacksquare$ 150 mm
	<b>No 404</b>	1/4" $\blacksquare$ 116 mm
	<b>No 405/2</b>	1/4" $\blacksquare$ $\bigcirc$ 54 mm
	<b>No 405/6</b>	1/4" $\blacksquare$ $\bigcirc$ 150 mm
	<b>No 407</b>	1/4" $\blacksquare$ $\bigcirc$ 38 mm
	<b>No 412</b>	1/4" $\bigcirc$ $\bigcirc$
	<b>No 415</b>	1/4" $\blacksquare$

	<b>No 10760CV</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10; 12 mm
	<b>No 52</b>	1/2" $\bigcirc$ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm
	<b>No 506</b>	1/2" $\blacksquare$ 300 mm
	<b>No 509/2</b>	1/2" $\blacksquare$ $\bigcirc$ 52 mm
	<b>No 509/5</b>	1/2" $\blacksquare$ $\bigcirc$ 130 mm
	<b>No 509/10</b>	1/2" $\blacksquare$ $\bigcirc$ 255 mm
	<b>No 510</b>	1/2" $\blacksquare$ $\bigcirc$ 71 mm
	<b>No 512</b>	1/2" $\blacksquare$
	<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm)
	<b>No 4630</b>	sizes 1; 2; 3
	<b>No 65 01 5 180</b>	
	<b>No 65 29 5 200</b>	
	<b>No 65 43 4 002</b>	
	<b>No 65 45 4 002</b>	
	<b>No 65 51 6 240</b>	
	<b>No 65 64 2 250</b>	
	<b>No 66 02 5 160</b>	
	<b>No 102</b>	175 mm
	<b>No 108</b>	150 x 6; 175 x 6 mm
	<b>No 109</b>	size 6; 100 x 3.4 mm
	<b>No 10956</b>	$\varnothing$ 35 mm
	<b>No 10960</b>	500 g

### 2500 TCS Workshop set for BMW vehicles



285 tools, in TCS inlays (Tool Control System see page 53-71), 7x1/3, 1x2/3 and 4x3/3 inlays for 7 drawers (No 98VA for 3.5 drawers).

Code	kg
<b>97830600</b>	23.7



**96838192**



**96830679**



**96830605**



**96830602**





96 83 06 03



96 83 81 77



96 83 06 07



96 83 07 06



96 83 06 08



96 83 06 04



96 83 06 22








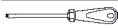

















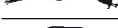






96 83 06 09

	<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 24 mm
	<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32 mm
	<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22 mm
	<b>No 24</b>	size 10 x 11 mm
	<b>No 40</b>	1/4" $\bigcirc$ sizes 3; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 40L</b>	1/4" $\bigcirc$ sizes 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13 mm
	<b>No 41K</b>	1/4" $\bigcirc$ , $\ominus$ 0.6 x 3.5; 1.0 x 5.5; 1.2 x 8 mm
	<b>No 44K</b>	1/4" $\bigcirc$ , $\bullet$ 3; 4; 5; 6; 8 mm
	<b>No 44P</b>	1/4" $\bigcirc$ , $\oplus$ sizes 1; 2; 3; 4
	<b>No 400</b>	1/4" $\blacksquare$ 150 mm
	<b>No 404</b>	1/4" $\blacksquare$ 116 mm
	<b>No 405/2</b>	1/4" $\blacksquare$ $\bigcirc$ 54 mm
	<b>No 405/4</b>	1/4" $\blacksquare$ $\bigcirc$ 100 mm
	<b>No 405/6</b>	1/4" $\blacksquare$ $\bigcirc$ 150 mm
	<b>No 407</b>	1/4" $\blacksquare$ $\bigcirc$ 38 mm
	<b>No 412</b>	1/4" $\bigcirc$ $\bigcirc$
	<b>No 415</b>	1/4" $\blacksquare$
	<b>No 409</b>	3/8" $\blacksquare$ 1/4" $\bigcirc$
	<b>No 456</b>	3/8" $\bigcirc$ sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm
	<b>No 46</b>	3/8" $\bigcirc$ sizes 10; 11; 12; 13 mm
	<b>No 47</b>	3/8" $\bigcirc$ sizes 10; 11; 12; 13; 14; 15; 16 mm
	<b>No 49</b> <b>No 1049-9</b>	3/8" $\bigcirc$ sizes 5; 6; 7 mm 3/8" $\bigcirc$ size 9 mm

	<b>No 49X</b>	3/8" $\bigcirc$ sizes M6; M8; M10
	<b>No 427/3</b>	3/8" $\blacksquare$ $\bigcirc$ 76 mm
	<b>No 427/5</b>	3/8" $\blacksquare$ $\bigcirc$ 125 mm
	<b>No 427/10</b>	3/8" $\blacksquare$ $\bigcirc$ 240 mm
	<b>No 435</b>	3/8" $\blacksquare$
	<b>No 452</b>	3/8" $\blacksquare$
	<b>No 428</b>	3/8" $\blacksquare$ $\bigcirc$ 46 mm
	<b>No 431</b>	1/4" $\blacksquare$ 3/8" $\bigcirc$
	<b>No 432</b>	1/2" $\blacksquare$ 3/8" $\bigcirc$
	<b>No 52</b>	1/2" $\bigcirc$ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm
	<b>No 54</b>	1/2" $\bigcirc$ sizes 8; 10; 12; 14; 17 mm
	<b>No 509QR/2</b>	1/2" $\blacksquare$ $\bigcirc$ 52 mm
	<b>No 509/5</b>	1/2" $\blacksquare$ $\bigcirc$ 130 mm
	<b>No 509QR/10</b>	1/2" $\blacksquare$ $\bigcirc$ 255 mm (2x)
	<b>No 506</b>	1/2" $\blacksquare$ 300 mm
	<b>No 510</b>	1/2" $\blacksquare$ $\bigcirc$ 71 mm
	<b>No 512</b>	1/2" $\blacksquare$
	<b>No 513</b>	3/8" $\blacksquare$ 1/2" $\bigcirc$
	<b>No 514</b>	3/4" $\blacksquare$ 1/2" $\bigcirc$
	<b>No 2309K</b>	1/2" $\bigcirc$ sizes 17; 19 mm
	<b>No 12506</b>	sizes 6; 7 mm
	<b>No 21TX</b>	sizes E6 x E8; E10 x E12; E14 x E18; E20 x E24
	<b>No 40TX</b>	1/4" $\bigcirc$ sizes E4; E5; E6; E7; E8
	<b>No 44KTXB</b>	1/4" $\bigcirc$ sizes T10; T15; T20; T25; T27; T30; T40
	<b>No 45TX</b>	3/8" $\bigcirc$ sizes E10; E12; E14
	<b>No 47TX</b>	3/8" $\bigcirc$ sizes E8; E10
	<b>No 49TX</b>	3/8" $\bigcirc$ size T40
	<b>No 50TX</b>	1/2" $\bigcirc$ sizes E11; E16; E18; E20; E24
	<b>No 54TX</b> <b>No 54TXB</b>	1/2" $\bigcirc$ sizes T45; T50; T55; T60 1/2" $\bigcirc$ sizes T30; T40; T45; T50
	<b>No 409M</b>	3/8" $\blacksquare$ 1/4" $\bigcirc$
	<b>No 415B</b>	1/4" $\bigcirc$
	<b>No 1410</b>	size T6
	<b>No 1411</b>	size T7
	<b>No 1412</b>	size T8
	<b>No 1413</b>	size T9
	<b>No 1440</b>	size T10
	<b>No 1441</b>	size T15
	<b>No 1442</b>	size T20
	<b>No 1443</b>	size T25
	<b>No 1444</b>	size T27
	<b>No 1445</b>	size T30
	<b>No 1446</b>	size T40
	<b>No 1427</b>	size T25 (65 mm)
	<b>No 1435</b>	size T55
	<b>No PZ1221</b> <b>No PZ1222</b> <b>No PZ1223</b>	size 1 size 2 size 3
	<b>No 736/40</b>	5/16" $\bigcirc$ size D8
	<b>No 3115/1</b>	1/4" $\blacksquare$ $\bullet$
	<b>No 4856</b>	sizes T6; T7; T8; T9; T10; T15; T20; T25; T27; T30
	<b>No 10766</b>	sizes T6; T7

Continuation see next page

## Special automotive tools

	<b>No 10766/9</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30; T40
		TORX® controller
	<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)
	<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
	<b>No 4734</b>	size 2
	<b>No 4744</b>	size 1
	<b>No 4820</b>	0.6 x 3.5 x 75 mm 0.8 x 4.0 x 100 mm 1.2 x 6.5 x 150 mm 1.6 x 10.0 x 200 mm 2.0 x 12.0 x 250 mm
	<b>No 4830</b>	sizes 1; 2; 3
	<b>No 4840</b>	size 1
	<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 65 01 5 180</b>	
	<b>No 65 29 5 200</b>	
	<b>No 65 43 4 002</b>	
	<b>No 65 44 4 021</b>	
	<b>No 65 45 4 002</b>	
	<b>No 65 46 4 021</b>	
	<b>No 65 64 2 250</b>	
	<b>No 65 72 6 240</b>	
	<b>No 66 02 5 160</b>	
	<b>No 102</b>	200 mm
	<b>No 103</b>	150 mm
	<b>No 105</b>	120 x 10 mm
	<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
	<b>No 10957</b>	∅ 40 mm
	<b>No 10960</b>	500 g
	<b>No 12373</b>	
	<b>No 12600</b>	500 g
	<b>No 12718</b>	
	<b>No 12922E</b>	
	<b>No 12931</b>	3 m
	<b>No 39 cars</b>	400 mm
	<b>No 7756</b>	

## 2501N TCS Workshop set for BMW motorbikes



215 tools, in TCS inlays (Tool Control System see page 53-71), 2x1/3, 2x2/3 and 5x3/3 inlays for 7 drawers (No 98VA for 3.5 drawers).

Code	kg
<b>97 83 06 06</b>	23.3



**96 83 20 96**



**96 83 20 95**



**96 83 20 97**



**96 83 20 98**



**96 83 20 99**



**96 83 21 00**







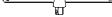

**96 83 21 01**



**96 83 21 02**



**96 83 06 22**

	<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 18 x 21; 20 x 22 mm
	<b>No 13</b>	sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 27; 29; 30; 32; 34 mm
	<b>No 40</b>	1/4" ∅ sizes 4; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13 mm
	<b>No 44K</b>	1/4" ∅, ∅ 3; 4; 5; 6; 8 mm
	<b>No 400</b>	1/4" ■ 150 mm
	<b>No 404</b>	1/4" ■ 116 mm

	<b>No 405/2</b> <b>No 405/4</b>	1/4" ■ ○ 54 mm 1/4" ■ ○ 100 mm
	<b>No 407</b>	1/4" ■ ○ 38 mm
	<b>No 412</b>	1/4" ○ ○
	<b>No 415</b>	1/4" ■
	<b>No 456</b>	3/8" ○ sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm
	<b>No 46</b> <b>No 4600</b> <b>No 4606</b>	3/8" ○ size 20.8 mm-13/16" 3/8" ○ size 16 mm-5/8" 3/8" ○ size 18 mm-11/16"
	<b>No 49</b>	3/8" ○ sizes 5; 6; 8 mm
	<b>No 425</b>	3/8" ■ 165 mm
	<b>No 427/3</b>	3/8" ■ ○ 76 mm
	<b>No 427/10</b>	3/8" ■ ○ 240 mm
	<b>No 428</b>	3/8" ■ ○ 46 mm
	<b>No 431</b>	1/4" ■ 3/8" ○
	<b>No 432</b>	1/2" ■ 3/8" ○
	<b>No 435</b>	3/8" ■
	<b>No 52</b>	1/2" ○ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32; 34 mm
	<b>No 54</b>	1/2" ○ sizes 10; 12 mm
	<b>No 506</b>	1/2" ■ 300 mm
	<b>No 509/5</b>	1/2" ■ ○ 130 mm
	<b>No 509/10</b>	1/2" ■ ○ 255 mm
	<b>No 510</b>	1/2" ■ ○ 71 mm
	<b>No 512</b>	1/2" ■
	<b>No 513</b>	3/8" ■ 1/2" ○
	<b>No 21TX</b>	sizes E6 x E8; E10 x E12
	<b>No 40TX</b>	1/4" ○ sizes E8; E10
	<b>No 44KTXB</b>	1/4" ○ sizes T8; T10; T15; T20; T25; T27; T30; T40
	<b>No 45TX</b>	3/8" ○ sizes E8; E10; E12; E14
	<b>No 49TX</b> <b>No 54TX</b>	3/8" ○ sizes T25; T45 1/2" ○ sizes T40; T50; T55; T60
	<b>No 1054TX</b> <b>No 2054TX</b>	1/2" ○ sizes T50; T55 1/2" ○ sizes T40; T45
	<b>No 10771/8</b>	sizes T9; T10; T15; T20; T25; T27; T30; T40
	<b>No 10769</b>	sizes T9; T10; T15; T20; T25; T30; T40; T45; T50
	<b>No 4621</b>	size 0 (0.4 x 2.5 x 80 mm) size 1 (0.5 x 3.5 x 90 mm) size 2 (0.6 x 4.0 x 100 mm) size 4 (1.0 x 6.5 x 140 mm) size 5 (1.2 x 8.0 x 160 mm)
	<b>No 4631</b>	sizes 1; 2
	<b>No 4632</b>	sizes 1; 2; 3
	<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
	<b>No 4734</b>	size 2
	<b>No 10506</b>	0.8 x 4 x 300 mm
	<b>No 10518</b>	1.0 x 5.5 x 410 mm
	<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 10768</b>	sizes 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 12507-2K</b>	sizes 8; 10 mm
	<b>No 65 01 5 180</b>	

	<b>No 65 29 5 200</b>	
	<b>No 65 34 5 280</b>	
	<b>No 65 35 5 200</b>	
	<b>No 65 43 4 001</b> <b>No 65 43 4 002</b>	
	<b>No 65 45 4 001</b> <b>No 65 45 4 002</b>	
	<b>No 65 72 6 240</b>	
	<b>No 66 02 5 160</b>	
	<b>No 102</b>	150 mm
	<b>No 103</b>	150 mm
	<b>No 105</b>	120 x 10 mm
	<b>No 108</b>	150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
	<b>No 10356</b>	
	<b>No 10670</b>	285 mm
	<b>No 10672</b>	20 x 315 mm
	<b>No 10957</b>	∅ 40 mm
	<b>No 10960</b>	300; 500 g
	<b>No 12374</b>	
	<b>No 12600</b>	500 g
	<b>No 12900N</b>	
	<b>No 12922E</b>	∅ 6 mm
	<b>No 12965N</b>	

## Tool Control System

### The safety inlay system

- Designed to fit our Tool Trolleys and Tool Boxes
- With yellow signal cut-outs to show whether all tools are in their places





# Special automotive tools

## 3026N/1 TCS Tool set for Mercedes-Benz cars



279 tools, in TCS inlay (Tool Control System see page 53-71),  
5x1/3, 5x2/3 and 3x3/3 inlays for 8 drawers (No 98VA for 4 drawers).

Code	△ kg
97830008	26.6



96830167



96830217



96830218



96830163



96838179



96830323



96831168



96830226



96830164



96830165



96830166


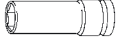



































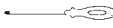
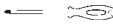
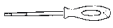















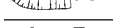


96830219



96830227

	<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 24 x 27; 30 x 32; 34 x 36 mm
	<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24 mm
	<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 24 x 27; 30 x 32 mm
	<b>No 21</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 24; 27 x 32; 30 x 34 mm
	<b>No 24</b>	sizes 10 x 11; 12 x 14 mm
	<b>No 40</b>	1/4"  sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 41K</b>	1/4"   0.6 x 3.5; 1.0 x 5.5; 1.2 x 8 mm
	<b>No 44K</b>	1/4"   3; 4; 5; 6; 8 mm
	<b>No 44P</b>	1/4"   sizes 1; 2; 3; 4
	<b>No 400</b>	1/4"  150 mm
	<b>No 404</b>	1/4"  116 mm
	<b>No 405/2</b>	1/4"   54 mm
	<b>No 405/6</b>	1/4"   150 mm
	<b>No 407</b>	1/4"   38 mm
	<b>No 409</b>	3/8"  1/4"
	<b>No 412</b>	1/4"
	<b>No 415</b>	1/4"
	<b>No 456</b>	3/8"  sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm
	<b>No 427/3</b>	3/8"   76 mm
	<b>No 427/5</b>	3/8"   125 mm
	<b>No 427/10</b>	3/8"   240 mm
	<b>No 428</b>	3/8"   46 mm
	<b>No 431</b>	1/4"   3/8"
	<b>No 432</b>	1/2"   3/8"
	<b>No 435</b>	3/8"
	<b>No 50</b>	1/2"  sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 30 mm
	<b>No 52</b>	1/2"  sizes 12; 17; 18; 19; 20; 21; 22; 24; 25; 27; 30; 32 mm
	<b>No 509/2</b>	1/2"   52 mm
	<b>No 509/5</b>	1/2"   130 mm
	<b>No 509/10</b>	1/2"   255 mm
	<b>No 510</b>	1/2"   71 mm
	<b>No 512</b>	1/2"
	<b>No 513</b>	3/8"  1/2"
	<b>No 514</b>	3/4"  1/2"
	<b>No 54</b>	1/2"  sizes 5; 6; 7; 8; 10; 12; 14; 17; 19 mm

	<b>No 55</b>	3/4" $\bigcirc$ size 36 mm
	<b>No 2309K</b>	1/2" $\bigcirc$ sizes 17; 19 mm
	<b>No 12506</b>	sizes 6; 7 mm
	<b>No 21TX</b>	sizes E6 x E8; E10 x E12; E14 x E18; E20 x E24
	<b>No 40TX</b>	1/4" $\bigcirc$ sizes E4; E5; E6; E7; E8
	<b>No 44KTXB</b>	1/4" $\bigcirc$ sizes T10; T15; T20; T25; T27; T30; T40
	<b>No 45TX</b>	3/8" $\bigcirc$ sizes E10; E12; E14
	<b>No 47TX</b>	3/8" $\bigcirc$ sizes E8; E10
	<b>No 49TX</b>	3/8" $\bigcirc$ size T40
	<b>No 49X</b>	3/8" $\bigcirc$ sizes M6; M8; M10
	<b>No 50TX</b>	1/2" $\bigcirc$ sizes E11; E16; E18; E20; E24
	<b>No 54TX</b> <b>No 54TXB</b>	1/2" $\bigcirc$ sizes T45; T50; T55; T60 1/2" $\bigcirc$ sizes T30; T40; T45; T50
	<b>No 409M</b>	3/8" $\blacksquare$ 1/4" $\bigcirc$
	<b>No 415SGB</b>	1/4" $\bigcirc$
	<b>No 1410</b>	size T6
	<b>No 1411</b>	size T7
	<b>No 1412</b>	size T8
	<b>No 1413</b>	size T9
	<b>No 1440</b>	size T10
	<b>No 1441</b>	size T15
	<b>No 1442</b>	size T20
	<b>No 1443</b>	size T25
	<b>No 1444</b>	size T27
	<b>No 1445</b>	size T30
	<b>No 1446</b>	size T40
	<b>No 1427</b>	size T25 (65 mm)
	<b>No PZ1221</b> <b>No PZ1222</b> <b>No PZ1223</b>	size 1 (2x) size 2 (2x) size 3
	<b>No 3115/1</b>	1/4" $\blacksquare$ $\blacklozenge$
	<b>No 4650</b>	sizes T6; T7; T8; T9; T10; T15; T20; T25; T27; T30
	<b>No 10766</b>	sizes T6; T7
	<b>No 10771/8</b>	sizes T9; T10; T15; T20; T25; T27; T30; T40
		TORX® controller
	<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm) size 6 (1.6 x 10.0 x 200 mm) size 7 (2.0 x 12.0 x 250 mm)
	<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)
	<b>No 4630</b>	size 1; 2; 3
	<b>No 4632</b>	size 4
	<b>No 4640</b>	sizes 0; 1; 2
	<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm)
	<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
	<b>No 4734</b> <b>No 4744</b>	size 2 size 1
	<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 65 01 5 180</b>	
	<b>No 65 29 5 200</b>	
	<b>No 65 51 6 240</b>	

	<b>No 65 64 2 175</b>	
	<b>No 66 02 5 160</b>	
	<b>No 102</b>	200 mm
	<b>No 103</b>	150 mm
	<b>No 105</b>	120 x 10 mm
	<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8; 200 x 8 mm
	<b>No 10672</b>	20 x 315; 25 x 365 mm
	<b>No 10957</b>	$\varnothing$ 40 mm
	<b>No 10960</b>	500; 800 g
	<b>No 12377</b>	
	<b>No 12600</b>	3000 g
	<b>No 12718</b>	

### 3022N/1 TCS Tool set for Mercedes-Benz HGVs



308 tools, in TCS inlay (Tool Control System see page 53-71), 6x1/3, 2x2/3 and 7x3/3 inlays for 11 drawers (No 98VA for 6 drawers).

Code	$\Delta$ kg
<b>9783 0009</b>	47.3



**96 83 01 67**



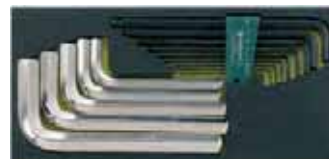
**96 83 02 17**



**96 83 02 18**



**96 83 01 72**



**96 83 02 25**



**96 83 81 79**



**96 83 02 22**



**96 83 03 24**



**96 83 02 21**



**96 83 11 79**

Continuation see next page



## Special automotive tools



96830177



96830178








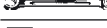








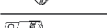

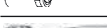






96830165





















































96830166



96830220

	<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 24 x 27; 30 x 32; 34 x 36 mm
	<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32; 34 mm
	<b>No 14</b>	size 24 mm
	<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 24 x 27; 30 x 32 mm
	<b>No 21</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 24; 27 x 32; 30 x 34 mm
	<b>No 24</b>	sizes 10 x 11; 12 x 14 mm
	<b>No 40</b>	1/4" $\bigcirc$ sizes 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 41K</b>	1/4" $\bigcirc$ , $\ominus$ 0.6 x 3.5; 1.0 x 5.5; 1.2 x 8 mm
	<b>No 44K</b>	1/4" $\bigcirc$ , $\bullet$ 3; 4; 5; 6; 8 mm
	<b>No 44P</b>	1/4" $\bigcirc$ , $\oplus$ sizes 1; 2; 3; 4
	<b>No 400</b>	1/4" $\blacksquare$ 150 mm
	<b>No 404</b>	1/4" $\blacksquare$ 116 mm
	<b>No 405/2</b>	1/4" $\blacksquare$ $\bigcirc$ 54 mm
	<b>No 405/6</b>	1/4" $\blacksquare$ $\bigcirc$ 150 mm
	<b>No 407</b>	1/4" $\blacksquare$ $\bigcirc$ 38 mm
	<b>No 409</b>	3/8" $\blacksquare$ 1/4" $\bigcirc$
	<b>No 412</b>	1/4" $\bigcirc$ $\bigcirc$
	<b>No 415</b>	1/4" $\blacksquare$
	<b>No 456</b>	3/8" $\bigcirc$ sizes 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22 mm
	<b>No 427/3</b>	3/8" $\blacksquare$ $\bigcirc$ 76 mm
	<b>No 427/5</b>	3/8" $\blacksquare$ $\bigcirc$ 125 mm
	<b>No 427/10</b>	3/8" $\blacksquare$ $\bigcirc$ 240 mm
	<b>No 428</b>	3/8" $\blacksquare$ $\bigcirc$ 46 mm

	<b>No 431</b>	1/4" $\blacksquare$ 3/8" $\bigcirc$
	<b>No 432</b>	1/2" $\blacksquare$ 3/8" $\bigcirc$
	<b>No 435</b>	3/8" $\blacksquare$
	<b>No 50</b>	1/2" $\bigcirc$ sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 30 mm
	<b>No 52</b>	1/2" $\bigcirc$ sizes 12; 17; 18; 19; 20; 21; 22; 24; 25; 27; 30; 32 mm
	<b>No 504/15</b>	1/2" $\blacksquare$ 397 mm
	<b>No 506</b>	1/2" $\blacksquare$ 300 mm
	<b>No 509/2</b>	1/2" $\blacksquare$ $\bigcirc$ 52 mm
	<b>No 509/5</b>	1/2" $\blacksquare$ $\bigcirc$ 130 mm
	<b>No 509/10</b>	1/2" $\blacksquare$ $\bigcirc$ 255 mm (2 x)
	<b>No 510</b>	1/2" $\blacksquare$ $\bigcirc$ 71 mm
	<b>No 512</b>	1/2" $\blacksquare$
	<b>No 54</b>	1/2" $\bigcirc$ sizes 5; 6; 7; 8; 10; 12; 14; 17; 19 mm
	<b>No 51IMP</b>	1/2" $\bigcirc$ sizes 24; 27 mm
	<b>No 2309</b>	1/2" $\bigcirc$ size 22 mm
	<b>No 2309K</b>	1/2" $\bigcirc$ sizes 17; 19 mm
	<b>No 21TX</b>	sizes E6 x E8; E10 x E12; E14 x E18; E20 x E24
	<b>No 40TX</b>	1/4" $\bigcirc$ sizes E4; E5; E6; E7; E8
	<b>No 44KTXB</b>	1/4" $\bigcirc$ sizes T10; T15; T20; T25; T27; T30; T40
	<b>No 45TX</b>	3/8" $\bigcirc$ sizes E10; E12; E14
	<b>No 49TX</b>	3/8" $\bigcirc$ size T40
	<b>No 49X</b>	3/8" $\bigcirc$ sizes M6; M8; M10
	<b>No 50TX</b>	1/2" $\bigcirc$ sizes E11; E16; E18; E20; E24
	<b>No 54TX</b>	1/2" $\bigcirc$ sizes T45; T50; T55; T60
	<b>No 54TXB</b>	1/2" $\bigcirc$ sizes T30; T40; T45; T50
	<b>No 409M</b>	3/8" $\blacksquare$ 1/4" $\bigcirc$
	<b>No 415SGB</b>	1/4" $\bigcirc$
	<b>No 1410</b>	size T6
	<b>No 1411</b>	size T7
	<b>No 1412</b>	size T8
	<b>No 1413</b>	size T9
	<b>No 1440</b>	size T10
	<b>No 1441</b>	size T15
	<b>No 1442</b>	size T20
	<b>No 1443</b>	size T25
	<b>No 1444</b>	size T27
	<b>No 1445</b>	size T30
	<b>No 1446</b>	size T40
	<b>No 1427</b>	size T25 (65 mm)
	<b>No PZ1221</b>	size 1 (2x)
	<b>No PZ1222</b>	size 2 (2x)
	<b>No PZ1223</b>	size 3
	<b>No 3115/1</b>	1/4" $\blacksquare$ $\bullet$
	<b>No 4650</b>	sizes T6; T7; T8; T9; T10; T15; T20; T25; T27; T30
	<b>No 10766</b>	sizes T6; T7
	<b>No 10771/8</b>	sizes T9; T10; T15; T20; T25; T27; T30; T40
		TORX® controller
	<b>No 55</b>	3/4" $\bigcirc$ sizes 22; 24; 27; 30; 32; 34; 36; 38; 41; 46; 50 mm
	<b>No 552</b>	3/4" $\blacksquare$
	<b>No 556</b>	3/4" $\blacksquare$

	<b>No 559/8</b>	3/4" ■ ○ 200 mm
	<b>No 559/16</b>	3/4" ■ ○ 400 mm
	<b>No 558</b>	510 mm
	<b>No 568</b>	1/2" ■ 3/4" ○
	<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm) size 6 (1.6 x 10.0 x 200 mm) size 7 (2.0 x 12.0 x 200 mm)
	<b>No 4628</b>	size 1 (0.4 x 2.5 x 60 mm)
	<b>No 4630</b>	sizes 1; 2; 3
	<b>No 4632</b>	size 4
	<b>No 4640</b>	sizes 0; 1; 2
	<b>No 4660 VDE</b>	size 1 (0.4 x 2.5 x 75 mm)
	<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
	<b>No 4734</b>	size 2
	<b>No 4744</b>	size 1
	<b>No 10760CV</b>	sizes 12; 14; 17; 19; 22 mm
	<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 65 01 5 180</b>	
	<b>No 65 29 5 200</b>	
	<b>No 65 51 6 240</b>	
	<b>No 66 02 5 160</b>	
	<b>No 102</b>	200; 300 mm
	<b>No 103</b>	175 mm
	<b>No 105</b>	120 x 12 mm
	<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
	<b>No 10957</b>	∅ 50 mm
	<b>No 10960</b>	500; 800; 1000 g
	<b>No 11006</b>	400 mm
	<b>No 11007</b>	400 mm
	<b>No 12025</b>	210 mm
	<b>No 12036</b>	260 mm
	<b>No 12374</b>	
	<b>No 12600</b>	3000 g
	<b>No 12718</b>	
	<b>No 12931</b>	3 m

## Tool Control System

### The safety inlay system

- Designed to fit our Tool Trolleys and Tool Boxes
- With yellow signal cut-outs to show whether all tools are in their places



## 1100 TCS Tool set for Porsche



228 tools, in TCS inlays (Tool Control System see page 53-71), 1x1/3, 1x2/3 and 5x3/3 inlays for 6 drawers (No 98VA for 3 drawers).

Code	kg
<b>9783 04 11</b>	24.7



**96 83 01 92**



**96 83 01 93**



**96 83 01 94**



**96 83 01 95**



**96 83 11 96**



**96 83 01 97**

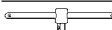



















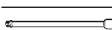


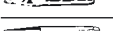

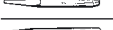













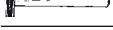
























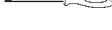





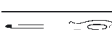


**96 83 01 98**

	<b>No 12</b>	sizes 5.5; 12; 14 mm (2x)
	<b>No 13</b>	sizes 7; 11 mm (2x); sizes 6; 8; 9; 10; 12; 13; 14; 15; 16; 17; 18; 19; 20; 22; 24; 30; 32; 36 mm (1x)
	<b>No 14</b>	size 17 mm
	<b>No 20</b>	sizes 10 x 11; 12 x 13; 14 x 15; 17 x 19; 19 x 22 mm
	<b>No 23</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22; 21 x 23; 24 x 27; 30 x 32 mm
	<b>No 24</b>	sizes 8 x 10; 11 x 13; 12 x 14; 17 x 19; 22 x 24 mm
	<b>No 29</b>	sizes 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 19; 20 x 22 mm
	<b>No 40</b>	1/4" ○ sizes 3.5; 4; 4.5; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13 mm
	<b>No 44</b>	1/4" ○ sizes 3; 4; 5; 6 mm
	<b>No 400</b>	1/4" ■ 150 mm

Continuation see next page

## Special automotive tools

	<b>No 404</b>	1/4" ■ 116 mm		<b>No 4724</b>	size 2 (1.0 x 5.5 x 25 mm)
	<b>No 405/6</b>	1/4" ■ ○ 150 mm		<b>No 4734</b>	size 2
	<b>No 407</b>	1/4" ■ ○ 38 mm		<b>No 10760CV/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 409M</b>	3/8" ■ 1/4" ○		<b>No 65 01 6 180</b>	
	<b>No 415</b>	1/4" ■		<b>No 65 43 4 002</b>	
	<b>No 45</b>	3/8" ○ sizes 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm		<b>No 65 45 4 002</b>	
	<b>No 46</b>	3/8" ○ size 20.8 mm-13/16"		<b>No 65 46 4 021</b>	
	<b>No 49</b>	3/8" ○ sizes 4; 5; 6; 7; 8; 10 mm		<b>No 65 51 6 240</b>	
	<b>No 425</b>	3/8" ■ 165 mm		<b>No 66 02 6 160</b>	
	<b>No 427/3</b>	3/8" ■ ○ 76 mm		<b>No 100</b>	150 mm
	<b>No 427/10</b>	3/8" ■ ○ 240 mm		<b>No 103</b>	150 mm
	<b>No 428</b>	3/8" ■ ○ 46 mm		<b>No 104</b>	120 x 4; 120 x 6 mm
	<b>No 432M</b>	1/2" ■ 3/8" ○		<b>No 105</b>	120 x 12 mm
	<b>No 435</b>	3/8" ■		<b>No 108</b>	150 x 4 mm
	<b>No 50</b>	1/2" ○ sizes 19; 21; 22; 24; 27; 30; 32 mm		<b>No 10670</b>	265 mm
	<b>No 52</b>	1/2" ○ sizes 16; 17; 18; 19; 22; 24; 27; 30; 32 mm		<b>No 10940</b>	∅ 55 mm
	<b>No 54</b>	1/2" ○ sizes 6; 7; 8; 10 mm		<b>No 10955</b>	∅ 35 mm
	<b>No 54X</b>	1/2" ○ sizes M6; 8; 12; 14		<b>No 10960</b>	300; 500 g
	<b>No 506</b>	1/2" ■ 300 mm		<b>No 11095/20</b>	20 blades 0.05-1 mm
	<b>No 509/5</b>	1/2" ■ ○ 130 mm		<b>No 12005</b>	
	<b>No 509/10</b>	1/2" ■ ○ 255 mm		<b>No 12036</b>	260 mm
	<b>No 510</b>	1/2" ■ ○ 71 mm		<b>No 12321</b>	
	<b>No 512</b>	1/2" ■		<b>No 12905</b>	
	<b>No 514M</b>	3/4" ■ 1/2" ○		<b>No 12931</b>	3 m
	<b>No 21TX</b>	sizes E6 x E8; E10 x E12; E14 x E18; E20 x E24			
	<b>No 40TX</b>	1/4" ○ sizes E4; E5; E6; E7; E8			
	<b>No 45TX</b>	3/8" ○ sizes E10; E12; E14			
	<b>No 50TX</b>	1/2" ○ sizes E11; E16; E18; E20; E24			
	<b>No 54TX</b>	1/2" ○ sizes T45; T50; T55; T60			
	<b>No 1410</b>	size T6			
	<b>No 1411</b>	size T7			
	<b>No 1412</b>	size T8			
	<b>No 1413</b>	size T9			
	<b>No 1440</b>	size T10			
	<b>No 1441</b>	size T15			
	<b>No 1442</b>	size T20			
	<b>No 1443</b>	size T25			
	<b>No 1444</b>	size T27			
	<b>No 1445</b>	size T30			
	<b>No 1446</b>	size T40			
	<b>No 1427</b>	size T25 (65 mm)			
	<b>No 4155GB</b>	1/4" ○			
	<b>No 4650</b>	sizes T6; T7; T8; T9; T10; T15; T20; T25; T27; T30			
	<b>No 10766/9</b>	sizes T8; T9; T10; T15; T20; T25; T27; T30; T40			
	<b>No 4622</b>	size 1 (1.0 x 5.5 x 100 mm) size 2 (1.2 x 6.5 x 125 mm) size 4 (1.6 x 10.0 x 175 mm) size 5 (2.0 x 12.0 x 200 mm)			
	<b>No 4630</b>	size 1			
	<b>No 4632</b>	size 3			



STAHLWILLE's **Tool Trolley 95VA** now features even better safety and more sophisticated details.



## 1120 TCS Workshop set for VW/Audi (basic)



241 tools, in TCS inlays (Tool Control System see page 53-71),  
3x1/3, 3x2/3 and 4x3/3 inlays for 7 drawers (No 98VA for 4 drawers).

Code	kg
<b>97 83 08 20</b>	30



**96 83 16 08**



**96 83 16 15**



**96 83 16 13**



**96 83 15 85**



**96 83 16 09**



**96 83 08 77**



**96 83 16 10**



**96 83 01 66**



**96 83 16 14**



**96 83 15 84**


































	<b>No 13</b>	sizes 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32 mm
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	<b>No 20</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 24 x 27; 30 x 32 mm
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	<b>No 24</b>	size 10 x 11 mm
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	<b>No 17</b>	sizes 8; 10; 12; 13; 17; 19 mm
	<b>No 40</b>	1/4"  sizes 4; 5; 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm
	<b>No 44K</b>	1/2"  sizes 3; 4; 5; 6 mm
	<b>No 40TX</b>	1/4"  sizes E4; E5; E6; E8
	<b>No 44KTX</b>	1/4"  sizes T10; T15; T20; T25; T27
	<b>No 41K</b>	1/4"  1.0 x 5.5 mm
	<b>No 44P</b>	1/4"  sizes 1; 2
	<b>No 400</b>	1/4"  150 mm
	<b>No 405W/2</b>	1/4"  54 mm
	<b>No 405W/4</b>	1/4"  100 mm
	<b>No 405W/6</b>	1/4"  150 mm
	<b>No 407</b>	1/4"  38 mm
	<b>No 412</b>	1/4"
	<b>No 415</b>	1/4"
	<b>No 409</b>	3/8"  1/4"
	<b>No 431</b>	1/4"  3/8"
	<b>No 432</b>	1/2"  3/8"
	<b>No 50</b>	1/2"  sizes 8; 9; 10; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24; 27; 30; 32 mm
	<b>No 52</b>	1/2"  sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 27; 30; 32 mm
	<b>No 54</b>	1/2"  sizes 5; 6; 7; 8; 10; 12; 14; 17; 19 mm
	<b>No 54KK</b>	1/2"  sizes 5; 6; 7; 8; 10 mm
	<b>No 54X</b>	1/2"  sizes M5; M6; M8; M10; M12; M14; M16
	<b>No 59X</b>	3/4"  size M18
	<b>No 1054X/M8</b>	1/2"  80 mm
	<b>No 3054X/M10</b>	1/2"  140 mm
	<b>No 3054X/M12</b>	1/2"  140 mm
	<b>No 3054X/M14</b>	1/2"  140 mm
	<b>No 50TX</b>	1/2"  sizes E10; E12; E14; E16; E18; E20
	<b>No 54TX</b>	1/2"  sizes T25; T27; T30; T40; T45; T50; T55; T60
	<b>No 506</b>	1/2"  300 mm
	<b>No 509W/2</b>	1/2"  52 mm
	<b>No 509W/5</b>	1/2"  130 mm
	<b>No 509W/10</b>	1/2"  255 mm
	<b>No 510</b>	1/2"  71 mm
	<b>No 512</b>	1/2"
	<b>No 513</b>	3/8"  1/2"
	<b>No 514</b>	3/4"  1/2"
	<b>No 556</b>	3/4"  320 mm
	<b>No 558</b>	510 mm
	<b>No 568</b>	1/2"  3/4"
	<b>No 2309K</b>	1/2"  sizes 17; 19 mm
	<b>No 50D IMP</b>	1/2"  sizes 32; 36 mm
	<b>No 1410</b>	size T6
	<b>No 1411</b>	size T7
	<b>No 1412</b>	size T8
	<b>No 1413</b>	size T9

## Special automotive tools

	<b>No 4724</b>	size 1 (0.6 x 3.5 x 25 mm)
	<b>No 4734</b>	size 2
	<b>No 4620</b>	size 1 (0.6 x 3.5 x 75 mm) size 2 (0.8 x 4.0 x 100 mm) size 3 (1.0 x 5.5 x 125 mm) size 4 (1.2 x 6.5 x 150 mm) size 5 (1.6 x 8.0 x 175 mm) size 6 (1.6 x 10.0 x 200 mm) size 7 (2.0 x 12.0 x 200 mm)
	<b>No 4632</b>	size 1; 2; 3
	<b>No 4622SK</b>	size 1 (0.8 x 4.0 x 90 mm) size 2 (1.0 x 5.5 x 100 mm) size 3 (1.2 x 6.5 x 125 mm)
	<b>No 4632SK</b>	size 1; 2
	<b>No 4650</b>	sizes T6; T7; T8; T9; T10; T15; T20; T25; T27; T30
	<b>No 10767/9</b>	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
	<b>No 10771/8</b>	sizes T9; T10; T15; T20; T25; T27; T30; T40
	<b>No 65 01 5 180</b>	
	<b>No 65 29 5 160</b>	
	<b>No 65 43 4 002</b>	
	<b>No 65 44 4 021</b>	
	<b>No 65 45 4 002</b>	
	<b>No 65 46 4 021</b>	
	<b>No 65 63 2 250</b>	
	<b>No 65 72 6 240</b>	
	<b>No 66 02 5 180</b>	
	<b>No 102</b>	150; 200 mm
	<b>No 105</b>	120 x 10 mm
	<b>No 108</b>	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm
	<b>No 10956</b>	∅ 35 mm
	<b>No 10960</b>	500 g
	<b>No 11095/13</b>	0.05-1 mm
	<b>No 12320</b>	
	<b>No 12373</b>	
	<b>No 12600</b>	500 g
	<b>No 12718</b>	
	<b>No 12900/3</b>	
	<b>No 12920N</b>	
	<b>No 12931</b>	3 m
	<b>No 39 Pkw</b>	400 mm
	<b>No 7756</b>	

## 1120/1 TCS Additional set for VW



66 tools, in TCS inlays (Tool Control System see page 53-71),  
2x1/3 und 1x2/3 inlays for 2 drawers (No 98VA for 1 drawer).

Code	∆ kg
<b>97 83 08 21</b>	6.55




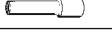
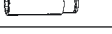



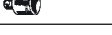
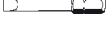





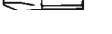
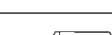
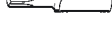









**96 83 16 02**










**96 83 16 07**


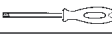








**96 83 16 01**

	<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 24 x 27; 30 x 32 mm
	<b>No 40DL</b>	1/4" ∅ size 8 mm
	<b>No 46</b>	3/8" ∅ size 12 mm
	<b>No 51</b>	1/2" ∅ sizes 10; 13; 14; 15; 16; 17; 18; 19 mm
	<b>No 54TX</b>	1/2" ∅ sizes T30; T40; T45; T50; T55
	<b>No 512</b>	1/2" ■
	<b>No 513</b>	3/8" ■ 1/2" ∅
	<b>No 1162</b>	0.6 x 3.5 mm
	<b>No 1164</b>	0.8 x 4.0 mm
	<b>No 1166</b>	1.0 x 5.5 mm
	<b>No 1166/1</b>	1.2 x 6.5 mm
	<b>No 1168</b>	1.6 x 8.0 mm
	<b>No 1299</b>	2 mm
	<b>No 1221</b>	size 1
	<b>No 1222</b>	size 2
	<b>No 1223</b>	size 3
	<b>No PZ1221</b>	size 1
	<b>No PZ1222</b>	size 2
	<b>No PZ1223</b>	size 3
	<b>No 1410</b>	size T6
	<b>No 1411</b>	size T7
	<b>No 1412</b>	size T8
	<b>No 1413</b>	size T9
	<b>No 1414</b>	size T10
	<b>No 1415</b>	size T15
	<b>No 1416</b>	size T20
	<b>No 1417</b>	size T25
	<b>No 1418</b>	size T27
	<b>No 1419</b>	size T30
	<b>No 1420</b>	size T40
	<b>No 1421</b>	size T45
	<b>No 1435</b>	size T55



	<b>No 1300</b>	3 mm
	<b>No 1301</b>	4 mm
	<b>No 1302</b>	5 mm
	<b>No 1303</b>	6 mm
	<b>No 1304</b>	8 mm
	<b>No 415B</b>	1/4" $\odot$
	<b>No 12507-2K</b>	sizes 8; 10; 13 mm
	<b>No 65 01 5 180</b>	
	<b>No 65 29 5 145</b>	
	<b>No 65 30 5 200</b>	
	<b>No 66 00 5 145</b>	
	<b>No 66 02 5 200</b>	

	<b>No 1350</b>	size M4
	<b>No 1356</b>	size M5
	<b>No 1357</b>	size M6
	<b>No 1358</b>	size M8
	<b>No 1359</b>	size M8
	<b>No 4650L</b>	sizes T15; T20; T25; T30
	<b>No 736/10</b>	1/4" $\odot$ size D 6,3
	<b>No 736/10</b>	5/16" $\odot$ size D 8
	<b>No 12506</b>	sizes 6; 7; 8 mm
	<b>No 12507-2K</b>	sizes 8; 10; 13 mm
	<b>No 65 01 5 180</b>	
	<b>No 65 29 5 145</b>	
	<b>No 65 30 5 200</b>	
	<b>No 66 00 5 145</b>	
	<b>No 66 02 5 200</b>	

### 1120/2 TCS Additional set for Audi



73 tools, in TCS inlays (Tool Control System see page 53-71),  
2x1/3, 1x2/3 and 1x3/3 inlays for 3 drawers (No 98VA for 1.5 drawers).

Code	$\Delta$ kg
<b>97830822</b>	8.04



**96831602**










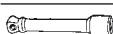





**96831603**



**96831601**



**96831695**

	<b>No 10</b>	sizes 6 x 7; 8 x 9; 10 x 11; 12 x 13; 14 x 15; 16 x 17; 18 x 21; 19 x 22; 24 x 27; 30 x 32 mm
	<b>No 456</b>	3/8" $\odot$ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22 mm
	<b>No 46</b>	3/8" $\odot$ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm
	<b>No 47</b>	3/8" $\odot$ sizes 10; 11; 12; 13; 14; 15; 16; 17; 18; 19 mm
	<b>No 427/3</b>	3/8" $\blacksquare$ $\odot$ 76 mm
	<b>No 427/6</b>	3/8" $\blacksquare$ $\odot$ 160 mm
	<b>No 427/10</b>	3/8" $\blacksquare$ $\odot$ 240 mm
	<b>No 427W/3</b>	1/4" $\blacksquare$ $\odot$ 76 mm
	<b>No 427W/5</b>	3/8" $\blacksquare$ $\odot$ 125 mm
	<b>No 427W/6</b>	3/8" $\blacksquare$ $\odot$ 160 mm
	<b>No 428</b>	3/8" $\blacksquare$ $\odot$ 46 mm
	<b>No 435</b>	3/8" $\blacksquare$
	<b>No 543</b>	5/16" $\odot$ 1/2" $\odot$

### 1120/3 TCS Bodywork set for VW/Audi








9 tools, in TCS inlays (Tool Control System see page 53-71),  
3/3 inlays for 1 drawer (No 98VA for 0.5 drawers).

Code	$\Delta$ kg
<b>96831586</b>	4.4



**96831586**

	<b>No 112</b>	240 mm
	<b>No 65 63 2 175</b>	
	<b>No 65 64 2 145</b>	
	<b>No 65 64 2 250</b>	
	<b>No 10670</b>	265 mm
	<b>No 10960</b>	200; 1000 g
	<b>No 12752R</b>	260 mm
	<b>No 12752L</b>	260 mm

## Tool Control System

### The safety inlay system

- Designed to fit our Tool Trolleys and Tool Boxes
- With yellow signal cut-outs to show whether all tools are in their places





## Special tools for cars

### Special tools for carburettors

#### 10503 Screwdriver

for adjusting slotted screws, matt chrome, black tip.



Code	L mm	Blade mm	 g	
73210101	365	0.8 x 5.0 x 260	100	10


#### 10506 Screwdriver

for setting correct CO-valve on mixture screen, idling mixture on Pierburg carburettors:

BMW, Ford, Opel, Peugeot, Renault, Mercedes-Benz cars.

Choke adjustment Audi 80, VW Passat 1.3-1.5; 1.6 l, matt chrome, black tip.



Code	L mm	Blade mm	 g	
73010001	350	0.8 x 4.0 x 300	53	10

#### 10507N KK Screwdriver

for hexagon socket head screws, size 3 mm,

for mixture regulation on distributor of K-Jetronic: VW-Audi, Mercedes-Benz, Porsche 924, Ford and BMW, matt chrome, black tip.





Code	L mm	 g	
73101003	385	56	5

#### 10518 Screwdriver

for adjustment (slotted screws), matt chrome, black tip.



Code	L mm	Blade mm	 g	
73210102	525	1.0 x 5.5 x 410	159	10

#### 11085 Jet reamers

16 pieces in case

(0.33; 0.4; 0.45; 0.5; 0.6; 0.7; 0.75; 0.8; 0.9; 1.0; 1.1; 1.2; 1.4; 1.6; 1.8; 2.0 mm), with holder.






Code	 g	
74310001	27	10


#### 12504 Bit holder with inside hexagon

for all screwdriver bits, flexible shaft, for adjustment.



Code	L mm	inside  "	Blade mm	 g	
18101016	260	1/4	150	168	10


#### 54TX-T20 Screwdriver Bit

for inside TORX® screws, size T20, 1/2"  -drive, use on mounting screws for choke-switch on choke-flap L-Jetronic.



Code	Type	 g	
03100020	BMW	71	5

#### 540-22 CROWN-FOOT spanner

size 22 mm, 3/8"  -drive, on through-flow jet of 2B4-carburettor, for use with adaptor No 513.



Code	Type	 g	
02200022	BMW: series 3, 518, 520	64	1


#### 513 Adaptor

1/2" socket x 3/8" plug.





Code	Type	 g	
13030002	BMW: series 3, 518, 520	55	5

#### 1062 Socket

bi-hexagon, AS-drive, size 27 mm, 1/2"  -drive, for diesel injectors.



Code	Type	 g	
03830027	BMW: M 21: E30 = 324td, E28 = 524td, E34 = 524td, M 51: E36 = 325td, E34 = 525tds	255	5


#### 1023 Special ring spanner

single ended, angled, size 13 mm, use on mounting screws of injection pump.



Code	Type	 g	
41110013	Citroën: all diesel VW/Audi: Audi 80 L, CL, GL, CD, Golf, Jetta, Caddy, Passat	67	1

#### 51-27 Socket

extra deep, bi-hexagon, size 27 mm, 1/2"  -drive, for injection nozzles on diesel car engines.



Code	Type	 g	
03020027	Mercedes-Benz	294	5

#### 51-30 Socket

size 30 mm, for injectors.



Code	Type	 g	
03020030	Mercedes-Benz	341	5

### 3000 Socket

multi-spline, 1.5 x 58 mm, 1/2" O-drive, for use on pre-chamber with indirect injection.



Code	Type		
03 39 00 01	Mercedes-Benz diesel	185	10

### 3505 Special extension



Code		
13 21 00 01	186	1

### 1054-13 INHEX socket

for hexagon socket head screws, size 13 mm, length, 70 mm, 1/2" O-drive, for use on brass air-cooled injector nozzles.



Code	Type		
03 15 07 13	VW/Audi: for engines with fuel injection	130	5

## Special tools for valves and pistons

### 11063 Valve seating-ring pliers

for pulling valve stem seals and removal of valve spring base on VW-Audi engines with overhead camshaft i.e. Golf, Passat, Audi 80, Audi 100, BMW and Mercedes-Benz, bright nickel-plated.



Code	L mm		
74 29 00 01	250	340	1

### 11063/1 Valve seating-ring pliers

for extracting poorly accessible valve shaft seals, e.g. in four-valve engines. Joint and jaws made of gun-finished hardened sheet steel. Handles made of nickel-plated shaped sheet steel.



Code	L mm		
74 29 00 02	270	345	1

### 11066 Valve spring lifters

bright nickel-plated.



Code	size	Clamp. width mm	Jaws (2 pieces)		
74 12 20 01	1	75-225	11066R/1	1214	1
74 12 20 03	2N	120-280	11066R/3 + R/4	3214	1

### 11066R Spare jaws

for No 11066, 2 each, hardened, nickel-plated.



Code	size	shape	for No		
79 12 01 01	1	straight	11066/1	120	1
79 12 01 02	2	bent	11066/1	121	1
79 12 02 01	3	straight	11066/2	103	1
79 12 02 02	4	bent	11066/2	114	1

### 11068 Piston ring compressors

made of spring steel, stepless adjustment c/w hexagon key wrench.



Code	size	Clamp. width mm	Height mm		
74 14 00 00	0	40-75	50	105	1
74 14 00 01	1 <sup>1)</sup>	57-125	80	230	1
74 14 00 03	2	90-175	80	270	1
74 14 00 05	3	90-175	165	603	1

<sup>1)</sup> Fiat-No A 60 605

(Type 126, 127, 128, X 1/9, 130, 131, 132, 850T, 238)

### 11069 Piston ring pliers

for mounting and removing piston rings, bright nickel-plated.



Code	size	for piston rings mm	L mm		
74 15 20 01	1 <sup>1)</sup>	50-100	200	245	1
74 15 20 02	2	80-120	240	279	1
74 15 20 03	3	110-160	240	394	1
74 15 20 05	5 <sup>2)</sup>	60-160	220	194	1

<sup>1)</sup> Fiat-No A 60 182 (Type 126, 127, 133, 850T)

<sup>2)</sup> with V-shaped contact faces for safe and positive manipulation of piston rings



## Special automotive tools

### 11095-11097 Precision feeler gauges

nickel-plated case, tapered blades.



Code	No	Sizes	L mm	g	
74 24 0001	11095/13	0.05; 0.10; 0.15; 0.20; 0.25; 0.30; 0.40; 0.50; 0.60; 0.70; 0.80; 0.90; 1.00 mm	100	61	10
74 24 0002	11095/20	0.05; 0.10; 0.15; 0.20; 0.25; 0.30; 0.35; 0.40; 0.45; 0.50; 0.55; 0.60; 0.65; 0.70; 0.75; 0.80; 0.85; 0.90; 0.95; 1.00 mm	100	95	10
74 24 0005	11097/26	1 1/2; 2; 2 1/2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25/1000"	100	80	10

### 12108 Valve spring tool

incorporating 2 clamping and 2 compression facilities which are interchangeable, suitable for most car engines, some without removing cylinder head.



Code	g	
74 57 0001	780	1

### 12705 Motor mechanics stethoscope

steel probe, plastic handle and sound tubes.



Code	g	
74 06 0001	137	1

### 12731 Valve grinding tools

with suction cap.



Code	∅ mm	g	
74 05 0020	20	58	5
74 05 0025	25	54	5
74 05 0030	30	66	5
74 05 0037	37	65	5

### 40-3 Socket

hexagon, size 3 mm, 1/4" O-drive, for releasing and tightening screws on the expansion valve.



Code	Type	g	
01 01 0003	BMW: X6 model E71, 7 Series model F01/F02	7	10

### 732/10-10 Ring insert tool

size 10 mm, valve adjustment, tightening torque 8-12 N-m.



Code	Type	g	
58 22 10 10	BMW: all except Diesel	44	1

### 1054-10 INHEX socket

for hexagon socket head screws, size 10 mm, length 140 mm, 1/2" O-drive, for cylinder head bolts.



Code	Type	g	
03 15 14 10	Mercedes-Benz	150	5

### 3054X-M10 Screwdriver BIT

for tri-square socket head screws (XZN®), size M10, length 140 mm, 1/2" O-drive, for cylinder head bolts and drive shaft bolts.



Code	Type	g	
03 26 14 10	Mercedes-Benz	142	5

### 3054X-M12 Screwdriver BIT

size M12, for cylinder head bolts, with tri-square socket head M12.



Code	Type	g	
03 26 14 12	Mercedes-Benz	160	5

### 3004 Screwdriver BIT

for tri-square socket head screws (XZN®), size M12, length 55 mm, 1/2" O-drive, for cylinder head bolts.



Code	Type	g	
03 23 00 12	Mercedes-Benz	71	5

### 54CV/9 Set: Screwdriver sockets

for spline socket head screws (Ribe-CV®), for brakes and cylinders head bolts.

Content: M5; M6; M7; M8; M9; M10; M12; M13; M14



Code	Type	g	
96 03 19 01	Fiat, Alfa	1317	1

### 54CV Screwdriver sockets

for spline socket head screws (Ribe-CV®), length 60 mm, 1/2"  $\odot$ -drive, for brakes and cylinder head bolts.



Code	size	Type	$\triangle$ g	
03 09 00 07	M7	Fiat	78	5
03 09 00 08	M8	Fiat	78	5
03 09 00 09	M9	Fiat (1.2 l; 8V/16V)	92	5
03 09 00 10	M10	Fiat (1.2 l; 8V/16V)	95	5
03 09 00 12	M12	Fiat (2.0 l)	119	5
03 09 00 13	M13	Fiat, Alfa (e.g. 1.6 l; 16V)	125	5
03 09 00 14	M14	Alfa (e. g. 1.6 l; 16V)	126	5
03 09 00 16	M16	Alfa (e. g. 1.6 l; 16V)	163	5

### 513 Adaptor

1/2" socket x 3/8" plug.



Code	Type	$\triangle$ g	
13 03 00 02	BMW: series 3, 518, 520	55	5

### 1417 BIT

for inside TORX® screws, size T25; 1/4"  $\bullet$ -drive, for screws on sun roof E30.



Code	Type	$\triangle$ g	
08 13 00 25	BMW	6	10

## Special tools for chassies and steering

### 40TX-E8 Socket

for external TORX® screws, size E 8, 1/4"  $\odot$ -drive, for steering lock screws.



Code	Type	$\triangle$ g	
01 27 00 08	BMW	10	10

### 24-17x19 OPEN-RING spanner

bi-hexagon, size 17 x 19 mm, use on wingpump manifold (hydro-steering).



Code	Type	$\triangle$ g	
41 08 17 19	BMW	151	10

### 55-36 Socket

hexagon, size 36 mm, 3/4"  $\odot$ -drive, use on vibration damper.



Code	Type	$\triangle$ g	
05 01 00 36	BMW: series 5, 6 and 7, except 518-520i	386	2

### 540-22 CROW-FOOT spanner

size 22 mm, 3/8"  $\odot$ -drive, use on track-rods.



Code	Type	$\triangle$ g	
02 20 00 22	BMW: series 3, 518, 520	64	1

### 3054X-M10 Screwdriver BIT

for tri-square socket head screws (XZN®), size M10, on drive shaft bolts.



Code	Type	$\triangle$ g	
03 26 14 10	Mercedes-Benz	142	5

### 11060-3 Internal puller

capacity 27-36 mm, for taper roller bearing outer ring on steering housing, to be used with counter stay No 11061-2.



Code	Type	$\triangle$ g	
71 16 00 13	Mercedes-Benz	365	1

### 11061-2 Counter stay with reduction unit

for taper roller bearing outer ring on steering housing.



Code	Type	$\triangle$ g	
71 17 00 12	Mercedes-Benz	1518	1

### 46-19 Socket

Fiat-No A 57 052 extra deep, bi-hexagon, size 19 mm, 3/8"  $\odot$ -drive, for front mounting screw of top steering link on front wheel suspension.



Code	Type	$\triangle$ g	
02 02 00 19	Fiat: 1500, 125	112	10

### 12495 Brass punch

Ø 20 mm, length 200 mm, for use on bushes bearing rings, steering pivot pin.



Code	Type	$\triangle$ g	
77 13 00 00	VW/Audi	533	5



## Special tools for ignition and electrics

### 3466 Spark plug socket

3/8" O-drive, with magnet, outside dia 25.5 mm, for deep seated plugs.



Code	O-drive mm/"	L mm	g	Box
02 14 00 36	16-5/8	85	180	5

### 4600 Spark plug socket

3/8" O-drive, with rubber insert.



Code	O-drive mm/"	L mm	g	Box
02 12 00 36	16-5/8	60	88	10

### 4606 Spark plug socket

3/8" O-drive, with rubber insert.



Code	O-drive mm/"	L mm	g	Box
02 13 00 18	18-11/16	65	132	10

### 1042 Tubular spark plug socket

3/8" O-drive.



Code	O-drive mm/"	L mm	g	Box
02 23 20 16	16-5/8	270	203	5

### 1043 Tubular spark plug sockets

3/8" O-drive, extra long, with rubber insert, for deeply recessed, difficult-to-reach spark-plugs with M12 x 1.25 mm threads.



Citroën: C5 with engine 2.0 I HPI  
Peugeot: 406 HPI  
Renault: Twingo, Clio, Kangoo with engine 1.2 I, 16V

Code	No	O-drive mm	L mm	g	Box
02 23 20 14	1043	14	90	52	1
02 23 30 14	1043/1	14	250	144	1

### 46 Spark plug socket

3/8" O-drive, with rubber insert.



Code	O-drive mm/"	L mm	g	Box
02 02 02 08	20.8-13/16	65	151	10

### 51 Spark plug sockets

1/2" O-drive, with rubber insert.



Code	O-drive mm/"	L mm	g	Box
03 02 02 16	16-5/8	83	137	10
03 02 02 08	20.8-13/16	83	194	10

### 51S Spark plug socket

1/2" O-drive, with rubber insert.



Code	O-drive mm/"	L mm	g	Box
03 24 02 08	20.8-13/16	83	196	10

### 5100 Rubber insert

for size 20.8 mm (No 46; 51; 51S).



Code	g	Box
09 01 00 01	6	5

### 10626 Spark plug connector pliers

forged, with 45° offset, curved jaws, for extracting and replacing sparkplug connectors.



Code	L mm	g	Box
76 53 00 01	195	223	1



### 12375 Spark plug brush

wood, brass wire dia 0.15 mm.



Code	L mm	Rows	g	Box
74 16 00 01	150	3 x 5	17	10

## Tools for heater plugs

### 25GK Ratchet ring spanner

angled, extra long, for hard-to-reach heater plugs (e.g. BMW, Mercedes-Benz, Peugeot, Renault, Seat, VW/Audi), size 8 mm for contact rail bolts, size 12 mm for diesel heater plugs, chrome plated.



Code	mm	L mm	g	
41 18 08 12	8 x 12	255	156	1

### 3047 Spark plug sockets

extra long, for hard-to-reach heater plugs, 3/8" O-drive, size 10 mm e.g. for Renault, VW/Audi TDi; size 12 mm e.g. for BMW, Mercedes-Benz (201, 202 four-valve technology), Ford, Opel, Renault.



Code	mm	L mm	g	
02 18 00 10	10	140	138	1
02 18 00 12	12	140	138	1

### 10627 Heater plug socket pliers

forged, curved jaws with milled grip, for accessing tight-fitting, awkward-to-reach heater plug connectors (e.g. BMW, Mercedes-Benz, Peugeot, Renault, Seat, VW/Audi).



Code	L mm	g	
76 53 00 04	220	262	1

### 46-12 Socket

extra deep, bi-hexagon, size 12 mm, 3/8" O-drive, use on glow plugs of diesel engines.



Code	Type	g	
02 02 00 12	BMW: 324d; 524d	57	10

## Testing tools for car electrics

### 12905 Car circuit tester

for car electrics 6-12 volt and 24 volt, with pointed probe, cover cap, connecting lead with alligator clip.



Code	L mm	g	
77 38 00 01	120	73	10

### 7756 Automotive voltage tester (complete set)

Testing unit for electric and electronic car components, 3-48 volt, 2 LEDs to indicate voltage and plus or minus pole, complete in Pc-bag.

Content:  
1 basic unit with 1.5 m cable, testing tip, integrated mechanical sliding needle,  
1 crocodile terminal,  
1 jaw clamp.



Code	g	
77 56 00 01	85	1



## Special tools for brakes and wheels

### ES 721/15/3/2



530 x 350 x 40 mm, 6 pieces

Code	g
96 83 81 72	5060

	No 2309K	1/2" O sizes 17; 19; 20.8 mm-13/16"
--	----------	-------------------------------------

	No 721/15	30-150 N·m
--	-----------	------------

	No 35c cars	17; 19; 22; 1/2"
--	-------------	------------------

	No 10599/2	245 mm
--	------------	--------

83 81 20 87	Empty tray	299
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## Special automotive tools

### 34c/35c Wheel braces

DIN 3119/ISO 6788, forged centre section, pressed-in extension arms with extra deep forged socket heads, Chrome Alloy Steel, chrome plated.



Code	No	Ø mm/"	L mm	⚖ g	📦
43 03 00 06	35c cars	17; 19; 22; ■ 1/2"	400	2058	1
43 03 00 05	34c HGVs	24; 27; 32; ■ 3/4"	700	5053	1

### 39 Tyre levers

Handy, sturdy construction, purposefully shaped, Chrome Alloy Steel.

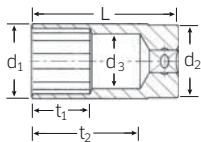


Code	No	L mm	⚖ g	📦
74 01 04 00	39 cars	400	375	5
74 01 06 00	39/1 HGVs	600	897	5
74 01 06 02	39/2 HGVs	600	1180	5
74 01 06 03	39/3 HGVs	600	915	5

### 51S Socket



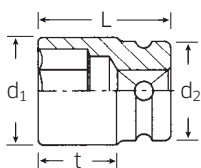
extra deep, DIN 3124/ISO 2725-1, E DIN EN 3710, E DIN EN 3709 (test loads), with rubber insert for spark plugs and for tightening and untightening wheel nuts on Japanese cars, HPQ® high performance steel, chrome plated.



Code	Ø mm/"	d <sub>1</sub> mm	d <sub>2</sub> mm	d <sub>3</sub> mm	L mm	t <sub>1</sub> mm	t <sub>2</sub> mm	⚖ g	📦
03 24 02 08	20.8-13/16	27.7	26	20	83	22	66.2	196	10

### 2309 IMPACT sockets

1/2" O-drive, for power drivers, extra deep, with reduced outside diameter, Chrome Alloy Steel, gunmetal finish.



Code	Ø mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	⚖ g	📦
23 09 00 17	17	25.7	30	85	68	242	5
23 09 00 19	19	28.2	30	85	67.5	257	5
23 09 02 08	20.8	30.7	30	85	66.5	272	5
23 09 00 22	22	32	30	85	66.5	311	5

for wheel nuts

### 2309K Wheel nut sockets

with plastic sleeve. Sleeve extension protects not only wheel bolts and nuts but also the wheel and holes.



Code	Ø mm	Ø "	L mm	∅ mm	⚖ g	📦
23 09 10 17	17	1/2	86	27	240	1
23 09 10 19	19	1/2	86	29	250	1
23 09 12 08	20.8	1/2	86	31	265	1

### 10599/2 Balance weight pliers

with cutter for cutting and trimming lead weights (with or without adhesive foil), Chrome Vanadium, chrome plated.



Code	L mm	⚖ g	📦
76 29 40 03	245	380	1

### 10613 Brake spring pliers

for rivetted brake linings/shoes, Chrome Vanadium, bright nickel-plated.



Code	L mm	⚖ g	📦
76 41 30 01	210	245	6
76 41 30 02	330	380	6

### 10613/1 Brake spring pliers

with flexible anvil, for rivetted and glued brake linings/shoes.



Code	L mm	⚖ g	📦
76 41 30 21	330	461	2

### 12371 Brake calliper file

for removing dust, rust and dirt from brake calliper groove.



Code	L mm	⚖ g	📦
74 54 01 01	260	130	5

### 12373 Steel wire brush

special slim design.



Code	L mm	Rows	⚖ g	📦
77 44 00 01	230	2	70	10

### 12900/2N Brake disc gauge

DIN 862, for measuring the thickness of car and motorcycle brake discs in situ, stainless steel, with locking screw and trailing vernier scale (1/10 mm), in plastic pouch.



Code	measuring range mm	throat depth mm	$\Delta$ g	
<b>77 37 1003</b>	60	55	233	1

### 12900/3 Tyre tread Vernier calliper



- sturdy brass construction
- smooth ground surface



Code	measuring range mm	$\Delta$ g	
<b>77 37 1004</b>	30	41	1

### 12900/4 Electronic tyre tread Vernier calliper



- large LCD display with clear read-offs, figures 9.5 mm high
- display accuracy 0.01 mm/0.0005"
- ON/OFF push button
- unit of measure switchable mm/inch
- zeroing possible in any position
- incl. 1 x 3 V battery (type CR2032)



Code	measuring range mm/"	$\Delta$ g	
<b>77 37 1005</b>	25/1	64	1

### 1049-9 INHEX socket

for hexagon socket head screws, size 9 mm,  $\frac{3}{8}$ "  $\odot$ -drive, for brake calliper retainers.



Code	Type	$\Delta$ g	
<b>02 15 1009</b>	<b>BMW, MINI</b>	62	5

### 54-7 INHEX socket

for hexagon socket head screws, size 7 mm,  $\frac{1}{2}$ "  $\odot$ -drive, for changing brake linings.



Code	Type	$\Delta$ g	
<b>03 05 0007</b>	<b>BMW: 518, 520i, 525i, 528i</b>	75	5

### 733/10-11 OPEN-RING insert tool

size 11 mm, use with SERVICE-MANOSKOP® torque wrench No 730/5, for flare nuts on brake lines and bleed screws.



Code	Type	$\Delta$ g	
<b>58 23 10 11</b>	<b>Mercedes-Benz</b>	55	1

### 733/10-12 OPEN-RING insert tool

size 12 mm, for flare nuts on brake pressure regulator, tightening torque 15-18 N-m.



Code	Type	$\Delta$ g	
<b>58 23 10 12</b>	<b>BMW</b>	59	1

### 733/10-14 OPEN-RING insert tool

size 14 mm, for flare nuts on main brake cylinder, tightening torque 16-25 N-m (BMW), for flare nuts on brake lines and bleed screws (Mercedes-Benz).

Code	Type	$\Delta$ g	
<b>58 23 10 14</b>	<b>BMW, Mercedes-Benz</b>	60	1

### 733/10-17 OPEN-RING insert tool

size 17 mm, for flare nuts on main brake cylinder, tightening torque 16-25 N-m.

Code	Type	$\Delta$ g	
<b>58 23 10 17</b>	<b>BMW</b>	64	1

### 733/10-19 OPEN-RING insert tool

size 19 mm, for flare nuts on main brake regulator, tightening torque 30-40 N-m.

Code	Type	$\Delta$ g	
<b>58 23 10 19</b>	<b>BMW</b>	80	1

### 54CV/9 Set: Screwdriver sockets

for spline socket head screws (Ribe-CV®), for brakes and cylinders head bolts.  
Content:  
M5; M6; M7; M8; M9; M10; M12;  
M13; M14



Code	Type	$\Delta$ g	
<b>96 03 19 01</b>	<b>Fiat, Alfa</b>	1317	1



## Special automotive tools

### 54CV Screwdriver sockets

for spline socket head screws (Ribe-CV®), length 60 mm, 1/2"  $\odot$ -drive, for brakes and cylinder head bolts.



Code	size	Type	$\Delta$ g	
03 09 0007	M7	Fiat	78	5
03 09 0009	M9	Fiat (1.2 l; 8V/16V)	92	5
03 09 0013	M13	Fiat, Alfa (e.g. 1.6 l; 16V)	125	5

## Special tools for lubrication service

### 1015 Oil filter claw

for loosening of oil filters on cars.



Code	$\odot$ "	Clamp. width mm	total height mm	length of claws mm	$\Delta$ g	
74620002	3/8	68-120	65	50	530	1

### 3045 Special socket

for oil filters, size 74 mm, 14-point, 10 mm dia. bore and outside hexagon 22 mm  $\emptyset$ .



Code	total height mm	$\Delta$ g	
74370001	52	131	1

### 3045K Special socket

for oil filters, size 74 mm, 14-point, 10 mm dia. bore and outside hexagon 22 mm  $\emptyset$ , extremely compact – essential where access is awkward.



Code	total height mm	Type	$\Delta$ g	
74370003	44	e.g. Ford Mondeo from 02/2002	104	1

### 3046 Special sockets

for fitting and removing oil filter covers when changing oil filter cartridges.



Code	$\odot$ mm	$\odot$ "	Type	$\Delta$ g	
02 11 10 32	32	3/8	e.g. Audi, MAN, Vauxhall Astra, Corsa, VW Passat	130	1
02 11 10 36	36	3/8	e.g. BMW, Mercedes-Benz cars, 100 D Transporter, MAN, Vauxhall Vectra B DI 16V, VW Lupo 1.2 TDi, model year 99	171	1

### 12005 Strap wrenches

for oil filters etc., up to 180 mm diameter, non-slip rubber cloth tape, 22 mm width.



Code	No	L mm	$\Delta$ g	
76 50 00 01	12005	236	264	1
79 15 00 01	12005/1 <sup>1)</sup>	600	68	1

<sup>1)</sup> spare strap

### 12007 Oil filter wrenches

adjustable for diameters 80-110 mm. Hardened anti-slip cams ensure safety during use.



Code	No	L mm	$\Delta$ g	
76 52 10 01	12007/1 <sup>1)</sup>	150	226	1
76 52 10 02	12007/2 <sup>2)</sup>	240	319	1

<sup>1)</sup> with 1/2"  $\odot$   
<sup>2)</sup> with lever handle

### 54-14 INHEX socket

for hexagon socket head screws, size 14 mm, 1/2"  $\odot$ -drive, for use on oil drain plug.



Code	Type	$\Delta$ g	
03 05 00 14	Mercedes-Benz	135	5



### 10765-12 Hexagon key wrench

Fiat-No A 5013  
long, for hexagon socket  
head screws, size 12 mm,  
for oil drain plug on engine,  
gearbox and rear axle.



Code	Type		
<b>43 21 00 12</b>	<b>Fiat</b>	287 g	5

### 1054-13 INHEX socket

for hexagon socket head screws,  
size 13 mm, length 70 mm, 1/2" -drive,  
for oil drain plug on engine.



Code	Type		
<b>03 15 07 13</b>	<b>Lancia</b>	130 g	5

### 1058 Oil service spanner

bent, size 8 and 10 mm outside  
square, for drain plugs on sump,  
gearbox, differential.



Code	Type		
<b>44 73 08 10</b>	<b>Peugeot, Renault</b>	315 g	5

### 1054KK-5 INHEX socket

with ball-point hexagon, size 5 mm,  
length 238 mm, 1/2" -drive,  
for use on socket head screws with  
difficult access up to an angle of 25°,  
size 5 mm for use on sump screws  
of 5 cylinder diesel engine, van T4.



Code	Type		
<b>03 31 00 05</b>	<b>VW/Audi</b>	145 g	5

### 1054KK-8 INHEX socket

size 8 mm, length 238 mm.



Code	Type		
<b>03 31 00 08</b>	<b>VW/Audi</b>	154 g	5

## Special tools for engine and gear transmission

### 12735 Clutch alignment tool

8-piece set, contains  
1 clutch alignment mandrel,  
length 220 mm;  
1 combined sliding taper/cylindrical  
bush, cylindrical bushes from  
22.2-25.2 mm;  
1 sliding cylindrical bush,  
tapered at both ends,  
cylinder diameters 16-21 mm;  
5 cylindrical bushes, two sizes each,  
cylinder diameter 12-20 mm,  
in wooden storage box 255 x 81 x 38 mm.



Code		
<b>74 48 00 00</b>	650 g	1

### 50TX-E10 Socket

for external TORX® screws, size E10, 1/2" -drive,  
use on mounting screws for GETRAG 260 gearbox,  
as well as on automatic gearboxes fitted to US and  
Japanese models.



Code	Type		
<b>03 27 00 10</b>	<b>BMW</b>	53 g	10

### 50TX-E12 Socket

size E12

Code	Type		
<b>03 27 00 12</b>	<b>BMW</b>	55 g	10

### 50TX-E14 Socket

size E14

Code	Type		
<b>03 27 00 14</b>	<b>BMW</b>	56 g	10

### 54TX-T27 Screwdriver BIT

for inside TORX® screws, size T27,  
1/2" -drive, use on switchgear of  
automatic gearbox 3HP 22, 4HP 22.



Code	Type		
<b>03 10 00 27</b>	<b>BMW</b>	72 g	5

### 1418 BIT

for inside TORX® screws, size T27,  
1/4" -drive, use on switchgear on  
automatic gearbox 3HP 22, 4HP 22.



Code	Type		
<b>08 13 00 27</b>	<b>BMW</b>	6 g	10



## Special automotive tools

### 730N/5 SERVICE-MANOSKOP® torque wrench

10–50 N-m, with tool carrier for insert tools, for tightening ZF switch-gear and adjustment brake belt BW 65 on automatic gearbox, to use with ratchet insert tool No 735/10.



Code	Type	g	g	g
50 18 10 05	BMW	1054	1	

### 735/10 Ratchet insert tool

reversible, 1/2" O-drive.



Code	Type	g	g	g
58 25 00 10		147	1	

### 6547 Special circlip pliers

use on retaining ring on gearbox main shaft (all "GETRAG" and ZF gearboxes S4-18/3).



Code	Type	g	g	g
65 47 41 70	BMW	154	1	

### 3049-8 INHEX socket

for hexagon socket head screws, size 8 mm, length 24 mm, 3/8" O-drive, for use on mounting screws on fluid fly-wheel.



Code	Type	g	g	g
02 15 24 08	Mercedes-Benz	28	5	

### 51-27 Socket

extra deep, bi-hexagon, size 27 mm, 1/2" O-drive, for rotating engine through hexagon on crankshaft.



Code	Type	g	g	g
03 02 00 27	Mercedes-Benz	294	5	

### 1054-10 INHEX socket

for hexagon socket head screws, size 10 mm, length 140 mm, 1/2" O-drive for bolts on car engines.



Code	Type	g	g	g
03 15 14 10	Mercedes-Benz	150	5	

### 11060-1a Internal puller

capacity 16–20 mm, for sealing ring and bearing on crankshaft, use with counter stay No 11061-1.



Code	Type	g	g	g
71 16 00 21	Mercedes-Benz	116	1	

### 11061-1 Counter stay



Code	Type	g	g	g
71 17 00 11		654	1	

### 11060-2 Internal puller

capacity 20–27 mm, for bearing bush of idler gear on oil pump drive, use with counter stay No 11061-2.



Code	Type	g	g	g
71 16 00 12	Mercedes-Benz	131	1	

### 11061-2 Counter stay



Code	Type	g	g	g
71 17 00 12		1518	1	

### 730/2 SERVICE-MANOSKOP® torque wrench

capacity 4–20 N-m.



Code	Type	g	g	g
50 18 00 02	VW/Audi	315	1	

### 734/5 Square drive insert tool

3/8" O-drive, for use with SERVICE-MANOSKOP® torque wrench No 730/2.



Code	Type	g	g	g
58 24 00 05	VW/Audi	76	1	

### 12717 Pin wrench

offset, distance between pins 18 mm, pin dia.  $\varnothing$  2.9 mm, length 140 mm, for ring nut of tension pulley on 1.6 l diesel.



Code	Type		
44 70 00 18	2/80 Golf, Jetta, Passat, Audi 80	76 g	10

### 10623/1 Hose clip pliers

registered design, with rotating jaws and multiple locking positions, single-handed use even with wide openings due to variable-geometry joint, especially for 12 and 15 mm wide, large-format hose clips, e.g. for Alfa Romeo, Audi, Citroën, Fiat, Ford, Mercedes-Benz, Opel, Peugeot, Porsche, Renault, VW.



Code	L mm		
76 46 00 12	290	414 g	1

## Special tools miscellaneous

### 157 Chain exhaust-pipe cutter

infinitely adjustable, with twist handle, also suitable for special steel pipes up to 1.8 mm wall thickness, chain length 270 mm.



Code	mm		
60 11 00 01	25-75	705 g	1

### K157 Chain

Code		
69 13 00 01	183 g	1

### 1225 Special extension

offset, for use on magnetic switch diesel pump.



Code	"		
12 25 00 01	$\frac{3}{8}$	128 g	5

### 10614 Hose clip pliers

for self tightening hose clips, nickel-plated.



Code	L mm		
76 46 00 00	220	293 g	1

### 10615/1 Hose clip pliers CLIC

for CLIC hose clips e.g. Alfa Romeo, Audi, BMW, Opel, Peugeot, VW. Work can be carried out at various angles due to stepless swivelling jaws.



Code	L mm		
76 46 00 13	200	189 g	1

### 10623/2 Hose clip pliers

registered design, with Bowden cable and multiple locking positions, especially for 12 and 15 mm spring-steel hose clips, suitable for use near cooling and heating systems up to a diameter of 42 mm, access to hard-to-reach places using Bowden cable remote action (length 610 mm), e.g. for Alfa Romeo, Audi, Citroën, Fiat, Ford, Mercedes-Benz, Opel, Peugeot, Porsche, Renault, VW.



Code	L mm		
76 54 00 01	300	565 g	1

### Replacement Bowden cable for No 10623/2

Code		
79 54 00 01	120 g	1

### 10625 Ear clamp pincers

for application of 1 and 2-ear clamps on shaft sleeves, radiator and fuel lines e.g. for Audi, BMW, Ford, GM, Honda, Mazda, Mercedes-Benz, Nissan, Opel, VW, quality steel, black paint finish.



Code	L mm		
76 54 00 02	225	340 g	1

### 10625/2 Hose clip pliers

for correctly closing hose clips without ears, for shaft sleeves on Audi, Mercedes-Benz, Toyota and VW. Quality steel, nickel-plated, jaws gunmetal finished.



Code	L mm		
76 54 00 03	200	173 g	1

### 12718 Flat scraper

special steel, for removal of gasket seals on carburettor, valve cover, cylinder head etc.



Code	L mm		
72 03 11 01	265	160 g	5



## Special automotive tools



### 12763 Pull hook for rubber exhaust mountings

with T-bar, chromium-plated, black dip-coated, for pulling rubber loops on exhaust mountings. All cars except Ford.



Code	L mm	g	g	g
74 20 00 01	210	99	5	

### 12771 Extractor pliers

for removing fixing plugs on door trims, outside trims, rubber bumper covers etc. Joint and jaws made of hardened sheet steel, handles made of shaped sheet steel.



Code	L mm	g	g	g
76 48 00 01	230	205	1	

### 12975 Fuel hose clamp

capacity up to Ø 20 mm, for stopping fuel flow temporarily.



Code	g	g	g
74 34 00 01	38	10	

### 1435 BIT

for inside TORX® screws, size T55, 5/16" drive, for screws in rear seats, for use with bit-holder insert tool No 736/40.



Code	Type	g	g	g
08 14 00 55	BMW: X6 model E71, series 7 model F01/F02	20	10	

### 736/40 BIT holder insert tool

Internal hex drive 5/16", for screws in rear seats, for use with bit No 1435.



Code	Type	g	g	g
58 26 10 40	BMW: X6 model E71, series 7 model F01/F02	114	1	

### 1445 BIT

for inside TORX® tamper resistant screws, size T30, 1/4" drive, use on sensor screws wheelhouse (models with airbag system).



Code	Type	g	g	g
08 16 00 30	BMW	6	10	

### 12506-6 Hexagon nut spinner

flexible, size 6 mm, for screws on hose clips of radiator hose, max. tightening torque 8 N·m.



Code	Type	g	g	g
43 10 02 06	BMW	167	10	

### 440-17 CROW-RING spanner

size 17 mm, 3/8" drive, for use on pipes for air conditioning unit.



Code	Type	g	g	g
02 19 00 17	Mercedes-Benz	40	1	

### 440-19 CROW-RING spanner

size 19 mm.

Code	g	g	g
02 19 00 19	40	1	

### 440-22 CROW-RING spanner

size 22 mm.

Code	g	g	g
02 19 00 22	57	1	

### 440-24 CROW-RING spanner

size 24 mm.

Code	g	g	g
02 19 00 24	57	1	

### 735/20 Ratchet insert tool

reversible, 1/2" drive, use with SERVICE-MANOSKOP® torque wrench No 730/12 and 730/20, for general service work.



Code	Type	g	g	g
58 25 00 20	Mercedes-Benz	302	1	

### 730R/5 SERVICE-MANOSKOP® torque wrench

capacity 6–50 N·m, 3/8" ■-drive, for general service work.



Code	Type	g	g	g
96 50 20 05	Mercedes-Benz	945	1	

### 730R/12 SERVICE-MANOSKOP® torque wrench

25–130 N·m, 1/2" ■-drive



Code	Type	g	g	g
96 50 20 12	Mercedes-Benz	1410	1	

### 730R/20 SERVICE-MANOSKOP® torque wrench

40–200 N·m, 1/2" ■-drive.



Code	Type	g	g	g
96 50 20 20	Mercedes-Benz	1555	1	

### 11060-1 Internal puller

capacity 12–16 mm, for use on bearings, seals and bushes.



Code	Type	g	g	g
71 16 10 11	Mercedes-Benz	110	1	

### 11060-2 Internal puller

capacity 20–27 mm.

Code	Type	g	g	g
71 16 00 12	Mercedes-Benz	131	1	

### 11060-3 Internal puller

capacity 27–36 mm.

Code	Type	g	g	g
71 16 00 13	Mercedes-Benz	365	1	

### 11060-5 Internal puller

capacity 36–46 mm.

Code	Type	g	g	g
71 16 00 15	Mercedes-Benz	385	1	

### 11060-6 Internal puller

capacity 46–58 mm.

Code	Type	g	g	g
71 16 00 16	Mercedes-Benz	558	1	

### 11061-1 Counter stay

for Internal Puller No 11060/0-2, for use on bearings, seals and bushes.



Code	g	g	g
71 17 00 11	654	1	

### 11061-2 Counter stay

for Internal Puller No 11060/3-7.

Code	g	g	g
71 17 00 12	1518	1	

### 12506-7 Hexagon nut spinner

flexible, size 7 mm, for screws on hose clips of radiator hose, max. tightening torque 8 N·m.



Code	Type	g	g	g
43 10 02 07	Mercedes-Benz	168	10	

### 10760CV-2,5-17 Hexagon key wrench

Fiat No A 89601 up to A 89611 for hexagon socket head screws, size 2.5 mm up to 17 mm (see page 250).



### 720Nf/80 Standard-MANOSKOP® torque wrench

capacity 160–800 N·m, 3/4" ○-drive.



Code	Type	g	g	g
50 19 00 81	VW: LT Syncro	5650	1	





## Special automotive tools

**730/5**

### SERVICE-MANOSKOP® torque wrench

capacity 5-50 N·m, for general service work.



Code	Type	g	g	g
50 18 00 05	VW/Audi	805	1	

**732/10-13**

### Ring insert tool

size 13 mm, for use with SERVICE-MANOSKOP® torque wrench No 730/5.



Code	Type	g	g	g
58 22 10 13	VW/Audi	55	1	

**735/10**

### Ratchet insert tool

reversible, 1/2" ■-drive, for use with SERVICE-MANOSKOP® torque wrench No 730/5.



Code	Type	g	g	g
58 25 00 10	VW/Audi	147	1	

**730/20**

### SERVICE-MANOSKOP® torque wrench

capacity 40-200 N·m.



Code	Type	g	g	g
50 18 00 20	VW/Audi	1250	1	

**735/20**

### Ratchet insert tool

reversible, 1/2" ■-drive, for use with SERVICE-MANOSKOP® torque wrench No 730/20.



Code	Type	g	g	g
58 25 00 20	VW/Audi	302	1	

**730/40**

### SERVICE-MANOSKOP® torque wrench

capacity 80-400 N·m.



Code	Type	g	g	g
50 18 00 40	VW/Audi	1880	1	

**735/40**

### Ratchet insert tool

reversible, 3/4" ■-drive, for use with SERVICE-MANOSKOP® torque wrench No 730/40.



Code	Type	g	g	g
58 25 00 40	VW/Audi	510	1	

**1421**

### Bit screwdriver socket

for inside TORX® screws, outside 1/4" C 6.3 size T45, length 26 mm, for use on door hinges. Drive Tools: f.e. ratchet reversible No 725/4B and ratchet tap holder No 1820 or ratchet reversible No 725/4B and torque wrench.



Code	Type	g	g	g
08 13 00 45	VW: Golf III	8	10	

## Special tools for HGVs

**34c/35c**

### Wheel braces

DIN 3119/ISO 6788, forged centre section, pressed-in extension arms with extra deep forged socket heads, Chrome Alloy Steel, chrome plated.



Code	No	mm/"	L mm	g	g	g
43 03 00 05	34c HGVs	24; 27; 32; ■ 3/4"	700	5053	1	
43 03 00 06	35c cars	17; 19; 22; ■ 1/2"	400	2058	1	

**39**

### Tyre levers

Handy, sturdy construction, purposefully shaped, Chrome Alloy Steel.



Code	No	L mm	g	g	g
74 01 06 00	39/1 HGVs	600	897	5	
74 01 06 02	39/2 HGVs	600	1180	5	
74 01 06 03	39/3 HGVs	600	915	5	
74 01 04 00	39 cars	400	375	5	

### 1068 Air filter claw

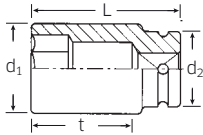
for loosening of filter cartridges on air brakes (trucks).



Code	Clamp. width "	total height mm	length of claws mm	$\Delta$ g	
<b>74620011</b>	1/2	100-145	85	925	1

### 2509 IMPACT sockets

3/4" -drive, for power drivers, extra deep, with reduced diameter, Chrome Alloy Steel, gunmetal finish.

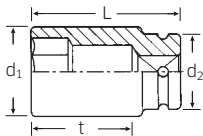


Code	$\varnothing$ mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	$\Delta$ g	
<b>25090027</b>	<b>27</b>	40.5	44	100	72.5	672	2
<b>25090030</b>	<b>30</b>	44.3	44	100	72.5	728	2
<b>25090032</b>	<b>32</b>	46.8	44	100	72	778	2
<b>25090033</b>	<b>33</b>	48	44	100	72	803	2

for Trilex wheels

### 2609 IMPACT sockets

1" -drive, for power drivers, extra deep, with reduced outside diameter, Chrome Alloy Steel, gunmetal finish.



Code	$\varnothing$ mm	d <sub>1</sub> mm	d <sub>2</sub> mm	L mm	t mm	$\Delta$ g	
<b>26090027</b>	<b>27</b>	42.3	54	110	80	1001	2
<b>26090030</b>	<b>30</b>	46	54	110	79.5	1047	2
<b>26090032</b>	<b>32</b>	48.5	54	110	79	1015	2
<b>26090033</b>	<b>33</b>	49.8	54	110	78.5	1102	2

for wheel nuts

### 24-17x19 OPEN-RING spanner

bi-hexagon, size 17 x 19 mm, for all threaded connectors on injector pipes.



Code	Type	$\Delta$ g	
<b>41081719</b>	<b>Mercedes-Benz</b>	151	10

### 51-30 Socket

extra deep, bi-hexagon, size 30 mm, 1/2" -drive, on injector post.



Code	Type	$\Delta$ g	
<b>03020030</b>	<b>Mercedes-Benz</b>	341	5

### 440-27MB CROW-RING spanner

for setting of electronic injection on 440-HP-engines.



Code	Type	$\Delta$ g	
<b>02191027</b>	<b>Mercedes-Benz</b>	92	1

### 3678 4-pin socket

length 72 mm, 1/2" -drive, for use on pressure nut of injector post.



Code	Type	$\Delta$ g	
<b>03810001</b>	<b>Mercedes-Benz</b>	151	5

### 1054-10 INHEX socket

for hexagon socket head screws, size 10 mm, length 140 mm, 1/2" -drive, for cylinder head bolts.



Code	Type	$\Delta$ g	
<b>03151410</b>	<b>Mercedes-Benz</b>	150	5

### 3054X-M12 Screwdriver BIT

for tri-square socket head screws (XZN<sup>®</sup>), size 12, length 140 mm,  $\varnothing$  11.5 mm, 1/2" -drive for cylinder head bolts with tri-square socket head M12.



Code	Type	$\Delta$ g	
<b>03261412</b>	<b>Mercedes-Benz</b>	160	5

### 11068-2 Piston ring compressor

of special spring steel, infinitely variable adjustment, c/w adj. spanner, capacity  $\varnothing$  90-175 mm.



Code	Type	$\Delta$ g	
<b>74140003</b>	<b>Mercedes-Benz</b>	270	1

## Special automotive tools

### 55-30 Socket

size 30 mm, hexagon  $\frac{3}{4}$ "  $\odot$ -drive, for U-bolt nuts, front.



Code	Type		
05 01 00 30	Mercedes-Benz	313 g	5

### 55-36 Socket

size 36 mm, for U-bolt nuts, rear.

Code	Type		
05 01 00 36	Mercedes-Benz	386 g	2

### 24-10x12 OPEN-RING spanner

hexagon, size 10x12 mm, for general service work.



Code	Type		
41 08 10 12	Mercedes-Benz	59 g	10

### 440-30 CROW-RING spanner

size 30 mm,  $\frac{1}{2}$ "  $\odot$ -drive for use on hydraulic pipe flare nuts.



Code	Type		
03 19 00 30	Mercedes-Benz	155 g	1

### 540-19 CROW-FOOT spanner

size 19 mm, for use on new push connector for pneumatic installations on new light-weight truck series.



Code	Type		
02 20 00 19	Mercedes-Benz	64 g	1

### 540-24 CROW-FOOT spanner

size 24 mm.

Code	Type		
02 20 00 24	Mercedes-Benz	60 g	1

### 730R/2 SERVICE-MANOSKOP® torque wrench

capacity 4-20 N-m,  $\frac{3}{8}$ "  $\blacksquare$ -drive, for use on new push connector for pneumatic installations on new light-weight truck series.



Code	Type		
96 50 20 02	Mercedes-Benz	455 g	1

### 730R/40/32 Torque wrench set

32 pieces, in steel case, for general service work.

Content:

- 1 SERVICE-MANOSKOP® No 730/40, 80-400 N-m,
- 1 ratchet insert tool No 735/20, reversible,  $\frac{1}{2}$ "  $\blacksquare$ -drive;
- 1 square drive insert tool No 734/20,  $\frac{1}{2}$ "  $\blacksquare$ -drive;
- 7 o/e insert tools No 731/40, sizes 13, 15, 17, 19, 22, 27, 30 mm
- 1 No 3731/40 size 24 mm;
- 7 ring insert tools No 732/40, sizes 13, 15, 17, 19, 22, 24, 27 mm
- 10 sockets, bi-hexagon No 50, sizes 13, 14, 15, 17, 19, 22, 24, 27, 30, 32 mm
- 4 accessories,  $\frac{1}{2}$ "  $\odot$ -drive:
  - 1 T-handle No 506
  - 1 extension 255 mm No 509/10
  - 1 extension 130 mm No 509/5
  - 1 extension 55 mm No 509/2



Code	Type		
96 50 20 53	Mercedes-Benz	9739 g	1


### 54/12 Set of INHEX sockets

for hexagon socket head screws, in sturdy, stackable ABS plastic case, for general service work.

Content:

- 12 INHEX sockets
- No 54, sizes 4, 5, 6, 7, 8, 10, 12, 14, 17, 19 mm,
- No 3054/8, No 1054/10,  $\frac{1}{2}$ "  $\odot$ -drive.



Code	Type		
96 03 15 03	Mercedes-Benz	1963 g	1

### 721Nf/80 Standard-MANOSKOP® torque wrench

capacity 160-800 N-m,  $\frac{3}{4}$ "  $\blacksquare$ -drive, for general service work.



Code	Type		
50 20 00 81	Mercedes-Benz	6770 g	1

# STAHLWILLE – Certified to DIN EN ISO 9001.

After STAHLWILLE was certified, as one of the very first companies back in 1990, to **DIN EN ISO 9002**, our Quality Assurance System was also certified to **DIN EN ISO 9001 in 1992**.



## CERTIFICATE

This is to certify that the  
**STAHLWILLE-Group**



**Eduard Wille GmbH & Co. KG**  
Lindenallee 27  
42349 Wuppertal

**SWM Werkzeugfabrik GmbH & Co. KG**  
Bereich Schmiede  
Stiller Berg  
98587 Steinbach-Hallenberg

Lange Str. 40-56  
42857 Remscheid

has implemented and maintains a **Quality Management System**.

Scope:  
Development, manufacture & distribution of tools

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

### ISO 9001 : 2008

Certificate registration no.	000018 QM08
Valid from	2015-06-01
Valid until	2018-05-31
Date of certification	2015-04-10



**DQS GmbH**













Götz Blechschmidt  
Managing Director

Accredited Body: DQS GmbH, August-Schanz-Straße 21, 60433 Frankfurt am Main



**TORX® Screw Sizes. according to DIN**

										
DIN	931/933	912	963/965	964/966	7984	7985	7991	7981	7982	7983
M 2										
ST 2.2										
M 2.5		T8	T8	T8						
ST 2.9								T8	T8	T8
M 3	E4	T10	T10	T10	T10	T10	T10			
M 3.5			T15	T15		T15				
ST 3.5								T10	T10	T10
ST 3.9								T15	T15	T15
M 4	E5	T20	T20	T20	T20	T20	T20			
ST 4.2								T20	T20	T20
ST 4.8								T25	T25	T25
M 5	E6	T25	T25	T25	T25	T25	T25			
ST 5.5								T25	T25	T25
M 6	E8	T30	T30	T30	T30	T30	T30			
ST 6.3								T30	T30	T30
M 7										
M 8	E10	T45	T40	T45	T45	T45	T40			
M 10	E12	T50	T50	T50	T50	T50	T50			
M 12	E14	T55			T55					
M 14	E18	T60			T60					
M 16	E20	T70			T70					
M 18	E24	T80			T80					
M 20	E24	T90			T90					
M 22		T100*								
Camcar Licence sheet	TMF-16001	TMF-17012	TMF-17065	TMF-17066	TMF-17069	TMF-17085	TMF-17091	TMF-17081	TMF-17082	TMF-17083

Special screw

**Screw correlation for TORX®-Tools**

Ø Size	Ø mm	Screws metr.	Screws "
T5	1.4	M1.4-M2	-
T6	1.6	M2	-
T7	2.0	M2.5	2.2
T8	2.3	M2.5	-
T9	2.5	M3	2.9
T10	2.7	M3-M3.5	-
T15	3.3	M3.5-M4	3.5
T20	3.8	M4-M5	4.2
T25	4.4	M4.5-M5	4.8
T27	5.0	M4.5-M5-M6	-
T30	5.5	M6-M7	-
T40	6.6	M7-M8	-
T45	7.8	M8-M10	-
T50	8.8	M10	-
T55	11.2	M12	-
T60	13.2	M14	-
T70	15.5	M16	-
T80	17.6	M18	-
T90	19.9	M20	-
T100	22.1	M22	-

**Screw correlation for TORX®-Tools**

Ø Size	Ø mm	Screws metr.	Screws "
E4	3.8	M3	2.2-2.9
E5	4.7	M4	-
E6	5.7	M5	-
E7	6.2	M6	-
E8	7.5	M6-M7	3.5-4.2
E10	9.4	M8	-
E11	10.1	-	-
E12	11.1	M10	-
E14	12.9	M12	-
E16	14.7	M12	-
E18	16.6	M14	-
E20	18.4	M16	-
E24	22.1	M18-M20	-



Inch pound (in-lb) - newton metres (N-m)										
	0	10	20	30	40	50	60	70	80	90
in-lb	N-m									
0	0.0	1.1	2.3	3.4	4.5	5.7	6.8	7.9	9.0	10.2
100	11.3	12.4	13.6	14.7	15.8	17.0	18.1	19.2	20.3	21.5
200	22.6	23.7	24.9	26.0	27.1	28.3	29.4	30.5	31.6	32.8
300	33.9	35.0	36.2	37.3	38.4	39.6	40.7	41.8	42.9	44.1
400	45.2	46.3	47.5	48.6	49.7	50.9	52.0	53.1	54.2	55.4
500	56.5	57.6	58.8	59.9	61.0	62.2	63.3	64.4	65.5	66.7
600	67.8	68.9	70.1	71.2	72.3	73.5	74.6	75.7	76.8	78.0
700	79.1	80.2	81.4	82.5	83.6	84.8	85.9	87.0	88.1	89.3
800	90.4	91.5	92.7	93.8	94.9	96.1	97.2	98.3	99.4	100.6
900	101.7	102.8	104.0	105.1	106.2	107.4	108.5	109.6	110.7	111.9
1000	113.0	114.1	115.3	116.4	117.5	118.7	119.8	120.9	122.0	123.2
1100	124.3	125.4	126.6	127.7	128.8	130.0	131.1	132.2	133.3	134.5
1200	135.6	136.7	137.9	139.0	140.1	141.3	142.4	143.5	144.6	145.8
1300	146.9	148.0	149.2	150.3	151.4	152.6	153.7	154.8	155.9	157.1
1400	158.2	159.3	160.5	161.6	162.7	163.9	165.0	166.1	167.2	168.4
1500	169.5	170.6	171.8	172.9	174.0	175.2	176.3	177.4	178.5	179.7
1600	180.8	181.9	183.1	184.2	185.3	186.5	187.6	188.7	189.8	191.0
1700	192.1	193.2	194.4	195.5	196.6	197.8	198.9	200.0	201.1	202.3
1800	203.4	204.5	205.7	206.8	207.9	209.1	210.2	211.3	212.4	213.6
1900	214.7	215.8	217.0	218.1	219.2	220.4	221.5	222.6	223.7	224.9
2000	226.0	227.1	228.3	229.4	230.5	231.7	232.8	233.9	235.0	236.2
2100	237.3	238.4	239.6	240.7	241.8	243.0	244.1	245.2	246.3	247.5
2200	248.6	249.7	250.9	252.0	253.1	254.3	255.4	256.5	257.6	258.8
2300	259.9	261.0	262.2	263.3	264.4	265.6	266.7	267.8	268.9	270.1
2400	271.2	272.3	273.5	274.6	275.7	276.9	278.0	279.1	280.2	281.4
2500	282.5	283.6	284.8	285.9	287.0	288.2	289.3	290.4	291.5	292.7
2600	293.8	294.9	296.1	297.2	298.3	299.5	300.6	301.7	302.8	304.0
2700	305.1	306.2	307.4	308.5	309.6	310.8	311.9	313.0	314.1	315.3
2800	316.4	317.5	318.7	319.8	320.9	322.1	323.2	324.3	325.4	326.6
2900	327.7	328.8	330.0	331.1	332.2	333.4	334.5	335.6	336.7	337.9
3000	339.0	340.1	341.3	342.4	343.5	344.7	345.8	346.9	348.0	349.2
3100	350.3	351.4	352.6	353.7	354.8	356.0	357.1	358.1	359.3	360.5
3200	361.6	362.7	363.9	365.0	366.1	367.3	368.4	369.5	370.6	371.8
3300	372.9	374.0	375.2	376.3	377.4	378.6	379.7	380.8	381.9	383.1
3400	384.2	385.3	386.5	387.6	388.7	389.9	391.0	392.1	393.2	394.4
3500	395.5	396.6	397.8	398.9	400.0	401.2	402.3	403.4	404.5	405.7
3600	406.8	407.9	409.1	410.2	411.3	412.5	413.6	414.7	415.8	417.0

Foot pound (ft-lb) - newton metres (N-m)										
	0	1	2	3	4	5	6	7	8	9
ft-lb	N-m									
0	0.0	1.4	2.7	4.1	5.4	6.8	8.1	9.5	10.9	12.2
10	13.6	14.9	16.3	17.6	19.0	20.3	21.7	23.1	24.4	25.8
20	27.1	28.5	29.8	31.2	32.5	33.9	35.3	36.6	38.0	39.3
30	40.7	42.0	43.4	44.7	46.1	47.5	48.8	50.2	51.5	52.9
40	54.2	55.6	56.9	58.3	59.7	61.0	62.4	63.7	65.1	66.4
50	67.8	69.2	70.5	71.9	73.2	74.6	75.9	77.3	78.6	80.0
60	81.4	82.7	84.1	85.4	86.8	88.1	89.5	90.8	92.2	93.6
70	94.9	96.3	97.6	99.0	100.3	101.7	103.0	104.4	105.8	107.1
80	108.5	109.8	111.2	112.5	113.9	115.3	116.6	118.0	119.3	120.7
90	122.0	123.4	124.7	126.1	127.5	128.8	130.2	131.5	132.9	134.2
100	135.6	136.9	138.3	139.7	141.0	142.4	143.7	145.1	146.4	147.8
110	149.1	150.5	151.9	153.2	154.6	155.9	157.3	158.6	160.0	161.3
120	162.7	164.1	165.4	166.8	168.1	169.5	170.8	172.2	173.6	174.9
130	176.3	177.6	179.0	180.3	181.7	183.0	184.4	185.8	187.1	188.5
140	189.8	191.2	192.5	193.9	195.2	196.6	198.0	199.3	200.7	202.0
150	203.4	204.7	206.1	207.4	208.8	210.2	211.5	212.9	214.2	215.6
160	216.9	218.3	219.6	221.0	222.4	223.7	225.1	226.4	227.8	229.1
170	230.5	231.9	233.2	234.6	235.9	237.3	238.6	240.0	241.3	242.7
180	244.1	245.4	246.8	248.1	249.5	250.8	252.2	253.5	254.9	256.3
190	257.6	259.0	260.3	261.7	263.0	264.4	265.7	267.1	268.5	269.8
200	271.2	272.5	273.9	275.2	276.6	277.9	279.3	280.7	282.0	283.4
210	284.7	286.1	287.4	288.8	290.2	291.5	292.9	294.2	295.6	296.9
220	298.3	299.6	301.0	302.4	303.7	305.1	306.4	307.8	309.1	310.5
230	311.8	313.2	314.6	315.9	317.3	318.6	320.0	321.3	322.7	324.0
240	325.4	326.8	328.1	329.5	330.8	332.2	333.5	334.9	336.2	337.6
250	339.0	340.3	341.7	343.0	344.4	345.7	347.1	348.5	349.8	351.2
260	352.5	353.9	355.2	356.6	357.9	359.3	360.7	362.0	363.4	364.7
270	366.1	367.4	368.8	370.1	371.5	372.9	374.2	375.6	376.9	378.3
280	379.6	381.0	382.3	383.7	385.1	386.4	387.8	389.1	390.5	391.8
290	393.2	394.5	395.9	397.3	398.6	400.0	401.3	402.7	404.0	405.4
300	406.8									

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# Symbols used throughout this catalogue

Symbols	Special Tools for
	
<b>Spanner Opening</b>	<b>Carburettor, fuel injection systems</b>
	
<b>Spanner Opening for Hexagon Socket Head Screws</b>	<b>Valves, pistons</b>
	
<b>TORX® size in mm</b>	<b>Chassies, steering</b>
	
<b>Outside Square</b>	<b>Car bodies</b>
	
<b>Inside Square</b>	<b>Ignition, electric, electronic</b>
	
<b>Inside Hexagon</b>	<b>Brakes, wheels</b>
	
<b>Outside Hexagon</b>	<b>Lubrication service</b>
	
<b>Pipe Diameter, inside</b>	<b>Engine, drive train</b>
	
<b>Pipe Diameter, outside</b>	<b>Other tools</b>
	
<b>Size of Insert Tool Carrier in mm (MANOSKOP®) (Inside Square)</b>	
	
<b>Size of Shell Tool Carrier in mm (MANOSKOP®) (Outside Square)</b>	
	
<b>Open Ring Spanner, hexagon</b>	
	
<b>Open Ring Spanner, bi-hexagon</b>	
	
<b>Socket, hexagon</b>	
	
<b>Socket, bi-hexagon</b>	
	
<b>Socket, hexagon, AS-drive</b>	
	
<b>Socket, bi-hexagon, AS-drive</b>	
	
<b>Socket, bi-square</b>	
	
<b>Socket, spline-drive</b>	
	
<b>for Socket Head Screw, hexagon</b>	
	
<b>for Socket Head Screw, hexagon with guide pin</b>	
	
<b>for Phillips-Recessed head Screws</b> Phillips-Recess®, registered trademark of Phillips Screw Company	
	
<b>for POZIDRIV/SUPADRIV Screws</b> POZIDRIV/SUPADRIV®, registered trademark of European Industrial Services Ltd.	
	
<b>for Trisquare Socket Head Screws</b>	
	
<b>for Inside TORX® Screws</b>	
	
<b>for Inside TORX® Screws with hollow drive tip</b>	
	
<b>for Inside TORX PLUS® Screws</b>	
	
<b>for 5-star screws</b>	
	
<b>for Outside TORX® Screws</b>	
<b>TORX®</b> registered trademark of Fa. Acument Intellectual Properties, LLC, Rockford, Illinois, USA STAHLWILLE holds the Manufacturing Licence for TORX® Tools	
	
<b>for Spline Socket Head Screws</b> Ribe-CV®, registered trademark of Richard Bergner GmbH & Co.	
	
<b>for Slotted Head Screws</b>	
	
<b>for TRI-WING® Screws</b> , registered trademark of Phillips Screw Company	
	
<b>for TORQ-SET® Screws</b> , registered trademark of Phillips Screw Company	
	
<b>Diameter in mm</b>	
	
<b>Anti-Slip-drive</b>	
	
<b>High-Performance-Quality</b>	
	
<b>Scale Range</b>	
	
<b>Scale Division</b>	
	
<b>Weight</b>	
	
<b>Standard Pack (pieces)</b>	
	
<b>full flush cutting</b>	
	
<b>semi flush cutting</b>	
	
<b>standard bevel</b>	
	
<b>Safety insulated as per IEC 900 - AC 1000 V</b>	
	
<b>new items</b>	

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