



AEROSPACE

1100e



CONVERTA

The modular components system in the aerospace industry (maintenance), in industry, the trades and all service work in the field for maintenance and assembly jobs

- Fully mobile for use anywhere.
- Multitalented – numerous combination options.
- Wheel it – or carry it.
- Interchangeable drawers and a range of magazines. Magazines are placed on flat drawers and can be opened easily when the drawer is pulled out. The undersides are coated with non-slip, skydrol and oil resistant rubber.
- The magazine drawers can easily be exchanged for normal drawers (as with the Tool Trolleys and Tool Boxes in the full range, with the exception of No 93).
- Toplevel-proof because only one drawer can be opened at any one time.
- Drawers designed to match the STAHLWILLE inlay system.
- Can be completely locked with cylinder lock (central locking), also available on request with master key locking system for several Tool Boxes and Trolleys.
- Hanging option for spray-can holders.
- Tough worktop made of plastic, oil and skydrol resistant with compartments for screws, nuts etc.
- Can be combined with Tool Trolley No 93 and No 97.
- All painted parts have an environmentally friendly powdercoat.



920 + R920

920 + 921

920 + 922N



920 + 93R

920 + 97N/7R

920 Magazine case

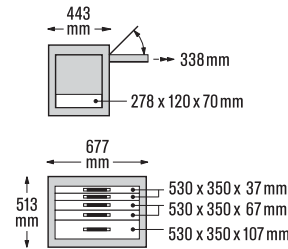
with 5 drawers and 5 magazines.

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.

With the exception of the 37 mm high magazine, the other 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.

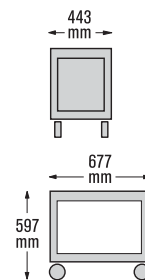


Code	Colour	Can be combined with No	⚖️ kg
81480000	red RAL 3020	920; 921; 922; 93; 94N; 97N; 97N/KM; 97H/8; 98	46

921 Wheely box with up-and-over door

With 4 wheels \varnothing 125 mm (two pivoting casters, one wheel with parking brake).

Silver coloured front door pivots open and slides inside, out of the way. Large storage space inside without drawers. 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	⚖️ kg
81480001	red RAL 3020	94N; 920	20

922N Wheely box with drawers

With 4 wheels \varnothing 125 mm (two 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
96 48 0002	red RAL 3020	920; 94N	37.4

Accessories CONVERTA

920C-SCH Magazine drawer

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



Code	Δ kg
81 48 1000	1.85

920C 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
81 48 1050	920 C 50	530 x 350 x 38	920	2.9
81 48 1080	920 C 80	530 x 350 x 68	920; 922N; 92NG; 94N; 97N/6; 97N/6KM; 97N/8; 97N/8KM; 97N/9; 97N/9KM; 97H/8	3.3
81 48 1120	920 C 120	530 x 350 x 108	920; 92NG; 97N/6; 97N/6KM; 97N/7; 97N/7KM; 97N/8; 97N/8KM; 97N/9; 97N/9KM; 97H/8	3.7



Tool trolleys, tool boxes, workbenches and accessories

93 Mechanics tool trolleys

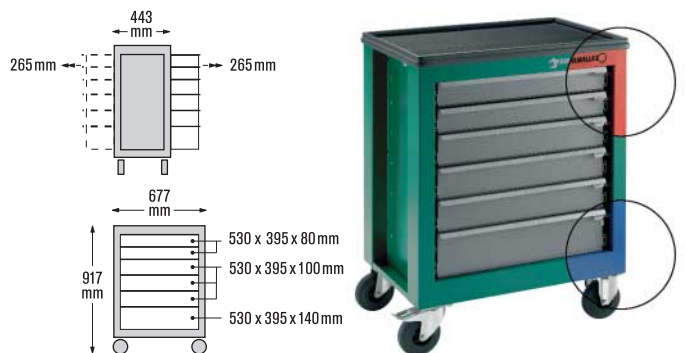
Both sides with louvre, central locking. 4 ball-bearing mounted drawers, opening to both sides, with stop. Handles integrated in side walls, removable holder for spray cans or similar. Can be enhanced with STAHLWILLE standard and TCS inlays. May be combined with tool box No 94N.



Code	No	Colour	kg
81 41 00 11	93G	green	39
81 41 00 16	93R	red, RAL 3020	39
81 41 00 13	93B	blue, RAL 2703035	39

98 Mechanics tool trolleys

with 6 drawers on telescopic rails, can be opened from both sides. Recessed worktop with rubber mat and impact protection made of plastic. Handles integrated in side walls. Central locking. Double-bearing wheels, oil and acid-resistant. Parking brake. Drawers can be individually unlocked. Can be combined with Tool Box No 94N.



Code	No	Colour	kg
81 17 00 00	98G	green	50.5
81 17 00 02	98R	red, RAL 3020	50.5
81 17 00 01	98B	blue, RAL 2703035	50.5

97N/6 Tool trolleys

with double-bearing, oil and acid-resistant wheels, brake and 6 fully extendible, removable drawers. Can be enhanced with STAHLWILLE standard and TCS inlays. Holders for spray cans and paper rolls. Divided work area. Centrally locked by cylinder lock. May be combined with tool box No 94N.



Code	No	Colour	kg
81 16 00 01	97N/6G	green	47.7
81 16 00 02	97N/6R	red, RAL 3020	47.7
81 16 00 03	97N/6B	blue, RAL 2703035	47.7

97N/6KM Tool trolleys

With solid multi-purpose worktop No 913/1, plastic handles on the drawers and impact protection strips on the vertical edges, with double-bearing, oil and acid-resistant wheels, parking brake and 6 removable fully extendible drawers, holders for paper rolls and spray cans. Can be enhanced with STAHLWILLE standard and TCS inlays. Central locking with a cylinder lock. Can be combined with Tool Box No 94N. Can also be enhanced using additional tray No 913/2 and multifunctional back panel No 913/3 (please order separately).



Code	No	Colour	kg
81 16 00 04	97N/6KM G	green	49.2
81 16 00 05	97N/6KM R	red, RAL 3020	49.2
81 16 00 06	97N/6KM B	blue, RAL 2703035	48.5

97N/7 Tool trolleys

with double-bearing, oil and acid-resistant wheels, brake and 7 fully extendible, removable drawers. Can be enhanced with STAHLWILLE standard and TCS inlays. Holders for spray cans and paper rolls. Divided work area. Centrally locked by cylinder lock. May be combined with tool box No 94N.



Code	No	Colour	△▽ kg
81 16 00 07	97N/7G	green	49.9
81 16 00 08	97N/7R	red, RAL 3020	49.9
81 16 00 09	97N/7B	blue, RAL 2703035	49.9

97N/8 Tool trolleys

with double-bearing, oil and acid-resistant wheels, brake and 8 fully extendible, removable drawers. Can be enhanced with STAHLWILLE standard and TCS inlays. Holders for spray cans and paper rolls. Divided work area. Centrally locked by cylinder lock. May be combined with tool box No 94N.



Code	No	Colour	△▽ kg
81 16 00 13	97N/8G	green	51.7
81 16 00 14	97N/8R	red, RAL 3020	51.7
81 16 00 15	97N/8B	blue, RAL 2703035	51.7

97N/7KM Tool trolleys

With solid multi-purpose worktop No 913/1, plastic handles on the drawers and impact protection strips on the vertical edges, with double-bearing, oil and acid-resistant wheels, parking brake and 7 removable fully extendible drawers, holders for paper rolls and spray cans. Can be enhanced with STAHLWILLE standard and TCS inlays. Central locking with a cylinder lock. Can be combined with Tool Box No 94N. Can also be enhanced using additional tray No 913/2 and multifunctional back panel No 913/3 (please order separately).



Code	No	Colour	△▽ kg
81 16 00 10	97N/7KM G	green	51.4
81 16 00 11	97N/7KM R	red, RAL 3020	51.4
81 16 00 12	97N/7KM B	blue, RAL 2703035	51.4

97N/8KM Tool trolleys

With solid multi-purpose worktop No 913/1, plastic handles on the drawers and impact protection strips on the vertical edges, with double-bearing, oil and acid-resistant wheels, parking brake and 8 removable fully extendible drawers, holders for paper rolls and spray cans. Can be enhanced with STAHLWILLE standard and TCS inlays. Central locking with a cylinder lock. Can be combined with Tool Box No 94N. Can also be enhanced using additional tray No 913/2 and multifunctional back panel No 913/3 (please order separately).



Code	No	Colour	△▽ kg
81 16 00 16	97N/8KM G	green	53.5
81 16 00 17	97N/8KM R	red, RAL 3020	53.5
81 16 00 18	97N/8KM B	blue, RAL 2703035	53.5

97N/9 Tool trolleys

with double-bearing, oil and acid-resistant wheels, brake and 9 fully extendible, removable drawers. Can be enhanced with STAHLWILLE standard and TCS inlays. Holders for spray cans and paper rolls. Divided work area. Centrally locked by cylinder lock. May be combined with tool box No 94N.



Code	No	Colour	kg
81 16 00 19	97N/9G	green	53.8
81 16 00 20	97N/9R	red, RAL 3020	53.8
81 16 00 21	97N/9B	blue, RAL 2703035	53.8

97N/10 Tool trolleys

with double-bearing, oil and acid-resistant wheels, brake and 10 fully extendible, removable drawers. Can be enhanced with STAHLWILLE standard and TCS inlays. Holders for spray cans and paper rolls. Divided work area. Centrally locked by cylinder lock. May be combined with tool box No 94N.



Code	No	Colour	kg
81 16 00 25	97N/10G	green	56
81 16 00 26	97N/10R	red, RAL 3020	56
81 16 00 27	97N/10B	blue, RAL 2703035	56

97N/9KM Tool trolleys

With solid multi-purpose worktop No 913/1, plastic handles on the drawers and impact protection strips on the vertical edges, with double-bearing, oil and acid-resistant wheels, parking brake and 9 removable fully extendible drawers, holders for paper rolls and spray cans. Can be enhanced with STAHLWILLE standard and TCS inlays. Central locking with a cylinder lock. Can be combined with Tool Box No 94N. Can also be enhanced using additional tray No 913/2 and multifunctional back panel No 913/3 (please order separately).



Code	No	Colour	kg
81 16 00 22	97N/9KM G	green	55.9
81 16 00 23	97N/9KM R	red, RAL 3020	55.9
81 16 00 24	97N/9KM B	blue, RAL 2703035	55.9

97N/10KM Tool trolleys

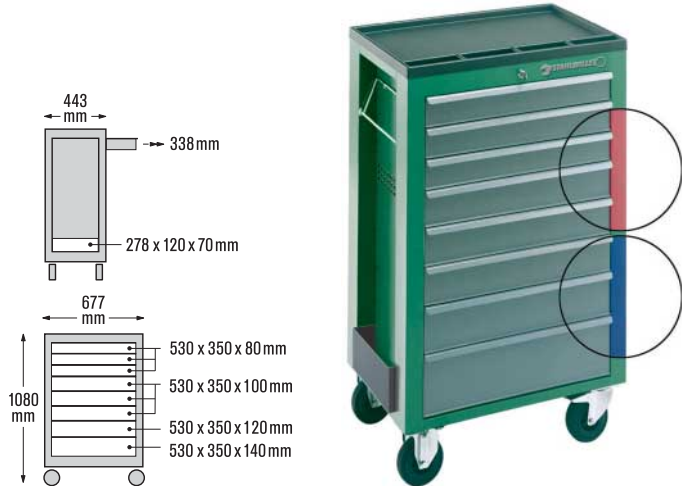
With solid multi-purpose worktop No 913/1, plastic handles on the drawers and impact protection strips on the vertical edges, with double-bearing, oil and acid-resistant wheels, parking brake and 10 removable fully extendible drawers, holders for paper rolls and spray cans. Can be enhanced with STAHLWILLE standard and TCS inlays. Central locking with a cylinder lock. Can be combined with Tool Box No 94N. Can also be enhanced using additional tray No 913/2 and multifunctional back panel No 913/3 (please order separately).



Code	No	Colour	kg
81 16 00 28	97N/10KM G	green	58.3
81 16 00 29	97N/10KM R	red, RAL 3020	58.3
81 16 00 30	97N/10KM B	blue, RAL 2703035	58.3

97H/8 Tool trolleys

with smooth-running plastic castors, locking brake and 8 removable, fully extendible drawers.
Can be enhanced with STAHLWILLE standard and TCS inlays.
Side wall space can be individually optimised using the square-hole perforations and hooks No 8031–8041.
Holders for spray cans and paper rolls. Divided work area.
Centrally locked by cylinder lock.
May be combined with tool boxes No 94N.



Code	No	Colour	△▽ kg
81 1600 31	97H/8G	green	55
81 1600 32	97H/8R	red, RAL 3020	55
81 1600 33	97H/8B	blue, RAL 270 30 35	55

94N Tool boxes

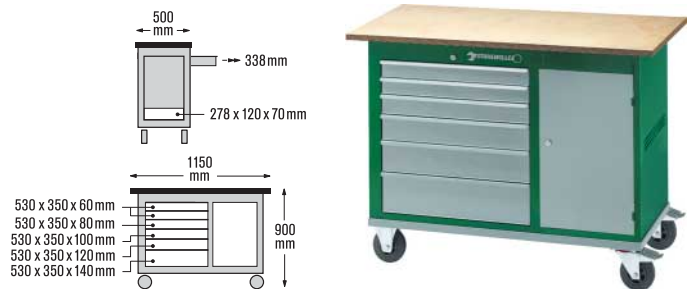
with 5 fully extendible, removable drawers. Handles integrated in side walls. Can be enhanced with STAHLWILLE standard and TCS inlays.
Central locking with a cylinder lock. Can also be mounted on tool trolleys No 93, No 97N, No 97H/8, No 98, Wheely box No 921, No 922N.



Code	No	Colour	△▽ kg
81 4300 01	94NG	green	32.5
81 4300 02	94NR	red, RAL 3020	32.5
81 4300 03	94NB	blue, RAL 270 30 35	32.5

92NG Mobile workbench

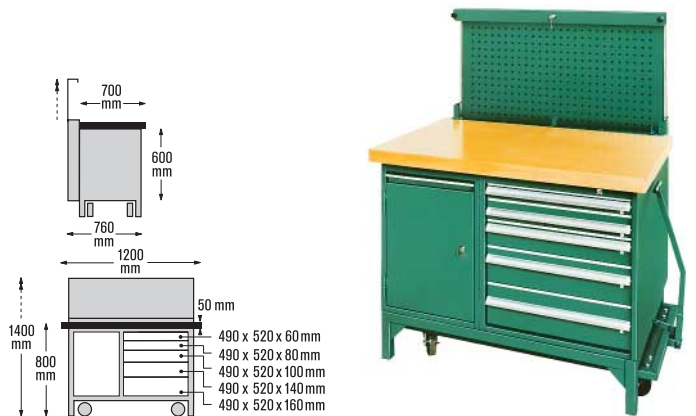
With 4 smooth-running plastic wheels, of which 2 are swivelling and have parking brakes; 6 fully extendible removable drawers, holders for paper rolls and spray cans, 30 mm multiplex beechwood worktop.
Roomy storage area with a shelf in the cabinet, drawers and access door to storage area, each individually lockable with cylinder locks, with a single key. One outer side and the inside of the storage area access door 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.



Code	△▽ kg
8501 00 13	73

96/3 Mobile workbench

with chassis and retractable tool panel. Five 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.
Patented worktop is 50 mm thick, warp- and water resistant, multilayer bonded beech wood with clear varnish finish.
Front edge has hardwood edging strip.



Code	△▽ kg
8503 00 03	160



Drawers

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



Code	No	Dimensions mm	Can be combined with No	ΔΔ kg
81 48 2060	SCH 60	530 x 350 x 60	92NG; 94N; 97N/7; 97N/8; 97N/9; 97N/10; 922N	2.4
81 48 2080	SCH 80	530 x 350 x 80	92NG; 94N; 97N/6; 97N/8; 97N/9; 97H/8; 920; 922N	2.7
81 48 2100	SCH 100	530 x 350 x 100	92NG; 97N/6; 97N/7; 97N/8; 97N/10; 97H/8	2.95
81 48 2120	SCH 120	530 x 350 x 120	92NG; 97N/6; 97N/7; 97N/8; 97N/9; 97H/8; 920	3.2
81 48 2140	SCH 140	530 x 350 x 140	92NG; 97N/6; 97N/7; 97H/8	3.5

Drawers with plastic handles

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



Code	No	Dimensions mm	Can be combined with No	ΔΔ kg
81 48 3060	SCH 60KM	530 x 350 x 60	97N/7KM; 97N/8KM; 97N/9KM; 97N/10KM	2.5
81 48 3080	SCH 80KM	530 x 350 x 80	97N/6KM; 97N/8KM; 97N/9KM	2.65
81 48 3100	SCH 100KM	530 x 350 x 100	97N/6KM; 97N/7KM; 97N/8KM; 97N/10KM	3.3
81 48 3120	SCH 120KM	530 x 350 x 120	97N/6KM; 97N/7KM; 97N/8KM; 97N/9KM	3.4
81 48 3140	SCH 140KM	530 x 350 x 140	97N/6KM; 97N/7KM	3.6

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. Separator height = 40 mm.



Code	for No	ΔΔ kg
81 48 4001	92NG; 93; 94N; 97N; 97N/KM; 97H/8; 920; 922N	0.7

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	ΔΔ g
83 81 2070	92NG; 93; 94N; 97N; 97N/KM; 97H/8; 920; 922N	520 x 340 x 30	330

913 Cover

Oil and skydrol resistant.



Code	for No	mm	ΔΔ g
8901 00 11	93; 94N; 97N; 97N/KM; 97H/8; 920; 921; 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. 4 additional holes for mounting the multifunctional back panel No 913/3. Oil and Skydrol resistant.



Code	for No	mm	ΔΔ kg
8901 00 22	93; 94N; 97N; 97N/KM; 97H/8; 920; 921; 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	ΔΔ kg
8901 00 23	93; 97N; 97N/KM; 97H/8; 920; 921; 922N	443 x 540 x 35	2.2

913/3 Multifunctional back panel

Perforated panel for attaching to multipurpose worktop No 913/1, for mounting drawings & docketts using magnets or for hanging tools with hook sets No 8031 to 8041. Consisting of: 2 uprights for inserting in the base and perforated panel, silver paint finish.



Code	mm	ΔΔ kg
8901 00 24	570 x 365 x 40	3.7

R 920 Set of wheels

Set consists of two fixed wheels and two pivoting, 125 mm Ø. One wheel with locking brake.



Code	for No	ΔΔ kg
89480001	93; 94N; 97N; 97N/KM; 98; 920; 921; 922N	4.9

SDH 921 Spray can holders

One pair, coated with environmentally friendly silver-coloured textured powder-coat, with holder for paper rolls.



Code	for No	ΔΔ kg
81483001	92NG; 93; 94N; 97N; 97N/KM; 97H/8; 98; 920; 921; 922N	1

AB97 Rubbish bin for attaching to tool trolleys

Capacity approx. 9 l. All painted parts have an environmentally friendly silver finish powder coat. For Tool Trolleys with fewer than 25 slots at the side.



Code	for No	mm	ΔΔ kg
89010010	92GL; 93; 97/6KM; 97/6M.; 97/7; 97/8; 98	278 x 300 x 140	1.6

AB97N Rubbish bin for attaching to tool trolleys

Capacity approx. 9 l. All painted parts have an environmentally friendly silver finish powder coat. For Tool Trolleys with 25 slots at the side.



Code	for No	mm	ΔΔ kg
89010012	92NG; 93; 97N; 97N/KM; 97H/8; 98	278 x 300 x 140	1.6

What accessories are available for each Tool Trolley, Tool Box and Mobile Workbench?

Accessories	Tool Trolley Models																		
	No 93	No 98	No 97N/6	No 97N/6KM	No 97N/7	No 97N/7KM	No 97N/8	No 97N/8KM	No 97N/9	No 97N/9KM	No 97N/10	No 97N/10KM	No 97H/8	No 94N	No 920	No 921	No 922N	No 92NG	
Drawers																			
SCH 60																			
SCH 80																			
SCH 100																			
SCH 120																			
SCH 140																			
Drawers with plastic handles																			
SCH 60KM																			
SCH 80KM																			
SCH 100KM																			
SCH 120KM																			
SCH 140KM																			
Drawer separators																			
VE 50-150																			
Magazine drawer																			
920C-SCH																			
Tool magazines																			
920 C 50																			
920 C 80																			
920 C 120																			
Magazine stopper																			
924																			
Empty tray for small components																			
912																			
Worktops																			
913																			
913/1																			
Multifunctional back panel																			
913/3 (only in conjunction with 913/1)																			
Additional tray																			
913/2																			
Set of wheels																			
R 920																			
Rubbish bin																			
AB 97																			
Spray can holders																			
SDH 921																			

Tool boxes

13216/2 Tool box

with 2 drawers and a safety lock. The perforated panel in the lid can be arranged as required using spring loaded clips No 8050 (please order separately).



Code	W mm	H mm	D mm	⚖ kg
81 09 0002	510	270	230	9.5

W = Width, H = Height, D = Depth

13216/3 Tool box

with 3 drawers and a safety lock. The perforated panel in the lid can be arranged as required using spring loaded clips No 8050 (please order separately).



Code	W mm	H mm	D mm	⚖ kg
81 09 0003	510	365	230	12

W = Width, H = Height, D = Depth

13216/4 Tool box

with 4 drawers and a safety lock. The perforated panel in the lid can be arranged as required using spring loaded clips No 8050 (please order separately).



Code	W mm	H mm	D mm	⚖ kg
81 09 0004	510	415	230	15.8

W = Width, H = Height, D = Depth

8050 Spring clip

for perforated panel No 8002, Workshop cabinet No 8144, Mobile Workbench No 92NG, Tool Trolley No 97H/8 and Tool Boxes No 13216/2, No 13216/3, 13216/4.



Code	size	mm	⚖ g	📦
81 48 5006	6	6	28	1
81 48 50 12	12	12	35	1

GRIPMAT

- Stops tools slipping
- Stops tools rattling
- Increases safety

910 Non-slip mat GRIPMAT

protects the tools, prevents them sliding and rattling. One roll will normally be sufficient for a tool trolley with up to seven drawers.



Code	L mm	W mm	⚖ g
8901 0003	3800	370	930

L = Length, W = Width

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	W mm	H mm	D mm	⚖ kg
81 62 0002	460	310	160	4.1

W = Width, H = Height, D = Depth

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	W mm	H mm	D mm	△△ kg
81620003	460	310	180	4.5

W = Width, H = Height, D = Depth

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	W mm	H mm	D mm	△△ kg
81620001	460	310	180	6






































W = Width, H = Height, D = Depth

Tool sets for aerospace industry

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

172 Tools

Code		△△ kg
97846011		15
 No 12a/13Pc	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"	
 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"	
 No 230a	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"	
 No 4025	size 4	

 No 40aD/25/8	1/4" ○ No 40aD: sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16" No 40aDL: sizes 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; 5/16; 3/8; 7/16; 1/2" No 400; 405/2; 405/4; 405/6; 407; 412; 415 SG-QR; 417/1
 No 409	3/8" ■ 1/4" ○
 No 415SGB	1/4" ○
 No 46a	3/8" ○ sizes 7/16; 1/2; 9/16; 5/8"
 No 427/18	3/8" ■ ○ 455 mm
 No 431	1/4" ■ 3/8" ○
 No 45a/19/9	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" No 47a: sizes 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4" No 427/10; 427/6; 427/3; 428; 433/1; 435SG-QR; 442; 443; 453
 No 1220	size 0
 No 1221	size 1
 No 1222	size 2
 No 1223	size 3
 No 13010	sizes 0; 1; 2; 3; 4; 5; 6; 8; 10
 No 4006/1	1/4" ○
 No 12503	1/4" ○
 No 4722	size 1 (1 x 5.5 x 100 mm); size 3 (1.2 x 8 x 150 mm); size 4 (1.6 x 10 x 175 mm)
 No 4732	sizes 1; 2; 3
 No 10760aCV/13	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"
 No 65 01 5 180	
 No 65 10 5 190	
 No 65 31 5 190	
 No 65 51 6 240	
 No 65 75 1 280	
 No 66 00 5 180	
 No 105-8/6 K	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
 No 10670	205 mm
 No 10955	∅ 27 mm
 No 10960	300 g
 No 12320	
 No 12321	
 No 12600	500 g
 No 12900	
 No 12921N	∅ 50 mm
 No 12922N	
 No 12931	3 m
 No 13110	300 mm
 No 13126	
 No 13135	

13205a Standard aircraft maintenance tool set

127 Tools

Code		Δ kg
97 84 60 12		9.2
No 12a/13Pc	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"	
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"	
No 230a	sizes 5/16 x 1 1/32; 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"	
No 4025	size 4	
No 409	3/8" ■ 1/4" ○	
No 40aD/25/8	1/4" ○ No 40aD: sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16" No 40aDL: sizes 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; 5/16; 3/8; 7/16; 1/2" No 400; 405/2; 405/4; 405/6; 407; 412; 415 SG-QR; 417/1	
No 1161-1166	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	
No 1220-1223	sizes 0; 1; 2; 3	
No 13008	sizes 0; 1; 2; 3; 4; 5	
No 13010	sizes 0; 1; 2; 3; 4; 5; 6; 8; 10	
No 4006/1	1/4" ○	
No 12503	1/4" ○	
No 4722	size 1 (1 x 5.5 x 100 mm); size 3 (1.2 x 8 x 150 mm); size 4 (1.6 x 10 x 175 mm)	
No 4732	sizes 1; 2; 3	
No 65 01 5 180		
No 65 10 5 190		
No 65 31 5 190		
No 65 51 6 240		
No 65 75 1 220		
No 66 00 5 180		
No 105-8/6 K	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	
No 10955	∅ 27 mm	
No 10960	300 g	
No 12025	200 mm	
No 12030	250 mm	
No 12035	200 mm	
No 12036	250 mm	
No 12053		
No 12321		
No 12900N		
No 12921N	∅ 40 mm	
No 13110	300 mm	
No 13126		

13207a Electricians set in tool case No 13209









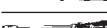











117 Tools

Code		Δ kg
9881 0322		14.4
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"	
No 12a/13Pc	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"	
No 40aD/10/8	1/4" ○ No 40aD: sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16" No 400; 405/2; 405/4; 405/6; 407; 412; 415SG-QR; 417/1	
No 4006/1	1/4" ○	
No 4760 VDE	size 1 (0.4 x 2.5 x 75 mm); size 3 (0.6 x 3.5 x 100 mm); size 5 (1 x 5.5 x 125 mm); size 6 (1.2 x 6.5 x 150 mm)	
No 4765 VDE	sizes 0; 1; 2	
No 12500a	sizes 1/8; 5/32; 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16"	
No 10760aCV/13	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"	
No 65 01 5 160, No 65 01 5 180		
No 65 24 5 160		
No 65 29 5 200		
No 65 30 5 200		
No 65 31 5 170		
No 65 55 5 125		
No 65 76 5 230		
No 66 00 5 130		
No 66 02 5 180		
No 66 23 5 160		
No 105-8/6 K	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	
No 10960	300 g	
No 12053		
No 12320		
No 12600	500 g	
No 12921N	∅ 40 mm	
No 12922N		
No 12940		
No 13008	sizes 0; 1; 2; 3; 4; 5	
No 13010	sizes 0; 1; 2; 3; 4; 5	
No 13126		
No 13130		
No 13131		
No 13209		

13208a

Board case for aircraft in tool case
No 13209












65 Tools

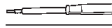







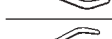
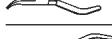



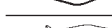


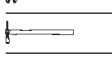














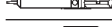





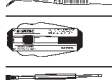
Code		Δ kg
9881 0323		8.9
 No 13a	sizes 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2"	
 No 4025	sizes 4; 6; 8	
 No 1220	size 0	
 No 1221	size 1	
 No 1222	size 2	
 No 1223	size 3	
 No 13008	sizes 0; 1; 2; 3; 4; 5; 6	
 No 13010	sizes 0; 1; 2; 3; 4; 5; 6; 8; 10	
 No 4006/1	1/4" \odot	
 No 4722	size 1 (1 x 5.5 x 100 mm); size 3 (1.2 x 8 x 150 mm); size 4 (1.6 x 10 x 175 mm)	
 No 4732	sizes 1; 2; 3	
 No 10760aCV/13	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"	
 No 65 01 5 180		
 No 65 10 5 190		
 No 65 51 6 240		
 No 65 76 5 230		
 No 66 00 5 180		
 No 12320		
 No 13126		
 No 13209		

13210

Electronics set in tool case No 13209

101 Tools

Code		Δ kg
9881 0301		10.7
 No 13	sizes 5.5; 6; 7; 8; 9; 10; 11; 12; 13; 14 mm	
 No 13a	sizes 3/16; 7/32; 1/4; 3/8; 1/2"	
 No 16	sizes 3.2; 3.5; 4; 4.5; 5 mm	
 No 4025	size 4	
 No 4721	size 5 (1.2 x 8 x 160 mm)	
 No 4724	size 1 (0.6 x 3.5 x 25 mm); size 2 (1 x 5.5 x 25 mm)	
 No 4730	sizes 0; 1; 2	
 No 4753	\bullet sizes 0.7; 0.9; 1.3 mm	
 No 4760 VDE	size 1 (0.4 x 2.5 x 75 mm); size 4 (0.8 x 4 x 100 mm); size 6 (1.2 x 6.5 x 150 mm)	
 No 4797	\ominus 4751: 0.3 x 1.5; 0.4 x 2; 0.4 x 2.5; 0.5 x 3 mm \oplus 4752: No 00, No 0; No 1	
 No 10546	size 2 (0.8 x 4 x 100 mm); size 3 (1 x 5.5 x 125 mm)	

 No 10554	220–250 Volt
 No 10760aCV/13	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"
 No 10765	sizes 2; 2.5; 3; 4 mm
 No 12500	sizes 6; 7 mm
 No 018/3	
 No 109	sizes 1; 2; 3; 4; 5; 6; 7; 8
 No 65 01 5 160	
 No 65 11 5 135	
 No 65 32 5 170	
 No 65 36 5 160	
 No 66 04 6 110	
 No 66 06 6 130	
 No 66 23 5 160	
 No 12900	
 No 10971	
 No 12921N	\varnothing 50 mm
 No 13100	
 No 13135	
 Drip oiler	
 Magnetic lifter	
 Electronics tweezers	
 Electronics tweezers	
 Extractor hook set	
 Test equipment set for safety applications	
 Universal soldering iron	
 Solder	
 Solder removing pump, antistatic	
 Blade holders with blades	
 Lamp extractor	
 Magnifying glass	
 2 Screwdrivers	
 Tweezers	
 Stripper	
 Set of soldering tools	
 Solder removing wire	
 Hand vice	
 Inspection mirror, insulated, \varnothing 40 mm	
 No 13209	

13211a Sheetmetal set

53 Tools

Code		δ	kg
97 84 60 08			9
No 10a	sizes 1/4 x 5/16; 3/8 x 7/16; 1/2 x 9/16"		
No 13a	sizes 7/32; 11/32"		
No 23a	size 1/2 x 9/16"		
No 230a	sizes 1/4 x 5/16; 3/8 x 7/16"		
No 4025	size 8		
No 442	1/4" ○ 3/8" ○		
No 443	5/16" ○ 3/8" ○		
No 453	3/8" ■		
No 103	150 mm		
No 104-5/6D	No 104/120 x 2; 120 x 3; 120 x 4; 120 x 5; 120 x 6 mm No 105/120 mm		
No 104	175 x 8 mm		
No 108/6D	No 108/150 x 2.5; 150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm		
No 4722	size 1 (1 x 5.5 x 100 mm); size 3 (1.2 x 8 x 150 mm); size 4 (1.6 x 10 x 175 mm); size 6 (2.5 x 14 x 250 mm)		
No 4730	sizes 1; 2; 3		
No 4734	size 2		
No 65 01 4 180			
No 65 64 2 175			
No 66 02 4 160			
No 10670	275 mm		
No 10955	32 mm ∅		
No 10970	3/4; 1 1/2 lb.		
No 12025	200 mm		
No 12030	250 mm		
No 12035	200 mm		
No 12036	250 mm		
No 12050	465 mm		
No 12200	145 mm		
No 12378			
No 12752R			
No 12800			
No 12900N			
No 12931	3 m		
No 13110	300 mm		

13212a Set for line maintenance








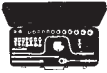




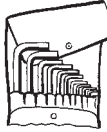









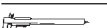
78 Tools

Code		δ	kg
97 84 60 19			4.19
No 13a	sizes 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"		
No 4025	size 4		
No 415SGB	1/4" ○		
No 40aD/10/8	1/4" ○ No 40aD: sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16" No 400; 405/2; 405/4; 405/6; 407; 412; 415SG-QR; 417/1		
No 1221	5 x size 1		
No 1222	5 x size 2		
No 13010	3 x (sizes 2; 3; 4; 5; 6; 8)		
No 4006/1	1/4" ○		
No 4722	size 1 (1 x 5.5 x 100 mm); size 3 (1.2 x 8 x 150 mm); size 4 (1.6 x 10 x 175 mm)		
No 4732	sizes 1; 2		
No 10760aCV/13	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"		
No 65 01 5 180			
No 65 51 6 240			
No 65 75 1 280			
No 66 00 5 180			
No 10960	300 g		
No 13126			



13213a Engine mechanics set

124 Tools

Code		△△ kg
97846010		12.2
 No 13a No 130a	sizes 19/32; 5/8; 11/16; 3/4" sizes 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16"	
 No 24	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"	
 No 230a	sizes 1/4 x 5/16; 5/16 x 3/8; 3/8 x 7/16; 7/16 x 1/2; 1/2 x 9/16; 9/16 x 5/8; 5/8 x 3/4; 11/16 x 3/4"	
 No 405	1/4" ■ ○ sizes 10; 14	
 No 413	1/4" ■	
 No 415SGB	1/4" ○	
 No 40aD/25/8	1/4" ○ No 40aD: sizes 3/16; 7/32; 1/4; 9/32; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16" No 40aDL: sizes 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; 5/16; 3/8; 7/16; 1/2" No 400; 405/2; 405/4; 405/6; 407; 412; 415 SG-QR; 417/1	
 No 45a/19/9	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" No 47a: sizes 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4" No 427/10; 427/6; 427/3; 428; 433/1; 435SG-QR; 442; 443; 453	
 No 109	sizes 1; 2; 3; 4; 5	
 No 4722	size 1 (1 x 5.5 x 100 mm); size 2 (1.2 x 6.5 x 125 mm); size 4 (1.6 x 10 x 175 mm); size 5 (2 x 12 x 200 mm)	
 No 4731	sizes 1; 2	
 No 4732	sizes 1; 2; 3	
 No 10760aCV/10Pc	sizes 1/16; 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8"	
 No 65 16 5 200		
 No 65 31 5 190		
 No 65 51 6 240		
 No 65 75 1 220		
 No 66 00 5 160		
 No 10960	300 g	
 No 11097/22	4-25/1000"	
 No 12600	500 g	
 No 12900N		
 No 12921N	∅ 50 mm	


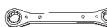







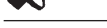

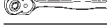
13214a Line maintenance set in tool box No 13216/4

























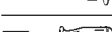

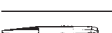

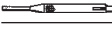










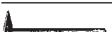






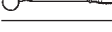







for maintenance and overhaul on aeroplanes,
122 Tools

Code	△△ kg
98814801	27.2



 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; 1 1/8"
 No 25a	sizes 1/4 x 5/16; 5/16 x 11/32; 3/8 x 7/16; 1/2 x 9/16"
 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 40aDL	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 405/2QR	1/4" ■ ○ 54 mm
 No 405/6QR	1/4" ■ ○ 150 mm
 No 407QR	1/4" ■ ○ 38 mm
 No 409M	3/8" ■ 1/4" ○
 No 415QR	1/4" ■
 No 415SGB	1/4" ○
 No 412	1/4" ○ ○

	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 427/3QR	3/8"   76 mm
	No 427/10QR	3/8"   240 mm
	No 428QR	3/8"   46 mm
	No 431	1/4"  3/8" 
	No 432M	1/2"  3/8" 
	No 435QR	3/8" 
	No 443	5/16"  3/8" 
	No 453	3/8" 
	No 4000	
	No 104	120 x 2; 120 x 3; 120 x 4; 120 x 5 mm
	No 109	sizes 2; 5
	No 4722	size 1 (1 x 5.5 x 100 mm); size 3 (1.2 x 8 x 150 mm)
	No 4732	sizes 1; 2; 3
	No 10767a/13	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"
	No 65 16 5 200	
	No 65 32 5 170	
	No 65 51 6 240	
	No 65 64 2 175	
	No 65 75 1 220	
	No 66 00 5 160	
	No 10956	∅ 35 mm
	No 10960	500 g
	No 11095/20	0.05–1 mm
	No 12053	
	No 12320	
	No 12321	
	No 12600	270 g
	No 12900	
	No 12921N	∅ 50 mm
	No 12922N	
	No 12931	3 m
	No 13126	
	No 8050	size 6 (4x); size 12 (6x)
	No 13216/4	



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



175 x 350 x 66 mm, 10 pieces

Code	g
96830358	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 13/21, 6-34 mm



530 x 350 x 75 mm, 21 pieces

Code	g
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 50/51/52/32



175 x 350 x 50 mm, 32 pieces

Code	g
96838191	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 4720/4730



175 x 350 x 35 mm, 7 pieces

Code	g
96838178	475
No 4720	size 1 (0.6 x 3.5 x 75 mm); size 2 (0.8 x 4 x 100 mm); size 4 (1 x 5.5 x 125 mm); size 5 (1.2 x 6.5 x 150 mm)
No 4730	sizes 1; 2; 3

TCS 4720/4760VDE+10767



530 x 350 x 35 mm, 27 pieces

Code	g
96830168	1925
No 4720	size 1 (0.6 x 3.5 x 75 mm); size 2 (0.8 x 4 x 100 mm); size 5 (1.2 x 6.5 x 150 mm); size 6 (1.6 x 8 x 175 mm); size 7 (1.6 x 10 x 200 mm); size 8 (2 x 12 x 200 mm)
No 4724	size 2 (1 x 5.5 x 25 mm)
No 4728	size 1 (0.4 x 2.5 x 50 mm)
No 4730	sizes 1; 2; 3
No 4732	size 4
No 4734	size 2
No 4740	sizes 0; 1; 2
No 4744	size 1
No 4760 VDE	size 1 (0.4 x 2.5 x 75 mm)
No 10767/9	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm

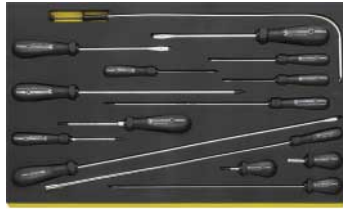
TCS 4720/4760VDE



530 x 350 x 40 mm, 18 pieces

Code	g
96830179	1510
No 4720	size 1 (0.6 x 3.5 x 75 mm); size 2 (0.8 x 4 x 100 mm); size 5 (1.2 x 6.5 x 150 mm); size 6 (1.6 x 8 x 175 mm); size 7 (1.6 x 10 x 200 mm); size 8 (2 x 12 x 200 mm)
No 4724	size 2 (1 x 5.5 x 25 mm)
No 4728	size 1 (0.4 x 2.5 x 50 mm)
No 4730	sizes 1; 2; 3
No 4732	size 4
No 4734	size 2
No 4740	sizes 0; 1; 2
No 4744	size 1
No 4760 VDE	size 1 (0.4 x 2.5 x 75 mm)

TCS 4721/4734



530 x 350 x 30 mm, 15 pieces

Code	g	
96830617	1160	
No 4721		sizes 0 (0.4 x 2.5 x 80 mm); sizes 1 (0.5 x 3.5 x 90 mm); sizes 2 (0.6 x 4 x 10 mm); sizes 4 (1 x 6.5 x 140 mm); sizes 5 (1.2 x 8 x 160 mm)
No 4724		size 2 (1 x 5.5 x 25 mm)
No 4731		sizes 1; 2
No 4732		sizes 1; 2
No 4734		size 2
No 10506		0.8 x 4 x 300 mm
No 10518		1.0 x 5.5 x 410 mm
No 12600	500 g	
No 12922N		

TCS 4722/4750+10760+10766



530 x 350 x 40 mm, 36 pieces

Code	g	
96830196	1633	
No 4722		size 1 (1 x 5.5 x 100 mm); size 2 (1.2 x 6.5 x 125 mm); size 4 (1.6 x 10 x 175 mm); size 5 (2 x 12 x 200 mm)
No 4724		size 2 (1 x 5.5 x 25 mm)
No 4730		size 1
No 4732		size 3
No 4734		size 2
No 4750		sizes T6; T7; T8; T9; T10; T15; T20; T25; T27; T30
No 10760CV/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

TCS 4820/4830



175 x 350 x 35 mm, 7 pieces

Code	g	
96838184	555	
No 4820		0.6 x 3.5 x 75 mm; 0.8 x 4 x 100 mm; 1 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	
96830606	1633	
No 4724		size 2 (1 x 5.5 x 25 mm)
No 4728		size 1 (0.4 x 2.5 x 50 mm)
No 4734 No 4744		size 2 size 1
No 4820		0.6 x 3.5 x 75 mm; 0.8 x 4 x 100 mm; 1.2 x 6.5 x 150 mm; 1.6 x 10 x 200 mm; 2.0 x 12 x 250 mm
No 4830 No 4840		sizes 1; 2; 3 size 1
No 10767/9		sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
No 7756		
No 12922N		

TCS 6501-6602/4



175 x 350 x 35 mm, 4 pieces

Code	g	
96838179	1010	
No 65 01 5 180		
No 65 29 5 200		
No 65 51 6 240		
No 66 02 5 160		

TCS 102-108/10960/10



175 x 350 x 40 mm, 10 pieces

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

TCS 102-108/10957/10960/12



530 x 350 x 40 mm, 12 pieces

Code		g
96830170		2415
No 102	200 mm	
No 103	150 mm	
No 105	120 x 10 mm	
No 108	150 x 3; 150 x 4; 150 x 5; 150 x 6; 150 x 8 mm	
No 10957	∅ 40 mm	
No 10960	500; 800 g	
No 12718		

TCS 102-108/10957/10960/13



530 x 350 x 60 mm, 13 pieces

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

TCS 102-108/10957/10960/16



530 x 350 x 45 mm, 16 pieces

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

TCS 102-108/10956/10960/18



530 x 350 x 55 mm, 18 pieces

Code		g
96830620		3653
No 102	150 mm	
No 103	150 mm	
No 105	120 x 10 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	∅ 50 mm	
No 10960	300; 500 g	
No 10356		
No 10670	275 mm	
No 10672	20 x 305 mm	
No 12374		
No 12900N		
No 12965		

10 Double open ended spanners

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



Code	mm	L mm	b ₁ mm	b ₂ mm	a mm	ΔΔ 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
40031924	19 x 24	250	42	53	7.8	217	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	1040	1

10a Double open ended spanners

Code	"	L mm	b ₁ mm	b ₂ mm	a mm	ΔΔ 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



Sets: Double open ended spanners

Code	No	Content mm/"	ΔΔ 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	693
96400312	10/9 ¹⁾	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	945
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
96400313	10/11 ¹⁾	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	2149
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

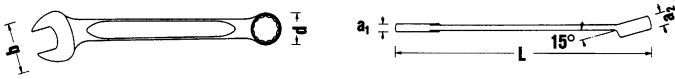
Standard packing: clear view wallet.

¹⁾ in convenient clip holder

13 Combination spanners OPEN-BOX



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

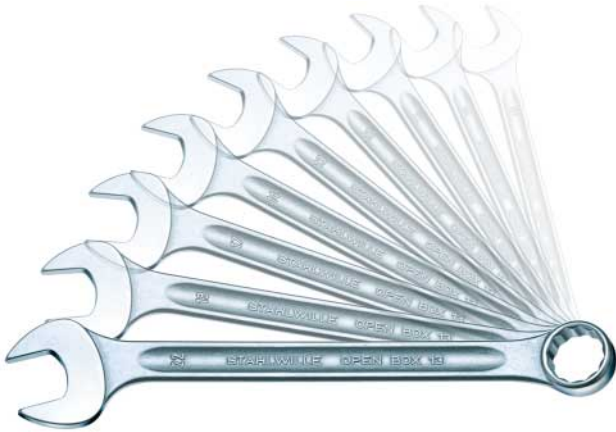


Code	mm	L mm	b mm	d mm	a ₁ mm	a ₂ mm	g	Box
40085500	5.5	100	14.8	9.2	3.5	5.8	13	10
40080606	6	105	15.5	9.9	3.6	6	15	10
40080707	7	110	17	11.3	3.9	6	20	10
40080808	8	115	18	12.4	4.2	7	21	10
40080909	9	120	21	13.4	4.5	7	27	10
40081010	10	125	23	14.8	4.8	7	35	10
40081111	11	135	26	16.4	4.8	8	43	10
40081212	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	36	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	80	48	9.4	17	683	1
40083636	36	460	88	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	1804	1
40085555	55	560	114	81	15	22	2193	1
40086060	60	590	125	89.8	16	24	2925	1

13a Combination spanners OPEN-BOX

Code	"	L mm	b mm	d mm	a ₁ mm	a ₂ mm	g	Box
40481212	3/16	95	14	9.8	3	3.2	10	5
40481313	13/64	95	14	9.8	3	3.2	10	5
40481414	7/32	95	14	9.8	3	3.2	10	5
40481515	15/64	95	14	9.8	3	3.2	9	5
40481616	1/4	105	15.5	10.2	3.6	6	14	10
40481818	9/32	110	17	11.3	3.9	6	17	10
40482020	5/16	115	18	12.4	4.2	7	20	10
40482222	11/32	120	21	13.4	4.5	7	26	10
40482424	3/8	125	23	14.3	4.8	7	32	10
40482828	7/16	135	26	16.4	4.8	8	41	10
40483232	1/2	160	30	18.8	5.3	8.5	57	10
40483434	9/16	165	32	20.6	5.3	8.5	68	10
40483535	19/32	170	35	21.9	5.3	8.5	74	10
40483636	5/8	180	37	23.2	5.8	10	88	10
40483838	11/16	200	40	25.3	6.7	11.5	116	10
40484040	3/4	230	42	27.5	6.7	11.5	144	10
40484141	25/32	235	45	29	7	13	175	5
40484242	13/16	260	47	30	7.3	13	204	5
40484444	7/8	260	49	31.8	7.3	13	217	5
40484646	15/16	280	53	34.9	7.8	14	255	5
40484848	1	300	55	37.2	8.4	14.5	286	5
40485050	1 1/16	300	60	39.2	8.4	14.5	327	5
40485252	1 1/8	330	64	41.4	8.9	16	380	5
40485454	1 3/16	335	66	43.2	8.9	16.5	398	1
40485656	1 1/4	360	70	45.8	9.4	16.5	504	5
40485858	1 5/16	450	74	47	9.6	17	617	1
40486060	1 3/8	460	80	49.3	10	18	796	1
40486262	1 7/16	460	80	51.4	10	18	770	1
40486464	1 1/2	480	87	53.6	11	19	961	1
40486666	1 5/8	480	88	58	11	19	1021	1
40486969	1 13/16	500	94.5	65.3	13	20	1343	1
40487070	1 7/8	530	103	68.4	14	21	1779	1
40487272	2	530	103	74	14	21	1817	1





Sets: Combination spanners OPEN-BOX

Code	No	Content mm/"	△	g
96400813	13/6 ³⁾	7; 8; 10; 13; 17; 19	457	
96400801	13/9	9; 10; 11; 12; 13; 14; 17; 19; 22	758	
96400814	13/9N ³⁾	7; 8; 10; 11; 13; 17; 19; 22; 24	1002	
96400808	13/10KT ¹⁾	8; 9; 10; 11; 12; 13; 14; 15; 17; 19	746	
96400802	13/11	8; 9; 10; 11; 12; 13; 14; 15; 17; 19; 22	915	
96400815	13/13 ³⁾	7; 8; 9; 10; 11; 12; 13; 14; 15; 17; 19; 22; 24	1282	
96400803	13/15	6; 7; 8; 9; 10; 11; 12; 13; 17; 19; 22; 24; 27; 30; 32	2236	
96400816	13/16 ²⁾	7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 21; 22; 24	1620	
96400804	13/17	6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22	1493	
96400805	13/26 ²⁾	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	
96404803	13a/8	7/16; 1/2; 9/16; 5/8; 11/16; 3/4; 13/16; 7/8	959	
96404812	13a/10KT ¹⁾	1/4; 5/16; 11/32; 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4	750	
96404804	13a/20 ²⁾	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	3127	

Standard packing: clear view wallet.

¹⁾ carton with clear view cover

²⁾ packed in carton

³⁾ in convenient clip holder

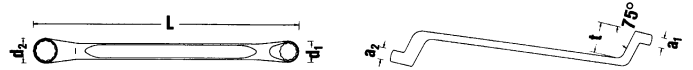
20 Double ended ring spanners

AS-drive

StahlwilleSTABIL®

offset, DIN 838/ISO 10104 (metric sizes),

Chrome Alloy Steel, chrome plated.



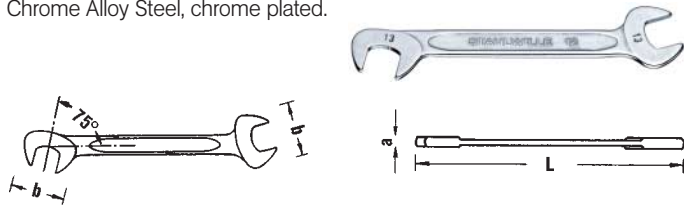
Code	□	L	d ₁	d ₂	a ₁	a ₂	t	△	g	☐
	mm	mm	mm	mm	mm	mm	mm			
41040607	6 x 7	165	10.5	11.8	6	7	18	46	10	
41040809	8 x 9	180	13.1	14.5	7	8	20	62	10	
41040810	8 x 10	180	13.1	15.8	7	9	21	61	10	
41041011	10 x 11	200	15.8	17.2	9	9	23	93	10	
41041013	10 x 13	220	15.8	20	9	10	25	122	10	
41041213	12 x 13	220	18.6	20	9	10	25	126	10	
41041317	13 x 17	245	20	25.3	10	12	27	169	10	
41041415	14 x 15	245	21.3	22.6	10	12	27	163	10	
41041617	16 x 17	255	23.9	25.3	11	12	27	181	10	
41041719	17 x 19	270	25.3	28	12	13	29	220	10	
41041819	18 x 19	275	26.6	28	12	13	29	228	10	
41041821	18 x 21	300	26.6	30.7	12	13	31	279	10	
41041922	19 x 22	300	28	32.1	13	14	31	315	10	
41042022	20 x 22	300	29.4	32.1	13	14	31	317	5	
41042123	21 x 23	315	30.7	33.4	13	14	31	312	5	
41042124	21 x 24	330	30.7	34.7	13	14	34	384	5	
41042224	22 x 24	330	32.1	34.7	14	14	34	368	5	
41042426	24 x 26	330	34.7	37.3	14	15	34	427	5	
41042427	24 x 27	330	34.7	38.6	14	15	34	447	5	
41042528	25 x 28	350	36	40	14	15	34	414	5	
41042730	27 x 30	360	38.3	42.6	15	15	37	595	5	
41042732	27 x 32	360	39.3	47.2	15	16	37	596	5	
41043032	30 x 32	365	42.6	45.4	15	16	37	603	5	
41043034	30 x 34	365	42.6	48	15	16	37	670	1	
41043641	36 x 41	440	53	60	17	18	40	1063	1	
41044650	46 x 50	535	65.2	73	19	20	45	1709	1	

20a Double ended ring spanners

Code	□	L	d ₁	d ₂	a ₁	a ₂	t	△	g	☐
	"	mm	mm	mm	mm	mm	mm			
41441620	1/4 x 5/16	180	11.8	13.1	7	7	20	61	10	
41442428	3/8 x 7/16	200	15.8	17.2	9	9	23	88	10	
41443234	1/2 x 9/16	220	20	21.3	9	10	25	131	10	
41443436	5/16 x 5/8	245	21.3	25.3	10	12	27	168	10	
41443538	19/32 x 11/16	255	23.9	25.3	11	12	27	177	10	
41443640	5/8 x 3/4	270	23.9	28	12	13	29	235	10	
41443842	11/16 x 13/16	300	25.3	30.7	12	13	31	280	5	
41444044	3/4 x 7/8	300	28	32.1	13	14	31	299	5	
41444142	25/32 x 13/16	300	29.4	32.1	13	14	31	333	5	
41444446	7/8 x 15/16	330	32.1	34.7	14	14	34	363	5	
41444648	15/16 x 1	330	34.7	37.3	14	15	34	419	5	
41445258	1 1/8 x 1 5/16	365	42.6	45.4	15	16	37	581	1	
41445864	1 5/16 x 1 1/2	440	53	60	17	18	40	1076	1	

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

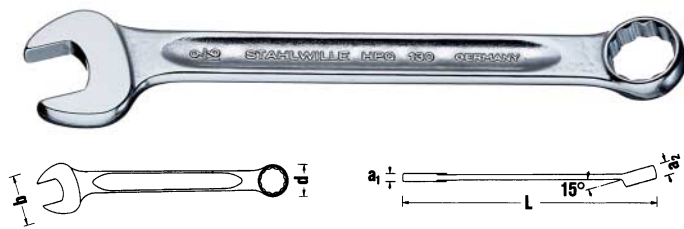
12a Small double open ended spanners ELECTRIC

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

130a Combination spanners

AS-drive HPQ

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

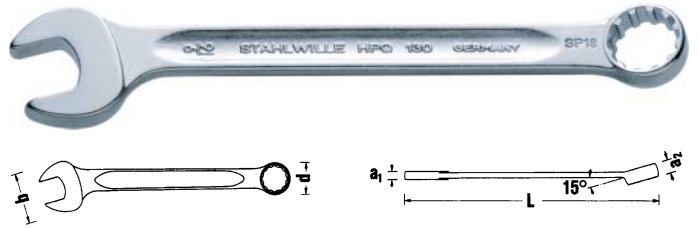


Code	Ø "	L mm	b mm	d mm	a ₁ mm	a ₂ mm	△ g	📦
40571616	1/4	105	14.2	9.8	3.6	6	13	10
40571818	9/32	110	15.5	10.9	4.1	6	16	10
40572020	5/16	115	17	12	4.5	7	20	10
40572222	11/32	120	19	13.1	4.9	7	25	10
40572424	3/8	125	20.5	14.1	5.2	7	32	10
40572828	7/16	135	23	16.2	6	8	42	10
40573232	1/2	150	27	18.2	6.5	8.5	61	10
40573434	9/16	165	30.5	20.6	7	8.5	78	10

130aSP Spline drive combination spanners

HPQ

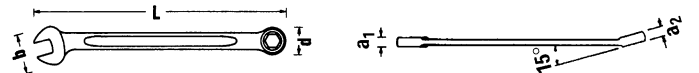
MS-33787, MIL-W-8982, HPQ high performance steel, chrome plated.



Code	Spline size	Ø "	L mm	b mm	d mm	a ₁ mm	a ₂ mm	△ g	📦
40581616	8	1/4	105	14.2	10	3.6	5.6	13	5
40582020	10	5/16	115	17	12.2	4.5	6.4	20	5
40582424	12	3/8	125	20.5	14.8	5.2	7	32	5
40582828	14	7/16	135	23	16.5	6	8	42	5
40583232	16	1/2	150	27	18.7	6.5	8.5	61	5
40583434	18	9/16	165	30.5	20.8	7	8.5	78	5

16 Combination spanners OPEN-BOX

ISO 3318,
Chrome Alloy Steel,
chrome plated.



Code	Ø mm	L mm	b mm	d mm	a ₁ mm	a ₂ mm	△ g	📦
40093232	3.2	75	10	6.6	3	3.2	6	10
40093535	3.5	75	10	6.6	3	3.2	6	10
40094040	4	85	12.5	7.8	3	3.2	9	10
40094545	4.5	85	12.5	7.8	3	3.2	8	10
40095050	5	95	14	9.8	3	3.2	11	10

180a Double ended ring spanners

AS-drive HPQ

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

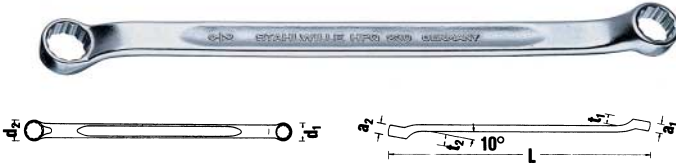


Code	Ø "	L mm	d ₁ mm	d ₂ mm	a ₁ mm	a ₂ mm	t ₁ mm	t ₂ mm	△ g	📦
41601620	1/4 x 5/16	107	10.2	11.8	7	8	7.2	7.4	26	10
41602428	3/8 x 7/16	121	14.6	16.7	6.7	7.8	9	10	42	10
41603234	1/2 x 9/16	140	18.5	20.7	8.7	9.5	11	12	62	10
41603436	9/16 x 5/8	148	20.7	22.6	9.5	10.5	11.5	12.5	87	10

230a Double ended ring spanners



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.

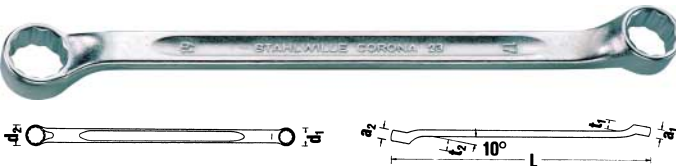


Code	"	L mm	d ₁ mm	d ₂ mm	a ₁ mm	a ₂ mm	t ₁ mm	t ₂ mm	g	
4161 1620	1/4 x 5/16	180	10.2	11.9	5.2	6	7.9	8.8	36	10
4161 2022	5/16 x 11/32	195	11.9	13.5	7	8	8	9	45	10
4161 2024	5/16 x 3/8	195	11.9	14.6	6	7.9	10.8	12.4	54	10
4161 2428	3/8 x 7/16	215	14.6	16.7	7.9	8.7	11.4	11.7	74	10
4161 2832	7/16 x 1/2	225	16.7	19.5	8.7	9.1	11.9	12.6	105	10
4161 3234	1/2 x 9/16	235	19.5	20.7	9.1	9.5	12.2	12.9	119	10
4161 3436	9/16 x 5/8	245	20.7	22.6	9.5	11.5	13.8	13.9	122	10
4161 3640	5/8 x 3/4	274	22.6	27.5	11.1	12	14.8	15.8	156	10
4161 3840	11/16 x 3/4	275	25.4	27.5	11.1	12	15.2	15.8	158	10
4161 4244	13/16 x 7/8	301	29.5	31.7	13.5	14.5	19	20	175	5
4161 4648	15/16 x 1	340	34.1	36.5	14.5	15	22	23	375	5
4161 4850	1 x 1 1/16	368	36.5	38.6	15	16	23	24	460	5
4161 5256	1 1/8 x 1 1/4	403	40.8	45	16	18	25	27	620	5

23 Double ended ring spanners



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

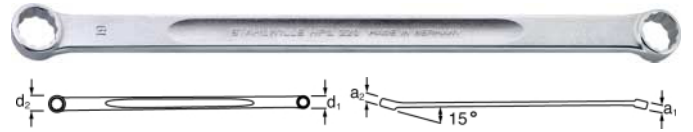


Code	mm	L mm	d ₁ mm	d ₂ mm	a ₁ mm	a ₂ mm	t ₁ mm	t ₂ mm	g	
4107 0607	6 x 7	170	9.5	10.8	6	7	7	8	41	10
4107 0809	8 x 9	179	12.1	13.3	7	8	8	9	49	10
4107 1011	10 x 11	188	14.6	15.9	8.5	9.5	9	10	66	10
4107 1213	12 x 13	203	17.3	18.6	9.5	10.5	10	11	95	10
4107 1415	14 x 15	219	20.1	21.4	10.5	11.5	11	13	109	10
4107 1617	16 x 17	248	22.7	24.1	11.5	12.5	14	15	144	10
4107 1719	17 x 19	250	24.1	27	12.5	13.5	15	18	162	10
4107 1819	18 x 19	251	25.5	27	12.5	13.5	16	18	157	10
4107 2022	20 x 22	280	28.5	31.3	13.5	14.5	19	20	223	5
4107 2123	21 x 23	328	29.8	32.9	13.5	14.5	19	22	281	5
4107 2427	24 x 27	376	34.3	38.6	14.5	16	22	24	426	5
4107 3032	30 x 32	429	42.6	45.2	18	18	26	27	608	5

220 Double ended ring spanners



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



Code	"	L mm	d ₁ mm	d ₂ mm	a ₁ mm	a ₂ mm	g	
4103 5507	5.5 x 7	185	8.8	11	5.3	5.8	28	5
4103 0608	6 x 8	205	9.8	12.1	5.6	6	34	5
4103 0911	9 x 11	250	14.2	16.7	8	8.7	80	5
4103 1011	10 x 11	250	15.5	16.7	8	8.7	80	5
4103 1214	12 x 14	290	18.3	20.7	9.5	9.5	162	5
4103 1314	13 x 14	290	18.7	20.7	9.5	9.5	160	5
4103 1719	17 x 19	365	25	27.5	11	12	296	5
4103 1819	18 x 19	365	25.5	27.5	11	12	295	5
4103 1922	19 x 22	408	27.5	31.5	13	14.3	520	5
4103 2022	20 x 22	409	28.5	31.5	13	14.3	515	5

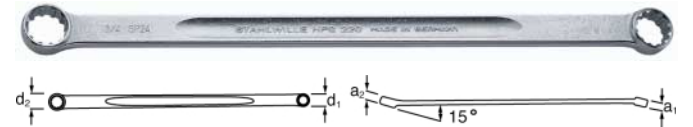
220a Double ended ring spanners

Code	"	L mm	d ₁ mm	d ₂ mm	a ₁ mm	a ₂ mm	g	
4143 1416	7/32 x 1/4	184	9	9.9	5.3	5.8	29	5
4143 1620	1/4 x 5/16	205	9.9	12.2	5.6	6	33	5
4143 2428	3/8 x 7/16	250	14	16	8	8.7	79	5
4143 3234	1/2 x 9/16	290	18.5	21	9.5	9.5	160	5
4143 3640	5/8 x 3/4	363	22.6	27	11	12	298	5
4143 3840	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.



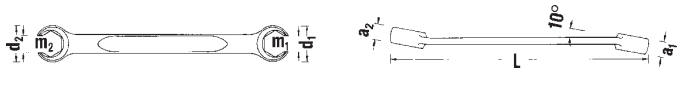
Code	Spline size	"	L mm	d ₁ mm	d ₂ mm	a ₁ mm	a ₂ mm	g	
4116 0709	7 x 9	7/32 x 9/32	185	9.4	11.5	5.3	5.8	23	5
4116 0810	8 x 10	1/4 x 9/16	205	10.4	12.4	5.6	6	33	5
4116 1214	12 x 14	3/8 x 7/16	250	14.9	17	8	8.7	79	5
4116 1618	16 x 18	1/2 x 9/16	290	19	21	9.5	9.5	161	5
4116 1820	18 x 20	9/16 x 5/8	315	21	23	10	11	205	5
4116 2224	22 x 24	11/16 x 3/4	365	25	27.5	11	12	310	5
4116 2630	26 x 30	13/16 x 13/16	410	29.5	34	13	14.3	496	5
4116 2832	28 x 32	7/8 x 1	430	32	36.5	13.5	15	582	5



24 Double ended open ring spanners, angled

AS-drive

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



Code	Size	L	d ₁	d ₂	a ₁	a ₂	m ₁	m ₂	g	Icon
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

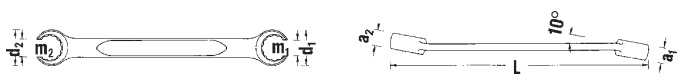
24a Double ended open ring spanners, angled

Code	Size	L	d ₁	d ₂	a ₁	a ₂	m ₁	m ₂	g	Icon
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	9/16 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

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



Code	Size	L	d ₁	d ₂	a ₁	a ₂	m ₁	m ₂	g	Icon
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 18 21	18 x 21	230	31.5	35.5	13	13.5	14.8	16.2	182	5
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

24a Double ended open ring spanners, angled

Code	Size	L	d ₁	d ₂	a ₁	a ₂	m ₁	m ₂	g	Icon
41 48 36 40	5/8 x 3/4	220	29	33	12	13	12.7	15.8	148	5
41 48 40 48	3/4 x 1	235	33	40.2	13	16	15.8	19	199	5
41 48 44 52	7/8 x 1 1/8	250	37	44.4	15	17.5	17.5	21	253	5

240 Ratchet wrenches

registered design, 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	Size	L	b	a	g	Icon
41 10 08 08	8 5/16	121.4	16	4	60	1
41 10 10 10	10 3/8	133.3	20	4	70	1
41 10 11 11	11 7/16	140.4	23	5	103	1
41 10 12 12	12 15/32	146.3	25	5	100	1
41 10 13 13	13 1/2	168.4	26.8	6	154	1
41 10 14 14	14 9/16	174.6	29.6	6	180	1
41 10 16 16	16 5/8	191.3	32.8	7	270	1
41 10 17 17	17 21/32	201.7	34.3	7	310	1
41 10 18 18	18 11/16	212.8	36.2	7	310	1
41 10 19 19	19 3/4	238.5	38.5	7	380	1



Sets: Ratchet wrenches

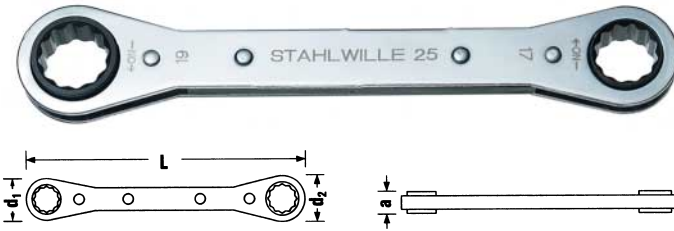
Code	No	Content	g
96 41 10 01	240/5	10 mm - 3/8"; 11 mm - 7/16"; 14 mm - 9/16"; 17 mm - 21/32"; 19 mm - 3/4"	1022
96 41 10 02	240/6	8 mm - 5/16"; 10 mm - 3/8"; 13 mm - 1/2"; 14 mm - 9/16"; 17 mm - 21/32"; 19 mm - 3/4"	1094



25 Ratchet ring spanners

AS-drive

with bi-hexagon, straight, Fed. Spec. GGG-W-001405 (American sizes), chrome plated.



Code	mm	L mm	d ₁ mm	d ₂ mm	a mm	g	
41130708	7 x 8	109	15	17	9	55	1
41130910	9 x 10	139	20	23	9	80	1
41131011	10 x 11	170	26	30	12	144	1
41131213	12 x 13	170	26	30	12	135	1
41131415	14 x 15	170	26	30	12	126	1
41131618	16 x 18	205	33	36	12	196	1
41131719	17 x 19	205	33	36	12	188	1
41131921	19 x 21	230	36	40	13	233	1

25aN Ratchet ring spanners

as No 25, but made of solid steel.



Code	"	L mm	d ₁ mm	d ₂ mm	a mm	g	
41561620	1/4 x 5/16	109	15	17	9	65	1
41562022	5/16 x 11/32	109	15	17	9	60	1
41562428	3/8 x 7/16	139	20	23	9	90	1
41563234	1/2 x 9/16	174	26	30	12	164	1
41563638	5/8 x 11/16	205	33	36	12	257	1
41564044	3/4 x 7/8	235	36	40	13	296	1
41564246	13/16 x 15/16	235	36	40	12	281	1



Sets: Ratchet ring spanners

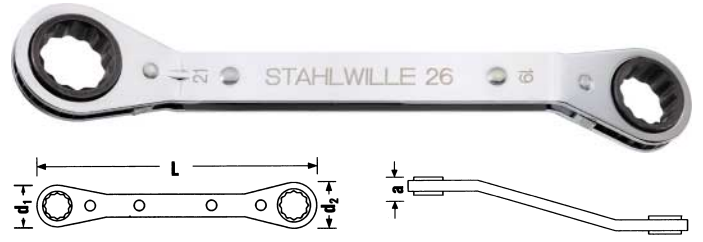
Code	No	Content mm/"	g
96411302	25/4	9 x 10; 12 x 13; 14 x 15; 17 x 19	556
96411301	25/7Pc	7 x 8; 9 x 10; 10 x 11; 12 x 13; 14 x 15; 16 x 18; 17 x 19	1049
96415602	25a/4N	3/8 x 7/16; 1/2 x 9/16; 5/8 x 11/16; 3/4 x 7/8;	1000
96415601	25a/7PcN	1/4 x 5/16; 5/16 x 11/32; 3/8 x 7/16; 1/2 x 9/16; 5/8 x 11/16; 3/4 x 7/8; 13/16 x 15/16	1271

Standard packing: clear view wallet.
Pc: in green plastic-wallet.

26 Ratchet ring spanners

AS-drive

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



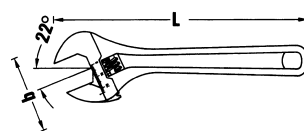
Code	mm	L mm	d ₁ mm	d ₂ mm	a mm	g	
41140708	7 x 8	109	15	17	9	55	1
41140910	9 x 10	139	20	23	9	80	1
41141011	10 x 11	170	26	30	12	144	1
41141213	12 x 13	170	26	30	12	135	1
41141415	14 x 15	170	26	30	12	126	1
41141618	16 x 18	205	33	36	12	196	1
41141719	17 x 19	205	33	36	12	188	1
41141921	19 x 21	230	36	40	13	233	1

26a Ratchet ring spanners

Code	"	L mm	d ₁ mm	d ₂ mm	a mm	g	
41551620	1/4 x 5/16	109	15	17	9	55	1
41552428	3/8 x 7/16	139	20	23	9	80	1
41553234	1/2 x 9/16	170	26	30	12	126	1

4025 Single-end spanners, adjustable

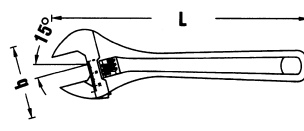
right-handed, DIN 3117/ISO 6787, B shape, jaw offset 22°, Chrome Vanadium, chrome plated.



Code	size	max. mm	L mm	b mm	a mm	g	
40250004	4	13	114	33	9.5	53	5
40250006	6	20	159	48	12	123	5
40250008	8	24	206	60	13.5	241	5
40250010	10	29	257	71	16	399	5
40250012	12	34	309	83	19	708	5
40250015	15	43	384	103	25	1287	1
40250018	18	53	460	120	30	2105	1

4026 Single-end spanners, adjustable

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

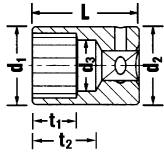


Code	size	max. mm	L mm	b mm	a mm	g	
40260004	4	13	114	33	9.5	50	5
40260006	6	20	159	48	12	138	5
40260008	8	24	206	60	13.5	247	5
40260010	10	29	257	71	16	397	5
40260012	12	34	309	83	19	699	5
40260015	15	43	384	103	25	1324	1
40260018	18	53	460	120	30	2076	1

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	Ø mm	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	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	

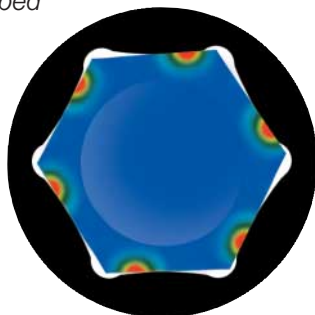
40aD Sockets

Code	Ø "	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	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	

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



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

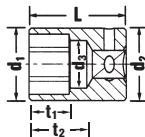


Code	g
96015310	206

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	Ø mm	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	g	⊖	⊞
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	9	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	Ø "	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	g	⊖	⊞
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	

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	Ø	d ₁	d ₂	d ₃	L	t ₁	t ₂	ΔΔ	g	
	mm	mm	mm	mm	mm	mm	mm			
01 24 00 05	5	7.9	10.7	4	50	4.5	42	18	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	Ø	d ₁	d ₂	d ₃	L	t ₁	t ₂	ΔΔ	g	
	"	mm	mm	mm	mm	mm	mm			
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 inserts

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	ΔΔ
	g
9601 6401	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	ΔΔ
	g
9601 64 10	350

40aDV Sockets



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

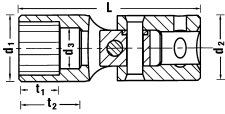


Code	Ø	d ₁	d ₂	d ₃	L	t ₁	t ₂	ΔΔ	g	
	"	mm	mm	mm	mm	mm	mm			
01 65 00 14	7/32	8.6	10.7	5	31.8	6	23.8	12	10	
01 65 00 16	1/4	9.4	10.7	5.2	31.8	6	23.8	13	10	
01 65 00 18	9/32	10.7	10.7	6.6	31.8	6.5	22	13	10	
01 65 00 20	5/16	11.6	11.6	7	31.8	8	21.9	15	10	

402 UNIFLEX sockets

AS-drive HPQ

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



Code	mm	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	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	38	5

402a UNIFLEX sockets

Code	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	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

AS-drive HPQ

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

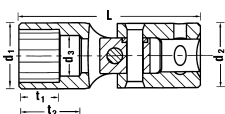


Code	g
96015401	101

402aK UNIFLEX sockets

AS-drive HPQ

short version, HPQ high performance steel, chrome plated.

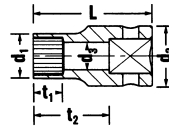


Code	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	g	
01541024	3/8	13.6	12.7	6.7	34	9.1	12.0	18	5
01541034	9/16	19	12.7	13.1	37.5	10.3	11.8	25	5

40aSP Sockets spline-drive

HPQ

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

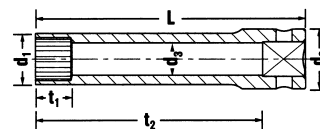


Code	Spline size	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	g	
01011007	7	7/32	8.6	10.7	5	22.2	6	14.2	7	1
01011008	8	1/4	9.5	10.7	5.6	22.2	7	14.2	10	1
01011009	9	9/32	11.2	11.2	6.6	22.2	8	12.4	10	1
01011010	10	5/16	11.6	11.6	7.1	22.2	8	12.2	12	1
01011012	12	3/8	13.8	13.8	8.6	23	8.7	12.6	18	1
01011014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

40aLSP Sockets spline-drive

HPQ

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

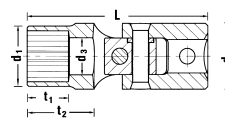


Code	Spline size	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	g	
01021007	7	7/32	8.6	10.7	5	50.8	6	42.8	18	1
01021008	8	1/4	9.5	10.7	5.6	50.8	8	42.8	24	1
01021010	10	5/16	11.6	11.6	7.1	50.8	8	40.8	27	1

402aSP Uniflex sockets spline-drive

HPQ

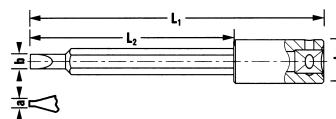
MS-33787, MIL-W-8982, HPQ high performance steel, chrome plated.



Code	Spline size	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ 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

41 Screwdriver sockets

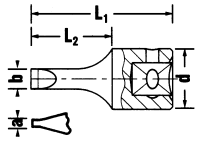
for slotted screws, blades to DIN 5264, Chrome Alloy Steel, chrome plated.



Code	mm	L ₁ mm	L ₂ mm	d mm	a mm	b mm	g	
01040005	0.5x3	82	57	11.6	0.5	3	20	5
01040006	0.6x3.5	82	57	11.6	0.6	3.5	31	5
01040008	0.8x4	82	57	11.6	0.8	4	32	5
01040010	1x5.5	82	57	11.6	1	5.5	32	5
01040012	1.2x8	82	57	14	1.2	8	45	5

41K Screwdriver sockets

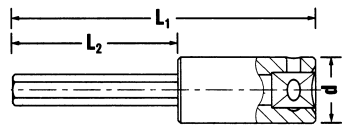
for slotted screws, blades to DIN 5264, Chrome Alloy Steel, chrome plated.



Code	mm	L ₁ mm	L ₂ mm	d mm	a mm	b mm	Δg	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	

44 IN HEX sockets

for socket head screws, DIN 7422, Chrome Alloy Steel, chrome plated.



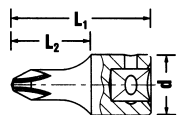
Code	mm	L ₁ mm	L ₂ mm	d mm	Δg	g	
01050025	2.5	55	30	10.7	14	5	
01050003	3	55	30	10.7	14	5	
01050004	4	55	30	10.7	16	5	
01050005	5	55	30	10.7	20	5	
01050006	6	55	30	11.6	26	5	

44a IN HEX sockets

Code	"	L ₁ mm	L ₂ mm	d mm	Δg	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	

44P Screwdriver sockets

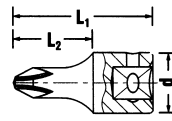
for recessed head screws Phillips-Recess®, tips to DIN 5260, Chrome Alloy Steel, chrome plated.



Code	PH size	L ₁ mm	L ₂ mm	d mm	Δg	g	
01290001	1	28	16	11.6	10	5	
01290002	2	28	16	11.6	11	5	
01290003	3	28	16	11.6	12	5	
01290004	4	28	16	11.6	14	5	

44PZ Screwdriver sockets

for POZIDRIV/SUPADRIV® screws, Chrome Alloy Steel, chrome plated.



Code	PZ size	L ₁ mm	L ₂ mm	d mm	Δg	g	
01300001	1	28	16	11.6	10	5	
01300002	2	28	16	11.6	11	5	

40CL Clip strips

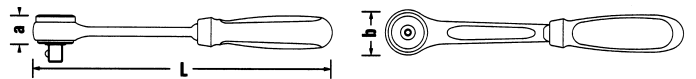
for socket retention, with 9 or 10 retaining clips. Supplied without sockets.



Code	size	L mm	Δg	g	
80400001	1	200	36	5	
80400002	2	300	52	5	

Drive tools and accessories

1/4" □, finish: Chrome Alloy Steel, chrome plated.



411 Ratchet, fine tooth

reversible, 60 teeth, for use in confined spaces, re-engages after movement of 6°, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	Δg	g	
11230011	118	24	19.5	87	1	

415 Ratchet

reversible, 22 teeth, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	Δg	g	
11110010	117	22	12.5	76	5	

415QR QuickRelease ratchet



reversible, 22 teeth, with QuickRelease safety locks and 2-component handles, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	☐
11110020	117	22	12.5	79	1

415QR/2 QuickRelease set



Content:
Ratchet 415 QR
Extension 405/2QR, 54 mm
Extension 405/6QR, 150 mm



Code	△△ g	☐
96111102	272	1

415SK Ratchet

reversible, slim handle, 22 teeth, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	☐
11120010	117	22	12.5	75	5

415SG-QR QuickRelease ratchet



reversible, 22 teeth, with QuickRelease safety locks and steel handle, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	☐
11110030	117	22	12.5	90	1

415QRL QuickRelease ratchet



long, reversible, 22 teeth, with QuickRelease safety locks and 2-component handles.



Code	L mm	b mm	a mm	△△ g	☐
11110153	153	22	12.5	96	1



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 (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	L mm	b mm	a mm	△△ g	☐
11130011	117	22	12	85	5

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	△△ g	☐
11260001	170	25	19.5	232	1

400 Drive handle

DIN 3122/ISO 3315.



Code	L mm	△△ g	☐
11050010	150	70	5

400QR QuickRelease drive handle



DIN 3122/ISO 3315, with QuickRelease safety locks.



Code	L mm	△△ g	☐
11051010	150	75	1

400 Drall Drive handle

with 1/4" square drive in end of handle, DIN 3122/ISO 3315.



Code	L mm	△△ g	☐
11050011	150	110	5

401 Drive handle

flexible shaft (right hand rotation only), maximum torque 5 N m.



Code	L mm	△△ g	☐
11050002	230	120	5

403 Flexible handle

DIN 3122/ISO 3315.



Code	L mm	Δ g	
11060010	154.5	70	5

404 Sliding T-handle

DIN 3122/ISO 3315.



Code	L mm	Δ g	
11070000	116	38	5

404QR QuickRelease sliding T-handle



with QuickRelease safety locks.



Code	L mm	Δ g	
11071000	116	52	1

413 Speeder brace

with steel handle,
working radius 70 mm.



Code	L mm	Δ g	
11100001	440	352	1

405 Extensions

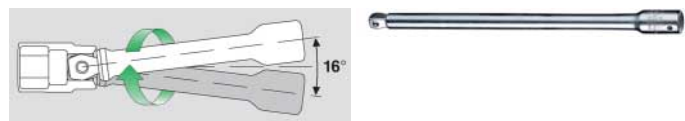
DIN 3123/ISO 3316.



Code	size	L mm	d mm	Δ g	
11010001	2	54	11.6	29	5
11010006	4	100	11.6	46	5
11010002	6	150	11.6	65	5
11010010	10	254	11.6	115	1
11010014	14	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	Δ g	
11010011	2	54	11.6	28	1
11010016	4	100	11.6	45	1
11010012	6	150	11.6	55	1
11010020	10	254	11.6	110	1
11010024	14	356	11.6	155	1

405QR QuickRelease extensions



DIN 3123/ISO 3316.



Code	size	L mm	d mm	Δ g	
11011001	2	54	11.6	28	1
11011002	6	150	11.6	65	1
11011005	14	356	11.6	150	1

406 Extension, flexible

(right hand rotation only)
maximum torque 5 N m.



Code	L mm	d mm	Δ g	
11040000	152	11.6	61	5

407 Universal joint

DIN 3123/ISO 3316.



Code	L mm	d mm	Δ g	
11020000	37	12.8	23	5

407QR QuickRelease universal joint



with QuickRelease safety locks.



Code	L mm	d mm	Δ g	
11021000	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	Δ g	
11030002	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	Δ g	
96121002	120	1

409M Adaptor

1/4" socket x 3/8" plug
(6.3 x 10 mm).



Code	L mm	ϕ mm	Δ g	
11030010	13	25	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	Δ g	
11030003	28	16.5	36	5

412 Bit holder



1/4" inside hexagon,
DIN 3126 form D 6.3/
ISO 1173 form D 6.3.
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).
HPQ high performance steel.



Code	L mm	d mm	Δ g	
11180010	25	11.6	15	5

412-1 Bit holder



1/4" inside hexagon,
DIN 3126 form D 6.3/
ISO 1173 form D 6.3.
Outer \bullet 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 (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).
HPQ high performance steel.



Code	outside \bullet	L mm	d mm	Δ g	
11180020	10 mm	20	11.6	11	5

417/1 Locking adaptor

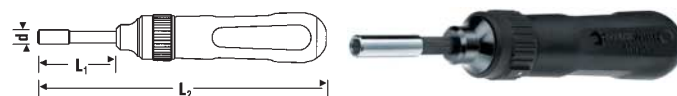
with hexagon key wrench
No 10760aCv 3/32".



Code	L mm	d mm	Δ g	
96112701	42	13	23	1

4008 Ratcheting bit holder

Positions selectable are clockwise/anticlockwise/fixed with fixed blade.
Inner hex. with magnet, for 1/4" screwdriver bits with outside hexagon 1/4"
DIN 3126/ISO 1173 Form C 6.3.
The square drive extension No 3115/1 can be used to adapt 1/4" socket
inserts (outer hex. to 1/4" outer square).
The ratcheting bit holder is fitted with a quick-twist knurled socket to allow
the user to tighten or untighten loosely by hand.
Socket mountings are toothed, heavy-duty and angled at 30°.
Ergonomically shaped handle with 1/4" inner square drive,
for use with cross-handle, extension bar etc.



Code	inside \circ	"	L ₁ mm	L ₂ mm	d mm	Δ g	
18120000	D 6.3	1/4	56	206.5	10	185	8

inside \circ DIN 3126/ISO 1173

4008/18 Ratcheting bit holder set

19 pieces
Content:
1 Ratcheting bit holder No 4008
3 Bits \oplus 1221; 1222; 1223
3 Bits \oplus PZ 1221; PZ 1222;
PZ 1223
6 Bits \otimes 1440 T10; 1441 T15;
1442 T20; 1443 T25;
1445 T30; 1446 T40
3 Bits \ominus 1301; 1302; 1303
3 Bits \ominus 1163 0.6 x 4.5;
1165 0.8 x 5.5;
1166/1 1.2 x 6.5 mm



Code	Δ g	
96181200	785	1

4008/27/1 Ratcheting bit holder set

29 pieces

Content:

- 1 Ratcheting bit holder No 4008
- 3 Bits ⊕ 1221; 1222; 1223
- 3 Bits ⊕ PZ 1221; PZ 1222; PZ 1223
- 6 Bits ⊕ 1440 T10; 1441 T15; 1442 T20; 1443 T25; 1145 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 1202	1025	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	□
9601 5303	425	1

415SGH Ratchet

reversible, 22 teeth, patented, 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 0002	117	22	12.5	90	5

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 2002	2	2	50	5	5
43 06 4002	4	2	100	8	5

10759a Offset screwdrivers

Code	size	"	L mm	g	□
43 56 0004	2	1/16	50	5	5
43 56 4004	4	1/16	100	8	5
43 56 0005	2	5/64	50	5	5
43 56 4005	4	5/64	100	8	5
43 56 0006	2	3/32	50	5	5
43 56 4006	4	3/32	100	8	5

40D/23/7 Socket set 1/4" □

In sturdy sheet steel case, 30 pieces

Content:

- 12 sockets with bi-hexagon No 40D: 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 ⊕ No 1221: size 1; No 1222: size 2; No 1223: size 3
- 4 Bits ⊖ 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	g
9601 0305	1380

40D/23/6 Socket set 1/4" □

In sturdy sheet steel 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 ⊖ 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 ⊕ 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	g
9601 0306	1120



40a/9/4 Socket set 1/4"

In sturdy sheet steel 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	96014107	Δ	g
		920	

40aD/10/8 Socket set 1/4"

In sturdy sheet steel case,
18 pieces
Content:
10 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; 9/16"
1 ratchet No 415SG-QR
3 extensions No 405/2 (54 mm),
No 405/4 (100 mm), No 405/6
(150 mm)
1 universal joint No 407
1 drive handle No 400
1 bit-holder No 412
1 locking adaptor No 417/1



Code	96015306	Δ	g
		1064	

40aD/9/4 Socket set 1/4"

In sturdy sheet steel 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	96015302	Δ	g
		830	

40aD/25/8 Socket set 1/4"

In sturdy sheet steel case,
33 pieces
Content:
10 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; 9/16"
10 sockets with bi-hexagon,
long, No 40aDL:
sizes 3/16; 7/32; 1/4; 9/32; 5/16;
11/32; 3/8; 7/16; 1/2; 9/16"
5 UNIFLEX sockets with
bi-hexagon No 402a:
sizes 1/4; 5/16; 3/8; 7/16; 1/2"
1 ratchet No 415SG-QR
3 extensions No 405/2 (54 mm), No 405/4 (100 mm), No 405/6
(150 mm)
1 universal joint No 407
1 drive handle No 400
1 bit-holder No 412
1 locking adaptor No 417/1



Code	96015305	Δ	g
		2322	

40ma/25/8 Socket set 1/4"

In sturdy sheet steel 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	96010162	Δ	g
		2070	

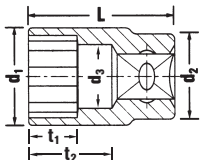


3

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.



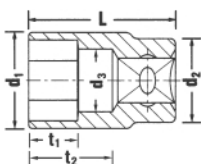
Code	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	Δ	g	
02010007	7	10.5	16.5	6	24	6	12.5	19	10	
02010008	8	11.7	16.5	7	25	7	13.5	19	10	
02010009	9	13	16.5	8	25	7	13.5	19	10	
02010010	10	14.3	16.5	9	27	8.5	15.5	20	10	
02010011	11	15.6	16.5	10	27	8.5	13.7	21	10	
02010012	12	16.9	17.5	11	28	9.5	14.4	24	10	
02010013	13	18	17.5	12	30	11.5	16.1	25	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	30	10	
02010016	16	21.7	19	15	31	13.5	18.9	33	10	
02010017	17	23	19	16	31	12.5	18.6	37	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	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	Δ	g	
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	

456EF Socket

for removing the Brake Swivel Sleeve Nut,
max. load 70 Nm, Chrome Alloy Steel, chrome plated.

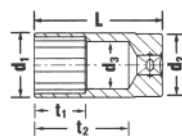


Code	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	Δ	g	
02110050	50	59.5	32	33	54	21	35.7	420	1	

460a Sockets



SAE AS 954-E, S.B.A.C. AS 40610/40611, ASME B 107.1,
HPQ high performance steel, chrome plated.

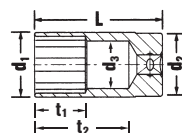


Code	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	Δ	g	
02620016	1/4	9.9	16.5	5.2	32	7	20.5	21	5	
02620020	5/16	11.5	16.5	7	32	8.5	20.5	22	5	
02620024	3/8	13.7	16.5	8.5	38	9	26.5	29	5	
02620028	7/16	15.7	16.5	10	38	11	24.5	33	5	
02620032	1/2	17.5	17.8	11.5	44	12	30	44	5	

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 ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	Δ	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	20.8-19/16 1)	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	

1) with rubber insert for spark plugs

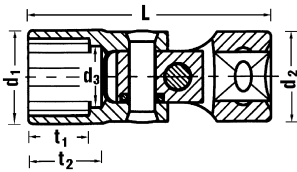
46a Sockets

Code	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	Δ	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	

47 UNIFLEX sockets



SAE AS 954-E (American sizes),
HPQ high performance steel, chrome plated.



Code	Spline size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	ΔΔ g	Box
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

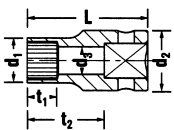
47a UNIFLEX sockets

Code	Spline size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	ΔΔ g	Box
02440020	5/16	11.7	17.5	7	45.5	7	12.5	50	1
02440024	3/8	13.7	17.5	8.5	45.5	7	12	50	1
02440028	7/16	15.8	17.5	10	47.5	11	14	54	1
02440032	1/2	18.3	17.5	11.5	47.5	11.5	14	57	1
02440034	9/16	19.7	17.5	13.1	48.5	13	14.5	55	1
02440036	5/8	21.6	17.5	15	51.5	14	17	59	1
02440038	11/16	23.5	17.5	16.3	53.5	16	18.5	58	1
02440040	3/4	25.5	17.5	18	57	16	21	67	1

45aSP Sockets spline-drive



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

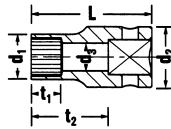


Code	Spline size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	ΔΔ g	Box
02011012	12	13.7	16.5	8.6	26.5	9	15	24	1
02011014	14	16	17.3	10.4	28	11	14.5	37	1
02011016	16	18	18.3	12.2	28	11.5	14	28	1

45aPSP Socket spline-drive



MS-33787, MIL-W-8982, for disassembling jet engines, series CFM 56,
HPQ high performance steel, gun finish.

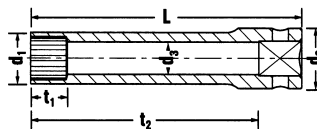


Code	Spline size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	ΔΔ g	Box
22410028	14	18.8	18.8	10.4	28	11	14.5	36	10

46aSP Sockets spline-drive



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

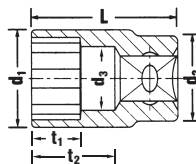


Code	Spline size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	ΔΔ g	Box
02021012	12	13.7	16.5	8.6	54	9	42.5	52	1
02021014	14	16	17.3	10.4	54	11	42.5	63	1

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, gun finish.

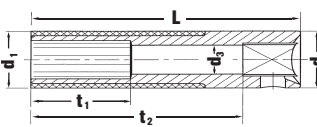


Code	Spline size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	ΔΔ g	Box
02430020	5/16	11.9	16.5	8.1	25	7	13.5	19	10

46aP Socket



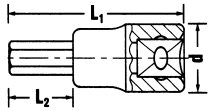
Plastic coating protects sensitive alloy wheels,
HPQ high performance steel, chrome plated.



Code	Spline size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	ΔΔ g	Box
22420024	3/8	16.5	16.5	8.4	54	20	42.5	44	1

49 IN HEX sockets

for socket head screws, DIN 7422,
Chrome Alloy Steel, chrome plated.



Code	mm	L ₁ mm	L ₂ mm	d mm	g	
02050003	3	52	20	17.8	38	5
02050004	4	52	20	17.8	40	5
02050005	5	52	20	17.8	44	5
02050006	6	52	20	17.8	46	5
02050007	7	52	20	17.8	51	5
02050008	8	52	20	17.8	55	5
02050010	10	52	20	17.8	62	5

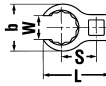
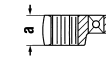
49a IN HEX sockets

Code	"	L ₁ mm	L ₂ mm	d mm	g	
02450008	1/8	52	20	17.8	40	5
02450009	9/64	52	20	17.8	40	5
02450010	5/32	52	20	17.8	40	5
02450012	3/16	52	20	17.8	44	5
02450014	7/32	52	20	17.8	46	5
02450016	1/4	52	20	17.8	48	5
02450020	5/16	52	20	17.8	55	5
02450024	3/8	52	20	17.8	61	5

440 CROW-RING spanners

AS-drive

Caution! Modified settings on torque wrench (refer to note on page 120).
Chrome Alloy Steel, chrome plated.



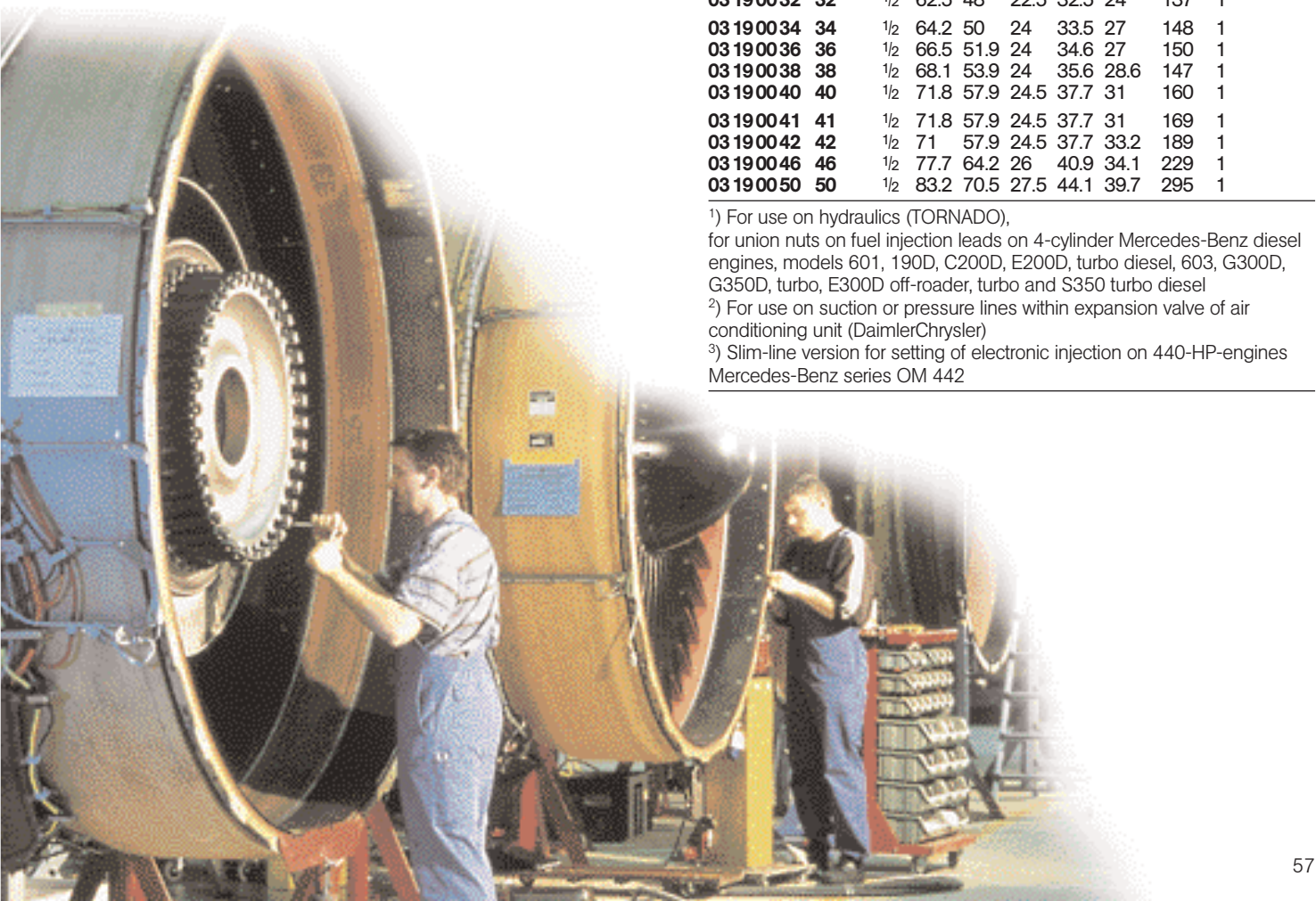
Code	mm	"	L mm	b mm	a mm	S mm	W mm	g	
01190008	8	1/4	23.8	12.7	8	12.3	6.3	11	1
01190009	9	1/4	28.5	18.2	13.5	14	6.7	21	1
01190010	10 ¹⁾	1/4	28.4	18.2	13.5	14	7.1	16	1
01190011	11	1/4	28	18.2	13.5	14	8.6	17	1
01190012	12 ¹⁾	1/4	30.8	20.6	14	15.7	9	20	1
01190013	13	1/4	32	22.2	14	16.4	10	20	1
01190014	14 ¹⁾	1/4	31.7	22.2	14	16.4	11.1	20	1
02190015	15	3/8	36.5	24.6	17.5	19.1	11.9	34	1
02190016	16	3/8	36.1	24.6	17.5	19.1	13	27	1
02190017	17 ²⁾	3/8	39.2	27.3	17.5	20.5	14	40	1
02190018	18	3/8	40.8	29	18.5	21.3	14.8	45	1
02190019	19 ²⁾	3/8	40.5	29	18.5	21.3	15.8	40	1
02190020	20	3/8	42.9	31.3	18.5	22.5	15.8	54	1
02190021	21	3/8	42.8	31.3	18.5	22.5	16.2	45	1
02190022	22 ²⁾	3/8	45.3	33.5	19	23.6	17	57	1
02190023	23	3/8	47.5	35.7	19.5	24.6	17.5	71	1
02190024	24 ²⁾	3/8	47.3	35.7	19.5	24.6	18	57	1
02190025	25	3/8	49.3	37.7	20	25.7	19	80	1
02190026	26	3/8	49.3	37.7	20	25.7	19	63	1
02190027	27	3/8	52.8	40	21.4	28.2	20	100	1
02191027	27DC ³⁾	3/8	57.1	42.1	15	29.3	20	92	1
03190028	28	1/2	56.8	42.1	22.5	29.3	21	120	1
03190030	30	1/2	63	48	22.5	32.5	22	155	1
03190032	32	1/2	62.5	48	22.5	32.5	24	137	1
03190034	34	1/2	64.2	50	24	33.5	27	148	1
03190036	36	1/2	66.5	51.9	24	34.6	27	150	1
03190038	38	1/2	68.1	53.9	24	35.6	28.6	147	1
03190040	40	1/2	71.8	57.9	24.5	37.7	31	160	1
03190041	41	1/2	71.8	57.9	24.5	37.7	31	169	1
03190042	42	1/2	71	57.9	24.5	37.7	33.2	189	1
03190046	46	1/2	77.7	64.2	26	40.9	34.1	229	1
03190050	50	1/2	83.2	70.5	27.5	44.1	39.7	295	1

¹⁾ For use on hydraulics (TORNADO),

for union nuts on fuel injection leads on 4-cylinder Mercedes-Benz diesel engines, models 601, 190D, C200D, E200D, turbo diesel, 603, G300D, G350D, turbo, E300D off-roader, turbo and S350 turbo diesel

²⁾ For use on suction or pressure lines within expansion valve of air conditioning unit (DaimlerChrysler)

³⁾ Slim-line version for setting of electronic injection on 440-HP-engines Mercedes-Benz series OM 442



440a CROW-RING spanners

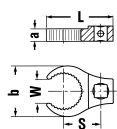
Code	"	mm	L mm	b mm	a mm	S mm	W mm	g	Box
01490024	3/8 1)	1/4	28.4	18.2	13.5	14	7.1	14	1
01490028	7/16	1/4	28	18.2	13.5	14	8.6	14	1
01490032	1/2	1/4	30.5	20.6	14	15.7	10	19	1
01490034	9/16	1/4	31.7	22.2	14	16.4	11.1	23	1
02490036	5/8	3/8	36.5	24.6	17.5	19.1	11.9	33	1
02490038	11/16	3/8	39.2	27.3	17.5	20.5	14	36	1
02490040	3/4	3/8	40.9	29	18.5	21.3	14.2	44	1
02490042	13/16	3/8	42.9	31.3	18.5	22.5	15.8	51	1
02490044	7/8	3/8	45.2	33.5	19	23.6	17.5	62	1
02490046	15/16	3/8	47.2	35.7	19.5	24.6	18.3	63	1
02490048	1	3/8	49.3	37.7	20	25.7	19	71	1
02490050	1 1/16	3/8	52.8	40	21.4	28.2	20	84	1
03490052	1 1/8	1/2	56.8	42.1	22.5	29.3	21	110	1
03490056	1 1/4	1/2	62.5	48	22.5	32.5	23.8	137	1
03490058	1 5/16	1/2	62.3	48	22.5	32.5	24.6	130	1
03490060	1 3/8	1/2	64.2	50	24	33.5	27	138	1
03490062	1 7/16	1/2	66.5	51.9	24	34.6	27	143	1
03490064	1 1/2	1/2	68.1	53.9	24	35.6	28.6	152	1
03490065	1 9/16	1/2	70.1	55.9	24	36.7	29.4	172	1
03490066	1 5/8	1/2	71.8	57.9	24.5	37.7	31	169	1
03490068	1 3/4	1/2	75.6	62	25.5	39.8	33.2	199	1
03490069	1 13/16	1/2	77.7	64.2	26	40.9	34.1	229	1
03490072	2	1/2	83.2	70.5	27.5	44.1	39.7	277	1
03490076	2 1/4	1/2	91.2	78.7	29.5	48.2	42.8	337	1
03490077	2 5/16	1/2	93.3	80.9	30	49.2	43.6	309	1
03490078	2 3/8	1/2	95.2	83	30.5	50.2	46	385	1

1) For Volvo aero-engines, types "JAS"

440 MJ CROW-RING spanners



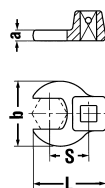
Caution! Modified settings on torque wrench (refer to note on page 120), EN 4108, for pipe unions with straight cylindrical involute toothing, HPQ high performance steel, chrome plated.



Code	Threaded nut	mm	"	L mm	b mm	a mm	S mm	W mm	g	Box
01210010	MJ10	DN04	1/4	31.9	22	8	17	6.5	25	1
01210014	MJ14	DN06	1/4	36.5	27	8	19.5	8.5	30	1
02210016	MJ16	DN08	3/8	43.8	31	8	24	10.5	50	1
02210018	MJ18	DN10	3/8	45.2	33	8	25	13	45	1
02210020	MJ20	DN12	3/8	46.2	35	8	26	15	50	1
02210022	MJ22	DN14	3/8	48.4	37	9	27	17.5	55	1
02210024	MJ24	DN16	3/8	49.5	39	9	28	19.7	60	1
02210027	MJ27	DN18	3/8	54.4	44	10	31	21.5	75	1
02210030	MJ30	DN20	3/8	60.8	50	10	36	23.7	95	1

540 CROW-FOOT spanners

Caution! Modified settings on torque wrench (refer to note on page 120), Chrome Alloy Steel, chrome plated.



Code	mm	"	L mm	b mm	a mm	S mm	g	Box
01200008	8	1/4	25.5	19.8	6.3	14.6	21	1
01200009	9	1/4	25.5	19.8	6.3	14.6	21	1
01200010	10	1/4	25.5	19.8	6.3	14.6	20	1
02200011	11	3/8	32	22.2	6.3	17.4	36	1
02200012	12	3/8	34.3	25.4	6.3	18.2	37	1
02200013	13	3/8	34.3	25.4	6.3	17.8	36	1
02200014	14	3/8	37.7	30	6.3	20.8	46	1
02200015	15	3/8	37.7	30	6.3	20.4	45	1
02200016	16	3/8	37.7	30	6.3	19.9	45	1
02200017	17	3/8	42.5	38	6.3	23.8	62	1
02200018	18	3/8	42.5	38	6.3	22.9	61	1
02200019	19	3/8	42.5	38	6.3	22.4	64	1
02200020	20	3/8	42.4	38	6.3	25	55	1
02200021	21	3/8	44.5	41	6.3	23.6	59	1
02200022	22	3/8	44.5	41	6.3	24.2	64	1
02200023	23	3/8	44.5	41	6.3	25.8	63	1
02200024	24	3/8	44.4	41	6.3	26.3	60	1
02200025	25	3/8	47	45	8	26.4	75	1
02200026	26	3/8	47	45	8	27.6	80	1
02200027	27	3/8	47	45	8	27.6	76	1
02200028	28	3/8	50	50	8	29.2	78	1
02200030	30	3/8	50	50	8	29.3	84	1
02200032	32	3/8	53	57	8	30.5	95	1
02200034	34	3/8	54.5	60	8	31.6	107	1
02200036	36	3/8	56.5	62	8	32.8	100	1
02200040	40	3/8	63	70	8	37.6	130	1
02200041	41	3/8	63	70	8	37.2	130	1
02200042	42	3/8	63	70	8	37.7	125	1
02200046	46	3/8	72	82	8	43.1	191	1
02200050	50	3/8	75	88	8	45.4	217	1



540a CROW-FOOT spanners

Code	"	"	L mm	b mm	a mm	S mm	△△ 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 120), American sizes: SAE AS 954-E, HPQ high performance steel, gunmetal finish.



Code	mm	d ₁ mm	d ₂ mm	h ₁ mm	h ₂ mm	S mm	△△ g	☐
02 18 10 07	7	11.5	19	6	11	50.8	30	1
02 18 10 08	8	12.4	19	6	11	50.8	30	1
02 18 10 09	9	14	19	8	11	50.8	40	1
02 18 10 10	10	15.6	19	8	11	50.8	40	1
02 18 10 13	13	19.3	19	9.2	11	50.8	55	1

447a Adaptor

Code	"	d ₁ mm	d ₂ mm	h ₁ mm	h ₂ mm	S mm	△△ g	☐
02 47 00 16	1/4	10.4	19	6	11	50.8	27	1
02 47 00 20	5/16	12.4	19	6	11	50.8	29	1
02 47 00 24	3/8	14.9	19	8	11	50.8	41	1
02 47 00 28	7/16	17	19	8	11	50.8	40	1
02 47 00 32	1/2	19	19	9.2	11	50.8	56	1
02 47 00 34	9/16	21	19	9.2	11	50.8	61	1
02 47 00 36	5/8	23	19	12	11	50.8	73	1

447aSP Spline-Drive adaptor



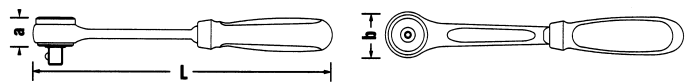
Caution! Modified settings on torque wrench (refer to note on page 120), MS-33787, MIL-W-8982, HPQ high performance steel, gunmetal finish.



Code	Spline size	"	d ₁ mm	d ₂ mm	h ₁ mm	h ₂ mm	S mm	△△ g	☐
02 48 00 14	7	7/32	9.4	19	6	11	50.8	27	1
02 48 00 16	8	1/4	10.4	19	6	11	50.8	27	1
02 48 00 18	9	9/32	11.5	19	6	11	50.8	29	1
02 48 00 20	10	5/16	12.4	19	6	11	50.8	29	1
02 48 00 24	12	3/8	14.9	19	8	11	50.8	40	1
02 48 00 28	14	7/16	17	19	9.2	11	50.8	50	1
02 48 00 32	16	1/2	19	19	9.2	11	50.8	59	1
02 48 00 34	18	9/16	21	19	9.2	11	50.8	55	1
02 48 00 36	20	5/8	23	19	12	11	50.8	74	1

Drive tools and accessories

3/8" □, finish: Chrome Alloy Steel, chrome plated.



422 Ratchet

fine tooth, reversible, 60 teeth, for use in confined spaces, re-engages after movement of 6°, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	☐
12 23 00 11	194	32	24	260	1

435 Ratchet

reversible, 30 teeth, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	☐
12 11 00 10	193	29	17	233	5

435QR QuickRelease ratchet



reversible, 30 teeth, with QuickRelease safety locks and 2-component handles, DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	△△ g	☐
12 11 00 20	193	29	17	244	1

435QR/3 QuickRelease set



Content:
Ratchet 435QR
Extension 427/3QR, 76 mm
Extension 427/6QR, 160 mm
Extension 427/10QR, 240 mm



Code	g	g	g
96 12 11 03	722	1	

435SG-QR QuickRelease ratchet



reversible, 30 teeth,
with QuickRelease safety locks and steel handle,
DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	g	g
12 11 00 30	193	29	17	275	1

435B Bit ratchet

reversible,
with inside hexagon 5/16",
DIN 3126/ISO 1173 D 8 for
Bits Screwdriver sockets 5/16",
30 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	L mm	b mm	a mm	g	g
12 13 00 11	193	29	17	220	1

445 Ratchet adaptor

reversible, 20 teeth.



Code	L mm	∅ mm	g	g
12 14 00 00	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	g	g
12 26 00 01	300	34	24	500	1

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
12 10 00 02	408	619	1

424 Flexible handle

DIN 3122/ISO 3315.



Code	L mm	g	g
12 06 00 10	253.5	222	5

425 Sliding T-handle

DIN 3122/ISO 3315.



Code	L mm	g	g
12 07 00 00	165	133	5

425QR QuickRelease sliding T-handle

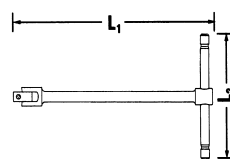


with QuickRelease safety locks.



Code	L mm	g	g
12 07 10 00	165	148	1

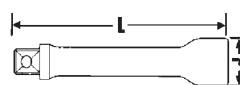
444 T-handle extension



Code	L ₁ mm	L ₂ mm	g	g
12 02 00 01	455	190	437	5

427 Extensions

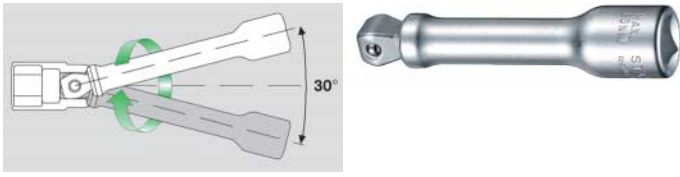
DIN 3123/ISO 3316.



Code	size	L mm	d mm	g	g
12 01 00 05	1.5	38	17	36	5
12 01 00 01	3	76	17	67	5
12 01 00 06	5	125	17	104	5
12 01 00 02	6	160	17	127	5
12 01 00 03	10	240	17	188	5
12 01 00 04	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	Δ g	☐
12010007	3	76	17	67	5
12010008	5	125	17	104	5
12010009	6	160	17	127	5

427QR QuickRelease extensions



DIN 3123/ISO 3316.



Code	size	L mm	d mm	Δ 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	Δ g	☐
96 122701	52	18	57	1

434 Extension, flexible

(right hand rotation only),
maximum torque 7 N m.



Code	L mm	d mm	Δ g	☐
12040000	194	17	109	5

1225 Special extension



Code	L mm	d mm	Δ g	☐
12250001	150	17	128	5

13220 Special extension

for removing Boroscope
plugs, with Boroscope plug locking,
external hexagon size 16 mm.



Code	L mm	Δ g	☐
12270020	355	362	1

428 Universal joint

DIN 3123/ISO 3316.

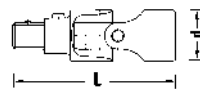


Code	L mm	d mm	Δ g	☐
12020000	46	18.8	55	5

428QR QuickRelease universal joint



DIN 3123/ISO 3316, with QuickRelease safety locks.



Code	L mm	d mm	Δ g	☐
12021000	60	19	66	1

431 Adaptor



3/8" socket x 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	Δ g	☐
12030001	28	17.2	26	5

432 Adaptor



3/8" socket x 1/2" plug (10 x 12.5),
DIN 3123/ISO 3316,
HPQ high performance steel



Code	L mm	d mm	Δ g	☐
12030003	31	17.2	36	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	g	
96 12 1002	120	1

432M Adaptor

3/8" socket x 1/2" plug
(10 x 12.5 mm).



Code	L mm	∅ mm	g	
12030010	16	32	22	1

442 Bit holder

○ 1/4" inside hexagon,
DIN 3126 form D 6.3/ISO 1173 form D 6.3.
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	L mm	d mm	g	
12 180026	32	16.5	30	5

443 Bit holder

○ 5/16" inside hexagon,
DIN 3126 form D 8/ISO 1173 form D 8.
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	L mm	d mm	g	
12 180030	32	16.5	39	5

45/14/5iQR Socket set 3/8"

In a sturdy 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
2 extensions
No 427QR/3 (76 mm),
No 427QR/10 (240 mm)
1 T-handle No 425QR
1 universal joint No 428QR



Code	g
96020180	1650

45ma/28/5 Socket set 3/8"

In sturdy sheet steel 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	g
96020122	2920

45a/8/4 Socket set 3/8"

In sturdy sheet steel case,
12 pieces

Content:
8 sockets with bi-hexagon No 45a:
sizes 1/4; 5/16; 3/8; 7/16; 1/2; 9/16; 5/8;
3/4"
1 ratchet No 435
2 extensions
No 427/3 (76 mm),
No 427/10 (240 mm)
1 universal joint No 428



Code	g
96024105	1500

45a/13/5 Socket set 3/8"

In sturdy sheet steel case,
18 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"
2 sockets with bi-hexagon, long,
with rubber insert
No 4600: size 16 mm - 5/8",
No 46: size 20.8 mm - 13/16"
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
96024104	1951

45a/12/9 Socket set 3/8"

- In sturdy sheet steel case,
21 pieces
Content:
12 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"
1 ratchet No 435SG-QR
3 extensions
No 427/3 (76 mm),
No 427/6 (160 mm),
No 427/10 (240 mm)
1 universal joint No 428
1 locking adaptor No 433/1
2 bit-holders No 442, No 244
1 speeder brace No 453



Code	△△ g
96024106	3511

45a/19/9 Socket set 3/8"

- In sturdy sheet steel case,
28 pieces
Content:
12 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"
7 UNIFLEX sockets with
bi-hexagon No 47a:
sizes 3/8; 7/16; 1/2; 9/16; 5/8; 11/16; 3/4"
1 ratchet No 435SG-QR
3 extensions
No 427/3 (76 mm), No 427/6 (160 mm), No 427/10 (240 mm)
1 universal joint No 428
1 locking adaptor No 433/1
2 bit-holders No 442, No 443
1 speeder brace No 453



Code	△△ g
96024107	3906

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



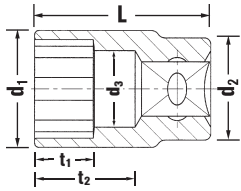
Code	△△ g
96024113	6540



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	Size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	Δg	g	Box
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	17	25.5	89	10	
03010021	21	28.7	26	20	42	18	25.2	104	10	
03010022	22	29.7	26	21	42	18	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	

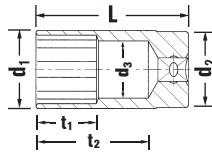
50a Sockets

Code	Size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	Δg	g	Box
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 9/16	41.8	28	32.1	47	22	26.7	210	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	

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	Size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	Δg	g	Box
03020010	10	14.5	22	9	83	19	67	90	10	
03020013	13	18.3	22	12	83	35	67	122	10	
03020014	14	19.9	22.7	13	83	35	65.2	129	10	
03020015	15	21.2	22.7	14	83	35	64.9	132	10	
03020016	16	22.4	23.7	15	83	35	64.6	145	10	
03020216	16-5/8 ¹⁾	22.4	23.7	15.4	83	19	64.5	137	10	
03020017	17	24	23.7	16	83	35	64.3	132	10	
03020018	18	24.7	23.7	17	83	35	64.1	170	10	
03020019	19	26.2	25	18	83	35	66.7	186	10	
03020208	20.8-13/16 ¹⁾	27.7	26	20	83	22	66.2	194	10	
03020021	21	28.7	26.5	20	83	35	66.2	231	10	
03020022	22	29.7	27.5	21	83	35	65.5	200	10	
03020024	24	32	30	21	83	35	66.1	280	5	
03020027	27 ²⁾	36.2	34	27	83	20	60	294	5	
03020030	30 ²⁾	39.7	37.5	30.2	83	35	65	341	5	
03020032	32	42.4	40	29	83	35	63.9	461	5	

¹⁾ with rubber insert for spark plugs

²⁾ for diesel injector (VW/Audi, DaimlerChrysler, Opel, Ford, Peugeot, Volvo, Toyota, Mazda, Nissan, Mitsubishi, Daihatsu)

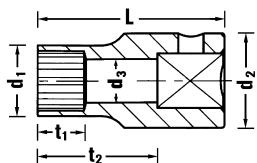
51a Sockets

Code	Size	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	Δg	g	Box
03420024	3/8	14.3	22	8.3	83	19	67	93	5	
03420028	7/16	16.3	22	9.9	83	19	67	102	5	
03420032	1/2	18.3	22	11.5	83	35	67	122	5	
03420034	9/16	20.3	22.7	13.1	83	35	65.2	131	5	
03420036	5/8	22.4	23.7	15	83	35	64.6	145	5	
03420038	11/16	24.2	23.7	16.5	83	35	64.2	158	5	
03420040	3/4	26.2	25	18	83	35	66.7	188	5	
03420042	13/16	27.7	26	19.5	83	35	66.3	170	5	
03420044	7/8	29.7	27.5	21	83	35	65.9	246	5	
03420046	15/16	32	30	22.6	83	35	65.7	281	5	
03420048	1	33.7	32	24.2	83	35	65	312	5	
03420050	1 1/16	36.2	34	25.8	83	35	64.5	359	5	
03420052	1 1/8	38.1	36	27.4	83	35	64	391	5	
03420054	1 3/16	39	37	28	83	35	63.9	377	5	
03420056	1 1/4	40	38	30.5	83	35	63.1	433	5	
03420058	1 5/16	41.8	40	32.1	83	35	62.7	479	5	
03420060	1 3/8	46	44	33.7	83	35	62.2	506	5	
03420062	1 7/16	49.4	47	34	83	35	62.1	635	5	
03420064	1 1/2	51	49	35	83	35	61.8	675	5	

50aPSP Sockets spline-drive



MS-33787, MIL-W-8982,
HPQ high performance steel, gunmetal finish.

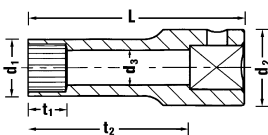


Code	Spline size	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	ΔΔ g	
03012028	14	7/16	18	23.7	10.4	38	11	22	65	5

50aPLSP Sockets spline-drive



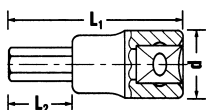
extra deep bolt clearance,
MS-33787, MIL-W-8982,
HPQ high performance steel, gunmetal finish.



Code	Spline size	"	d ₁ mm	d ₂ mm	d ₃ mm	L mm	t ₁ mm	t ₂ mm	ΔΔ g	
03013028	14	7/16	18	23.7	10.4	50	11	34	83	5

54 INEX sockets

for hexagon socket head screws, DIN 7422,
Chrome Alloy Steel, chrome plated.



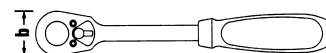
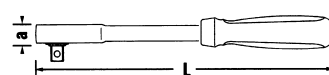
Code	mm	L ₁ mm	L ₂ mm	d mm	ΔΔ g	
03050004	4	60	22	22.7	68	5
03050005	5	60	22	22.7	68	5
03050006	6	60	22	22.7	71	5
03050007	7	60	22	22.7	75	5
03050008	8	60	22	22.7	79	5
03050010	10	60	22	22.7	97	5
03050012	12	60	20	23.7	122	5
03050014	14	60	20	23.7	135	5
03050017	17	60	20	27.5	186	5
03050019	19	60	20	31	242	5

54a INEX sockets

Code	"	L ₁ mm	L ₂ mm	d mm	ΔΔ g	
03450014	7/32	60	22	22.7	70	5
03450016	1/4	60	22	22.7	75	5
03450020	5/16	60	22	22.7	81	5
03450024	3/8	60	22	22.7	97	5
03450028	7/16	60	22	22.7	103	5
03450032	1/2	60	20	23.7	125	5
03450034	9/16	60	20	23.7	137	5
03450036	5/8	60	20	27.5	169	5
03450040	3/4	60	20	31	244	2

Drive tools and accessories

1/2" □, finish: Chrome Alloy Steel, chrome plated.



512 Ratchet

reversible, 36 teeth,
DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	ΔΔ g	
13110010	265.5	41	21	580	1

512QR QuickRelease ratchet



reversible, 36 teeth,
with QuickRelease safety locks and 2-component handles,
DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	ΔΔ g	
13110020	265.5	41	21	599	1

512QR/3 QuickRelease set



Content:
Ratchet 512QR
Extension 509/2QR, 52 mm
Extension 509/5QR, 130 mm
Extension 509/10QR, 255 mm



Code	g	
96131103	1317	1

512SG-QR QuickRelease ratchet



reversible, 36 teeth, with
QuickRelease safety locks and steel handle,
DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	ΔΔ g	
13110030	265.5	41	21	680	1

515 Ratchet, fine tooth

reversible, 60 teeth,
for use in confined spaces,
re-engages after movement of 6°,
DIN 3122/ISO 3315.



Code	L mm	b mm	a mm	ΔΔ g	
13230011	265	40	26.2	485	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	📦
13260001	415	43	26	793	1

522 Ratchet adaptor

reversible, 20 teeth.



Code	L mm	∅ mm	⚖ g	📦
13140000	67.5	40	316	1

532 Ratchet

long handle, reversible,
36 teeth.



Code	L mm	b mm	a mm	⚖ g	📦
13120010	380	41	21	812	1

501 Speeder brace

working radius 105 mm,
DIN 3122/ISO 3315.



Code	L mm	⚖ g	📦
13100010	456	615	5

504 Flexible handle

DIN 3122/ISO 3315.



Code	size	L mm	⚖ g	📦
13060011	10	269	515	5
13060012	15	397	700	5
13060013	18	469	779	5

5040 Spare parts set for No 504

for No 504.
Content:
1 Universal Joint
1 Screw
1 Spring Washer



Code	⚖ g	📦
96190800	75	1

506 Sliding T-handle

DIN 3122/ISO 3315.



Code	L mm	⚖ g	📦
13070000	300	436	5

506QR QuickRelease sliding T-handle

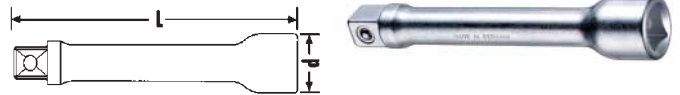


with QuickRelease safety locks.

Code	L mm	⚖ g	📦
13071000	300	470	1

509 Extensions

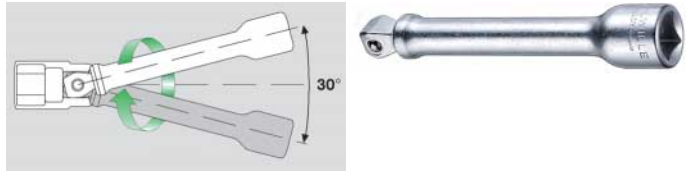
DIN 3123/ISO 3316.



Code	size	L mm	d mm	⚖ 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

509W Extensions with wobble-drive

swivel angle 15° each side,
maximum torque 200 N m.



Code	size	L mm	d mm	⚖ g	📦
13010005	2	52	23	80	5
13010006	3	75	23.2	120	5
13010007	5	130	23.2	191	5
13010008	10	255	23.2	341	5

509QR QuickRelease extensions



DIN 3123/ISO 3316.



Code	size	L mm	d mm	⚖ g	📦
13011001	2	52	23	90	1
13011004	3	75	23	123	1
13011002	5	130	23	187	1
13011003	10	255	23	341	1

3505 Special extension

for CROW-FOOT spanner No 3540



Code	L mm	d mm	Δ g	
13210001	120	23.2	186	1

510 Universal joint

DIN 3123/ISO 3316.

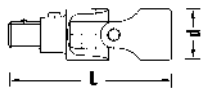


Code	L mm	d mm	Δ g	
13020000	71	25	146	5

510QR QuickRelease universal joint



DIN 3123/ISO 3316, with QuickRelease safety locks.



Code	L mm	d mm	Δ g	
13021000	80	25	157	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	Δ g	
13030002	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	Δ g	
13030005	44	25	118	5

7789-1 Adaptor



1/2" socket x 1" plug (12.5 x 25 mm), HPQ high performance steel.



Code	L mm	d mm	Δ g	
58522089	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	Δ g	
96121002	120	1

514M Adaptor

1/2" socket x 3/4" plug (12.5 x 20 mm).



Code	L mm	ϕ mm	Δ g	
13030010	22	38	50	1

543 Bit holder

5/16" inside hexagon, DIN 3126 form D 8/ISO 1173 form D 8. 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	L mm	d mm	Δ g	
13180010	38	22	65	5

50/17/6 Socket set 1/2"

In sturdy sheet steel case,
23 pieces

Content:

- 17 sockets with bi-hexagon
 - No 50: sizes 10; 11; 12; 13; 14;
15; 16; 17; 18; 19; 21; 22; 24;
27; 30; 32; 34 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	Δ7 g
96030147	5213

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	Δ7 g
96030140	8560



4891 3K DRALL set of screwdrivers

Set of six 3K DRALL screwdrivers.

Content:

- ⊖ 4820: 0.6 x 3.5 x 75 mm
- 0.8 x 4 x 100 mm
- 1 x 5.5 x 125 mm
- 1.2 x 6.5 x 150 mm

- ⊕ 4830: size 1; size 2



Code		
	g	
964891 10	530	1

4892 3K DRALL set of screwdrivers


Set of eight 3K DRALL screwdrivers.

Content:

- ⊖ 4820: 0.6 x 3.5 x 75 mm
- 0.8 x 4 x 100 mm
- 1 x 5.5 x 125 mm
- 1.2 x 6.5 x 150 mm
- 1.6 x 8 x 175 mm

- ⊕ 4830: size 1; size 2; size 3



Code		
	g	
964892 10	745	1

4899 3K DRALL set of TORX® screwdrivers


Set of nine 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	
964899 10	513	1

TCS 4820/4830



175 x 350 x 30 mm, 7 pieces

Code	
	g
968381 84	555









 No 4820	0.6 x 3.5 x 75 mm; 0.8 x 4 x 100 mm; 1 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
968306 06	1633



 No 4724	size 2 (1 x 5.5 x 25 mm)
 No 4728	size 1 (0.4 x 2.5 x 50 mm)
 No 4734	size 2
No 4744	size 1
 No 4820	0.6 x 3.5 x 75 mm; 0.8 x 4 x 100 mm; 1.2 x 6.5 x 150 mm; 1.6 x 10 x 200 mm; 2.0 x 12 x 250 mm
 No 4830	sizes 1; 2; 3
No 4840	size 1
 No 10767/9	sizes 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm
 No 7756	
 No 12922N	

4820

3K DRALL workshop screwdrivers

DIN 5265, ISO 2380, Chrome Alloy Steel, matt chrome plated, black tips.





Code	a mm	b mm	L ₁ mm	L ₂ mm		
4820 10 35	0.6	3.5	75	170	23	10
4820 10 40	0.8	4	100	195	32	10
4820 20 55	1	5.5	125	220	54	10
4820 10 65	1.2	6.5	150	265	81	10
4820 10 80	1.6	8	175	290	118	10
4820 11 00	1.6	10	200	315	158	5
4820 21 00	2	12	250	375	218	5
4820 31 00	2.5	14	250	375	311	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 ₁ mm	L ₂ mm		
4830 10 00	0	60	155	16	10
4830 10 01	1	80	175	33	10
4830 10 02	2	100	215	70	10
4830 10 03	3	150	275	126	5
4830 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 ₁ mm	L ₂ mm	△△ g	
4840 1000	0	60	155	16	10
4840 1001	1	80	175	33	10
4840 1002	2	100	215	70	10
4840 1003	3	150	275	126	5
4840 1004	4	200	325	251	5

4856 3K DRALL TORX® screwdrivers

with hollow point
(TORX® TAMPER RESISTANT),
Chrome Alloy Steel,
matt chrome plated, black tips.



Code	size	mm	L ₁ mm	L ₂ mm	△△ g	
48560006	T6*	1.6	50	145	14	5
48560007	T7	2.0	50	145	14	5
48560008	T8	2.3	60	155	21	5
48560009	T9	2.5	60	155	21	5
48560010	T10	2.7	80	175	26	5
48560015	T15	3.3	80	175	28	5
48560020	T20	3.8	100	215	32	5
48560025	T25	4.4	100	215	55	5
48560027	T27	5.0	115	230	58	5
48560030	T30	5.5	115	230	63	5
48560040	T40	6.6	115	240	86	5
48560045	T45	7.8	130	255	107	5

* without hollow point

4791 DRALL set of screwdrivers

Set of seven DRALL screwdrivers.

Content:
⊖ 4720: size 1 (0.6 x 3.5 x 75 mm)
size 2 (0.8 x 4 x 100 mm)
size 4 (1 x 5.5 x 125 mm)
size 5 (1.2 x 6.5 x 150 mm)
⊖ 4728: size 1 (0.4 x 2.5 x 50 mm)
⊕ 4730: size 1; size 2



Code	△△ g	
964791 10	417	1

4792 DRALL set of screwdrivers

Set of nine DRALL screwdrivers.

Content:
⊖ 4722: size 1 (1 x 5.5 x 100 mm)
size 2 (1.2 x 6.5 x 125 mm)
size 3 (1.2 x 8 x 150 mm)
size 4 (1.6 x 10 x 175 mm)
⊖ 4724: size 2 (1 x 5.5 x 25 mm)
⊖ 4728: size 1 (0.4 x 2.5 x 50 mm)
⊕ 4730: size 1
⊕ 4732: size 2
⊕ 4734: size 2



Code	△△ g	
964792 10	745	1

4793 DRALL set of screwdrivers

Set of five DRALL screwdrivers.

Content:
⊖ 4720: size 2 (0.8 x 4 x 100 mm)
⊖ 4722: size 1 (1 x 5.5 x 100 mm)
size 2 (1.2 x 6.5 x 125 mm)
⊕ 4730: size 1
⊕ 4732: size 2



Code	△△ g	
964793 10	387	1

4794 DRALL set of TORX® screwdrivers

Set of nine DRALL screwdrivers for TORX® screws

Content:
⊕ 4750: T8, T9, T10, T15, T20, T25, T27, T30, T40



Code	△△ g	
964794 10	513	1

4799 DRALL set of TORX® screwdrivers

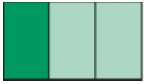
Set of seven DRALL screwdrivers for TORX® screws

(TORX® TAMPER RESISTANT).
Content:
⊕ 4756: T10, T15, T20, T25, T30, T40, T45
(with hollow point)



Code	△△ g	
964799 10	475	1

ES 4720/4730/7



175 x 350 x 33 mm, 7 pieces

Code $\Delta \Delta$
g

968381 16 544

No 4720 size 1 (0.6 x 3.5 x 75 mm);
size 2 (0.8 x 4 x 100 mm);
size 4 (1 x 5.5 x 125 mm);
size 5 (1.2 x 6.5 x 150 mm)

No 4730 sizes 1; 2; 3

8381 2026 Empty tray 111

ES 4720/4722/4732/7



175 x 350 x 35 mm, 7 pieces

Code $\Delta \Delta$
g

968381 33 575

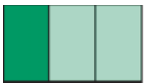
No 4720 size 1 (0.6 x 3.5 x 75 mm);
size 2 (0.8 x 4 x 100 mm)

No 4722 size 1 (1 x 5.5 x 100 mm);
size 2 (1.2 x 6.5 x 125 mm)

No 4732 sizes 1; 2; 3

8381 2026 Empty tray 111

ES 4756/7



175 x 350 x 39 mm, 7 pieces

Code $\Delta \Delta$
g

968381 18 500

No 4756 sizes T10; T15; T20; T25; T30; T40;
T45

8381 2039 Empty tray 110

TCS 4720/4730



175 x 350 x 35 mm, 7 pieces

Code $\Delta \Delta$
g

968381 78 475

No 4720 size 1 (0.6 x 3.5 x 75 mm);
size 2 (0.8 x 4 x 100 mm);
size 4 (1 x 5.5 x 125 mm);
size 5 (1.2 x 6.5 x 150 mm)

No 4730 sizes 1; 2; 3

TCS 4720/4760VDE+10767



530 x 350 x 35 mm, 27 pieces

Code $\Delta \Delta$
g

968301 68 1925

No 4720 size 1 (0.6 x 3.5 x 75 mm);
size 2 (0.8 x 4 x 100 mm);
size 5 (1.2 x 6.5 x 150 mm);
size 6 (1.6 x 8 x 175 mm);
size 7 (1.6 x 10 x 200 mm);
size 8 (2 x 12 x 200 mm)

No 4724 size 2 (1 x 5.5 x 25 mm)

No 4728 size 1 (0.4 x 2.5 x 50 mm)

No 4730 sizes 1; 2; 3

No 4732 size 4

No 4734 size 2

No 4740 sizes 0; 1; 2

No 4744 size 1

No 4760 VDE size 1 (0.4 x 2.5 x 75 mm)

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



4720 Workshop screwdrivers DRALL

DIN 5263/5264, ISO 2380, Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L ₁ mm	L ₂ mm	ΔΔ g	
47 20 1035	1	0.6	3.5	75	160	23	10
47 20 1040	2	0.8	4	100	195	32	10
47 20 1055	3	1	5.5	100	195	50	10
47 20 2055	4	1	5.5	125	220	54	10
47 20 1065	5	1.2	6.5	150	255	81	10
47 20 1080	6	1.6	8	175	290	118	10
47 20 1100	7	1.6	10	200	315	169	5
47 20 2100	8	2	12	250	375	218	5

4721 Workshop screwdrivers DRALL

parallel blades, as per VSM (Swiss Standard), Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L ₁ mm	L ₂ mm	ΔΔ g	
47 21 1025	0	0.4	2.5	80	165	22	10
47 21 1035	1	0.5	3.5	90	175	24	10
47 21 1040	2	0.6	4	100	185	28	10
47 21 1055	3	0.8	5.5	120	215	43	10
47 21 1065	4	1	6.5	140	245	79	10
47 21 1080	5	1.2	8	160	275	115	10
47 21 1100	6	1.6	10	180	305	162	10
47 21 1130	7	2	13	200	325	193	10
47 21 1160	8	2.5	16	220	345	231	10
47 21 1180	9	3	18	240	365	276	10

4722 Workshop screwdrivers DRALL

DIN 5265, ISO 2380, with hexagon, Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L ₁ mm	L ₂ mm	ΔΔ g	
47 22 1055	1	1	5.5	100	195	55	10
47 22 1070	2	1.2	6.5	125	230	84	10
47 22 1090	3	1.2	8	150	265	127	10
47 22 1100	4	1.6	10	175	290	158	10
47 22 1120	5	2	12	200	325	231	5
47 22 1130	6	2.5	14	250	375	311	5

4724 Carburettor screwdrivers DRALL

DIN 5265, ISO 2380, stubby, Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L ₁ mm	L ₂ mm	ΔΔ g	
47 24 1045	1	0.6	3.5	25	80	27	10
47 24 1060	2	1	5.5	25	80	32	10
47 24 1080	3	1.2	8	25	80	39	10

4728 Electricians screwdrivers DRALL

DIN 5265, ISO 2380, Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L ₁ mm	L ₂ mm	ΔΔ g	
47 28 1025	1	0.4	2.5	50	125	25	10
47 28 1035	2	0.6	3.5	75	160	25	10
47 28 1040	3	0.6	3.5	100	185	26	10
47 28 2040	4	0.8	4.0	125	210	31	10
47 28 1050	5	1	5.5	150	245	53	10
47 28 2050	6	1	5.5	200	295	62	10

4729 Electricians screwdrivers DRALL

DIN 5265, ISO 2380, sleeved blades, Chrome Alloy Steel, chrome plated, black tips.



Code	size	a mm	b mm	L ₁ mm	L ₂ mm	ΔΔ g	
47 29 1025	1	0.4	2.5	50	125	14	10
47 29 1035	2	0.6	3.5	75	160	26	10
47 29 2035	3	0.6	3.5	100	185	26	10
47 29 1040	4	0.8	4	125	210	33	10
47 29 1055	5	1	5.5	150	245	55	10
47 29 3055	6	1	5.5	200	295	68	10

4730 Cross-head screwdrivers DRALL

Phillips-Recess®, DIN 5262, ISO 8764, Chrome Alloy Steel, chrome plated, black tips.



Code	PH size	L ₁ mm	L ₂ mm	ΔΔ g	
47 30 1000	0	60	135	16	10
47 30 1001	1	80	175	33	10
47 30 1002	2	100	205	70	10
47 30 1003	3	150	265	126	10

4731 Cross-head screwdrivers DRALL

Phillips-Recess®, extra long, DIN 5262, ISO 8764, Chrome Alloy Steel, chrome plated, black tips.

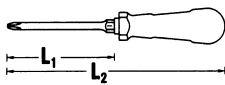


Code	PH size	L ₁ mm	L ₂ mm	ΔΔ g	
47 31 1001	1	250	345	66	1
47 31 1002	2	250	355	103	1

4732

⊕ Cross-head screwdrivers DRALL

with hexagon, Phillips-Recess®, DIN 5262, ISO 8764, Chrome Alloy Steel, chrome plated, black tips.



Code	PH size	L ₁ mm	L ₂ mm	ΔΔ g	
4732 1001	1	80	175	36	10
4732 1002	2	100	205	81	10
4732 1003	3	150	265	144	5
4732 1004	4	200	325	251	5

4734

⊕ Cross-head screwdrivers DRALL

Phillips-Recess®, DIN 5262, ISO 8764, stubby, Chrome Alloy Steel, chrome plated, black tips.



Code	PH size	L ₁ mm	L ₂ mm	ΔΔ g	
4734 1001	1	25	80	27	10
4734 1002	2	25	80	31	10

4735

⊖ Screwdrivers DRALL

TRI-WING®, hexagonal blade, phosphatized.



Code	No	L ₁ mm	L ₂ mm	outside ●" mm	ΔΔ g	
47350002	2	80	175	1/4	60	5
47350003	3	100	205	1/4	77	5
47350004	4	100	205	1/4	76	5
47350005	5	100	205	1/4	98	5

4736

⊕ Screwdrivers DRALL

TORQ-SET®, hexagonal blade, phosphatized.

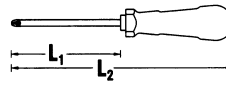


Code	No	L ₁ mm	L ₂ mm	outside ●" mm	ΔΔ g	
47360002	2	80	175	1/4	59	5
47360004	4	80	175	1/4	58	5
47360006	6	100	205	1/4	76	5
47360008	8	100	205	1/4	76	5
47360010	10	100	205	1/4	77	5
47360016	1/4	150	265	5/16	133	5

4740

⊕ Cross-head screwdrivers DRALL

POZIDRIV/SUPADRIV®, DIN 5262, ISO 8764, Chrome Alloy Steel, chrome plated, black tips.



Code	PZ size	L ₁ mm	L ₂ mm	ΔΔ g	
4740 1000	0	60	135	16	10
4740 1001	1	80	175	34	10
4740 1002	2	100	205	72	10
4740 1003	3	150	265	128	5
4740 1004	4	200	325	221	5

4744

⊕ Cross-head screwdrivers DRALL

POZIDRIV/SUPADRIV®, DIN 5262, ISO 8764, stubby, Chrome Alloy Steel, chrome plated, black tips.



Code	PZ size	L ₁ mm	L ₂ mm	ΔΔ g	
4744 1001	1	25	80	28	10
4744 1002	2	25	80	34	10

4748

● Ball ended hexagon drivers DRALL

for use on hexagon socket head screws, swivel angle up to 25° each side, Chrome Alloy Steel, chrome plated, black tips.



Code	mm	L ₁ mm	L ₂ mm	ΔΔ g	
4748 1030	3	100	185	29	10
4748 1040	4	100	185	30	10
4748 1050	5	100	195	54	10
4748 1060	6	125	230	82	10
4748 1080	8	150	265	143	10
4748 1100	10	150	275	209	10
4748 1120	12	150	275	268	10

10507KK

● Ball ended hexagon drivers DRALL

for use on hexagon socket head screws, swivel angle up to 25° each side, Chrome Alloy Steel, chrome plated, black tips.



Code	mm	L ₁ mm	L ₂ mm	ΔΔ g	
73 10005	5	300	385	89	10

4750 TORX® screwdrivers DRALL

for inside TORX® screws,
Chrome Alloy Steel,
chrome plated, black tips.



Code	size	mm	L ₁ mm	L ₂ mm	△△ g	
47 50 1006	T6	1.6	50	125	14	5
47 50 1007	T7	2.0	50	125	14	5
47 50 1008	T8	2.3	60	145	21	5
47 50 1009	T9	2.5	60	145	21	5
47 50 1010	T10	2.7	80	175	26	5
47 50 1015	T15	3.3	80	175	28	5
47 50 1020	T20	3.8	100	195	32	5
47 50 1025	T25	4.4	100	195	55	5
47 50 1027	T27	5.0	115	210	58	5
47 50 1030	T30	5.5	115	210	63	5
47 50 1040	T40	6.6	115	220	86	5
47 50 1045	T45	7.8	130	235	107	5

4750L TORX® screwdrivers DRALL

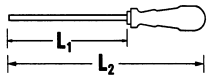
for inside TORX® screws,
extra long,
Chrome Alloy Steel,
chrome plated, black tips.



Code	size	mm	L ₁ mm	L ₂ mm	△△ g	
47 50 1115	T15	3.3	250	345	42	5
47 50 1120	T20	3.8	250	345	49	5
47 50 1125	T25	4.4	250	345	56	5
47 50 1130	T30	5.5	250	345	94	5

4756 TORX® screwdrivers DRALL

with hollow point (TORX® TAMPER RESISTANT),
Chrome Alloy Steel, chrome plated, black tips.



Code	size	mm	L ₁ mm	L ₂ mm	△△ g	
47 56 0010	T10	2.7	80	175	27	5
47 56 0015	T15	3.3	80	175	29	5
47 56 0020	T20	3.8	100	195	35	5
47 56 0025	T25	4.4	100	195	38	5
47 56 0030	T30	5.5	115	210	60	5
47 56 0040	T40	6.6	115	220	86	5
47 56 0045	T45	7.8	130	235	107	5

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	
96479801	675	1

Electronics Screwdrivers

4797 Electronics screwdrivers set

7 pieces
Content:

- ⊖ 4751: size 4 (0.3 x 1.5 x 40 mm)
size 6 (0.4 x 2 x 60 mm)
size 7 (0.4 x 2.5 x 75 mm)
size 8 (0.5 x 3 x 75 mm)
- ⊕ 4752: size 00, size 0, size 1



Code	△△ g	
96479710	302	1

4751 Screwdrivers for slotted screws



Code	size	a mm	b mm	L ₁ mm	L ₂ mm	△△ g	
4751 0001	1	0.16	0.8	40	140	12	5
4751 0002	2	0.18	1	40	140	12	5
4751 0003	3	0.25	1.2	40	140	12	5
4751 0004	4	0.3	1.5	40	140	12	5
4751 0005	5	0.3	1.8	60	160	13	5
4751 0006	6	0.4	2	60	160	13	5
4751 0007	7	0.4	2.5	75	175	14	5
4751 0008	8	0.5	3	75	175	16	5
4751 0010	10	0.6	3.5	100	200	20	5
4751 0012	12	0.8	4	100	200	23	5

4752 Cross-head screwdrivers

Phillips-Recess®.



Code	size	L ₁ mm	L ₂ mm	⊕ M	americ. No.	∅ mm	△△ g	
4752 0000	000	40	140	-	-	2	13	5
4752 0010	00	40	140	-	-	2.5	14	5
4752 0020	0	60	160	-2	0-1	3	16	5
4752 0001	1	80	180	2-3	2-4	4.5	24	5
4752 0011	11	150	250	2-3	2-4	4.5	33	5

4753 Hexagon socket screwdrivers



Code	∅ mm/''	L ₁ mm	L ₂ mm	△△ g	
4753 0007	0.7 / 0.028	40	140	14	5
4753 0009	0.9 / 0.035	40	140	14	5
4753 0013	1.3 / 0.050	40	140	14	5
4753 0015	1.5	50	150	14	5
4753 0020	2	50	150	14	5
4753 0025	2.5	60	160	14	5
4753 0030	3	60	160	16	5

VDE-insulated Screwdrivers


to DIN IEC 78 (CO) 11/VDE 0680 part 201/07.83
resp. IEC 900 1987

   AC 1000 V

High quality materials and stringent tests guarantee safe use on "live" lines up to 1000 V or 1500 V DC. Individually tested at 10 000 V.

4795 VDE Screwdriver set DRALL

Set with 6 screwdrivers DRALL, safety insulated.

 AC 1000 V

VDE 680 part 201

Content:

- ⊖ 4760 VDE: size 1 (0.4 x 2.5 x 75 mm)
- size 3 (0.6 x 3.5 x 100 mm)
- size 5 (1 x 5.5 x 125 mm)
- size 6 (1.2 x 6.5 x 150 mm)

- ⊕ 4765 VDE: size 1, size 2




Code	Δ g	
96479510	440	1

4760 VDE Electricians screwdrivers DRALL

DIN 7437, DIN EN 60900, safety insulated, blade gun finished, Chrome Alloy Steel.



Code	size	a mm	b mm	L ₁ mm	L ₂ mm	Δ g	
4760 1001	1	0.4	2.5	75	150	16	10
4760 1002	2	0.5	3	100	175	20	10
4760 1003	3	0.6	3.5	100	185	28	10
4760 1004	4	0.8	4	100	195	36	10
4760 1005	5	1	5.5	125	230	76	10
4760 1006	6	1.2	6.5	150	255	93	10
4760 1007	7	1.2	8	175	290	147	10
4760 1008	8	1.6	10	200	315	219	10


4765 VDE Cross-head screwdrivers DRALL

Phillips-Recess®, DIN 7438,

DIN EN 60900,

safety insulated, blade gun finished, Chrome Alloy Steel.




Code	PH size	L ₁ mm	L ₂ mm	Δ g	
4765 1000	0	60	135	17	10
4765 1001	1	80	175	36	10
4765 1002	2	100	205	76	10
4765 1003	3	150	265	134	10
4765 1004	4	200	325	234	10

4770 VDE Cross-head screwdrivers DRALL

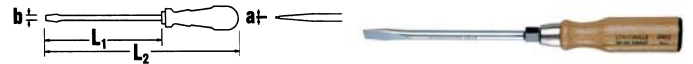
POZIDRIV/SUPADRIV®, DIN 7438, DIN EN 60900, safety insulated, blade gun finished, Chrome Alloy Steel.




Code	PZ size	L ₁ mm	L ₂ mm	Δ g	
4770 1000	0	60	135	17	10
4770 1001	1	80	175	37	10
4770 1002	2	100	205	76	10
4770 1003	3	150	265	140	10
4770 1004	4	200	325	228	10

10541 Engineers screwdrivers

with hexagon, DIN 475, hardwood, handle with leather cap, full length tang, Chrome Alloy Steel, chrome plated.




Code	size	a mm	b mm	L ₁ mm	L ₂ mm	Δ g	
73 11 3001	1	0.8	5.5	100	200	65	10
73 11 3002	2	1	7	125	235	104	10
73 11 3003	3	1.2	9	150	270	162	10
73 11 3004	4	1.6	10	175	300	212	10
73 11 3005	5	2	12	200	330	264	10
73 11 3006	6	2.5	13	250	380	346	5

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	Δ g	
77450001	1	3.5	190	37	10

ES 12500/7



175 x 350 x 30 mm, 7 pieces

Code	Δ g
96838170	969
 No 12500	sizes 7; 8; 9; 10; 11; 12; 13 mm
83812085	Empty tray
	103



12500 Nut spinners DRALL

DIN 3125 (metric),
Chrome Vanadium,
chrome plated.



Code	Ø mm	L ₁ mm	L ₂ mm	ΔΔ g	
43 09 00 03	3	125	230	68	10
43 09 00 35	3.5	125	230	72	10
43 09 00 04	4	125	230	72	10
43 09 00 45	4.5	125	230	71	10
43 09 00 05	5	125	230	73	10
43 09 00 55	5.5	125	230	73	10
43 09 00 06	6	125	230	74	10
43 09 00 07	7	125	240	106	10
43 09 00 08	8	125	240	109	10
43 09 00 09	9	125	240	110	10
43 09 00 10	10	125	240	138	10
43 09 00 11	11	125	250	169	5
43 09 00 12	12	125	250	172	5
43 09 00 13	13	125	250	173	5
43 09 00 14	14	125	250	181	5
43 09 00 15	15	125	250	192	5
43 09 00 16	16	125	250	189	5
43 09 00 17	17	125	250	199	5

12500a Nut spinners DRALL

Code	Ø "	L ₁ mm	L ₂ mm	ΔΔ g	
43 49 00 08	1/8	125	230	68	10
43 49 00 10	5/32	125	230	70	10
43 49 00 12	3/16	125	230	73	10
43 49 00 14	7/32	125	230	75	10
43 49 00 16	1/4	125	240	103	10
43 49 00 18	9/32	125	240	101	10
43 49 00 20	5/16	125	240	108	10
43 49 00 22	11/32	125	240	106	10
43 49 00 24	3/8	125	240	113	10
43 49 00 28	7/16	125	250	159	5
43 49 00 32	1/2	125	250	176	5
43 49 00 34	9/16	125	250	169	5
43 49 00 36	5/8	125	250	185	5

12506N Nut spinners DRALL

flexible,
max. torque 8 N m,
matt chrome plated.



Code	Ø mm	L ₁ mm	L ₂ mm	ΔΔ g	
43 10 01 05	5	150	255	148	10
43 10 01 06	6	150	255	106	10
43 10 01 07	7	150	255	148	10
43 10 01 08	8	150	255	109	10
43 10 01 10	10	175	280	168	10

12507-2K T-handed nut spinners

with 2-component T-handle, Chrome Vanadium, matt chrome plated.



Code	Ø mm	L ₁ mm	L ₂ mm	ΔΔ g	
43 23 20 40	4	200	225	65	10
43 23 20 45	4.5	200	226	65	10
43 23 20 50	5	200	226	66	10
43 23 20 55	5.5	200	225	66	10
43 23 20 60	6	200	224	83	10
43 23 20 70	7	200	234	133	10
43 23 20 80	8	200	234	135	10
43 23 20 90	9	200	234	137	10
43 23 21 00	10	200	234	141	10
43 23 21 10	11	200	240	169	5
43 23 21 20	12	200	240	171	5
43 23 21 30	13	200	240	176	5

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	ΔΔ g	
73 27 20 01	1	0.6	3.5	90	8	10
73 27 20 02	2	0.8	4	100	12	10
73 27 20 03	3	1	5.5	125	29	10
73 27 20 04	4	1.2	8	150	69	10
73 27 20 05	5	1.6	10	175	105	10
73 27 20 06	6	2	12	200	149	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	ΔΔ g	
73 28 20 12	1 x 2	125	30	10
73 28 20 23	2 x 3	150	72	10
73 28 20 34	3 x 4	200	148	10

Hexagon key wrenches

on ring, for socket head screws,
Chrome Vanadium, nickel-plated.



Code	No	△△ g	☐
96 43 15 21	10760CV R/8 1)	260	1
96 43 55 21	10760aCV R/8 2)	119	1

1) Content: 2; 2.5; 3; 4; 5; 6; 8; 10 mm

2) Content: 1/16; 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4"

Hexagon key wrenches

in holder, for socket head screws,
Chrome Vanadium, nickel-plated.



Code	No	△△ g	☐
96 43 15 01	10760CV/9 1)	245	1
96 43 55 01	10760aCV/10Pc 2)	269	1
96 43 55 02	10760aCV/13 3)	124	1

1) Content: 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm

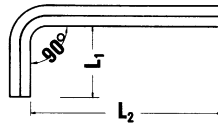
2) Content: 1/16; 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4; 5/16; 3/8" (in plastic-wallet)

3) 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"



10760CV ● Hexagon key wrenches

DIN ISO 2936 (metric), for socket head screws,
Chrome Vanadium, nickel-plated.



Code	⊕ mm/"	L ₁ mm	L ₂ mm	△△ g	☐
43 15 00 70	0.7/0.028	8	32	1	10
43 15 00 90	0.9/0.035	10	32	1	10
43 15 01 30	1.3/0.050	12	40	1	10
43 15 01 50	1.5	14	45	1	10
43 15 00 02	2	16	50	2	10
43 15 02 50	2.5	18	56	3	10
43 15 00 03	3	20	63	4	10
43 15 03 50	3.5	22	66	7	10
43 15 00 04	4	25	70	10	10
43 15 00 05	5	28	80	18	10
43 15 00 06	6	32	90	29	10
43 15 00 07	7	34	95	42	10
43 15 00 08	8	36	100	59	10
43 15 00 09	9	38	105	80	10
43 15 00 10	10	40	112	103	10
43 15 00 11	11	42	119	130	10
43 15 00 12	12	45	125	169	5
43 15 00 14	14	56	140	261	5
43 15 00 17	17	63	160	442	5
43 15 00 19	19	70	180	603	5
43 15 00 22	22	80	200	938	1
43 15 00 24	24	90	224	1248	1
43 15 00 27	27	100	250	1692	1
43 15 00 30	30	112	280	2434	1
43 15 00 32	32	125	315	3117	1
43 15 00 36	36	140	355	4430	1

10760aCV ● Hexagon key wrenches

Code	⊕ mm/"	L ₁ mm	L ₂ mm	△△ g	☐
43 15 00 70	0.7/0.028	8	32	1	10
43 15 00 90	0.9/0.035	10	32	1	10
43 15 01 30	1.3/0.050	12	40	1	10
43 55 00 03	3/64	14	45	1	10
43 55 00 04	1/16	15	45	1	10
43 55 00 05	5/64	16	50	2	10
43 55 00 06	3/32	17	51	3	10
43 55 00 07	7/64	20	54	4	10
43 55 00 08	1/8	22	57	5	10
43 55 00 09	9/64	23	63	7	10
43 55 00 10	5/32	25	65	10	10
43 55 00 12	3/16	29	70	15	10
43 55 00 14	7/32	32	80	23	10
43 55 00 16	1/4	32	87	32	10
43 55 00 18	9/32	35	95	45	10
43 55 00 20	5/16	40	98	59	10
43 55 00 22	11/32	41	105	75	10
43 55 00 24	3/8	45	110	95	10
43 55 00 28	7/16	48	124	143	10
43 55 00 32	1/2	50	133	200	5
43 55 00 34	9/16	57	152	380	5
43 55 00 36	5/8	59	160	380	5
43 55 00 40	3/4	70	180	605	5
43 55 00 44	7/8	80	200	945	1

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	g
96432101	410	5	

10765 Hexagon key wrenches

DIN ISO 2936, for socket head screws, extra long,
Chrome Vanadium, nickel-plated.



Code	mm	L ₁ mm	L ₂ mm	g	g
43210015	1.5	14	90	3	10
43210002	2	16	100	3	10
43210025	2.5	18	112	5	10
43210003	3	20	126	9	10
43210004	4	25	140	17	10
43210005	5	28	160	31	10
43210006	6	32	180	50	10
43210007	7	34	190	74	10
43210008	8	36	200	100	10
43210009	9	38	210	135	10
43210010	10	40	224	179	10
43210012	12	45	250	287	5
43210014	14	56	280	440	5
43210017	17	63	320	742	5
43210019	19	70	360	1048	5

Key wrenches

for inside TORX® screws,
in holder,
Chrome Vanadium,
chrome plated.



Code	No	g	g
96432201	10766/6 ¹⁾	101	1
96432202	10766/9 ²⁾	120	1

¹⁾ Content: sizes T15; T20; T25; T27; T30; T40

²⁾ Content: sizes T8; T9; T10; T15; T20; T25; T27; T30; T40

10766 Key wrenches

for inside TORX® screws,
Chrome Vanadium, chrome plated.



Code	size	mm	L ₁ mm	L ₂ mm	g	g
43220006	T6	1.6	16	38	2	10
43220007	T7	2.0	16	41	2	10
43220008	T8	2.3	16	44	3	10
43220009	T9	2.5	16	48	3	10
43220010	T10	2.7	17	51	3	10
43220015	T15	3.3	18	54	5	10
43220020	T20	3.8	19	57	7	10
43220025	T25	4.4	20	60	9	10
43220027	T27	5.0	21	64	15	10
43220030	T30	5.5	24	70	20	10
43220040	T40	6.6	26	76	29	10
43220045	T45	7.8	29	83	42	10
43220050	T50	8.8	32	95	61	10
43220055	T55	11.2	35	108	122	10
43220060	T60	13.2	38	120	185	10

10771/6 Key wrenches

for inside TORX® screws,
extra long,
with ball end on long arm,
in holder,
Chrome Vanadium, gun finished.
Content:
sizes T15; T20; T25; T27; T30; T40



Code	g	g
96432701	168	1

10771 Key wrenches

for inside TORX® screws,
extra long,
with ball end on long arm,
swivel angle up to 20° each side,
Chrome Vanadium,
gun finish.



Code	size	mm	L ₁ mm	L ₂ mm	g	g
43270010	T10	2.7	17	73	10	5
43270015	T15	3.3	19	83	15	5
43270020	T20	3.8	20	94	20	5
43270025	T25	4.4	20	96	24	5
43270027	T27	5.0	22	106	28	5
43270030	T30	5.5	26	119	30	5
43270040	T40	6.6	28	137	35	5

Ball ended hexagon key wrenches

in holder,
Chrome Vanadium,
gunmetal finish.



Code	No	△△ g	📦
96432601	10767/9¹⁾	420	5
96435701	10767a/8²⁾	283	1
96435702	10767a/13³⁾	455	1

¹⁾ Content: 1.5; 2; 2.5; 3; 4; 5; 6; 8; 10 mm

²⁾ Content: 5/64; 3/32; 1/8; 5/32; 3/16; 7/32; 1/4; 5/16"

³⁾ 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"

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 ₁ mm	L ₂ mm	△△ g	📦
43570130	1.3/0.050	12	72	1	10
43260015	1.5	14	90	1.5	10
43260002	2	16	100	3	10
43260025	2.5	18	112	5.5	10
43260003	3	20	126	9	10
43260004	4	25	140	18	10
43260005	5	28	160	31	10
43260006	6	32	180	50	10
43260008	8	36	200	100	10
43260010	10	40	224	188	10
43260012	12	45	224	297	10

10767a

● Ball ended hexagon key wrenches

Code	⊕ mm/"	L ₁ mm	L ₂ mm	△△ g	📦
43570130	1.3/0.050	12	72	1	10
43570004	1/16	14	80	1.5	10
43570005	5/64	16	89	3	10
43570006	3/32	18	101	5	10
43570007	7/64	20	111	7	10
43570008	1/8	20	121	9.5	10
43570009	9/64	23	136	13	10
43570010	5/32	25	149	16	10
43570012	3/16	26	163	27	10
43570014	7/32	29	170	42	10
43570016	1/4	31	179	60	10
43570020	5/16	36	189	102	10
43570024	3/8	38	200	164	10

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	📦
96432602	401	5

10767H

● Ball ended hexagon key wrenches

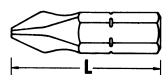
for hexagon key wrenches,
swivel angle up to 25° each side,
with ball end on long arm,
facilitates quick, safe work in
awkward places, screws stay on the head once attached,
Chrome Vanadium,
gunmetal finish.



Code	⊕ mm	L ₁ mm	L ₂ mm	△△ g	📦
46231003	3	127	23	8	10
46231004	4	141	28	17	10
46231005	5	165	34	30	10
46231006	6	185	38	50	5
46231008	8	205	45	100	5
46231010	10	232	51	175	5

⊕ BITS

DIN 3128, for Phillips screws.

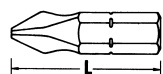


Code	No	Phillips-Recess®	outside ●	"	L mm	△△ g	
08000000	1218	000	C 4	-	28	3	5
08000001	1219	00	C 4	-	28	3	5
08010000	1220	0	C 6.3	1/4	25	5	10
08010001	1221	1	C 6.3	1/4	25	5	10
08010002	1222	2	C 6.3	1/4	25	5	10
08010003	1223	3	C 6.3	1/4	25	5	10
08030001	1231	1	C 8	5/16	32	9	10
08030002	1232	2	C 8	5/16	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.

⊕ BITS

DIN 3128, for Phillips screws.

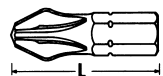


Code	No	Phillips-Recess®	outside ●	"	L mm	△△ g	
08020001	1221AA	1	C 6.3	1/4	25	5	10
08020002	1222AA	2	C 6.3	1/4	25	5	10
08020003	1223AA	3	C 6.3	1/4	25	5	10

outside ● DIN 3126/ISO 1173
Phillips-Recess® DIN 5260
for wood screws,
mild steel screws etc.

⊕ BITS

for POZIDRIV/SUPADRIV® screws, extra hard.

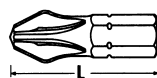


Code	No	POZIDRIV/ SUPADRIV®	outside ●	"	L mm	△△ g	
08050001	PZ1221	1	C 6.3	1/4	25	5	10
08050002	PZ1222	2	C 6.3	1/4	25	5	10
08050003	PZ1223	3	C 6.3	1/4	25	6	10

outside ● DIN 3126/ISO 1173

⊕⊕ TwinBITS

with special profiles for recessed-head screws (PH) and POZIDRIV/SUPADRIV® screws (PZ), high resistance to wear due to coating with hard material.



Code	No	outside size	●	"	L mm	△△ g	
0801 1001	PH/PZ1221	1	C 6.3	1/4	25	5	10
0801 1002	PH/PZ1222	2	C 6.3	1/4	25	5	10
0801 1003	PH/PZ1223	3	C 6.3	1/4	25	5	10

outside ● DIN 3126/ISO 1173

1203/7 TwinBITS set

Storage facility for BITS screwdriver inserts.

Content:

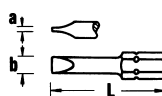
- 1 quick-change holder No 3825/1 for BITS screwdriver inserts
- ⊕⊕ 6 TwinBITS screwdriver inserts with special profile for recessed-head screws (PH) and POZIDRIV/SUPADRIV® screws (PZ)
- 2 x size 1; 3 x size 2; 1 x size 3



Code	△△ g	
960801 12	97	1

⊖ BITS screwdrivers

DIN 3127/ISO 2351, for slotted screws.



Code	No	a x b mm	outside ●	"	L mm	△△ g	
0807 00 17	1157	0.25 x 1.5	C 4	-	28	3	5
0807 00 18	1158	0.4 x 2.0	C 4	-	28	3	5
0807 00 19	1159	0.4 x 2.5	C 4	-	28	3	5
0807 00 20	1160	0.5 x 3.0	C 6.3	1/4	39	5	10
0807 00 21	1161	0.5 x 4.0	C 6.3	1/4	39	6	10
0807 00 22	1162	0.6 x 3.5	C 6.3	1/4	39	6	10
0807 00 23	1163	0.6 x 4.5	C 6.3	1/4	39	6	10
0807 00 24	1164	0.8 x 4.0	C 6.3	1/4	39	6	10
0807 00 25	1165	0.8 x 5.5	C 6.3	1/4	39	7	10
0807 00 26	1166	1.0 x 5.5	C 6.3	1/4	39	8	10
0807 00 30	1166/1	1.2 x 6.5	C 6.3	1/4	39	9	10
0807 00 27	1167	1.2 x 8.0	C 6.3	1/4	39	12	10
0807 00 28	1168	1.6 x 8.0	C 6.3	1/4	39	12	10
0807 00 29	1169	1.6 x 10.0	C 6.3	1/4	39	16	10
0808 00 30	1180	0.8 x 5.5	C 8	5/16	41	10	10
0808 00 31	1181	1.0 x 5.5	C 8	5/16	41	11	10
0808 00 32	1182	1.2 x 6.5	C 8	5/16	41	13	10
0808 00 33	1183	1.2 x 8.0	C 8	5/16	41	15	10
0808 00 34	1184	1.6 x 8.0	C 8	5/16	41	15	10
0808 00 35	1185	1.6 x 10.0	C 8	5/16	41	19	10
0808 00 36	1186	2.0 x 12.0	C 8	5/16	41	24	10

outside ● DIN 3126/ISO 1173

BITS

for tri-square socket head screws (XZN®).



Code	No	size	outside ●	"	L mm	△ g	☐
08 20 00 04	1350	M4	C 6.3	1/4	25	4	10
08 20 00 10	1356	M5	C 6.3	1/4	25	5	10
08 20 00 11	1357	M6	C 6.3	1/4	25	5	10
08 20 00 12	1358	M8	C 8	5/16	28	10	10
08 20 00 13	1359	M10	C 8	5/16	38	15	10
08 20 00 14	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

1299 BITS

for inside hexagon screws,
for operating the adjusting screws
on torque wrenches No 720, 721,
730 and 730N.



Code	mm	outside ●	"	L mm	△ g	☐
08 09 00 02	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 ●	"	L mm	△ g	☐
08 25 00 00	0	C 6.3	1/4	25	5	10
08 25 00 01	1	C 6.3	1/4	25	5	10
08 25 00 02	2	C 6.3	1/4	25	5	10
08 25 00 03	3	C 6.3	1/4	25	5	10
08 25 00 04	4	C 6.3	1/4	25	5	10
08 25 00 05	5	C 6.3	1/4	25	5	10
08 25 00 06	6	C 6.3	1/4	25	8	10

outside ● DIN 3126/ISO 1173

13010 BITS screwdrivers

for TORQ-SET® screws.

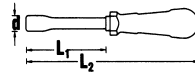


Code	TORQ-SET®	outside ●	"	L mm	△ g	☐
08 26 00 00	0	C 6.3	1/4	25	5	10
08 26 00 01	1	C 6.3	1/4	25	5	10
08 26 00 02	2	C 6.3	1/4	25	5	10
08 26 00 03	3	C 6.3	1/4	25	5	10
08 26 00 04	4	C 6.3	1/4	25	5	10
08 26 00 05	5	C 6.3	1/4	25	5	10
08 26 00 06	6	C 6.3	1/4	25	5	10
08 26 00 08	8	C 6.3	1/4	25	5	10
08 26 00 10	10	C 6.3	1/4	25	5	10
08 26 00 16	1/4 A	C 8	5/16	32	11	10
08 26 00 20	5/16 A	C 8	5/16	32	11	10
08 26 00 24	3/8 A	C 8	5/16	32	11	10

outside ● DIN 3126/ISO 1173

Spinner handles

for BITS screwdriver bits with outside hexagon 1/4" or 5/16"
DIN 3126/ISO 1173 Form C 6.3 or C 8, handle of impact proof plastic.
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 ○	"	d mm	L ₁ mm	L ₂ mm	△ g	☐
18 07 00 26	4000	D 6.3	1/4	11	75	180	103	5
18 07 00 30	4005	D 8	5/16	13	85	190	111	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 Type C 6.3,
transparent plastic handle
for storing BITS with rotating selection cap,
internal hexagon and powerful permanent magnet.



Code	inside ○	"	d mm	L ₁ mm	L ₂ mm	△ g	☐
18 08 00 17	D 6.3	1/4	10	120	230	124	1

inside ○ DIN 3126/ISO 1173

12504N BIT holder

for BITS screwdriver bits
with outside hexagon 1/4"
DIN 3126/ISO 1173 Form C 6.3,
flexible shaft,
handle of impact proof plastic.



Code	inside ○	"	L ₁ mm	L ₂ mm	△ g	☐
18 10 01 16	D 6.3	1/4	150	260	149	10

inside ○ DIN 3126/ISO 1173

12503 BIT holder

for BITS screwdriver bits
with outside hexagon 1/4"
DIN 3126/ISO 1173 Form C 6.3,
inside hexagon with magnet,
stubby version,
handle of impact proof plastic.



Code	inside ○	"	L ₁ mm	L ₂ mm	△ g	☐
18 11 00 16	D 6.3	1/4	10	65	46	10

inside ○ DIN 3126/ISO 1173

4007 BIT holder

for BITS screwdriver bits with outside hexagon 1/4" DIN 3126/ISO 1173 Form C 6.3, inside hexagon with magnet, with T-handle.



Code	inside ○	"	d mm	L ₁ mm	L ₂ mm	△ g	☐
180900 16	D 6.3	1/4	10	200	165	108	5

inside ○ DIN 3126/ISO 1173

415SGB Bit ratchet

reversible, all steel handle, for BITS screwdrivers with outside hexagon 1/4" DIN 3126/ISO 1173 Form 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	☐
11 1300 11	D 6.3	1/4	117	85	5

inside ○ DIN 3126/ISO 1173

435B Bit ratchet

reversible, for BITS screwdrivers with outside hexagon 5/16" DIN 3126/ISO 1173 Form C 8, 30 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	☐
12 1300 11	D 8	5/16	193	220	1

inside ○ DIN 3126/ISO 1173

25B Ratcheting bit holder

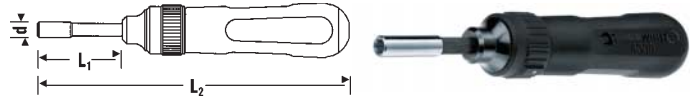
for hexagon bits, magnetic location, reversible heads angled, chrome plated.



Code	inside ○	"	L mm	d ₁ mm	d ₂ mm	a ₁ mm	a ₂ mm	△ g	☐
4154 16 20	1/4 x 5/16		138	20	23	15	17	105	1

4008 Ratcheting bit holder

Positions selectable are clockwise/anticlockwise/fixed with fixed blade. Inner hex. with magnet, for screwdriver bits with outside hexagon 1/4" DIN 3126/ISO 1173 Form C 6.3. The square drive extension No 3115/1 can be used to adapt 1/4" socket inserts (outer hex. to 1/4" outer square). The ratcheting bit holder is fitted with a quick-twist knurled socket to allow the user to tighten or untighten loosely by hand. Socket mountings are toothed, heavy-duty and angled at 30°. Ergonomically shaped handle with 1/4" inner square drive for use with cross handle, extension bar etc.



Code	inside ○	"	L ₁ mm	L ₂ mm	d mm	△ g	☐
18 1200 00	D 6.3	1/4	56	206.5	10	185	8

inside ○ DIN 3126/ISO 1173

4008/18 Ratcheting bit holder set

19 pieces.

Content:

- 1 Ratcheting bit holder No 4008
- 3 Bits ⊕ 1221; 1222; 1223
- 3 Bits ⊕ PZ1221; PZ1222; PZ1223
- 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



Code	△ g	☐
96 18 12 00	785	1

4008/27/1 Ratcheting bit holder set

29 pieces.

Content:

- 1 Ratcheting bit holder No 4008
- 3 Bits ⊕ 1221; 1222; 1223
- 3 Bits ⊕ PZ 1221; PZ 1222; PZ 1223
- 6 Bits ⊕ 1440 T10; 1441 T15; 1442 T20; 1443 T25; 1145 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 12 02	1025	1

3115/2 BIT holder

for torque screwdrivers
No 760 and No 775,
inside hexagon DIN 3126 D4
for BITS screwdriver bits Type C4,
outside hexagon 1/4"
DIN 3126/ISO 1173 Form E 6.3.



Code	inside ○	outside ●	"	L mm	△▽ g	☐
31 150003	4 mm	E 6.3	1/4	60	18	1

outside ● DIN 3126/ISO 1173

1200/1 BIT holder

with permanent magnet
1/4" inside and outside hexagon
1/4" DIN 3126/ISO 1173
Form C 6.3.



Code	inside ○	"	outside ●	"	L mm	△▽ g	☐
38 120001	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 Type C 6.3,
with quick-action chuck,
adaptor with external hexagonal drive for powered use.



Code	inside ○	"	outside ●	"	L mm	△▽ g	☐
38 250002	D 6.3	1/4	E 6.3	1/4	62	27	1

inside ○/outside ● DIN 3126/ISO 1173

3115 Adaptor

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.



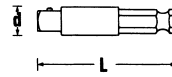
Code	outside ■	"	outside ●	"	L mm	d mm	△▽ g	☐
31 150001	A 6.3	1/4	E 6.3	1/4	50	10.5	16	5

outside ■ DIN 3120/ISO 1174-1
outside ● DIN 3126/ISO 1173



Adaptors

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	No	outside ■	"	outside ●	"	L mm	d mm	△▽ g	☐
31 160001	3116/1	6.3	1/4	E 6.3	1/4	50	10.5	16	5
32 160001	3216/1	10	3/8	E 6.3	1/4	50	15.5	23	5
32 160002	3216/2	10	3/8	E 6.3	1/4	100	15.5	42	5

Außen ■ DIN 3120/ISO 1174-1

Außen ● DIN 3126/ISO 1173

3115/1 Adaptor

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	△▽ g	☐
31 150002	A 6.3	1/4	C 6.3	1/4	25	10	5

outside ■ DIN 3120/ISO 1174-1

outside ● DIN 3126/ISO 1173

⊕ BITS screwdrivers

DIN 3128, for Phillips screws.



Code	No	Phillips- Recess®	outside ●	"	L mm	△▽ g	☐
08 31 0001	1260	1	E 6.3	1/4	50	10	10
08 31 0002	1261	2	E 6.3	1/4	50	11	10
08 31 0003	1262	3	E 6.3	1/4	50	11	10

outside ● DIN 3126/ISO 1173

Phillips-Recess® DIN 5260

⊕ BITS screwdrivers

for POZIDRIV/SUPADRIV® screws.



Code	No	POZIDRIV/ SUPADRIV®	outside ●	"	L mm	△▽ g	☐
08 32 0001	1270	1	E 6.3	1/4	50	10	10
08 32 0002	1271	2	E 6.3	1/4	50	11	10
08 32 0003	1272	3	E 6.3	1/4	50	11	10

outside ● DIN 3126/ISO 1173

13006 Special socket

registered design, for use on plugs
in electronic rack
Airbus A320-A340.





Code	outside ●	"	∅ mm	L mm	△▽ g	☐
08 23 0001	E 6.3	1/4	11	50	10	10


outside ● DIN 3126/ISO 1173

13007 BITS screwdriver

for use on plugs in electronic rack
Airbus A320–A340.



Code	outside " 	L mm	ΔΔ g	
08240006	$\frac{3}{32}$ E 6.3 $\frac{1}{4}$	50	10	5

outside  DIN 3126/ISO 1173

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	ΔΔ g	
96322001	1410	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	ΔΔ g	
32200001	$\frac{3}{8}$ 138	617	1	

Adaptors

with outside hexagon,
for IMPACT screwdriver
No 4030.





Code	No	outside " 	outside " 	L mm	ΔΔ g	
32210001	4035	$\frac{3}{8}$	$\frac{3}{8}$	38	34	1
33210001	4036	$\frac{3}{8}$	$\frac{1}{2}$	38	43	1

⊖ BITS screwdrivers

for slotted screws,
for IMPACT driver No 4030.





Code	No	a x b mm	outside " 	L mm	ΔΔ g	
08400010	4040	1.0 x 7	$\frac{3}{8}$	40	17	10
08400014	4041	1.4 x 9	$\frac{3}{8}$	40	19	10
08400016	4042	1.6 x 10	$\frac{3}{8}$	40	21	10
08400020	4043	2.0 x 12	$\frac{3}{8}$	40	20	10
08400015	4044	1.5 x 13	$\frac{3}{8}$	40	24	10
08400025	4045	2.5 x 16	$\frac{3}{8}$	40	30	10

⊕ BITS screwdrivers

for Phillips screws,
for IMPACT driver No 4030.





Code	No	Phillips- Recess®	outside " 	L mm	ΔΔ g	
08410002	4050	2	$\frac{3}{8}$	35	17	10
08410003	4051	3	$\frac{3}{8}$	35	17	10
08410004	4052	4	$\frac{3}{8}$	35	17	10

Phillips-Recess® DIN 5260

● BITS screwdrivers

for socket head screws,
for IMPACT driver No 4030.



Code	No	mm	outside " 	L mm	ΔΔ g	
08420005	4055	5	$\frac{3}{8}$	35	16	10
08420006	4056	6	$\frac{3}{8}$	35	16	10
08420008	4057	8	$\frac{3}{8}$	35	19	10
08420010	4058	10	$\frac{3}{8}$	35	23	10



Service work & series production MANOSKOP® – indicating and cut-out

This electromechanical torque wrench combines the "indicating" and "cut-out" functions in a single tool; the function modes can be selected independently of each other.

With a mount for interchangeable sockets and inserts and QuickRelease safety lock; rapid setting using the convenient foil keypad and large display; tactile and acoustic trigger signal.

Differing tolerance limits can be set for each joint. Visual red and green signals in the display confirm the status of the joint.

Display also works for anticlockwise torque.

7500 data records can be stored, transferred via a USB interface and evaluated on the PC.

Automatic compensation to achieve correct tightening torque even if a changed extension is entered.

Overload protection by means of acoustic and visual signals. The automatic keypad lock prevents inadvertent changes. Additional security for presets (function mode, trigger or preset value, unit of measurement, tolerance, save, deviating extension) using PIN code.

All the sensitive components are protected by the sturdy housing. The 2-component handle with its ergonomically designed green softer layers is resistant to oils, grease, fuels, brake fluids and Skydrol.

Included in the set are 2 AA NiMH rechargeable batteries, 1.2 V, 2300 mAh.

It is also possible to use 1.5 V AA batteries.

Automatic notification of the next calibration date. Simple calibration and, if required, adjustment without disassembly using Torque Tester No 7707W.

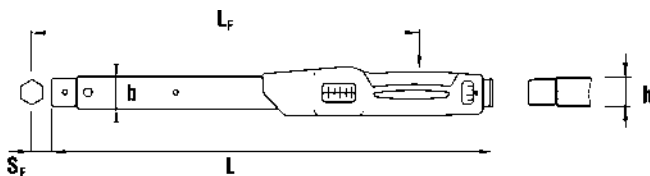
Units of measurement: N m, ft.lb, in.lb

Guaranteed maximum accuracy deviation $\pm 2\%$. With certificate.

Not for sale in the USA due to Third Party patent rights. Our own patents are pending.

(Inserts see pages 108-113)

730D Basic wrenches with tool carrier for insert tools



Code	size	Setting/display resolution			mm	b mm	h mm	L mm	L _F mm	S _F mm	$\Delta\tau$ g			
		N m	ft.lb	in.lb										
50 18 20 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	9 x 12	28	23	467	426.5	17.5	1150
50 18 20 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	14 x 18	28	23	548	515	25	1430
50 18 20 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	14 x 18	28	23	688	655	25	1830

Available from spring 2007

730DR Basic wrench with ratchet insert tool

in sturdy plastic case (size 40 in steel case)



Code	size	"	$\Delta\tau$ g
96 50 18 10	10	1/2	1663
96 50 18 20	20	1/2	2078
96 50 18 40	40	3/4	5498

7757+7732 USB cable and software for No 730D

Documentation and management of readings on a PC



Code	L m	$\Delta\tau$ g
96 58 36 24	1.5	58

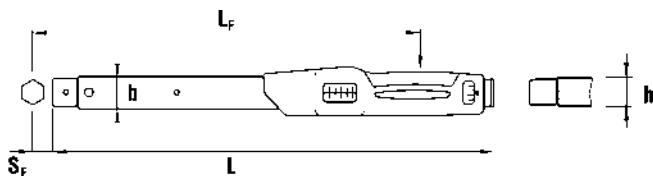
Service MANOSKOP® 730N

Clicking torque wrench with mount for interchangeable socket tools, rapid, accurate setting using QuickSelect quick-action adjuster, with QuickRelease safety lock, double stop signals, very clear twin scales with colour coded N m/ft.lb and ft.lb/inch.lb markings and long-term repeated accuracy.

The measuring element is only under load while force is being applied, no need for manual reset to zero. All the sensitive components are protected by the sturdy housing. The 2-component handle with its ergonomically designed green softer layers is resistant to oils, grease, fuels, brake fluids and Skydrol. 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. The swap-over inserts can also be used to apply torque in an anticlockwise direction. Easily adjustable without disassembly, e.g. using tester No 7707 W. Guaranteed maximum accuracy deviation $\pm 3\%$. With certificate.

(Inserts see pages 108-113)

730N Basic wrenches with tool carrier for insert tools



730N/10



Code	size					Fine scale		b	h	L	L _F	S _F	Δ
							mm	mm	mm	mm	mm	mm	g
50 18 1002	2	2–20 N m	20–180 in.lb	1 N m	10 in.lb	0.2 N m	9 x 12	28	23	275	226	17.5	740
50 18 1005	5	10–50 N m	7–37 ft.lb	5 N m	1 ft.lb	0.25 N m	9 x 12	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	9 x 12	28	23	386	336	17.5	1210
50 18 1012	12	25–130 N m	20–95 ft.lb	10 N m	2.5 ft.lb	0.5 N m	14 x 18	28	23	421	379	25	1356
50 18 1020	20	40–200 N m	30–150 ft.lb	10 N m	5 ft.lb	1 N m	14 x 18	28	23	467	424.5	25	1489
50 18 1040	40	80–400 N m	60–300 ft.lb	20 N m	10 ft.lb	2 N m	14 x 18	28	23	607	564.5	25	1888
50 18 1065	65	130–650 N m	100–480 ft.lb	50 N m	20 ft.lb	2.5 N m	14 x 18	30.6	25.6	890	848	25	3400
50 58 1005	a/5	90–450 in.lb	7–37 ft.lb	50 in.lb	1 ft.lb	2.5 in.lb	9 x 12	28	23	330	280.5	17.5	1054
50 58 1002	a/2	20–180 in.lb	1.5–15 ft.lb	10 in.lb	0.5 ft.lb	2 in.lb	9 x 12	28	23	275	226	17.5	740
50 58 1010	a/10	180–900 in.lb	15–75 ft.lb	100 in.lb	2.5 ft.lb	5 in.lb	9 x 12	28	23	386	336	17.5	1210
50 58 1020	a/20	350–1800 in.lb	30–150 ft.lb	100 in.lb	5 ft.lb	10 in.lb	14 x 18	28	23	467	424.5	25	1489
50 58 1040	a/40	60–300 ft.lb	800–3600 in.lb	20 ft.lb	100 in.lb	2 ft.lb	14 x 18	28	23	607	564.5	25	1888

Mechanical torque wrench 730N for rapid, accurate and safe working.



QuickRelease safety lock

Firm locking and rapid change of insert tools thanks to the QuickRelease safety lock.



Ring scale

Fine setting for the black measuring range on the double scale



No need for manual reset to zero

thanks to the tried-and-tested wear-free triggering cam system

QuickSelect Rapid setting

Rapid, accurate, safe setting action: pull out the knob, turn it to the required reading with just a few revolutions and push it in again to lock it.

Easily readable double scale

The colour differentiation between the Nm and ft.lb scales simplifies fine setting.

Service MANOSKOP® 730

Torque wrenches offering quick adjustment, with cut-out, with QuickRelease safety lock (size 5–65) dual signal (size 2–40), dual scale N m/ft.lb resp. N m/inch.lb. (size 5–80), long term accuracy and facility to accept insert/shell tools.

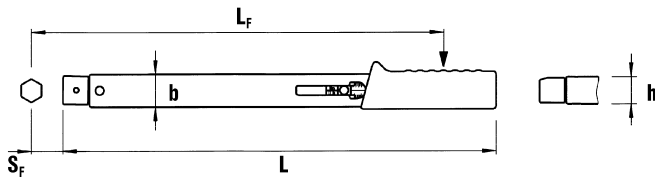
The robust steel tube completely encloses all working parts. Any force applied to the tool after the "click" or applied in the opposite direction to the current function – e.g. forcible loosening of a jammed screw – does not act on the trigger mechanism and cannot cause damage to it. Reversible insert/shell tools allow anticlockwise operation.

Recalibration without dismantling using Torque Tester No 7707 W.

Guaranteed accuracy $\pm 4\%$. With certificate.

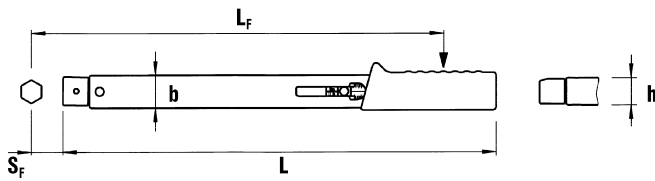
(Insert/shell tools see pages 108-113)

730 Basic wrenches with tool carrier for insert tools



730/2

Code	size				mm	b mm	h mm	L mm	L _F mm	S _F mm	Δ g
50180002	2	4–20 N m	0.5 N m		9 x 12	27.5	23	178.5	174	17.5	315
50180004	4	8–40 N m	1 N m		9 x 12	27.5	23	222	218	17.5	395
50580002	a/2	30–175 in.lb	5 in.lb		9 x 12	27.5	23	178.5	174	17.5	315
50580004	a/4	70–350 in.lb	10 in.lb		9 x 12	27.5	23	222	218	17.5	395

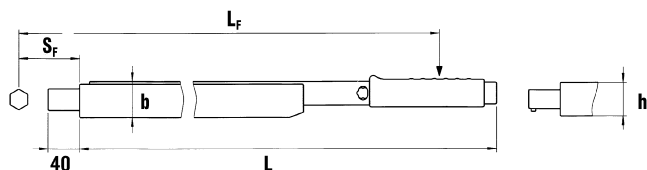


730/5



Code	size					mm	b mm	h mm	L mm	L _F mm	S _F mm	Δ g
50180005	5	6–50 N m	5–36 ft.lb	2 N m	1 ft.lb	9 x 12	28	23	315	288	17.5	805
50180010	10	20–100 N m	15–72.5 ft.lb	2.5 N m	2.5 ft.lb	9 x 12	28	23	370	343	17.5	1020
50180012	12	25–130 N m	20–95 ft.lb	2.5 N m	2.5 ft.lb	14 x 18	28	23	410	390	25	1100
50180020	20	40–200 N m	30–145 ft.lb	5 N m	5 ft.lb	14 x 18	28	23	455	435	25	1250
50180040	40	80–400 N m	60–300 ft.lb	10 N m	10 ft.lb	14 x 18	28	23	590	570	25	1655
50180065	65	130–650 N m	100–480 ft.lb	20 N m	20 ft.lb	14 x 18	30.6	25.6	875	855	25	3480
50580005	a/5	6–50 N m	50–440 in.lb	2 N m	10 in.lb	9 x 12	28	23	315	288	17.5	805
50580010	a/10	20–100 N m	180–880 in.lb	2.5 N m	20 in.lb	9 x 12	28	23	370	343	17.5	965
50580012	a/12	25–130 N m	225–1150 in.lb	2.5 N m	25 in.lb	14 x 18	28	23	410	390	25	1100
50580020	a/20	40–200 N m	350–1750 in.lb	5 N m	50 in.lb	14 x 18	28	23	455	435	25	1250

730 Basic wrench with tool carrier for shell tools, registered design



Code	size					mm	b mm	h mm	L mm	L _F mm	S _F mm	Δ g
50180080	80	160–800 N m	120–600 ft.lb	20 N m	20 ft.lb	24.5 x 28	46	43	970	990	95	4925

Use shell adaptor No 7370/80 to make 14 x 18 mm insert tools fit.

Standard MANOSKOP® 720Nf

Torque wrenches with dual "Stop" signal and cut-out, micrometer type adjustment, dual scale N m/ft.lb and long service life.

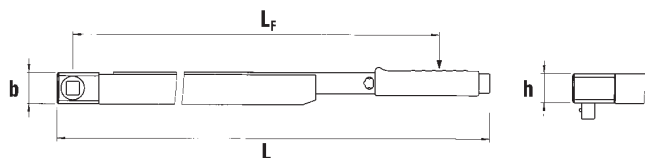
Robust steel tube and light alloy "U"-profile protect all working parts.

Push through square drive for right and left hand tightening.

Recalibration without dismantling using Torque Tester No 7707 W.

Guaranteed accuracy $\pm 4\%$. With certificate.

720Nf Torque wrench with square drive



Code	size					■	b mm	h mm	L mm	L _F mm	S _F mm	Δg
50190081	80	160–800 N m	120–600 ft.lb	20 N m	20 ft.lb	3/4	45	42	1034	938	0	5650

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	Δg
81370002	7301	720/15; 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
81370003	7302	720/30; 721/30; 730/40; 730N/40; 730Na/40; 730D/20	680	535

Inlays for plastic case

Code	for torque wrenches No	Δg g
83071004	720/15; 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
83071002	720/30; 721/30; 730/40; 730N/40; 730Na/40; 730D/20	113

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	Δg g	
08090002	2	C 6.3	1/4	34	4	10
08090002	2	C 6.3	1/4	34	4	10

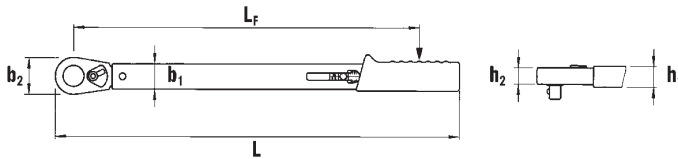
outside DIN 3126/ISO 1173



Standard MANOSKOP® 721

Torque wrenches with dual "Stop" signal and cut-out, rapid adjustment, dual scale N m/ft.lb and long service life. Robust steel tube protects all working parts. 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. Recalibration without dismantling using Torque Tester No 7707 W. Guaranteed accuracy $\pm 4\%$. With certificate.

721 Torque wrenches with reversible ratchet



721/15

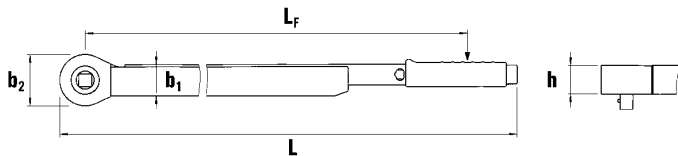
Code	size					"	b ₁ mm	b ₂ mm	h ₁ mm	h ₂ mm	L mm	L _F mm	ΔΔ g
50200005	5	6–50 N m	5–36 ft.lb	2 N m	1 ft.lb	3/8	28	27.5	23	14.5	352	293	900
50200015	15	30–150 N m	25–110 ft.lb	5 N m	5 ft.lb	1/2	28	41	23	18	452	387	1305
50200030	30	60–300 N m	50–220 ft.lb	10 N m	10 ft.lb	1/2	28	44	23	27.5	553	486	1720

size 30 with push through square drive

Standard MANOSKOP® 721Nf

Torque wrenches with dual "STOP" signal and cut-out, micrometer type adjustment, dual scale N m/ft.lb and long service life. Robust steel tube and light alloy "U"-profile protect all working parts. Push through square drive for right and left hand tightening. Easily adjustable without disassembly using tester No 7707 W. Guaranteed accuracy $\pm 4\%$. With certificate.

721Nf Torque wrenches with ratchet



721Nf/80



721Nf/100

Code	size					"	b ₁ mm	b ₂ mm	h mm	L mm	L _F mm	ΔΔ g
50200081	80	160–800 N m	120–600 ft.lb	20 N m	20 ft.lb	3/4	46.5	76	42	1051	938	6770
96502001	100	200–1000 N m	150–725 ft.lb	25 N m	25 ft.lb	3/4	46.5	76	42	1504	1365	6970

Industrial MANOSKOP® 755

Torque wrenches with tool carrier for interchangeable insert tools, dual stop signal and cut-out.

Especially light and handy. Robust steel tube encloses all working parts.

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. Reversible insert tools enable anti-clock wise operation.

Guaranteed accuracy $\pm 4\%$.

Industrial Manoskop No 755 is designed for continuous production work. Supplied without quick adjustment facility, the cut-out value has to be set using Torque Tester No 7707 W.

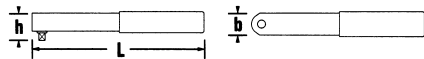
If required, can be supplied with a preset trigger setting (price on application). (Inserts see pages 108-113)

755R/1 Industrial MANOSKOP

Torque wrench with built-in ratchet, irrespective of the point of application of force, dual stop signal and cut-out.

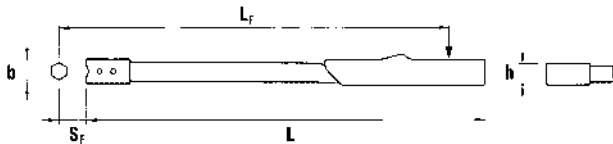
Guaranteed accuracy $\pm 4\%$.

Cut-out setting with aid of Setting Gauge.



Code			"	b mm	h mm	L mm	Δ g
50 100001	1.5–12.5 N m	1.0–9.0 ft.lb	1/4	22	18	173.5	335

755 Basic wrenches with tool carrier for insert tool



Code	size				b mm	h mm	L mm	L _F mm	S _F mm	Δ g
50010004	4	4–40 N m	4–30 ft.lb	9 x 12	22	18	201	172	17.5	522
50010010	10	20–100 N m	15–74 ft.lb	9 x 12	28	24	318	289	17.5	635
50010020	20	40–200 N m	30–147 ft.lb	14 x 18	28	24	457	435	25	1060
50010030	30	60–300 N m	40–220 ft.lb	14 x 18	28	24	609	587	25	1210



TORSIOMAX 775

Torque Screwdriver with cut-out for controlled tightening in cN m and in.lb.

With 1/4" inside hexagon (F 6.3 DIN 3126/ISO 1173), with cut-out, for one-off jobs and production runs, disengaging clutch coupling, clockwise and counterclockwise operation, DIN EN ISO 6789, Type II, Category D.

775 Torque screwdriver "TORSIOMAX"

The measuring element:

The measuring element is a screw compression spring.

Adjustment:

The level is set steplessly via a rotary micrometer scale.

Safe working methods:

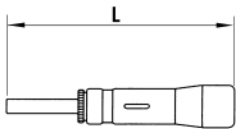
These clicking torque screwdrivers are equipped with a ratchet which disengages when the preset torque level is reached – preventing excessive torque being applied. Guaranteed maximum accuracy deviation $\pm 6\%$. With certificate.

A firm grip:

The shape of the handle and its surface texture ensure safe and accurate transfer of torque.

Insert tools (bits):

For all 1/4" hex E 6.3, Phillips-head screws, POZIDRIV/SUPADRIV®, straight-slot, TORX®, hex bits (see pp. 87, 88). For very small joints, bits with a 4 mm hex drive and an adaptor No 31 15/2 for BITS screwdriver inserts, Type C4, and external hex 1/4" (E 6.3 DIN 3126/ISO 1173) are required (see pp. 84, 87).



775/3



775/12



775/30



775/50



775/100

Code	size			inside O	L mm	Δ g
51060003	3 ¹⁾	2–30 cN m	0.2 cN m	F 6.3	105	210
51060012	12 ²⁾	20–120 cN m	1 cN m	F 6.3	157	195
51060030	30 ²⁾	40–300 cN m	1 cN m	F 6.3	160	215
51060050	50 ²⁾	100–500 cN m	2.5 cN m	F 6.3	205	455
51060100	100 ³⁾	200–1000 cN m	5 cN m	F 6.3	235	770
51460003	a/3 ¹⁾	0.2–3 in.lb	0.02 in.lb	F 6.3	105	210
51460012	a/12 ²⁾	2–12 in.lb	0.1 in.lb	F 6.3	157	350
51460050	a/50 ²⁾	10–50 in.lb	0.25 in.lb	F 6.3	205	606

¹⁾ with a swivelling handle-end to improve tool control; and with a clamping screw for locking the preset.

²⁾ with an additional locking mechanism to prevent the selected torque being inadvertently adjusted.

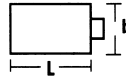
³⁾ with screw-on handles for increasing the force applied for large torques.

Torque limiter for spark plugs

Torque limiters with cut-out measure directly on spark plug, thus ensuring high accuracy even when used with several accessory tools. When the pre-set torque is reached the cut-out operates – "Pull-on" is impossible. Pre-set value remains with these tools. Due to the built-in left hand lock, spark plugs can be tightened as well as loosened. Small overall dimensions avoid access problems. Universal Torque Limiter No 7600 is set to required cut-on by means of pin.

7600 Universal torque limiter

capacity 15–35 N m, with direct adjustment and left hand lock, with adjustment pin.



Code			■	○	b mm	L mm	△ g
50160035	15–35 N m	5 N m	3/8	3/8	28	53	236

with in-built torque trip value if requested (price available on request)

ES 7600 Adjustment pin

for No 7600.

Code	△ g	
59131001	15	10

7620 Torque limiter

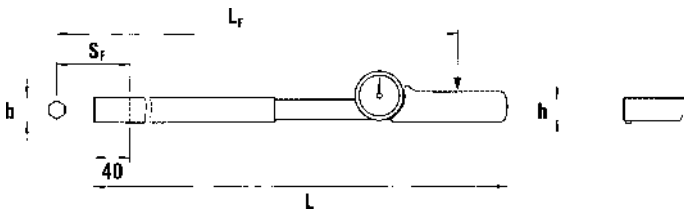
with built-in universal joint, cut-out set at 20 N m, left hand lock.



Code	N m	■	○	b mm	L mm	△ g
50170020	20	3/8	3/8	28	103	313

71/80 MANOSKOP® 71 with integrated force compensator

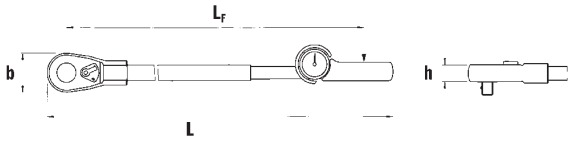
Torque wrench, indicating, with carrier for interchangeable shell tools, registered design, use shell adaptor No 7370/80 to make 14 x 18 mm insert tools fit (max. 400 N m), with pointer follower, scale is made of luminescent light yellow special film enabling clear readings even in poor light conditions, dual scale N m/ft.lb. Handle with integrated force compensator. Measuring element is a deflection plate in the handle, with overload cut-out, anticlockwise by turning over. Guaranteed accuracy $\pm 4\%$. With certificate. Insert tools see pages 108-113.



Code						b mm	h mm	L mm	L _F mm	S _F mm	△ g
50030080	160–800 N m	120–600 ft.lb	10 N m	10 ft.lb	24.5 x 28	28	24	1048	1050	95	2030

71aR/80 MANOSKOP® 71 with integrated force compensator

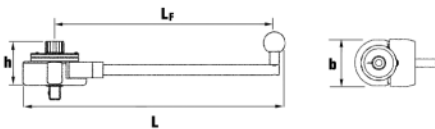
Indicating torque wrench with a permanent ratchet and pointer follower. Scale is made of luminescent light yellow special film enabling clear readings even in poor light conditions. Twin scales ft.lb/N m. Dial gauge has a protective ring as additional protection against knocks. Not suitable for anticlockwise use. Boxed. Guaranteed accuracy $\pm 4\%$. With certificate.



Code					"	b mm	h mm	L mm	L _F mm	Δ _g g
50450080	100–600 ft.lb	160–800 N m	10 ft.lb	10 N m	3/4	70	30	1152	1060	4280

73Nm/15 Friction gauge

Indicating torque wrench with permanently attached square drive and trailing pointer dial. No needle wobble during measurements. Lightweight construction through use of aluminium. Guaranteed maximum accuracy deviation $\pm 4\%$. With certificate.



Code			"	b mm	h mm	L mm	L _F mm	S _F mm	Δ _g g
50240015	2–15 N m	0.5 N m	1/2	72	50	298.5	250	0	676

TORSIOMETER 760

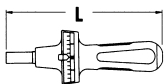
Indicating Torque Screwdriver with measuring element = torsional leaf spring, for right hand tightening (with pointer follower) and for left hand tightening.

760 Torque screwdrivers TORSIOMETER

With 1/4" inside hexagon (F 6.3 DIN 3126), with comparison scale in.lb. Guaranteed accuracy $\pm 4\%$.

Insert tools:

All tools and accessories with hexagon drive shaft E 6.3 (1/4") DIN 3126/ISO 1173 are safely held in tool carrier. BITS screwdrivers (see page 87, 88). For use with 1/4"-sockets, please order adaptor No 3115 (see page 87).



Code	size				inside O	L mm	Δ _g g
51040007	7.5	15–75 cN m	1.5–6.5 in.lb	2.5 cN m	F 6.3	185	231
51040015	15	30–150 cN m	3–13 in.lb	5 cN m	F 6.3	185	435
51040030	30	60–300 cN m	6–26 in.lb	10 cN m	F 6.3	185	231
51040060	60	120–600 cN m	12–52 in.lb	20 cN m	F 6.3	185	440

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).

Electronic angle-controlled torque wrench Sensotork® 713

Simple, flexible operation thanks to operator guidance on large-format display.

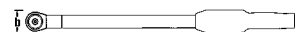
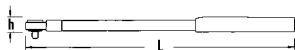
Very broad measuring range (5 % to 100 % of rated value) with display deviation value of ± 1 % of the current reading. Display deviation value of angle is ± 1 %.

Repeated joint can be collated to form a single menu-guided sequence. (Insert tools see pages 108-113)

713R Electronic angle-controlled torque wrenches Sensotork®



Electronic angle-controlled torque wrench with insert tool pawl-action ratchet, with QuickRelease safety lock, for clockwise and anticlockwise use, readings independent of point of application of force (sizes 6 and 20), units of measurement: N m, ft.lb, in.lb, advance warning points for visual, tactile and acoustic signals, torque and angle are simultaneously visible, convenient angle measurement across a very wide angle range without a reference arm, choice of individual insert lengths, maintenance friendly due to easy adjustment and automatic reminder of next calibration date, individual identification possible, tamper-proof due to password protection, meets requirements of DKD-R 3-7, Class 2 and DIN EN ISO 6789, with works certificate in accordance with DIN EN 10204, supplied in sturdy plastic case (size 40 in sturdy steel case). Included are 3 rechargeable cells, AA/LR6 RAM, 1.5 V, 1800 mAh. However, other batteries and cells may also be used: AA/LR6, 1.5 V batteries or AA/LR6, 1.2 V rechargeable cells.



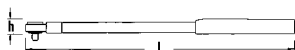
Code	size	N m	ft.lb	"	mm	b mm	h mm	L mm	Δ g	Δ g with box
96 50 16 06	6	3-60	2.5-44	$\frac{3}{8}$	9 x 12	50	33.5	378	856	1500
96 50 16 20	20	10-200	7-148	$\frac{1}{2}$	14 x 18	50	33.5	608	1552	2430
96 50 16 40	40	20-400	15-296	$\frac{3}{4}$	14 x 18	50	33.5	838	2332	5555

Electronic torque wrench Sensotork® 712

712R Electronic torque wrench Sensotork®



Electronic torque wrench with option of attaching interchangeable insert tools, same design as No 713 but without angle function.



Code	size	N m	ft.lb	"	mm	b mm	h mm	L mm	Δ g	Δ g with box
96 50 15 06	6	3-60	2.5-44	$\frac{3}{8}$	9 x 12	50	33.5	378	856	1500
96 50 15 20	20	10-200	7-148	$\frac{1}{2}$	14 x 18	50	33.5	608	1552	2430
96 50 15 40	40	20-400	15-296	$\frac{3}{4}$	14 x 18	50	33.5	838	2332	5555

Accessories for electronic angle-controlled torque wrench No 713 and electronic torque wrench No 712

7757+7052 USB cable and software for No 712R, 713R

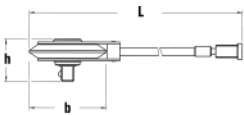
for statistical analysis of torque readings and recording series of readings on the PC.



Code	L m	Δ g
96 58 36 22	1.5	100

7380N/7385N Torque angle gauges

registered design, 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 degree of angle recommended. Whether 1/2" or 3/4" sq.dr. Torque Angle Gauge is used depends upon the square drive of the appropriate torque wrench employed.



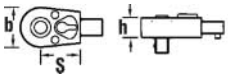
Code	No	□	■	□	□	b	h	L	Δ
		"	"	°	°	mm	mm	mm	g
54010001	7380N	1/2	1/2	± 360°	2°	78	43	416	494
54010002	7385N	3/4	3/4	± 360°	2°	78	76	416	720

Insert/shell tools for torque wrenches

725QR QuickRelease ratchet insert tool



reversible, with QuickRelease safety lock, size 4: 22 teeth, sizes 5 and 10: 30 teeth, size 20: 36 teeth.



Code	size	□	■	b	h	S	Δ
		"	mm	mm	mm	mm	g
58253004	4	1/4	9 x 12	22	14.5	17.5	60
58253005	5	3/8	9 x 12	29	14.5	28*	130
58253010	10	1/2	9 x 12	29	14.5	28*	141
58253020	20	1/2	14 x 18	41	18	38.5*	325

Maximum continuous loads of ratchet insert tools are limited to: 725QR/4 - 40 N m, 725QR/5 and 725QR/10 - 100 N m, 725QR/20 - 250 N m.

Limits must not be exceeded when these insert tools are used with torque wrenches of larger capacity.

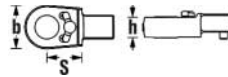
* Caution! Modified settings on torque wrench (refer to note on page 120)

725/B 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 (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	size	inside	□	b	h	S	Δ
		"	mm	mm	mm	mm	g
58255004	4	1/4	9 x 12	22	14	17.5	54
58255005	5	5/16	9 x 12	29	14.5	28*	117

* Caution! Modified settings on torque wrench (refer to note on page 120)

725L/5 Ratchet insert tool

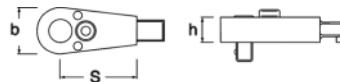
reversible, 30 teeth.

Caution! Modified settings on torque wrench (refer to note on p. 120).

This ratchet insert tool has the same extension length as ring insert tool

No 732G/10 (see p. 111) and square drive insert tool No 734L/5

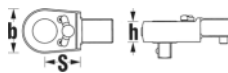
(see p. 109).



Code	□	■	b	h	S	Δ
	"	mm	mm	mm	mm	g
58151005	3/8	9 x 12	27.5	14.5	45	164

725/4 Ratchet insert tool

reversible, 22 teeth.



Code	□	■	b	h	S	Δ
	"	mm	mm	mm	mm	g
58254004	1/4	9 x 12	22	14.5	17.5	62

Maximum continuous loads of ratchet insert tools are limited to: 725/4 - 40 N m.

Limits must not be exceeded when these insert tools are used with torque wrenches of larger capacity.



735 Ratchet insert tools

reversible, 60 teeth.



Code	size	"	mm	b mm	h mm	S mm	ΔΔ g
58 25 00 05	5	3/8	9 x 12	33	24	17.5	136
58 25 00 10	10	1/2	9 x 12	33	24	17.5	147
58 25 00 20	20	1/2	14 x 18	43	26.2	25	302
58 25 00 40	40	3/4	14 x 18	50	30.7	25	467

Maximum continuous loads of ratchet insert tools are limited to: 735/5 and 735/10 - 100 N m, 735/20 - 300 N m, 735/40 - 650 N m. Limits must not be exceeded when these insert tools are used with torque wrenches of larger capacity.

735/80 Ratchet shell tool

with push through square drive, registered design, 30 teeth.



Code	"	mm	b mm	h mm	S mm	ΔΔ g
58 25 00 80	3/4	24.5 x 28	76	43	95	2000

734 Square drive insert tools



Code	size	"	mm	b mm	h mm	S mm	ΔΔ g
58 24 00 04	4	1/4	9 x 12	20	14	17.5	71
58 24 00 05	5	3/8	9 x 12	20	14	17.5	76
58 24 00 10	10	1/2	9 x 12	20	14	17.5	82
58 24 00 20	20	1/2	14 x 18	27	18	25	203
58 24 00 40	40	3/4	14 x 18	40	25	25	396

Caution: Maximum continuous loads of square drive insert tools are limited to: 734/4 - 40 N m, 734/5 - 80 N m, 734/10 - 100 N m, 734/20 - 300 N m, 734/40 - 650 N m.

Limits must not be exceeded when these insert tools are used with torque wrenches of larger capacity.

734/80 Square drive shell tool

registered design.



Code	"	mm	b mm	h mm	S mm	ΔΔ g
58 24 00 80	3/4	24.5 x 28	42	42	95	1200

734F Square drive insert tools

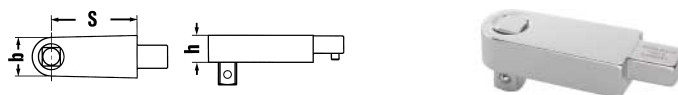
with permanently attached, captive square drive.



Code	size	"	mm	b mm	h mm	S mm	ΔΔ g
58 24 10 04	4	1/4	9 x 12	22	14	17.5	72
58 24 10 05	5	3/8	9 x 12	22	14	17.5	75

734L/5 Square drive insert tool

Caution! Modified settings on torque wrench (refer to note on p. 120). This square-drive insert tool has the same extension length as ring insert tool No 732G/10 (see p. 111) and ratchet insert tool No 725L/5 (see p. 108).

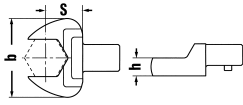


Code	"	mm	b mm	h mm	S mm	ΔΔ g
58 24 20 05	3/8	9 x 12	20	14	45	141



731 Open ended insert tools

9 x 12 mm



Code	size	Ø mm	b mm	h mm	S mm	△ g
5821 1007	10	7	22	5	17.5	40
5821 1008		8	22	5	17.5	39
5821 1009		9	26	5.5	17.5	38
5821 1010		10	26	5.5	17.5	42
5821 1011		11	26	5.5	17.5	41
5821 1012		12 ¹⁾	30	7	17.5	43
5821 1013		13	30	7	17.5	48
5821 1014		14	35	8	17.5	52
5821 1015		15	35	8	17.5	51
5821 1016		16	38	8.5	17.5	58
5821 1017		17	38	8.5	17.5	60
5821 1018		18	42	9	20*	71
5821 1019		19	42	9	20*	74

¹⁾ For flare nuts of hydraulic pipes on French vehicles

9 x 12 mm

Code	size	Ø "	b mm	h mm	S mm	△ g
5861 1016	a/10	1/4	22	5	17.5	36
5861 1020		5/16	22	5	17.5	53
5861 1024		3/8	26	5.5	17.5	38
5861 1028		7/16	26	5.5	17.5	37
5861 1032		1/2	30	7	17.5	44
5861 1034		9/16	35	8	17.5	49
5861 1036		5/8	38	8.5	17.5	64
5861 1038		11/16	42	9	20*	76
5861 1040		3/4	42	9	20*	73

14 x 18 mm

Code	size	Ø mm	b mm	h mm	S mm	△ g
5821 4013	40	13	30	7	25	128
5821 4014		14	35	8	25	129
5821 4015		15	35	8	25	132
5821 4016		16	38	9	25	140
5821 4017		17	38	9	25	136
5821 4018		18	42	10	25	147
5821 4019		19	42	10	25	147
5821 4021		21	50	11	25	171
5821 4022		22	50	11	25	165
5821 4024		24	53	12	25	167
5821 4025		25	53	12	25	170
5821 4027		27	60	13	30*	219
5821 4030		30	66	14	30*	245
5821 4032		32	66	14	32.5*	246
5821 4034		34	66	14	32.5*	239
5821 4036		36	74	15	32.5*	275
5821 4038		38	74	15	32.5*	265
5821 4041		41	82	15	36.5*	307

* Caution! Modified settings on torque wrench (refer to note on page 120).

14 x 18 mm.

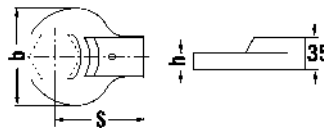
Code	size	Ø "	b mm	h mm	S mm	△ g
5861 4028	a/40	7/16	30	7	25	127
5861 4032		1/2	30	7	25	125
5861 4034		9/16	35	8	25	129
5861 4036		5/8	38	9	25	136
5861 4038		11/16	42	10	25	148
5861 4040		3/4	42	10	25	144
5861 4042		13/16	50	11	25	171
5861 4044		7/8	50	11	25	165
5861 4046		15/16	53	12	25	177
5861 4048		1	60	13	30*	224
5861 4052		1 1/8	66	14	30*	258

* Caution! Modified settings on torque wrench (refer to note on page 120).

731 Open ended shell tools

registered design.

24.5 x 28 mm

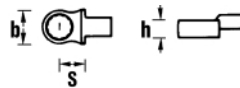


Code	size	Ø mm	b mm	h mm	S mm	△ g
5821 8024	80	24	50	13	95	601
5821 8027		27	56	14	95	620
5821 8030		30	63	15	95	655
5821 8032		32	67	15	95	670
5821 8034		34	72	15	95	699
5821 8036		36	74	15	95	740
5821 8041		41	84	16	95	810
5821 8046		46	94	17	95	867
5821 8050		50	104	18	95	1010
5821 8055		55	114	19	95	1150
5821 8060		60	124	20	95	1330

732 Ring insert tools

AS-drive

9 x 12 mm



Code	size	Ø mm	b mm	h mm	S mm	△ g
5822 1007	10	7	13	8	17.5	37
5822 1008		8	14.2	8	17.5	40
5822 1010		10	17.2	9	17.5	44
5822 1011		11	18.5	9	17.5	41
5822 1012		12	20.5	11	17.5	49
5822 1013		13	21.5	11	17.5	56
5822 1014		14	22.5	11	17.5	52
5822 1015		15	24.5	12	17.5	52
5822 1016		16	26	12	17.5	54
5822 1017		17	27	13	17.5	59
5822 1018		18	28	13	17.5	56
5822 1019		19	30.5	13	17.5	65
5822 1021		21	33	15	17.5	71
5822 1022		22	34.5	15	17.5	74

9 x 12 mm

Code	size	"	b mm	h mm	S mm	△△ g
58 62 10 16	a/10	1/4	13	8	17.5	36
58 62 10 20		5/16	14.2	8	17.5	37
58 62 10 24		3/8 1)	17.2	9	17.5	37
58 62 10 28		7/16	18.5	9	17.5	40
58 62 10 32		1/2	21.5	11	17.5	53
58 62 10 34		9/16	22.5	11	17.5	52
58 62 10 36		5/8	26	12	17.5	54
58 62 10 38		11/16	28	13	17.5	58
58 62 10 40		3/4	30.5	13	17.5	58
58 62 10 42		13/16	33	15	17.5	68
58 62 10 44		7/8	34.5	15	17.5	69

1) For Volvo aero-engines, types "JAS"

14 x 18 mm

Code	size	mm	b mm	h mm	S mm	△△ g
58 22 40 13	40	13	22.5	11	25	130
58 22 40 14		14	23	11	25	123
58 22 40 15		15	24	11	25	128
58 22 40 16		16	25.5	12	25	133
58 22 40 17		17	27	12	25	135
58 22 40 18		18	29	13	25	134
58 22 40 19		19	30.5	13	25	138
58 22 40 21		21	33	15	25	144
58 22 40 22		22	34.5	15	25	145
58 22 40 24		24	37.5	15	25	153
58 22 40 27		27	42.5	17	25	162
58 22 40 28		28	45.5	19	25	175
58 22 40 30		30	46	19	25	182
58 22 40 32		32	47.5	19	25	181
58 22 40 34		34	52	19	28*	210
58 22 40 36		36	54	19	28*	203
58 22 40 41		41	60	20	30*	240

* Caution! Modified settings on torque wrench (refer to note on page 120).

14 x 18 mm

Code	size	"	b mm	h mm	S mm	△△ g
58 62 40 32	a/40	1/2	22.5	11	25	122
58 62 40 34		9/16	23	11	25	122
58 62 40 36		5/8	25.5	12	25	134
58 62 40 38		11/16	29	13	25	132
58 62 40 40		3/4	30.5	13	25	138
58 62 40 42		13/16	33	15	25	142
58 62 40 44		7/8	34.5	15	25	147
58 62 40 46		15/16	37.5	15	25	151
58 62 40 48		1	41	17	25	160

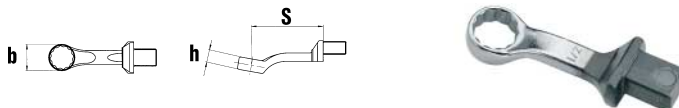


732 Ring insert tools

AS-drive HPQ

9 x 12 mm

Caution! Modified settings on torque wrench (refer to note on page 120). HPQ high performance steel. Ring end is chrome plated, square drive is gunmetal finish.



Code	size	"	b mm	h mm	S mm	△△ g
58 62 11 16	aL/10	1/4	10.2	5.2	50	42
58 62 11 20		5/16	11.8	6.4	50	43
58 62 11 24		3/8	14.6	7	50	46
58 62 11 28		7/16	16.7	8	50	48
58 62 11 32		1/2	18.5	8.7	50	42
58 62 11 34		9/16	20.7	9.5	50	60
58 62 11 36		5/8	22.6	10.5	50	62

For assembling and dismantling aero-engines.

732 Ring insert tools

AS-drive HPQ

9 x 12 mm

Caution! Modified settings on torque wrench (refer to note on p. 120). This insert tool has the same extension length as insert tool No 725L/5 (see p. 108) and square-drive insert tool No 734L/5 (see p. 109)



Code	size	mm	b mm	h mm	S mm	△△ g
58 62 00 07	G/10	7	11.5	6	45	31
58 62 00 08		8	12.4	6	45	33
58 62 00 09		9	14	8	45	40
58 62 00 10		10	15.6	8	45	44
58 62 00 13		13	19.3	9.2	45	60

Code	size	"	b mm	h mm	S mm	△△ g
58 62 12 16	aG/10	1/4	10.4	6	45	28
58 62 12 20		5/16	12.4	6	45	31
58 62 12 24		3/8	14.9	8	45	42
58 62 12 28		7/16	17	8	45	43
58 62 12 32		1/2	19	9.2	45	58
58 62 12 34		9/16	21	9.2	45	58
58 62 12 36		5/8	23	12	45	74

for assembling and dismantling aero-engines.

Tool holder

with tool carrier to receive insert tools (without torque function).

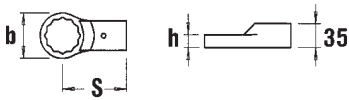


Code	No	mm	L mm	△△ g
18 20 00 01	1820	9 x 12	382.5	490
18 21 00 01	1821	14 x 18	575	720

732 Ring insert tools

AS-drive

registered design
24.5 x 28 mm



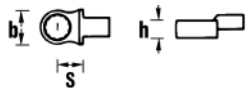
Code	size	size mm	b mm	h mm	S mm	ΔΔ g
58 22 80 24	80	24	36	15	95	605
58 22 80 27		27	40.5	15	95	610
58 22 80 30		30	46	16	95	630
58 22 80 32		32	49	16	95	635
58 22 80 34		34	52	17	95	650
58 22 80 36		36	54	17	95	650
58 22 80 41		41	61	18	95	675
58 22 80 46		46	66	19	95	720
58 22 80 50		50	75	20	95	803
58 22 80 55		55	84	21	95	889
58 22 80 60		60	93	22	95	995

Code	size	size "	b mm	h mm	S mm	ΔΔ g
58 62 80 46	a/80	1 ⁵ / ₁₆ 1)	36	14	95	604
58 62 80 50		1 1 ¹ / ₁₆ 1)	40.5	14	95	608

1) for jet engine pins (Airbus A320/A321)

732TX TORX® insert tools

9 x 12 mm



Code	size	size	b mm	h mm	S mm	ΔΔ g
58 29 10 06	10	E6	13	8	17.5	40
58 29 10 08		E8	14.2	8	17.5	45
58 29 10 10		E10	17.2	9	17.5	45
58 29 10 12		E12	18.5	9	17.5	50
58 29 10 14		E14	21.5	11	17.5	60

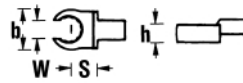
14 x 18 mm

Code	size	size	b mm	h mm	S mm	ΔΔ g
58 29 40 14	40	E14	22.5	11	25	130
58 29 40 18		E18	24	11	25	135
58 29 40 20		E20	29	13	25	150
58 29 40 24		E24	30.5	13	25	150

733 Open ring insert tools

AS-drive

9 x 12 mm



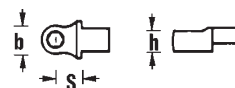
Code	size	size mm	b mm	h mm	W mm	S mm	ΔΔ g
58 23 10 10	10	10	21.5	11	7.1	17.5	57
58 23 10 11		11	22.5	11	8.6	17.5	55
58 23 10 12		12	24.5	12	9	17.5	59
58 23 10 13		13	26	12	10	17.5	55
58 23 10 14		14	27	13	11	17.5	60
58 23 10 16		16	30.5	13	13	17.5	65
58 23 10 17		17	31.5	13	14	17.5	64
58 23 10 18		18	33	15	14.8	17.5	74
58 23 10 19		19	34	15	15.8	17.5	80
58 23 10 21		21	38.5	15	16.2	20*	88
58 23 10 22		22	39.5	15	17	20*	92
58 23 10 24		24	40	15	18	20*	75

* Caution! Modified settings on torque wrench (refer to note on page 120).

Code	size	size "	b mm	h mm	W mm	S mm	ΔΔ g
58 63 10 24	a/10	3 ³ / ₈	21.5	11	7.1	17.5	55
58 63 10 28		7 ⁷ / ₁₆	22.5	11	8.6	17.5	56
58 63 10 32		1 ¹ / ₂	26	12	9.5	17.5	58
58 63 10 34		9 ⁹ / ₁₆	27.5	13	11	17.5	59
58 63 10 36		5 ⁵ / ₈	30.5	13	12.7	17.5	61
58 63 10 38		11 ¹¹ / ₁₆	33	15	14	17.5	48
58 63 10 40		3 ³ / ₄	34	15	15.8	17.5	76

736 BIT holder insert tools

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).

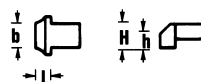


Code	size	inside size mm	size "	b mm	h mm	S mm	ΔΔ g	
58 26 10 10	10	D 8	5 ⁵ / ₁₆	9 x 12	16	12.5	17.5	47
58 26 26 10	10-1	D 6.3	1 ¹ / ₄	9 x 12	14	10	17.5	45
58 26 10 40	40	D 8	5 ⁵ / ₁₆	14 x 18	16	12.5	25	112

inside ○ DIN 3126/ISO 1173

737 Blank end insert tools

gun 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.

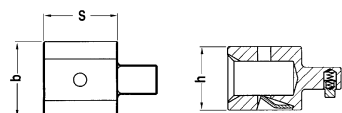


Code	size	Welding surface h x b mm	size mm	H mm	L mm	ΔΔ g
58 27 00 10	10	8 x 14	9 x 12	14.5	8	35
58 27 00 40	40	11 x 25	14 x 18	21.5	12	98

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. 120).

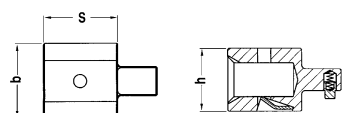


Code	mm	mm	b mm	h mm	S mm	Δ g
58 29 00 10	9 x 12	14 x 18	31	26	30.5	114

7370/40 Adaptor



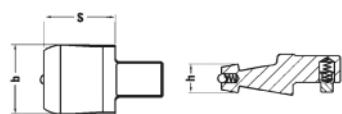
for using insert tools with an outer square drive of 9 x 12 mm on torque wrenches with an internal square drive of 14 x 18 mm. Long-term loading of the adaptor is restricted to 100 N m. Caution! Modified settings on torque wrench (refer to note on p. 120).



Code	mm	mm	b mm	h mm	S mm	Δ g
58 29 00 40	14 x 18	9 x 12	28	21	21.5	115

7370/10-2 Adaptor

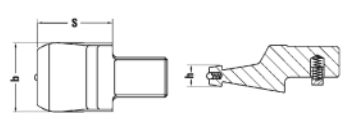
for use with insert tools with a lateral dovetail profile in torque wrenches with 9 x 12 mm internal square drives. Caution! Modified settings on torque wrench (refer to note on p. 120).



Code	mm	b mm	h mm	S mm	Δ g
58 29 00 12	9 x 12	23.5	9.5	24	50

7370/40-2 Adaptor

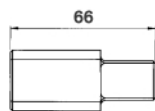
for use with insert tools with a lateral dovetail profile in torque wrenches with 14 x 18 mm internal square drives. Long-term loading of the adaptor is restricted to 200 N m. Caution! Modified settings on torque wrench (refer to note on p. 120).



Code	mm	b mm	h mm	S mm	Δ g
58 29 00 42	14 x 18	31.5	9.5	34.6	136

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. Long-term loading of the adaptor is restricted to 650 N m. Caution! Modified settings on torque wrench (refer to note on p. 120).



Code	mm	mm	b mm	h mm	Δ g
58 29 00 41	14 x 18	24.5 x 28	28	24	251

7370/80 Shell adaptor

registered design, for attaching 14 x 18 mm insert tools. Load capacity up to 650 N m. Caution! Modified settings on torque wrench (refer to note on p. 120).



Code	mm	mm	b mm	h mm	S mm	Δ g
58 29 00 80	24.5 x 28	14 x 18	36	26	70	281



Electronic torque tester for torque wrenches Sensotork® 7707 W For complete calibration systems, see p. 95.

Compact workshop-based torque tester for easy adaptation by replacement of the transducers. High degree of accuracy (from 20–100 % of the rated value ± 0.25 % display deviation from actual measured value, up to 20 % of rated value ± 1 %) thanks to flat transducer and conversion and digitalisation of readings within the transducer.

High degree of safety through display showing actual torque read-off where clicking torque wrenches are used.

7707 W Workshop torque tester Sensotork®

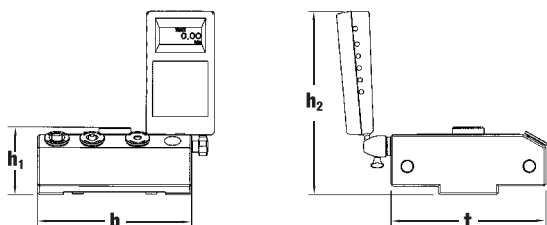


Electronic workshop torque tester for torque wrenches, consisting of:

- transducer (registered design)
- holder
- display unit (registered design)
- tripod for display unit (with 1.5 m cable)
- spiral cable
- mains adaptor (230 V) or direct connection to 12 V in-car supply is possible
- square drive adaptor (No 7707-2W, 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 2% to 100% of rated value ($< 1\%$ at 1100 N m). Readings can be transferred to PC via the USB cable (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 $+60^{\circ}\text{C}$). Meets DIN 51309, Class 2. With certificate. Supplied in sturdy plastic case.



Code	No	Capacity N m	Capacity ft.lb	Capacity in.lb	□ "	b mm	h ₁ mm	h ₂ mm	t mm	ΔΔ g	ΔΔ g with box
96 52 10 71	7707-1W	0.2–10	0.15–7.4	1.8–88.5	1/4	180	79	215	180	6255	8255
96 52 10 72	7707-2W ¹⁾	2–100	1.5–74	17.7–885	3/8	180	79	215	180	7025	10000
96 52 10 73	7707-3W ²⁾	10–1100	7.4–811.5	88.5–9736	3/4	180	79	215	180	7495	10610

¹⁾ with square drive adaptor No 409M (1/4" □ x 3/8" ■)

²⁾ 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" ■)

Accessories for workshop torque tester

7721-7724 Transducers



registered design, high degree of accuracy thanks to conversion and digitalisation of readings within the transducer itself. Not susceptible to lateral forces due to low-profile construction.

Within the range of 20-100 % of rated value ± 0.25 % display deviation value from actual torque reading, up to 20 % of rated value, ± 1 %. Can also be used as part of a calibration system (see p. 95).



Code	No	Capacity N m	Capacity ft.lb	Capacity in.lb	Ø "	ΔΔ g
52 100021	7721	0.2-10	0.15-7.4	1.8-88.5	1/4	1735
52 100022	7722	2-100	1.5-74	17.7-885	3/8	2486
52 100023	7723	10-1100	7.4-811.5	88.5-9736	3/4	3100
52 100024	7724*	300-3000	221.4-2214	2655.3-26553	1 1/2	10500

* for use with mechanical loader No 7792 (see p. 118)

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	ΔΔ g
52 100050	325

7757+7731 USB cable and software

Connection between transducer and PC, for evaluating data on the PC.



Code	L m	ΔΔ g
96 583623	1.5	210

7751 Jack cable

Connection between transducer and USB adaptor or display unit.



Code	L m	ΔΔ g
52 110051	1.5	50

7753 USB adaptor with USB cable

For connecting up to 5 transducers to the PC for evaluating your data



Code	L mm	b mm	h mm	ΔΔ g
52 110053	125	65	41	230

7752 Spiral cable

Connection between transducer and display unit or USB adaptor with jacks at both ends, 90° angled.



Code	L max. mm	ΔΔ g
52 110052	500	35

7755 Mains adaptor

Input:

230 V AC (No 7755/1)

110 V AC (No 7755/2)

Output: 12 V DC



Code	No	Volt	ΔΔ g
52 110054	7755/1	230	385
52 110055	7755/2	110	357

409M Square drive adaptor

1/4" socket x 3/8" plug (6.3 x 10 mm).



Code	L mm	Ø mm	ΔΔ g	☐
11030010	13	25	14	1

7787 Square drive adaptor

1/4" socket x 3/4" plug (6.3 x 20 mm).



Code	L mm	Ø mm	ΔΔ g
58 521087	15.5	29	41

7788 Square drive adaptor

3/8" socket x 3/4" plug
(10 x 20 mm).



Code	L mm	∅ mm	ΔΔ g
58 52 10 88	23.5	29	52

7789 Square drive adaptor

1/2" socket x 3/4" plug
(12.5 x 20 mm).



Code	L mm	∅ mm	ΔΔ g
58 52 10 89	23.5	29	42

7789-2 Square drive adaptor

3/4" socket x 1 1/2" plug
(20 x 40 mm).



Code	L mm	∅ mm	ΔΔ g
58 52 30 89	44	60	380

7789-3 Square drive adaptor

1" socket x 1 1/2" plug
(25 x 40 mm).



Code	L mm	∅ mm	ΔΔ g
58 52 40 89	44	60	290



/M|a|n|u|t|o|r|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.

Mechanical loader for torque wrenches up to 1100 N m nominal torque

7791 Mechanical base unit from 0.2 to 400 N m, registered design

Measurement possible without moving the point of application of force.

Thanks to a specially designed force transmission system, mechanical loader No 7791 avoids the need for the point of force application to be shifted 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. This reduces the error potential caused by possible lateral forces being inadvertently applied to the transducer.

Supplied without torque wrench, transducer, display unit and holder

7791



Code	Capacity N m	for transducer No	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	\varnothing kg
52 110091	0.2-400	7721; 7722; 7723	815	180	704	323	1087	40.5

7791-1 Extension unit for No 7791 up to 1100 N m

7791-1



Code	Capacity N m	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	\varnothing kg
52 110191	-1100	1390 (7791 + 7791-1)	180	308	135	673	5.5

Mechanical loader for torque wrenches up to 3000 N m nominal torque

7792 Mechanical base unit from 10 to 1100 N m, registered design

Code	Capacity N m	for transducer No	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	$\Delta\varnothing$ kg
52110092	10-1100	7723; 7724	1390	270	722	323	1668.5	75

7792-1 Extension unit for No 7792 up to 3000 N m

Code	Capacity N m	for torque wrenches with functional length (L_F) max. mm	Profile width mm	b mm	h mm	L mm	$\Delta\varnothing$ kg
52110192	-3000	2390 (7792 + 7792-1)	270	558	135	1073	18.5

Test attachments for torque screwdrivers

7791-2 Test attachment for torque screwdriver

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	$\Delta\varnothing$ kg
52110291	-10	250	442-593	351	5.5

7790 Stand alone test attachment 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 No	b mm	h mm	t mm	$\Delta\varnothing$ kg
58521090	-10	7721	250	442-593	351	8.5

5

Accessory

7750-1 Holder

for display unit No 7750.
Can be bolted to mechanical loaders and test attachments.



Code	$\Delta\varnothing$ g
52101050	151



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 (guaranteed limit $\pm 5\%$).

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 largest Multipower units are fitted with an anti-backlash device.

MULTIPOWER

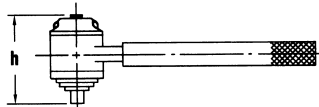
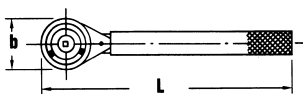
with overload protection and planetary gears, in carrying case, with spare hex. for overload device, guaranteed accuracy $\pm 5\%$.



STW 393N



STW 290N



Code	No	N m ¹⁾	ft.lb ¹⁾	N m ²⁾	ft.lb ²⁾	Gear ratio	Torque ratio	⌀	■	b	h	L	ΔΔ
								"	"	mm	mm	mm	g
53 03 29 00	STW 290N	800	590	229	169	4 : 1	1 : 3.5	1/2	3/4	66	84	215	5355
53 03 29 50	STW 295N	1350	996	386	285	4 : 1	1 : 3.5	3/4	3/4	84	100	265	7020
53 03 39 10	STW 391N*)	2000	1475	167	123	16 : 1	1 : 12	1/2	1	89	140	330	9065
53 03 39 20	STW 392N*)	3000	2212	250	184	16 : 1	1 : 12	3/4	1	89	150	330	10200
53 03 39 30	STW 393N*)	5000	3687	312	230	20 : 1	1 : 16	3/4	1 1/2	114	182	400	12890

*) with anti-backlash device

1) max. output

2) max. input

Spares for Multipower

Sun wheel with overload cutout



Code	for No	ΔΔ
		g
59 30 00 39	STW 290N	41
59 30 00 67	STW 295N	95
59 30 00 68	STW 391N	95
59 30 00 69	STW 392N	105
59 30 00 70	STW 393N	105

Replacement square drives

drilled, for STAHLWILLE-Multipower STW 390–STW 393 (until 1996).

Code	No	ΔΔ
		g
59 30 39 11	STW 391-700*	89
59 30 39 21	STW 392-70	232
59 30 39 31	STW 393-70	252

* also for STW 390

Ratchet spare parts sets for torque wrenches 721/15-80

Code	No	Content	g
59 19 1005	7210/5	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
19040000	5120 + 7210/15	For ratchet/torque wrench No 721/15 1 Pinion, 1 Pawl, 1 Lever, 1 Lever Pin, 1 Ball, 2 Compression Springs, 2 Screws	127
59 19 1030	7210/30	For ratchet/torque wrench No 721/30 1 Pinion, 1 Pawl, 1 Lever, 1 Lever Pin, 1 Ball, 2 Compression Springs, 2 Screws	134
59 19 1080	7210/80	For ratchet/torque wrench No 721Nf/80, 721Nf/100, 735/80 1 Pinion, 2 Pawls, 2 spring contact points, 2 Compression Springs	448

Sets of spare parts for ratchet insert tools No 725QR, No 735

4150 QR Spare parts set



Content:
1 Pinion, 1 Pawl, 1 Lever with pin, 1 Ball, 2 Compression Springs,
2 Screws M 1.7 x 8

Code	for No	g	g
19010020	725QR/4	51	1

4350 QR Spare parts set



Content:
1 Pinion, 1 Pawl, 1 Lever with pin, 1 Ball, 2 Compression Springs,
2 Screws

Code	for No	g	g
19020020	725QR/5	51	1

7250 QR/10 Spare parts set



Content:
1 Pinion, 1 Pawl, 1 Lever with pin, 1 Ball, 2 Compression Springs,
2 Screws

Code	for No	g	g
19041020	725QR/10	64	1

5120 QR Spare parts set



Content:
1 Pinion, 1 Pawl, 1 Lever with pin, 1 Ball, 2 Compression Springs,
2 Screws

Code	for No	g	g
19040020	725QR/20	127	1

7350/5 Set of spare parts

Content:
1 Pinion, 1 Pawl, 1 Switching disk, 1 Spring, 3 Screws

Code	for No	g	g
59251005	735/5	85	1

for ratchets from 12/97

7350/10 Set of spare parts

Content:
1 Pinion, 1 Pawl, 1 Switching disk, 1 Spring, 3 Screws

Code	for No	g	g
59251010	735/10	96	1

for ratchets from 12/97

7350/20 Set of spare parts

Content:
1 Pinion, 1 Pawl, 1 Switching disk, 1 Spring, 3 Screws

Code	for No	g	g
59251020	735/20	146	1

for ratchets from 4/96

7350/40 Set of spare parts

Content:
1 Pinion, 1 Pawl, 1 Switching disk, 1 Spring, 3 Screws

Code	for No	g	g
59251040	735/40	219	1

for ratchets from 5/97

70V Square drive units

for torque wrenches and insert tools.



Code	size	for No	a "	b "	L mm	g	g
59010001	1	71...V/1	1/4	1/4	17.5	5	5
59010014	11	734/4	3/8	1/4	22	12	5
59010003	3	734/5	3/8	3/8	25.8	17	5
59010005	5	734/10	3/8	1/2	30	28	5
59010011	502 1/2	720/30; 734/20	1/2	1/2	33.5	39	5
59010007	7	721/30	1/2	1/2	44.3	52	5
59010008	8	734/40	3/4	3/4	52.2	138	5
59010015	12	720Nf/80; 721Nf/80+100	3/4	3/4	65	179	1

Combination Pliers

6501 Combination pliers

DIN ISO 5746, precision cutter for all wires, incl. piano wire, induction hardened cutting edges, approx. 62 HRC, for long life.



65014160



65015160



65016160

Code	L mm	Head	Handles	③	④	⑤	⑥	$\Delta \nabla$ g
65014160	160	chrome plated	chrome plated, chequered	1.8	1.5	10	16	150
65014180	180			2	1.8	12	16	191
65014200	200			2.5	2	13	16	254
65015160	160	chrome plated	multi-component handles with softer layers	1.8	1.5	10	16	210
65015180	180			2	1.8	12	16	250
65015200	200			2.5	2	13	16	368
65016160	160	polished	dip-coated with sure-grip surface	1.8	1.5	10	16	163
65016180	180			2	1.8	12	16	190
65016200	200			2.5	2	13	16	263

③ cutting capacity in mm for hard wire

④ cutting capacity in mm for piano wire

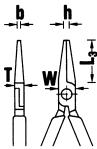
⑤ cutting capacity in mm for cable

⑥ cutting capacity in mm² for cable

Flat Nose Pliers

6508 Flat nose pliers, long

DIN ISO 5745, long, flat serrated jaws.



65085160

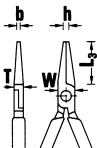


65086160

Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	$\Delta \nabla$ g
65085160	160	chrome plated	multi-component handles with softer layers	50	15	8	3	5	160
65086160	160	polished	dip-coated with sure-grip surface	50	15	8	3	5	113

6509 Flat nose pliers, long, with cutter

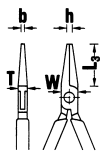
designed for gripping and manipulating electronic components, long, thin, flat serrated jaws, induction hardened cutting edges, approx. 60 HRC, for soft and hard wires.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	$\Delta \nabla$ g
65095140	140	chrome plated	multi-component handles with softer layers	41	14	7.5	2.5	4	150

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.

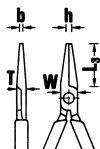


65 105 145

Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	⚖ g
65 105 145	145	chrome plated	dip-coated with sure-grip surface	39	11.5	7.5	2	4.5	80
65 105 170	170			64	13.5	8	2	4.5	122
65 105 190	190			75	13.5	8.5	2	4.5	128

6516 Mechanics flat nose pliers

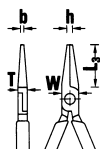
designed for use by instrument mechanics, flat blunt, serrated jaws, wear resistant.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	⚖ g
65 165 200	200	chrome plated	dip-coated with sure-grip surface	40	13.5	9.5	2.5	9.5	158

6511 Relay pliers

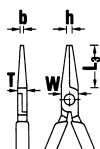
DIN 5235, Form A, flat pointed, for use on contact and relay springs and on small components, smooth jaws.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	⚖ g
65 115 135	140	chrome plated	dip-coated with sure-grip surface	33	13	7.5	1	1.5	75

6512 Relay pliers

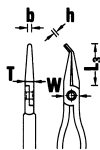
DIN 5235, Form B, flat blunt, for use on contact and relay springs and on small components, smooth jaws.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	⚖ g
65 125 135	140	chrome plated	dip-coated with sure-grip surface	33	13	7.5	1	3.5	81

6513 Relay pliers

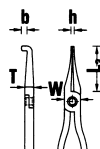
DIN 5235, Form C, flat bent, 45° in line with jaws, for use on contact and relay springs and on small components, smooth jaws.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ _g g
65 135 135	140	chrome plated	dip-coated with sure-grip surface	31	13	7.5	1	3.5	80

6514 Relay pliers

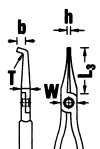
DIN 5235, Form E, flat bent, 90° angle to jaws, for use on contact and relay springs and on small components, smooth jaws.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ _g g
65 145 135	140	chrome plated	dip-coated with sure-grip surface	33	13	7.5	1	4	75

6515 Relay pliers

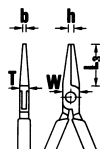
DIN 5235, Form D, flat bent, 75° angle to jaws, for use on contact and relay springs and on small components, smooth jaws.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ _g g
65 155 135	140	chrome plated	dip-coated with sure-grip surface	33	13	7.5	1	4	75

6518 Mechanics gripping pliers

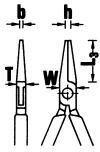
Form A, flat blunt, designed for use by instrument mechanics, wide precision jaws, smooth, tapering to 1.5 mm, box joint for precise movement.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ _g g
65 185 130	130	chrome plated	dip-coated with sure-grip surface	24	11.5	7	2	6.5	75

6519 Mechanics gripping pliers

Form B, flat pointed, designed for use by instrument mechanics, flat pointed precision jaws, smooth, tapering to 1.5 mm, box joint for precise movement.

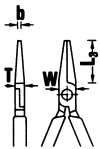


Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ _g g
65 195 130	130	chrome plated	dip-coated with sure-grip surface	24	11.5	7	1.5	2	75

Round Nose Pliers

6523 Round nose pliers, short

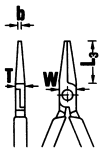
DIN ISO 5745, for bending wire loops and rings, short, round, ground jaws, fine serrations on gripping areas.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	b mm	Δ _g g
65 235 160	160	chrome plated	multi-component handles with softer layers	30	18	10	3	185

6524 Round nose pliers, long

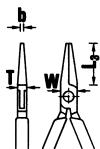
DIN ISO 5745, for bending wire loops and rings, long, round, ground jaws, fine serrations on gripping areas.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	b mm	Δ _g g
65 245 160	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, 1.0 point diameter, box joint for precise movement.

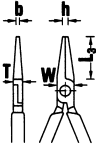


Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	b mm	Δ _g g
65 255 130	130	chrome plated	dip-coated with sure-grip surface	22	11.5	7	1	70

Snipe Nose Pliers

6529 Snipe nose pliers with cutter (radio- or telephone pliers)

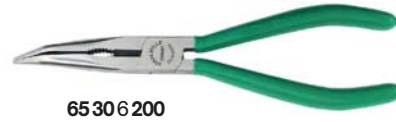
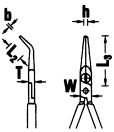
DIN ISO 5745, Form A (straight), half round, long tapering, serrated jaws, with burner hole, precision cutters for soft and hard wires, induction hardened cutting edges, approx. 60 HRC.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ ₂ g
65294160	160	chrome plated	chrome plated, chequered	51	16	9	3	2.5	116
65294200	200			73	17	9	3	2.5	160
65295160	160	chrome plated	multi-component handles with softer layers	51	16	9	3	2.5	170
65295200	200			73	17	9	3	2.5	220
65296160	160	polished	dip-coated with sure-grip surface	51	16	9	3	2.5	148
65296200	200			73	17	9	3	2.5	187

6530 Snipe nose pliers with cutter (Radio- or Telephone Pliers)

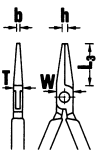
DIN ISO 5745, Form B, bent 45°, half round, long tapering, serrated jaws, with burner hole, precision cutters for soft and hard wires, induction hardened cutting edges, approx. 60 HRC.



Code	L mm	Head	Handles	L ₂ mm	L ₃ mm	W mm	D mm	h mm	b mm	Δ ₂ g
65304160	160	chrome plated	chrome plated, chequered	24	55	16	9	3	2.5	116
65304200	200			28	76	17	9	3.5	3	163
65305160	160	chrome plated	multi-component handles with softer layers	24	55	16	9	3	2.5	170
65305200	200			28	76	17	9	3.5	3	220
65306160	160	polished	dip-coated with sure-grip surface	24	55	16	9	3	2.5	146
65306200	200			28	76	17	9	3.5	3	178

6531 Mechanics snipe nose pliers

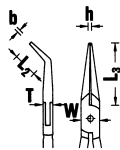
Form A (straight), designed for use on miniature electronic and mechanical components, haft round extra thin, long tapering jaws with fine serration, box joint for precise movement.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ ₂ g
65315170	170	chrome plated	dip-coated with sure-grip surface	63	13.5	8	2.5	2	100
65315190	190			75	14	8.5	2.5	2	122

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.

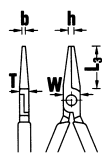


65325170

Code	L mm	Head	Handles	L ₂ mm	L ₃ mm	W mm	D mm	h mm	b mm	α g
65325170	170	chrome plated	dip-coated with sure-grip surface	24	54	13.5	8	2.5	2	102
65325190	190			28	70	14	8	2.5	2	122

6533 Mechanics snipe nose pliers

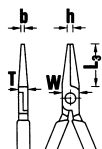
half round, long tapering, serrated jaws.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	α g
65335160	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.



65345200

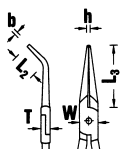


65345280

Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	α g
65345200	200	chrome plated	multi-component handles with softer layers	76	16	10	3	2.5	220
65345280	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.



65355200



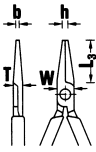
65355280

Code	L mm	Head	Handles	L ₂ mm	L ₃ mm	W mm	D mm	h mm	b mm	α g
65355200	200	chrome plated	multi-component handles with softer layers	28	68	17	9.5	3.5	3	220
65355280	280	chrome plated	dip-coated with sure-grip surface	28	66	20	9.5	3	2.5	255



6538 Mechanics snipe nose pliers

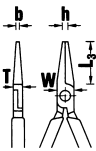
designed for use on miniature mechanical components half round tapering jaws, wear resisting serration.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ _g g
65385200	200	chrome plated	dip-coated with sure-grip surface	38	13	9.5	2.5	2	157

6536 Snipe nose pliers (needle pliers)

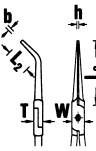
DIN ISO 9655, Form A (straight), designed for use on electronic components, half round, extra long tapering jaws, fine serration.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ _g g
65365160	160	chrome plated	dip-coated with sure-grip surface	58	15	8.5	3	1	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 ₂ mm	L ₃ mm	W mm	D mm	h mm	b mm	Δ _g g
65375160	160	chrome plated	dip-coated with sure-grip surface	25	54	14	8	1	3	115

Circlip Pliers

6543 Circlip pliers for inside circlips

DIN 5256 C, straight, H.D. drop forged, precision points.



65434002



65436002

Code	size	L mm	tips ∅ mm	for circlip sizes mm	Head	Handles	Δ _g g
65434000	J 0	140	0.9	8-13	matt chrome plated	chrome plated, chequered	90
65434001	J 1	140	1.3	12-25			90
65434002	J 2	180	1.8	19-60			135
65434003	J 3	225	2.3	40-100			195
65434004	J 4	320	3.2	85-140			419
65436000	J 0	140	0.9	8-13	polished	dip-coated with sure-grip surface	100
65436001	J 1	140	1.3	12-25			100
65436002	J 2	180	1.8	19-60			150
65436003	J 3	225	2.3	40-100			215
65436004	J 4	320	3.2	85-140			462

6544 Circlip pliers for inside circlips

DIN 5256 D, bent 90°, H.D. drop forged, precision points.



6544 4 021



6544 6 021

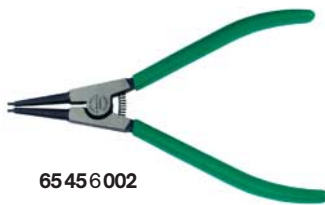
Code	size	L mm	tips Ø mm	for circlip sizes mm	Head	Handles	△ g
6544 4 001	J 01	130	0.9	8-13	matt chrome plated	chrome plated, chequered	90
6544 4 011	J 11	130	1.3	12-25			90
6544 4 021	J 21	170	1.8	19-60			135
6544 4 031	J 31	215	2.3	40-100			195
6544 4 041	J 41	300	3.2	85-140			416
6544 6 001	J 01	130	0.9	8-13	polished	dip-coated with sure-grip surface	100
6544 6 011	J 11	130	1.3	12-25			100
6544 6 021	J 21	170	1.8	19-60			150
6544 6 031	J 31	215	2.3	40-100			215
6544 6 041	J 41	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.



6545 4 002



6545 6 002

Code	size	L mm	tips Ø mm	for circlip sizes mm	Head	Handles	△ g
6545 4 000	A 0	140	0.9	3-10	matt chrome plated	chrome plated, chequered	95
6545 4 001	A 1	140	1.3	10-25			95
6545 4 002	A 2	180	1.8	19-60			145
6545 4 003	A 3	210	2.3	40-100			205
6545 4 004	A 4	315	3.2	85-140			437
6545 6 000	A 0	140	0.9	3-10	polished	dip-coated with sure-grip surface	105
6545 6 001	A 1	140	1.3	10-25			105
6545 6 002	A 2	180	1.8	19-60			160
6545 6 003	A 3	210	2.3	40-100			232
6545 6 004	A 4	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.



6546 4 021



6546 6 021

Code	size	L mm	tips Ø mm	for circlip sizes mm	Head	Handles	△ g
6546 4 001	A 01	125	0.9	3-10	matt chrome plated	chrome plated, chequered	95
6546 4 011	A 11	125	1.3	10-25			95
6546 4 021	A 21	170	1.8	19-60			145
6546 4 031	A 31	200	2.3	40-100			111
6546 4 041	A 41	290	3.2	85-140			431
6546 6 001	A 01	125	0.9	3-10	polished	dip-coated with sure-grip surface	105
6546 6 011	A 11	125	1.3	10-25			105
6546 6 021	A 21	170	1.8	19-60			160
6546 6 031	A 31	200	2.3	40-100			236
6546 6 041	A 41	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	Δ g
6547 4 170	170	matt chrome plated	chrome plated, chequered	154

Waterpump Pliers

6551 Waterpump pliers

DIN ISO 8976 (No 207 c), box joint, 7 adjustment positions, anti-squeeze protection, Chrome Vanadium.



6551 5 240



6551 6 240

Code	L mm	Jaw opening max. mm	Head	Handles	Δ g
6551 5 240	240	43	chrome plated	multi-component handles with softer layers	365
6551 6 240	240	43	black lacquered, jaws polished	black lacquered, box frame polished, dip-coated	310
6551 6 300	300	51			495

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	Δ g
6554 4 250	250 ¹⁾	50	chrome plated	chrome plated, chequered	476
6554 4 375	375	70			1066

¹⁾ anti-squeeze protection

Spare springs for No 6554

Code	Spare spring for No	Δ 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	g
6555 125	125	15	chrome plated	dip-coated	78

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
6561 2175	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
6562 2250	250	50	bright nickel-plated	bright nickel-plated	700

6563 Universal self grip wrenches

forged jaws (one straight, one contoured), quick release lever, Chrome Vanadium.



6563 2175

Code	L mm	S mm	Head	Handles	g
6563 2175	175	25	bright nickel-plated	bright nickel-plated	320
6563 2250	250	30			500

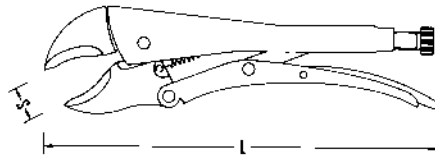


6564 Self grip wrenches

forged contoured jaws, quick release lever, wire cutter, Chrome Vanadium.



65642175



Code	L mm	S mm	Head	Handles	△ g
65642145	145	14	bright nickel-plated	bright nickel-plated	175
65642175	175	30			323
65642250	250	40			528
65642300	300	65			977

6565 Welders self grip wrench

with quick release lever, Chrome Vanadium.



Code	L mm	S mm	Head	Handles	△ g
65652280	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	△ g
65662280	280	85	bright nickel-plated	bright nickel-plated	944

6567 C-Clamp self grip wrench

with quick release lever, Chrome Vanadium.



65672280

Code	L mm	S mm	Head	Handles	△ g
65672175	175	75	bright nickel-plated	bright nickel-plated	236
65672280	280	85			694

6568 Long reach grip wrenches

extra large capacity, quick release lever, Chrome Vanadium.



6568 2460

Code	L mm	S mm	Head	Handles	 g
6568 2460	460	180	bright nickel-plated	bright nickel-plated	1100
6568 2600	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
6571 2165	165	23	bright nickel-plated	bright nickel-plated	190

Various Gripping Pliers

6575 Wire twisting pliers

registered design, 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 anti-clockwise use**, with automatic return action, Chrome Vanadium.



6575 1220



6575 1280

Code	L mm	Head	Handles	 g
6575 1220	230	gunmetal finish, polished	gunmetal finish	330
6575 1280	280			410

6576 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
6576 5230	230	chrome plated	dip-coated	299

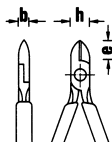
Loose plastic jaws for No 6576

Code	 g
69760001	3

Side Cutters

6600 Side cutters

DIN ISO 5749, Form B, precision cutter for all wires incl. piano wire, high quality alloy steel, bevelled cutting edges induction hardened, approx. 63 HRC.



Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	Δ g
66004160	160	chrome plated	chrome plated, chequered	29.5	22.5	9.5	3	2.8	2	1.6	150
66004180	180			32	23.5	11	3.8	3	2.5	2	200
66005130	125	chrome plated	multi-component handles with softer layers	24	17	8.6	2.8	2.3	1.5	1.25	105
66005145	140			25.7	18.5	8.2	3	2.5	1.8	1.6	160
66005160	160			29.5	22.5	9.5	3	2.8	2	1.6	205
66005180	180			32	23.5	11	3.8	3	2.5	2	325
66006160	160	polished	dip-coated with sure-grip surface	29.5	22.5	9.5	3	2.8	2	1.6	165
66006180	180			32	23.5	11	3.8	3	2.5	2	205

① Cutting capacity in mm for soft wire

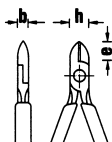
② Cutting capacity in mm for medium hard wire

③ Cutting capacity in mm for hard wire

④ Cutting capacity in mm for piano wire

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	Δ g
66016110	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

② Cutting capacity in mm for medium hard wire

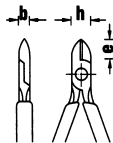
③ Cutting capacity in mm for hard wire

④ Cutting capacity in mm for piano wire



6602 Heavy duty side cutters

DIN ISO 5749, Form A, precision cutter for all wires incl. piano wire, high quality alloy steel, bevelled cutting edges induction hardened, approx. 63 HRC.



6602 4 200



6602 5 200



6602 6 200

Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	△ g
6602 4 140	140	chrome plated	chrome plated, chequered	23.5	20	9	4	3.1	2	1.5	120
6602 4 160	160			25.5	25	9.5	4	3.4	2.5	2	165
6602 4 180	180			27.5	26.5	10.5	4	3.8	2.7	2.2	200
6602 4 200	200			31	28	11.5	4	4	3	2.5	255
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 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

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

6608 Lever action side cutters

DIN ISO 5749, for piano wire, special steel.



6608 0 190

Code	L mm	Head	Handles	②	④	△ g
6608 0 190	190	polished	black lacquered	3.7	3	510
6608 0 225	225			4.2	3.5	555

② Cutting capacity in mm for medium hard wire

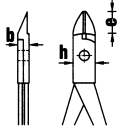
④ Cutting capacity in mm for piano wire



Oblique Cutters

6612 Mechanics oblique cutters

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 \varnothing 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	Δ g
66 125 185	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

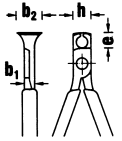
② Cutting capacity in mm for medium hard wire

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.



Code	L mm	Head	Handles	e mm	h mm	b ₁ mm	b ₂ mm	①	②	③	④	Δ g
66 185 160	160	chrome plated	multi-component handles with softer layers	17	26	11.5	24	3.8	3	2.5	2	240

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.



66 170 180

Code	L mm	Head	Handles	②	④	Δ g
66 170 180	180	polished	black lacquered	3.7	3.0	438
66 170 215	215			4.2	3.5	579
66 170 235	235			4.7	4.0	766

② Cutting capacity in mm for medium hard wire

④ Cutting capacity in mm for piano wire

Wire Stripping Pliers

6622 Wire stripping pliers

with adjustment screw to cut insulation only on wire or cable, max. 5 mm \varnothing 10 mm² conductor cross-section.



Code	L mm	Head	Handles	 g
66225160	160	chrome plated	multi-component handles with softer layers	195

6623 Wire stripping pliers

for wires from 0.5 to 5 mm \varnothing , self adjusting, cutter hole for cutting wire or stranded wires up to 5 mm \varnothing , special steel.



Code	L mm	Head	Handles	 g
66235160	160	chrome plated	multi-component handles with softer layers	180

Replacement stripping knives (1 pair) for No 6623

Code	 g
69230001	11

6624 Wire stripping pliers

for wires from 0.3 to 1.2 mm \varnothing , self adjusting, cutter hole for cutting wire or stranded wires up to 5 mm \varnothing , special alloy steel.



Code	L mm	Head	Handles	 g
66245160	160	chrome plated	multi-component handles with softer layers	180

Cable Shears

6630 Cable shears

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
66301220	220	gun finish	dip-coated with sure-grip surface	16	35	70	332

⑦ cutting capacity in mm² for single wire Al-/Cu-Cable

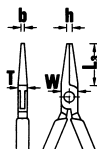
⑧ cutting capacity in mm² for multiple wire Al-/Cu-Cable

⑨ cutting capacity in mm² for thin wire Al-/Cu-Cable

Electronics Pliers

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 to 1 mm, box joint for precise movement.



65176 120

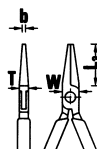


65179 120

Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ g
65176 120	125	polished	dip-coated with sure-grip surface	20	9	6.5	1.5	3	48
65179 120	125	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	20	9	6.5	1.5	3	55

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, 1.25 mm point diameter, box joint for precise movement.



65266 120

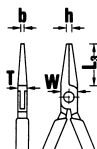


65269 120

Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	b mm	Δ g
65266 120	125	polished	dip-coated with sure-grip surface	22	9	6.5	1.25	47
65269 120	125	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	22	9	6.5	1.25	55

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 to 1 mm \varnothing , box joint for precise movement.



65406 120



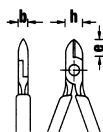
65409 120

Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ g
65406 120	125	polished	dip-coated with sure-grip surface	21	9	6.5	1	1	50
65409 120	125	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	21	9	6.5	1	1	56



6603 Electronics side cutters

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.



66036115



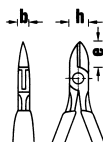
66039115

Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	Δ g
66036115	115	polished	dip-coated with sure-grip surface	14	11	6.5	1.5	1	0.8	0.5	60
66039115	115	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	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 cutters

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.



66056110



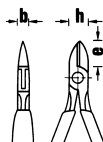
66059110

Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	Δ g
66056110	112	polished	dip-coated with sure-grip surface	13	10.5	7	1.5	1	0.8	0.6	64
66059110	112	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	13	10.5	7	1.5	1	0.8	0.6	69

- 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

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.



66066110



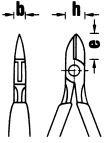
66069110

Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	Δ g
66066110	112	polished	dip-coated with sure-grip surface	13	12	7.5	1.5	1	0.8	0.6	66
66066130	125	polished	dip-coated with sure-grip surface	18	16	10	1.7	1.2	1	0.8	104
66069110	112	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	13	12	7.5	1.5	1	0.8	0.6	70
66069130	125	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	18	16	10	1.7	1.2	1	0.8	110

- 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

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.



66076110



66079110

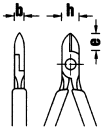
Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	Δ g
66076110	112	polished	dip-coated with sure-grip surface	13	12	7.5	1.5	1	64
66076130	125			18	16	10	1.5	1	104
66079110	112	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	13	12	7.5	1.5	1	70
66079130	125			18	16	10	1.5	1	110

① Cutting capacity in mm for soft wire

② Cutting capacity in mm for piano wire

6604 Mini-electronics side cutters

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 ϕ can be cut at the tips, welded on double leaf spring, alloy steel of highest quality, induction hardened cutting edges, approx. 63 HRC.



66046110



66049110

Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	Δ g
66046110	112	polished	dip-coated with sure-grip surface	11	9	6	1	0.8	0.6	0.4	47
66049110	112	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	11	9	6	1	0.8	0.6	0.4	53

① Cutting capacity in mm for soft wire

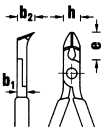
② Cutting capacity in mm for medium hard wire

③ Cutting capacity in mm for hard wire

④ Cutting capacity in mm for piano wire

6613 Electronics oblique cutters

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 ϕ 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.



66136115



66139115

Code	L mm	Head	Handles	e mm	h mm	b ₁ mm	b ₂ mm	①	②	③	④	Δ g
66136115	112	polished	dip-coated with sure-grip surface	11	11	7.5	10.5	1	0.8	0.6	0.4	54
66139115	112	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	11	11	7.5	10.5	1	0.8	0.6	0.4	66

① Cutting capacity in mm for soft wire

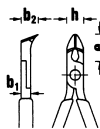
② Cutting capacity in mm for medium hard wire

③ Cutting capacity in mm for hard wire

④ Cutting capacity in mm for piano wire

6614 Electronics oblique cutters

DIN ISO 9654, as No 6613, but without bevelled cutting edges, for flush cutting of soft and medium hard Cu- and diode wires.



66 146 115



66 149 115



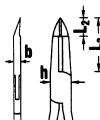
Code	L mm	Head	Handles	e mm	h mm	b ₁ mm	b ₂ mm	①	②	$\Delta \nabla$ g
66 146 115	112	polished	dip-coated with sure-grip surface	11	11	7.5	10.5	1	0.6	55
66 149 115	112	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	11	11	7.5	10.5	1	0.6	65

① Cutting capacity in mm for soft wire

② Cutting capacity in mm for medium hard wire

6615 Electronics oblique cutters

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.



66 156 115



66 159 115



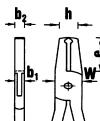
Code	L mm	Head	Handles	L ₂ mm	L ₃ mm	h mm	b mm	①	②	$\Delta \nabla$ g
66 156 115	112	polished	dip-coated with sure-grip surface	8	18	8	6	0.6	0.3	48
66 159 115	112	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	8	18	8	6	0.6	0.3	54

① Cutting capacity in mm for soft wire

② Cutting capacity in mm for medium hard wire

6619 Electronics top cutters

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.



66 196 115



66 199 115



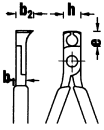
Code	L mm	Head	Handles	e mm	W mm	h mm	b ₁ mm	b ₂ mm	①	②	$\Delta \nabla$ g
66 196 115	112	polished	dip-coated with sure-grip surface	15.5	8.5	5.5	6	5	0.6	0.3	65
66 199 115	112	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	15.5	8.5	5.5	6	5	0.6	0.3	55

① Cutting capacity in mm for soft wire

② Cutting capacity in mm for medium hard wire

6620 Electronics top cutters

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, mini bevel approx. 60 HRC.



66206 115



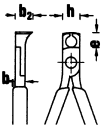
66209 115

Code	L mm	Head	Handles	e mm	h mm	b ₁ mm	b ₂ mm	①	②	③	④	Δ g
66206 115	112	polished	dip-coated with sure-grip surface	6.5	11	7.5	11	1	0.8	0.6	0.4	82
66209 115	112	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	6.5	11	7.5	11	1	0.8	0.6	0.4	62

- 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 cutters

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.



66216 115



66219 115

Code	L mm	Head	Handles	e mm	h mm	b ₁ mm	b ₂ mm	①	②	Δ g
66216 115	112	polished	dip-coated with sure-grip surface	6.5	11	7.5	11	1	0.6	82
66219 115	112	polished	with dissipative sleeves, antistatic-dissipation $> 1 \times 10^5$ and $< 1 \times 10^{12} \Omega$	6.5	11	7.5	11	1	0.6	62

- ① Cutting capacity in mm for soft wire
- ② Cutting capacity in mm for medium hard wire



VDE Pliers

6501 Combination pliers

DIN ISO 5746, precision cutter for all wires, incl. piano wire, induction hardened cutting edges, approx. 62 HRC, for long life.



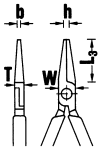
65017 160

Code	L mm	Head	Handles	③	④	⑤	⑥	Δ g
65017 160	160	chrome plated	dip-coated insulation, DIN EN 60900,   AC/1000 V	1.8	1.5	10	16	202
65017 180	180			2	1.8	12	16	279
65017 200	200			2.5	2	13	16	359

- 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 mm² for cable

6508 Flat nose pliers, long

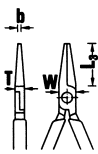
DIN ISO 5745, long, flat serrated jaws.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ g
65087 160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V	50	15	8	3	5	148

6523 Round nose pliers, short

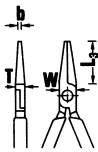
DIN ISO 5745, for bending wire loops and rings, short, round, ground jaws, fine serrations on gripping areas.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	b mm	Δ g
65237 160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V	30	18	10	3	201

6524 Round nose pliers, long

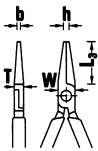
DIN ISO 5745, for bending wire loops and rings, long, round, ground jaws, fine serrations on gripping areas.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	b mm	Δ g
65247 160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V	47	15.5	8.5	2.5	162

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 cutters for soft and hard wires, induction hardened cutting edges, approx. 60 HRC.



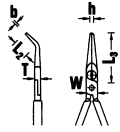
65297 160

Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	Δ g
65297 160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V	51	16	9	3	2.5	174
65297 200	200			73	17	9	3	2.5	226



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 cutters for soft and hard wires, induction hardened cutting edges, approx. 60 HRC.

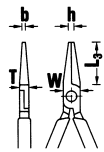


65307 200

Code	L mm	Head	Handles	L ₂ mm	L ₃ mm	W mm	D mm	h mm	b mm	⊕ g
65307 160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V	24	55	16	9	3	2.5	185
65307 200	200			28	76	17	9	3.5	3	230

6533 Mechanics snipe nose pliers

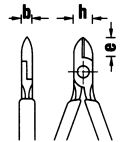
half round, long tapering, serrated jaws.



Code	L mm	Head	Handles	L ₃ mm	W mm	D mm	h mm	b mm	⊕ g
65337 160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V	50	15	8	3	2.5	147

6600 Side cutters

DIN ISO 5749, Form B, precision cutter for all wires incl. piano wire, high quality alloy steel, bevelled cutting edges induction hardened, approx. 63 HRC.



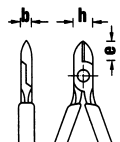
66007 160

Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	⊕ g
66007 160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V	23.5	20	9	3	2.8	2	1.6	215
66007 180	180			25.5	25	9.5	3.8	3	2.5	2	270

- 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

6602 Heavy duty side cutters

DIN ISO 5749, Form A, precision cutter for all wires incl. piano wire, high quality alloy steel, bevelled cutting edges induction hardened, approx. 63 HRC.



66027 200

Code	L mm	Head	Handles	e mm	h mm	b mm	①	②	③	④	⊕ g
66027 160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V	25.5	25	9.5	4	3.4	2.5	2	220
66027 180	180			27.5	26.5	10.5	4	3.8	2.7	2.2	265
66027 200	200			31	28	11.5	4	4	3	2.5	325
66027 250	250			32	29.5	12	4	4	3.5	3	475

- 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

6622 Wire stripping pliers

with adjustment screw to cut insulation only on wire or cable, max. 5 mm \varnothing 10 mm² conductor cross-section.



Code	L mm	Head	Handles			g
66227160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V			180

6623 Wire stripping pliers

for wires from 0.5 to 5 mm \varnothing , self adjusting, cutter hole for cutting wire or stranded wires up to 5 mm \varnothing , special steel.



Code	L mm	Head	Handles			g
66237160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V			214

Replacement stripping knives (1 pair) for No 6623

Code			g
69230001			11

6624 Wire stripping pliers

for wires from 0.3 to 1.2 mm \varnothing , self adjusting, cutter hole for cutting wire or stranded wires up to 5 mm \varnothing , special alloy steel.



Code	L mm	Head	Handles			g
66247160	160	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V			215

6630 Cable shears

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.

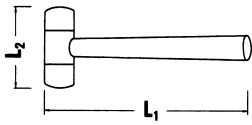


Code	L mm	Head	Handles			g
66307220	220	chrome plated	dip-coated insulation, DIN EN 60900, AC/1000 V	⑦ ⑧ ⑨		380

- ⑦ cutting capacity in mm² for single wire Al-/Cu-Cable
- ⑧ cutting capacity in mm² for multiple wire Al-/Cu-Cable
- ⑨ cutting capacity in mm² for thin wire Al-/Cu-Cable

10940 Rubber composition hammers

DIN 5128, with two plane faces.



Code	∅ mm	L ₁ mm	L ₂ 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	1190	2

10955 Plastic hammers

with interchangeable heads of impact resisting cellulose acetate and ash handles.



Code	∅ mm	L ₁ mm	L ₂ mm	△△ g	
70 16 00 27	27	265	90	215	6
70 16 00 32	32	280	100	325	6
70 16 00 35	35	290	105	400	2
70 16 00 40	40	320	110	550	2
70 16 00 50	50	340	115	860	2
70 16 00 60	60	380	135	1365	2

10955R Spare plastic heads

of impact resisting cellulose acetate, these are lightly heated and then tapped into position.

Code	∅ mm	△△ g	
7904 00 27	27	13	5
7904 00 32	32	21	10
7904 00 35	35	28	10
7904 00 40	40	37	10
7904 00 50	50	65	10
7904 00 60	60	108	10

10956 Nylon hammers

with interchangeable heads of shockproof nylon vestamid and EUROPLUS handles.



Code	∅ mm	L ₁ mm	L ₂ mm	△△ g	
70 17 00 27	27	265	90	215	6
70 17 00 32	32	280	100	325	6
70 17 00 35	35	290	105	400	2
70 17 00 40	40	320	110	550	2
70 17 00 50	50	340	115	860	2
70 17 00 60	60	380	135	1365	2

10956R Spare nylon heads

these are lightly heated and then tapped into position.

Code	∅ mm	△△ g	
7905 00 27	27	10	10
7905 00 32	32	17	10
7905 00 35	35	23	10
7905 00 40	40	28	10
7905 00 50	50	52	10
7905 00 60	60	83	10

10957 Plastic hammers

recoilless; with interchangeable heads and hickory handles.



Code	∅ mm	L ₁ mm	L ₂ 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 45	45	380	130	1000	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	
7909 00 25	25	14	10
7909 00 30	30	19	10
7909 00 35	35	26	10
7909 00 40	40	38	10
7909 00 45	45	52	10
7909 00 50	50	72	10
7909 00 60	60	118	10

10958 Embossing hammer

aluminium, cylindrical, with hickory handle.



Code	∅ mm	L ₁ mm	L ₂ mm	△△ g	
7024 00 40	40	340	155	648	2



10960 Engineers hammers

with ash handles, DIN 1041.



Code	g	L ₁ mm	L ₂ mm	ΔΔ g	
70 11 0005	100	260	82	148	6
70 11 0001	200	280	95	254	6
70 11 0004	300	300	105	396	6
70 11 0002	500	320	118	614	6
70 11 0006	800	350	130	951	2
70 11 0003	1000	360	135	1132	2
70 11 0007	1500	380	145	1615	2
70 11 0008	2000	400	155	2285	2

10970 Engineers hammers

with ash handles.



Code	lb.	L ₁ mm	L ₂ mm	ΔΔ g	
70 12 0001	1/4	270	67	176	6
70 12 0005	1/2	290	82	320	6
70 12 0006	3/4	310	93	454	6
70 12 0002	1	320	99	575	6
70 12 0004	1 1/2	350	118	790	2
70 12 0003	2	380	126	1044	2

100 Ribbed cold chisels

of tough tempered special steel, chrome plated.



Code	size	L mm	b mm	ΔΔ g	
70010004	4	100	15	51	10
70010005	5	125	18	93	10
70010006	6	150	20	165	10
70010008	8	200	26	305	5
70010010	10	250	30	507	5
70010012	12	300	35	807	5

102 Cold chisels

DIN 6453, chrome vanadium steel, lacquered silver.



Code	size	L mm	b mm	ΔΔ g	
70020002	125	125	15	96	10
70020003	150	150	18	172	10
70020004	175	175	21	269	10
70020005	200	200	24	379	5
70020007	250	250	25	479	5
70020008	300	300	26	591	5

103 Cross-cut chisels

DIN 6451, flat, chrome vanadium steel, lacquered silver.



Code	size	L mm	b mm	ΔΔ g	
70040003	150	150	16	147	10
70040004	175	175	17	239	10
70040005	200	200	18	340	5
70040007	250	250	19	441	5

110 Grooving chisel

flat, chrome vanadium steel, lacquered silver.



Code	L mm	b mm	ΔΔ g	
70080001	240	26	292	5

112 Grooving chisel

as No 110, but with finger protector.



Code	L mm	b mm	ΔΔ g	
70080002	240	26	411	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	ΔΔ g	
79 16 0001	101	5

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
70060006	175 x 8	8	16	175	244	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
70050003	130 x 12	12	130	99	10
70050004	150 x 14	14	150	154	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	30	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 ¹⁾	3	10	175	57	10
70070010	175 x 4 ²⁾	4	10	175	64	10
70070012	175 x 6 ³⁾	6	10	175	69	10
70070008	200 x 8	8	12	200	141	10
70070011	200 x 10	10	12	200	159	10

¹⁾ for use on OPEL Kadett C

²⁾ for use on Mercedes-Benz

³⁾ with guide bush for use on retaining pins of disc brake pads, all brake calipers on OPEL Ascona B, C, Manta B, Kadett D, Astra

● diameter of tip

● size of handle, octagon

109 Pin punches

with guide bush.



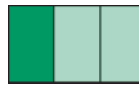
Code	size	● mm	● mm	L mm	△△ g	📦
70090001	1	0.9	5	80	7	10
70090002	2	1.4	5.5	82	12	10
70090003	3	1.8	6	86	12	10
70090004	4	2.4	7	95	18	10
70090005	5	2.8	7	97	19	10
70090006	6	3.4	8	100	25	10
70090007	7	3.9	9	100	27	10
70090008	8*	5.9	10	103	47	10

● 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
Pc = in plastic wallet



Code	No	△△ g	☐
98812201	102-5/6 D	445	1
98812202	102-5/6 Pc	426	5

104-5/6 Sets: 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
D = in plastic stand
Pc = in plastic wallet



Code	No	△△ g	☐
96700601	104-5/6 D	417	1
96700602	104-5/6 Pc	392	5

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	☐
96700711	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
Pc = in plastic wallet



Code	No	△△ g	☐
96700701	108/6 D	450	1
96700702	108/6 Pc	424	5

10670 Three square engineers scrapers

special steel.



Code	L mm	△△ g	☐
72060001	205	76	5
72060002	230	84	5
72060003	255	105	5
72060004	275	115	5
72060005	300	148	5

10672 Flat engineers scrapers

special steel.



Code	mm	△△ g	☐
72050004	20 x 305	206	5
72050005	25 x 365	364	5

10676 Three square engineers bearing scrapers

special steel.



Code	mm	△△ g	☐
72080003	85 x 12 x 305	146	5

12025 Engineers file, round



Code	L mm	△△ g	☐
72120000	200	96	5

12030 Engineers file, half round



Code	L mm	△△ g	☐
72130000	250	285	5

12035 Engineers file, three-square



Code	L mm	△△ g	☐
72140000	200	167	5

12036 Engineers file, hand



Code	L mm	△△ g	☐
72170002	250	335	5

12200 Hand vice

forged C 35,
width of jaws 48 mm.



Code	L mm	△△ g	☐
7120000	145	673	1

12050 Tubular hacksaw

adjustable,
with blade size 300 mm/12".



Code	L mm	△△ g	☐
7221000	465	490	1

Spare hacksaw blades for No 12050

10 pieces, H.S. Steel, 24 teeth per inch.

Code	L mm	△△ g	☐
79180001	300	174	1

12053 Hacksaw frame



Code	L mm	△△ g	☐
72210002	252	159	1

Spare hacksaw blades for No 12053

6 pieces, Chrome Alloy Tool Steel, 32 teeth per inch.

Code	L mm	△△ g	☐
79180002	158	23	1

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	∅ "	△△ g	☐
7134000	3/8	420	1

12900N Vernier calliper

as per DIN 862,
vernier readings 1/20 mm and 1/128", stainless steel,
c/w plastic pouch.



Code	measuring range mm/"	△△ g	☐
77371001	150/6	185	1

12900/1N Vernier calliper

with a large digital display,
automatic shut-off,
switch for mm/inches, depth gauge,
RS232C interface, spare battery,
differential measurements by means of 0 reset function, display accuracy 0.01 mm / 0.0005",
in plastic case.



Code	measuring range mm/"	△△ g	☐
77371002	150/6	312	1

13110 Steel rule

Metric-Inch scales,
length 300 mm.



Code	size	Divisions Top Edge "	Divisions Lower Edge mm	△△ g	☐
77460001	1	1/16, 1/32, 1/64	0.5; 1	76	5

12915 Ratchet tap holders

steel, chrome plated



Code	size	Capacity mm	DIN ¹⁾	ISO ²⁾	L mm	△△ g	☐
77390001	1	2.0–5.0	M2–8	M1–6	85	180	1
77390002	2	4.6–8	M5–12	M6–12	110	305	1
77390003	3	2.0–5.0	M2–8	M1–6	250	251	1
77390004	4	4.6–8	M5–12	M6–12	300	428	1

¹⁾ for taps DIN

²⁾ for taps ISO

13100 Set of needle files

6 pieces, in plastic wallet,
Content: 1 file each,
round, half round,
three square, square,
hand, flat



Code	L mm	△△ g	☐
96722801	140	46	1

12932 Padlock



Code	g	
77 21 0002	85	1

12320 Electricians cable knife

with stainless blade.



Code	Blade mm	g	
77 02 0000	90	81	10

12321 Engineers scribe



Code	L mm	g	
77 10 0000	250	31	10

13115 Brass wire brush

for use on light alloys.



Code	L mm	Rows	g	
77 47 0001	280	4	134	1

12600 Magnetic lifters



Code	lifting power g	∅ mm	L mm	g	
77 26 0027	270 ¹⁾	5	500	25	1
77 26 0025	500	8	460	80	1
77 26 0060	1800	15	520	230	1
77 26 0200	3000	19	520	297	1

¹⁾ Miniature magnetic lifter with tiny head, very powerful

12910 Adjustable hook spanners

for slotted nuts as per DIN 1810, adjustable.



Code	size	∅ mm	g	
44 01 0001	1	20-42	90	5
44 01 0002	2	45-90	245	5
44 01 0003	3	95-165	686	5

12920N Telescopic mirror

with non-twisting, oval-section telescopic rod.



Code	mm	L mm	g	
77 40 1001	65 x 43	200-560	65	1

12920NR-1 Replacement mirror for No 12920N

Code	g	
79 40 1001	43	1

12920NR-2 Stainless steel replacement mirror for No 12920N

Code	g	
79 40 1002	43	1

12921N Telescopic mirrors



Code	∅ mm	L mm	g	
77 40 1030	30	180-530	108	1
77 40 1040	40	180-530	112	1
77 40 1050	50	180-530	135	1
77 40 1060	60	180-530	150	1

12921NR Replacement mirror for 12921N

Code	∅ mm	g	
79 40 1030	30	10	1
79 40 1040	40	15	1
79 40 1050	50	20	1
79 40 1060	60	27	1

13120 Telescopic mirror

with illumination and concave mirror, in wooden box, with battery.



Code	∅ mm	L mm	g	
77 48 0001	55	350-800	805	1

12922N Claw lifter



Code	∅ mm	L mm	g	
77 40 0003	7	525	96	5

12941 Soldering gun

230 V, 50–60 Hz, 100 W.



Code	g	g	g
77 42 00 02	1100	1	

Replacement tips for soldering gun No 12941

Code	No	Sizes	g	g
79 14 00 02	12941/R1	thick	20	1
79 14 00 03	12941/R2	medium	19	1
79 14 00 04	12941/R3	fine	18	1

12942 Soldering iron

230 V, 50–60 Hz, 20/40 W.



Code	g	g	g
77 42 00 03	130	1	

12943 Soldering iron

230 V, 50–60 Hz.



Code	W	g	g
77 42 00 04	20	104	1
77 42 00 05	30	105	1
77 42 00 06	50	110	1

12942R Replacement tips for No 12942, 12943

Code	g	g	g
79 14 00 05	14	1	

13126 Torch

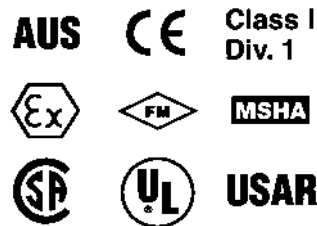
ABS body with high-impact polycarbonate lens. Approved by FM, CSA, AUS and MSHA as non flammable. Laser-SPOT™ xenon lamp module generates a finely focussed white collimation light beam with a net intensity up to 400% higher than normal. 12.000 candlepower. Bulb lifetime: 30 hours. With black rubber lens protection. Conforms to US military regulations - Class. I Div. 1 USAR. Takes 3 alkali batteries (C) (not included). Suitable for underwater use. Waterproof up to 100 m.



Code	L mm	g	g
77 49 00 02	191	160	1

13127 Torch

Made of high-impact polycarbonate resin developed for space use. Focussed beam; with light deflector. Approved by FM, SA, and CENELEC as non flammable. Bulb lifetime: 20 hours. Suitable for underwater use. Waterproof to 150 m. Consisting of: torch, light deflector for deflecting beam through 90°, 2 alkali batteries (AAA).



Code	L mm	g	g
77 49 00 03	120	80	1

TCS 13126/13127/2



175 x 350 x 60 mm, 2 pieces

Code	g	g
96 83 00 14	475	



No 13126



No 13127

Spares for torches

Code	for No	g	
79490002	13126 (Spare lens)	33	1
79490003	13127 (Spare lens)	7	1
79490004	13126 (Bulb unit)	25	1
79490005	13127 (Bulb unit)	10	1

13130 Tweezers

straight, blunt,
finely milled inside,
stainless steel.



Code	L mm	g	
77500001	160	25	5

13131 Tweezers

bent, blunt,
finely milled inside,
stainless steel.



Code	L mm	g	
77510001	150	22	5

13135 Wire cutter

with smooth cutting edges,
nickel-plated,
plastic covered handles.



Code	L mm	g	
75270001	145	93	1

