



5 TORQUE TOOLS, TORQUE TESTERS

Torque screwdrivers

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Torque wrenches, mechanical

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Angle-controlled torque wrenches,
electronic

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Accessories torque wrenches

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Insert/shell tools

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Torque multipliers MULTIPOWER

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Spare parts

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Torque tester

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Calibration systems

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Accessories torque tester
and calibration systems

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As individual as your fastener. STAHLWILLE torque tools.

To ensure safety and productivity, STAHLWILLE torqueing tools offer you a high degree of convenience, accurate setting and optimised ergonomic designs. The following overview is designed to help you select just the right model for your application.



e.g.
TORSIOTRONIC®

Torque screwdrivers

Clicking	Indicating	No	Range	Page
	•	760	15-600 cN·m	192
•		775	2-1000 cN·m	192
•	•	TORSIOTRONIC®	12-1000 cN·m	193

5

Torque wrenches

Clicking	Indicating	No	Range	Page
	•	71	160-800 N·m	194
	•	73Nm/15	2-15 N·m	195
•		755	1.5-300 N·m	195
•		730 Quick	4-650 N·m	198
•		730/80	160-800 N·m	198
•		721 Quick	6-300 N·m	199
•		720Nf	160-800 N·m	200
•		721Nf	160-1000 N·m	200
•		730N	4-1000 N·m	204, 205
•		730 Fix	10-1000 N·m	205
	•	701	1-20 N·m	207
•	•	730D	10-1000 N·m	212, 213
	•	712R/6	3-60 N·m	220



e.g.
MANOSKOP® 730 Quick

Tightening angle torque wrenches

Clicking	Indicating	No	Range	Page
•	•	714	1-1000 N·m	216, 217
	•	713R	3-400 N·m	220



e.g.
MANOSKOP® 714



STAHLWILLE's calibration laboratory – accredited by the highest authority. Controlled bolt tightening is an essential aspect of operating safety and the durability of screws and bolts. Put your trust in STAHLWILLE's DAKS calibration laboratory. For all your torquing tools and testers.

More details on page 236



Insert & shell tools

System		Page
9x12 mm	9x12	223 - 226
14x18 mm	14x18	226 - 228
22x28 mm	22x28	228, 229
24.5x28 mm	24.5x28	229



Torque multipliers

No	Range	Page
MP100-1500	100-1500 N·m	232
MP300	800-5000 N·m	233



e.g.
perfectControl 7794-2

Testers & calibration systems

No	Range	Page
SmartCheck	1-800 N·m	237
7707 W Torque Tester	0.2-1100 N·m	238
7791 / 7792 Manutork	1-3000 N·m	241 - 243
7794 perfectControl	1-1000 N·m	245 - 247
Accessories		249 - 251

Electronics and mechanics: the perfect symbiosis. **TORSIOTRONIC®.**



TORSIOTRONIC® – this is the name behind the first electromechanical torque screwdriver in the world. The patented trigger system, based on a ball mechanism, trips with audible and tactile signals when the target torque is reached. The tool measures as accurately as only an electronic torque tool can. The fine-tooth ratchet, a wide range of programming options and a micro-USB port make the TORSIOTRONIC the ideal tool when it comes to logging work steps, applying very small torques or following complex tightening sequences.

UNIQUE.

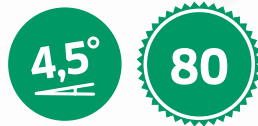
The first electromechanical torque screwdriver on the market – combines the accuracy of electronic measurement with the convenience of the »click« from mechanical trigger mechanisms.



CLOCKWISE. OR ANTICLOCKWISE.

Whether the tool is set to indicating only or clicking – both modes can be applied clockwise or anticlockwise.





SENSITIVE.

Integrated ratcheting bit-holder with 80 teeth that provide a particularly small ratchet angle of only 4.5° and thus enable particularly sensitive working – ideal for hard-to-reach fasteners. The 1/4" male square allows the direct application of sockets, while the bit holder supplied allows tightening with screwdriver bits.

SAFE.

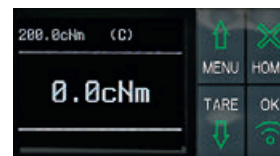
After the tool trips, the slip mechanism prevents the preset tightening torque from being inadvertently exceeded, which protects against overtightening.

INTUITIVELY SIMPLE.

Easy learning curve thanks to almost self-explanatory controls and an easily understood menu structure.

READY WHEN YOU ARE.

Long-lasting battery charge with battery-saving stand-by mode. Always ready for use thanks to quick and easy to change externally charged battery.



BRILLIANT.

Clear display of all the relevant information in a bright, battery-saving colour OLED display – readable at almost any angle.



LOGGING FUNCTION.

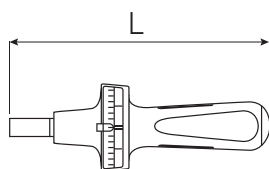
Stores up to 2500 fasteners for reading out and documenting on the PC later by means of the integrated micro-USB port.

Torque screwdrivers

TORSIOMETER 760

- indicating type
- the measuring element is a torsional leaf spring
- clockwise tightening (with trailing pointer) and anticlockwise tightening
- with 1/4" internal hex drive (F 6.3 DIN 3126)
- comparative scale in in-lb and cursor
- inserts and adaptors with external hex E 6.3 (1/4")
- DIN 3126/ISO 1173 are securely held and firmly controlled in the mounting shaft (for bit screwdriver inserts, refer to page 184)
- to attach 1/4" sockets, please order adaptor No 3115 (refer to page 182)
- certificate in accordance with DIN EN ISO 6789-2:2017
- display deviation value $\pm 4\%$**

760 Torque screwdrivers TORSIOMETER



Code	size				Ø mm	L mm	Δ g
51040007	7.5	15-75 cN·m	1.5-6.5 in-lb	2.5 cN·m	F 6.3	185	225
51040015	15	30-150 cN·m	3-13 in-lb	5 cN·m	F 6.3	185	225
51040030	30	60-300 cN·m	6-26 in-lb	10 cN·m	F 6.3	185	230
51040060	60	120-600 cN·m	12-52 in-lb	20 cN·m	F 6.3	185	230

TORSIOMAX 775

- click-type
- for torque-controlled bolt tightening in the cN·m and in-lb ranges
- for one-off or production runs
- anticlockwise and clockwise tightening
- with 1/4" internal hex drive (F 6.3 DIN 3126/ISO 1173)
- infinitely variable via micrometer scale (twist scale)
- disengaging clutch coupling prevents the preset value being exceeded
- the shape of the handle and its surface texture ensure safe and accurate transmission of torque
- insert tools: For all 1/4" hex E 6.3, Phillips-head screws, POZIDRIV/SUPADRIV®, straight-slot, TORX®, hex bits (see pp. 184)
- certificate in accordance with DIN EN ISO 6789-2:2017
- display deviation value $\pm 6\%$**

775 Torque screwdrivers TORSIOMAX



Code	size			Ø mm	L mm	Δ g
51060003	3 ¹⁾	2-30 cN·m	0.2 cN·m	F 6.3	105	55
51060012	12 ²⁾	20-120 cN·m	1 cN·m	F 6.3	157	180
51060030	30 ²⁾	40-300 cN·m	1 cN·m	F 6.3	160	205
51060050	50 ²⁾	100-500 cN·m	2.5 cN·m	F 6.3	205	420
51060100	100 ³⁾	400-1000 cN·m	5 cN·m	F 6.3	235	630
51460003	a/3 ¹⁾	0.2-3 in-lb	0.02 in-lb	F 6.3	105	55
51460012	a/12 ²⁾	2-12 in-lb	0.1 in-lb	F 6.3	157	200
51460050	a/50 ²⁾	10-50 in-lb	0.25 in-lb	F 6.3	205	440

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

TORSIOTRONIC®

- indicating and click-type
- integrated ratcheting bit-holder with 80 teeth that provide a particularly small ratchet angle of only 4.5° and thus enable particularly sensitive working – ideal for hard-to-reach fasteners
- after the tool trips, the slip mechanism prevents the preset tightening torque from being inadvertently exceeded, which protects against overtightening
- clear display of all the relevant information in a bright, battery-saving colour OLED display – readable at almost any angle
- visual assessment of the torqueing action by means of the traffic light colours in the display and laterally placed LEDs
- display in a number of languages
- long-lasting battery charge with battery-saving stand-by mode. The rechargeable batteries can be quickly and easily changed.
- stores up to 2500 fasteners and sequences for reading out and documenting on the PC later by means of the integrated micro-USB interface
- the target torque and tolerances can be individually set to evaluate the readings
- easy learning curve thanks to almost self-explanatory controls and an easily understood menu structure
- three operating modes (first peak, track, peak hold)
- tactile, visual and acoustic trigger signals.
- the ergonomically designed convex handle promotes strain-free working and is resistant to oils, grease, fuels, brake fluids and Skydrol
- clockwise and anticlockwise operation
- with 1/4" male square drive (6.3 DIN 3120/ISO 1174-1) for 1/4" sockets
- with 1/4" female square drive in the handle end (6.3 DIN 3120/ISO 1174-1) for attaching a 1/4" T-bar
- units of measure: cN·m, N·m, ft·lb, in·lb, in·oz
- included in the set: SENSOMASTER 4 software, USB cable, bit holder, T-bar handle (size 10)
- supplied with 3.6 V lithium battery, type 18650, packaged according to UN 3480
- patented
- certificate in accordance with DIN EN ISO 6789-2:2017
- in robust plastic case
- display deviation value ± 4%**

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TORSIOTRONIC Electromechanical torque screwdrivers

NEW

80 4.5°



TORSIOTRONIC® 10

Code	size						L mm	⌀ g	⌀ g with box
96510712	1.2	12-120 cN·m	0.12-1.2 N·m	0.08-0.885 ft·lb	1.06-10.7 in·lb	16.9-169.9 in·oz	317	569	1494
96510730	3	30-300 cN·m	0.3-3 N·m	0.2-2.3 ft·lb	2.6-26.6 in·lb	42-425 in·oz	317	570	1502
96510760	6	60-600 cN·m	0.6-6 N·m	0.4-4.45 ft·lb	5.3-53.1 in·lb	84.5-849.5 in·oz	317	572	1508
96510700	10	100-1000 cN·m	1-10 N·m	0.7-7.3 ft·lb	8.8-88.5 in·lb	141-1417 in·oz	317	575	1616
96511712	1.2	12-120 cN·m	0.12-1.2 N·m	0.08-0.885 ft·lb	1.06-10.7 in·lb	16.9-169.9 in·oz	317	523	1448
96511730	3	30-300 cN·m	0.3-3 N·m	0.2-2.3 ft·lb	2.6-26.6 in·lb	42-425 in·oz	317	524	1456
96511760	6	60-600 cN·m	0.6-6 N·m	0.4-4.45 ft·lb	5.3-53.1 in·lb	84.5-849.5 in·oz	317	526	1462
96511700	10	100-1000 cN·m	1-10 N·m	0.7-7.3 ft·lb	8.8-88.5 in·lb	141-1417 in·oz	317	529	1570

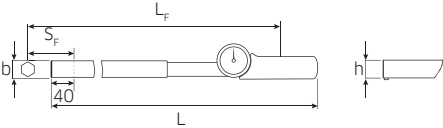
96 51 17 12 - 96 51 17 00: As for 96 51 07 12 - 96 51 07 00, but without accu (not hazardous)

MANOSKOP® 71

- 223-229

 - indicating type
 - mount for interchangeable shell tools
 - all 14 x 18 mm insert tools can also be used with insert tool adaptor No 7370/80 (max. 650 N·m)
 - trailing pointer dial
 - twin scales N·m/ft·lb
 - scale is made of luminescent light yellow special film enabling clear readings even in poor light conditions
 - handle with integrated force compensator
 - measuring element is a bending plate housed in the handle
- with overload protection
 - can be applied for either clockwise or anticlockwise tightening by turning the wrench over
 - calibration using perfectControl® calibrating unit No 7794 or calibration system No 7706. Adjustment without disassembly
 - certificate in accordance with DIN EN ISO 6789-2:2017
 - supplied in textile bag
 - display deviation value ± 4%**

71/80 MANOSKOP® torque wrench with dial gauge and mount for shell tools

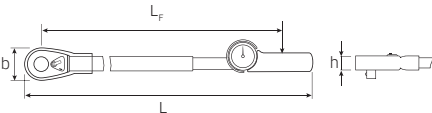


Code					 mm	b mm	h mm	L mm	L _F mm	S _F mm	ΔΔ g
50030080	160-800 N·m	120-600 ft·lb	10 N·m	10 ft·lb	24,5x28	28	24	1048	1050	95	2300

MANOSKOP® 71 with permanently installed reversible ratchet

- indicating type
 - trailing pointer dial
 - twin scales N·m/ft·lb
 - scale is made of luminescent light yellow special film enabling clear readings even in poor light conditions
 - additional protection for the gauge by the protective ring
 - handle with integrated force compensator
- not for anticlockwise measurement
 - calibration using perfectControl® calibrating unit No 7794 or calibration system No 7706. Adjustment without disassembly
 - certificate in accordance with DIN EN ISO 6789-2:2017
 - supplied in textile bag
 - display deviation value ± 4%**

71aR/80 MANOSKOP® torque wrench with dial gauge and permanently installed ratchet



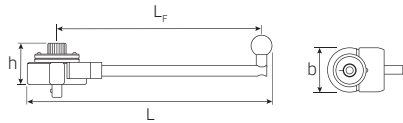
Code					 "	b mm	h mm	L mm	L _F mm	ΔΔ g
50450080	100-600 ft·lb	160-800 N·m	10 ft·lb	10 N·m	3/4	70	30	1152	1060	4900

Friction gauge

- indicating type
- permanently installed square drive for clockwise use
- trailing pointer dial
- no "needle wobble" during measurements
- lighter construction due to use of aluminium

- certificate in accordance with DIN EN ISO 6789-2:2017
- display deviation value $\pm 4\%$**

73Nm/15 Friction gauge



Code			"	b mm	h mm	L mm	L _F mm	$\Delta\Delta$ g
50240015	2-15 N·m	0.5 N·m	1/2	72	50	298.5	250	676

Industrial MANOSKOP® 755

For work on production lines or series production. No setting scale; have to be set with testers such as the STAHLWILLE No 7707 W, SmartCheck tester or the No 7794, No 7706 calibration system.

- click-type
- mount for interchangeable insert tools (755/4-30)
- dual stop signal
- particularly light and easy to handle
- handle and shank are made of square tubular steel
- any force applied to the tool after the 'click' or applied in the opposite direction to the current function (up to the maximum of the wrench's range) does not act on the trigger mechanism and cannot

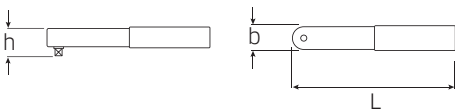
223-229

- cause damage to it
- anticlockwise torquing thanks to swap-over insert tools
- on request with preset cut-out value (surcharge 10%)
- display deviation value $\pm 4\%$**

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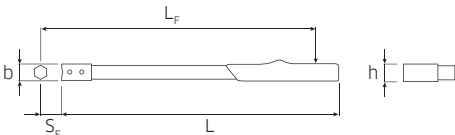
755R/1 Series MANOSKOP® torque wrench with permanently installed ratchet

- measurements independent of the point of application of force



Code			"	b mm	h mm	L mm	$\Delta\Delta$ g
50100001	1.5-12.5 N·m	1.0-9.0 ft·lb	1/4	22	18	173.5	335

755 Series MANOSKOP® torque wrenches with mount for insert tools



Code	size				b mm	h mm	L mm	L _F mm	S _F mm	$\Delta\Delta$ g
50010004	4	4-40 N·m	4-30 ft·lb	9x12	22	18	201	172	17.5	500
50010010	10	20-100 N·m	15-74 ft·lb	9x12	28	24	318	289	17.5	635
50010020	20	40-200 N·m	30-147 ft·lb	14x18	28	24	457	435	25	1045
50010030	30	60-300 N·m	40-220 ft·lb	14x18	28	24	609	587	25	1210

Versatile and quick. **MANOSKOP® 730 Quick.**



Anyone in need of a mechanical torque wrench that can be quickly set for the next operation will find the MANOSKOP® 730 Quick the ideal helper. Thanks to its flexible range of 4 – 650 N·m and the interchangeable insert tools (9 x 12 mm, 14 x 18 mm and 22 x 28 mm), the MANOSKOP® Quick is remarkably versatile – and quicker than ever: as a result of the much improved ergonomics and accessibility to the essential controls, the target torque is set in seconds.



EXACT.

The design, with opposing V-shaped »sights« and an integrated magnifier, facilitates fast, accurate setting even at an awkward reading angle. With a Vernier scale in N·m/ft·lb or N·m/in·lb.

PROTECTED.

The internal mechanism is extremely resistant to mechanical wear and well protected against dirt and soiling inside the outer housing.





FAST.

Rapid setting thanks to the easy-action locking lever in the handle. Ergonomically designed, non-slip adjuster with a thumb recess for fast, safe setting of the slider.



WEAR-RESISTANT.

Wear resistant trigger system with a flexible rod. In contrast to conventional torque wrenches, it is not necessary to reset the wrench to zero after each job to unload the spring. In this way, users benefit from long-term accuracy and safe measurement results with less time required.



SAFE.

QuickRelease safety lock guarantees secure locking of insert tools on sizes 5 – 65 and fast removal.



SIMPLE.

Quick adjustment from outside, no disassembly of the torque wrench required, with two adjustment points for the maximum & minimum values.

COMPACT.

Compact and space-saving, the MANOSKOP® 730 Quick torque wrenches are available in sizes 2 and 4. They feature the same measuring and trigger technology as their »big brother«, and are just as precise and reliable.

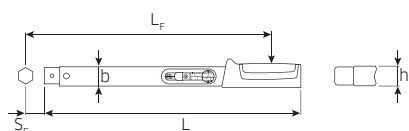


Service MANOSKOP® 730

- click-type
- the measuring element is only under load while force is being applied, no need for manual reset to zero
- mount for interchangeable insert/shell tools
- QuickRelease safety lock (sizes 5-65)
- rapid setting thanks to easy-action locking lever in the handle (sizes 5-65)
- ergonomically designed, non-slip adjuster with a thumb recess
- magnifying glass integrated in the display window
- optimised convex handle for strain-free working
- dual stop signal
- twin scales N·m/ft·lb and N·m/in·lb (sizes 5-80)
- on request also available as an N·m-only version without twin scale (sizes 5-65)
- can be applied for either clockwise or anticlockwise tightening by turning the inserts over
- any force applied to the tool after the 'click' or applied in the opposite direction to the current function – e.g. forcible loosening of a jammed screw – does not act on the trigger mechanism and cannot cause damage to it
- calibration using perfectControl® calibrating unit No 7794 or calibration system No 7706. Readjustment does not require disassembly.
- certificate in accordance with DIN EN ISO 6789-2:2017
- **display deviation value ± 4%**

223-229

730 Quick Service MANOSKOP® torque wrenches with mount for insert tools

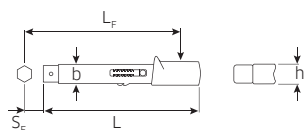


Code	size					mm	b mm	h mm	L mm	L _F mm	S _F mm	Δg
50184005	5	6-50 N·m	5-36 ft·lb	2 N·m	1 ft·lb	9x12	28	23	315	288	17.5	780
50184010	10	20-100 N·m	15-72.5 ft·lb	2.5 N·m	2.5 ft·lb	9x12	28	23	370	343	17.5	936
50184012	12	25-130 N·m	20-95 ft·lb	2.5 N·m	2.5 ft·lb	14x18	28	23	410	390	25	1074
50184020	20	40-200 N·m	30-145 ft·lb	5 N·m	5 ft·lb	14x18	28	23	455	435	25	1310
50184040	40	80-400 N·m	60-300 ft·lb	10 N·m	10 ft·lb	14x18	28	23	590	570	25	1540
50184065	65 ¹⁾²⁾	130-650 N·m	100-480 ft·lb	20 N·m	20 ft·lb	14x18	30.6	25.6	875	855	25	3192
50184565	II/65 ²⁾	130-650 N·m	100-480 ft·lb	20 N·m	20 ft·lb	22x28	30.6	25.6	897	907	55	4104
50584005	a/5	6-50 N·m	50-440 in·lb	2 N·m	10 in·lb	9x12	28	23	315	288	17.5	780
50584010	a/10	20-100 N·m	180-880 in·lb	2.5 N·m	20 in·lb	9x12	28	23	370	343	17.5	934
50584012	a/12	25-130 N·m	225-1150 in·lb	2.5 N·m	25 in·lb	14x18	28	23	410	390	25	1076
50584020	a/20	40-200 N·m	350-1750 in·lb	5 N·m	50 in·lb	14x18	28	23	455	435	25	1216

¹⁾ recommended ratchet insert tool No 735/40HD

²⁾ supplied in textile bag

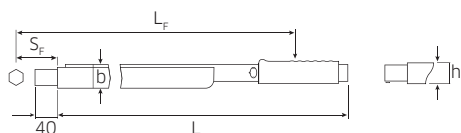
730 Quick Service MANOSKOP® torque wrenches with tool carrier for insert tools



Code	size			mm	b mm	h mm	L mm	L _F mm	S _F mm	Δg
50184002	2	4-20 N·m	0.5 N·m	9x12	27.5	23.6	179	157.2	17.5	315
50184004	4	8-40 N·m	1 N·m	9x12	27.5	23.6	223	200.8	17.5	395
50584001	a/2-1	17.5-87.5 in·lb	2.5 in·lb	9x12	27.5	23.6	179	157.2	17.5	315
50584002	a/2	30-175 in·lb	5 in·lb	9x12	27.5	23.6	179	157.2	17.5	315
50584004	a/4	70-350 in·lb	10 in·lb	9x12	27.5	23.6	223	200.8	17.5	395

730/80 Service MANOSKOP® torque wrench with mount for shell tools

- supplied in textile bag
- use shell adaptor No 7370/80 to make 14 x 18 mm insert tools fit



Code					mm	b mm	h mm	L mm	L _F mm	S _F mm	Δg
50180080	160-800 N·m	120-600 ft·lb	20 N·m	20 ft·lb	24,5x28	46	43	970	990	95	4925

Standard MANOSKOP® 721 Quick

- click-type
- the measuring element is only under load while force is being applied, no need for manual reset to zero
- rapid setting thanks to easy-action locking lever in the handle
- ergonomically designed, non-slip adjuster with a thumb recess
- magnifying glass integrated in the display window
- dual stop signal
- twin scales N·m/ft·lb
- optimised convex handle for strain-free working
- any force applied to the tool after the 'click' or applied in the opposite direction to the current function – e.g. forcible loosening of a jammed screw – does not act on the trigger mechanism and cannot cause damage to it
- all the sensitive components are protected by the sturdy tubular steel housing
- calibration using perfectControl® calibrating unit No 7794 or calibration system No 7706. Readjustment does not require disassembly.
- certificate in accordance with DIN EN ISO 6789-2:2017
- **display deviation value ± 4%**

721 Quick Standard MANOSKOP® torque wrenches with permanently installed ratchet



Code	size					"	b ₁ mm	b ₂ mm	h ₁ mm	h ₂ mm	L mm	L _F mm	ΔΔ g
50 20 40 05	5	6–50 N·m	5–36 ft·lb	2 N·m	1 ft·lb	3/8	28	27.5	23	14.5	352	293	880
50 20 40 15	15	30–150 N·m	25–110 ft·lb	5 N·m	5 ft·lb	1/2	28	41	23	18	452	387	1282
50 20 40 20	20	40–200 N·m	30–145 ft·lb	5 N·m	5 ft·lb	1/2	28	41	23	18	483	418	1349
50 20 40 30	30	60–300 N·m	50–220 ft·lb	10 N·m	10 ft·lb	1/2	28	44	23	27.5	553	486	1646

size 30 with push through square drive for anticlockwise torquing (spare square drive, refer to page 235)

721QR Quick Standard MANOSKOP® torque wrenches with permanently installed QuickRelease ratchet



Code	size					"	b ₁ mm	b ₂ mm	h ₁ mm	h ₂ mm	L mm	L _F mm	ΔΔ g
50 20 41 15	15	30–150 N·m	25–110 ft·lb	5 N·m	5 ft·lb	1/2	28	41	23	18	452.5	387	1268
50 20 41 20	20	40–200 N·m	30–145 ft·lb	5 N·m	5 ft·lb	1/2	28	41	23	18	482	416.5	1338

721QR/20/3/1 Quick Wheel-fitting set



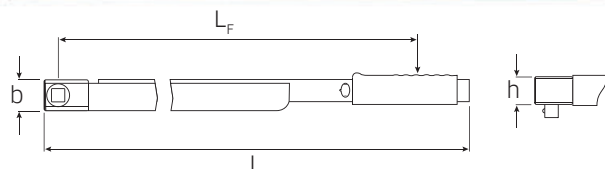
- in sturdy plastic box
- Content 5 pieces:
- 1 standard MANOSKOP® No 721QR/20 Quick, 40–200 N·m, 30 – 150 ft·lb, with permanently installed QuickRelease ratchet, reversible, 1/2" ■-drive
 - 3 wheel nut sockets No 51IMP K, sizes 17 (green), 19 (blue), 20.8 mm (red)
 - 1 extension No 509QR/5, 130 mm

Code	ΔΔ g
96 50 72 14	2818

Standard MANOSKOP® 720Nf/721Nf

- click-type
- easy setting
- dual stop signal
- twin scales N·m/ft·lb
- anticlockwise torquing thanks to swap-over square drive
- all the sensitive components are protected by the sturdy tubular steel housing in the U-shaped aluminium profile
- calibration using perfectControl® calibrating unit No 7794 or calibration system No 7706. Readjustment does not require disassembly.
- certificate in accordance with DIN EN ISO 6789-2:2017
- supplied in textile bag
- **display deviation value ± 4%**

720Nf/80 Standard MANOSKOP® torque wrench with permanently installed square drive



Code					"	b mm	h mm	L mm	L _F mm	Δg
50190081	160-800 N·m	120-600 ft·lb	20 N·m	20 ft·lb	3/4	45	42	1034	938	5650

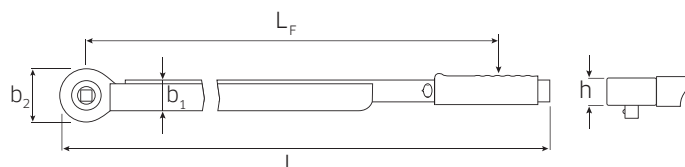
721Nf Standard MANOSKOP® torque wrenches with permanently installed ratchet



721Nf/80



721Nf/100



Code	size					"	b ₁ mm	b ₂ mm	h mm	L mm	L _F mm	Δg
50200081	80	160-800 N·m	120-600 ft·lb	20 N·m	20 ft·lb	3/4	46.5	76	42	1051	938	6380
96502001	100	200-1000 N·m	150-725 ft·lb	25 N·m	25 ft·lb	3/4	46.5	76	42	1504	1365	7010

730R/40/32 Quick Torque wrench set

- in steel case
 - for general service work
- Content 32 pieces:
- 1 Service-MANOSKOP® No 730/40 Quick, 80-400 N·m
 - 1 ratchet insert tool No 735/20, reversible, 1/2" ■-drive
 - 1 square drive insert tool No 734/20, 1/2" ■-drive
 - 7 open ended insert tools No 731/40: 13; 15; 17; 19; 22; 27; 30 mm
 - 1 open ended insert tool No 3731/40, 24 mm
 - 7 ring insert tools No 732/40: 13; 15; 17; 19; 22; 24; 27 mm
 - 10 sockets, bi-hexagon No 50: 13; 14; 15; 17; 19; 22; 24; 27; 30; 32 mm
 - 4 accessories, 1/2" ○-drive:
 - 1 T-handle No 506
 - 1 extension No 509/10, 255 mm
 - 1 extension No 509/5, 130 mm
 - 1 extension No 509/2, 55 mm



code	Δg g	
96502053	9739	1

This is how to achieve the correct tightening torque – even if you are using inserts with an extension

When you tighten fasteners using inserts whose extension length S deviates from the standard length S_F , it is necessary to recalculate the setting/display value for the torque wrench in use.

Caution! If adapters are combined with inserts or special tools, use the sum of the extensions = ΣS . Where the special tool is angled to the side, W_K will have to be determined empirically.

$$W_K = \frac{M_A \cdot L_F}{L_K} \left[\frac{\text{N} \cdot \text{m} \cdot \text{mm}}{\text{mm}} \right]$$

$$W_K = \frac{M_A \cdot L_F}{L_F - S_F + S \text{ (or } \Sigma S \text{)}}$$

M_A = desired tightening torque

W = reading/setting $W = M_A$

W_K = adjusted reading or setting value $W_K \neq M_A$

L_F = functional length (see dimension table for torque wrenches)

L_K = adjusted functional length
 $L_K = L_F - S_F + S \text{ (or } \Sigma S \text{)}$

S = extension of STAHLWILLE inserts or special tools (see dimension table for inserts)

S_F = standard extension (see dimension table for torque wrenches)

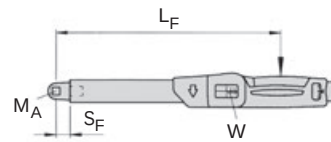
ΣS = total of all extensions of the attached inserts
 $S_{\text{adapter}} + S_{\text{insert}} + \dots$

Normal situation

Torque wrench No 730N/10 combined with square drive insert tool No 734/5 and socket size 13 mm.

Required tightening torque for the screw $M_A = 40 \text{ N} \cdot \text{m}$

Dimension table for torque wrenches: $L_F = 336 \text{ mm}$, $S_F = 17.5 \text{ mm}$
Dimension table for square drive insert tools: $S = 17.5 \text{ mm}$



No adjustment to setting value required on torque wrench.

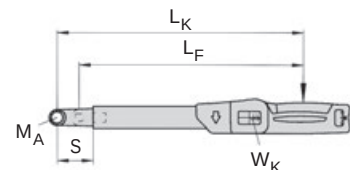
→ $S = S_F$
→ $W = M_A$

Example 1: adjusted setting value (1 insert tool)

Torque wrench No 730N/20 combined with ring insert tool No 732/40 size 36 mm

Required tightening torque for the screw $M_A = 190 \text{ N} \cdot \text{m}$

Dimension table for torque wrenches: $L_F = 424.5 \text{ mm}$, $S_F = 25 \text{ mm}$
Dimension table for ring insert tools: $S = 28 \text{ mm}$



And this is what it looks like in the catalogue:

730N Service MANOSKOP® torque wrenches with mount for insert tools													
- mount for interchangeable insert tools - QuickRelease safety lock - can be applied for either clockwise or anticlockwise tightening by turning the inserts over - display deviation value ± 3% (size 2; a/2 4 %)													
Code	size	functional	functional	functional	functional	Fine scale	mm	b	h	L	L _F	S _F	4°a
50181102	2	4-20 N·m	40-180 ft·lb	1 N·m	10 in·lb	0.2 N·m	28	23	275	226	17.5	737	
50181005	5	10-50 N·m	7-37 ft·lb	5 N·m	1 ft·lb	0.25 N·m	28	23	330	280.5	17.5	831	
50181010	10	20-100 N·m	15-75 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	28	23	386	336	17.5	988	
50181012	12	25-130 N·m	20-95 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	28	23	421	379	25	1128	
50181020	20	40-200 N·m	30-150 ft·lb	10 N·m	5 ft·lb	1 N·m	28	23	467	424.5	25	1264	
50181040	40	80-400 N·m	60-300 ft·lb	20 N·m	10 ft·lb	2 N·m	28	23	607	564.5	25	1655	
50181065	65	130-650 N·m	100-480 ft·lb	50 N·m	20 ft·lb	2.5 N·m	30.6	25.6	890	848	25	3231	
50181365	11/65	130-650 N·m	100-480 ft·lb	50 N·m	20 ft·lb	2.5 N·m	30.6	25.6	911	900	55	3504	
50181080	80	160-800 N·m	120-600 ft·lb	100 N·m	25 ft·lb	5 N·m	32.28	30.6	1178	1167	55	4825	
50181100	100	200-1000 N·m	150-750 ft·lb	100 N·m	25 ft·lb	5 N·m	32.28	30.6	1363	1352	55	5000	
50581102	a/2	40-180 in·lb	3-15 ft·lb	10 in·lb	0.5 ft·lb	2 in·lb	28	23	275	226	17.5	737	
50581005	a/5	90-450 in·lb	7-37 ft·lb	50 in·lb	1 ft·lb	2.5 in·lb	28	23	330	280.5	17.5	831	

732/40 Ring insert tools									
Code	mm	mm	b	h	S	4°a			
58224013	13	16x18	22.5	11	25	130			
58224014	14	16x18	23	11	25	123			
58224015	15	16x18	24	11	25	128			
58224016	16	16x18	25.5	12	25	133			
58224017	17	16x18	27	12	25	135			
58224018	18	16x18	29	13	25	134			
58224019	19	16x18	30.5	13	25	145			
58224021	21	16x18	33	15	25	144			
58224022	22	16x18	34.5	15	25	145			
58224024	24	16x18	37.5	15	25	153			
58224027	27	16x18	42.5	17	25	162			
58224028	28	16x18	45.5	19	25	175			
58224030	30	16x18	46	19	25	182			
58224032	32	16x18	47.5	19	25	181			
58224034	34	16x18	52	19	28	210			
58224036	36	16x18	54	19	28	203			

$$W_K = \frac{M_A \cdot L_F}{L_F - S_F + S} = \frac{190 \text{ N} \cdot \text{m} \cdot 424.5 \text{ mm}}{424.5 \text{ mm} - 25 \text{ mm} + 28 \text{ mm}} = \frac{190 \text{ N} \cdot \text{m} \cdot 424.5 \text{ mm}}{427.5 \text{ mm}} = 188.7 \text{ N} \cdot \text{m}$$

Adjusted setting value $W_K = 188.7 \text{ N} \cdot \text{m}$
→ value to set 189 N·m

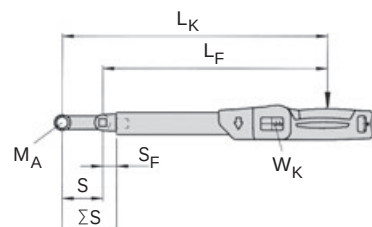
→ $S \neq S_F$
→ $W \neq M_A$

Example 2: adjusted reading (insert tool and adapter)

Torque wrench No 730N/10 combined with square drive insert tool No 734/5 and adapter No 447 size 10 mm

Required tightening torque for the screw $M_A = 25 \text{ N} \cdot \text{m}$

Dimension table for torque wrenches: $L_F = 336 \text{ mm}$, $S_F = 17.5 \text{ mm}$
Dimension table for square drive insert tools: $S_F = 17.5 \text{ mm}$
Dimension table for adapters: $\Sigma S = 50.8 \text{ mm}$



$$W_K = \frac{M_A \cdot L_F}{L_F - S_F + \Sigma S} = \frac{25 \text{ N} \cdot \text{m} \cdot 336 \text{ mm}}{336 \text{ mm} - 17.5 \text{ mm} + 17.5 \text{ mm} + 50.8 \text{ mm}} = \frac{25 \text{ N} \cdot \text{m} \cdot 336 \text{ mm}}{386.8 \text{ mm}}$$

Adjusted setting value $W_K = 21.7 \text{ N} \cdot \text{m}$

→ $\Sigma S \neq S_F$
→ $W \neq M_A$

Strong and highly talented. **MANOSKOP® 730N.**



The mechanical MANOSKOP® 730N torque wrench features an extremely wide range and is suitable for accurate application up to 1000 N·m. Its QuickSelect technology makes setting the target torque particularly easy – and very accurate. Unlock, set and lock the control knob in the end of the handle. The audible and tactile mechanism and the fine adjustment ring scale simplify setting.

CLICKING.

When the target torque is reached, MANOSKOP® 730N provides a noticeable tactile dual stop signal.



Square drive for use with insert tools in a range of formats (9 x 12 mm, 14 x 18 mm and 22 x 28 mm).



USER FRIENDLY.

Accurate QuickSelect one-handed setting – quick & easy control using the knob at the end of the handle.
Unlock. Set. Lock.



UNCOMPLICATED.

Quick adjustment from outside, no disassembly of the torque wrench required, with two adjustment points for the maximum & minimum values.



SAFE.

The QuickRelease safety interlock guarantees secure linking but quick release for changing the insert tools.



WEAR-RESISTANT.

Wear resistant trigger system with a flexible rod. In contrast to conventional torque wrenches, it is not necessary to reset the wrench to zero after each job to unload the spring. In this way, users benefit from long-term accuracy and safe measurement results with less time required.

CLEAR VIEW.

Easy-to-read dual scale with colour differentiation between the N·m and ft.lb scales to simplify fine setting.



Service MANOSKOP® 730N

- click-type
- the measuring element is only under load while force is being applied, no need for manual reset to zero
- fast, accurate setting thanks to QuickSelect quick-action adjuster
- dual stop signal
- easy-to-read double scale with colour coding to differentiate between N·m/ft·lb and ft·lb/in·lb scales
- any force applied to the tool after the 'click' or applied in the opposite direction to the current function – e.g. forcible loosening of a jammed screw – does not act on the trigger mechanism and cannot cause damage to it
- two-component handle with ergonomically designed green softer layers (resistant to oils, grease, fuels, brake fluids and skydrol)
- calibration using perfectControl® calibrating unit No 7794 or calibration system No 7706. Readjustment does not require disassembly.
- certificate in accordance with DIN EN ISO 6789-2:2017
- supplied in textile bag (from size 65)
- registered design

730N Service MANOSKOP® torque wrenches with mount for insert tools

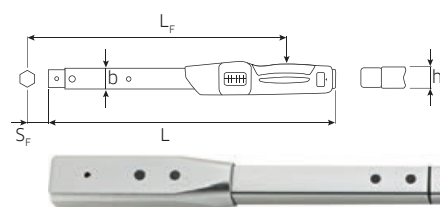
- mount for interchangeable insert tools
- QuickRelease safety lock

223-229

- can be applied for either clockwise or anticlockwise tightening by turning the inserts over
- display deviation value $\pm 3\%$ (size 2; a/2 4%)

730N/10

730N/80



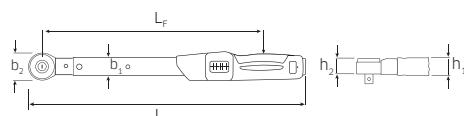
Code	size					Fine scale		b mm	h mm	L mm	L _F mm	S _F mm	Δg
50181102	2	4-20 N·m	40-180 in·lb	1 N·m	10 in·lb	0.2 N·m	9x12	28	23	275	226	17.5	737
50181005	5	10-50 N·m	7-37 ft·lb	5 N·m	1 ft·lb	0.25 N·m	9x12	28	23	330	280.5	17.5	831
50181010	10	20-100 N·m	15-75 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	9x12	28	23	386	336	17.5	988
50181012	12	25-130 N·m	20-95 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	14x18	28	23	421	379	25	1128
50181020	20	40-200 N·m	30-150 ft·lb	10 N·m	5 ft·lb	1 N·m	14x18	28	23	467	424.5	25	1264
50181040	40	80-400 N·m	60-300 ft·lb	20 N·m	10 ft·lb	2 N·m	14x18	28	23	607	564.5	25	1655
50181065	65 *	130-650 N·m	100-480 ft·lb	50 N·m	20 ft·lb	2.5 N·m	14x18	30.6	25.6	890	848	25	3231
50181365	II/65	130-650 N·m	100-480 ft·lb	50 N·m	20 ft·lb	2.5 N·m	22x28	30.6	25.6	911	900	55	3504
50181080	80	160-800 N·m	120-600 ft·lb	100 N·m	25 ft·lb	5 N·m	22x28	30.6	25.6	1178	1167	55	4825
50181100	100	200-1000 N·m	150-750 ft·lb	100 N·m	25 ft·lb	5 N·m	22x28	30.6	25.6	1363	1352	55	5000
50581102	a/2	40-180 in·lb	3-15 ft·lb	10 in·lb	0.5 ft·lb	2 in·lb	9x12	28	23	275	226	17.5	737
50581005	a/5	90-450 in·lb	7-37 ft·lb	50 in·lb	1 ft·lb	2.5 in·lb	9x12	28	23	330	280.5	17.5	831
50581010	a/10	180-900 in·lb	15-75 ft·lb	100 in·lb	2.5 ft·lb	5 in·lb	9x12	28	23	386	336	17.5	988
50581020	a/20	350-1800 in·lb	30-150 ft·lb	100 in·lb	5 ft·lb	10 in·lb	14x18	28	23	467	424.5	25	1264
50581040	a/40	60-300 ft·lb	800-3600 in·lb	20 ft·lb	100 in·lb	2 ft·lb	14x18	28	23	607	564.5	25	1655

* recommended ratchet insert tool No 735/40HD

730NR Service MANOSKOP® torque wrenches with permanently installed fine-tooth ratchet

- in sturdy plastic box (size 65 in steel box)

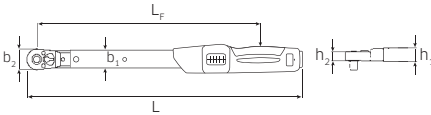
- deviation of indication $\pm 4\%$



Code	size					Fine scale		b ₁ mm	b ₂ mm	h ₁ mm	h ₂ mm	L mm	L _F mm	Δg	Δg with box
96503105	5 FK	10-50 N·m	7-37 ft·lb	5 N·m	1 ft·lb	0.25 N·m	3/8	28	33	23	24	364	280.5	973	1763
96503110	10 FK	20-100 N·m	15-75 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	1/2	28	33	23	24	420	336.5	1146	1934
96503120	20 FK	40-200 N·m	30-150 ft·lb	10 N·m	5 ft·lb	1 N·m	1/2	28	43	23	26	513.5	425	1583	2370
96502140	40 FK	80-400 N·m	60-300 ft·lb	20 N·m	10 ft·lb	2 N·m	3/4	28	50	23	31.5	657	564.5	2122	2657
96502265	65 FK-HD	130-650 N·m	100-480 ft·lb	50 N·m	20 ft·lb	2.5 N·m	3/4	30.6	58	25.6	36	944	848	3698	6188

730NR Service MANOSKOP® torque wrenches with permanently installed fine-tooth ratchet

- in sturdy plastic box
- with QuickRelease safety lock
- deviation of indication $\pm 4\%$



Code	size					Fine scale 	"	b ₁ mm	b ₂ mm	h ₁ mm	h ₂ mm	L mm	L _F mm	Δ g	Δ g with box
96 50 21 05	5QR FK	10-50 N·m	7-37 ft·lb	5 N·m	1 ft·lb	0.25 N·m	3/8	28	29	23	14.5	372.5	291	961	1386
96 50 21 10	10QR FK	20-100 N·m	15-75 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	1/2	28	29	23	14.5	428.5	346.5	1129	1554
96 50 21 20	20QR FK	40-200 N·m	30-150 ft·lb	10 N·m	5 ft·lb	1 N·m	1/2	28	41	23	18	526	438.5	1589	2014

Service MANOSKOP® 730 Fix

- for daily use in series production
- the setting knob can be unscrewed after the target has been set - making inadvertent changes to the settings impossible
- the TORX® TAMPER-RESISTANT locking screw

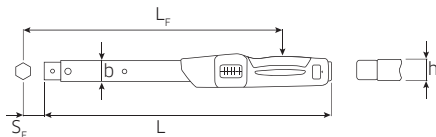
supplied with the tool also protects against unwanted manipulation the adhesive seals supplied offer a further level of security. It is not possible to adjust the setting without breaking the seal

730 Fix Service MANOSKOP® torque wrenches with mount for insert tools

- click-type
- the measuring element is only under load while force is being applied, no need for manual reset to zero
- mount for interchangeable insert tools
- QuickRelease safety lock
- fast, accurate setting thanks to QuickSelect quick-action adjuster
- dual stop signal
- easy-to-read double scale with colour coding to differentiate between N·m/ft·lb and ft·lb/in·lb scales
- can be applied for either clockwise or anticlockwise tightening by turning the inserts over

223-229

- any force applied to the tool after the 'click' or applied in the opposite direction to the current function - e.g. forcible loosening of a jammed screw - does not act on the trigger mechanism and cannot cause damage to it
- two-component handle with ergonomically designed green softer layers (resistant to oils, grease, fuels, brake fluids and skydrol)
- calibration using perfectControl® calibrating unit No 7794 or calibration system No 7706. Readjustment does not require disassembly
- certificate in accordance with DIN EN ISO 6789-2:2017
- registered design
- in sturdy plastic box (size 80-100 in steel box)
- display deviation value $\pm 3\%$



Code	size					Fine scale 	mm	b mm	h mm	L mm	L _F mm	S _F mm	Δ g	Δ g with box
96 50 30 05	5	10-50 N·m	7-37 ft·lb	5 N·m	1 ft·lb	0.25 N·m	9x12	28	23	330	280.5	17.5	828	1632
96 50 30 10	10	20-100 N·m	15-75 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	9x12	28	23	386	336	17.5	986	1788
96 50 30 12	12	25-130 N·m	20-95 ft·lb	10 N·m	2.5 ft·lb	0.5 N·m	14x18	28	23	421	379	25	1124	1928
96 50 30 20	20	40-200 N·m	30-150 ft·lb	10 N·m	5 ft·lb	1 N·m	14x18	28	23	467	424.5	25	1266	1890
96 50 30 40	40	80-400 N·m	60-300 ft·lb	20 N·m	10 ft·lb	2 N·m	14x18	28	23	607	564.5	25	1666	2444
96 50 30 65	65*	130-650 N·m	100-480 ft·lb	50 N·m	20 ft·lb	2.5 N·m	14x18	30.6	25.6	890	848	25	3242	6500
96 50 34 65	II/65	130-650 N·m	100-480 ft·lb	50 N·m	20 ft·lb	2.5 N·m	22x28	30.6	25.6	911	900	55	3490	7000
96 50 30 80	80	160-800 N·m	120-600 ft·lb	100 N·m	25 ft·lb	5 N·m	22x28	30.6	25.6	1178	1167	55	4794	10500
96 50 31 00	100	200-1000 N·m	150-750 ft·lb	100 N·m	25 ft·lb	5 N·m	22x28	30.6	25.6	1363	1352	55	5196	11000
96 58 30 05	a/5	90-450 in·lb	7-37 ft·lb	50 in·lb	1 ft·lb	2.5 in·lb	9x12	28	23	330	280.5	17.5	832	1638
96 58 30 10	a/10	180-900 in·lb	15-75 ft·lb	100 in·lb	2.5 ft·lb	5 in·lb	9x12	28	23	386	336	17.5	988	1790
96 58 30 20	a/20	350-1800 in·lb	30-150 ft·lb	100 in·lb	5 ft·lb	10 in·lb	14x18	28	23	467	424.5	25	1066	2072
96 58 30 40	a/40	60-300 ft·lb	800-3600 in·lb	20 ft·lb	100 in·lb	2 ft·lb	14x18	28	23	607	564.5	25	1670	2614

* recommended ratchet insert tool No 735/40HD

TRIPLE SAFETY.

The setting knob can be unscrewed after the target has been set - making inadvertent changes to the settings impossible.



The TORX® TAMPER-RESISTANT locking screw supplied with the tool also protects against unwanted manipulation.



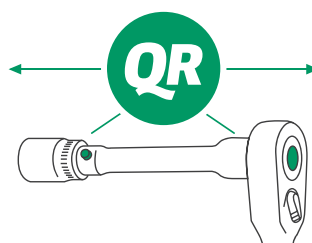
The adhesive seals supplied offer a further level of security. It is not possible to adjust the setting without breaking the seal.



Small fits all. **SENSOTORK® 701.**



Working in confined spaces – and with very low torques? SENSOTORK® 701 is designed specifically for such cases. With its compact design and permanently installed fine-tooth ratchet, precise fastener tightening is no problem even in very tight spaces. The electronic torque wrench shows torques from 1 to 20 N·m with a display deviation of only $\pm 4\%$ – and in combination with the SENSOMASTER software, the SENSOTORK® 701 can also be used with full logging capability.



SAFE.

The QuickRelease technology ensures tools cannot be inadvertently lost – while enabling rapid, safe tool changes.

COMPACT.

With a compact length of only 21 cm, it is ideally suited to safe, accurate work in confined spaces.

VERSATILE.

For torques from 1 to 20 N·m – the ideal choice for bolt tightening on modern materials such as plastic, carbon and aluminium, for state-of-the-art bicycles with carbon frames, for example.

INTUITIVE.

The required mode of operation (track, peak hold, user (fastener evaluation)) can be quickly and easily set using the single-button setting system.



4,5°

80

EFFICIENT.

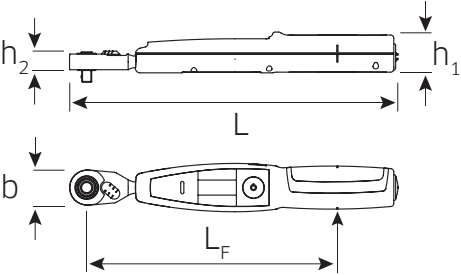
Eighty teeth provide a tight ratchet angle of only 4.5° – facilitating efficient working in confined spaces. In contrast to conventional fine-tooth ratchets, no less than eight teeth engage at once here, ensuring maximum load capacity and, at the same time, smooth action and durability.

701/2

Electronic torque wrench SENSOTORK® with permanently installed fine-tooth ratchet

QR

- indicating
- slim, compact shape for smaller torques from 1 N·m upwards
- measuring units: N·m, cN·m, ft·lb, in·lb
- measurements independent of the point of application of force
- additional functions using SENSMASER 4 software (not included, free download at www.stahlwille.de):
 - adjustable joints
 - evaluation of tightening operation by means of coloured LEDs, buzzer and vibration
- calibrating interval adjustable
- logging function
- supplied with 3.6 V lithium battery, type 14500, packed in accordance with UN3091, Class 9
- calibration in conjunction with perfectControl® calibrating unit No 7794 or complete calibration system No 7706. Readjustment does not require disassembly
- certificate in accordance with DIN EN ISO 6789-2:2017
- in sturdy plastic box
- display deviation value $\pm 4\%$



Code						b mm	h ₁ mm	h ₂ mm	L mm	L _F mm	$\Delta\Delta$ g	$\Delta\Delta$ g with box
96 50 45 02	1-20 N·m	100-2000 cN·m	0.7-15 ft·lb	9-180 in·lb	1/4	22.6	26	10	210	160	145	710
96 50 46 02	1-20 N·m	100-2000 cN·m	0.7-15 ft·lb	9-180 in·lb	1/4	22.6	26	10	210	160	132	700

96 50 46 02 - As for 96 50 45 02, but without battery (not hazardous)

7761/3

Interface adaptor set

required for automated calibration and adjustment using calibrating and adjusting units perfectControl® No 7794-2 and 7794-3.

- Contents:
- No 7761 interface adaptor
 - No 7752 spiral cable
 - No 7760 mains adaptor



Code	$\Delta\Delta$ g
96 52 11 61	255



5

Note!

Torque tightening tools are measuring instruments.
They must be regularly calibrated with suitable instruments and adjusted accordingly (refer to DIN EN ISO 6789-1, 5.3 Conformance test during use and DIN EN ISO 6789-2, 4.1 Calibration during use).

A stroke of genius – with a logging function. **MANOSKOP® 730D.**



Made in
Germany

Tool owners wishing to combine the benefits of precision digital technology with the tried-and-tested mechanical torque wrench need look no further than the MANOSKOP® 730D. The patented electromechanical release triggers when the target torque is reached – and indicates this with a definite tactile signal and an audible click. In addition, the LC display gives a visual evaluation of the tightening action using different colours.

IDEAL.

After clicking, the MANOSKOP® 730D indicates the torque actually applied. As a result, the user has the opportunity to optimise his/her working methods.



Square drive for use with a wide range of different insert tools, including the 22 x 28 mm system for especially high torques.



ELECTROMECHANICAL.

The MANOSKOP® 730D has an electromechanical release and, in this way, combines precise, electronic measurement with the comforting, perceptible tactile signal when the target torque is reached.



SAFE.

The QuickRelease technology ensures tools cannot be inadvertently lost – while enabling rapid, safe tool changes.

ERGONOMICALLY REFINED.

The 2-component grip lies comfortably in the hand even after several tightening actions due to its soft zone, but it is still resistant to oils, grease, fuels, brake fluids and Skydrol.



OPTIONAL.

STAHLWILLE's optional SENSOMASTER software facilitates programming electronic torque wrenches and enables stored data to be read out.

CONNECTING YOU NOW...

The stored tightening torques can be read out via the USB interface and then evaluated and documented in conjunction with the SENSOMASTER 4 software.



READER-FRIENDLY.

The LC display is easy to read and evaluates the fastener visually by means of coloured displays. All settings can be made quickly and easily using the keyboard, which uses only four keys.

Service work & series production MANOSKOP® 730D – indicating and click-type

- tactile and acoustic trigger signal
 - mount for interchangeable insert tools
 - QuickRelease safety lock
 - fast setting using convenient keypad
 - automatic compensation to achieve correct tightening torque even if a changed extension is entered
 - overload protection by means of acoustic and visual signals
 - automatic keypad lock prevents inadvertent changes
 - display also works for anticlockwise torque
 - units of measurement: N·m, ft·lb, in·lb
 - different tolerance limits can be set for each joint
 - visual red and green signals in the display confirm the status of the joint
 - additional security for presets (function mode, trigger or preset value, unit of measurement, tolerance, save, deviating extension) using PIN code
 - up to 7.500 measurements can be stored
- 223-229
- USB interface
 - automatic notification of the next calibration date
 - calibration using perfectControl® calibrating unit No 7794 or calibration system No 7791
 - two-component handle with ergonomically designed green softer layers (resistant to oils, grease, fuels, brake fluids and skydrol)
 - certificate in accordance with DIN EN ISO 6789-2:2017
 - in sturdy plastic box (sizes 40-100 in steel box)
 - patent
 - supplied with two 1.5 V AA batteries. AA/LR6, 1.2 V rechargeable cells may also be used
 - **display deviation value ± 2%, ± 1 digit**

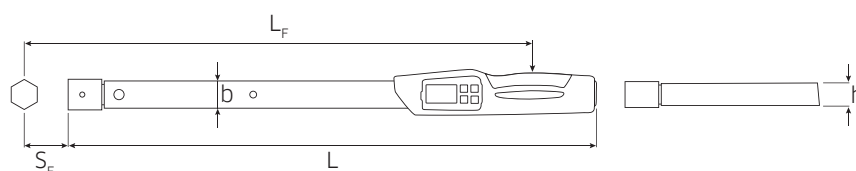
730D Service/series MANOSKOP® torque wrenches with mount for insert tools



730D/20



730D/80



Code	size				Setting/display resolution				b	h	L	L _F	S _F	Δ± g	Δ± g with box
96501710	10	10-100 N·m	7.4-75 ft·lb	90-900 in·lb	0.2/0.1	0.2/0.1	2/1.0	9x12	28	23	467	426.5	17.5	1085	1510
96501720	20	20-200 N·m	15-150 ft·lb	180-1800 in·lb	0.5/0.1	0.5/0.1	5/1.0	14x18	28	23	548	515	25	1361	1896
96501740	40	40-400 N·m	30-300 ft·lb	360-3600 in·lb	1.0/0.1	1.0/0.1	10/1.0	14x18	28	23	688	655	25	3300	5155
96501765	65*	65-650 N·m	48-480 ft·lb	580-5800 in·lb	1.0/0.1	1.0/0.1	10/1.0	14x18	30.6	25.6	870	837	25	3300	6000
96501965	II/65	65-650 N·m	48-480 ft·lb	580-5800 in·lb	1.0/0.1	1.0/0.1	10/1.0	22x28	30.6	25.6	892	889	55	3224	7500
96502080	80	80-800 N·m	60-600 ft·lb	720-7200 in·lb	1.0/1.0	1.0/1.0	10/1.0	22x28	30.6	25.6	1160	1157	55	4577	10500
96502100	100	100-1000 N·m	74-750 ft·lb	900-9000 in·lb	1.0/1.0	1.0/1.0	10/1.0	22x28	30.6	25.6	1344	1341	55	4995	11000

* recommended ratchet insert tool No 735/40HD

730DR Service/series MANOSKOP® torque wrenches with reversible ratchet insert tool



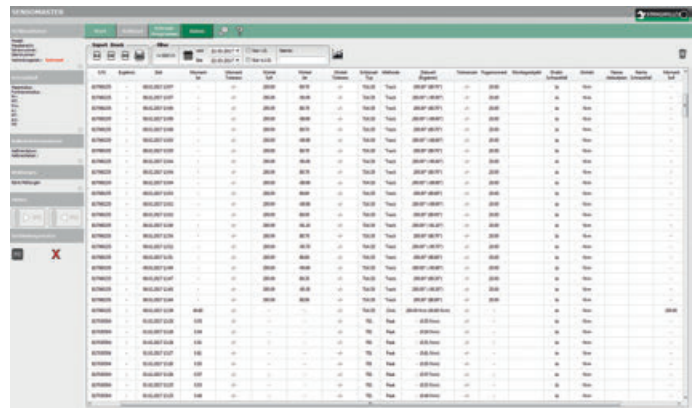
Code	size				Setting/display resolution					L mm	$\Delta\Delta$ g	$\Delta\Delta$ g with box
		N·m	ft·lb	in·lb	N·m	ft·lb	in·lb	"	mm			
96501810	10	10-100 N·m	7.4-75 ft·lb	90-900 in·lb	0.2/0.1	0.2/0.1	2/1.0	1/2	9x12	501	1232	1657
96501820	20	20-200 N·m	15-150 ft·lb	180-1800 in·lb	0.5/0.1	0.5/0.1	5/1.0	1/2	14x18	595	1663	2198
96501840	40	40-400 N·m	30-300 ft·lb	360-3600 in·lb	1.0/0.1	1.0/0.1	10/1.0	3/4	14x18	738	2232	4722
96501865	65	65-650 N·m	48-480 ft·lb	580-5800 in·lb	1.0/0.1	1.0/0.1	10/1.0	3/4	14x18	975	3767	6530
96502065	II/65	65-650 N·m	48-480 ft·lb	580-5800 in·lb	1.0/0.1	1.0/0.1	10/1.0	3/4	22x28	977	3994	9000
96501880	80	80-800 N·m	60-600 ft·lb	720-7200 in·lb	1.0/0.1	1.0/0.1	10/1.0	3/4	22x28	1255	6492	12500
96501800	100	100-1000 N·m	74-750 ft·lb	900-9000 in·lb	1.0/0.1	1.0/0.1	10/1.0	3/4	22x28	1439	6910	12500

7759-5 USB hub, jack cable and SENSOMASTER 4 software

- SENSOMASTER 4 - one software package for all electronic torque wrenches from STAHLWILLE
- self-explanatory thanks to intuitive GUI with clearly organised tabbed layout
- quick and easy programming for electronic torque wrenches
- enables comprehensive evaluations, for example in connection with quality assurance
- read out stored wrench data and joint readings:
 - joint identifier
 - tool serial number
 - date and time of tightening operation
 - target torque or target angle
 - torque level at which the tool cuts out
 - tightening torque or angle reached
 - tolerances
 - joint evaluation
- storage of joint data in a database
- delete or print highlighted joints from the database
- export displayed joint data to a range of file formats (*.XLS;*.CSV;*.ODG)
- user management
- define new PIN
- delete joint data stored in wrench

System requirements:

- PC
- from Microsoft Windows XP on
- USB connection



Code	L m	$\Delta\Delta$ g
96583630	1.5	65

7751 Jack cable

- with jacks at both ends, 90° angled



Code	L m	$\Delta\Delta$ g
52110051	1.5	50

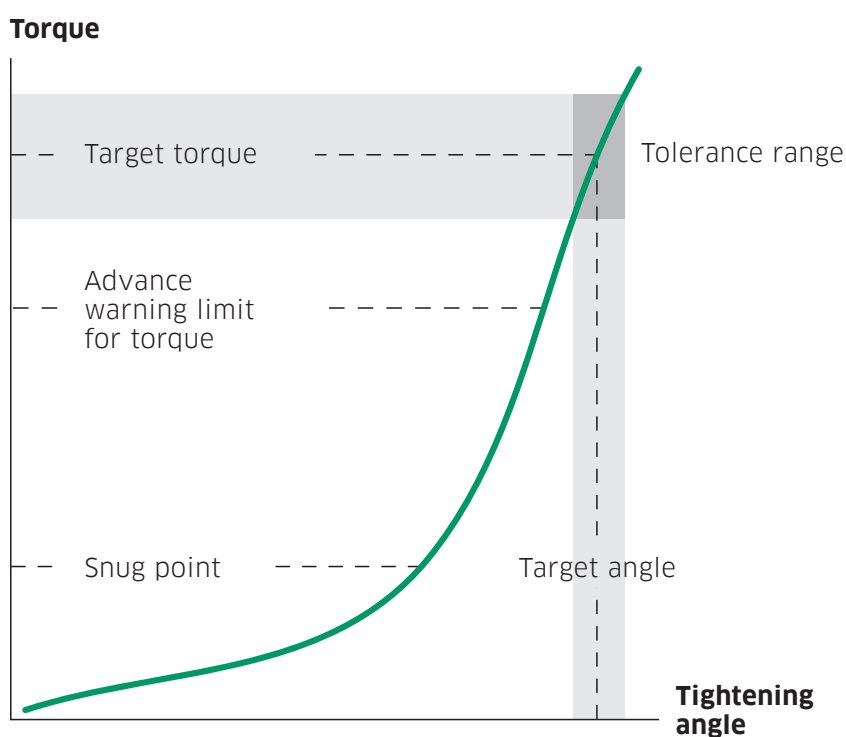
7757-1 USB adaptor



Code	$\Delta\Delta$ g
52111057	10

For absolute accuracy. **STAHLWILLE torque angle/torque wrenches.**

For high-accuracy applications – Category A bolted connections, for example – just checking the torque is not enough. As well as the torque, it is crucial to tighten to the correct tightening angle.



The torque reading specifies how much force was applied to tighten a fastener. For many applications, this is perfectly good enough. However, in certain cases, the additional measure of accuracy is an essential requirement. The tightening force that is generated between the workpieces in a bolted joint has to be exactly adhered to: if the force is too great, there is a risk of breakage. If it is too low, on the other hand, the connection will not be firm enough and may lead to failure in the assembly under normal operation conditions. Since the tension is dependent on the tightening torque and the angle, measuring equipment that can measure both quantities exactly is required. For applications of this kind, STAHLWILLE has precisely the solutions industry needs.



MANOSKOP® 714
» 216

SENSOTORK® 713R
» 220

EFFICIENT.

Easily readable displays and automatic switch-over to angle-controlled measurement once the target tightening torque has been reached – key features in efficient, safe work practice.

AUDITED.

All our angle-controlled torque wrenches have a logging function. Using the corresponding software (this is an optional extra), it is possible to read out programmed, stored readings and archive them on the PC – for example by the serial number of the tool, date and timestamp of the tightening operation, target torque and angle and the torques and angles actually recorded.

ACCURATE.

Accuracy counts – uncertainty is reduced to a minimum to guarantee accurate readings.

SAFE.

Increased fastener quality – including the angle of turn as the second measured quantity makes the bolted joint even more secure.

ECONOMICAL.

Thanks to the considerably extended measuring ranges, every angle-controlled torque wrench can replace as many as four mechanical torque wrenches (two indicating and two clicking), which simultaneously reduces the costs of maintenance, calibration and adjustment. All these models are suitable for clockwise and anticlockwise tightening.

Simply special. **MANOSKOP® 714.**



As an electromechanical torque wrench, the MANOSKOP® 714 delivers the best of both worlds. Users benefit from precise, electronic tracking, but also feel and hear the familiar »click« of mechanical torque wrenches. The result of the tightening action is evaluated visually on the high-resolution OLED display and lateral LEDs and is indicated acoustically. The menu is intuitive to use and can be freely configured. As one would expect, the MANOSKOP® 714 is capable of logging tightening actions, indicates in both anticlockwise and clockwise directions and clicks in a clockwise direction.

ACCURATE.

Display deviation value $\pm 2\%$ for torque and $\pm 1\%$ for angle. All readings are independent of the point of application of force (with sizes 1, 2 and 4).



Optional rechargeable lithium-ion batteries with 2600 mAh and a corresponding charger cradle ensure the tool is always ready for use.



MADE TO MEASURE.

Four measuring modes (torque, angle, torque backed up by angle, angle backed up by torque).



CONNECTING YOU NOW...

Micro-USB interface for quick connection to a PC.



SIMPLE.

Smooth-action bayonet connection on battery compartment. Can optionally be equipped with Li-Ion battery 7195-2.

HD DISPLAY.

High-definition colour display providing a reading angle up to 170° and with additional side-mounted indicator lamps. Yellow lamp: advance warning threshold reached, green lamp: within the target range, red lamp: reading is outside the tolerance range.

VERSATILE.

Three function modes: first peak, peak (indicating mode) and track (indicating mode).



INDIVIDUAL.

Individually configurable menus. Includes SENSOMASTER software for easy configuration of the tool.

MANOSKOP® 714 – indicating and click-type Electromechanical angle-controlled torque wrench

- 4 measuring modes (torque, angle, torque backed up by angle, angle backed up by torque)
- high-definition colour display with additional side-mounted indicator lamps
- freely configurable menu structure
- optionally: Li-ion battery No 7195-2 and charger No 7160
- 3 function modes: cut-out, peak hold (indicating mode with peak value) and track (indicating mode with current value)
- micro USB interface
- bayonet connection for battery compartment
- QuickRelease safety lock change system for insert tools
- data storage (≤ 2500 tightening jobs)
- as many as 200 joints can be programmed in up to 25 preset sequences
- different tolerance limits can be set for each joint
- acoustic and visual assessment of the joint
- rapid, accurate setting via keypad
- the automatic keypad lock prevents inadvertent changes
- overload protection by means of acoustic and visual signals and a fail-safe system (clockwise)
- automatic notification of the next calibration date, either by the number of joints or the time interval
- fully automated calibrating and adjusting using the perfectControl® calibrating and adjusting unit No 7794-2 (torque) or 7794-3 (torque and angle)
- units of measure: N·m, ft·lb, in·lb
- tightening torque is automatically corrected if a deviating extension is entered
- immediately reusable after release
- clockwise and anticlockwise tightening – it may be necessary to refit the insert tool rotated through 180° for anticlockwise tightening in the cut-out mode
- tactile and acoustic trigger signal
- torque and angle are simultaneously visible
- all readings are independent of the point of application of force (with sizes 1, 2 and 4)
- safe handling due to ergonomically designed handle (resistant to oils, grease, fuels, brake fluid and skydrol)
- 3 certificates (torque indicating/clicking in accordance with DIN EN ISO 6789-2:2017, angle)
- in sturdy plastic box (size 40-100 in steel box)
- design patent, patent
- supplied with SENSOMASTER 4 software, USB cable, 4 AAA/LR03 micro-batteries, 1.5 V. AAA, 1.2 V, micro NiMH rechargeable batteries can be used
- display resolution, angle 0.1°
- **display deviation value, angle $\pm 1\%$, ± 1 digit**
- display resolution, torque ≤ 60 N·m: 0.01 N·m; > 60 N·m: 0.1 N·m
- **display deviation value, torque $\pm 2\%$, ± 1 digit**

223-229

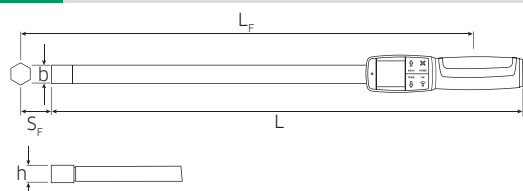
5

714

MANOSKOP® tightening angle torque wrenches with mount for insert tools

product
design award

2013



714/2



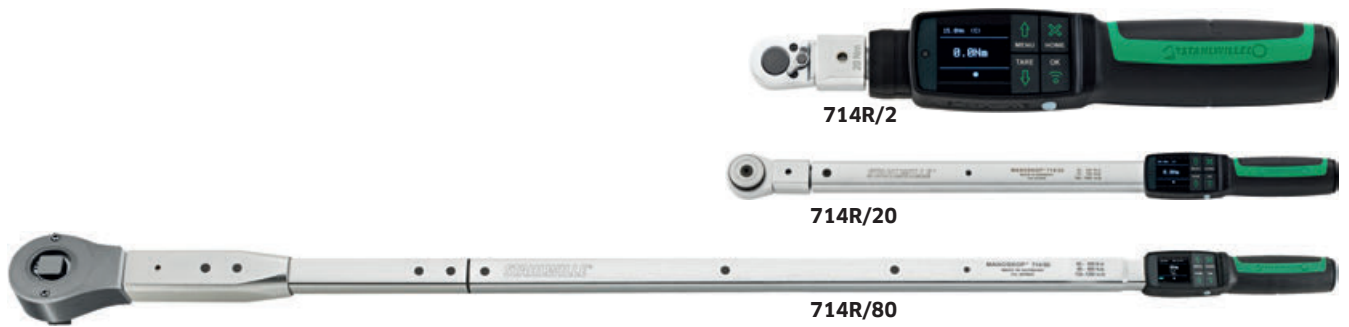
714/20



714/80

Code	size					b mm	h mm	L mm	L _F mm	S _F mm	Δg g	Δg g with box
96 50 09 01	1	1–10 N·m	0.7–7.5 ft·lb	9–90 in·lb	9x12	28	23	226	188	17.5	370	795
96 50 09 02	2	2–20 N·m	1.5–15 ft·lb	18–180 in·lb	9x12	28	23	226	188	17.5	380	805
96 50 09 04	4	4–40 N·m	3–30 ft·lb	36–360 in·lb	9x12	28	23	252	214	17.5	420	845
96 50 09 06	6	6–60 N·m	4.5–45 ft·lb	54–540 in·lb	9x12	28	23	393	355	17.5	810	1235
96 50 09 10	10	10–100 N·m	7.4–75 ft·lb	90–900 in·lb	9x12	28	23	466	428	17.5	1085	1655
96 50 09 20	20	20–200 N·m	15–150 ft·lb	180–1800 in·lb	14x18	28	23	547	516	25	1361	1896
96 50 09 40	40	40–400 N·m	30–300 ft·lb	360–3600 in·lb	14x18	28	23	687	656	25	1765	5155
96 50 09 65	65	65–650 N·m	48–480 ft·lb	580–5800 in·lb	22x28	30.6	25.6	890	890	55	3222	7000
96 50 09 80	80	80–800 N·m	60–600 ft·lb	720–7200 in·lb	22x28	30.6	25.6	1158	1158	55	4572	10400
96 50 01 00	100	100–1000 N·m	74–750 ft·lb	900–9000 in·lb	22x28	30.6	25.6	1343	1343	55	4990	10500

714R MANOSKOP® tightening angle torque wrenches with reversible ratchet insert tool



Code	size				"		mm	L mm	ΔΔ g	ΔΔ g with box
96 50 1001	1	1-10 N·m	0.7-7.5 ft·lb	9-90 in·lb	1/4		9x12	269	432	857
96 50 1002	2	2-20 N·m	1.5-15 ft·lb	18-180 in·lb	1/4		9x12	269	442	867
96 50 1004	4	4-40 N·m	3-30 ft·lb	36-360 in·lb	1/4		9x12	295	482	907
96 50 1006	6	6-60 N·m	4.5-45 ft·lb	54-540 in·lb	3/8		9x12	427	965	1390
96 50 1010	10	10-100 N·m	7.4-75 ft·lb	90-900 in·lb	1/2		9x12	500	1232	1657
96 50 1020	20	20-200 N·m	15-150 ft·lb	180-1800 in·lb	1/2		14x18	594	1663	2198
96 50 1040	40	40-400 N·m	30-300 ft·lb	360-3600 in·lb	3/4		14x18	737	2275	5665
96 50 1065	65	65-650 N·m	48-480 ft·lb	580-5800 in·lb	3/4		22x28	980	5137	9000
96 50 1080	80	80-800 N·m	60-600 ft·lb	720-7200 in·lb	3/4		22x28	1253	6487	12300
96 50 1100	100	100-1000 N·m	73-735 ft·lb	885-8850 in·lb	3/4		22x28	1438	6905	12500

7195-2 Li-ion battery for No 714

- max. charge voltage 4.2 V
- capacity 2600 mAh
- hazardous goods: Rechargeable Li-ion battery according to UN 3480, Class 9



Code	ΔΔ g
54 10 1195	74

7160 Charging dock for Li-ion battery No 7195-2

- including charger
- Input: 100 V-240 V AC
- Output: 4.2 V DC
- charge duration: 4 hrs.
- with interchangeable socket adaptors



Code	ΔΔ g
54 10 0060	440

7761/3 Interface adaptor set

required for automated calibration and adjustment of angle-controlled torque wrench No 714 using calibrating and adjusting units perfectControl® No 7794-2 and 7794-3.

Contents:

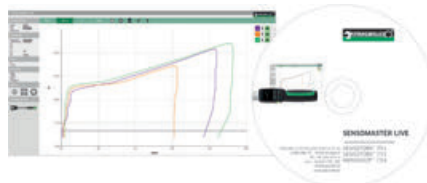
- No 7761 interface adaptor
- No 7752 spiral cable
- No 7760 mains adaptor



Code	ΔΔ g
96 52 1161	255

7732-2 SENSOMASTER Live software

- record torqueing operations with the MANOSKOP® 714, SENSOTORK® 713R (from firmware 4.x) and SENSOTORK® 701
- representation of torque over time, angle over time, torque over angle
- representation of several curves simultaneously
- data export for further processing
- the software is for a single-seat licence
- torque wrenches 714/1 ... /100 must have firmware version 02.01.02



Code	ΔΔ g
96 58 52 35	111

7762 Docking station for No 714

- stationary base for securely connecting angle-controlled torque wrench No 714 to a PC via a USB port



Code	ΔΔ g
52 11 0062	440

7762-1 Rest for docking station No 7762

- for securely supporting long angle-controlled torque wrenches No 714 from size 6 up



Code	ΔΔ g
52 11 0162	475

The torque angle specialist. **SENSOTORK® 713R.**



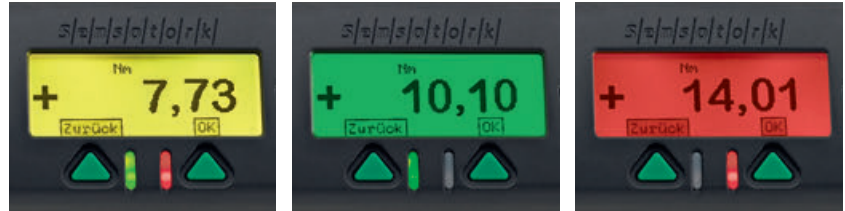
When it comes to prescribed tightening using the torque angle, SENSOTORK® 713R is the ideal tool. This tightening angle torque wrench for clockwise and anticlockwise operation boasts a particularly flexible measuring range and measures the angle and torque applied irrespective of the point of application of force. In this way it prevents human error. In addition, there is a display deviation of only $\pm 1^\circ$ for the angle of rotation and $\pm 1\%$ for the torque.

EXACT.

With a display deviation value of only $\pm 1\%$, the SENSOTORK® 713R is the champion in the STAHLWILLE range.



Easy extension setting. Where the insert tool requires an extension adjustment, simply enter the new value – recalculation using formulae is not necessary.



SIMPLE.

Preset individual fasteners and program complex sequences – whether on the PC or on the tool itself using the display and function keys.

MULTISENSORY.

The torque achieved is indicated by visual, audible and tactile signals – with a multicoloured backlit LED display, acoustic signal and vibration.



SAFE.

The QuickRelease interlock technology ensures tools cannot be inadvertently lost – while enabling rapid, safe tool changes.



UNCOMPLICATED.

Operator guidance and the menu structure are intuitive – arrow keys simplify operation.

LOGGING FUNCTION.

Comprehensive documentation options. As many as 2000 tightening actions can be stored with timestamps.



CONNECTING YOU NOW...

Set the parameters for the torque wrench or read out the stored data. This is a simple matter using the USB interface together with the optional SENSOMASTER software.

Electronic angle-controlled torque wrenches SENSOTORK® 713R and electronic torque wrench SENSOTORK® 712R

- simple, flexible operation thanks to operator guidance on large-format display
- very broad measuring range (5% to 100% of rated value)
- supplied with insert tool reversible ratchet
- more insert tools
- QuickRelease safety lock
- for clockwise and anticlockwise torquing
- measurements independent of the point of application of force
- units of measurement: N·m, ft·lb, in·lb
- advance warning points programmable for visual, tactile and acoustic signals
- backlit display aids evaluation of the tightening operation (traffic-light colours)
- insert tool lengths can be individually set
- maintenance friendly due to easy adjustment and automatic reminder of next calibration date
- repeated joints can be collated to form a single menu-guided sequence
- tightening jobs are stored with a timestamp
- individual identification markings possible
- password protection to prevent inadvertent changes and make the tool tamper-proof
- meets requirements of DKD-R 3-7, Class 2
- with 2 certificates (torque in accordance with DIN EN ISO 6789-2:2017/angle)
- in sturdy plastic box (size 40 in tough steel box)
- supplied with two 1.5 V AA batteries. AA/LR6, 1.2 V NiMH rechargeable cells may also be used
- fully automated calibration (torque) using perfectControl® calibrating unit No 7794-2. Readjustment does not require disassembly.
- registered design
- **display deviation value ± 1%**

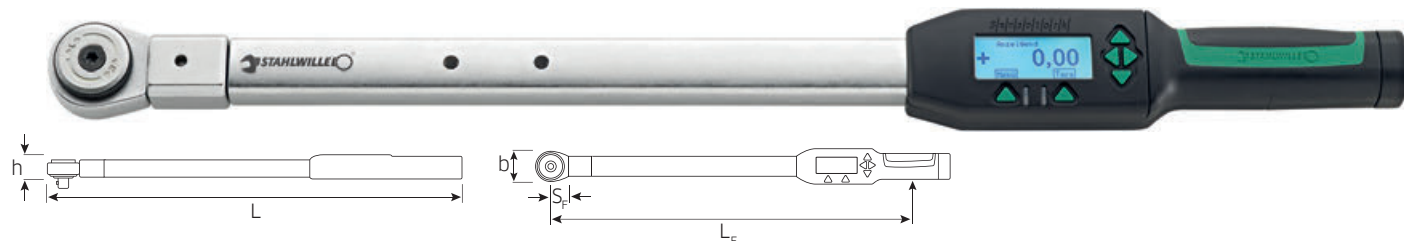
223-229

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713R

Electronic SENSOTORK® tightening angle torque wrenches with reversible ratchet insert tool

- torque and angle are simultaneously visible
- convenient angle measurement across a very wide angle range
- **display deviation value, angle ±1%, ±1 digit**



Code	size			"		b mm	h mm	L mm	L _F mm	S _F mm	Δg	Δg with box
96 50 16 06	6	3-60 N·m	2.5-44 ft·lb	3/8	9x12	33	24	378	299	17.5	856	1500
96 50 16 20	20	10-200 N·m	7-148 ft·lb	1/2	14x18	43	26	608	524	25	1552	2430
96 50 16 40	40	20-400 N·m	15-296 ft·lb	3/4	14x18	50	31.5	838	750	25	2332	5555

712R/6

Electronic SENSOTORK® torque wrench with reversible ratchet insert tool



Code			"		b mm	h mm	L mm	L _F mm	S _F mm	Δg	Δg with box
96 50 15 06	3-60 N·m	2.5-44 ft·lb	3/8	9x12	33	24	378	299	17.5	856	1500

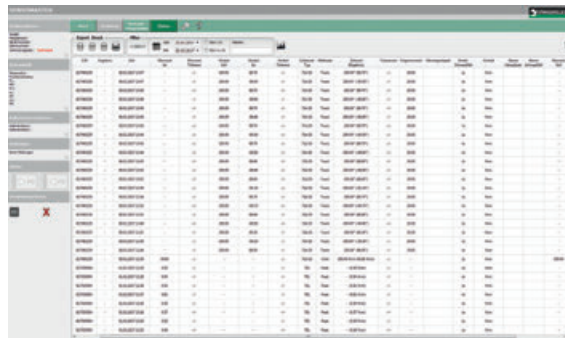
Accessories for electronic angle-controlled torque wrench Sensotork® No 713R and electronic torque wrench SENSOTORK® No 712R

7759-5 USB hub, jack cable and SENSOMASTER 4 software

- SENSOMASTER 4 - one software package for all electronic torque wrenches from STAHLWILLE
- self-explanatory thanks to intuitive GUI with clearly organised tabbed layout
- quick and easy programming for electronic torque wrenches
- enables comprehensive evaluations, for example in connection with quality assurance
- read out stored wrench data and joint readings:
 - joint identifier
 - tool serial number
 - date and time of tightening operation
 - target torque or target angle
 - torque level at which the tool cuts out
 - tightening torque or angle reached
 - tolerances
 - joint evaluation
- storage of joint data in a database
- delete or print highlighted joints from the database
- export displayed joint data to a range of file formats (*.XLS,*.CSV,*.ODG)
- user management
- define new PIN
- delete joint data stored in wrench

System requirements:

- PC
- from Microsoft Windows XP on
- USB connection



Code	L m	Δ g
96 58 36 30	1.5	65

7751 Jack cable

- connection between transducers 7721-7724 and USB adaptor or display unit
- with jacks at both ends, 90° angled



Code	L m	Δ g
52 11 00 51	1.5	50

7757-1 USB adaptor



Code	Δ g
52 11 10 57	10

Accessories

7301/7302 Plastic box, 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	ΔΔ g
81370002	7301	712R/6; 713R/6; 714/1-10; 721/5-20 Quick; 730/5-20 Quick; 730/5-20 Fix; 730N/5-20; 730D/10	550	425
81370003	7302	713R/20; 714/20; 721/30 Quick; 730/40 Quick; 730/40 Fix; 730N/40; 730D/20	680	535

7303/7304 Inlays for plastic box

Code	No	for torque wrenches No	ΔΔ g
83071004	7303	712R/6; 713R/6; 721/5-20 Quick; 730/5-20 Quick; 730/5-20 Fix; 730N/5-20; 730D/10	60
83071002	7304	713R/20; 721/30 Quick; 730/40 Quick; 730/40 Fix; 730N/40; 730D/20	81

TWBE 65-100 Textile bags for larger torque wrenches

- for safe storage and transport of large torque wrenches



Code	No	for torque wrenches No	ΔΔ g
81231100	TWBE 65	714/65; 730/65 Quick; 730II/65 Quick; 730N/65; 730NII/65; 730/65 Fix; 730II/65 Fix; 730D/65; 730DII/65	670
81231101	TWBE 80	714/80; 71/80; 71aR/80; 720Nf/80; 721Nf/80; 730/80; 730D/80	714
81231102	TWBE 100	714/100; 730N/80; 730/80 Fix; 730N/100; 730D/100	760
81231103	TWBE 721NF/100	721Nf/100	850

7396 LED lighting

- for torque wrenches
- if light is poor, simply attach this LED lamp to illuminate the work site
- included in the delivery is a 1.5 V micro battery
- supplied without torque wrench



Code	for torque wrenches No	ΔΔ g
54010004	712R/6; 713R/6-40; 714/6-40; 721/5-30 Quick; 730/5-40 Quick; 730/5-40 Fix; 730N/5-40; 730D/10-40	55

7380N/7385N Torque angle gauges

- for angle controlled bolt/screw tightening, with static read-off point
- read-off possible from any angle thanks to a pair of angled scales
- removable magnet for attaching sockets with 1/2" internal square drive
- for use in conjunction with tightening tools such as service MANOSKOP® No 730N
- since this tightening method requires a pre-determined snug torque to be applied, it is essential to choose a torque wrench covering both snug torque as well as maximum torque required to reach the recommended tightening angle
- whether 1/2" or 3/4" square drive torque angle gauge is used depends upon the square drive of the appropriate torque wrench employed



code	No	□	■	□	□	b mm	h mm	L mm	ΔΔ g
54010001	7380N	1/2	1/2	± 360°	2°	78	43	416	505
54010002	7385N	3/4	3/4	± 360°	2°	78	76	416	720

7161 QuickRelease safety lock

- prevents insert tools being swapped
- the system is locked in place on the head of the torque wrench by means of a safety screw
- once the protection system has been fitted, it is possible to attach an insert tool but not to remove it because the QuickRelease unlock button itself is locked
- after the safety screw has been removed, the torque wrench reverts to being a standard, versatile tool
- the safety screw can be fitted and removed using a TORX® screwdriver with a central bore in the tip (No 4656, size T20, Code 46 56 00 20) or a bit screwdriver insert with a central bore in the tip (No 1442, size T20, Code 08 16 00 20)



Code	size	for torque wrenches No	ΔΔ g
54100070	1	714/1-4	4
54100071	2	712R/6; 713R/6; 714/6-10; 730/10 Quick; 730/10 Fix; 730N/10; 730D/10	5
54100072	3	713R/20-40; 714/20-40; 730/12-40 Quick; 730/12-40 Fix; 730N/12-40; 730D/20-40	11
54100073	4	730/5 Quick; 730/5 Fix; 730N/5	2
54100074	5	714/65-100; 730II/65; 730II/65 Quick; 730II/65 Fix; 730/80-100 Fix; 730NII/65; 730N/80-100; 730DII/65; 730D/80-100	30

for other torque wrenches on request

1299 Bit

- for inside hexagon screws
 - for operating the adjusting screws on torque wrenches
- No 720, 721, 721 Quick, 730, 730 Quick, 730N, 730 Fix



Code	mm	□	"	L mm	ΔΔ g	□
08090002	2	C 6.3	1/4	34	4	10

outside ● DIN 3126/ISO 1173

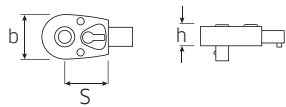
Insert/shell tools for torque wrenches

Output square drive ■ in accordance with DIN 3120. Long-term loading of the input and output square drive is in accordance with DIN EN ISO 6789. This limit must not be exceeded if larger torque wrenches and tool holders are used.

725QR QuickRelease ratchet insert tools

QR

- reversible
- with QuickRelease safety lock
- size 4: 22 teeth
- sizes 5 and 10: 30 teeth

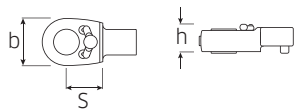


Code	size	■	mm	b mm	h mm	S mm	max. N-m	Δ g
58 25 3004	4	1/4	9x12	22	13.8	17.5	40	50
58 25 3005	5	3/8	9x12	29	18	28*	100	130
58 25 3010	10	1/2	9x12	29	18	28*	100	141

* Caution! Modified settings on torque wrench (refer to note on p. 201)

725B Bit ratchet insert tool

- reversible
- with inside hexagon, 1/4" or 5/16", DIN 3126/ISO 1173 D 6.3 or D8
- for direct acceptance of bits 1/4" or 5/16" outside hexagon C 6.3 (size 4: 22 teeth, size 5: 30 teeth)
- internal hex drive with a collar-thrust spring
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)

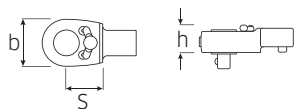


Code	size	○	mm	b mm	h mm	S mm	Δ g
58 25 5004	4	1/4	9x12	22	13.6	17.5	54
58 25 5005	5	5/16	9x12	29	17.9	28*	117

* Caution! Modified settings on torque wrench (refer to note on p. 201)

725/4 Ratchet insert tool

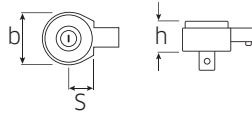
- reversible
- 22 teeth



Code	■	mm	b mm	h mm	S mm	max. N-m	Δ g
58 25 4004	1/4	9x12	22	13.8	17.5	40	62

735 Ratchet insert tools, fine tooth

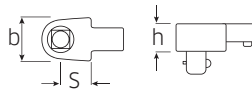
- reversible
- 60 teeth



Code	size	■	mm	b mm	h mm	S mm	max. N-m	Δ g
58 25 0005	5	3/8	9x12	33	24	17.5	100	150
58 25 0010	10*	1/2	9x12	33	24	17.5	100	147

* on request also available as a clockwise-only ratchet

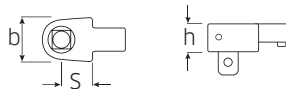
734 Square drive insert tools



Code	size	■	mm	b mm	h mm	S mm	max. N-m	Δ g
58 24 0004	4	1/4	9x12	20	14	17.5	40	71
58 24 0005	5	3/8	9x12	20	14	17.5	80	76
58 24 0010	10	1/2	9x12	20	14	17.5	100	82

734F Square drive insert tools

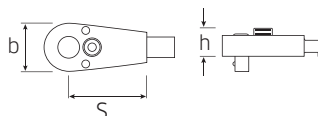
- with permanently attached, captive square drive



Code	size	■	mm	b mm	h mm	S mm	Δ g
58 24 1004	4	1/4	9x12	22	14	17.5	72
58 24 1005	5	3/8	9x12	22	14	17.5	75

725L/5 Ratchet insert tool

- reversible
- 30 teeth
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	■	mm	b mm	h mm	S mm	max. N-m	Δ g
58 15 1005	3/8	9x12	27.5	19.6	45	100	164

Insert/shell tools

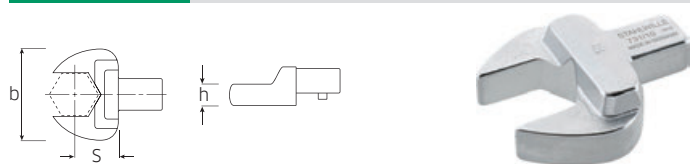
734L/5 Square drive insert tool

- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	"	mm	b mm	h mm	S mm	max. N·m	ΔΔ g
58 24 2005	3/8	9x12	20	14	45	80	141

731/10 Open ended insert tools



Code	"	mm	b mm	h mm	S mm	ΔΔ g
58 21 1007	7	9x12	22	5	17.5	40
58 21 1008	8	9x12	22	5	17.5	39
58 21 1009	9	9x12	26	5.5	17.5	38
58 21 1010	10	9x12	26	5.5	17.5	42
58 21 1011	11	9x12	26	5.5	17.5	41
58 21 1012	12 ¹⁾	9x12	30	7	17.5	43
58 21 1013	13	9x12	30	7	17.5	45
58 21 1014	14	9x12	35	8	17.5	52
58 21 1015	15	9x12	35	8	17.5	51
58 21 1016	16	9x12	38	8.5	17.5	58
58 21 1017	17	9x12	38	8.5	17.5	60
58 21 1018	18	9x12	42	9	20*	71
58 21 1019	19	9x12	42	9	20*	74

¹⁾ for flare nuts of hydraulic pipes on French vehicles

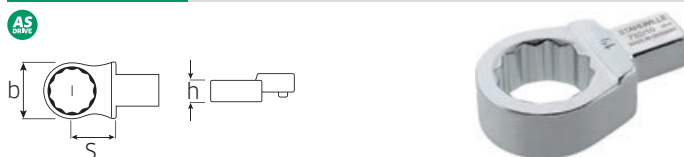
* Caution! Modified settings on torque wrench (refer to note on p. 201)

731a/10 Open ended insert tools

Code	"	mm	b mm	h mm	S mm	ΔΔ g
58 61 1016	1/4	9x12	22	5	17.5	36
58 61 1020	5/16	9x12	22	5	17.5	53
58 61 1024	3/8	9x12	26	5.5	17.5	38
58 61 1028	7/16	9x12	26	5.5	17.5	37
58 61 1032	1/2	9x12	30	7	17.5	44
58 61 1034	9/16	9x12	35	8	17.5	49
58 61 1036	5/8	9x12	38	8.5	17.5	64
58 61 1038	11/16	9x12	42	9	20*	76
58 61 1040	3/4	9x12	42	9	20*	73

* Caution! Modified settings on torque wrench (refer to note on p. 201)

732/10 Ring insert tools



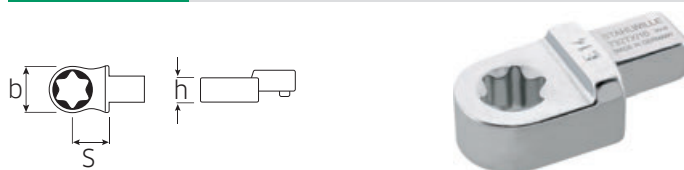
Code	"	mm	b mm	h mm	S mm	ΔΔ g
58 22 1007	7	9x12	13	8	17.5	37
58 22 1008	8	9x12	14.2	8	17.5	40
58 22 1010	10	9x12	17.2	9	17.5	44
58 22 1011	11	9x12	18.5	9	17.5	41
58 22 1012	12	9x12	20.5	11	17.5	49
58 22 1013	13	9x12	21.5	11	17.5	55
58 22 1014	14	9x12	22.5	11	17.5	52
58 22 1015	15	9x12	24.5	12	17.5	52
58 22 1016	16	9x12	26	12	17.5	54
58 22 1017	17	9x12	27	13	17.5	59
58 22 1018	18	9x12	28	13	17.5	56
58 22 1019	19	9x12	30.5	13	17.5	65
58 22 1021	21	9x12	33	15	17.5	71
58 22 1022	22	9x12	34.5	15	17.5	74

732a/10 Ring insert tools

Code	"	mm	b mm	h mm	S mm	ΔΔ g
58 62 1016	1/4	9x12	13	8	17.5	36
58 62 1020	5/16	9x12	14.2	8	17.5	37
58 62 1024	3/8 ¹⁾	9x12	17.2	9	17.5	37
58 62 1028	7/16	9x12	18.5	9	17.5	40
58 62 1032	1/2	9x12	21.5	11	17.5	53
58 62 1034	9/16	9x12	22.5	11	17.5	52
58 62 1036	5/8	9x12	26	12	17.5	54
58 62 1038	11/16	9x12	28	13	17.5	58
58 62 1040	3/4	9x12	30.5	13	17.5	58
58 62 1042	13/16	9x12	33	15	17.5	68
58 62 1044	7/8	9x12	34.5	15	17.5	69

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

732TX/10 TORX® insert tools



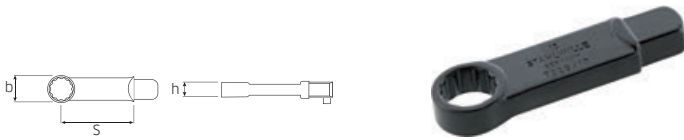
Code	size	mm	b mm	h mm	S mm	ΔΔ g
58 29 1006	E6	9x12	13	8	17.5	40
58 29 1008	E8	9x12	14.2	8	17.5	45
58 29 1010	E10	9x12	17.2	9	17.5	45
58 29 1012	E12	9x12	18.5	9	17.5	50
58 29 1014	E14	9x12	21.5	11	17.5	60

732G/10

Ring insert tools



- HPQ® high performance steel, gunmetal finish
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	mm	mm	b mm	h mm	S mm	ΔΔ g
58620007	7	9x12	11.5	6	45	31
58620008	8	9x12	12.4	6	45	33
58620009	9	9x12	14	8	45	44
58620010	10	9x12	15.6	8	45	45
58620013	13	9x12	19.3	9.2	45	60

732aG/10

Ring insert tools

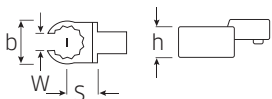


- for assembling and dismantling aero-engines
- HPQ® high performance steel, gunmetal finish
- Caution! Modified settings on torque wrench (refer to note on p. 201)

Code	mm	mm	b mm	h mm	S mm	ΔΔ g
58621216	1/4	9x12	10.4	6	45	28
58621220	5/16	9x12	12.4	6	45	31
58621224	3/8	9x12	14.9	8	45	42
58621228	7/16	9x12	17	8	45	43
58621232	1/2	9x12	19	9.2	45	58
58621234	9/16	9x12	21	9.2	45	58
58621236	5/8	9x12	23	12	45	74

733/10

Open ring insert tools



Code	mm	mm	b mm	h mm	S mm	W mm	ΔΔ g
58231010	10	9x12	21.5	11	17.5	7.1	57
58231011	11	9x12	22.5	11	17.5	8.6	55
58231012	12	9x12	24.5	12	17.5	9	59
58231013	13	9x12	26	12	17.5	10	55
58231014	14	9x12	27	13	17.5	11	60
58231016	16	9x12	30.5	13	17.5	13	65
58231017	17	9x12	31.5	13	17.5	14	64
58231018	18	9x12	33	15	17.5	14.8	74
58231019	19	9x12	34	15	17.5	15.8	70
58231021	21	9x12	38.5	15	20*	16.2	88
58231022	22	9x12	39.5	15	20*	17	92
58231024	24	9x12	40	15	20*	18	75

* Caution! Modified settings on torque wrench (refer to note on p. 201)

733a/10

Open ring insert tools

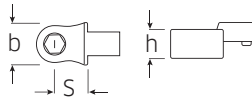


Code	mm	mm	b mm	h mm	S mm	W mm	ΔΔ g
58631024	3/8	9x12	21.5	11	17.5	7.1	55
58631028	7/16	9x12	22.5	11	17.5	8.6	56
58631032	1/2	9x12	26	12	17.5	9.5	58
58631034	9/16	9x12	27.5	13	17.5	11	59
58631036	5/8	9x12	30.5	13	17.5	12.7	61
58631038	11/16	9x12	33	15	17.5	14	48
58631040	3/4	9x12	34	15	17.5	15.8	76

736

Bit holder insert tools

- internal hex drive with a collar-thrust spring
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)



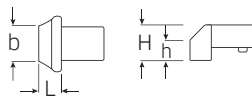
Code	size				b mm	h mm	S mm	
58261010	10	D 8	5/16		16	12.5	17.5	47
58262610	10-1	D 6.3	1/4		14	10	17.5	45

inside DIN 3126/ISO 1173

737/10

Blank end insert tool

- gunmetal finish
- to prevent damage from excessive temperatures, the locking pin, spring and washer are not fitted until the welding work has been completed
- instructions are supplied
- material: 1.2208 - 31CRV3



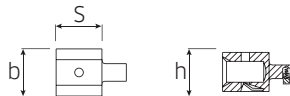
Code	Welding surface h x b mm	mm	H mm	L mm	ΔΔ g
58270010	8 x 14	9x12	14.5	8	35

7370/10

Adaptor



- for using insert tools with an outer square drive of 14 x 18 mm on torque wrenches with an internal square drive of 9 x 12 mm
- Caution! Modified settings on torque wrench (refer to note on p. 201)

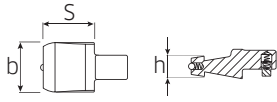


Code	mm	mm	b mm	h mm	S mm	ΔΔ g
58290010	9x12	14x18	31	26	30.5	118

Insert/shell tools

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. 201)



Code	size	mm	b mm	h mm	S mm	max. N-m	Δ g
58 29 00 12	9x12		23.5	9.5	24	51	

1820 Tool holder

- with tool carrier to receive insert/shell tools (without torque function)

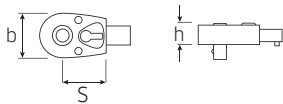


Code	mm	L mm	Δ g
18 20 00 01	9x12	382.5	490

725QR/20 QuickRelease ratchet insert tool



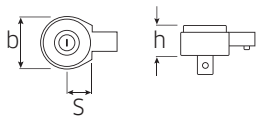
- reversible
- with QuickRelease safety lock
- 36 teeth
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	size	 "	 mm	b mm	h mm	S mm	max. N·m	 g
58 25 30 20	20	1/2	14x18	41	22.3	38.5	200	325

735 Ratchet insert tools, fine tooth

- reversible
- 60 teeth

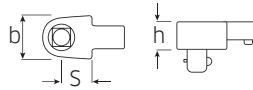


Code	size		 mm	b mm	h mm	S mm	max. N·m	 g
58 25 00 20	20	1/2		43	26	25	300	302
58 25 00 40	40	3/4		50	31.5	25	400	515
58 25 00 65	40HD	3/4		58	36	30 *	650	725

on request also available as a clockwise-only ratchet

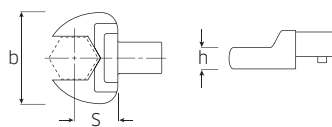
* Caution! Modified settings on torque wrench (refer to note on p. 210)

734 Square drive insert tools



Code	size		 mm	b mm	h mm	S mm	max. N-m	 g
58 24 00 20	20	1/2	14x18	27	18	25	300	205
58 24 00 40	40	3/4	14x18	40	25	25	650	396

731/40 Open ended insert tools



Code	mm	mm	b mm	h mm	S mm	Δ g
58 21 40 13	13	14x18	30	7	25	128
58 21 40 14	14	14x18	35	8	25	129
58 21 40 15	15	14x18	35	8	25	132
58 21 40 16	16	14x18	38	9	25	140
58 21 40 17	17	14x18	38	9	25	130
58 21 40 18	18	14x18	42	10	25	147
58 21 40 19	19	14x18	42	10	25	140
58 21 40 21	21	14x18	50	11	25	171
58 21 40 22	22	14x18	50	11	25	165
58 21 40 24	24	14x18	53	12	25	167
58 21 40 25	25	14x18	53	12	25	170
58 21 40 27	27	14x18	60	13	30 *	219
58 21 40 30	30	14x18	66	14	30 *	275
58 21 40 32	32	14x18	66	14	32.5 *	246
58 21 40 34	34	14x18	66	14	32.5 *	239
58 21 40 36	36	14x18	74	15	32.5 *	275
58 21 40 38	38	14x18	74	15	32.5 *	265
58 21 40 41	41	14x18	82	15	36.5 *	307

* Caution! Modified settings on torque wrench (refer to note on p. 201)

731a/40 Open ended insert tools

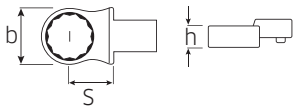
Code	mm	mm	b mm	h mm	S mm	Δ g
58 61 40 28	7/16	14x18	30	7	25	127
58 61 40 32	1/2	14x18	30	7	25	125
58 61 40 34	9/16	14x18	35	8	25	129
58 61 40 36	5/8	14x18	38	9	25	136
58 61 40 38	11/16	14x18	42	10	25	148
58 61 40 40	3/4	14x18	42	10	25	144
58 61 40 42	13/16	14x18	50	11	25	171
58 61 40 44	7/8	14x18	50	11	25	165
58 61 40 46	15/16	14x18	53	12	25	177
58 61 40 48	1	14x18	60	13	30 *	224
58 61 40 52	1 1/8	14x18	66	14	30 *	258

* Caution! Modified settings on torque wrench (refer to note on p. 201)

732/40

Ring insert tools

AS
cert.



Code	mm	mm	b mm	h mm	S mm	Δ g
58 22 40 13	13	14x18	22.5	11	25	130
58 22 40 14	14	14x18	23	11	25	123
58 22 40 15	15	14x18	24	11	25	128
58 22 40 16	16	14x18	25.5	12	25	133
58 22 40 17	17	14x18	27	12	25	135
58 22 40 18	18	14x18	29	13	25	134
58 22 40 19	19	14x18	30.5	13	25	145
58 22 40 21	21	14x18	33	15	25	144
58 22 40 22	22	14x18	34.5	15	25	145
58 22 40 24	24	14x18	37.5	15	25	153
58 22 40 27	27	14x18	42.5	17	25	162
58 22 40 28	28	14x18	45.5	19	25	175
58 22 40 30	30	14x18	46	19	25	182
58 22 40 32	32	14x18	47.5	19	25	181
58 22 40 34	34	14x18	52	19	28 *	210
58 22 40 36	36	14x18	54	19	28 *	203
58 22 40 41	41	14x18	60	20	30 *	240

* Caution! Modified settings on torque wrench (refer to note on p. 201)

736/40

Bit holder insert tool

- internal hex drive with a collar-thrust spring
- bits are easy to insert, lock securely in position and can be removed just as easily; even hex bits with a wide groove (Type E, DIN 3126/ISO 1173)



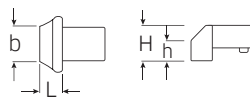
code			 mm	b mm	h mm	S mm	 g
58 26 10 40	D 8	5/16	14x18	16	12.5	25	114

inside  DIN 3126/ISO 1173

737/40

Blank end insert tool

- gunmetal finish
- to prevent damage from excessive temperatures, the locking pin, spring and washer are not fitted until the welding work has been completed
- instructions are supplied
- material: 1.2208 - 31CRV3



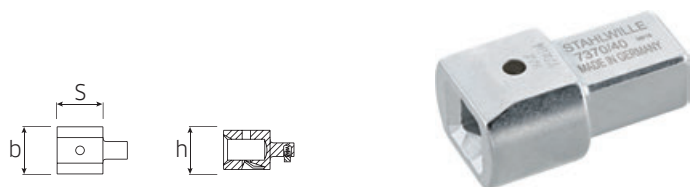
Code	Welding surface h x b mm	mm	H mm	L mm	Δ g
58 27 00 40	11 x 25	14x18	21.5	12	98

7370/40

Adaptor

QR

- for using insert tools with an outer square drive of 9 x 12 mm on torque wrenches with an internal square drive of 14 x 18 mm
- Caution! Modified settings on torque wrench (refer to note on p. 201)



code	mm	mm	b mm	h mm	S mm	Δ g
58 29 00 40	14x18	9x12	28	21	21.5	117

7370/40-1

Adaptor

- for using shell tools with an internal square drive of 24.5 x 28 mm on torque wrenches with an internal square drive of 14 x 18 mm
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	mm	mm	L mm	Δ g
58 29 00 41	14x18	24.5x28	66	251

732a/40

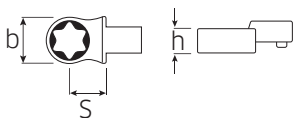
Ring insert tools

AS
cert.

Code	mm	mm	b mm	h mm	S mm	Δ g
58 62 40 32	1/2	14x18	22.5	11	25	122
58 62 40 34	9/16	14x18	23	11	25	122
58 62 40 36	5/8	14x18	25.5	12	25	134
58 62 40 38	11/16	14x18	29	13	25	132
58 62 40 40	3/4	14x18	30.5	13	25	138
58 62 40 42	13/16	14x18	33	15	25	142
58 62 40 44	7/8	14x18	34.5	15	25	147
58 62 40 46	15/16	14x18	37.5	15	25	151
58 62 40 48	1	14x18	41	17	25	160

732TX/40

TORX® insert tools

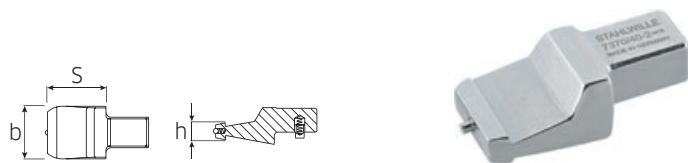


Code	size	mm	b mm	h mm	S mm	Δ g
58 29 40 14	E14	14x18	22.5	11	25	130
58 29 40 18	E18	14x18	24	11	25	135
58 29 40 20	E20	14x18	29	13	25	150
58 29 40 24	E24	14x18	30.5	13	25	150

Insert/shell tools

7370/40-2 Adaptor

- for use with insert tools with a lateral dovetail profile in torque wrenches with 14 x 18 mm internal square drives
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	mm	b mm	h mm	S mm	Δg
58 29 00 42	14x18	31.5	9.5	34.6	138

1821 Tool holder

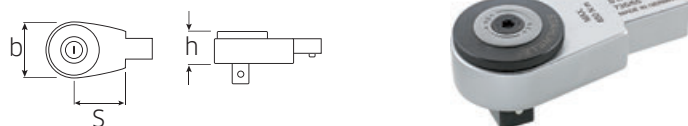
- with tool carrier to receive insert/shell tools (without torque function)



Code	mm	L mm	Δg
18 21 00 01	14x18	575	720

735/65 Ratchet insert tool, fine tooth

- reversible
- 60 teeth
- load capacity up to 650 N·m
- for size 65 torque wrenches



Code	"	mm	b mm	h mm	S mm	Δg
58 25 10 65	3/4	22x28	61	35	55	1115

735/100 Ratchet insert tool

- with push through square drive
- 30 teeth



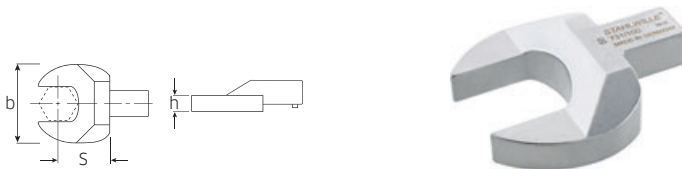
Code	"	mm	b mm	h mm	S mm	Δg
58 25 01 00	3/4	22x28	76	42	55	1893

734/100 Square drive insert tool



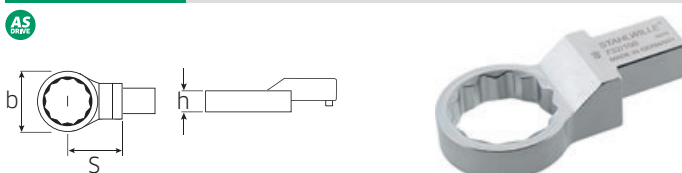
Code	"	mm	b mm	h mm	S mm	Δg
58 24 01 00	3/4	22x28	43	42	55	1175

731/100 Open ended insert tools



Code	mm	mm	b mm	h mm	S mm	Δg
58 21 10 24	24	22x28	50	13	55	618
58 21 10 27	27	22x28	56	14	55	640
58 21 10 30	30	22x28	63	15	55	690
58 21 10 32	32	22x28	67	15	55	705
58 21 10 34	34	22x28	72	15	55	731
58 21 10 36	36	22x28	74	15	55	713
58 21 10 41	41	22x28	84	16	55	894
58 21 10 46	46	22x28	94	17	55	934
58 21 10 50	50	22x28	104	18	55	1073
58 21 10 55	55	22x28	114	19	55	1172
58 21 10 60	60	22x28	124	20	55	1241

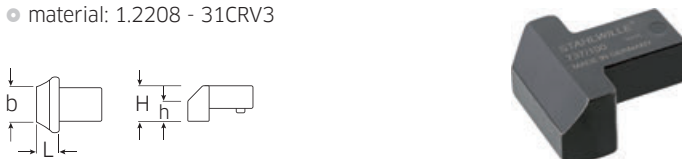
732/100 Ring insert tools



Code	mm	mm	b mm	h mm	S mm	Δg
58 22 10 24	24	22x28	43	15	55	616
58 22 10 27	27	22x28	43	15	55	609
58 22 10 30	30	22x28	46	16	55	617
58 22 10 32	32	22x28	49	16	55	611
58 22 10 34	34	22x28	52	17	55	627
58 22 10 36	36	22x28	54	17	55	620
58 22 10 41	41	22x28	61	18	55	630
58 22 10 46	46	22x28	66	19	55	628
58 22 10 50	50	22x28	75	20	55	701
58 22 10 55	55	22x28	84	21	55	776
58 22 10 60	60	22x28	93	22	55	867

737/100 Blank end insert tool

- gunmetal finish
- to prevent damage from excessive temperatures, the locking pin, spring and washer are not fitted until the welding work has been completed
- instructions are supplied
- material: 1.2208 - 31CRV3



Code	Welding surface h x b mm	mm	H mm	L mm	Δg
58 27 01 00	15 x 50	22x28	32	24	483

7370/100 Adaptor

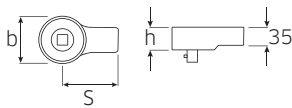
- for using shell tools with an internal square drive of 24.5 x 28 mm on torque wrenches with an internal square drive of 22 x 28 mm
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	mm	mm	L mm	S mm	ΔΔ g
58 29 11 00	22x28	24,5x28	85	100	421

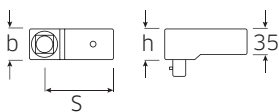
735/80 Ratchet shell tool

- with push through square drive
- 30 teeth



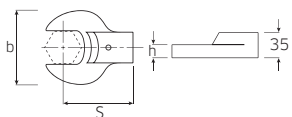
Code	"	mm	b mm	h mm	S mm	ΔΔ g
58 25 00 80	3/4	24,5x28	76	43	95	1930

734/80 Square drive shell tool



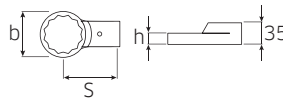
Code	"	mm	h mm	S mm	ΔΔ g
58 24 00 80	3/4	24,5x28	42	95	1200

731/80 Open ended shell tools



Code	mm	mm	b mm	h mm	S mm	ΔΔ g
58 21 80 24	24	24,5x28	50	13	95	601
58 21 80 27	27	24,5x28	56	14	95	620
58 21 80 30	30	24,5x28	63	15	95	655
58 21 80 32	32	24,5x28	67	15	95	670
58 21 80 34	34	24,5x28	72	15	95	699
58 21 80 36	36	24,5x28	74	15	95	620
58 21 80 41	41	24,5x28	84	16	95	810
58 21 80 46	46	24,5x28	94	17	95	867
58 21 80 50	50	24,5x28	104	18	95	1010
58 21 80 55	55	24,5x28	114	19	95	1150
58 21 80 60	60	24,5x28	124	20	95	1325

732/80 Ring shell tools



Code	mm	mm	b mm	h mm	S mm	ΔΔ g
58 22 80 24	24	24,5x28	36	15	95	605
58 22 80 27	27	24,5x28	40.5	15	95	610
58 22 80 30	30	24,5x28	46	16	95	630
58 22 80 32	32	24,5x28	49	16	95	635
58 22 80 34	34	24,5x28	52	17	95	650
58 22 80 36	36	24,5x28	54	17	95	650
58 22 80 41	41	24,5x28	61	18	95	675
58 22 80 46	46	24,5x28	66	19	95	700
58 22 80 50	50	24,5x28	75	20	95	750
58 22 80 55	55	24,5x28	84	21	95	800
58 22 80 60	60	24,5x28	93	22	95	850

732a/80 Ring shell tools

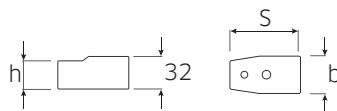


Code	"	mm	b mm	h mm	S mm	ΔΔ g
58 62 80 46	15/16 ¹⁾	24,5x28	36	14	95	604
58 62 80 50	1 1/16 ¹⁾	24,5x28	40.5	14	95	608

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

7370/80 Shell adaptor

- for attaching 14 x 18 mm insert tools
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	mm	mm	b mm	h mm	S mm	ΔΔ g
58 29 00 80	24,5x28	14x18	36	26	70	300

1822 Tool holder

- with tool carrier to receive insert/shell tools (without torque function)



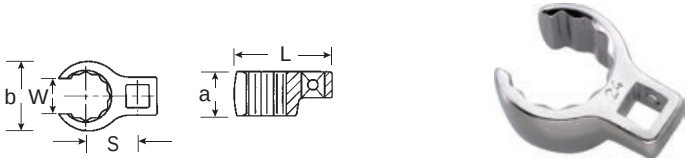
Code	mm	L mm	ΔΔ g
18 22 00 03	24,5x28	1000	2057

440

CROW-RING spanners



- Chrome Alloy Steel, chrome plated
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	mm	"	L mm	b mm	a mm	S mm	W mm	Δg	
01 190008	8	1/4	23.8	12.7	8	12.3	6.3	11	1
01 190009	9	1/4	28.5	18.2	13.5	14	6.7	21	1
01 190010	10 ¹⁾	1/4	28.4	18.2	13.5	14	7.1	16	1
01 190011	11	1/4	28	18.2	13.5	14	8.6	17	1
01 190012	12 ¹⁾	1/4	30.8	20.6	14	15.7	9	20	1
01 190013	13	1/4	32	22.2	14	16.4	10	30	1
01 190014	14 ¹⁾	1/4	31.7	22.2	14	16.4	11.1	20	1
02 190015	15	3/8	36.5	24.6	17.5	19.1	11.9	34	1
02 190016	16	3/8	36.1	24.6	17.5	19.1	13	27	1
02 190017	17 ²⁾	3/8	39.2	27.3	17.5	20.5	14	40	1
02 190018	18	3/8	40.8	29	18.5	21.3	14.8	45	1
02 190019	19 ²⁾	3/8	40.5	29	18.5	21.3	15.8	40	1
02 190020	20	3/8	42.9	31.3	18.5	22.5	15.8	54	1
02 190021	21	3/8	42.8	31.3	18.5	22.5	16.2	45	1
02 190022	22 ²⁾	3/8	45.3	33.5	19	23.6	17	57	1
02 190023	23	3/8	47.5	35.7	19.5	24.6	17.5	71	1
02 190024	24 ²⁾	3/8	47.3	35.7	19.5	24.6	18	57	1
02 190025	25	3/8	49.3	37.7	20	25.7	19	80	1
02 190026	26	3/8	49.3	37.7	20	25.7	19	63	1
02 190027	27	3/8	52.8	40	21.4	28.2	20	100	1
02 191027	27MB ³⁾	3/8	57.1	42.1	15	29.3	20	92	1
03 190028	28	1/2	56.8	42.1	22.5	29.3	21	120	1
03 190030	30	1/2	63	48	22.5	32.5	22	155	1
03 190032	32	1/2	62.5	48	22.5	32.5	24	145	1
03 190034	34	1/2	64.2	50	24	33.5	27	146	1
03 190036	36	1/2	66.5	51.9	24	34.6	27	150	1
03 190038	38	1/2	68.1	53.9	24	35.6	28.6	147	1
03 190040	40	1/2	71.8	57.9	24.5	37.7	31	160	1
03 190041	41	1/2	71.8	57.9	24.5	37.7	31	169	1
03 190042	42	1/2	71	57.9	24.5	37.7	33.2	189	1
03 190046	46	1/2	77.7	64.2	26	40.9	34.1	215	1
03 190050	50	1/2	83.2	70.5	27.5	44.1	39.7	295	1

¹⁾ for union nuts on fuel injection leads on 4-cylinder Mercedes-Benz diesel engines

²⁾ for use on suction or pressure lines within expansion valve of air conditioning unit (Mercedes-Benz)

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

440a

CROW-RING spanners



- Chrome Alloy Steel, chrome plated
- Caution! Modified settings on torque wrench

Code	mm	"	L mm	b mm	a mm	S mm	W mm	Δg	
01 490024	3/8 ¹⁾	1/4	28.4	18.2	13.5	14	7.1	16	1
01 490028	7/16	1/4	28	18.2	13.5	14	8.6	14	1
01 490032	1/2	1/4	30.5	20.6	14	15.7	10	19	1
01 490034	9/16	1/4	31.7	22.2	14	16.4	11.1	23	1
02 490036	5/8	3/8	36.5	24.6	17.5	19.1	11.9	33	1
02 490038	11/16	3/8	39.2	27.3	17.5	20.5	14	36	1
02 490040	3/4	3/8	40.9	29	18.5	21.3	14.2	44	1
02 490042	13/16	3/8	42.9	31.3	18.5	22.5	15.8	51	1
02 490044	7/8	3/8	45.2	33.5	19	23.6	17.5	62	1
02 490046	15/16	3/8	47.2	35.7	19.5	24.6	18.3	63	1
02 490048	1	3/8	49.3	37.7	20	25.7	19	71	1
02 490050	1 1/16	3/8	52.8	40	21.4	28.2	20	84	1
03 490052	1 1/8	1/2	56.8	42.1	22.5	29.3	21	110	1
03 490056	1 1/4	1/2	62.5	48	22.5	32.5	23.8	137	1
03 490058	1 5/16	1/2	62.3	48	22.5	32.5	24.6	130	1
03 490060	1 3/8	1/2	64.2	50	24	33.5	27	138	1
03 490062	1 7/16	1/2	66.5	51.9	24	34.6	27	143	1
03 490064	1 1/2	1/2	68.1	53.9	24	35.6	28.6	152	1
03 490065	1 9/16	1/2	70.1	55.9	24	36.7	29.4	172	1
03 490066	1 5/8	1/2	71.8	57.9	24.5	37.7	31	169	1
03 490068	1 3/4	1/2	75.6	62	25.5	39.8	33.2	199	1
03 490069	1 13/16	1/2	77.7	64.2	26	40.9	34.1	229	1
03 490072	2	1/2	83.2	70.5	27.5	44.1	39.7	277	1
03 490076	2 1/4	1/2	91.2	78.7	29.5	48.2	42.8	337	1
03 490077	2 5/16	1/2	93.3	80.9	30	49.2	43.6	309	1
03 490078	2 3/8	1/2	95.2	83	30.5	50.2	46	385	1

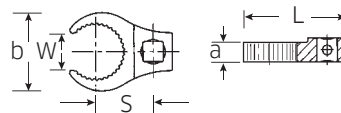
¹⁾ for Volvo aero-engines, types "JAS"

440S MJ

CROW-RING spanners



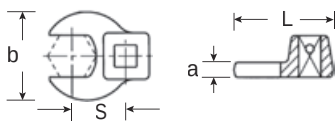
- HPQ® high performance steel, chrome plated
- supersedes No 440 MJ
- EN 4108
- for pipe unions with straight cylindrical involute toothing
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	Threaded nut	mm	"	L mm	b mm	a mm	S mm	W mm	Δg	
01 21 10 10	MJ10	DN04	1/4	31.9	22	8	17	6.5	54	1
01 21 10 14	MJ14	DN06	1/4	36.5	27	8	19.5	8.5	29	1
02 21 10 16	MJ16	DN08	3/8	43.8	31	8	24	10.5	46	1
02 21 10 18	MJ18	DN10	3/8	45.2	33	8	25	13	47	1
02 21 10 20	MJ20	DN12	3/8	46.2	35	8	26	15	49	1
02 21 10 22	MJ22	DN14	3/8	48.4	37	9	27	17.5	54	1
02 21 10 24	MJ24	DN16	3/8	49.5	39	9	28	19.7	56	1
02 21 10 27	MJ27	DN18	3/8	54.4	44	10	31	21.5	70	1
02 21 10 30	MJ30	DN20	3/8	60.8	50	10	36	23.7	93	1

540 CROW-FOOT spanners

- Chrome Alloy Steel, chrome plated
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	mm	"	L mm	b mm	a mm	S mm	g	
01200008	8	1/4	25.5	19.8	6.3	14.6	19	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	64	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

1225 Special extension

- 3/8" ■
- offset



code	L mm	d mm	g	
12250001	150	17	128	5

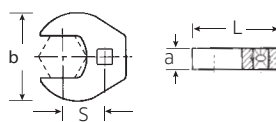
540a CROW-FOOT spanners

- Chrome Alloy Steel, chrome plated
- Caution! Modified settings on torque wrench (refer to note on p. 201)

Code	"	"	L mm	b mm	a mm	S mm	g	
01500024	3/8	1/4	25.5	19.8	6.3	14.6	17	1
02500028	7/16	3/8	32	22.2	6.3	17.2	34	1
02500032	1/2	3/8	34.3	25.4	6.3	18.1	37	1
02500034	9/16	3/8	37.7	30	6.3	20.9	40	1
02500036	5/8	3/8	37.7	30	6.3	20.4	44	1
02500038	11/16	3/8	42.5	38	6.3	24.1	62	1
02500040	3/4	3/8	42.5	38	6.3	24	66	1
02500042	13/16	3/8	42.3	38	6.3	24	59	1
02500044	7/8	3/8	44.5	41	6.3	25.8	65	1
02500048	1	3/8	47	45	8	26.7	78	1
02500050	1 1/16	3/8	47	45	8	27.2	78	1
02500052	1 1/8	3/8	50	50	8	28.5	84	1
02500054	1 3/16	3/8	50	50	8	29.2	83	1
02500056	1 1/4	3/8	53	57	8	30.3	101	1
02500058	1 5/16	3/8	53	57	8	31.2	101	1
02500060	1 3/8	3/8	54.5	60	8	32.3	105	1
02500062	1 7/16	3/8	56.5	62	8	33.1	107	1
02500064	1 1/2	3/8	58	65	8	34.5	118	1
02500065	1 9/16	3/8	59.5	68	8	35.7	126	1
02500066	1 5/8	3/8	63	70	8	37.3	140	1
02500067	1 11/16	3/8	63	70	8	37.7	126	1
02500068	1 3/4	3/8	68	76	8	40.4	161	1
02500070	1 7/8	3/8	72	82	8	42	205	1
02500072	2	3/8	75	88	8	44.8	214	1
02500074	2 1/8	3/8	75.6	91	10	46	265	1
02500076	2 1/4	3/8	80.5	96	10	49.5	297	1
03500078	2 3/8	1/2	81.5	96	8	51.3	214	1

540a HD CROW-FOOT spanners heavy-duty

- for particularly high loadings, e.g. stainless steel screw fittings
- full use of jaws in conjunction with standard ratchets
- chrome plated
- supplied without ratchet
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code	"	"	L mm	b mm	a mm	S mm	g	
02501034	9/16	3/8	43.4	32	11	26.8	52	1
02501036	5/8	3/8	45	34.8	11	27.7	58	1
02501038	11/16	3/8	47.2	38	11	28.6	69	1
02501042	13/16	3/8	51	46.4	11	30.5	113	1
02501044	7/8	3/8	52	48	11	31.3	99	1
02501046	15/16	3/8	54	51.2	11	32.3	129	1
02501048	1	3/8	56	53.4	11	33.2	133	1
02501050	1 1/16	3/8	57	53.8	11	34.1	124	1
02501052	1 1/8	3/8	59	53.8	11	35	128	1
02501056	1 1/4	3/8	62	60	11	36.8	153	1
02501062	1 7/16	3/8	66.5	66	11	39.6	172	1
03501064	1 1/2	1/2	76	70	16	45	310	1
03501069	1 13/16	1/2	85	84	16	49.6	400	1
03501072	2	1/2	89	90	16	52.3	451	1
03501074	2 1/8	1/2	91.5	92.8	16	54.2	460	1
03501075	2 3/16	1/2	93	96	16	55.1	480	1
03501076	2 1/4	1/2	95	99	16	56	500	1

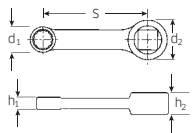
Insert/shell tools

447

Adaptor



- HPQ® high performance steel, gunmetal finish
- Caution! Modified settings on torque wrench (refer to note on p. 201)



Code			d ₁ mm	d ₂ mm	h ₁ mm	h ₂ mm	S mm		
02 18 1007	7	3/8	11.5	19	6	11	50.8	30	1
02 18 1008	8	3/8	12.4	19	6	11	50.8	30	1
02 18 1009	9	3/8	14	19	8	11	50.8	40	1
02 18 1010	10	3/8	15.6	19	8	11	50.8	40	1
02 18 1013	13	3/8	19.3	19	9.2	11	50.8	55	1

447a

Adaptor



- SAE AS 954-E
- HPQ® high performance steel, gunmetal finish
- Caution! Modified settings on torque wrench (refer to note on p. 201)

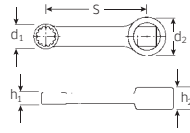
Code			d ₁ mm	d ₂ mm	h ₁ mm	h ₂ mm	S mm		
02 47 0016	1/4	3/8	10.4	19	6	11	50.8	27	1
02 47 0020	5/16	3/8	12.4	19	6	11	50.8	29	1
02 47 0024	3/8	3/8	14.9	19	8	11	50.8	41	1
02 47 0028	7/16	3/8	17	19	8	11	50.8	40	1
02 47 0032	1/2	3/8	19	19	9.2	11	50.8	56	1
02 47 0034	9/16	3/8	21	19	9.2	11	50.8	61	1
02 47 0036	5/8	3/8	23	19	12	11	50.8	73	1

447aSP

Spline-Drive adaptor



- MS-33787, MIL-W-8982
- HPQ® high performance steel, gunmetal finish
- Caution! Modified settings on torque wrench (refer to note on p. 201)



code	Spline size			d ₁ mm	d ₂ mm	h ₁ mm	h ₂ mm	S mm		
02 48 0014	7	7/32	3/8	9.4	19	6	11	50.8	28	1
02 48 0016	8	1/4	3/8	10.4	19	6	11	50.8	27	1
02 48 0018	9	9/32	3/8	11.5	19	6	11	50.8	29	1
02 48 0020	10	5/16	3/8	12.4	19	6	11	50.8	29	1
02 48 0024	12	3/8	3/8	14.9	19	8	11	50.8	38	1
02 48 0028	14	7/16	3/8	17	19	9.2	11	50.8	39	1
02 48 0032	16	1/2	3/8	19	19	9.2	11	50.8	59	1
02 48 0034	18	9/16	3/8	21	19	9.2	11	50.8	55	1
02 48 0036	20	5/8	3/8	23	19	12	11	50.8	74	1

MULTIPOWER

MP100-1500 MULTIPOWER

- particularly compact construction
- light and easy to handle
- with ratchet function
- working angle 8°
- with rotary scale
- for use with a torque wrench with a fixed 1/2" square drive
- patent
- in carrying box
- included in the set: 3 hexagon inserts 30; 32; 36 mm, 1 insert with 1" outer square drive, 1 reaction arm 400 mm
- **display deviation value ± 5%**



Code	N·m ¹⁾	ft·lb ¹⁾	N·m ²⁾	ft·lb ²⁾	Gear ratio	Torque ratio		b mm	h mm	L mm		
96 53 1500	1500	1106	300	221	5.62 : 1	1 : 5	1/2	105	30	165	1890	3630

¹⁾ max. output

²⁾ max. input

MULTIPOWER MP300

Makes child's play of the largest torques.

MULTIPOWER or really "toughwork".

STAHLWILLE MULTIPOWER torque multipliers with planetary gears take the fatigue out of tightening or loosening stiff or large bolt connections. A long lever is not necessary.

STAHLWILLE MULTIPOWER multiplies human strength; steady torque transfer is easy on nuts and bolts.

Even the largest torques are transferred with ease and precision over long periods.

Accordingly, construction materials and workmanship are extremely robust.

When combined with STAHLWILLE torque wrenches, MULTIPOWER really shows its strength.

The MULTIPOWER range extends to 5000 N·m/3687 ft·lb.

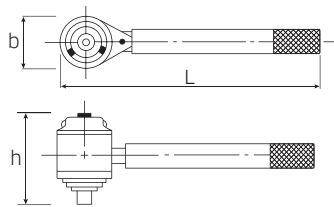
MULTIPOWER tools are also available on request up to 12000 N·m/8850 ft·lb.

The MULTIPOWER from 2000 N·m are fitted with an anti-backlash device.

MP300 MULTIPOWER

- with overload protection and planetary gears
- in carrying box

- with one spare sun wheel (overload cut-out)
- deviation of indication $\pm 5\%$



code	size	N·m ¹⁾	ft·lb ¹⁾	N·m ²⁾	ft·lb ²⁾	Gear ratio	Torque ratio	⌀ "	■ "	b mm	h mm	L mm	ΔΔ g	ΔΔ g with box
53030800	800	800	590	229	169	4 : 1	1 : 3.5	1/2	3/4	66	85	215	2000	5838
53031350	1350	1350	996	375	277	4 : 1	1 : 3.6	3/4	3/4	90	106	265	3400	7500
53032000	2000 *)	2000	1475	160	118	16 : 1	1 : 12.5	1/2	1	95	161	330	7000	11000
53033000	3000 *)	3000	2212	240	177	16 : 1	1 : 12.5	3/4	1	95	161	330	7000	10805
53035000	5000 *)	5000	3687	294	217	20 : 1	1 : 17.0	3/4	1 1/2	120	180	400	10400	14000

MULTIPOWER tools are also available on request up to 12000 N·m/8850 ft·lb.

*) with anti-backlash device

¹⁾ max. output

²⁾ max. input

Spares for MULTIPOWER

SR290-393 Sun wheel with overload cutout



Code	No	for No	ΔΔ g
59030800	SR300-800	MP300-800	45
59031350	SR300-1350	MP300-1350	106
59032000	SR300-2000	MP300-2000	120
59033000	SR300-3000	MP300-3000	130
59035000	SR300-5000	MP300-5000	127
59300039	SR290N	STW 290N	18
59300067	SR295N	STW 295N	95
59300068	SR391N	STW 391N	95
59300069	SR392N	STW 392N	95
59300070	SR393N	STW 393N	105

Sets of spare parts for ratchet insert tools

4150QR Spare parts set

Content 11 pieces:
1 pinion; 1 pawl; 2 levers with pin; 1 ball; 2 compression springs;
2 screws M 1.7 x 8; 2 cover plates

code	for No	g
1901 1020	725QR/4	24

4350QR Spare parts set

Content 8 pieces:
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs;
2 screws

code	for No	g
19020020	725QR/5	51

7250QR/10 Spare parts set

Content 8 pieces:
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws

code	for No	g
1904 1020	725QR/10	64

5120QR Spare parts set

Content 8 pieces:
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs; 2 screws

code	for No	g
19040020	725QR/20	118

7250B Spare parts sets

Content 9 pieces:
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs;
2 screws; 1 cover plate

code	size	for No	g
1901 2022	4	725B/4	21
1901 2023	5	725B/5	48

7250L/5 Spare parts set

Content 9 pieces:
1 pinion; 1 pawl; 1 change-over button with pin; 1 ball; 2 compression springs; 2 screws; 1 cover plate

code	for No	g
1902 1000	725L/5	70

7250/4 Spare parts set

Content 9 pieces:
1 pinion; 1 pawl; 1 lever with pin; 1 ball; 2 compression springs;
2 screws; 1 cover plate

code	for No	g
1901 2021	725/4	26

7350/5 Spare parts set

Content 7 pieces:
1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws

code	for No	g
59 25 1005	735/5	85
for ratchets from 12/97		

7350/10 Spare parts set

Content 7 pieces:
1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws

code	for No	g
59 25 10 10	735/10	96
for ratchets from 12/97		

7350/20 Spare parts set

Content 7 pieces:
1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws

code	for No	g
59 25 1020	735/20	140
for ratchets from 4/96		

7350/40 Spare parts set

Content 7 pieces:
1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws

code	for No	g
59 25 1040	735/40	219
for ratchets from 5/97		

7350/40HD-65 Spare parts set

Content 7 pieces:
1 pinion; 1 pawl; 1 switching disk; 1 spring; 3 screws

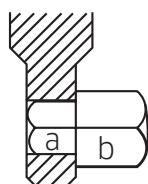
code	for No	g
59 25 1065	735/40HD; 735/65	429

7210 Ratchet spare parts sets for torque wrenches No 721

code	No	Content	Δg g
59 19 1005	7210/5	For ratchet/torque wrench No 721/5, 721/5 Quick: 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, 721/15 Quick, 721/20, 721/20 Quick: 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, 721/30 Quick: 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, 735/100: 1 pinion, 2 pawls, 2 spring contact points, 2 compression springs	443

70V Square drive units

• for torque wrenches and insert tools



502 1/2



70V 16

code	size	for No	a "	b "	L mm	Δg 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	40	5
59010007	7	721/30, 721/30 Quick	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; 734/80; 734/100; 735/80; 735/100	3/4	3/4	65	179	1
59010016	16 *	720Nf/80; 721Nf/80+100; 734/40; 734/80; 734/100; 735/80; 735/100	3/4	3/4	88	240	1

* extra-long, firmly locked, so usable from both sides

Accredited by the highest authority. STAHLWILLE's calibration laboratory.

Controlled tightening of fasteners is becoming increasingly important and is a must for safety and quality assurance. As clear confirmation of its expertise in the field of controlled tightening, STAHLWILLE is accredited by the DAkKS accreditation authority (Deutsche Akkreditierungsstelle) as an approved calibration laboratory for »torque«.



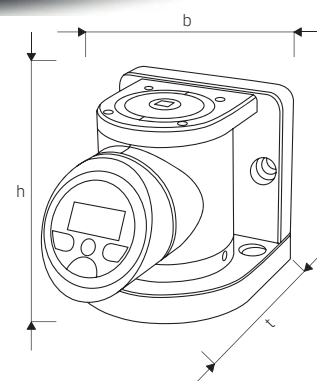
The STAHLWILLE calibration service offers both works calibration certificates and DAkKS calibration certificates.

SmartCheck

Tester for torque wrenches and torque screwdrivers

- compact construction
- for horizontal or vertical mounting
- display, display mount and base body can be rotated through 180°
- three operating modes (track, first peak, peak hold)
- three measuring units (N·m, ft·lb, in·lb)
- the target torque and tolerances can be set individually to evaluate the readings
- operating mode using a mains adapter or battery (4 x AAA or 1 x 9 V block, adapter included)
- with integrated visual and audible overload protection mechanism
- the display and keypad are splash-proof, and the housing is made of impact-resistant plastic
- with certificate
- supplied in sturdy plastic box
- **display deviation value $\pm 1\%$**

SmartCheck Torque Tester



code	No	capacity N·m	capacity ft·lb	capacity in·lb	Ø "	b mm	h mm	t mm	△ g
96 52 1201	SmartCheck 10S *	1-10	0.74-7.4	8.9-88.5	1/4	120	124	167	5210
96 52 1202	SmartCheck 10	1-10	0.74-7.4	8.9-88.5	1/4	120	124	167	5210
96 52 1203	SmartCheck 100	10-100	7-74	89-885	3/8	120	124	167	5310
96 52 1204	SmartCheck 400	40-400	30-295	354-3540	3/4	120	124	167	5690
96 52 1205	SmartCheck 800	80-800	59-590	708-7081	3/4	120	124	167	5690

*) for checking torque screwdrivers

Electronic torque tester for torque wrenches **SENSOTORK® 7707 W** (For complete calibration systems see p. 241, 245)

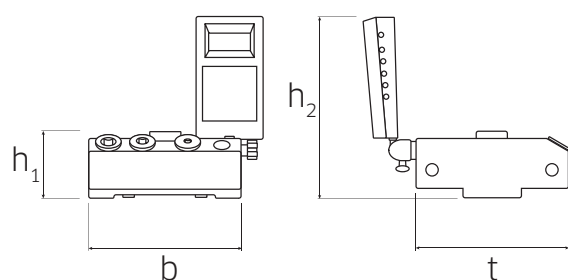
- compact torque tester for easy adaptation by replacement of the transducers
- high degree of accuracy thanks to flat transducer and conversion and digitalisation of readings within the transducer (see p. 239)
- high degree of safety through display showing actual torque read-off where clicking torque wrenches are used

7707 W Torque tester **SENSOTORK®**

Electronic torque tester for torque wrenches, consisting of:

- transducer (patent)
- holder
- display unit (registered design)
- tripod for display unit (with 1.5 m cable)
- spiral cable
- mains adaptor (110 V-230 V with interchangeable socket adaptors) or direct connection to 12 V in-car supply is possible
- square drive adaptor (No 7707-2W, No 7707-2-1W, No 7707-2-2W, No 7707-3W)
- kit for attaching the unit to a workbench or wall in a horizontal or vertical testing position
- for clockwise and anticlockwise use
- units of measurement: N·m, ft·lb, in·lb
- the easily interchangeable transducers are attached to the holder by means of a QuickRelease safety lock
- low lateral forces thanks to low-profile transducers
- automatic detection of the transducer
- flexible and user friendly because the unit can be used horizontally or vertically and the display unit can be placed in many positions
- additional tripod with 1.5 m cable for mounting the display unit to facilitate visual monitoring when using longer torque wrenches
- especially broad measuring range from approx. 2 % to 100 % of rated value
- the software No 7759-4, including USB hub and jack cable (see p. 249), enables readings to be transferred to the PC for documenting (no separate power supply needed, power comes from PC)
- while individual transducers are being recalibrated, the torque tester itself remains on-site for further use
- wide range of application (-20°C to +60°C)
- complies with DIN 51309: 2005, Class 2 and DKD-R 3-8: 2003
- with certificate
- supplied in sturdy plastic box

5



QR

QuickRelease Rapid change and firm locking of the transducers thanks to the QuickRelease safety lock.

Interchangeable square drive adapters: A set of interchangeable square drive adapters are conveniently stored in the mounting block for a range of different drive sizes.



Code	No	Capacity N·m	Capacity ft·lb	Capacity in·lb	□ "	b mm	h ₁ mm	h ₂ mm	t mm	ΔΔ g	ΔΔ g with box
96 52 1086	7707-1-3W ¹⁾	0.2-10	0.15-7.4	1.8-88.5	1/4	180	79	215	180	6255	9500
96 52 1085	7707-1-2W	0.2-10	0.15-7.4	1.8-88.5	1/4	180	79	215	180	6255	9500
96 52 1080	7707-1W	0.4-20	0.3-15	3.5-177	1/4	180	79	215	180	6255	9500
96 52 1072	7707-2W ²⁾	2-100	1.5-74	18-885	3/8	180	79	215	180	7025	10300
96 52 1083	7707-2-1W ³⁾	4-200	3-148	35-1770	1/2	180	79	215	180	7511	10975
96 52 1084	7707-2-2W ⁴⁾	8-400	6-295	71-3540	3/4	180	79	215	180	7654	11100
96 52 1082	7707-3W ⁴⁾	25-1100	18-812	221-9736	3/4	180	79	215	180	7495	11000

¹⁾ for calibrating torque screwdrivers

²⁾ with square drive adaptor No 409M (1/4" □ x 3/8" ■)

³⁾ with square drive adaptors No 7789-4 (1/4" □ x 1/2" ■), No 7789-5 (3/8" □ x 1/2" ■)

⁴⁾ with square drive adaptors No 7787 (1/4" □ x 3/4" ■), No 7788 (3/8" □ x 3/4" ■), No 7789 (1/2" □ x 3/4" ■)

Which transducer is for which torque tool?

(for manually operated testing, calibration technology on page 238-247)

	7721	7721-0	7721-1	7722	7723-1	7723-2	7723-3	7724-1		7721	7721-0	7721-1	7722	7723-1	7723-2	7723-3	7724-1		7721	7721-0	7721-1	7722	7723-1	7723-2	7723-3	7724-1
760	•								730a/2			•	•					730Na/20					•	•		
775	•								730a/4			•	•					730Na/40					•	•		
TORSIOTRONIC	•								730/80							•	•	701/2			•		•	•		
71/80							•	•	721/5			•	•					730D/10				•	•	•		
71aR/80							•	•	721/15				•	•	•			730D/20				•	•	•		
73Nm/15			•	•					721/20				•	•	•			730D/40					•	•		
755R/1			•						721/30					•	•			730D/65						•		
755/4				•	•				721QR/15				•	•	•			730DII/65						•		
755/10					•	•			721QR/20				•	•	•			730D/80						•		
755/20					•	•	•		720Nf/80						•	•		730D/100						•		
755/30						•	•		721Nf/80						•	•		714/ 1		•	•					
730/5				•	•				721Nf/100						•	•		714/ 2			•	•				
730/10					•	•			730N/2			•	•					714/ 4				•	•			
730/12					•	•	•		730N/5			•	•	•				714/ 6				•	•			
730/20					•	•	•		730N/10				•	•				714/10				•	•	•		
730/40						•	•		730N/12				•	•	•			714/20					•	•		
730/65							•		730N/20				•	•				714/40					•	•		
730II/65							•		730N/40					•	•			714/65						•		
730a/5				•	•				730N/65						•			714/80						•		
730a/10					•	•			730NII/65						•			714/100						•		
730a/12					•	•	•		730N/80						•	•		713R/6				•				
730a/20					•	•	•		730N/100						•	•		713R/20					•	•		
730/2			•	•					730Na/2			•	•					713R/40					•			
730/4				•	•	•			730Na/5			•	•	•				712R/6			•					
730a/2-1	•	•							730Na/10				•	•												

7721-7724 Transducers

- patent
- for calibration of torque wrenches and torque screwdrivers
- high degree of accuracy thanks to conversion and digitization of readings within the transducer itself
- not susceptible to lateral forces due to low-profile construction
- can also be used as part of a calibration system (see p. 241, 245)
- with certificate
- supplied in sturdy plastic box
- measuring ranges by deviation of indication



Measuring ranges by deviation of indication

Code	No	Display deviation value ± 1% of the reading			Display deviation value ± 0.5% of the reading			Display deviation value ± 0.25% of the reading			Ø mm	Ø "	Δ g	Δ g with box
		N·m	ft·lb	in·lb	N·m	ft·lb	in·lb	N·m	ft·lb	in·lb				
9652 1021	7721 ¹⁾	0,2-10	0,15-7,4	1,8-88,5	1-10	0,74-7,4	8,9-88,5	2-10	1,5-7,4	17,7-88,5	120	1/4	1735	2411
9652 1000	7721-0	0,2-10	0,15-7,4	1,8-88,5	1-10	0,74-7,4	8,9-88,5	2-10	1,5-7,4	17,7-88,5	120	1/4	1735	2411
9652 1026	7721-1	0,4-20	0,3-15	3,5-177	2-20	1,5-15	18-177	4-20	3-15	35-177	120	1/4	1735	2411
9652 1022	7722	2-100	1,5-74	18-885	10-100	7-74	89-885	12-100	9-74	106-885	120	3/8	2486	3223
9652 1023	7723-1	40-200	3-148	35-1770	20-200	15-148	177-1770	40-200	30-148	354-1770	120	1/2	2983	3605
9652 2023	7723-2	8-400	6-295	71-3540	40-400	30-295	354-3540	80-400	59-295	708-3540	120	3/4	3134	3745
9652 1028	7723-3	25-1100	18-812	221-9736	110-1100	81-812	974-9736	220-1100	162-812	1947-9736	120	3/4	2998	3761
9652 1029	7724-1 ²⁾	150-3000	111-2214	1328-26553	300-3000	221-2214	2655-26553	600-3000	443-2214	5311-26553	195	1 1/2	10500	12000

¹⁾ for calibrating torque screwdrivers

²⁾ for use with mechanical loader No 7792 and 7792-1 (S. 243)

Note!

Torque testers are measuring instruments! They have to be regularly calibrated and, where necessary, adjusted, using suitable calibration equipment. We recommend recalibrating every 12 months. DAkkS certificates must be ordered separately see p. 236

Accurate, dependable and safe. STAHLWILLE calibration.

Calibration is the regular examination of the accuracy and reliability of torque tools. This is essential because torque tools are precision instruments which are very often in use in safety-relevant environments. In order to be able to deliver dependable measured values in the long term, it is essential that examination by means of calibration takes place at regular intervals and is documented. A calibration system comprises several components:



The torque applied using the torque wrench is digitalised within the **transducer** and transmitted via USB cable to the PC, which ensures error-free transmission.



USB adapter – transfers the data to the PC.



The **square drive adapters** required to utilise the measuring range of the transducers are included; e.g. for transducer No 7728-100 (female 3/4" square drive) this is square drive adapter No 7787 (1/4" female to 3/4" male), No 7788 (3/8" female to 3/4" male) and No 7789 (1/2" female to 3/4" male).



The **mechanical loader** is required for rapid, accurate fixing and operation of the torque wrench. The mechanical loader also ensures that the DIN EN ISO 6789 requirement for clicking torque wrenches is fulfilled, i.e. that, above 80% of the final torque value, the force can be applied slowly and steadily within the required time.

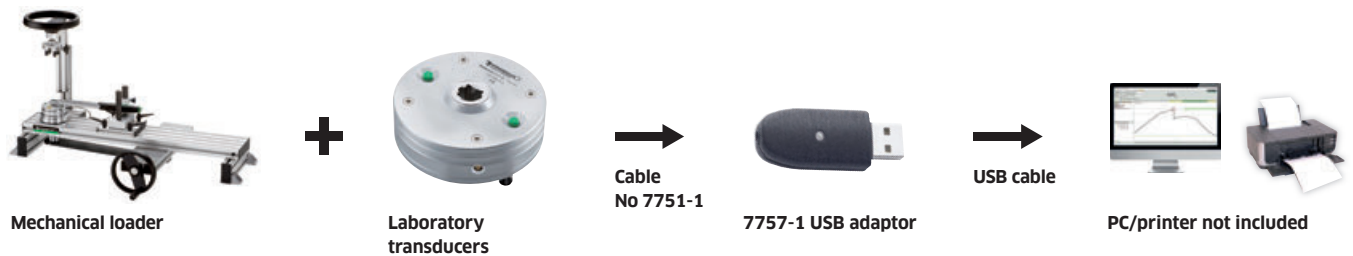


The transducer is connected to the USB adapter by means of a **cable** with a jack and a self-locking precision plug.



Software – The data received in this way can then be used to issue and manage Declarations of Conformity or calibration certificates in accordance with DIN EN ISO 6789:2017.

Coordinated – down to the last detail. STAHLWILLE calibration systems.



	No for full system	7706-8 PC	7706-9 PC	7706-10 PC	7706-11 PC
	Code	96 52 10 68	96 52 10 69	96 52 10 70	96 52 10 74
	Weight in kg	14.2	67.6	70.6	108.4
	Range N-m	1-10	2-100	2-1000	20-3000
	Mechanical loader	-	No 7791	No 7791	No 7792
	»Stand alone« test attachment for torque screwdrivers	No 7790	-	-	-
	Extension	-	-	No 7791-1	No 7792-1
	Laboratory transducers	No 7728-1S (1-10 N-m)	No 7728-2 (2-20 N-m) No 7728-10 (10-100 N-m)	No 7728-2 (2-20 N-m) No 7728-10 (10-100 N-m) No 7728-40 (40-400 N-m) No 7728-100 (100-1000 N-m)	No 7728-20 (20-200 N-m) No 7728-100 (100-1000 N-m) No 7728-300 (300-3000 N-m)
	USB adapter	No 7757-1	No 7757-1	No 7757-1	No 7757-1
	Jack cable	No 7751	No 7751	No 7751	No 7751
	Cable to No. 7728 (transducer to USB adapter)	No 7751-1	No 7751-1	No 7751-1	No 7751-1
	Square drive adapters	No 431 (3/8" □ x 1/4" ■)	No 431 (3/8" □ x 1/4" ■) No 409M (1/4" □ x 3/8" ■)	No 7787 (1/4" □ x 3/4" ■) No 7788 (3/8" □ x 3/4" ■) No 7789 (1/2" □ x 3/4" ■) No 409M (1/4" □ x 3/8" ■)	No 7787 (1/4" □ x 3/4" ■) No 7788 (3/8" □ x 3/4" ■) No 7789 (1/2" □ x 3/4" ■) No 7789-2 (3/4" □ x 1 1/2" ■) No 7789-3 (1" □ x 1 1/2" ■) No 7789-4 (1/4" □ x 1 1/2" ■) No 7789-5 (3/8" □ x 1 1/2" ■)
	Calibrating square drive insert tools	-	No 734K/4 (1/4" ■) No 734K/5 (3/8" ■)	No 734K/4 (1/4" ■) No 734K/5 (3/8" ■) No 734K/20 (1/2" ■) No 734K/40 (3/4" ■)	No 734K/4 (1/4" ■) No 734K/5 (3/8" ■) No 734K/20 (1/2" ■) No 734K/40 (3/4" ■)
	Adapters	No 3115 (1/4" ■ x 1/4" ● E 6.3) No 3115/1 (1/4" ■ x 1/4" ● C 6.3)	-	-	-
	Calibration software	TORKMASTER	TORKMASTER	TORKMASTER	TORKMASTER
	DAkkS calibration certificates	1	2	4	3

/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.

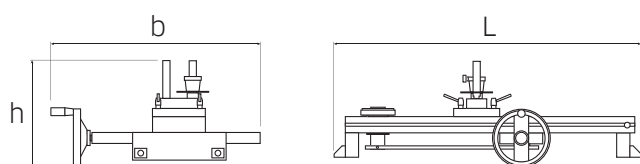
The components can be quickly and easily locked together using the integrated screw joints.

The display unit can be attached at various points of the system via a holder.

In this way, every user can organize his or her work to suit themselves.

7791 Mechanical loaders up to 400 N·m

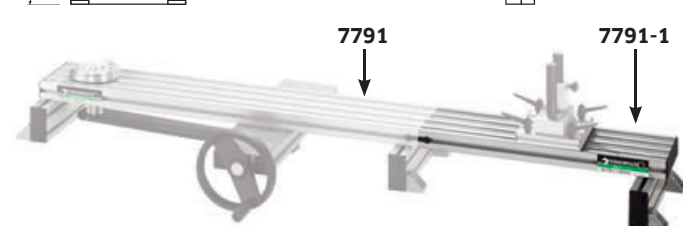
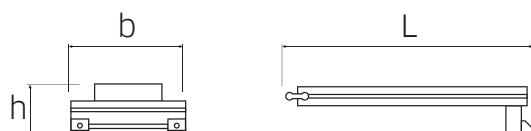
- **measurement possible without moving the point of application of force**
- thanks to a specially designed force transmission system, mechanical loader No 7791 avoids the risk of the point of force application shifting during the calibration process
- the lever below the test rail is actuated in a linear direction by the handwheel acting on a spindle
- the linear motion is translated into a rotary movement which acts on the transducer
- the torque wrench to be calibrated remains in the same position throughout the calibration process
- this prevents measuring errors caused by the point of force application being moved
- thanks to a low-friction linear ball bearing, the torque wrench is automatically levelled as it is placed in the unit
- a further linear ball bearing ensures the contact with the torque wrench is friction-free
- the reduction in lateral forces acting on the transducer and in the friction on the point of contact with the torque wrench results in a corresponding reduction in mismeasurement
- protected by national and international patents



Code	Capacity N·m	for transducer	for torque wrenches with functional length (L _F) max. mm	Profile width mm	b mm	h mm	L mm	Δ kg
52110091	-400	sizes 1-100	815	180	704	323	1069	44.8

7791-1 Extension unit for No 7791, 7794-1 and 7794-2 up to 1000 N·m

- with one pair of adapter plates No 7770-3 for height compensation between extension unit No 7791-1 and perfectControl® calibrating units No 7794-1 and No 7794-2



Code	Capacity N·m	for torque wrenches with functional length (L _F) max. mm	Profile width mm	b mm	h mm	L mm	Δ kg
52110191	-1000	1390 (7791 + 7791-1)	180	308	135	673	8

7792 Mechanical loaders unit to 1000 N·m



Code	Capacity N·m	for transducer	for torque wrenches with functional length (L _F) max. mm	Profile width mm	b mm	h mm	L mm	Δ kg
52 11 0092	-1000	sizes 20; 100; 300	1390	270	722	323	1668.5	58

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

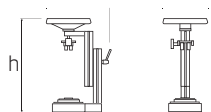


Code	Capacity N·m	for torque wrenches with functional length (L _F) max. mm	Profile width mm	b mm	h mm	L mm	Δ kg
52 11 0192	-3000	2390 (7792 + 7792-1)	270	558	135	1073	18.5

Test attachments for torque screwdrivers

7790 Mechanical loaders for torque screwdrivers

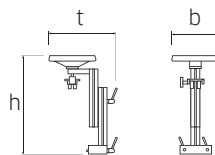
- can be bolted to mechanical loader No 7792
- the torque screwdriver to be calibrated is inserted in the square mount of the transducer and fixed using the universal central clamp
- the handwheel ensures that the required force is applied in a controlled manner to the torque screwdriver
- supplied without transducer or torque screwdriver



Code	Capacity N·m	for transducer	b mm	h mm	t mm	Δ kg
58 52 1090	-10	7728-1S	250	442-593	351	9

7791-2 Test attachment for torque screwdrivers

- can be bolted onto mechanical loader No 7791
- the torque screwdriver to be calibrated is inserted in the square mount of the transducer and fixed using the universal central clamp
- the handwheel ensures that the required force is applied in a controlled manner to the torque screwdriver



Code	Capacity N·m	b mm	h mm	t mm	Δ kg
52 11 0291	-10	250	442-593	351	3.7

Accessory

7750-1 Holder

- for display unit No 7750
- can be bolted to test attachments



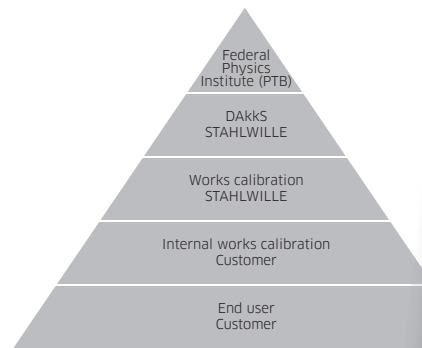
code	Δ g
52 10 1050	165

Audited. Documented. Certified. **STAHLWILLE DAKKS calibration laboratory.**

STAHLWILLE's DAKKS calibration laboratory for torque is accredited by the German Accreditation Service (DAKKS) in accordance with DIN EN ISO/IEC 17025:2005. The transfer torque wrenches and torque transducers in use in the calibration laboratory are subject to regular examination by the German Federal Physics Institute (PTB) in Braunschweig.

The accuracy of the torque wrenches must be proved in a series of steps and these must be traceable. Only in this way can the reliability of the readings be guaranteed. During the first stage, the end-user checks the accuracy of the torque tools in-house using suitable calibrated testing equipment. At the next stage, this test equipment is checked in STAHLWILLE's DAKKS calibrating laboratory. This accreditation by the German Calibration Service (DKD) in accordance with DIN EN ISO/IEC 17025:2005 guarantees the direct link between the measuring equipment and the national standard as laid down in DIN EN ISO 9001:2008.

5



Relationship between the national standard and the equipment



CONFORMS TO STANDARDS.

The accreditation means the specific requirements listed in Technical Specification ISO/TS 16949 relating to testing laboratories are fulfilled. This is absolutely essential for all suppliers in the automotive sector.



Precisely matched products. perfectControl calibration systems.



Motor driven calibrating unit
No. 7794-2



Laboratory
transducers



Cable
No 7751-1



7757-1 USB adaptor



USB cable



PC/printer not included



Manual calibrating unit
No 7794-1



No for full system	7794-2/400	7794-2/1000	7794-1/400	7794-1/1000
Code	96 52 10 78	96 52 10 79	96 52 10 76	96 52 10 77
Weight in kg	62.1	69.8	53.2	60.9
Range N·m	1-400	1-1000	1-400	1-1000
Motor driven calibrating unit	No 7794-2	No 7794-2	-	-
Manual calibrating unit	-	-	No 7794-1	No 7794-1
Extension	-	No 7791-1	-	No 7791-1
Laboratory transducers	No 7728-1 (1-10 N·m) No 7728-6 (6-60 N·m) No 7728-40 (40-400 N·m)	No 7728-1 (1-10 N·m) No 7728-6 (6-60 N·m) No 7728-40 (40-400 N·m) No 7728-100 (100-1000 N·m)	No 7728-1 (1-10 N·m) No 7728-6 (6-60 N·m) No 7728-40 (40-400 N·m)	No 7728-1 (1-10 N·m) No 7728-6 (6-60 N·m) No 7728-40 (40-400 N·m) No 7728-100 (100-1000 N·m)
USB adapter	No 7757-1	No 7757-1	No 7757-1	No 7757-1
Jack cable	No 7751	No 7751	No 7751	No 7751
Spiral cable	No 7752	No 7752	No 7752	No 7752
Cable for No 7728	No 7751-2	No 7751-2	No 7751-2	No 7751-2
Square drive adapter	No 409M (1/4" ) No 7787 (1/4" ) No 7788 (3/8" ) No 7789 (1/2" ) No 7789-4 (1/4" ) No 7789-5 (3/8" )	No 409M (1/4" ) No 7787 (1/4" ) No 7788 (3/8" ) No 7789 (1/2" ) No 7789-4 (1/4" ) No 7789-5 (3/8" )	No 409M (1/4" ) No 7787 (1/4" ) No 7788 (3/8" ) No 7789 (1/2" ) No 7789-4 (1/4" ) No 7789-5 (3/8" )	No 409M (1/4" ) No 7787 (1/4" ) No 7788 (3/8" ) No 7789 (1/2" ) No 7789-4 (1/4" ) No 7789-5 (3/8" )
Calibration square drive insert tools	No 734K/4 (1/4" ) No 734K/5 (3/8" ) No 734K/12 (3/8" ) No 734K/20 (1/2" ) No 734K/40 (3/4" ) No 734K/100 (3/4" )	No 734K/4 (1/4" ) No 734K/5 (3/8" ) No 734K/12 (3/8" ) No 734K/20 (1/2" ) No 734K/40 (3/4" ) No 734K/100 (3/4" )	No 734K/4 (1/4" ) No 734K/5 (3/8" ) No 734K/12 (3/8" ) No 734K/20 (1/2" ) No 734K/40 (3/4" ) No 734K/100 (3/4" )	No 734K/4 (1/4" ) No 734K/5 (3/8" ) No 734K/12 (3/8" ) No 734K/20 (1/2" ) No 734K/40 (3/4" ) No 734K/100 (3/4" )
Calibration software	TORKMASTER	TORKMASTER	TORKMASTER	TORKMASTER
DAkKS calibration certificates	3	4	3	4

perfectControl®

7794-2 Motorised calibrating and adjusting tool from 1 to 400 N·m

The electronic perfectControl® calibrating unit with its electric drive considerably reduces the amount of effort and time required for calibration and adjustment tasks on torque wrenches

- measurement possible without moving the point of application of force
- prevents faulty readings thanks to precision-mounted spindle and finely regulated motor
- extremely accurate calibration thanks to optimised bearings and square drives for the transducers
- rapid, easy change of transducers thanks to quick-release latching system
- convenient pushbutton controls for clockwise and anticlockwise measurements with automatic speed compensation
- saves time because the bridge support is locked in place using a single-handed eccentric lever
- transmission of readings to a PC via USB interface for further processing, analysis and archiving
- a Declaration of Conformance or a calibration certificate can be printed or saved as a PDF file after calibration
- as found / as left calibrations can be documented
- during calibration, DIN EN ISO 6789:2003 in numerous languages is supported. Additional standards and works standards are available on request
- can be upgraded to perfectControl® calibrating unit No 7794-3 for angle-controlled wrenches
- **calibration up to 1000 N·m is possible using the easily attached extension unit No 7791-1 (see p. 242)**

- design patent
- protected by national and international patents
- both clicking and indicating torque wrenches can be calibrated
- calibration of transducers is possible using reference torque wrenches No 7770-10, 7770-100 and 7770-1000, available on request.
- the unit is supplied without the torque wrench, transducers or notebook
- **transducers laboratory No 7728 (see p. 248)**



product
design
award

2011

Content:

- 6 calibrating square drive insert tools No 734K (sizes 4, 5, 12, 20, 40, 100)
- 6 square drive adaptors (No 409M, No 7787, No 7788, No 7789, No 7789-4, No 7789-5)
- 1 USB adaptor No 7757-1
- 1 software Torkmaster 7731-1
- 1 jack cable No 7751
- 1 spiral cable No 7752
- 1 spiral cable No 7751-2 with jack plug and self-locking precision plug
- 1 low-temperature cable connector
- 1 hexagon key wrench No 10760CV size 2 mm are included



Code	Capacity N·m	for transducer	for torque wrenches with functional length (L _F) max. mm	Profile width mm	b mm	h mm	L mm	⌀ kg
96521093	1-400	7728 (sizes 1-100)	815	180	640	328	1060	58.1

Made in
Germany

7794-1 Manual calibrating unit from 1 to 400 N·m

- as for perfectControl® No 7794-2, but the drive is via an ergonomically designed handwheel
- calibration up to 1000 N·m is possible using the easily attached extension unit No 7791-1 (see p. 242)**
- protected by national and international patents
- supplied without torque wrench, transducer or notebook
- transducers laboratory No 7728 (see p. 248)**

Content:

- 6 calibrating square drive insert tools No 734K (sizes 4, 5, 12, 20, 40, 100)
- 6 square drive adaptors (No 409M, No 7787, No 7788, No 7789, No 7789-4, No 7789-5)
- 1 USB adaptor No 7757-1
- 1 software Torkmaster 7731-1
- 1 jack cable No 7751
- 1 spiral cable No 7752
- 1 spiral cable No 7751-2 with jack plug and self-locking precision plug
- 1 low-temperature cable connector
- 1 hexagon key wrench No 10760CV 2 mm are included



Code	Capacity N·m	for transducer	for torque wrenches with functional length (L _F) max. mm	Profile width mm	b mm	h mm	L mm	⌀ kg
96 52 1092	1-400	7728 (sizes 1-100)	815	180	705	355	1060	47

7794-3 Automated calibrating and adjusting unit from 1 to 400 N·m

- automatically calibrates electronic torque and angle-controlled wrenches made by STAHLWILLE**
- design patent
- protected by national and international patents
- model is the same as perfectControl® No 7794-2, except it is additionally suited to calibrating angle-controlled wrenches. Optimum adaptation to working height with motorised height adjustment
- calibration up to 1000 N·m is possible using the easily attached expansion unit No 7791-1 (see p. 242) and set of adapter plates No 7791-4, Code 52110491
- supplied without torque wrench, transducer or notebook

Content:

- 6 calibrating square drive insert tools No 734K (sizes 4, 5, 12, 20, 40, 100)
- 6 square drive adaptors (No 409M, No 7787, No 7788, No 7789, No 7789-4, No 7789-5)
- 1 USB adaptor No 7757-1
- 1 software Torkmaster 7731-1
- 1 jack cable No 7751
- 1 spiral cable No 7752
- 1 spiral cable No 7751-2 with jack plug and self-locking precision plug
- 1 low-temperature cable connector
- 1 hexagon key wrench No 10760CV 2 mm are included



Code	Capacity N·m	for transducer	for torque wrenches with functional length (L _F) max. mm	Profile width mm	b mm	h mm	L mm	⌀ kg
96 52 1094	1-400	7728 (sizes 1-100)	815	180	640	884-1134	1060	230

Torque testers

7728

Transducers laboratory



- patented
- for laboratory environments
- with optimised measuring range
- for calibrating torque wrenches and torque screwdrivers
- for use together with perfectControl® calibrating unit No 7794 or calibration system No 7706
- high degree of accuracy thanks to conversion and digitization of readings within the transducer itself
- with high-grade self-locking precision plug
- not susceptible to lateral forces due to low-profile construction
- with DAkkS calibration certificate
- max. display deviation value $\pm 0.5\%$ of the reading**
- further details on request
- supplied in sturdy plastic box
- measuring ranges by deviation of indication



Code	size	Display deviation value $\pm 0.5\%$ of the reading			Display deviation value $\pm 0.25\%$ of the reading			ϕ mm	"	Δ g	Δ g with box
		N·m	in·lb	ft·lb	N·m	ft·lb	in·lb				
96524011	15 ¹⁾	1-10	8,9-88,5	0,74-7,4	2-10	1,5-7,4	18-88,5	120	1/4	1735	2415
96524001	1	1-10	8,9-88,5	0,74-7,4	2-10	1,5-7,4	18-88,5	120	1/4	1735	2415
96524002	2	2-20	18-177	1,5-15	4-20	3-15	35-177	120	1/4	1735	2415
96524004	4	4-40	35-354	3-30	8-40	6-30	71-354	120	3/8	2486	3136
96524006	6	6-60	53-531	4,5-45	12-60	9-45	106-531	120	3/8	2486	3136
96524010	10	10-100	89-885	7-74	20-100	14-74	177-885	120	3/8	2486	3136
96524020	20	20-200	177-1770	15-148	40-200	30-148	354-1770	120	1/2	2983	3170
96524040	40	40-400	354-3540	30-295	80-400	60-295	708-3540	156	3/4	4846	5507
96524065	65	65-650	575-5753	48-479	130-650	96-479	1151-5753	156	3/4	4846	5507
96524080	80	80-800	708-7081	59-590	160-800	118-590	1416-7081	156	3/4	4846	5507
96524100	100	100-1000	885-8851	74-738	200-1000	148-738	1770-8851	156	3/4	4846	5507
96524300	300 ²⁾	300-3000	2655-26553	221-2214	600-3000	443-2214	5310-26553	195	1 1/2	10500	12000

¹⁾ for calibrating torque screwdrivers

²⁾ for use with mechanical loader No 7792 and 7792-1 (S. 243)

TORKMASTER.

Simple, professional calibration.

Need to adjust torque wrenches and torque screwdrivers and calibrate them in compliance with the standards, generate Declarations of Conformance and calibration certificates to DIN EN ISO 6789? This is exactly what the STAHLWILLE TORKMASTER software is for. At the highest standard of safety and with minimum effort for the user.

The **optional CAQ interface** enables connection to the superordinate CAQ system, which in this way has access to all inspection data at all times. The user is not required to do anything – all the data and logs of the calibration process are securely transmitted.



Accessories for workshop torque tester and calibration systems

7759-4

USB adaptor, jack cable and software Torkmaster

Link between perfectControl® or transducer (7721-7724) and PC. For adjusting and calibrating torque wrenches and torque screwdrivers. Produces calibration certificates in accordance with DIN EN ISO 6789, which can be printed out or saved as PDF files.

- as found / as left calibrations can be documented
- graphical representation of the torque progression
- user management
- 17 languages
- equipment testing system

System requirements:

- PC
- Microsoft Windows XP SP3 or later operating system
- USB connection



Code	L m	ΔΔ g
96 58 36 29	1.5	65

7759-6

USB adaptor, cable and software Torkmaster

NEW

Link between perfectControl® or transducer (7728) and PC. For adjusting and calibrating torque wrenches and torque screwdrivers. Produces calibration certificates in accordance with DIN EN ISO 6789, which can be printed out or saved as PDF files.

- as found / as left calibrations can be documented
- graphical representation of the torque progression
- user management
- 17 languages
- equipment testing system

System requirements:

- PC
- Microsoft Windows XP SP3 or later operating system
- USB connection



Code	L m	ΔΔ g
96 58 36 31	1.5	72

7751

Jack cable

- connection between transducers 7721-7724 and USB adaptor or display unit
- with jacks at both ends, 90° angled



Code	L m	ΔΔ g
52 11 00 51	1.5	50

7751-1

Cable for No 7728

- for connecting laboratory transducers 7728 to a USB hub or display unit
- with jack plug, 90° angled, and self-locking precision plug



Code	L m	ΔΔ g
52 11 00 54	1.5	38

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 11 00 52	500	35

7751-2

Spiral cable for No 7728

- for connecting laboratory transducers 7728 to a USB hub or display unit
- with jack plug, 90° angled, and self-locking precision plug



Code	L max. mm	ΔΔ g
52 11 00 57	500	32

Torque testers

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	⚖ g
52 1000 50	182

7760 Mains adaptor

- Input: 110 V-230 V AC
- Output: 9 V DC, with interchangeable socket adaptors



Code	⚖ g
52 1100 56	201

7761 Interface adaptor

- required for automated calibration and adjustment of angle-controlled torque wrenches No 714 using calibrating and adjusting units perfectControl® No 7794-2 and 7794-3



Code	⚖ g
52 1100 61	26

7761/3 Interface adaptor set

- Contents:
- No 7761 interface adaptor
 - No 7752 spiral cable
 - No 7760 mains adaptor



Code	⚖ g
96 52 11 61	255

7311/7312 Plastic box, empty

- for safe storage and transport of transducers (please order inlays separately)



Code	No	for transducer	⚖ g
81 500003	7311	7721; 7722; 7723; 7728 1-20	554
81 500004	7312	7724-1; 7728 40-100	1346

7313/7314 Inlays for plastic box

Code	No	for transducer	⚖ g
8307 1030	7313	7721; 7722; 7723; 7728 1-20	77
8307 1031	7314	7724-1; 7728 40-100	242

409M Adaptor

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



code	L mm	∅ mm	⚖ g
11 0300 10	13	28	14

7787 Square drive adaptor

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



Code	L mm	∅ mm	⚖ g
58 52 10 87	15.5	29	41

7788 Square drive adaptor

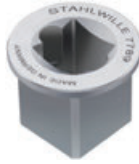
- 3/8" socket x 3/4" plug (10 x 20)



Code	L mm	∅ mm	⚖ g
58 52 10 88	23.5	29	50

7789 Square drive adaptor

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



Code	L mm	Ø mm	ΔΔ g
58 52 1089	23.5	29	40

7789-2 Square drive adaptor

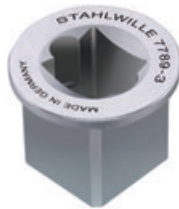
- 3/4" socket x 1 1/2" plug (20 x 40)



Code	L mm	Ø mm	ΔΔ g
58 52 3089	44	60	380

7789-3 Square drive adaptor

- 1" socket x 1 1/2" plug (25 x 40)



Code	L mm	Ø mm	ΔΔ g
58 52 4089	44	60	280

7789-4 Square drive adaptor

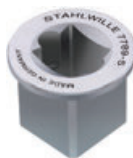
- 1/4" socket x 1/2" plug (6.3 x 12.5)



Code	L mm	Ø mm	ΔΔ g
58 52 4090	15.5	29	25

7789-5 Square drive adaptor

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



Code	L mm	Ø mm	ΔΔ g
58 52 4091	15.5	29	28

734K Calibrating square drive insert tools

- without a ball or pin (so not suitable for bolt tightening)
- optimum measuring results during calibration thanks to reduced lateral forces



Code	size	"	mm	b mm	h mm	s mm	ΔΔ g
58 24 3004	4	1/4	9x12	20	16.7	17.5	76
58 24 3005	5	3/8	9x12	20	16.7	17.5	76
58 24 3012	12	3/8	14x18	27	21.5	25	199
58 24 3020	20	1/2	14x18	27	21.5	25	218
58 24 3040	40	3/4	14x18	40	29.3	25	410
58 24 1100	100	3/4	22x28	43	29.3	55	907

70VK Calibrating square drive units

- without a ball or pin (so not suitable for bolt tightening)
- optimum measuring results during calibration thanks to reduced lateral forces



Code	size	for No	a "	b "	L mm	ΔΔ g
5901 1014	11	734/4	3/8	1/4	24.7	12
5901 1003	3	735/5	3/8	3/8	27.6	17
5901 1012	12	734/10; 734/20	1/2	3/8	32.5	34
5901 1011	502 1/2	734/20	1/2	1/2	36.9	60
5901 1008	8	734/40; 734/80; 734/100	3/4	3/4	52.2	138