

assortment informations
new products

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Tools. Next Level.



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109295 Caliper gauge digital for left-handed

DIN 862

Designs:

Type A: depth gauge rectangular

Features:

LCD display
mm/inch conversion
Zero setting in any position

Package contents:

Delivered in case.

Appropriate batteries:

1 pieces 155051.0365 - SR44 (357) / 1.55 V (included in scope of delivery).

Order ID		109295.0100
Type		A
Range	mm	150
Resolution	mm	0.01
Measuring jaw length	mm	40
Digit height	mm	11
Depth gauge	mm	3.7 x 1.3
Depth gauge		rectangular
Drive wheel		—
Data output		—



115141 External micrometer digital SYLVAC S_Mike PRO

Measuring surfaces offset

SwissMade - 3-year guarantee

Non-rotating measuring spindle with quick spindle setting. Offset measuring surfaces \varnothing 2 mm.

Designs:

115141.0100...115141.0300: Data output Proximity

115141.1100: Data output Bluetooth®

Features:

LCD display
Stand-by functions
Auto-On when motion detected and position memory
mm/inch conversion

Package contents:

Delivered in case incl. factory certificate.

Appropriate accessories:

109145 Accessories SYLVAC

154290 Software SYLVAC

Appropriate batteries:

1 pieces 155051.0545 - CR2032 / 3.0 V (included in scope of delivery).

Order ID		115141.0100	115141.0200	115141.0300	115141.1100
Range	mm	0...25	25...60	60...95	0...25
Resolution	mm	0.001	0.001	0.001	0.001
Accuracy	μ m	3	4	5	3
Measuring spindle \varnothing	mm	6.5	6.5	6.5	6.5
Measuring surfaces	mm	\varnothing 2 x 5			
Spindle pitch	mm	10	10	10	10
Digit height	mm	8.5	8.5	8.5	8.5
Protection class		IP67	IP67	IP67	IP67
Data output		Proximity	Proximity	Proximity	Bluetooth®
Measuring pressure	N	5 / 10	10	10	5 / 10



115141.0100



Detail view

115142 External micrometer digital SYLVAC S_Mike PRO**Measuring surfaces knife shaped****SwissMade - 3-year guarantee****Non-rotating measuring spindle** with quick spindle setting. Measuring surfaces knife shaped 0.75 x 6.5 mm.**Designs:****115142.0100...115142.0500:** Data output Proximity**115142.1100:** Data output Bluetooth®**Features:**

LCD display

Stand-by functions

Auto-On when motion detected and position memory

mm/inch conversion

Package contents:

Delivered in case incl. factory certificate.

Appropriate accessories:

109145 Accessories SYLVAC

154290 Software SYLVAC

Appropriate batteries:

1 pieces 155051.0545 - CR2032 / 3.0 V (included in scope of delivery).

Order ID		115142.0100	115142.0200	115142.0300	115142.0400	115142.0500	115142.1100
Range	mm	0...25	25...60	60...95	95...130	120...155	0...25
Resolution	mm	0.001	0.001	0.001	0.001	0.001	0.001
Accuracy	µm	3	4	5	6	7	3
Measuring spindle Ø	mm	6.5	6.5	6.5	6.5	6.5	6.5
Measuring surfaces	mm	0.75 x 6.5					
Spindle pitch	mm	10	10	10	10	10	10
Digit height	mm	8.5	8.5	8.5	8.5	8.5	8.5
Protection class		IP67	IP67	IP67	IP67	IP67	IP67
Data output		Proximity	Proximity	Proximity	Proximity	Proximity	Bluetooth®
Measuring pressure	N	5 / 10	10	10	10	10	5 / 10



115142.0100



Detail view

115143 External micrometer digital SYLVAC S_Mike PRO**Measuring surfaces plate shaped****SwissMade - 3-year guarantee****Non-rotating measuring spindle** with quick spindle setting. Measuring surfaces plate shaped Ø 25 mm.**Designs:****115143.0100:** Data output Proximity**115143.1100...115143.1300:** Data output Bluetooth®**Features:**

LCD display

Stand-by functions

Auto-On when motion detected and position memory

mm/inch conversion

Package contents:

Delivered in case incl. factory certificate.

Appropriate accessories:

109145 Accessories SYLVAC

154290 Software SYLVAC

Appropriate batteries:

1 pieces 155051.0545 - CR2032 / 3.0 V (included in scope of delivery).

* full-touch-contact / partial contact

Order ID		115143.0100	115143.1100	115143.1200	115143.1300
Range	mm	0...30	0...30	30...66	66...102
Resolution	mm	0.001	0.001	0.001	0.001
Accuracy	µm	4 / 10*	4 / 10*	4 / 10*	4 / 10*
Measuring spindle Ø	mm	6.5	6.5	6.5	6.5
Measuring surfaces	mm	Ø 25	Ø 25	Ø 25	Ø 25
Spindle pitch	mm	10	10	10	10
Digit height	mm	8.5	8.5	8.5	8.5
Protection class		IP67	IP67	IP67	IP67
Data output		Proximity	Bluetooth®	Bluetooth®	Bluetooth®
Measuring pressure	N	5	5	5	5



Detail view

115144 External micrometer digital SYLVAC S_Mike PRO**Measuring surfaces pherical****SwissMade - 3-year guarantee****Non-rotating measuring spindle** with quick spindle setting.**Designs:****115144.0100:** Anvil side spherical measuring surface**115144.0200:** Both sides measuring surfaces pherical**Features:**

LCD display

Stand-by functions

Auto-On when motion detected and position memory

mm/inch conversion

Data output Proximity

Package contents:

Delivered in case incl. factory certificate.

Appropriate accessories:

109145 Accessories SYLVAC

Appropriate batteries:

1 pieces 155051.0545 - CR2032 / 3.0 V (included in scope of delivery).

Order ID		115144.0100	115144.0200
Range	mm	0...30	0...30
Resolution	mm	0.001	0.001
Accuracy	µm	3	4
Measuring spindle Ø	mm	6.5	6.5
Measuring surfaces	mm	Ø 7.0 Kugel - Ø 6.5	Ø 7.0 Kugel - Ø 7.0 Kugel
Spindle pitch	mm	10	10
Digit height	mm	8.5	8.5
Protection class		IP67	IP67
Measuring pressure	N	5 / 10	5 / 10



115144.0100



115144.0200

115145 External micrometer digital SYLVAC S_Mike PRO**Crimpen / Point****SwissMade - 3-year guarantee****Non-rotating measuring spindle** with quick spindle setting.**Designs:****115145.0100:** Anvil side knife shaped, spindle cone 60° x 0.5 mm**115145.0200:** 2 point 30° / SR 0.3 mm**Features:**

LCD display

Stand-by functions

Auto-On when motion detected and position memory

mm/inch conversion

Data output Bluetooth®

Package contents:

Delivered in case incl. factory certificate.

Appropriate accessories:

109145 Accessories SYLVAC

154290 Software SYLVAC

Appropriate batteries:

1 pieces 155051.0545 - CR2032 / 3.0 V (included in scope of delivery).

Order ID		115145.0100	115145.0200
Range	mm	0...25	0...25
Resolution	mm	0.001	0.001
Accuracy	µm	3	3
Measuring spindle Ø	mm	6.5	6.5
Measuring surfaces	mm	0.5 x 6.5 / 60° x Ø 0.5	2 x 30° x Ø 3
Spindle pitch	mm	10	10
Digit height	mm	8.5	8.5
Protection class		IP67	IP67
Data output		Bluetooth®	Bluetooth®
Measuring pressure	N	5 / 10	5 / 10



115145.0100



115145.0200

123690 Analogue comparator Käfer SENSIKATOR

The comparator Sensikator combines the advantages of very high precision with a very low measuring force.

Designs:

123690.0200: with wire lifter

**Features:**

Adjustment knob on the housing for easy fine adjustment

The glass hand reduces inertia

Pointer and scale markings are perfectly aligned

Key bearing points mounted in precise, high-quality perforated jewels

Effective shock protection

Package contents:

Supplied in transport packaging incl. test report (measured value and force specification).

Order ID		123690.0100	123690.0200
Type		SENSIKATOR	SENSIKATOR
Travel	mm	±0.050	±0.050
Resolution	mm	0.001	0.001
Measuring pressure	N	0.14	0.14
Accuracy	µm	1.2	1.2
Lettering		50...0...50	50...0...50
Free lift	mm	2.5	2.5

124008 Measuring inserts M2.5 FUTURO



SwissMade

Order ID	Designation		Order ID	Designation	
124008.0020	Carbide pin		124008.0410	Carbide pin, replaceable	
124008.0030	Carbide pin		124008.0415	Carbide pin, replaceable	
124008.0045	Carbide pin		124008.0420	Carbide pin, replaceable	
124008.0046	Carbide pin		124008.0430	Carbide pin, replaceable	
124008.0048	Carbide pin		124008.1500	Carbide pin	
124008.0050	Carbide pin		124008.1520	Carbide pin Groove width from 0.8 mm Groove depth max. 1.4 mm	
124008.0060	Carbide pin		124008.1640	Plastic ball	
124008.0130	Carbide pin		124008.1650	Steel ball	
124008.0140	Carbide pin		124008.1700	with replaceable POM measuring insert	
124008.0200	Carbide pin		124008.1705	with replaceable POM measuring insert	
124008.0300	4 carbide pin, replaceable		124008.1720	with replacement POM measuring insert / cone	
124008.0310	Carbide pin, replaceable		124008.1750	POM measuring insert / cone	
124008.0320	Carbide pin, replaceable		124008.1800	POM measuring insert / pin Ø 1 x 10	
124008.0330	Carbide pin, replaceable		124008.1805	POM measuring insert / pin Ø 1.5 x 13	
124008.0405	Carbide pin, replaceable		124008.2030	INOX insert-body FUTURO M2.5, with receptacle bore hole, Ø1.5H6	
			124008.2040	INOX insert-body FUTURO M2.5, with receptacle bore hole, Ø2.0H6	
			124008.2050	INOX insert-body FUTURO M2.5, with receptacle bore hole, Ø2.5H6	
			124008.3000	Caliper support FUTURO Aluminium, black anodised M2.5	
			124008.9000	Base on acrylic glass for inserts M2.5 transparent with place for 23 pieces	

127360 Measuring table BENZING

Pillar hardened and precision-ground. Table surface ground and lapped. **Fixed horizontal arm.**

Designs:

127360.0100: Standard table

127360.0150: Standard table, with fine adjustment

127360.0300...127360.0400: Table with dust grooves

Package contents:

Delivered in transport packaging, **without dial gauge.**

Appropriate accessories:

Dial gauges starting from 121450

Order ID		127360.0100	127360.0150	127360.0300	127360.0400
Measuring height	mm	105	105	100	155
Capacity	mm	49	49	49	76
Table size	mm	Ø 50	Ø 50	60 x 68	98 x 115
Evenness	µm	4.4	4.4	4.3	4.5
Vertical arm	mm	Ø 22	Ø 22	Ø 22	Ø 28
Height	mm	200	200	200	284
Dial gauge holder	mm	Ø 8	Ø 8	Ø 8	Ø 8
Weight	kg	~2.3	~2.5	~3.5	~7.1



127360.0100

127360.0150



127360.0300

127360.0400

127440 Ceramic measuring table BENZING

Table surface made from high-grade ceramic, lapped. Pillar made of steel, hardened and precision-ground.

Versions:

127440.0100 / .0300 / .0500: Fixed horizontal arm

127440.0150: Horizontal arm fix with fine adjustment

127440.0200 / .0400 / .0600: Horizontal arm adjustable

Package contents:

Delivered in transport packaging, **without dial gauge.**

Appropriate accessories:

Dial gauges starting from 121450



127440.0100

127440.0150



127440.0400

Order ID		127440.0100	127440.0150	127440.0200	127440.0300	127440.0400	127440.0500	127440.0600
Measuring height	mm	105	105	105	100	100	155	165
Capacity	mm	49	49	90	49	90	76	135
Table size	mm	Ø 50	Ø 50	Ø 50	65 x 75	65 x 75	100 x 115	100 x 115
Evenness	µm	2.0	2.0	2.0	2.0	2.0	3.0	2.0
Vertical arm	mm	Ø 22	Ø 28	Ø 28				
Horizontal arm	mm	-	-	Ø 18	-	Ø 18	-	Ø 20
Height	mm	200	200	200	200	200	284	284
Dial gauge holder	mm	Ø 8	Ø 8	Ø 8	Ø 8	Ø 8	Ø 8	Ø 8
Weight	kg	~2.3	~2.5	~2.5	~3.2	~3.5	~7.1	~7.1

127662 Vertical run out testers BENZING

Vertical concentricity testing instrument with base plate to DIN 876/1 and a pair of tailstocks. The tip of the upper tailstock can be pulled back using a lever and returns to its position by spring force. This permits easy insertion and removal of the test specimen.

Note:

The standard tips can be replaced by hollow tips or carbide tips.

Package contents:

Base plate with foot and tailstock pair with tips (60°).

Order ID		127662.0100	127662.0200	127662.0300
Tip width	mm	350	350	450
Tip height	mm	50	75	100
Holder Ø	mm	16	16	22
Height	mm	580	580	755
T-slots	mm	10 H7 / 8 H7	10 H7 / 8 H7	12 H7 / 8 H7
Weight	kg	~30.5	~31.5	~68



Example of use

135250 Measuring bench MAHR Precimar SM 60

The Precimar SM 60 is a user-friendly measuring instrument for fast, precise outside measurements on workpieces.

Features:

Quick adaptation to new workpieces
Rugged construction makes it suitable for use close to production
Freely selectable measuring equipment (digital dial indicator, measuring probes, etc.)
Integrated coupling protects the measuring equipment
Carbide measuring surfaces
Large support table, Ø 60 mm, with variable height adjustment
Suitable for left- and right-handed operators

**Package contents:**

Delivered in transport packaging **without measurement system.**

Order ID		135250.0100
Range	mm	0...60
Travel	mm	25
Measuring spindle Ø	mm	6
Parallelism	µm	< 1
Evenness	µm	0.5
Measuring pressure	N	1 ±0.2
Holder Ø	mm	8
Weight	kg	9
Dimensions	mm	285 x 80 x 100

178200 Laserfinder TSCHORN

With the laserfinder, workpiece positions can be determined very quickly and easily without any direct contact. It is particularly suitable for determining rough workpieces e.g. for raw materials with allowance. Furthermore, the laser cross is also well suited to find the approximate centre of a round workpiece.

**Use:**

For NC machining centres, boring mills, milling machines, boring machines, etc.

First application:

Clamp the Laser finder into a tool holder.
Insert the tool holder into your spindle.
The Laser finder is now ready to use.

Switching the tester on an off:

The laser finder is switched on and off manually by a rotary switch.

Note:

The Lasercross can be seen most clearly at a distance of approx. 100 mm from the workpiece.

Package contents:

Delivered in transport packaging.

Appropriate batteries:

1 pieces 155050.0720 - LRV08 (A23) / 12 V (included in scope of delivery).

Order ID	Shaft Ø mm	Accuracy mm	Overall length mm	Protection class	Operating time max. h
178200.0100	16	±0.2	97	IP67	4

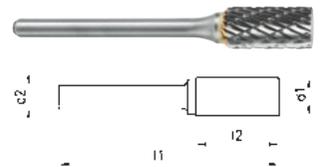
230201 Carbide mini burr NERIOX**ZYA**

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Cylindrical shape without end cut

Crosscut

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm
230201.0100	ZYA	1.5	6	3	38
230201.0150	ZYA	2	11	3	38
230201.0200	ZYA	2.5	11	3	38
230201.0300	ZYA	3	14	3	38
230201.0400	ZYA	4	12.7	3	38
230201.0500	ZYA	6.3	12.7	3	45

NERIOX

230211 Carbide mini burr NERIOX

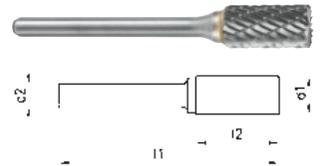
ZYAS

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Cylindrical shape with end cut.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm
230211.0100	ZYAS	1.5	6	3	38
230211.0150	ZYAS	2	11	3	38
230211.0200	ZYAS	2.5	11	3	38
230211.0300	ZYAS	3	14	3	38
230211.0400	ZYAS	6.3	12.7	3	45

NERIOX

**230221 Carbide mini burr NERIOX**

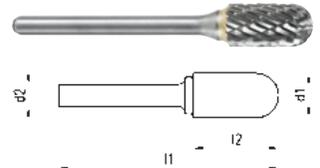
WRC

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Sphero-cylinder shape.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm
230221.0050	WRC	2	11	3	38
230221.0100	WRC	2.5	11	3	38
230221.0200	WRC	3	14	3	38
230221.0300	WRC	4	12.5	3	38
230221.0400	WRC	5	12.7	3	38
230221.0500	WRC	6.3	12.7	3	45

NERIOX

**230231 Carbide mini burr NERIOX**

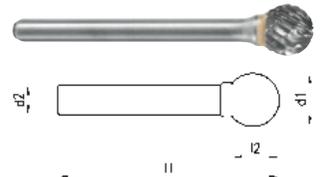
KUD

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Ball shape.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm
230231.0050	KUD	2	1.75	3	38
230231.0100	KUD	2.5	2.3	3	38
230231.0200	KUD	3	2.5	3	38
230231.0300	KUD	4	3.4	3	38
230231.0400	KUD	5	4.7	3	38
230231.0500	KUD	6.3	5	3	45

NERIOX

**230241 Carbide mini burr NERIOX**

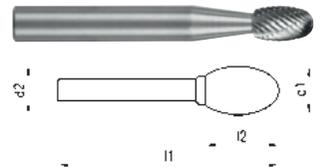
TRE

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Oval shape.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm
230241.0100	TRE	3	6	3	38
230241.0200	TRE	5	7.1	3	38
230241.0300	TRE	6.3	9.5	3	42

NERIOX

**230251 Carbide mini burr NERIOX**

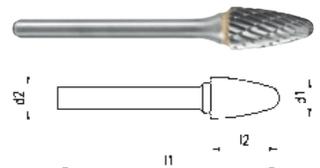
RBF

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Round-arch shape.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm
230251.0100	RBF	3	14	3	38
230251.0200	RBF	5	12.7	3	38
230251.0300	RBF	6.3	12.7	3	45

NERIOX



230261 Carbide mini burr NERIOX

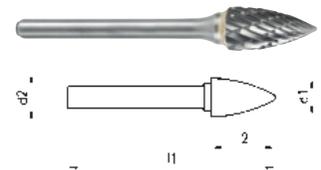
SPG

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Pointed-arch shape.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm
230261.0100	SPG	3	14	3	38
230261.0200	SPG	5	12.7	3	45
230261.0300	SPG	6.3	12.7	3	45

NERIOX



230271 Carbide mini burr NERIOX

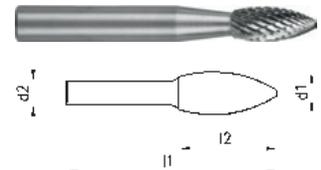
H

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Flame shape.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm
230271.0100	H	3	6	3	38
230271.0200	H	5	9.5	3	38

NERIOX



230281 Carbide mini burr NERIOX

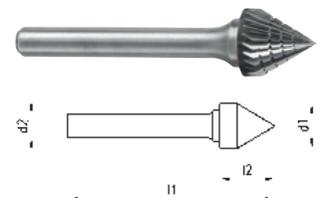
KSJ

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Conical counterbore shape 60°.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm
230281.0100	KSJ	3	2.5	3	38

NERIOX



230291 Carbide mini burr NERIOX

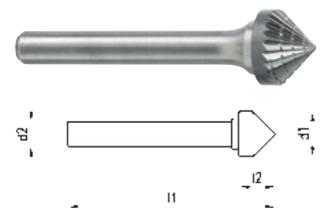
KSK

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Conical counterbore shape 90°.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm
230291.0100	KSK	3	1.5	3	38

NERIOX



230301 Carbide mini burr NERIOX

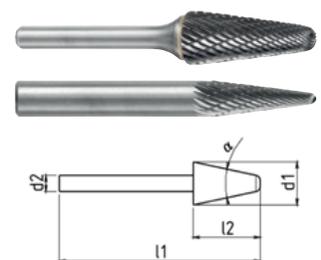
KEL

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Conical shape with radius end.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm	Angle
230301.0100	KEL	3	10	3	38	10°
230301.0150	KEL	3	14	3	38	8°
230301.0200	KEL	5	12.7	3	38	14°

NERIOX



230311 Carbide mini burr NERIOX

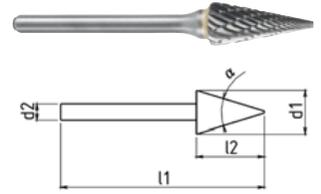
SKM

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Conical pointed shape.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm	Angle
230311.0100	SKM	3	8	3	38	18°
230311.0200	SKM	3	11	3	38	14°
230311.0300	SKM	3	15	3	38	10°
230311.0400	SKM	5	14.5	3	38	16°
230311.0500	SKM	6.3	12.7	3	49	22°

NERIOX



230321 Carbide mini burr NERIOX

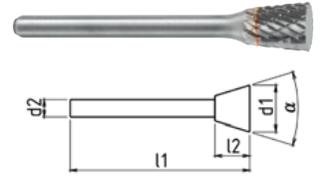
WKN

P	M	K	N	S	H	O
○	○	○	○	○	○	○

Angular shape.
Crosscut.

Order ID	Type	d1 mm	l2 mm	d2 mm	l1 mm	Angle
230321.0100	WKN	3	4	3	38	10°
230321.0200	WKN	6.3	6.4	3	39	12°

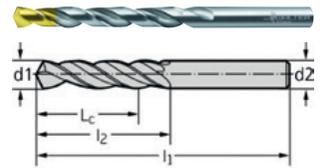
NERIOX



252026 Twist drill WALTER TITEX DA110

Perform

HSS	Ø 1-16	 118°	 DIN 338					
	P	M	K	N	S	H	O	
	●●	○	●●	○			○	



Type N, TiN-coated drill head

Application

Standard drill for drilling steel and cast steel (alloyed and unalloyed), cast iron, malleable cast iron, spheroidal graphite iron, sintered iron, etc.

Is part of:

253625 Set of twist drills WALTER TITEX DA110 Perform

1 pack contains: 1...2 mm: 5 Stück

Order ID	d1 mm	Lc mm	l2 mm	l1 mm	d2 mm	Order ID	d1 mm	Lc mm	l2 mm	l1 mm	d2 mm
252026.0010	1	10	12	34	1	252026.0590	6.8	57	69	109	6.8
252026.0020	1.1	12	14	36	1.1	252026.0600	6.9	57	69	109	6.9
252026.0030	1.2	14	16	38	1.2	252026.0610	7	57	69	109	7
252026.0040	1.3	14	16	38	1.3	252026.0620	7.1	57	69	109	7.1
252026.0050	1.4	15	18	40	1.4	252026.0630	7.2	57	69	109	7.2
252026.0060	1.5	15	18	40	1.5	252026.0640	7.3	57	69	109	7.3
252026.0070	1.6	17	20	43	1.6	252026.0650	7.4	57	69	109	7.4
252026.0080	1.7	17	20	43	1.7	252026.0660	7.5	57	69	109	7.5
252026.0090	1.8	19	22	46	1.8	252026.0670	7.6	62	75	117	7.6
252026.0100	1.9	19	22	46	1.9	252026.0680	7.7	62	75	117	7.7
252026.0110	2	20	24	49	2	252026.0690	7.8	62	75	117	7.8
252026.0120	2.1	20	24	49	2.1	252026.0700	7.9	62	75	117	7.9
252026.0130	2.2	23	27	53	2.2	252026.0710	8	62	75	117	8
252026.0140	2.3	23	27	53	2.3	252026.0720	8.1	62	75	117	8.1
252026.0150	2.4	26	30	57	2.4	252026.0730	8.2	62	75	117	8.2
252026.0160	2.5	26	30	57	2.5	252026.0740	8.3	62	75	117	8.3
252026.0170	2.6	26	30	57	2.6	252026.0750	8.4	62	75	117	8.4
252026.0180	2.7	28	33	61	2.7	252026.0760	8.5	62	75	117	8.5
252026.0190	2.8	28	33	61	2.8	252026.0770	8.6	66	81	125	8.6
252026.0200	2.9	28	33	61	2.9	252026.0780	8.7	66	81	125	8.7
252026.0210	3	28	33	61	3	252026.0790	8.8	66	81	125	8.8
252026.0220	3.1	30	36	65	3.1	252026.0800	8.9	66	81	125	8.9
252026.0230	3.2	30	36	65	3.2	252026.0810	9	66	81	125	9
252026.0240	3.3	30	36	65	3.3	252026.0820	9.1	66	81	125	9.1
252026.0250	3.4	33	39	70	3.4	252026.0830	9.2	66	81	125	9.2
252026.0260	3.5	33	39	70	3.5	252026.0840	9.3	66	81	125	9.3
252026.0270	3.6	33	39	70	3.6	252026.0850	9.4	66	81	125	9.4
252026.0280	3.7	33	39	70	3.7	252026.0860	9.5	66	81	125	9.5
252026.0290	3.8	36	43	75	3.8	252026.0870	9.6	71	87	133	9.6
252026.0300	3.9	36	43	75	3.9	252026.0880	9.7	71	87	133	9.7
252026.0310	4	36	43	75	4	252026.0890	9.8	71	87	133	9.8
252026.0320	4.1	36	43	75	4.1	252026.0900	9.9	71	87	133	9.9
252026.0330	4.2	36	43	75	4.2	252026.0910	10	71	87	133	10
252026.0340	4.3	39	47	80	4.3	252026.0920	10.1	71	87	133	10.1
252026.0350	4.4	39	47	80	4.4	252026.0930	10.2	71	87	133	10.2
252026.0360	4.5	39	47	80	4.5	252026.0940	10.3	71	87	133	10.3
252026.0370	4.6	39	47	80	4.6	252026.0950	10.4	71	87	133	10.4
252026.0380	4.7	39	47	80	4.7	252026.0960	10.5	71	87	133	10.5
252026.0390	4.8	44	52	86	4.8	252026.0970	10.7	76	94	142	10.7
252026.0400	4.9	44	52	86	4.9	252026.0980	10.8	76	94	142	10.8
252026.0410	5	44	52	86	5	252026.0990	11	76	94	142	11
252026.0420	5.1	44	52	86	5.1	252026.1000	11.1	76	94	142	11.1
252026.0430	5.2	44	52	86	5.2	252026.1010	11.3	76	94	142	11.3
252026.0440	5.3	44	52	86	5.3	252026.1020	11.5	76	94	142	11.5
252026.0450	5.4	48	57	93	5.4	252026.1030	11.8	76	94	142	11.8
252026.0460	5.5	48	57	93	5.5	252026.1040	12	87	101	151	12
252026.0470	5.6	48	57	93	5.6	252026.1050	12.1	87	101	151	12.1
252026.0480	5.7	48	57	93	5.7	252026.1060	12.2	87	101	151	12.2
252026.0490	5.8	48	57	93	5.8	252026.1070	12.5	87	101	151	12.5
252026.0500	5.9	48	57	93	5.9	252026.1080	13	87	101	151	13
252026.0510	6	48	57	93	6	252026.1090	13.5	94	108	160	13.5
252026.0520	6.1	52	63	101	6.1	252026.1100	13.7	94	108	160	13.7
252026.0530	6.2	52	63	101	6.2	252026.1110	14	94	108	160	14
252026.0540	6.3	52	63	101	6.3	252026.1120	14.5	99	114	169	14.5
252026.0550	6.4	52	63	101	6.4	252026.1130	15	99	114	169	15
252026.0560	6.5	52	63	101	6.5	252026.1140	15.5	104	120	178	15.5
252026.0570	6.6	52	63	101	6.6	252026.1150	16	104	120	178	16
252026.0580	6.7	52	63	101	6.7						

253625 Set of twist drills WALTER TITEX DA110

Perform

HSS	118°		DIN 338					
	P	M	K	N	S	H	O	
	●●	○	●●	○				○

Type N, TiN-coated drill head

Application

Standard drill for drilling steel and cast steel (alloyed and unalloyed), cast iron, malleable cast iron, spheroidal graphite iron, sintered iron, etc.

Consisting of:

252026 Twist drill WALTER TITEX DA110 Perform

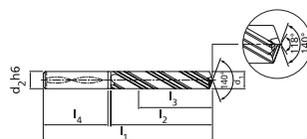
Order ID	Assortment	Range mm	Increment	Contents pieces	Notes
253625.0100	1...10.5	1...10.5	0.5	24	incl. ø 3.3, 4.2, 6.8, 10.2 mm.
253625.0200	1...13	1...13	0.5	25	



259000 Solid carbide drill reamer 5xD BECK

with pyramid tip

VHM	Ø 4-16	Coated	140°	h7	h6	5xD	2	
	P	M	K	N	S	H	O	
	●●		●●	○				



Drilling and reaming in one operation!

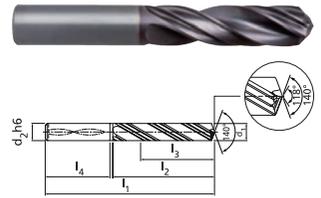
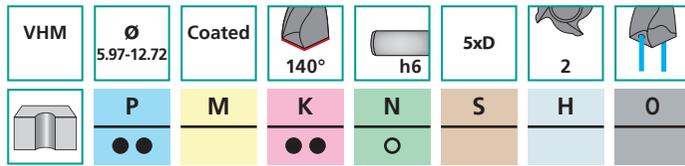
The **pyramid tip** ensures precise self-centring.

Highest-quality surfaces through **optimally designed reaming blades** and long service life due to the **new coating**.

Order ID	d1 mm	Tolerance	d2 mm	l2 mm	l1 mm	l3 mm
259000.0100	4.00	H7	6	36	74	29
259000.0200	5.00	H7	6	53	91	43
259000.0300	6.00	H7	6	53	91	43
259000.0400	7.00	H7	8	53	91	43
259000.0500	8.00	H7	8	53	91	43
259000.0600	9.00	H7	10	61	103	49
259000.0700	10.00	H7	10	61	103	49
259000.0800	12.00	H7	12	71	118	56
259000.0900	14.00	H7	14	77	124	60
259000.1000	16.00	H7	16	83	133	63

259005 Solid carbide drill reamer 5xD BECK

with pyramid tip

**Drilling and reaming in one operation!**The **pyramid tip** ensures precise self-centring.Highest-quality surfaces through **optimally designed reaming blades** and long service life due to the **new coating**.**Minimum order quantity for non-stock items:**

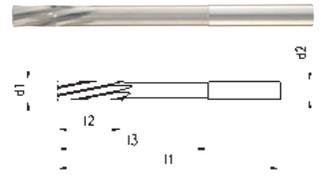
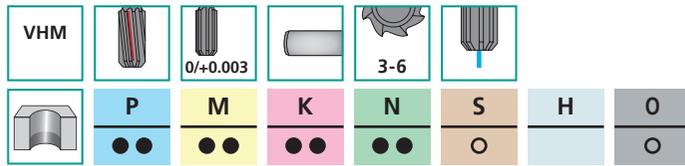
Ø5.97-10.02 mm five pieces

Ø11.97-12.72 mm three pieces

Order ID	d1 mm	Tolerance	d2 mm	l2 mm	l1 mm	l3 mm
259005.0100	5.97	-0.005/+0.013	6	53	91	43
259005.0200	5.98	-0.005/+0.013	6	53	91	43
259005.0300	5.99	-0.005/+0.013	6	53	91	43
259005.0400	6.00	-0.005/+0.013	6	53	91	43
259005.0500	6.01	-0.005/+0.013	6	53	91	43
259005.0600	6.02	-0.005/+0.013	6	53	91	43
259005.0700	6.32	-0.005/+0.013	8	53	91	43
259005.0800	6.33	-0.005/+0.013	8	53	91	43
259005.0900	6.34	-0.005/+0.013	8	53	91	43
259005.1000	6.35	-0.005/+0.013	8	53	91	43
259005.1100	6.36	-0.005/+0.013	8	53	91	43
259005.1200	6.37	-0.005/+0.013	8	53	91	43
259005.1300	7.97	-0.005/+0.013	8	53	91	43
259005.1400	7.98	-0.005/+0.013	8	53	91	43
259005.1500	7.99	-0.005/+0.013	8	53	91	43
259005.1600	8.00	-0.005/+0.013	8	53	91	43
259005.1700	8.01	-0.005/+0.013	8	53	91	43
259005.1800	8.02	-0.005/+0.013	8	53	91	43
259005.1900	9.48	-0.005/+0.013	10	61	103	40
259005.2000	9.49	-0.005/+0.013	10	61	103	40
259005.2100	9.50	-0.005/+0.013	10	61	103	40
259005.2200	9.52	-0.005/+0.013	10	61	103	40
259005.2300	9.53	-0.005/+0.013	10	61	103	40
259005.2400	9.54	-0.005/+0.013	10	61	103	40
259005.2500	9.97	-0.005/+0.013	10	61	103	40
259005.2600	9.98	-0.005/+0.013	10	61	103	40
259005.2700	9.99	-0.005/+0.013	10	61	103	40
259005.2800	10.00	-0.005/+0.013	10	61	103	40
259005.2900	10.01	-0.005/+0.013	10	61	103	40
259005.3000	10.02	-0.005/+0.013	10	61	103	40
259005.3100	11.97	-0.005/+0.013	12	71	118	56
259005.3200	11.98	-0.005/+0.013	12	71	118	56
259005.3300	11.99	-0.005/+0.013	12	71	118	56
259005.3400	12.00	-0.005/+0.013	12	71	118	56
259005.3500	12.01	-0.005/+0.013	12	71	118	56
259005.3600	12.02	-0.005/+0.013	12	71	118	56
259005.3700	12.67	-0.005/+0.013	14	77	124	60
259005.3800	12.68	-0.005/+0.013	14	77	124	60
259005.3900	12.69	-0.005/+0.013	14	77	124	60
259005.4000	12.70	-0.005/+0.013	14	77	124	60
259005.4100	12.71	-0.005/+0.013	14	77	124	60
259005.4200	12.72	-0.005/+0.013	14	77	124	60

284081 Solid carbide machine reamer DIXI

In solid carbide



NC-suitable design

Designs:

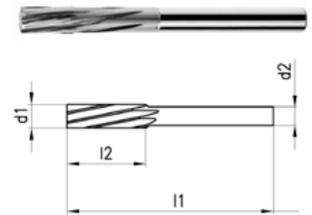
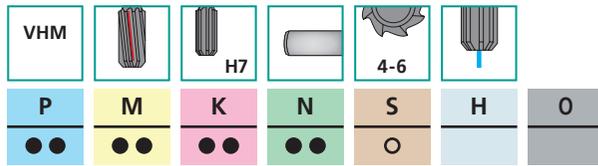
0.37 mm... 2.97 mm: without internal cooling

2.98 mm... 12.02 mm: with internal cooling

d1 mm	l2 mm	l1 mm	d2 mm	l3 mm	Z
0.37...0.5	3	38	3	5	3
0.51...0.6	4	38	3	6	3
0.61...0.7	4	38	3	7	3
0.71...0.8	4	38	3	8	3
0.81...0.9	5	38	3	9	3
0.91...1	5	38	3	10	3
1.01...1.1	5	38	3	11	3
1.11...1.2	5	38	3	12	3
1.21...1.4	6	38	3	13	3
1.41...1.6	7	38	3	15	3
1.61...1.7	7	50	3	16	3
1.71...1.9	7	50	3	17	3
1.91...2.3	8	50	3	18	3
2.31...2.6	10	50	3	20	3
2.61...3.09	10	61	3	25	4
3.1...5.77	10	70	3	-	6
5.79...6.2	10	70	3	-	6
6.3...6.5	10	70	3	-	6
6.51...6.52	10	70	3	-	6
6.6...7	10	70	3	-	6
7.01...7.02	10	70	3	-	6
7.1...7.5	10	70	3	-	6
7.51...7.52	10	70	3	-	6
7.6...7.9	10	70	3	-	6
7.98...8.02	10	70	3	-	6
8.1...8.5	10	70	3	-	6
8.51...8.52	10	70	3	-	6
8.7...8.9	10	70	3	-	6
9...9.02	10	70	3	-	6
9.1...9.5	10	70	3	-	6
9.7...10	10	70	3	-	6
10.01...10.01	10	70	3	-	6
10.02...10.03	19	133	10	87	6
10.1...10.48	19	133	10	87	6
10.49...10.52	19	133	10	87	6
10.6...10.6	19	133	10	87	6
10.98...11.02	19	142	12	96	6
11.48...11.52	19	142	12	96	6
11.8...11.8	19	142	12	96	6
11.98...12.02	19	151	12	105	6

284082 Solid carbide machine reamer DIXI

In solid carbide



NC-suitable design

Designs:

2.97 mm: without internal cooling

2.99 mm... 6.5 mm: with internal cooling

Order ID	d1 mm	l2 mm	l1 mm	d2 mm	Number of teeth	Order ID	d1 mm	l2 mm	l1 mm	d2 mm	Number of teeth
284082.0050	2.97	20	56	2.5	4	284082.1700	3.75	20	56	3	4
284082.0100	2.99	20	56	2.5	4	284082.1750	3.78	20	56	3	4
284082.0150	3	20	56	2.5	4	284082.1800	3.8	20	56	3	4
284082.0200	3.01	20	56	2.5	4	284082.1850	3.85	20	56	3	4
284082.0250	3.02	20	56	2.5	4	284082.1900	3.9	20	56	3	4
284082.0300	3.05	20	56	2.5	4	284082.1950	3.95	20	56	3	4
284082.0350	3.08	20	56	2.5	4	284082.2000	4	20	56	3	4
284082.0400	3.1	20	56	2.5	4	284082.2050	4.04	22	63	3.5	6
284082.0450	3.11	20	56	2.5	4	284082.2100	4.1	22	63	3.5	6
284082.0500	3.15	20	56	2.5	4	284082.2150	4.2	22	63	3.5	6
284082.0550	3.18	20	56	2.5	4	284082.2200	4.3	22	63	3.5	6
284082.0600	3.2	20	56	2.5	4	284082.2250	4.4	22	63	3.5	6
284082.0650	3.21	20	56	2.5	4	284082.2300	4.5	22	63	4	6
284082.0700	3.25	20	56	2.5	4	284082.2350	4.6	22	63	4	6
284082.0750	3.28	20	56	2.5	4	284082.2400	4.7	22	63	4	6
284082.0800	3.3	20	56	2.5	4	284082.2450	4.8	22	63	4	6
284082.0850	3.31	20	56	2.5	4	284082.2500	4.9	22	63	4	6
284082.0900	3.35	20	56	2.5	4	284082.2550	5	22	63	4	6
284082.0950	3.38	20	56	2.5	4	284082.2600	5.1	22	63	4	6
284082.1000	3.4	20	56	2.5	4	284082.2650	5.2	22	63	4	6
284082.1050	3.41	20	56	2.5	4	284082.2700	5.3	22	63	4	6
284082.1100	3.45	20	56	2.5	4	284082.2750	5.4	22	63	4	6
284082.1150	3.49	20	56	2.5	4	284082.2800	5.5	22	63	5	6
284082.1200	3.5	20	56	3	4	284082.2850	5.6	22	63	5	6
284082.1250	3.51	20	56	3	4	284082.2900	5.7	22	63	5	6
284082.1300	3.55	20	56	3	4	284082.2950	5.8	22	63	5	6
284082.1350	3.58	20	56	3	4	284082.3000	5.9	22	63	5	6
284082.1400	3.6	20	56	3	4	284082.3050	6	22	63	5	6
284082.1450	3.61	20	56	3	4	284082.3100	6.1	22	63	5	6
284082.1500	3.65	20	56	3	4	284082.3150	6.2	22	63	5	6
284082.1550	3.68	20	56	3	4	284082.3200	6.3	22	63	5	6
284082.1600	3.7	20	56	3	4	284082.3250	6.4	22	63	5	6
284082.1650	3.71	20	56	3	4	284082.3300	6.5	22	63	5	6

318290 Mill saw file BAHCO



Bahco 1-143...0, suitable for sharpening a variety of different tools such as spades, shovels, hoes and scrapers. Particularly suitable when surface quality is important. File handle not included.



Order ID	Length in	Cut
318290.0100	12	1 bastard

324015 Metal saw bow BAHCO

Bahco 225-Plus, professional and robust bow, which can also be used as a jigsaw due to the additional blade storage in the tubular bow, with comfortable aluminium handle. Blade tensioning mechanism with spring-loaded blade attachment for easy changes, supplied with virtually unbreakable 300 mm (12") Sandflex® bimetal hand saw blade, 24 teeth per inch.



Appropriate accessories:

- 324300 Hand saw blade BAHCO
- 324320 Hack saw blade WESA
- 324340 Hand saw blade WESA
- 324360 Hand saw blade

Order ID	Length mm	Capacity mm	Saw blade mm
324015.0100	390	120	300

334512 Accessories for US1100 DIEBOLD shrink-fit device

Order ID	Designation	Type	suitable for
334512.0100	Tool holder	HSK-25 A/E	334510
334512.0200	Tool holder	HSK-32 A/E/40F	334510
334512.0300	Tool holder	HSK-40 A/E/50F	334510
334512.0400	Tool holder	HSK-50 A/E/63F	334510
334512.0500	Tool holder	HSK-63 A/E	334510
334512.0600	Tool holder	HSK-80 A/E	334510
334512.0700	Tool holder	HSK-100 A/E	334510
334512.0800	Tool holder	SK30/BT30	334510
334512.0900	Tool holder	SK40/BT40	334510
334512.1000	Tool holder	SK50/BT50	334510
334512.1100	Tool holder	UNI	334510
334512.1300	Bit	TER11	334510
334512.1400	Bit	TER16	334510
334512.1500	Bit	TER20	334510
334512.1600	Bit	TER25	334510
334512.1700	Bit	TER32	334510
334512.1900	Length adjustment	mit Messuhr	334510, 334511, 334513
334512.2000	Length adjustment	mit Festanschlag	334510, 334511, 334513
334512.2100	Tool holder	SK25	334511, 334541
334512.2200	Tool holder	SK,CAT,BT 30/40	334511, 334513, 334541
334512.2250	Tool holder	SK,CAT,BT 50	334511, 334513
334512.2300	Tool holder	HSK-25/32	334511, 334541
334512.2400	Tool holder	HSK-40/50/F63	334511, 334541
334512.2500	Tool holders	HSK-32	334513
334512.2600	Tool holders	HSK-40	334513
334512.2700	Tool holders	HSK-50	334513
334512.2800	Tool holders	HSK-63	334513
334512.2900	Tool holders	HSK-80	334513
334512.3000	Tool holders	HSK-100	334513
334512.3100	Ferrite disc	D3-5	334510, 334511, 334513
334512.3200	Ferrite disc	D6-12	334510, 334511, 334513
334512.3300	Ferrite disc	D14-20	334510, 334511, 334513
334512.3400	Ferrite disc	D25	334510, 334511, 334513
334512.3500	Ferrite disc	D32	334510, 334511, 334513

**419612 One-hand quick-release clamp QUICK-GRIP**

Ideal for temporary hold-down, quick clamping applications with one-handed quick-release for easy operation with one hand. Profiled rail made of heat-treated, burnished C-steel. Movable clamping jaws with protective pads for uniform, gentle clamping force. Quick-change button for easy removal of the clamping jaws for accessory installation or for easy conversion to a spreader.

Order ID	Clamping width	Capacity
	mm	
419612.0100	150	80
419612.0200	300	80
419612.0300	450	80
419612.0400	600	80

**424050 Hex L key BAHCO**

Bahco 1995Z, ISO 2936, made of robust steel, burnished, fully hardened, **inch**, short version.

Order ID	Wrench size	Side length
	in	
424050.0100	1/16	47 x 15
424050.0200	5/64	52 x 18
424050.0300	3/32	59 x 21
424050.0400	1/8	66 x 23
424050.0500	5/32	74 x 29
424050.0600	3/16	85 x 33
424050.0700	7/32	91 x 35
424050.0800	1/4	96 x 38
424050.0900	5/16	108 x 44
424050.1000	3/8	122 x 50
424050.1100	7/16	129 x 53
424050.1200	1/2	145 x 63
424050.1300	5/8	168 x 76
424050.1400	3/4	199 x 89



424065 Hex L key PB Swiss Tools

PB 214Z, long version, imperial, factory standard lengths, made of extra-chromium-vanadium steel.

Order ID	Wrench size in	Side length mm
424065.0100	3/64	70 x 14
424065.0200	1/16	80 x 15
424065.0300	5/64	90 x 16
424065.0400	3/32	97 x 17
424065.0500	7/64	105 x 18
424065.0600	1/8	115 x 19
424065.0700	9/64	125 x 20
424065.0800	5/32	132 x 22
424065.0900	3/16	145 x 24
424065.1000	7/32	162 x 26
424065.1100	1/4	180 x 29
424065.1200	5/16	200 x 32
424065.1300	3/8	220 x 35

**424225 Hex L key PB Swiss Tools**

PB 212Z, factory standard lengths, **imperial, with ball head**, made of extra-chromium-vanadium steel, chrome-plated.

Order ID	Wrench size in	Side length mm
424225.0100	1/20	45 x 12
424225.0200	1/16	50 x 15
424225.0300	5/64	56 x 16
424225.0400	3/32	61 x 17
424225.0500	7/64	65 x 18
424225.0600	1/8	70 x 19
424225.0700	9/64	75 x 20
424225.0800	5/32	80 x 22
424225.0900	3/16	86 x 24
424225.1000	7/32	93 x 26
424225.1100	1/4	102 x 29
424225.1200	5/16	112 x 32

**425825 Hinged pin face spanner AMF**

AMF 764AZ, for two-hole nuts. Special steel, tempered in burnished colour, **with replaceable, hardened pin**, with hanging hole.

Pin dimension = nominal dimension -0.1 mm; tolerance zone h_{12} .

Order ID	Clamping capacity mm	Shaft Ø mm	Length mm
425825.0100	18...40	3	150
425825.0200	18...40	4	150
425825.0300	40...80	4	220
425825.0400	40...80	5	220
425825.0500	40...80	6	220
425825.0600	80...125	6	295
425825.0700	80...125	7	295
425825.0800	80...125	8	295
425825.0900	125...200	8	405
425825.1000	125...200	10	405

**425830 Hinged pin face spanner AMF**

AMF 764Md, with square holders for torque wrenches, for two-hole nuts. Special steel, tempered in burnished colour, **with replaceable, hardened pin**, with hanging hole.

Note: The set value of the torque wrench depends on the dimension of „S“. The instructions for your torque wrench contain the necessary information and formulas for calculating the correct setting.

Pin dimension = nominal dimension -0.1 mm; tolerance zone h_{12} .

Order ID	Clamping capacity mm	Shaft Ø mm	Drive	Length mm
425830.0100	18...40	4	1/2"	120
425830.0200	40...80	5	3/4"	180
425830.0300	40...80	6	3/4"	180
425830.0400	80...125	6	3/4"	250
425830.0500	80...125	8	3/4"	250



428775 Socket wrench set for wheel nuts KOKEN



Koken 14201M, set specially developed for mounting wheel nuts. Long design, also suitable for extra-deep wheel nuts. Especially suitable for aluminium wheel rims thanks to its slim shape; the plastic impact also protects the wheel nut from damage. The coloured marking makes it easier to identify the appropriate tool.



Contents:

428775.0100

- 1 Socket wrench bit for wheel nuts KOKEN 14145PM.110, WAF 17 mm x 110 mm
- 1 Socket wrench bit for wheel nuts KOKEN 14145PM.110, WAF 19 mm x 110 mm
- 1 Socket wrench bit for wheel nuts KOKEN 14145PM.110, WAF 21 mm x 110 mm

Order ID	Parts
428775.0100	3

429705 Hexagon socket wrench set KOKEN



Koken Impact RS14401MS/10, with cross hole and ring groove for securing, for tightening screws mechanically. **Extra short and thin walled** for working even in particularly hard-to-reach places. Mounted on a practical holding rail.



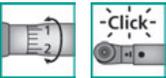
Contents:

429705.0100

- 1 hex socket wrench KOKEN 14401MS, WAF 10 mm, length 23 mm
- 1 hex socket wrench KOKEN 14401MS, WAF 12 mm, length 24 mm
- 1 hex socket wrench KOKEN 14401MS, WAF 13 mm, length 25 mm
- 1 hex socket wrench KOKEN 14401MS, WAF 14 mm, length 25 mm
- 1 hex socket wrench KOKEN 14401MS, WAF 17 mm, length 26 mm
- 1 hex socket wrench KOKEN 14401MS, WAF 19 mm, length 28 mm
- 1 hex socket wrench KOKEN 14401MS, WAF 21 mm, length 28 mm
- 1 hex socket wrench KOKEN 14401MS, WAF 22 mm, length 28 mm
- 1 hex socket wrench KOKEN 14401MS, WAF 24 mm, length 28 mm
- 1 hex socket wrench KOKEN 14401MS, WAF 27 mm, length 28 mm

Order ID	Parts
429705.0100	10

431305 Torque wrench BAHCO



Bahco 7455, accuracy $\pm 4\%$ from the scale value, suitable for use clockwise and anti-clockwise, acoustic and tactile signal when the torque is reached. **Completely made of metal** with mechanics closed to the outside, non-slip grip, **resistant to vibrations and all common chemicals**. Fixed mounted ratchet with switchover lever, tested according to DIN EN ISO 6789-2:2017 with factory test certificate.



Order ID	Type	Drive	Range Nm	Division Nm	Length mm
431305.0100	7455-100	3/8"	20...100	0.5	400
431305.0200	7455-100A	1/2"	20...100	0.5	414

432445 Electronic torque tester STAHLWILLE



Stahlwille SmartCheck USB, electronic workshop test device. Thanks to its compact dimensions, horizontal or vertical mounting option and the rotating display, it can fit in almost anywhere. **Display, display bracket and base frame can rotate 180°**. Intuitive to use and user guidance features for quick and reliable results and maximum safety. **Micro-USB interface for reading the test values stored in the device (up to 200 data sets with date and time stamp)** – enabling these values to also be transferred to other systems. Visual and audible overload warning. Integrated measurement transducer with an accuracy of $\pm 1\%$ of the respective measured value. Three different operating modes (Track, First Peak, Peak Hold) and three units of measurement (Nm, ft-lb, in-lb). Target torque and tolerances for evaluating the measured value can be specified individually. In addition to traditional operation via a power supply unit, it can also be operated via battery (4 x AAA or 1 x 9-V block, adapter included). Display and membrane keyboard are splash-proof; the housing is made of impact-resistant plastic. **Supplied with** a robust transport box, mains adapter and factory test certificate.



Designs:

432445.0100: For testing torque **screwdrivers** with display and click-type torque screwdrivers

432445.0200...432445.0500: For testing torque **wrenches** with display and click-type torque wrenches

Order ID	Type	Range Nm	Square socket in	Dimensions WxDxH mm	Weight kg
432445.0100	SmartCheck 10S USB	1...10	1/4	120 x 167 x 124	5.2
432445.0200	SmartCheck 10 USB	1...10	1/4	120 x 167 x 124	5.2
432445.0300	SmartCheck 100 USB	10...100	3/8	120 x 167 x 124	5.3
432445.0400	SmartCheck 400 USB	40...400	3/4	120 x 167 x 124	5.7
432445.0500	SmartCheck 800 USB	80...800	3/4	120 x 167 x 124	5.7

437535 Socket wrench bit set KOKEN

KOKEN PK115/7, with 1/4" E 6.3 hexagon coupler, for hex sockets, **with magnet** for holding the screws or nuts. In plastic cassette with foam insert

Contents:**437535.0100**

- 1 socket wrench bit KOKEN 115, WAF 7 mm x 50 mm
- 1 socket wrench bit KOKEN 115, WAF 8 mm x 50 mm
- 1 socket wrench bit KOKEN 115, WAF 10 mm x 50 mm
- 1 socket wrench bit KOKEN 115, WAF 12 mm x 50 mm
- 1 socket wrench bit KOKEN 115, WAF 13 mm x 50 mm
- 1 socket wrench bit KOKEN 115, WAF 1/4" x 50 mm
- 1 socket wrench bit KOKEN 115, WAF 3/8" x 50 mm

Order ID	Parts
437535.0100	7

**440035 Heavy-duty combination pliers BAHCO**

Bahco 2688D, with high-performance steel alloy, burnished, anti-corrosion treated. Polished and oiled surfaces, PVC-coated handles. Suitable for cutting Cu, Fe and Fe+ wire, crimping die behind hinge for maximum leverage, cutting edges are suitable for cutting medium-hard wires.

Order ID	Length mm	for medium-hard wire mm
440035.0100	250	2.5

**442375 Cable cutters BAHCO**

Bahco 2800N-2801N, made of high-performance high-speed steel, nickel-plated and chrome-plated, anti-corrosion treated, highly polished. Particularly suitable for cutting multi-core cables and flexible cables, not suitable for solid conductors. PVC-coated handle.

Order ID	Length mm	for cable Ø mm
442375.0100	170	0...10
442375.0200	230	0...15

**443250 Pipe wrench KNIPEX**

Knipex 8330, DIN 5234, slim design, S-shaped mouth. Tothing offset against the direction of rotation, tothing also inductively hardened, three-point system on the pipe, self-locking, double T-profile handle, captive adjusting nut, red powder coating, plain jaws. Chrome-vanadium electric steel, forged, oil-hardened over multiple layers.

Order ID	Length mm	for tubes Ø mm	for tubes up to Ø in	Clamping width mm
443250.0100	245	35	1 1/2	35
443250.0200	320	42	1.625	42
443250.0300	420	60	2.375	60
443250.0400	540	70	2.75	70
443250.0500	680	100	4.75	100

**443255 Single-hand pipe wrench BAHCO**

Bahco 380, multi-purpose pipe wrenches for single-handed use. Anti-corrosion treated, high-strength housing made of a light and robust aluminium alloy, self-locking, forged jaws.

Order ID	Length in	Length mm	for tubes Ø mm
443255.0100	10	253	35
443255.0200	24	607	76
443255.0300	36	910	127

**444160 Locking pliers BAHCO**

Bahco 2952, chrome-plated, thin nose grip, **long, slim and narrow jaws with curved section for gripping low-flying, hard-to-reach places**; also suitable for round workpieces. Adjustable locking force, fixing nut, easy to unlock.

Order ID	Length mm	Clamping width max. mm	Jaw length mm
444160.0100	165	55	78



450755 True-rms voltage tester AMPROBE**IP 64**

Amprobe 2100-Delta, a robust voltage tester with a multitude of functions; **measures voltage, current, resistance, continuity and frequency**. The ideal product for troubleshooting in industrial and commercial settings. True-rms voltage and polarity testing and true-rms AC current measurements. Unipolar voltage test to determine the outer conductor and continuity test (Rx) for testing wiring. The IP 64 rating means that this measuring instrument is suitable for use in humid environments. LC display and LED indicators, polarity indication, auto ON/OFF and ON/OFF button, built-in LED torch, self-test function and buzzer and vibration function for voltage measurements. **Measurement categories CAT III 1000 V/CAT IV 600 V**. Complies with the requirements of IEC 61243-3:2014, EN 61243-3:2014 and DIN VDE 0682-401:2015. Safety-tested by the German Technical Inspection Association TÜV Rheinland.

Scope of delivery:

450755.0100 True-rms voltage tester AMPROBE 2100-Delta, Holster CC-2100-Delta, 2 GS-38 protective caps for measuring probes, 2 screw-on measuring probe tip extensions, diameter 4 mm, operating instructions

Appropriate batteries:

2 pieces 155050.0400 - LR03 / 1.5 V (AAA) (included in scope of delivery).

Order ID	450755.0100	
Type	2100 - Delta	
Voltage range AC/DC	V	1...1000
Voltage display		+120 -120 230 400 690 1000
Resistance	kΩ	0...100
Continuity check	kΩ	<500
Frequency range	Hz	15...800
Working temperature	°C	-20...+70
Protection class		IP64
Dimensions	mm	210 x 63 x 37
Weight	g	275

**450825 Thermal imaging camera FLUKE****IP 54**

Fluke PTi120, a powerful, professional thermal imaging camera **that is pocket-sized**. Ideal for carrying out rapid testing on electrical equipment, machinery and other equipment. Designed to withstand a drop of 1 metre, IP 54 dust-proof and splash-proof. Large LCD touch screen for easy troubleshooting, automatically organises and files thermal imaging files using FLUKE-Connect Asset Tagging; scan QR codes or barcodes to automatically save images to the appropriate folders. Internal 2 GB flash memory, built-in lithium-ion battery.

Scope of delivery:

450825.0100 Thermal imaging camera FLUKE PTi120, USB cable, padded transport bag, adjustable hand strap. PC software and user manual can be downloaded free of charge.

Order ID	450825.0100	
Type	PTi120	
Thermal image resolution	pixels	120 x 90
Range	°C	-20...+150
Accuracy		+/- 2°C, 2%
Thermal sensitivity (NETD)	mK	60
Battery life	min	120
Charge Time	min	90
Protection class		IP54
Dimensions	mm	89 x 127 x 25
Weight	g	233



450840 Thermal imaging camera FLUKE

IP 54

Fluke Ti555+, a robust, reliable and accurate thermal imaging camera. Designed to withstand a drop of 2 metres, IP 54 dust-proof and splash-proof. Perfectly organises your thermal images with real-time voice notes during the measurement process, asset tagging using QR codes and automatic sorting by devices/systems, IR PhotoNotes for photographing device numbers and other features for use as a reminder when looking at the images on a computer at a later point. Internal memory for approx. 500 recordings, additional storage can be added via a micro SD card, lithium-ion battery.

Scope of delivery:

450840.0100 Thermal imaging camera FLUKE TiS 55+, power supply unit with adapter, 1 lithium-ion battery, 4 GB micro-SD card, hard shell carry case with padded transport bag and adjustable hand strap. PC software and user manual can be downloaded free of charge.

Order ID	450840.0100	
Type	Ti555+	
Thermal image resolution	pixels	256 x 192
Range	°C	-20...+550
Accuracy		+/- 2°C, 2%
Thermal sensitivity (NETD)	mK	40
Battery life	min	210
Charge Time	min	150
Protection class		IP54
Dimensions	mm	267 x 101 x 145
Weight	kg	2.27

**450845 Thermal imaging camera FLUKE**

IP 54

Fluke Ti575+, a robust, reliable and accurate thermal imaging camera **with high resolution, video recording function and advanced features**. Designed to withstand a drop of 2 metres, IP 54 dust-proof and splash-proof. Perfectly organises your thermal images with real-time voice notes during the measurement process, asset tagging using QR codes and automatic sorting by devices/systems, IR PhotoNotes for photographing device numbers and other features for use as a reminder when looking at the images on a computer at a later point. Internal memory for approx. 500 recordings, additional storage can be added via a micro SD card, lithium-ion battery.

Scope of delivery:

450845.0100 Thermal imaging camera FLUKE TiS 75+, power supply unit with adapter, 2 lithium-ion batteries with charger, 4 GB micro-SD card, hard shell carry case with padded transport bag and adjustable hand strap. PC software and user manual can be downloaded free of charge.

Order ID	450845.0100	
Type	Ti575+	
Thermal image resolution	pixels	384 x 288
Range	°C	-20...+550
Accuracy		+/- 2°C, 2%
Thermal sensitivity (NETD)	mK	40
Battery life	min	210
Charge Time	min	150
Protection class		IP54
Dimensions	mm	267 x 101 x 145
Weight	kg	2.27

**457157 MDP safety knife MARTOR**

Secunorm Profi 40 MDP, professional safety knife with automatic blade retraction **and extra deep cut** for universal applications and materials; also cuts three-layer boxes effortlessly. Ideally suited **for use in the food or pharmaceutical industries — metal-detectable**. When working, a cutting tool—or parts of it—can sometimes be lost. But only for a short time because the metal-detectable plastic and the striking blue ensure that you find it again more quickly. The **unpainted handle** also minimises the risk of broken parts being able to enter the production process. Suitable for right-handed and left-handed users, 2-sided, **stainless trapezoidal blade**, push button for easy blade change.

Appropriate accessories:

457325 Used blade container MARTOR
550095 Belt pouch with clip MARTOR

Order ID	Type	Cutting depth
457157.0100	Secunorm Profi 40 MDP	mm 36

**461075 Triangular scraper CP GRAT-EX**

For metals and plastics.

Appropriate accessories:

461750 Replacement scraper blade CP GRAT-EX

Order ID	Type	Designation
461075.0100	SCR-6-MK	CP GRAT-EX , with multi-component handle and collet chuck, replaceable blades, fixed blade holder not extendable, with 1 HSS blade SCR-6 HSS triangular 6 mm + 45°



461215 Universal hand deburrer set CP GRAT-EX

with multicut blades

Rotating multicut blades Ø 3.2 mm and Ø 6 mm and scraper, universal deburrer set in practical plastic case for many different applications.

Scope of delivery:

- 1 x Universal deburrer CP GRAT-EX MC-2 (Ø 3.2 mm)
- 1 x Universal deburrer CP GRAT-EX DT-MC (Ø 3.2 mm)
- 1 x Universal deburrer CP GRAT-EX RDT-MC (Ø 6 mm)
- 1 x Triangular scraper CP GRAT-EX Hollow Scraper 80
- 1 set of 10 multicut blades Ø 3.2 mm (2x MC-10, MC-20, MC-101 and 1x MC-15, MC-40, MC-10(C) and MC-20)
- 1 set of 5 multicut blades Ø 6 mm (3x MR-10, 2x MR-15)



Order ID	Type
461215.0100	MULTI-CUT KIT

461360 Replacement blade FUTURO

Rotating blades P Ø 2.6 mm, in HSS, for external, internal and key slot deburring.

Usable with:

- 461010 Universal deburring tool NOGA
- 461700 Universal deburrer FUTURO
- 461765 Universal deburrer FUTURO

Order ID	Type	Designation
461360.0100	P-1 HSS	Universal blade for steel, aluminium, copper, plastic, etc. Clockwise rotation
461360.0200	P-2 HSS	For cast iron and brass, works in both directions of rotation
461360.0300	P-3 HSS	Deburs thin-walled material on the inside and outside in a single operation up to 6 mm material thickness, clockwise rotation
461360.0500	P-6 HSS	for reverse deburring and for hard-to-reach places, direction of rotation right

FUTURO



461380 Replacement blade FUTURO

Rotating blades C Ø 3.2 mm, in HSS, for steel and aluminium, for external, internal and keyway deburring.

Usable with:

- 461025 Universal deburring tool NOGA
- 461040 Universal deburring tool FUTURO
- 461705 Universal deburrer FUTURO
- 461710 Universal deburrer FUTURO
- 461715 Universal deburrer FUTURO
- 461735 Hand deburrer set FUTURO
- 461770 Universal deburrer FUTURO

Order ID	Type	Designation
461380.0100	C-10 HSS	For metals and plastics, for internal and external deburring, clockwise rotation
461380.0110	C-10 TIN	with TiN coating, for hard, tough metals and plastics, for internal and external deburring, direction of rotation right
461380.0120	C-10 STAR	with TiAlN coating for the toughest applications and longest service life when machining metals and plastics, for internal and external deburring, direction of rotation right
461380.0150	C-15 INOX	for INOX and hard plastics, direction of rotation left and right
461380.0170	C-15 INOX STAR	with TiAlN coating for the toughest applications and longest service life when machining stainless steel and hard plastics, for internal and external deburring, direction of rotation left and right
461380.0200	C-20 HSS	for cast iron and brass, works in both directions of rotation
461380.0220	C-20 TIN	with TiN coating, for hard, tough cast iron and brass, works in both directions of rotation
461380.0250	C-20 STAR	with TiAlN coating for the toughest applications and longest service life when machining cast iron and brass, works in both directions of rotation
461380.0300	C-30 HSS	Deburs thin-walled material on the inside and outside in a single operation, clockwise rotation
461380.0350	C-30 HSS (L+R)	Deburs thin-walled material internally and externally in one step, direction of rotation left and right
461380.0370	C-35 HSS	deburs straight external edges on most materials, direction of rotation left and right
461380.0380	C-60 HSS	for reverse deburring up to a thickness of 20 mm and in hard-to-reach places, direction of rotation right
461380.0390	C-101 HSS	for deburring small holes from 1.5 mm in steel and aluminium
461380.0400	C-101 STAR	for deburring small holes from 1.5 mm in steel and aluminium, long service life with TiAlN coating
461380.0500	C-102 STAR	for deburring small holes from 3 mm in steel and aluminium, long service life with TiAlN coating

FUTURO



461700 Universal deburrer FUTURO

Rotating blades P Ø 2.6 mm, for internal and external deburring of metals and plastics.

Appropriate accessories:

- 461360 Replacement blade FUTURO

Order ID	Designation
461700.0100	Multi-component handle and replaceable blades, steel holder up to 100 mm extendable for hard-to-reach places; with 1 HSS blade each of P-1, P-2, P-3

FUTURO



461705 Universal deburrer FUTURO

Rotating blades C Ø 3.2 mm, for internal and external deburring of metals and plastics.

Appropriate accessories:

461380 Replacement blade FUTURO

Order ID	Designation
461705.0100	Multi-component handle and replaceable blades, steel holder up to 100 mm extendable for hard-to-reach places; with 1 HSS blade each of C-10, C-20, C-30, C-15, C-35

FUTURO**461710 Universal deburrer FUTURO**

Rotating blades C Ø 3.2 mm, for internal and external deburring of metals and plastics.

Appropriate accessories:

461380 Replacement blade FUTURO

Order ID	Designation
461710.0100	Multi-component handle and replaceable blades that can be stored in the handle, metal blade holder, not extendable; with 1 HSS blade each of C-10, C-20, C-30

FUTURO**461715 Universal deburrer FUTURO**

Rotating blades C Ø 3.2 mm, for internal and external deburring of metals and plastics.

Appropriate accessories:

461380 Replacement blade FUTURO

Order ID	Designation
461715.0100	Comfort handle with soft sleeve and ergonomic hand rest with ball head, replaceable blades, metal blade holder, with permanently mounted HSS blade C-10

FUTURO**461720 Universal deburrer FUTURO**

Rotating blades R Ø 6 mm, for internal and external deburring of metals and plastics.

Appropriate accessories:

461740 Replacement blade FUTURO

Order ID	Designation
461720.0100	Multi-component handle and replaceable blades that can be stored in the handle, metal blade holder, not extendable; with 1 HSS blade each of R-10(S) and R-15(S)

FUTURO**461735 Hand deburrer set FUTURO**

Promotional set with rotating blades C Ø 3.2 mm, for internal and external deburring of metals and plastics.

Appropriate accessories:

461380 Replacement blade FUTURO

Order ID	Designation
461735.0100	Multi-component handle and interchangeable blades, with 2 HSS blades each of C-10, C-20, C-101 and 1 blade each of C-30, C-15, C-35 and C-10(C)

FUTURO**461740 Replacement blade FUTURO**

Rotating blades R Ø 6 mm, made from HSS (M2).

Usable with:

461720 Universal deburrer FUTURO

Order ID	Type	Designation
461740.0100	R-10S	Universal blade extra strong, for particularly tough internal and external deburring applications involving steel, aluminium, copper, zinc etc., direction of rotation right
461740.0200	R-15S INOX	Universal blade extra strong, for particularly tough internal and external deburring applications involving stainless steel, cast iron, brass etc., direction of rotation left and right

FUTURO

461745 Replacement scraper blade FUTURO

For triangular scraper, made from HSS.

Usable with:

461775 Triangular scraper FUTURO

Order ID	Type	Designation
461745.0100	SCR-3 HSS	Triangular scraper Ø 3.2 x 75 mm
461745.0200	SCR-3 HSS	Triangular scraper Ø 3.2 x 50 mm
461745.0300	SCR-345	Internal scraper, 45° angled Ø 3.2 x 73 mm

FUTURO

SCR-3 HSS (75 mm)



SCR-3 HSS (50 mm)



SCR-345

461750 Replacement scraper blade CP GRAT-EX

For triangular scraper, made from HSS.

Usable with:

461075 Triangular scraper CP GRAT-EX
 461556 Triangular scraper set with 3 blades CP GRAT EX
 461760 Triangular scraper CP GRAT-EX
 461780 Triangular scraper CP GRAT-EX

Order ID	Type	Designation
461750.0100	SCR-6 HSS	CP GRAT-EX Double-sided scraper blade with triangular scraper 6 mm on one side and internal scraper 45° on the other side
461750.0200	HS-80	CP GRAT-EX Double-sided triangular hollow scraper, Ø 4.2 x 80 mm
461750.0300	HS-120	CP GRAT-EX Double-sided triangular hollow scraper, Ø 7.4 x 120 mm



SCR-6 HSS



HS-80



HS-120

461760 Triangular scraper CP GRAT-EX

For metals and plastics.

Appropriate accessories:

461750 Replacement scraper blade CP GRAT-EX

Order ID	Type	Designation
461760.0100	Hollow Scraper 80	CP GRAT-EX , with multi-component handle and collet chuck, replaceable blades, with 1 double-sided scraper blade HS-80

**461765 Universal deburrer FUTURO**

Rotating blades P Ø 2.6 mm, for internal and external deburring of metals and plastics.

Appropriate accessories:

461360 Replacement blade FUTURO

Order ID	Designation
461765.0100	Economical deburrer, 12 mm hexagonal handle with steel blade holder, replaceable blades, with 1 HSS blade P-1

FUTURO**461770 Universal deburrer FUTURO**

Rotating blades C Ø 3.2 mm, for internal and external deburring of metals and plastics.

Appropriate accessories:

461380 Replacement blade FUTURO

Order ID	Designation
461770.0100	Economical deburrer, 12 mm hexagonal handle with steel blade holder, replaceable blades, with 1 HSS blade C-10

FUTURO**461775 Triangular scraper FUTURO**

For metals and plastics.

Appropriate accessories:

461745 Replacement scraper blade FUTURO

Order ID	Designation
461775.0100	Long-lasting triangular scraper with ergonomic acetal body handle and ball knob, replaceable blades, blade extendable, with 1 triangular scraper Ø 3 x 75 mm

FUTURO**461780 Triangular scraper CP GRAT-EX**

For metals and plastics.

Appropriate accessories:

461750 Replacement scraper blade CP GRAT-EX

Order ID	Type	Designation
461780.0100	Hollow Scraper 120	CP GRAT-EX , with multi-component handle and collet chuck, replaceable blades, with 1 double-sided scraper blade HS-120



461900 Universal deburrer NERIOX

Rotating blades C Ø 3.2 mm, for internal and external deburring of metals and plastics.

Order ID	Designation
461900.0100	Hexagonal handle and permanently mounted blade, economical deburrer with powder-coated handle and practical protective cap which not only protects the blade but also serves as an ergonomic handle; with permanently mounted HSS blade C-10
461900.0200	Hexagonal handle and permanently mounted blade, economical deburrer with powder-coated handle and practical protective cap which not only protects the blade but also serves as an ergonomic handle; with permanently mounted HSS blade C-101

NERIOX



461900.0100



461900.0200

461905 Triangular scraper NERIOX

For metals and plastics.

Order ID	Designation
461905.0100	Hexagon handle (9.5 mm) and permanently mounted blade, economical deburrer with powder-coated handle and practical protective cap which not only protects the blade but also serves as an ergonomic handle; with permanently mounted triangular scraper blade 6 mm

NERIOX

**461910 Triangular scraper NERIOX**

For metals and plastics.

Order ID	Designation
461910.0100	Hexagon handle (8 mm) and permanently mounted blade, economical deburrer with powder-coated handle and practical protective cap which not only protects the blade but also serves as an ergonomic handle; with permanently mounted triangular scraper blade 3 mm

NERIOX

**461915 Universal deburrer NERIOX**

Rotating blades C Ø 3.2 mm, for internal and external deburring of metals and plastics.

Order ID	Designation
461915.0100	Economical deburrer with comfortable soft grip, permanently mounted blade, with C-101 blade for very fine deburring tasks

NERIOX

**461920 Triangular scraper NERIOX**

For metals and plastics.

Order ID	Designation
461920.0100	Economical triangular scraper with comfortable soft grip, permanently mounted blade, with SCR-3 (50 mm) blade for very fine work

NERIOX

**488135 Cut-off wheel PFERD**

SG INOX



Straight version EHT (shape 41), abrasive high-performance corundum A, **for stainless steel (INOX)**. For cutting sheet metal, profiles and solid material. Powerful tool for cool cutting with high cutting performance and very long service life.



Storage pack 25 pieces/sales unit 1 piece

Order ID	Ø mm	Width mm	Hole mm	Max. Speed min ⁻¹	Type
488135.0100	115	0.8	22.23	13 300	EHT 115-0,8 SG INOX
488135.0200	115	1.0	22.23	13 300	EHT 115-1,0 SG INOX
488135.0300	115	1.6	22.23	13 300	EHT 115-1,6 SG INOX
488135.0400	125	0.8	22.23	12 200	EHT 125-0,8 SG INOX
488135.0500	125	1.0	22.23	12 200	EHT 125-1,0 SG INOX
488135.0600	125	1.6	22.23	12 200	EHT 125-1,6 SG INOX
488135.0700	230	1.9	22.23	6 600	EHT 230-1,9 SG INOX
488135.0800	230	2.5	22.23	6 600	EHT 230-2,5 SG INOX

488190 Cut-off wheel PFERD

SG ALU



Flat version EHT (Form 41), abrasive aluminium oxide A, for **tough and hard aluminium, non-ferrous metals**. For cutting sheet metal, profiles and solid material. Powerful tool, hardness N-Alu with high-performance cutting and very long life; does not clog.



Stock package 25 pcs / sales unit = 1 pce

Other sizes can be supplied at short notice.

Order ID	Ø mm	Width mm	Hole mm	Max. Speed min ⁻¹	Type
488190.0020	115	1.0	22.2	13 300	EHT 115-1,0 SG ALU
488190.0040	115	1.6	22.2	13 300	EHT 115-1,6 SG ALU
488190.0060	115	2.4	22.2	13 300	EHT 115-2,4 SG ALU
488190.0100	125	1.0	22.2	12 200	EHT 125-1,0 SG ALU
488190.0200	125	1.6	22.2	12 200	EHT 125-1,6 SG ALU
488190.0300	125	2.4	22.2	12 200	EHT 125-2,4 SG ALU
488190.0400	230	1.9	22.2	6 600	EHT 230-1,9 SG ALU

488565 Roughing disc PFERD

E SG ALU

Shape E 27, abrasive special grain A and silicon carbide C, for **aluminium and non-ferrous metals**. For surface grinding, welding seam processing, chamfering, deburring, fillet grinding or gouging. No clogging of the roughing disc even on soft, lubricating materials. Does not contain fillers that leave unwanted residues on the workpiece. Fast work progress and maximum cost-effectiveness due to high grinding efficiency.

Storage pack 10 pieces/sales unit 1 piece

Order ID	Ø mm	Width mm	Hole mm	Max. Speed min ⁻¹	Type
488565.0100	115	7.2	22.23	13 300	E 115-7 SG ALU
488565.0200	125	7.2	22.23	12 200	E 125-7 SG ALU
488565.0300	230	7.2	22.23	6 600	E 230-7 SG ALU

**488585 Tool holder for grinding wheels PFERD**

Accessories for clamping grinding wheels on die grinders. Robust design with outstanding shaft breakage protection. Observe maximum speed of grinding wheel and tool holder — the lower value is crucial.

Usable with:

488580 Grinding wheel PFERD SG STEEL + INOX + CAST

Order ID	Shaft Ø mm	suitable for
488585.0100	6	Bohrung 6 mm / Tiefe 3...10 mm
488585.0200	8	Bohrung 10 mm / Tiefe 4...8 mm
488585.0300	8	Bohrung 10 mm / Tiefe 6...20 mm

**489060 Abrasive flap disc PFERD POLIFAN®**

PSF STEELOX



Flat type, abrasive: zirconia alumina Z, for **steel, stainless steel (INOX)**. Tool for all kinds of demanding grinding applications, for surface grinding and weld dressing. PSF ZIRKON version with aggressive cutting performance and **long life**. Best stock removal rates are achieved with high-powered angle grinders used at higher application pressures.



Stock package of 10 pcs / sales unit = 1 pce

Order ID	Ø mm	Grain	Hole mm	Max. Speed min ⁻¹	Type
489060.0100	115	40	22.2	13 300	PFF 115 Z40 PSF STEELOX
489060.0200	115	60	22.2	13 300	PFF 115 Z60 PSF STEELOX
489060.0300	115	80	22.2	13 300	PFF 115 Z80 PSF STEELOX
489060.0400	125	40	22.2	12 200	PFF 125 Z40 PSF STEELOX
489060.0500	125	60	22.2	12 200	PFF 125 Z60 PSF STEELOX
489060.0600	125	80	22.2	12 200	PFF 125 Z80 PSF STEELOX
489060.0700	180	40	22.2	8 500	PFF 180 Z40 PSF STEELOX
489060.0800	180	60	22.2	8 500	PFF 180 Z60 PSF STEELOX

489078 Abrasive flap disc PFERD POLIFAN®

SG POWER STEELOX



Conical design, abrasive zirconium corundum Z, **for steel and stainless steel (INOX)**. For surface grinding on steel, machining of welding seams, chamfering and deburring. Aggressive cutting performance and outstanding tool life for maximum efficiency.



Storage pack 10 pieces/sales unit 1 piece

Order ID	Ø mm	Grain	Hole mm	Max. Speed min ⁻¹	Type
489078.0100	115	40	22.23	13 300	POLIFAN PFC 115 Z40 SG POWER STEELOX
489078.0200	115	60	22.23	13 300	POLIFAN PFC 115 Z60 SG POWER STEELOX
489078.0300	115	80	22.23	13 300	POLIFAN PFC 115 Z80 SG POWER STEELOX
489078.0400	115	120	22.23	13 300	POLIFAN PFC 115 Z120 SG POWER STEELOX
489078.0500	125	40	22.23	12 200	POLIFAN PFC 125 Z40 SG POWER STEELOX
489078.0600	125	60	22.23	12 200	POLIFAN PFC 125 Z60 SG POWER STEELOX
489078.0700	125	80	22.23	12 200	POLIFAN PFC 125 Z80 SG POWER STEELOX
489078.0800	125	120	22.23	12 200	POLIFAN PFC 125 Z120 SG POWER STEELOX

489095 Non-woven abrasive flap disc PFERD POLIVLIES

PVZ CO-COOL

Combination flap disc with grinding lamellae made of ceramic grain (CO-COOL) and corundum A non-woven abrasive, for aggressive grinding with highest removal rate on hard materials with poor heat conductivity. **Ideal for machining large surfaces made of stainless steel (INOX)**. Consistently high performance due to self-sharpening ceramic grain. Abrasive additives in the coating significantly improve the removal rate, prevent clogging and produce cooler grinding. For optimum performance, use at a recommended cutting speed of 30–35 m/s.



Storage pack 5 pieces/sales unit 1 piece

Order ID	Ø mm	Grain	Width mm	Hole mm	Max. Speed min ⁻¹	Type
489095.0100	125	CO-COOL 60/A100 G	18	22.23	12 200	POLIVLIES PVZ 125 CO-COOL 60 / A 100 G
489095.0200	125	CO-COOL 80/A180 M	18	22.23	12 200	POLIVLIES PVZ 125 CO-COOL 80 / A 180 M
489095.0300	125	CO-COOL 120/A240 F	18	22.23	12 200	POLIVLIES PVZ 125 CO-COOL 120 / A 240 F

489140 Abrasive flap disc PFERD POLIFAN®

A-COOL SG INOX + ALU



Flat design, abrasive corundum A with cooling coating (COOL) with abrasive additive, **for stainless steel (INOX), aluminium and non-ferrous metals**. For **particularly cool grinding** on materials with poor heat conductivity such as stainless steels and aluminium and **no clogging**, e.g. on soft aluminium, thanks to abrasive coating. Excellent for surface grinding, welding seam processing, chamfering and deburring.



Storage pack 10 pieces/sales unit 1 piece

Order ID	Ø mm	Grain	Hole mm	Max. Speed min ⁻¹	Type
489140.0100	115	40	22.23	13 300	POLIFAN PFF 115 A-COOL 40 SG INOX+ALU
489140.0200	115	60	22.23	13 300	POLIFAN PFF 115 A-COOL 60 SG INOX+ALU
489140.0300	115	80	22.23	13 300	POLIFAN PFF 115 A-COOL 80 SG INOX+ALU
489140.0400	125	40	22.23	12 200	POLIFAN PFF 125 A-COOL 40 SG INOX+ALU
489140.0500	125	60	22.23	12 200	POLIFAN PFF 125 A-COOL 60 SG INOX+ALU
489140.0600	125	80	22.23	12 200	POLIFAN PFF 125 A-COOL 80 SG INOX+ALU
489140.0700	180	40	22.23	8 500	POLIFAN PFF 180 A-COOL 40 SG INOX+ALU
489140.0800	180	60	22.23	8 500	POLIFAN PFF 180 A-COOL 60 SG INOX+ALU
489140.0900	180	80	22.23	8 500	POLIFAN PFF 180 A-COOL 80 SG INOX+ALU

489150 Abrasive flap disc PFERD POLIFAN®

A SGP CURVE ALU

Radial design, abrasive corundum A with cooling coating with abrasive additive, **for aluminium and non-ferrous metals**. For **cool grinding** on materials with poor heat conductivity such as stainless steels and aluminium and **no clogging**, e.g. on soft aluminium, thanks to abrasive coating. **Special flap disc for processing fillet weld seams with radius up to 8 mm on aluminium**, chamfering and deburring.



Storage pack 10 pieces/sales unit 1 piece

Order ID	Ø mm	Grain	Hole mm	Max. Speed min ⁻¹	Type
489150.0100	115	40	22.23	13 300	POLIFAN PFR 115-L A 40 SGP CURVE ALU
489150.0200	125	40	22.23	12 200	POLIFAN PFR 125-L A 40 SGP CURVE ALU

489505 High-performance abrasive disc VSM**XK870K Top Size**

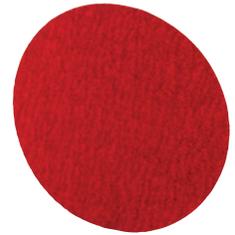
With **hook-and-loop fastener**, no perforation, X-polyester backing, full synthetic resin bond, half-open coating. The ceramic grain abrasive with self-sharpening effect is especially ideal in abrasive machining of very hard surfaces due to aggressive grinding and a very long service life. The Top Size abrasive additive layer ensures cool grinding. With medium contact pressure, **excellent for stainless steels, non-ferrous metals and super-alloys**, and well suited for aluminium. Use on eccentric grinders and angle grinders with a support plate.

Appropriate accessories:

489515 Support plate for hook-and-loop discs VSM

Storage pack 50 pieces/sales unit 1 piece

Order ID	Ø mm	Grain	Type
489505.0100	115	60	XK870K (75454290)
489505.0200	115	80	XK870K (75433581)
489505.0300	115	120	XK870K (75433582)
489505.0400	125	60	XK870K (75452917)
489505.0500	125	80	XK870K (75435337)
489505.0600	125	120	XK870K (75435338)

**489515 Support plate for hook-and-loop discs VSM**

For fabric, fibre and paper discs with hook-and-loop backing.

Usable with:

489501 Aluminium oxide sanding disc VSM
489505 High-performance abrasive disc VSM XK870K Top Size
489510 Corundum abrasive disc sia 1815 siatop 115 mm

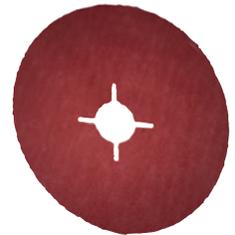
Order ID	Ø mm	Version	Adaptor thread
489515.0100	115	medium/standard	M14
489515.0200	125	medium/standard	M14

**489665 Fibre disc VSM****KF708**

Vulcanised fibre backing, full synthetic resin bond, closed coating. High-performance, universal aluminium oxide abrasive for use on hand-held machines. Long service life, sturdy backing and optimum adaptability. With medium to high contact pressure, **ideally suited for unalloyed steels, stainless steel and super-alloys**, well suited for aluminium, non-ferrous metals and wood. Use on hand-held angle grinders.

Appropriate accessories:

489630 Supporting disc for fibre discs
489640 High performance supporting disc for fibre discs 3M



Storage pack 25 pieces/sales unit 1 piece

Order ID	Ø mm	Grain	Hole mm	Type
489665.0100	115	16	22.23	KF708 (75447459)
489665.0200	115	24	22.23	KF708 (75400989)
489665.0300	115	36	22.23	KF708 (75401019)
489665.0400	115	40	22.23	KF708 (75400990)
489665.0500	115	60	22.23	KF708 (75400985)
489665.0600	115	80	22.23	KF708 (75401020)
489665.0700	115	100	22.23	KF708 (75400980)
489665.0800	115	120	22.23	KF708 (75401031)
489665.0900	125	16	22.23	KF708 (75447461)
489665.1000	125	24	22.23	KF708 (75401079)
489665.1100	125	36	22.23	KF708 (75401010)
489665.1200	125	40	22.23	KF708 (75401011)
489665.1300	125	50	22.23	KF708 (75401021)
489665.1400	125	60	22.23	KF708 (75400981)
489665.1500	125	80	22.23	KF708 (75401032)
489665.1600	125	100	22.23	KF708 (75401033)
489665.1700	125	120	22.23	KF708 (75401034)

492015 Stainless steel wire hand brush BAHCO

Bahco 782-U, universal wire brush for removing dirt, rust, paints, varnishes etc. Four rows of stainless steel bristles, wooden handle.

Order ID	Rows	Trim length mm	Length mm
492015.0100	4	139	285



503170 Coolant hose system Hirt-LINE 3/4"**3/4"**

Type 3 (3/4") Opening 19 mm, outer diameter max. 38 mm; can be expanded as desired, stainless steel; threaded connections for absolute rigidity, allowing use in the working area (e.g. on a lathe turret); each component has a long service life, is precision-machined and is resistant to heat and chemicals; easy to screw together, adjust, extend and shorten by hand; neither coolant pressure nor machine vibrations will alter the position; pressure resistance to max. 60 bar; for lathes, band saws, grinding machines, air-conditioning systems and the chemicals industry.



Order ID	Type	Designation
503170.0100	3-GE	Basic element, L=37 mm
503170.0200	3-GE-2	Basic element, L=66 mm
503170.0300	3-GE-3	Basic element, L=95 mm
503170.0400	3-GE-DK	Basic element, L=40 mm
503170.0500	3-AD-10-PT	Machine adapter G 1" PT
503170.0600	3-AD-34-PT	Machine adapter G 3/4" PT
503170.0700	3-AD-38-PT	Machine adapter G 3/8" PT
503170.0800	3-AD-LL	Machine adapter Loc-Line
503170.0900	3-WV-1K	Threaded elbow with ball section
503170.1000	3-WV-2K	T-piece with ball section
503170.1100	3-DU-12	Straight nozzle with borehole Ø 2 mm
503170.1200	3-DU-15	Straight nozzle with borehole Ø 5 mm
503170.1300	3-DU-19	Straight nozzle with borehole Ø 9 mm
503170.1400	3-DU-SL-25	Flat nozzle, outlet with scattered spray, 22 x 4 mm
503170.1500	3-DU-SL-25-SS	Flat nozzle, outlet with scattered spray, 20 x 2.5 mm
503170.1600	3-DU-SL-50	Flat nozzle, outlet with scattered spray, 45 x 4.2 mm
503170.1700	3-DU-SL-25-GS	Flat nozzle, outlet with straight spray, 18 x 2.5 mm
503170.1800	3-DU-SL-31-GS	Flat nozzle, outlet with straight spray, 28 x 2.5 mm
503170.1900	3-DU-SL-50-GS	Flat nozzle, outlet with straight spray, 35 x 2.0 mm
503170.2000	3-DU-SL-50-GS-0.4	Flat nozzle, outlet with straight spray, 35 x 0.4 mm
503170.2100	3-DU-SL-50-GS-1.0	Flat nozzle, outlet with straight spray, 35 x 1.0 mm
503170.2200	3-DU-SL-65-GS	Flat nozzle, outlet with straight spray, 58 x 2.0 mm
503170.2300	3-DU-SL-65-GS-0.4	Flat nozzle, outlet with straight spray, 58 x 0.4 mm
503170.2400	3-DU-SL-65-GS-1.0	Flat nozzle, outlet with straight spray, 58 x 1.0 mm
503170.2500	3-DU-SL-76-GS	Flat nozzle, outlet with straight spray, 70 x 2.0 mm
503170.2600	3-DU-SL-76-GS-0.4	Flat nozzle, outlet with straight spray, 70 x 0.4 mm
503170.2700	3-DU-SL-76-GS-1.0	Flat nozzle, outlet with straight spray, 70 x 1.0 mm
503170.2800	3-DU-SL-87-GS	Flat nozzle, outlet with straight spray, 81 x 2.0 mm
503170.2900	3-DU-SL-87-GS-0.6	Flat nozzle, outlet with straight spray, 81 x 0.6 mm
503170.3000	3-DU-SL-87-GS-1.2	Flat nozzle, outlet with straight spray, 81 x 1.2 mm
503170.3100	3-DU-SL-107-GS	Flat nozzle, outlet with straight spray, 101 x 2.0 mm
503170.3200	3-DU-SL-107-GS-0.6	Flat nozzle, outlet with straight spray, 101 x 0.6 mm
503170.3300	3-DU-SL-107-GS-1.2	Flat nozzle, outlet with straight spray, 101 x 1.2 mm
503170.3400	3-DU-LL-5-3	Straight nozzle, with 5 boreholes Ø 5 mm
503170.3500	3-DU-LL-90-8	Nozzle 90°, with 8 boreholes Ø 4 mm
503170.3600	KH-34	Mini ball valve G 3/4", chrome-plated brass
503170.3700	RE-3-2	Reducer, type 3 (3/4") to type 2 (1/2")
503170.3800	3-SW-27	Single open-end wrench WAF 27 mm
503170.3900	3-SW-38	Single open-end wrench WAF 38 mm
503170.4000	3-MU	Nut standard, WAF 38 mm

510630 TIG welding rod THERMANIT

Thermanit JE-308L, high-alloy stainless TIG rod for joint and application welding on similar and same types, stabilised and non-stabilised, austenitic CrNi(N) and CrNiMo(N) steels/cast steel. Corrosion resistance similar to same type, low carbon and stabilised austenitic 18/8 CrNi(N) steels/cast steel. Welding material still extremely tough at -196°C. **5-kg pack.**

Order ID	Ø mm	Length mm
510630.0050	1.0	1000
510630.0100	1.2	1000
510630.0200	1.6	1000
510630.0300	2.0	1000
510630.0400	2.4	1000
510630.0500	3.2	1000

**515065 Threadlocker, LOCTITE, high-strength****Type 2700**

Extremely strong locking product with 'clean' safety data sheet; single-component, anaerobic curing product to secure threaded connections that are subjected to high loads; semi-permanent to permanent securing effect depending on the diameter; suitable for locking stud bolts; extremely good hardening properties on passive surfaces (e.g. stainless steel, aluminium and galvanised surfaces) and on screws in as-delivered condition, with traces of oil or at low temperatures. Parts can be removed by heating to 300°C. **No hazard symbols, risk or safety phrases, does not contain any carcinogens or mutagens or substances that are toxic to reproduction that need declaring.** WRAS approval (BS 6920): 1104508.

Order ID	515065.0100	
Bottle	ml	50
Type		2700
Final strength at 22 °C	h	24
Colour		Green
for thread max.		M20
Initial curing time at 22 °C	min	5
Breakaway torque	Nm	20
Temperature range	°C	-55...+150
Viscosity	mPa·s	350...550



515135 ERGO thread lock medium-strength**Type 4050**

Anaerobic curing product for securing threaded connections, universally applicable, also suitable for fine threads, can be dismantled with normal tool.

Order ID		515135.0100
Bottle	g	5
Type		4050
Color		blue
for thread max.		M12
Joint max.	mm	0.15
Breakaway torque	Nm	15
Temperature range	°C	-55...+150
Flash point	°C	>100
Viscosity	mPa·s	100...250
Initial curing time at 22 °C	min	10...20
Final strength at 22 °C	h	5...10
H phrases		EUH210

**515265 LOCTITE Joint sealant, high-strength****Type 6300**

Single-component, anaerobic curing product **with ,clean' safety data sheet** for securing cylindrical joining parts and bearings; for sliding properties with **little clearance** under high **dynamic loads**; for improving the strength of light press fit joints, quick curing plus high temperature resistance. **No hazard symbols, risk or safety phrases, does not contain any carcinogens or mutagens or substances that are toxic to reproduction that need declaring.**

Order ID		515265.0100
Bottle	ml	50
Type		6300
Final strength at 22 °C	h	24
Colour		Green
Initial curing time at 22 °C	min	10
Joint max.	mm	0.15
Joint (optimal)	mm	0.05
Shear strength	N/mm ²	>15
Temperature range	°C	-55...+180
Viscosity	mPa·s	250...550

**515435 Threadlocker LOCTITE, medium strength****Type 5400**

Single-component, anaerobic curing product **with ,clean' safety data sheet for sealing threads up to M26 R 3/4 inch, suitable for hydraulic, pneumatic and water pipes**, medium strength; joint can be loosened using standard tools; extremely good chemical resistance against petrol, oil, cooling and hydraulic fluids; suitable only for metal threads; **SVGW-certified (gas)**. **No hazard symbols, risk or safety phrases, does not contain any carcinogens or mutagens or substances that are toxic to reproduction that need declaring.**

Order ID		515435.0100	515435.0200
Contents	ml	50	250
Packs		Bottle	Tube
Type		5400	5400
Final strength at 22 °C	h	24	24
Colour		Dark yellow	Dark yellow
for thread max.		M80 / R 3"	M80 / R 3"
Initial curing time at 22 °C	min	15...30	15...30
Breakaway torque	Nm	19	19
Temperature range	°C	-55...+150	-55...+150
Viscosity	mPa·s	5000...20000	5000...20000

**515635 Flange sealant LOCTITE, medium strength****Type 5800**

Single-component, anaerobic curing product **with ,clean' safety data sheet for sealing torsion-resistant surfaces and flanges**; seals parts subject to a high mechanical load in a joint that is difficult to separate; temperature-resistant; highly resistant against media (oil-resistant and water/glycol-resistant). Provides an immediate sealing effect against low pressures immediately after installation. **No hazard symbols, risk or safety phrases, does not contain any carcinogens or mutagens or substances that are toxic to reproduction that need declaring.**

Order ID		515635.0100	515635.0200
Contents	ml	50	300
Packs		Bottle	Cartridge
Type		5800	5800
Final strength at 22 °C	h	24	24
Colour of the product		Red	Red
Initial curing time at 22 °C	min	25	25
Joint max.	mm	0.25	0.25
Joint (optimal)	mm	0.05	0.05
Temperature range	°C	-55...+180	-55...+180
Viscosity	mPa·s	11000...32000	11000...32000
Shear strength	N/mm ²	5	5



515635.0100

516530 Super glue ERGO**Type 5039**

can be used anywhere, in **gel form, does not drip or run, colourless.**

Order ID		516530.0050	516530.0100
Tube for	g	3	20
Type		5039	5039
Temperature range	°C	-30...+80	-30...+80
Final strength at 25°C	h	24	24
Setting time at 25°C	s	90...110	90...110

Symbols of danger	GHS7		
H phrases	EUH202, H315, H319, H335		
P phrases	P261, P280, P304+P340, P305+P351+P338, P312, P332+P313		

**516565 Superglue ERGO****Type 5713**

Excellent cyanacrylate adhesive for bonding material combinations with different thermal elongation coefficients. Due to its viscosity, the product is also suitable for bonding porous materials such as leather, cork, wood etc.

Order ID		516565.0100
Bottle	g	20
Type		5713
Temperature range	°C	-30...+80
Viscosity	mPa·s	900...1400
Final strength at 25°C	h	24
Setting time at 25°C	s	50...70
Package		Plastic bottle

Symbols of danger	GHS7		
H phrases	EUH202, H315, H319, H335		
P phrases	P261, P280, P304+P340, P305+P351+P338, P312, P332+P313		

**523295 Drilling and cutting oil foam, high-performance FUTURO**

Sulphur-free, mineral oil-free, low consumption, high performance, can be washed away using water. This cutting oil foam is ideal for: Thread cutting, tapping, centring, broaching and clearing by reaming, drilling and milling. The cutting oil foam is suitable for targeted application at the processing location. The areas of application include **all ferrous and non-ferrous metals, e.g. non-alloyed or alloyed steel. Also suitable for all types of cast iron such as cast steel, malleable cast iron, die-cast iron, copper and its alloys e.g. brass cast iron and red cast iron, and all chromium-nickel alloys.** Good compatibility; can be used as a performance enhancer for all water-miscible cooling lubricants.

Order ID	Contents	Packs
	ml	
523295.0100	400	Spray can

Symbols of danger	GHS2, GHS7		
H phrases	H222, H229, H319		
P phrases	P102, P210, P211, P251, P271, P280, P305+P351+P338, P410, P412, P501		

FUTURO**524115 Workshop and Factory Cleaner High Performance FUTURO**

Aqueous multi-function professional cleaner (concentrate), can be used in all areas where heavy fouling occurs, e.g. machine tools, machining shops, floor coverings, etc. Reliably loosens oil, grease, wax and similar fouling. **Can be diluted up to 1 : 30. Minimum dilution 1 : 5.**

Order ID	Contents
	ml
524115.0100	1000

FUTURO**529561 Chip hook NERIOX**

With simple hand protection shield, chrome-vanadium steel, galvanised, with ergonomic two-component handle, conical hook section, chips loosen better, reduces the risk of accidents during turning work.

Order ID	Length (without handle)
	mm
529561.0300	420

NERIOX

531632 Special glass and display cleaner MAXOLEN 20G

Versatile 2-in-1 special glass and display cleaner with a feel-good aroma.

Professional cleaning of glass and vehicle windows of all kinds as well as especially suitable for cleaning TFT, plasma and LCD surfaces, all common plastics and touchscreens.

Removes stubborn dirt gently, thoroughly and without smudging. No stress cracking during application. Easy-to-clean and anti-static effect.

Order ID	Contents	Packs
531632.0100	5	Canister
531632.0200	1	Spray bottle



533536 Bump cap JSP

Aerolite®, 2.5-cm microscreen

The AeroLite® bump cap weighs less than 135 g and offers full protection.

- **Maximum ventilation:** The AeroLite® bump cap offers excellent ventilation.
- **Uncompromisingly light weight:** With a weight of less than 135 g, the AeroLite® bump cap offers maximum safety with an especially light EPP (expanded polypropylene) impact absorber combined with a stable shell made of HDPE (high density polyethylene) and a light coating made of polyester.
- **Clean and odour-inhibiting:** Both the sweat band and the comfort liner are coated with Polygiene®, an antibacterial feature that inhibits the growth of odour-forming bacteria, thus preventing unpleasant odours. This improved hygiene enhances freshness while reducing the risk of skin reactions. Polygiene® has Class 1 medical device approval and offers a lifetime guarantee for the prevention of unpleasant odours.
- **Quick drying:** The integrated sweat band effectively carries sweat away and distributes it over the entire fabric, increasing evaporation and cooling.
- **Side reflective strips:** Large reflective strips on both sides of the AeroLite® bump cap increase the visibility of the product and the user.
- **Water-repellent:** To improve the dirt-repellent properties of the fashionable bump cap, the surface is equipped with a durable water-repellent coating. Water simply trickles off the surface.



Appropriate spare parts:

533538 Comfort pads with spare rip-tape dots JSP Aerolite® for bump caps

Alternatively also available:

533537.0100 Bump cap JSP Aerolite®, 5-cm short screen black

533537.0200 Bump cap JSP Aerolite®, 5-cm short screen navy

EN812:2012

Order ID	Colour
533536.0100	black
533536.0200	navy
533536.0300	White
533536.0400	hi-vis yellow
533536.0500	hi-vis orange

534091 Safety low shoes S1P PAYPER

Get Texforce Low, navy blue



Protective aluminium toe cap

Upper material made from **water-resistant split leather** with breathable technical fabric inserts, breathable and abrasion-resistant lining (on the entire inner surface), 6+6 metal-free eyelets, reflective insert on the back cap, removable insert Ortholite X40 016 **ESD**, certified non-slip composite sole, reinforced anti-twist element, hoof-shaped tip protection, intermediate sole made of lightweight polyurethane **ESD**, MASTER BALANCE spring system made from PU polyurethane that has a high breaking strength and high density, X-TRAIL GRIP sole made of TPU **ESD** with heel and toe protection.



Alternatively also available:

534093 Safety low shoes S1P PAYPER Get Texforce Low, black

CE category II

EN ISO 20345:2011

Order ID	Size	Order ID	Size
534091.0100	39	534091.0500	43
534091.0200	40	534091.0600	44
534091.0300	41	534091.0700	45
534091.0400	42	534091.0800	46

534093 Safety low shoes S1P PAYPER

Get Texforce Low, black

Protective aluminium toe cap

Upper material made from **water-resistant split leather** with breathable technical fabric inserts, breathable and abrasion-resistant lining (on the entire inner surface), 6+6 metal-free eyelets, reflective insert on the back cap, removable insert Ortholite X40 016 **ESD**, certified non-slip composite sole, reinforced anti-twist element, hoof-shaped tip protection, intermediate sole made of lightweight polyurethane **ESD**, MASTER BALANCE spring system made from PU polyurethane that has a high breaking strength and high density, X-TRAIL GRIP sole made of TPU **ESD** with heel and toe protection.



Alternatively also available:

534091 Safety low shoes S1P PAYPER Get Texforce Low, navy blue

CE category II

EN ISO 20345:2011

Order ID	Size	Order ID	Size
534093.0100	39	534093.0500	43
534093.0200	40	534093.0600	44
534093.0300	41	534093.0700	45
534093.0400	42	534093.0800	46

534380 Safety shoes S3 PAYPER

Get Force MID, black



Protective aluminium toe cap

Upper material made from **water-resistant and breathable cowhide leather**, breathable and abrasion-resistant lining (on the entire inner surface), 8+8 metal-free eyelets, back cap made of leather with pampas structure and reflective insert, removable insert Ortholite X40 016 **ESD**, certified non-slip composite sole, reinforced anti-twist element, hoof-shaped tip protection, intermediate sole made of lightweight polyurethane **ESD**, MASTER BALANCE spring system made from PU polyurethane that has a high breaking strength and high density, X-TRAIL GRIP sole made of TPU **ESD** with heel and toe protection.



Alternatively also available:

534381 Safety shoes S3 PAYPER Get Force MID, aspen yellow

534382 Safety shoes S3 PAYPER Get Force MID, smoke grey

CE category II

EN ISO 20345:2011

Order ID	Size	Order ID	Size
534380.0100	39	534380.0500	43
534380.0200	40	534380.0600	44
534380.0300	41	534380.0700	45
534380.0400	42	534380.0800	46

534381 Safety shoes S3 PAYPER

Get Force MID, aspen yellow

**Protective aluminium toe cap**

Upper material made from **water-resistant and breathable cowhide leather**, breathable and abrasion-resistant lining (on the entire inner surface), 8+8 metal-free eyelets, back cap made of leather with pampas structure and reflective insert, removable insert Ortholite X40 016 **ESD**, certified non-slip composite sole, reinforced anti-twist element, hoof-shaped tip protection, intermediate sole made of lightweight polyurethane **ESD**, MASTER BALANCE spring system made from PU polyurethane that has a high breaking strength and high density, X-TRAIL GRIP sole made of TPU **ESD** with heel and toe protection.

**Alternatively also available:**

534380 Safety shoes S3 PAYPER Get Force MID, black

534382 Safety shoes S3 PAYPER Get Force MID, smoke grey

CE category II

EN ISO 20345:2011

Order ID	Size	Order ID	Size
534381.0100	39	534381.0500	43
534381.0200	40	534381.0600	44
534381.0300	41	534381.0700	45
534381.0400	42	534381.0800	46

534382 Safety shoes S3 PAYPER

Get Force MID, smoke grey

**Protective aluminium toe cap**

Upper material made from **water-resistant and breathable cowhide leather**, breathable and abrasion-resistant lining (on the entire inner surface), 8+8 metal-free eyelets, back cap made of leather with pampas structure and reflective insert, removable insert Ortholite X40 016 **ESD**, certified non-slip composite sole, reinforced anti-twist element, hoof-shaped tip protection, intermediate sole made of lightweight polyurethane **ESD**, MASTER BALANCE spring system made from PU polyurethane that has a high breaking strength and high density, X-TRAIL GRIP sole made of TPU **ESD** with heel and toe protection.

**Alternatively also available:**

534380 Safety shoes S3 PAYPER Get Force MID, black

534381 Safety shoes S3 PAYPER Get Force MID, aspen yellow

CE category II

EN ISO 20345:2011

Order ID	Size	Order ID	Size
534382.0100	39	534382.0500	43
534382.0200	40	534382.0600	44
534382.0300	41	534382.0700	45
534382.0400	42	534382.0800	46

534383 Safety low shoes S3 PAYPER

Get Force Low, black

**Protective aluminium toe cap**

Upper material made from **water-resistant and breathable cowhide leather**, breathable and abrasion-resistant lining (on the entire inner surface), 6+6 metal-free eyelets, back cap made of leather with pampas structure and reflective insert, toecap made from die-cast aluminium, removable insert Ortholite X40 016 **ESD**, certified non-slip composite sole, reinforced anti-twist element, hoof-shaped tip protection, intermediate sole made of lightweight polyurethane **ESD**, MASTER BALANCE spring system made from PU polyurethane that has a high breaking strength and high density, X-TRAIL GRIP sole made of TPU **ESD** with heel and toe protection.

**Alternatively also available:**

534384 Safety low shoes S3 PAYPER Get Force Low, aspen yellow

534385 Safety low shoes S3 PAYPER Get Force Low, smoke grey

CE category II

EN ISO 20345:2011

Order ID	Size	Order ID	Size
534383.0100	39	534383.0500	43
534383.0200	40	534383.0600	44
534383.0300	41	534383.0700	45
534383.0400	42	534383.0800	46

534385 Safety low shoes S3 PAYPER

Get Force Low, smoke grey

**Protective aluminium toe cap**

Upper material made from **water-resistant and breathable cowhide leather**, breathable and abrasion-resistant lining (on the entire inner surface), 8+8 metal-free eyelets, back cap made of leather with pampas structure and reflective insert, removable insert Ortholite X40 016 **ESD**, certified non-slip composite sole, reinforced anti-twist element, hoof-shaped tip protection, intermediate sole made of lightweight polyurethane **ESD**, MASTER BALANCE spring system made from PU polyurethane that has a high breaking strength and high density, X-TRAIL GRIP sole made of TPU **ESD** with heel and toe protection.

**Alternatively also available:**

534383 Safety low shoes S3 PAYPER Get Force Low, black

534384 Safety low shoes S3 PAYPER Get Force Low, aspen yellow

CE category II

EN ISO 20345:2011

Order ID	Size	Order ID	Size
534385.0100	39	534385.0500	43
534385.0200	40	534385.0600	44
534385.0300	41	534385.0700	45
534385.0400	42	534385.0800	46

537001 Skin protection NERIOX**Daily**

Easy-to-apply, **fast-absorbing oil-in-water (O/W) skin protection emulsion**, with innovative film-forming system that protects against **water-soluble and water-insoluble agents**, non-greasy for a particularly good grip after application, leaves no marks, free from silicone, can be used under gloves, only a small amount is required, compatible with hand sanitiser.

Allows the user to work with multiple materials without leaving any marks, even if the user wears gloves for some tasks. **Recommended as protection against many infections.**

Order ID	Contents ml	Packs
537001.0100	100	Tube

NERIOX

**537164 Hand cleanser NERIOX****Ruka**

Mild, creamy hand cleansing lotion. The addition of skin-friendly surfactants results in a fine and creamy foam with good cleansing properties. Contains moisturising and nourishing ingredients that keep skin soft and supple, lightly perfumed.

Hand cleanser NERIOX Ruka meets all the requirements expected of a modern skin cleanser. The optimised system is made from selected surfactants, ensuring **very good cleaning power while remaining suitable for most skin types.** For effectively removing oils, lubricants and fats, graphite, soot, dust, paints and printing inks from skin.

Application:

Apply one or two pumps to lightly moistened hands, then rub in evenly over the entire surface of the hands. Once the contamination has loosened, rinse well with water until there is no more foam on the hands.

Order ID	Contents ml	Packs
537164.0100	250	Bottle
537164.0200	1000	Canister

NERIOX

**537302 Surface disinfection wipes Sterillium®****Protect & Care**

Ready-to-use **disinfectant wipes soaked with Bacillol 30 Foam, fast-acting**, free of colourants and perfume, especially gentle on materials, also suitable for sensitive plastic materials, safe and easy removal of individual tissues from resealable flowpack packaging thanks to practical folded wipe design, high-quality, tear-resistant fleece.

Flowpack of 10 wipes

Order ID	Contents pieces
537302.0100	10
Symbols of danger	GHS2, GHS7
H phrases	H223, H316, H412
P phrases	P102, P210, P273, P305+P351+P338, P337+P313



537361 Skincare NERIOX**Pellis**

Protects and cares for hands and face. High-quality vegetable oils and lipids, such as almond oil, avocado oil and cocoa butter keep the skin smooth and supple without leaving a „greasy“ feeling. The 3B skincare complex consisting of betaine, bisabolol and beeswax provides excellent caring properties. Regular use keeps the skin healthy and strengthens its defences.

Application:

After work and during breaks, apply to clean, dry skin and rub in. Make sure that the cream is applied carefully between the fingers and on the nails.

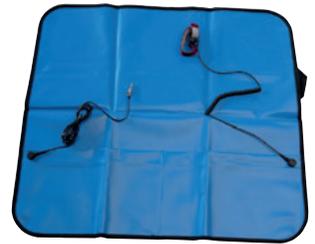
Order ID	Contents ml	Packs
537361.0100	100	Tube

NERIOX

**549262 Folding table cover STS**

ESD standard service kit with crocodile clip, blue folding mat made of conductive PU, with 2 pockets, adjustable fabric wrist strap with 2-m spiral cable and 2.5-m earth cable with 1-M Ω protective resistor.

Order ID	Length mm	Width mm	Protective resistor M Ω
549262.0100	600	600	1

**550335 Portable tool case KNIPEX**

Knipex Big Basic Move, portable tool case made of robust ABS plastic with surrounding aluminium frame, sturdy, ergonomic carrying handle, recessed telescopic handle in the base and two external, easy-running skater rollers. Two metal tilt locks and a three-digit combination code lock ensure that the cover is securely closed. Labelling field with two stickers for personal identification. Document compartment in the lid, two removable tool panels made of dirt-repellent PP hollow chamber boards with 31 tool pockets. First tool panel with ten tool pockets and an elastic loop on the cover side, plus eleven narrow and one large tool pocket on the base side. Second tool panel with ten narrow tool pockets and an elastic loop on the base side, plus a document compartment on the cover side. Base tray can be fixed in place using a pushbutton, 70 mm in height, can be subdivided using inserts, cover panel with 14 large tool pockets. 54 holders in total.

Order ID	Overall size mm	Internal size mm	Weight kg
550335.0100	430 x 280 x 515	350 x 200 x 480	6.2

**550345 Portable tool case KNIPEX**

Knipex Big Twin Move, portable tool case made of robust ABS plastic with surrounding aluminium frame, sturdy, ergonomic carrying handle, recessed telescopic handle in the base and two external, easy-running skater rollers. Free-standing in all open positions thanks to the double-sided locking lid holders with hinge mechanism, opening angle is freely adjustable. Can be opened on one or both sides; the base and the lid can be opened independently of each other. Labelling field with two stickers for personal identification. The cover and the base both have two metal tilt locks each to ensure that they stay securely closed; three-digit combination lock to ensure that the case stays closed. Removable document compartment and removable tool panels made of dirt-repellent PP hollow chamber plates with 13 tool pockets. Base tray can be fixed in place using a pushbutton, 58 mm in height, can be subdivided using flexible inserts and cover panel with 13 tool pockets. 95 holders in total.

Order ID	Overall size mm	Internal size mm	Weight kg
550345.0100	520 x 435 x 290	490 x 370 x 100/110	8.6

**551430 Hand dust brush FUTURO**

Pure horsehair, reinforced with black brushes, handle natural beech, with scratching edge, FSC-certified. Swiss Made

Order ID	Length mm
551430.0100	320

FUTURO



551718 Liner bag

For 140-l to 360-l refuse and plastic containers, per pack.

Usable with:

551780 Waste container with wheels OCHSNER

Order ID	Effective volume l	Colour
551718.0100	140	Clear
551718.0200	240	Clear
551718.0300	360	Clear



551720.0200

551780 Waste container with wheels OCHSNER

Polyethylene, for house dust or compostable wastes, light and handy, 2 wheels with diameter 200 mm. Can be used without difficulty in both high and low temperatures; can be emptied with standardized lifting mechanisms.

Order ID	Effective volume l	Colour	Outside width mm	Height mm	Depth mm
551780.0100	140	anthracite	480	1045	555
551780.0200	240	anthracite	580	1070	750
551780.0250	360	anthracite	600	1100	880
551780.0300	140	green	480	1045	555
551780.0400	240	green	580	1070	750
551780.0500	360	Green	600	1100	880
551780.0600	140	Yellow	480	1045	555
551780.0700	240	Yellow	580	1070	750
551780.0800	360	Yellow	600	1100	880
551780.0900	140	Blue	480	1045	555
551780.1000	240	Blue	580	1070	750
551780.1100	360	Blue	600	1100	880
551780.1200	140	Red	480	1045	555
551780.1300	240	Red	580	1070	750
551780.1400	360	Red	600	1100	880
551780.1500	140	Brown	480	1045	555
551780.1600	240	Brown	580	1070	750
551780.1700	360	Brown	600	1100	880



140 l



240 l

551785 Plastic container OCHSNER

Large polyethylene bin, with side handles for conventional emptying via lifting mechanisms, with 4 swivel castors 2 of which have brakes; rated capacity 355 kg.

Appropriate accessories:

551708 Refuse bags

551710 Refuse bags OKS

551720 Container bag

Order ID	Effective volume l	Colour	Outside width mm	Height mm	Depth mm	Weight kg
551785.0100	770	green	1330	1340	800	42
551785.0200	770	grey	1330	1340	800	42
551785.0300	770	dark grey	1330	1340	800	42
551785.0400	770	Blue	1330	1340	800	42
551785.0500	770	Yellow	1330	1340	800	42
551785.0600	770	Brown	1330	1340	800	42
551785.0700	770	Red	1330	1340	800	42



551785.0100



551785.0200



551785.0300



551785.0400



551785.0500



551785.0600



551785.0700

556010 Working platform Workstand P ZARGES

Optimum stability combined with a large standing surface and easy handling. Sturdy steel frame for high stability. Easy handling thanks to the carry handle in the platform.

Order ID	Platform size mm	Height mm	Footprint mm	max. working height mm	Max. Force kg	Weight kg
556010.0100	400 x 300	400	620 x 520	2400	150	5



556090 Telescopic single ladder Compactstep L ZARGES

Comes in an extremely compact format for ease of transport, yet still provides a secure stand on wide rungs. **When pushed together, the ladder can fit into any car boot.** Can be adjusted to different heights — effectively serves as multiple ladders in one and therefore always provides the right height for the job. Wide rungs for convenience when climbing up and down. Side rails anodised and abrasion-resistant. Complies with standard EN 131-6.

Order ID	Steps	Length open mm	Length closed mm	Step depth mm	Max. Force kg	Weight kg
556090.0100	9	2660	760	40	150	8.4
556090.0200	13	3800	880	40	150	14

**556095 Rung extension ladder Everest 2DE ZARGES**

Safe, flexible and suitable for **great heights with excellent value for money.** Convenient and precise height adjustment from rung to rung at 280 mm intervals. Both ladder parts can also be used separately as single ladders (for ladders with 8 and 10 rungs). Stable triangular rungs with extrusion profile, with horizontal footing when in use position. Positive-locking guide fittings made of aluminium extrusion profile. Replaceable plastic shoes for a non-slip stand.

Order ID	Steps	Length open mm	Length closed mm	Step depth mm	Max. Force kg	Weight kg
556095.0100	2 x 8	3800	2420	38	150	9.3
556095.0200	2 x 10	4930	2980	38	150	11.3
556095.0300	2 x 12	6050	3540	38	150	15.4
556095.0400	2 x 14	7170	4100	38	150	17.8
556095.0500	2 x 16	8290	4660	38	150	21.5
556095.0600	2 x 18	9170	5230	38	150	23.9

**556105 Platform ladder ZAP Neo S ZARGES**

The super-light platform ladder: Lightweight, **easy to handle on account of the folding handrails** and convenient to work on thanks to the large platform. **Large working platform.** Railing on three sides for maximum safety at work. Folding handrail for space-saving transport. Comfortable, non-fatiguing and safe footing on 80-mm deep steps with safety ribbing. Three-way riveted step-to-side-rail connection. Railing height: 1 metre.

Order ID	Steps	Length mm	max. working height mm	Platform size mm	Max. Force kg	Weight kg
556105.0100	3	1930	2740	400 x 400	150	9.3
556105.0200	6	2740	3490	400 x 400	150	12.5
556105.0300	8	3280	3990	400 x 400	150	15

**556110 Electrician's ladder**

Robust electrician's ladder **made of plastic, non-conductive.** Steps made of aluminium extrusion profile with a depth of 80 mm, particularly strong and robust side-rail-to-rung connection thanks to patented process. Sturdy die-cast aluminium hinge, two high-strength propylene belt straps, replaceable feet. **Meets the high voltage test according to DIN EN 61478 and VDE 0682 section.**

Order ID	Steps
556110.0100	2 x 3
556110.0200	2 x 4
556110.0300	2 x 5
556110.0400	2 x 6
556110.0500	2 x 8

**557130 Tyre lever BAHCO**

Bahco 38A, chrome-vanadium steel, chrome-plated and nickel-plated.

Order ID	Length mm
557130.0100	300
557130.0200	380
557130.0300	530
557130.0400	650



560035 LED tube lamp WALDMANN

IP 67



Waldmann RL70 LE, with **230 V mains voltage**, made for any harsh working environment with a proven design for maximum reliability. With LED technology and light-forming film, the RL70 LE delivers homogeneous, glare-free light with a wide beam angle and soft transitions. And zero-maintenance for continuous operation. A borosilicate glass tube is ideal for wet and oily environments in industrial settings.

Appropriate accessories:

560380 Accessories WALDMANN

Other versions with acrylic or polycarbonate tube and other performance levels available on request

Order ID	Type	Power W	Ø mm	Overall length mm	Light emission mm	Luminous flux lm
560035.0100	RL70LE-30 N	16	70	370	316	1250
560035.0200	RL70LE-45 N	24	70	510	456	1900
560035.0300	RL70LE-60 N	32	70	650	596	2550
560035.0400	RL70LE-75 N	40	70	790	736	3100

565525 Cordless screwdriver PANASONIC

Panasonic EY7412, ultra-compact mini cordless screwdriver for manually or electrically supported screwing in one tool. The electric screw tightening and removal speeds up and facilitates assembly work. When the switch is not pressed, the drive rod is locked, so that the tool becomes a manual screwdriver in a flash to precisely regulate the tightening at the end. Built-in lithium-ion battery for high screw capacities of over 600 M 3 x 5 screws at full charge, rechargeable via micro-USB cable. Charge level indicator, built-in LED light, clockwise/anti-clockwise rotation, quick-change bit holder for all common 1/4" E 6.3 bits.

**Scope of delivery:**

565525.0100 Panasonic EY7412 cordless screwdriver, **5-piece bit set** (1 x PH 2 x 150 mm, 1 x PH 2 x 100 mm, 1 x PH 2 x 45 mm, 1 x PH 1 x 100 mm, 1 flat head blade width 6 mm x 100 mm)

Order ID	565525.0100	
Type	EY7412	
Battery voltage	V	3.7
Battery capacity	Ah	0.85
Idle speed	min ⁻¹	230
Torque max.	Nm	1
Torque manual max.	Nm	8
Tool holder	1/4" quick-change bit holder	
Charge Time	min	35

565545 Cordless impact screwdriver PANASONIC

Panasonic AccuPulse® HR series EYFLA/EYFMA, precise shut-off cordless impact screwdriver with durable technology, **brushless motor** and hybrid switch. **AccuPulse® HR technology with high-resolution encoder for precise detection of the motor angle and head support and advanced programmable functions**; protection against overturning, service call alarm, edge protection, error detection when turning in, mode for long, impact-resistant nuts, head support delay. Rubberised handle and well-balanced, lightweight construction prevent fatigue even during continuous operation. Two sensors (angle sensor and shock sensor) measure engine speed and fluctuations and calculate the correct torque using a special algorithm. When the preset torque is reached, the device switches to impact speed control and automatically switches off when fully tightened. **The torque can be adjusted in 40 stages with optional remote control**, repeat protection, LED lighting, continuous battery capacity monitoring ensures consistent torque, automatic shut-off when the battery is drained, green LED indicates when torque is reached. Included in delivery: Screwdriver **without battery, charger and accessories**.



565545.0100 / .0200

Order ID	565545.0100	565545.0200	565545.0300	565545.0400
Type	EYFLA7A/R	EYFLA8A/R	EYFLA9C/R	EYFMA2C/R
Battery voltage	V	10.8	10.8	14.4
Adjustable torque	Nm	3...22	6...30	20...60
Torque max.	Nm	35	80	120
Tool holder	Quick-change hexagon 1/4"	Quick-change hexagon 1/4"	1/2" square drive	1/2" square drive

Appropriate accessories:

565560 Accessories PANASONIC

567305 Hammer drill BOSCH

Bosch GBH 2-28F Professional, strong performance in the Bosch SDS plus 2-kg hammer drill segment with quick-action drill chuck. Rapid drilling progress with very high impact energy, increased user protection with KickBack Control, effortless work thanks to vibration control in continuous and time-consuming applications. Perfect for drilling and chiselling in concrete, masonry, wood and metal. With clockwise/anti-clockwise rotation, overload clutch, variable speed and Vario-Lock.

Scope of delivery:

567305.0100 Hammer drill GBH 2-28 F, auxiliary handle, 210-mm depth stop, machine cloth, 1.5–13-mm quick-change chuck, SDS plus quick-change chuck, L-BOXX 136 with liner

Appropriate accessories:

597999 36-month full service package BOSCH

Order ID	567305.0100	
Type	GBH 2-28 F	
Power consumption	W	880
Tool holder		SDS plus
Drill chucks	mm	1.5...13
Idle speed	min ⁻¹	0...900
Impact frequency	min ⁻¹	0...4000
Impact energy (EPTA)	J	3.2
for concrete	mm	28
for wood	mm	30
for steel	mm	13
Length	mm	402
Height	mm	216
Weight	kg	3.1

**576005 Pneumatic vibration chisel set HAZET**

HAZET 9035V/5, optimal set for loosening rusted-on, resin-filled or dirty screw joints in all areas. With cold-insulating handle. Impact rate can be adjusted in 9 steps.

Scope of delivery:

576005.0100 Pneumatic vibration chisel HAZET 9035VH, quick-action chuck, 4-piece chisel set

Order ID	576005.0100	
Type	9035V/5	
Impact frequency	min ⁻¹	2600
Tool holder		Hexagonal chisel, 10 mm
Air consumption	l/min	57...594
Threaded connection		12.91 mm (1/4")
Coupling piece		NW 7.2 mm
Working pressure	bar	6.3
Sound pressure level	dB(A)	92...105
Weight	kg	2.5

**576015 Pneumatic chisel hammer set HAZET**

HAZET 9035H/6, powerful chisel hammer for separating body panels using compressed air. Also suitable for use in industrial applications, with cold-insulating handle. Impact rate can be adjusted in 9 steps.

Scope of delivery:

576015.0100 Pneumatic vibration chisel HAZET 9035VH, quick-action chuck, 5-piece chisel set

Order ID	576015.0100	
Type	9035H/6	
Impact frequency	min ⁻¹	2600
Tool holder		Hexagonal chisel, 10 mm
Air consumption	l/min	57...594
Threaded connection		12.91 mm (1/4")
Coupling piece		NW 7.2 mm
Working pressure	bar	6.3
Sound pressure level	dB(A)	92...105
Weight	kg	2.5



577342 Pneumatic impact driver HAZET

1/2"

HAZET 9012 ATT, extremely slim pneumatic impact driver with high-performance double-hammer impact mechanism. **Handle/trigger adjustable around its own axis** for optimum handling — **allows actuation in any position**. Innovative swivel mechanism for a broader range of applications guarantees excellent access to hard-to-reach places, such as when actuating calliper fittings. Cold-insulating handle, one-hand operation for right- and left-handed users. Low vibration, easy to operate, ergonomic shape.

Appropriate accessories:

579600 Swivel joint VARIACOR®

579605 Mini oiler HAZET

579730 Pneumatic oil



Order ID		577342.0100
Type		9012 ATT
Square drive		1/2"
Idle speed	min ⁻¹	8000
Torque max.	Nm	500
Loosening torque max.	Nm	550
Screw Ø max.	mm	16
Working pressure	bar	6.3
Air consumption	l/min	113
Threaded connection		12.91 mm (1/4")
Recommended hose diameter	mm	10
Vibration level	m/s ²	4.89
Sound power level	dB(A)	90.1
Length	mm	85
Weight	kg	1.3

579615 Pneumatic spray gun HAZET

HAZET 9048P-2/3, effective, powerful and solvent-free cleaning thanks to the tiered system-cleaning nozzle. Suitable for cleaning e.g. cooling systems. No splashback, jet wash nozzle for effectively cleaning machines, systems and vehicle parts. **Cleans without the use of aggressive chemicals or solvents**. Swivel joint at the water connection, helps to avoid a messy pile of hose. Infinitely adjustable water and compressed air supply. Water connection variants: 13 mm (1/2") nipple for water coupling (compatible with Gardena systems) or 20 mm (3/4") GHT hose thread.

**Scope of delivery:****579615.0100** Pneumatic spray gun HAZET 9048P-2/3, tiered system-cleaning nozzle, jet washing nozzle

Order ID		579615.0100
Type		9048P-2/3
Working pressure	bar	6...10
Temperature range	°C	-10...+40
Air consumption	l/min	200
Recommended hose diameter	mm	13
Coupling piece		NW 7.2 mm
Threaded connection		12.91 mm (1/4")
Weight	kg	0.4

642492 Felling axe BAHCO

For felling small trees. Made of high-alloy tool steel to DIN 17200. The wedge-shaped axe head and its heavy weight allow deep penetration into the wood. Curved ash handle with Euro hole and 8-mm hole (Euronorm) in the handle for easy wall hanging, lacquered, plastic-wedged. Wide eye for improved grip. Very narrow cutting edge allows easy penetration into the trunk.



Order ID	Weight g	Length mm
642492.0100	1500	600

642493 Splitting axe SUC BAHCO

Forged carbon steel head, fully hardened and tempered 51 HRC, sharpened edges ensure easy penetration into the wood. Fibreglass handle with composite grip for comfortable handling and durability. Comfortable thermoplastic elastomer handle with hanging hole. Supplied with protective cover for the head.



Order ID	Weight g	Length mm
642493.0100	980	450

644008 Pointed base wheelbarrow PERFECTA

Trough made of black varnished sheet steel. Support arms made of ash wood and replaceable tyre.

Product made in Switzerland.

Order ID	Contents l	Version
644008.0100	60	With tyre



644009 Pointed base wheelbarrow PERFECTA

Trough made of black varnished sheet steel. Support arms made of ash wood and replaceable solid rubber wheel.

Product made in Switzerland.

Order ID	Contents	Version
644009.0100	60	With solid rubber wheel

**644011 Wheelbarrow spar for pointed base wheelbarrow**

Made of ash wood, misted, drilled and painted.

Order ID	Length cm
644011.0100	140

**644012 Tyre with rim**

Tyre with rim and bolt for pointed base wheelbarrow.

Order ID	Ø mm	Dimension	Version
644012.0100	400	4.00 x 8"	With hose

**644014 Solid rubber wheel with rim**

This solid rubber wheel without air puts an end to punctures. With rim and bolt for pointed base wheelbarrow.

Order ID	Ø mm	Width mm	Version
644014.0100	380	90	Solid rubber

**644015 Rim with bolt**

Rim with axle for pointed base wheelbarrow PERFECTA.

Order ID	Dimension
644015.0100	2.5 x 8"

**644016 Tyre for pointed base wheelbarrow**

Replacement tyre for pointed base wheelbarrow.

Order ID	Ø mm	Dimension
644016.0100	400	4.00 x 8"



644017 Hose for pointed base wheelbarrow

Replacement tyre for pointed base wheelbarrow.

Order ID	Dimension
644017.0100	4.00 x 8"

**644018 Spare trough for pointed base wheelbarrow**

Spare trough for pointed base wheelbarrow PERFECTA.

Order ID	Contents
644018.0100	1 60

**644019 Base frame for pointed base wheelbarrow PERFECTA**

Base frame for pointed base wheelbarrow PERFECTA.

Order ID	644019.0100

**644020 Axle for pointed base wheelbarrow PERFECTA**

Axle with split pin and washers for pointed base wheelbarrow PERFECTA.

Order ID	Length mm
644020.0100	465

**644021 Bearing bush for pointed base wheelbarrow PERFECTA**

Bearing bush for pointed base wheelbarrow PERFECTA.

Order ID	Material
644021.0100	Plastic



656113 Cordless pole pruner STIHL HTA 66

AP battery system

**Powerful for precise cuts.**

Particularly lightweight and quiet yet powerful cordless pole pruner for land, garden and fruit tree maintenance. With 1/4" PM3 saw chain, light drive head with branch hook and rigid shaft. Total length 240 cm.

Appropriate spare parts:

656135.0100 Saw chain STIHL 3670 1/4" P Picco Micro 3 (PM3) 25 cm - 36700000056

656154.0100 Guide rail STIHL Rollomatic E Mini, 1/4" P, 1.1 mm 25 cm - 30050083403

Order ID		656113.0100	656113.0200
Type		HTA 66 (SET)	HTA 66 (SOLO)
Battery included		With AP 200	Battery not included
Charger included		With AL 300	Charger not included
Rail length	cm	25	25
STIHL Oilomatic saw chain type		Picco Micro 3 (PM3)	Picco Micro 3 (PM3)
Saw chain pitch		1/4" P	1/4" P
Nominal voltage	V	36	36
Total length	cm	240	240
Sound pressure level	dB(A)	78	78
Sound power level	dB(A)	93	93
Vibration level on the left/right	m/s ²	1.0 / 1.0	1.0 / 1.0
AP 100 battery life	min	18	18
AP 200 battery life	min	42	42
AP 300 battery life	min	55	55
AP 300 S battery life	min	68	68
AR 2000 L battery life	min	195	195
AR 3000 L battery life	min	300	300
Weight without battery	kg	3.3	3.3



HTA 66

656115 Cordless pole pruner STIHL HTA 86

AP battery system

**Optimal reach via telescopic shaft.**

Powerful cordless pole pruner. Quiet and low vibration. For professional users in tree maintenance, fruit growing and communities. For pruning trees, removing dead wood and storm breakages as well as for cutting fruit trees. 1/4" PM3 saw chain, light and compact drive head with robust branch hook for easy removal of loose clippings from the tree. Total length 270–390 cm.

Appropriate spare parts:

656135.0200 Saw chain STIHL 3670 1/4" P Picco Micro 3 (PM3) 30 cm - 36700000064

656154.0200 Guide rail STIHL Rollomatic E Mini, 1/4" P, 1.1 mm 30 cm - 30050083405

Order ID		656115.0100	656115.0200
Type		HTA 86 (SET)	HTA 86 (SOLO)
Battery included		With AP 200	Battery not included
Charger included		With AL 300	Charger not included
Rail length	cm	30	30
STIHL Oilomatic saw chain type		Picco Micro 3 (PM3)	Picco Micro 3 (PM3)
Saw chain pitch		1/4" P	1/4" P
Nominal voltage	V	36	36
Total length	cm	270...390	270...390
Sound pressure level	dB(A)	77	77
Sound power level	dB(A)	93	93
Vibration level on the left/right	m/s ²	1.0 / 1.0	1.0 / 1.0
AP 100 battery life	min	18	18
AP 200 battery life	min	42	42
AP 300 battery life	min	55	55
AP 300 S battery life	min	68	68
AR 2000 L battery life	min	195	195
AR 3000 L battery life	min	300	300
Weight without battery	kg	4.6	4.6



HTA 86

656234 Cordless brushcutter STIHL FSA 60 R

AK battery system

**Quiet and efficient mowing.**

The lightweight cordless brushcutter FSA 60 R is ideal in particular for **mowing grass** or trimming lawn edges along hedges and around plants or objects. The efficient and brushless **EC motor** drives the tool directly and offers consistent working performance. The low weight and balance of the brushcutter also facilitate longer use. Furthermore, this is supported by the **ergonomic operating handle** with infinitely adjustable speed setting.

Depending on your requirements, you can choose between three **different cutting tools**. The STIHL Autocut C 6-2 wire tool with a cutting circle diameter of 350 mm is included as standard. To refill the mowing blade, you can simply insert it manually into the housing from the outside. Optionally, you can also use the STIHL DuroCut 5-2 with wire pieces or the PolyCut 6-2 with two plastic blades. The **tools are replaced without the need for additional tools**.

When going around obstacles such as plants, pots or large stones with the brushcutter, the spacer prevents damage to plants and objects or to the device. Using the **all-round handle** on the sturdy aluminium shaft, you will retain a good, safe grip of the brushcutter.

If you are a hobby gardener or garden owner who wants to quickly and easily mow small lawns or trim lawn edges, then the cordless brushcutter FSA 60 R is the right choice for you. The quiet operation allows you to work without hearing protection **in noise-sensitive areas**.



FSA 60 R

Order ID	656234.0100	656234.0150	656234.0200
Type	FSA 60 R (SET)	FSA 60 R (SET+)	FSA 60 R (SOLO)
Battery included	With AK 20	With 2x AK 20	Battery not included
Charger included	With AL 101	With AL 101	Charger not included
Cutting circle diameter	mm 350	350	350
Cutting tool	AutoCut C6-2	AutoCut C6-2	AutoCut C6-2
Nominal voltage	V 36	36	36
Overall length without cutting tool	cm 168	168	168
Sound pressure level	dB(A) 81	81	81
Sound power level	dB(A) 94	94	94
Vibration level on the left/right	m/s ² 3.7 / 2.0	3.7 / 2.0	3.7 / 2.0
AK 10 battery life	min 13	13	13
AK 20 battery life	min 30	30	30
AK 30 battery life	min 38	38	38
Weight without battery	kg 3.3	3.3	3.3

656249 Cordless brushcutter STIHL FSA 135

Rechargeable battery system AP

**Efficient and quiet.**

Thanks to the powerful **EC motor** and wide offer of STIHL cutting tools that you can use with this brushcutter, the brushcutter SA 135 offers ideal requirements for garden maintenance and **mowing grass and undergrowth**. The ergonomic operating handle of the brushcutter allows you to **adjust the speed along a continuous scale**. For maximum efficiency when working, you have the option of setting three speed levels, which allow you to work in an energy-saving manner. **Cutting circle diameter 260 mm with grass cutting blade**.



FSA 135

Order ID	656249.0100	656249.0200
Type	FSA 135 (SET)	FSA 135 (SOLO)
Battery included	With AP 300 S	Battery not included
Charger included	With AL 300	Charger not included
Cutting circle diameter	mm 260	260
Cutting tool	GSB 260-2	GSB 260-2
Nominal voltage	V 36	36
Overall length without cutting tool	cm 188	188
Sound pressure level	dB(A) 80	80
Sound power level	dB(A) 92	92
Vibration level on the left/right	m/s ² 2.9 / 2.0	2.9 / 2.0
AP 100 battery life	min 25...16	25...16
AP 200 battery life	min 50...30	50...30
AP 300 battery life	min 70...40	70...40
AP 300 S battery life	min 100...50	100...50
AR 2000 L battery life	min 310...160	310...160
AR 3000 L battery life	min 430...240	430...240
Weight without battery	kg 4.9	4.9

656250 Cordless brushcutter STIHL FSA 135 R

Rechargeable battery system AP

**Efficient and quiet.**

Thanks to the powerful **EC motor** and wide offer of STIHL cutting tools that you can use with this brushcutter, the brushcutter SA 135 R offers ideal requirements for garden maintenance and **mowing grass and undergrowth**. The ergonomic operating handle of the brushcutter allows you to **adjust the speed along a continuous scale**. For maximum efficiency when working, you have the option of setting three speed levels, which allow you to work in an energy-saving manner. **Cutting circle diameter 420 mm with wire tool.**



FSA 135 R

Order ID		656250.0100	656250.0200
Type		FSA 135 R (SET)	FSA 135 R (SOLO)
Battery included		With AP 300 S	Battery not included
Charger included		With AL 300	Charger not included
Cutting circle diameter	mm	420	420
Cutting tool		AutoCut C 26-2	AutoCut C 26-2
Nominal voltage	V	36	36
Overall length without cutting tool	cm	184	184
Sound pressure level	dB(A)	80	80
Sound power level	dB(A)	92	92
Vibration level on the left/right	m/s ²	3.7 / 1.8	3.7 / 1.8
AP 100 battery life	min	14...10	14...10
AP 200 battery life	min	28...17	28...17
AP 300 battery life	min	36...19	36...19
AP 300 S battery life	min	45...25	45...25
AR 2000 L battery life	min	160...90	160...90
AR 3000 L battery life	min	200...130	200...130
Weight without battery	kg	4.3	4.3

656260 Rotary shears attachment RG STIHL

Attachment for brushcutters. For effective removal of weeds and grass on different surfaces such as gravel or paved surfaces. Enables a low-slinging mowing, for example along roads and traffic islands. Full functionality in the attachment drive. Powerful cut, very low tendency for blockages with clippings, easy and fast blade replacement.

Order ID		656260.0100
Type		RG
suitable for	FS 91, FS 94 C-E, FS 94 RC-E, FS 111, FS 131, FSA 130, FSA 130 R, FSA 135, FSA 135 R	
Weight	kg	2.0

**656261 Mower head STIHL TrimCut**

Two lines, for mowing and clearing work. Mowing lines are extended by hand.

Order ID	Type	Mowing wire diameter	suitable for
		mm	
656261.0200	TrimCut 32-2	2.4	FSA 90 / FSA 90 R / FSA 130 / FSA 130 R / FSA 135 / FSA 135 R / FS 55 / FS 55 R / FS 56 / FS 56 R / FS 70 RC-E / FS 89 / FS 91 / FS 94 RC-E / FS 111 / FS 131 / FS 240 / FS 260 R / FR 131 T / FR 410 C-E / FR 460 TC-E / FR 460 TC-EM



TrimCut 32-2

You can find all dimensions, sizes and versions in the ToolShop at www.brw.ch

656262 Mower head STIHL AutoCut

Semi-automatic mower head for clearing around obstacles such as walls, steps or bed bordering and for surface work. Mows particularly quickly and efficiently. The mowing wire automatically readjusts during operation by bouncing the mowing head. Only use with special mowing guard or universal guard.



AutoCut 2-2 / Ø 1.6 mm

Appropriate spare parts:

656273 Mowing wire STIHL round and silent

656274 Mowing wire STIHL round

Order ID	Type	Mowing wire diameter	suitable for
		mm	
656262.0100	AutoCut 2-2 / 1.6	1.6	FSE 52, FSA 56
656262.0200	AutoCut 2-2 / 2.0	2.0	FSE 52, FSA 56
656262.0220	AutoCut C 3-2 / 1.6	1.6	FSE 52, FSA 57
656262.0230	AutoCut C 3-2 / 2.0	2.0	FSE 52, FSA 57
656262.0300	AutoCut C 4-2	2.0	FSA 65 / FSA 85
656262.0500	AutoCut C 6-2 / 2.0	2.0	FSA 60 / FSA 86 R / FSE 71 / FSE 81 / FS 38 / FS 40 / FS 50 / FS 50 C-E
656262.0510	AutoCut C 6-2 / 2.4	2.4	FSA 60 / FSA 86 R / FSE 71 / FSE 81 / FS 38 / FS 40 / FS 50 / FS 50 C-E
656262.0600	AutoCut 25-2	2.4	FSA 90 / FSA 90 R / FSA 130 / FSA 130 R / FS 55 / FS 55 R / FS 56 / FS 56 R / FS 70 C-E / FS 70 RC-E / FS 94 RC-E / FS 111 / FS 131 / FS 240 C-E / FR 131 T / FR 410 C-E / FR 460 TC-E / FR 460 TC-EM
656262.0700	AutoCut C 26-2	2.4	FSA 90 / FSA 90 R / FSA 130 / FSA 130 R / FS 55 / FS 55 R / FS 56 / FS 56 R / FS 70 C-E / FS 70 RC-E / FS 94 RC-E / FS 111 / FS 131 / FS 240 C-E / FS 260 R / FR 131 T / FR 410 C-E / FR 460 TC-E / FR 460 TC-EM

656264 Mower head STIHL PolyCut**Designs:**

PolyCut 2-2: Mower head with 2 plastic blades. Ideal for cutting up to medium-high grass in gardens and for maintaining lawn edges **with cordless brushcutter STIHL FSA 45**. Blade changes can be performed quickly and without tools. Optionally, the mower head can also be fitted with wires with a diameter of 1.6 mm. **Supplied with two plastic blades installed on the device, plus four spare blades.**

PolyCut 3-2: Mower head with 2 plastic blades. Ideal for cutting up to medium-high grass in gardens and for maintaining lawn edges **with the STIHL brushcutters FSE 52 and FSA 57**. Blade changes can be performed quickly and without tools. Optionally, the mower head can also be fitted with wires with a diameter of 1.6 mm. **Supplied with two plastic blades installed on the device, plus four spare blades.**

PolyCut 6-2: Mower head with 2 plastic blades. Ideal for clearing and surface work.

PolyCut 7-3: Universal cutting tool equipped with three moving plastic blades for clearing and surface work.

Appropriate spare parts:

656267 Plastic blades STIHL for PolyCut

Order ID	Type	Number of plastic blades	suitable for
656264.0200	PolyCut 2-2	2	FSA 45 / FSA 56
656264.0210	PolyCut 3-2	2	FSE 52, FSA 57
656264.0220	PolyCut 6-2	2	FSA 60 R / FSA 86 R / FSE 71 / FSE 81 / FS 38 / FS 40 / FS 50 / FS 50 C-E
656264.0260	PolyCut 7-3	3	FS 38 / FS 40 / FS 50 / FS 50 C-E

656267 Plastic blades STIHL for PolyCut

Order ID	suitable for	Contents pieces
656267.0100	PolyCut 2-2, PolyCut 3-2	8
656267.0200	PolyCut 6-3, 7-3, 20-3, 41-3	12
656267.0260	PolyCut 6-2	12

656272 Wire reel STIHL for FSE and FSA

For STIHL electric brushcutters and wireless brushcutters.

Suitable for:

656233 Cordless brushcutter STIHL FSA 57 AK battery system

656252 Electric brushcutter STIHL FSE 52

Order ID	suitable for	Mowing wire diameter mm	Tape length m
656272.0100	Autocut 2-2	1.6	2 x 4
656272.0200	Autocut 2-2	2.0	2 x 4
656272.0300	Autocut C 3-2	2.0	2 x 4



PolyCut 2-2



PolyCut 3-2



PolyCut 6-2



PolyCut 7-3



for PolyCut 2-2 & PolyCut 3-2



for PolyCut 6-3, 7-3, 20-3, 41-3



for PolyCut 6-2



656272.0100

656373 Cordless hedge trimmer STIHL HLA 66

Rechargeable battery system AP

**Quiet cordless hedge trimmer.**

Light-weight cordless hedge trimmer for cutting back both hedges and shrubs and ground-covering plants. **Cutter bar can be adjusted by 115° without tools** for top, bottom or side cutting. Double-sided ground blades for a clean cut.

Order ID		656373.0100	656373.0200
Type		HLA 66 (SET)	HLA 66 (SOLO)
Battery included		With AP 200	Battery not included
Charger included		With AL 300	Charger not included
Cutting length	cm	50	50
Strokes	min ⁻¹	3000	3000
Tooth spacing	mm	33	33
Nominal voltage	V	36	36
Total length	cm	205	205
Sound pressure level	dB(A)	80	80
Sound power level	dB(A)	91	91
Vibration level on the left/right	m/s ²	3.2 / 1.8	3.2 / 1.8
AP 100 battery life	min	72	72
AP 200 battery life	min	144	144
AP 300 battery life	min	180	180
AP 300 S battery life	min	223	223
AR 2000 L battery life	min	715	715
AR 3000 L battery life	min	1040	1040
Weight without battery	kg	3.8	3.8



HLA 66

656375 Cordless hedge trimmer STIHL HLA 86

Rechargeable battery system AP

**Cordless hedge trimmer with telescopic shaft.**

Cordless hedge trimmer with good reach for professional use. Particularly suitable for cutting back **high hedges and shrubs** and cutting ground-covering plants. Work ergonomically thanks to the sturdy square telescopic shaft.

Order ID		656375.0100	656375.0200
Type		HLA 86 (SET)	HLA 86 (SOLO)
Battery included		With AP 200	Battery not included
Charger included		With AL 300	Charger not included
Cutting length	cm	50	50
Strokes	min ⁻¹	3000	3000
Tooth spacing	mm	33	33
Nominal voltage	V	36	36
Total length	cm	260...330	260...330
Sound pressure level	dB(A)	80	80
Sound power level	dB(A)	91	91
Vibration level on the left/right	m/s ²	3.2 / 1.6	3.2 / 1.6
AP 100 battery life	min	72	72
AP 200 battery life	min	144	144
AP 300 battery life	min	180	180
AP 300 S battery life	min	223	223
AR 2000 L battery life	min	715	715
AR 3000 L battery life	min	1040	1040
Weight without battery	kg	4.8	4.8



HLA 86

656499 Blades for STIHL lawn mower

Order ID	Original No.	suitable for	
656499.0100	63117020110	RMA 235	
656499.0200	63207020140	RMA 339	
656499.0300	63387020130	RMA 443	
656499.0400	63587020115	RMA 448	
656499.0500	63577020101	RMA 2 RT	
656499.0510	63577020102	RMA 2 RPV	
656499.0600	63117020100	RME 235	
656499.0700	63207020100	RME 339	
656499.0800	63387020100	RME 443	
656499.0900	63407020100	RME 545 V	

656603 Multioil Bio STIHL

Versatile multi-function oil. Can be used as lubricant, cleaner, corrosion protection, rust protection and penetrating oil. Cannot be used as chain adhesive oil for MS motor saws. The oil has an environmentally friendly composition, as it is 90% produced from renewable raw materials and is 90% biodegradable. Natural oil base, does not harden.

Suitable for:

656040 Cordless wood chainsaw STIHL GTA 26 Battery system AS
 656326 STIHL bundle HSA 26 + GTA 26 Cordless system AS

Order ID	Contents
656603.0100	50
656603.0200	150



50 ml



150 ml

656605 Silicone spray STIHL

for sweepers

The STIHL silicone spray lubricates, maintains and protects the **gear components of STIHL sweepers**. In contrast to grease-based lubricants, the silicone film ensures that dirt does not stick. It also has a water-repellent effect. When used regularly (after approx. every ten operating hours), the STIHL silicone spray allows sweepers to **operate smoothly with minimal wear**. In addition, the blue colouring of the silicone spray serves as proof that no other oils or greases have been used that affect the function of the gearbox.

Order ID		656605.0100
Contents	ml	100
Packs		Spray
Symbols of danger	GHS2, GHS7, GHS9	
H phrases	H222, H229, H315, H336, H411	
P phrases	P101, P102, P210, P211, P251, P261, P271, P312, P410+P412, P501	



656611 Varioclean STIHL

for saw chains and guide bars

Surfactants are biodegradable and phosphate-free.

Specially developed cleaner for removing organic contaminants such as **resin, oils or grass stains** on **saw chains, guide bars, cutters, circular saw blades** and **machine housings**. For steel and diecast magnesium materials. Free of phosphates and organic solvents; surfactants are biodegradable.

Instructions for use:

Spray tools and machinery with the cleaner, wash off with water and rub dry with a cloth. Use Multispray to protect against corrosion after use. Safety glasses must be worn when applying this product.

Order ID		656611.0100	656611.0200
Contents	I	0.5	5
Packs		Spray bottle	Canister

**656612 Multiclean STIHL**

for lawnmowers

Use STIHL Multiclean to gently but thoroughly clean **plastic, rubber and painted** or **metal surfaces**. It is ideal for **cleaning iMOW® robotic lawnmowers and lawnmowers**. Organic contaminants such as plant residues, plant sap and pollen, or insects can be reliably removed, therefore also ensuring that the various materials last longer.

Instructions for use:

Spray the STIHL MultiClean directly onto the surfaces to be cleaned or spray it onto a microfibre cloth and use it to clean the dirt away. After leaving it for a short amount of time to take effect, use a damp microfibre cloth to remove the dissolved dirt and the cleaner. Repeat this process in the case of stubborn and heavy dirt. STIHL Multiclean is pH-neutral and NTA-free and thus extremely compatible with materials.

Order ID		656612.0100
Contents	I	0.5
Packs		Spray bottle

**656613 Care and Clean Kits STIHL**

Order ID	Type	Version	
656613.0100	Kit FS	For maintaining STIHL brushcutters and trimmers. 1 x Multispray, 50 ml 1 x Superlub FS, 40 g	
656613.0200	Kit FS Plus	For maintaining STIHL brushcutters and trimmers. 1 x Multispray, 400 ml 1 x Superlub FS, 80 g 1 x VarioClean, 500 ml	
656613.0300	Kit HS	For maintaining STIHL hedge trimmers and hedgecutters. 1 x SuperClean, 50 ml 1 x Multilub, 40 g	
656613.0400	Kit HS Plus	For maintaining STIHL hedge trimmers and hedgecutters. 1 x SuperClean, 300 ml 1 x Multilub, 80 g	
656613.0500	Kit MOW	For maintaining STIHL lawnmowers. 1 x Multiclean, 500 ml 1 x cleaning brush with scraper 1 x microfibre cloth	

Symbols of danger	GHS2
H phrases	H222, H229
P phrases	P102, P210, P211, P251, P260, P271, P410+P412, P501

656670 Forestry hatchet STIHL

Light forestry hatchet for occasional pruning work and splitting small pieces of firewood.

Order ID	Type	Version	Length	Weight
			cm	g
656670.0100	AX 6	with ash handle	40	600
656670.0200	AX 6 P	With fibre-glass reinforced polyamide handle	40	600



AX 6



AX 6 P

656671 Forestry axe STIHL

Light forestry axe for gardening and forestry.

Order ID	Type	Version	Length cm	Weight g
656671.0100	AX 10	with ash handle	60	1000
656671.0200	AX 16 S	With hickory handle, impact protection sleeve and safety plate	70	1550
656671.0300	AX 15 P	With fibre-glass reinforced polyamide handle	73	1450



AX 10

AX 16 S



AX 15 P

656673 Cleaving axe STIHL

Optimum cleaving results with minimal effort due to wedge-shaped head. Highly suitable for medium and heavy-duty splitting work, suitable for lighter splitting work.

Order ID	Type	Version	Length cm	Weight g
656673.0200	AX 28 CS	With hickory handle, impact protection sleeve and safety plate	80	2800
656673.0300	AX 20 PC	With fibre-glass reinforced polyamide handle	75	1950



AX 28 CS

656687 Felling wedge STIHL, aluminium

With barb for optimal grip in the wood.

Order ID	Dimensions mm	Weight g
656687.0100	120 x 40	190

**656688 Felling and cutting wedges STIHL, plastic**

Impact-resistant even at low ambient temperatures. Polyamide; surface structure prevents the wedge from dislodging; available in three lengths for medium and harder woods and with a larger wedge angle.

Order ID	Length cm
656688.0100	19
656688.0200	23
656688.0300	25

**656689 Felling and splitting wedge STIHL, alu.**

With narrow cutting edge to penetrate deep into the wood. Three designs for small, medium and large trunk diameters; lock teeth to prevent the wedge dislodging; guiding groove; smooth wedge side to allow a second wedge to be easily inserted into the felling cut; high-quality aluminium alloy.

Order ID	Length cm	Weight g
656689.0100	22	600
656689.0200	24	800
656689.0300	26	1000



656690 Chainsaw wedge STIHL, aluminium

Forged, complete with wood and ring.

Order ID	Weight g
656690.0100	980

**656691 Twisted splitting wedge STIHL, aluminium**

Maximum splitting effect achieved thanks to the twisted shape. Guiding milled grooves and lock teeth for particularly good grip in frozen wood; forged for extremely stability yet lightweight, round striking surface.

Order ID	Length cm	Weight g
656691.0100	22	920

**656692 Hand sappie STIHL**

For picking up and placing down firewood, smaller logs and slices of wood. Ash handle, German type.

Order ID	Length cm	Weight g
656692.0100	35	500

**656693 Aluminium sappie STIHL**

For moving and picking up smaller logs and pieces of wood without hurting your back. High-strength aluminium alloy with plastic handle. Additional hook at the end of the handle provide a more secure grip.

Order ID	Length cm	Weight g
656693.0100	70	580

**656694 Felling lever STIHL**

For tipping the tree over the felling hinge in the intended direction, includes a cant hook for turning logs. Made from special steel alloy.

Order ID	Length cm	Weight g
656694.0100	76	1800
656694.0200	130	3400

**656695 Lifting and pulling hook STIHL**

For lifting, transporting, moving and pulling wood or logs.

Order ID	Type	Version
656695.0100	FP 10	Lifting hook for lifting, transporting and setting down plywood. Comfort grip.
656695.0200	FZ 10	Pulling hook for pulling tree trunks, ground tip allows you to hook into the trunk more easily. High-quality, hardened steel, comfort grip.
656695.0300	FP 20	Hand-held lifting pliers for moving wood with angled comfort grip. Hardened tips, 20-cm opening.

**656696 Forestry tape measure STIHL**

Self-retracting forestry tape measure in a robust metal casing. Certified by the Forsttechnischer Prüfungsausschuss (German Forestry Review Board) (KWF [German Board of Trustees for Forestry Work and Technology] acorn test symbol).

Order ID	Length m
656696.0100	15
656696.0200	20
656696.0300	25



656698 Marking chalk marker PRO STIHL

Marking chalk for dry and damp wood. Strong pigmentation, weather-resistant and light-resistant, highly break-resistant. Pack of 12.

Order ID	Colour	Length cm
656698.0100	Blue	12
656698.0200	Red	12
656698.0300	Green	12
656698.0400	Yellow	12
656698.0500	Black	12

**656699 Chalk holder STIHL**

Brightly coloured design. Metal chalk clamp, impact-resistant and extremely sturdy plastic housing (ABS), for chalk with a diameter of 11 to 12 mm.

Order ID	Colour
656699.0100	Orange

**656701 Cordless KombiEngine STIHL KMA 135 R**

Rechargeable battery system AP



Versatile.

Robust and powerful cordless KombiEngine in a contemporary design **with an AP battery compartment in the device**. For working in noise-sensitive environments. Can be used in a variety of ways thanks to the wide range of STIHL **KombiTools**. Ergonomic control handle with **three-level speed pre-selection** and LED display and infinitely variable speed control; loop handle; air filter for long service life. Fitting in the device housing for retrofitting the STIHL Smart Connector 2 A.

Order ID	656701.0100	656701.0200
Type	KMA 135 R (SET)	KMA 135 R (SOLO)
Battery included	With AP 300 S	Battery not included
Charger included	With AL 300	Charger not included
Nominal voltage	V	36
Sound pressure level	dB(A)	91
Sound power level	dB(A)	104
Vibration level on the left/right	m/s ²	5.0 / 3.7
Weight without battery	kg	3.4



KMA 135 R

656823 Cordless lawnmower STIHL RMA 443 VC

Rechargeable battery system AP



With electric Vario wheel drive.

The STIHL RMA 443 VC is a versatile battery-operated lawnmower from the STIHL product range. It is perfect for medium-sized gardens and can master uneven areas with ease thanks to the effective traction of its **Vario drive**. The STIHL AP battery system with powerful lithium-ion batteries provides the required power. The motor is optimised to ensure smooth operation and features an Eco mode. The flow-optimised blade has also been designed for efficiency. Its **cutting width of 41 cm** and the **6-level adjustable cutting height** make this cordless lawnmower a true all-rounder. To make mowing easier, the RMA 443 VC is equipped with a **mono-comfort handlebar**, which is comfortable to grip and easy to adjust. Even the grass box has been designed with simple handling in mind. If you want to use the grass cuttings to re-fertilise your garden straight away, this model can also be retrofitted with the **mulching function**.



RMA 443 VC

Appropriate spare parts:

656499.0300 Blades for STIHL lawn mower 63387020130 / for RMA 443

Order ID	656823.0100	656823.0200
Type	RMA 443 VC (SET)	RMA 443 VC (SOLO)
Battery included	With AP 200	Battery not included
Charger included	With AL 101	Charger not included
Cutting width	mm	410
Cutting height	mm	25...75
Nominal output	kW	1.05
Rated speed	min ⁻¹	3150
Drive	Vario / 2.0 - 4.5 km/h	Vario / 2.0 - 4.5 km/h
Vibration level	m/s ²	1.8
Sound power level	dB(A)	91
Sound pressure level	dB(A)	77
Width	mm	490
Height	mm	1080
Start	ES electric starter	ES electric starter
Stop	MS motor shut-off	MS motor shut-off
Grass catcher bag capacity	l	55
Length with grass catcher bag	mm	1380
Battery range with AP 100	m ²	210
Battery range with AP 200	m ²	420
Battery range with AP 300	m ²	510
Battery range with AP 300 S	m ²	620
Weight without battery	kg	23

656824 Cordless lawnmower STIHL RMA 448 VC

Rechargeable battery system AP

**With electric Vario wheel drive.**

The cordless STIHL RMA 448 VC allows maximum freedom when maintaining a medium-sized garden. This mower features an **Eco mode** for maximum range. In this mode, the motor output is automatically adapted to the required power level when mowing. As a result, the charge level of the STIHL AP lithium-ion battery system lasts even longer. The **Vario drive** provides constant propulsion when mowing. In addition to mowing and collecting, the **mulching function** can be retrofitted to this model. The **flow-optimised blade** makes gardening simple and effective. The cordless lawnmower is easy and convenient to handle thanks to the **mono-comfort handlebar** and the **folding grass box** with a volume of 55 litres. The **cutting width of 46 cm** and the **6-level central adjustable cutting height** of the blade mean that you can easily, quickly and accurately trim your lawn into shape.



RMA 448 VC

Appropriate spare parts:

656499.0400 Blades for STIHL lawn mower 63587020115 / for RMA 448

Order ID		656824.0100	656824.0200
Type		RMA 448 VC (SET)	RMA 448 VC (SOLO)
Battery included		With AP 300	Battery not included
Charger included		With AL 300	Charger not included
Cutting width	mm	460	460
Cutting height	mm	25...75	25...75
Nominal output	kW	1.05	1.05
Rated speed	min ⁻¹	3150	3150
Drive		Vario / 2.5...4.0 km/h	Vario / 2.5...4.0 km/h
Vibration level	m/s ²	1.8	1.8
Sound power level	dB(A)	95	95
Sound pressure level	dB(A)	82	82
Width	mm	500	500
Height	mm	1130	1130
Start		ES electric starter	ES electric starter
Stop		MS motor shut-off	MS motor shut-off
Grass catcher bag capacity	l	55	55
Length with grass catcher bag	mm	1470	1470
Battery range with AP 100	m ²	160	160
Battery range with AP 200	m ²	330	330
Battery range with AP 300	m ²	400	400
Battery range with AP 300 S	m ²	500	500
Weight without battery	kg	24	24

656826 Cordless lawnmower STIHL RMA 2 RPV

Rechargeable battery system AP



With electric Vario wheel drive and two active battery compartments.

The **mulching mower** STIHL RMA 2 RPV with **Vario drive** does not need fuel or cables: It is powered by the reliable STIHL AP system, using the same high-quality lithium-ion batteries as used in STIHL professional equipment. The batteries have enough energy to mow a medium-sized garden. As a special mulching mower, the RMA 2 RPV makes particularly fast work of your gardening tasks. The finely cut grass is returned to the lawn to act as a natural fertiliser in one processing step. So there is no need to continuously empty the grass box as is normally required. For added mowing efficiency, this STIHL cordless lawnmower also features an economical **Eco mode**. Thanks to the practical **quick-release clamps** on the side rail, the mower is compact to store and transport after use.



RMA 2 RPV

Appropriate spare parts:

656499.0510 Blades for STIHL lawn mowers 63577020102/for RMA 2 RPV

Order ID	656826.0050	656826.0100	656826.0200
Type	RMA 2 RPV (SET)	RMA 2 RPV (SET)	RMA 2 RPV (SOLO)
Battery included	With 1 x AP 300	With 2x AP 300	Battery not included
Charger included	With AL 300	With AL 300	Charger not included
Cutting width	mm 460	460	460
Cutting height	mm 25...85	25...85	25...85
Nominal output	kW 1.05	1.05	1.05
Rated speed	min ⁻¹ 3150	3150	3150
Drive	Vario / 2.5...4.0 km/h	Vario / 2.5...4.0 km/h	Vario / 2.5...4.0 km/h
Vibration level	m/s ² 1.4	1.4	1.4
Sound power level	dB(A) 88	88	88
Sound pressure level	dB(A) 74	74	74
Width	mm 500	500	500
Height	mm 1050	1050	1050
Start	ES electric starter	ES electric starter	ES electric starter
Stop	MS motor shut-off	MS motor shut-off	MS motor shut-off
Length	mm 1400	1400	1400
Battery range with AP 100	m ² 210	210	210
Battery range with 2x AP 100	m ² 420	420	420
Battery range with AP 200	m ² 420	420	420
Battery range with 2x AP 200	m ² 840	840	840
Battery range with AP 300	m ² 510	510	510
Battery range with 2x AP 300	m ² 1020	1020	1020
Battery range with AP 300 S	m ² 630	630	630
Battery range with 2x AP 300 S	m ² 1260	1260	1260
Weight without battery	kg 23	23	23

**656835 Electric lawnmower STIHL RME 443**

Compact electric lawnmower with cutting height adjustment.

The STIHL electric lawnmower RME 443 is great for your lawn and also protects the environment. Your neighbours will be especially pleased — this lawnmower is super **quiet**. This compact lawnmower is easy to manoeuvre with its low-resistance wheels and keeps you perfectly on track. An **integrated cable strain relief** ensures that the cable is securely fixed to your device. The central **cutting height adjustment** can be adjusted in **six steps** to the required lawn height. The 55-litre plastic folding grass box makes light work of gardening.

Appropriate spare parts:

656499.0800 Blades for STIHL lawn mowers 63387020100/for RME 443

Order ID		656835.0100
Type		RME 443
Cutting width	mm	410
Cutting height	mm	25...75
Nominal output	kW	1.2
Rated speed	min ⁻¹	2900
Vibration level	m/s ²	0.7
Sound power level	dB(A)	96
Sound pressure level	dB(A)	82
Grass catcher bag capacity	l	55
Weight	kg	20



RME 443

656836 Electric lawnmower STIHL RME 545 V

Convenient electric lawnmower with Vario wheel drive.

The STIHL electric lawnmower RME 545 V can be optimally adjusted to suit your individual requirements when maintaining medium-sized lawns. The **Vario wheel drive** allows you to adjust it to your personal mowing preferences and lawn conditions. The **mowing speed can therefore be infinitely varied** using the control lever on the handlebar. The adjustable handlebar can be adjusted to your height to make using the mower comfortable.

Appropriate spare parts:

656499.0900 Blades for STIHL lawn mowers 63407020100/for RME 545 V

Order ID		656836.0100
Type		RME 545 V
Cutting width	mm	430
Cutting height	mm	25...80
Nominal output	kW	1.6
Rated speed	min ⁻¹	2800
Drive		Vario / 2.4...4.0 km/h
Vibration level	m/s ²	1.4
Sound power level	dB(A)	94
Sound pressure level	dB(A)	82
Grass catcher bag capacity	l	66
Weight	kg	32



RME 545 V

656846 Electric scarifier STIHL RLE 540

Efficient electric lawn scarifier.

The STIHL electric lawn scarifier RLE 540 is ideal for maintaining small lawns where a connection to mains power is available. It combines a powerful yet **quiet electric motor** with an **effective scarifying unit** that aerates the lawn over a working width of 38 cm. The working depth is conveniently regulated using the **rotary switch on the handlebar**. The low-resistance wheels with their anti-slip profile and track alignment provide added comfort for effective lawn aeration.

Order ID		656846.0100
Type		RLE 540
Working width	mm	380
Working depth	mm	25
Nominal output	kW	1.6
Vibration level	m/s ²	1.95
Sound power level	dB(A)	89
Sound pressure level	dB(A)	72
Weight	kg	28



RLE 540

656849 Grass box STIHL AFK 050

The grass box reliably collects cuttings when scarifying, allowing them to be disposed of quickly in one go. It has a volume of 50 litres.

Order ID	Type	Contents	suitable for
656849.0100	AFK 050	50	RL 540 / RLE 540

**675143 Traffic cone PVC R2**

One-piece traffic cone made of PVC. Full-surface red/white retro-reflective R2

With ORALITE® 5831K. RA2 Film

Meets weight class II, tested according to DIN EN 13422

BAST tested V4-019/2013/V4-020/2013

PVC according to DIN ISO 1043

Order ID	Height mm	Base mm	Weight kg	Version	Material
675143.0100	500	330 x 330	5	R2 (highly retroreflective design)	PVC
675143.0200	750	440 x 440	6.8	R2 (highly retroreflective design)	PVC

**675144 Construction site lamp NISSEN Omni LED**

With two high-quality LEDs, all-round light, flashing and continuous light. The lamp features a dimming circuit and a metal hanging ring. The housing is closed using a slotted machine screw. The flashing rate is 60–70 flashes/min.

Order ID	675144.0100
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692018 Flat chisel SDS-Plus BOSCH

The self-sharpening power ribs create not only lateral, but also vertical cracks in the material. This provides a higher material removal rate and prevents the chisel from getting stuck. Additionally, viper teeth on the chiselling edge offer increased work progress. The SDS plus flat chisel offers a 30% longer service life and a 15% higher material removal rate than standard chisels.

Order ID	Edge width mm	Length mm	Holder
692018.0100	20	250	SDS Plus

**692019 Tile chisel SDS-Plus BOSCH**

The tile chisel enables clean and fast removal of wall and floor tiles. Its self-sharpening flat design with angled cutting edge enables precise positioning in narrow joints and efficient removal of tiles without breakage. It is compatible with the SDS plus mounting system. The self-sharpening tile chisel with angled cutting edge has a long service life and a 30% higher material removal rate than conventional chisels.

Order ID	Edge width mm	Length mm	Holder
692019.0100	40	260	SDS Plus

**692020 Gouging chisel SDS-Plus BOSCH**

The hollow chisel with SDS plus is ideal for cutting narrow channels in concrete and masonry.

Order ID	Edge width mm	Length mm	Holder
692020.0100	22	250	SDS Plus

**692021 Spade chisel SDS-Plus BOSCH**

The spade chisel offers a high material removal rate in masonry and mortar. The self-sharpening spade body retains its strength throughout its service life and therefore enables consistently better work progress. It removes rough plaster, layers of dirt, concrete residue from formwork boards and plaster from walls and is suitable for wall openings. The SDS plus self-sharpening spade chisel has a 30% higher material removal rate than conventional chisels.

Order ID	Edge width mm	Length mm	Holder
692021.0100	40	250	SDS Plus

**692022 Pointed chisel SDS-Plus BOSCH**

The pointed chisel is suitable for various standard work in concrete and masonry during renovation and restoration. Equipped with a pointed tip for precision, this chisel is intended for completing adjustment work to destroy or remove walls. It can also be used to restore joints and expose reinforcements.

Order ID	Length mm	Holder
692022.0100	250	SDS Plus

**692023 Pointed chisel SDS-Plus BOSCH**

The pointed chisel is ideal for precision work in concrete without interrupting work and with less jamming than conventional pointed chisels. The self-sharpening tip, which is turned in on itself, removes material over a wider area, thus enabling smooth working with no interruptions. The chisel is designed for adjustment work in concrete and building blocks, for destroying or removing walls, and for restoring joints and exposing reinforcement. The pointed chisel has a 30% longer service life and a 15% higher material removal rate than conventional chisels.

Order ID	Length mm	Holder
692023.0100	250	SDS Plus

**692027 Flat chisel SDS-Max DEWALT**

Suitable for use in SDS-max chisel hammers for demanding chiselling work in masonry, concrete, tarmac, etc.

Order ID	Edge width mm	Length mm	Holder
692027.0100	25	300	SDS Max
692027.0200	25	400	SDS Max
692027.0300	50	400	SDS Max

**692028 Pointed chisel SDS-Max DEWALT**

Material-appropriate induction heat treatment and special surface treatment guarantee the highest, uniform tool quality and consistently the best usage properties. Suitable for use in SDS-max chisel hammers for demanding chiselling work in masonry, concrete, tarmac, etc.

Order ID	Length mm	Holder
692028.0100	280	SDS Max
692028.0200	400	SDS Max
692028.0300	600	SDS Max



692029 Tile chisel SDS-Max DEWALT

Material-appropriate induction heat treatment and special surface treatment guarantee the highest, uniform tool quality and consistently the best usage properties. Suitable for use in SDS-max chisel hammers for demanding chiselling work in masonry, concrete, tarmac, etc.



Order ID	Edge width mm	Length mm	Holder
692029.0100	80	300	SDS Max

692030 Hammer drill SDS-Max Speed-X DeWalt

4-cutter geometry for clean, circular holes and a consistently high drilling speed. Virtually precludes the drill catching in reinforced concrete.



Long-drawn coils for optimised dust removal and faster drilling progress.

4-way spiralling for optimum drilling progress and extended service life of the drill head thanks to optimised discharge of cuttings via four genuine drilling spirals.

Order ID	Drill Ø mm	Total length mm	Working length mm	Holder
692030.0100	12	340	200	SDS Max
692030.0200	12	540	400	SDS Max
692030.0600	14	340	200	SDS Max
692030.0700	14	540	400	SDS Max
692030.0800	15	340	200	SDS Max
692030.0900	15	540	400	SDS Max
692030.1000	16	340	200	SDS Max
692030.1100	16	540	400	SDS Max
692030.1200	18	340	200	SDS Max
692030.1300	18	540	400	SDS Max
692030.1400	19	340	200	SDS Max
692030.1500	19	540	400	SDS Max
692030.1600	19	670	550	SDS Max
692030.1700	20	340	200	SDS Max
692030.1800	20	540	400	SDS Max
692030.1900	20	920	800	SDS Max
692030.2000	22	340	200	SDS Max
692030.2100	22	540	400	SDS Max
692030.2200	22	920	800	SDS Max
692030.2300	24	340	200	SDS Max
692030.2400	24	540	400	SDS Max
692030.2500	25	340	200	SDS Max
692030.2600	25	540	400	SDS Max
692030.2700	25	920	800	SDS Max
692030.2800	26	340	200	SDS Max
692030.2900	26	340	400	SDS Max
692030.3000	28	380	250	SDS Max
692030.3100	28	570	450	SDS Max
692030.3200	28	670	550	SDS Max
692030.3300	30	380	250	SDS Max
692030.3400	30	570	450	SDS Max
692030.3500	32	380	250	SDS Max
692030.3600	32	570	450	SDS Max
692030.3700	32	920	800	SDS Max
692030.3800	35	380	250	SDS Max
692030.3900	35	570	450	SDS Max
692030.4000	35	670	550	SDS Max
692030.4100	36	570	450	SDS Max
692030.4200	38	380	250	SDS Max
692030.4300	38	570	450	SDS Max
692030.4400	38	670	550	SDS Max
692030.4500	40	380	250	SDS Max
692030.4600	40	570	450	SDS Max
692030.4700	40	920	800	SDS Max
692030.4800	42	570	450	SDS Max

934073 Slotted screwdriver WERA

WERA 932A, chisel driver, for fastening, chiselling and loosening, with Krattform handle with roll protection, multi-component with soft zones, blade micro-matt with black point tip, continuous hexagon blade with impact cap and key assistance, for slotted screws, size 3.5 without impact cap and continuous blade size 12 and 14 without soft zones.

Order ID	Tip thickness mm	Tip width mm	Blade length mm
934073.0100	0.6	3.5	80
934073.0200	0.8	4.5	90
934073.0300	1.0	5.5	100
934073.0400	1.2	7.0	125
934073.0500	1.6	9.0	150
934073.0600	1.6	10.0	175
934073.0700	2.0	12.0	200
934073.0800	2.5	14.0	250

934074 Phillips screwdriver WERA

WERA 917SPH, with Kraftform handle with roll protection, multi-component with soft zones, blade micro-matt with black point tips, continuous hexagon blade with impact cap and key assistance, size 4 without soft zones.

Order ID	Size	Blade Ø mm	Blade length mm
934074.0100	PH 1	5	80
934074.0200	PH 2	6	100
934074.0300	PH 3	8	150
934074.0400	PH 4	10	200

**934075 Pozidriv screwdriver WERA**

WERA 918SPZ, with Kraftform handle with roll protection, multi-component with soft zones, blade micro-matt with black point tips, continuous hexagon blade with impact cap and key assistance, size 4 without soft zones, suitable for Pozidriv® cross-slotted screws.

Pozidriv®= registered trademark of European Industrial Service Ltd.

Order ID	Size	Blade Ø mm	Blade length mm
934075.0100	PZ 1	5	80
934075.0200	PZ 2	6	100
934075.0300	PZ 3	8	150
934075.0400	PZ 4	10	200

**934076 Screwdriver set WERA**

6 pieces



Screwdriver set consisting of screwdrivers nos. 934073 and 934074 or 934075, versions as described there, incl. rack for holding the screwdriver.

Content:

Type 932/6 = per 1 slotted screwdriver no. 934073 3.5x80, 4.5x90, 5.5x100, 7x125 as well as per 1 Phillips screwdriver Phillips no. 934074 size PH1, PH2 and 1 rack (wall holder)

Type 932/918/6 = slotted screwdriver no. 934073 size 3.5x80, 4.5x90, 5.5x100, 7x125 as well as per 1 Phillips screwdriver Pozidriv no. 934075 size PZ1, PZ2 and 1 rack (wall holder)

934076.0100 consisting of:

934073.0100 Slotted screwdriver WERA 932 A 3.5
 934073.0200 Slotted screwdriver WERA 932 A 4.5
 934073.0300 Slotted screwdriver WERA 932 A 5.5
 934073.0400 Slotted screwdriver WERA 932 A 7.0
 934074.0100 Phillips screwdriver WERA 917 SPH 1-80
 934074.0200 Phillips screwdriver WERA 917 SPH 2-100

934076.0200 consisting of:

934073.0100 Slotted screwdriver WERA 932 A 3.5
 934073.0200 Slotted screwdriver WERA 932 A 4.5
 934073.0300 Slotted screwdriver WERA 932 A 5.5
 934073.0400 Slotted screwdriver WERA 932 A 7.0
 934075.0100 Pozidriv screwdriver WERA 918 SPZ 1-80
 934075.0200 Pozidriv screwdriver WERA 918 SPZ 2-100

Order ID	Type	Parts
934076.0100	932/6	6
934076.0200	932/918/6	6



934077 Slotted screwdriver WERA

WERA 335/334, ergonomic WERA-Kraftform handle with soft zones and hexagon roll protection, blade round with WERA laser tip-toothing for improved grip in the screw, size specifications of the blade on the handle cap, blade micro-matt with laser tip.

Order ID	Tip thickness mm	Tip width mm	Blade length mm
934077.0100	0.4	2.5	75
934077.0200	0.5	3.0	80
934077.0300	0.6	3.5	100
934077.0400	0.8	4.0	100
934077.0500	1.0	5.5	125
934077.0600	1.2	6.5	150
934077.0700	1.2	8.0	175
934077.0800	1.6	10.0	200

**934078 Phillips screwdriver WERA**

WERA 350PH, ergonomic WERA-Kraftform handle with soft zones and hexagon roll protection, blade round with WERA laser tip-toothing for improved grip in the screw, size specifications of the blade on the handle cap, blade micro-matt with laser tip.

Order ID	Size	Blade length mm
934078.0100	PH 0	60
934078.0200	PH 1	80
934078.0300	PH 2	100
934078.0400	PH 3	150

**934079 Pozidriv screwdriver WERA**

WERA 355PZ, ergonomic WERA-Kraftform handle with soft zones and hexagon roll protection, blade round with WERA laser tip-toothing for improved grip in the screw, size specifications of the blade on the handle cap, blade micro-matt with laser tip, suitable for Pozidriv® screws.

Pozidriv® = registered trademark of European Industrial Service Ltd.

Order ID	Size	Blade length mm
934079.0100	PZ 0	60
934079.0200	PZ 1	80
934079.0300	PZ 2	100
934079.0400	PZ 3	150

**934080 Screwdriver set WERA**

Screwdriver set consisting of screwdrivers no. 934077 and 934078 or 934079, versions as described there, incl. Rack for holding the screwdriver

Content:

Type 334/6 = per 1 slotted screwdriver no. 934077 3.0x80, 4.0x100, 5.5x125, 6.5x150, as well as per 1 Phillips screwdriver Phillips no. 934078 PH1, PH2 and 1 rack (wall holder)

Type 334/335/6 = per 1 slotted screwdriver no. 934077 3.0x80, 4.0x100, 5.5x125, 6.5x150 as well as per 1 Phillips screwdriver Pozidriv no. 934079 PZ1, PZ2 and 1 rack (wall holder)

934080.0100 consisting of:

934077.0200 Slotted screwdriver WERA 335 3.0x80
 934077.0400 Slotted screwdriver WERA 335 4.0x100
 934077.0500 Slotted screwdriver WERA 335 5.5x125
 934077.0600 Slotted screwdriver WERA 334 6.5x150
 934078.0200 Phillips screwdriver WERA 350PH PH 1
 934078.0300 Phillips screwdriver WERA 350PH PH 2

934080.0200 consisting of:

934077.0200 Slotted screwdriver WERA 335 3.0x80
 934077.0400 Slotted screwdriver WERA 335 4.0x100
 934077.0500 Slotted screwdriver WERA 335 5.5x125
 934077.0600 Slotted screwdriver WERA 334 6.5x150
 934079.0200 Pozidriv screwdriver WERA 355PZ PZ1
 934079.0300 Pozidriv screwdriver WERA 355PZ PZ2

Order ID	Type	Parts
934080.0100	334/6	6
934080.0200	334/335/6	6



934081 Reversible ratchet wrench JOKER

Innovative ratcheting combination wrench; unique holding function, thanks to the metal plate in the jaw, reduces the risk of dropping nuts and bolts; replaceable metal plate in the jaw secures nuts and bolts with its extra hard teeth and reduces the danger of slipping; integrated limit stop prevents any slipping around the bolt head and allows higher torque to be applied; double-hex geometry makes for a positive connection with nuts or bolts and reduces the risk of slipping; return angle of only 30° at the open end to avoid time consuming flipping of the wrench during fastening jobs; ratchet mechanism at the ring end, with an exceptional, fine-tooth mechanism – 80 teeth in all – enables flexibility in very confined working spaces; specially forged geometry for high torque transfer and strength; high performance chrome molybdenum steel; nickel-chrome coating for high corrosion protection.



Order ID	Wrench size mm	Length mm
934081.0050	8	144
934081.0100	10	159
934081.0130	11	165
934081.0150	12	171
934081.0200	13	177
934081.0230	14	188
934081.0250	15	200
934081.0270	16	212
934081.0300	17	224
934081.0330	18	235
934081.0400	19	246

934082 Reversible ratchet wrench set JOKER

Ratcheting combination wrench set; a practical combination in a durable pouch, unique holding function, thanks to the metal plate in the jaw, reduces the risk of dropping nuts and bolts; replaceable metal plate in the jaw secures nuts and bolts with its extra hard teeth and reduces the danger of slipping; integrated limit stop prevents any slipping around the bolt head and allows higher torque to be applied; double-hex geometry makes for a positive connection with nuts or bolts and reduces the risk of slipping; return angle of only 30° at the open end to avoid time consuming flipping of the wrench during fastening jobs; ratchet mechanism at the ring end, with an exceptional, fine-tooth mechanism – 80 teeth in all – enables flexibility in very confined working spaces; specially forged geometry for high torque transfer and strength; high performance chrome molybdenum steel; nickel-chrome coating for high corrosion protection.

**Contents:**

4 pc set
1 each ratcheting combination wrench No. 934081 size 10, 13, 17, 19 in roll-up case
8 pc set
1 each ratcheting combination wrench No. 934081 size 8, 10, 11, 12, 14, 15, 16, 18 in roll-up case
11 pc set
1 each ratcheting combination wrench No. 934081 size 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 in roll-up case

Consisting of:

934081 Ratcheting combination wrench Joker
934081 Reversible ratchet wrench Joker

Order ID	Parts	Size mm
934082.0100	4	10...19
934082.0200	8	8...18
934082.0300	11	8...19

934083 Compact screwdriver sets WERA

Practically configured screw assortments with Kraftform screwdriver handles and different bit configurations in convenient folders, for manual and machine operation. All parts can be purchased individually later

Contents:

Type compact 20 = 1 Kraftform handle, per 1 slotted blade 1.0x5.5x25, 1 x 1.2x6.5x25, per 1 cruciform blade Phillips PH 1x25, PH 2x25 and per 1 cruciform blade Pozidriv PZ 1x25, PZ 2x25

Type compact 22 = 1 Kraftform handle, per 1 cruciform blade Pozidriv PZ 1x25, PZ 2x25, per 1 Torx blade TX 15x25, TX 20x25, TX 25x25

Type compact 40 = 1 Kraftform handle, per 1 slotted blade 1.0x5.5x89, 1,2x6.5x89, per 1 cruciform blade Phillips PH 1x89, PH 2x89, per 1 cruciform blade Pozidriv PZ 1x89, PZ 2x89

Type compact 41 = 1 Kraftform handle, per 1 cruciform blade Philips PH 1x89, PH 2x89, PH 3x89, per 1 cruciform blade Pozidriv PZ 1x89, PZ 2x89, PZ 3x89, per 1 Torx blade TX 15x89, TX 20x89, TX 25x89, TX 30x89

Type compact 60 = 1 Kraftform handle, 1 slotted blade 1.0x5.5x89, per 1 hexagon blade 3.0x89, 4.0x89, 5.0x89, 6.0x89, per 1 cruciform blade Phillips PH 1x89, PH 2x89, PH 3x89

Pozidriv blade PZ 1x89, PZ 2x89, PZ 3x89, Torx blade with bore TX 10x89, TX 15x89, TX 20x89, TX 25x89, TX 30x89

Type compact 60 RA = 1 Kraftform handle with ratchet function, 1 slotted blade 1.0x5.5x89, per 1 hexagon blade 3.0x89, 4.0x89, 5.0x89, 6.0x89, per 1 cruciform blade PH 1x89, PH 2x89, PH 3x89, per 1 cruciform blade Pozidriv PZ 1x89, PZ 2x89, PZ 3x89, per 1 Torx blade with bore TX 10x89, TX 15x89, TX 20x89, TX 25x89, TX 30x89

Type compact Vario SB = 1 Kraftform handle with ratchet function, 1 double slotted blade 0.6x4.0x1.0x6.0x175, 1 double hexagon blade 4x5x175, 1 double cruciform blade Phillips PH 1xPH 2x175, 1 double cruciform blade Pozidriv PZ 1xPZ 2x175, per 1 double Torx blade TX 10xTX 15x175, TX 20xTX 25x175



Order ID	Type	Parts
934083.0100	KOMPAKT 20	7
934083.0200	KOMPAKT 22	6
934083.0300	KOMPAKT 40	7
934083.0400	KOMPAKT 41	11
934083.0500	KOMPAKT 60	17
934083.0600	KOMPAKT 60 RA	17
934083.0700	KOMPAKT VARIO RA SB	7

934087 Hex L key set WERA

Wera 950/9 Hex-Plus Multi-Colour, high-quality L key set with convenient, colour-coded, sheathing. The Hex Plus profile offers larger contact surfaces on the screw head. The notching effect is thereby reduced to a minimum; the destruction of the screw head is almost eliminated. The BlackLaser surface treatment provides excellent surface protection, even against corrosion, and a long service life.

Order ID	Type	Version	Number of wrenches	with wrenches mm
934087.0100	950/9 Hex-Plus Multicolour HF 1	Long	9	1.5 / 2 / 2.5 / 3 / 4 / 5 / 6 / 8 / 10

**934088 L key set for TORX® screws WERA**

Wera 967/9 TX Multi-colour, high-quality L key set with convenient, colour-coded, sheathing for recessed TORX® screws. The BlackLaser surface treatment provides outstanding corrosion protection and a long service life. With holding function: Due to the clamping force resulting from the surface pressure between the output tip and the screw profile, the screws on both arms are held securely on the tool.

Order ID	Type	Version	Number of wrenches	with spanners
934088.0100	967/9 TX Multicolour HF 1	Long	9	T8 / T9 / T10 / T15 / T20 / T25 / T27 / T30 / T40

**934089 Bit L key set WERA**

1/4" C 6.3

Wera Kraftform COMPACT 100, in a surface-friendly, compact and robust textile box. 1 bit hand holder Rapidaptor with quick-change chuck; 1 bit holder Rapidaptor with quick-change chuck for mounting in the cordless screwdriver; 30 BiTorsion bits with 25 mm length for long service life, tough (BTZ), for universal use, extra hard (BTH), 12 impactor bits with 50 mm length for particularly high demands, 8 L keys with Hex-Plus profile (reducing the notching effect that is damaging for the head of the hex screws) and hexagonal ball head on the long arm.

Order ID	Type	Parts	Set composition
934089.0100	Kraftform Kompakt 100	52	1x Bit-Handhalter 813 R 1x Bithalter 889/4/1 K 30x BiTorsion-Bits 25 mm 12x Impaktor-Bits 50 mm 8x Winkelstiftschlüssel Hex Plus

**934096 Ratcheting combination wrench set WERA JOKER Switch**

Wera 6001 JOKER Switch 4 set 1, high-quality ratcheting combination wrench set made of high-performance chrome-molybdenum steel with 15° angled ratchet end and switch lever. The double-hex geometry ensures a positive connection with screws or nuts and a low return angle of only 30° on the jaw end, eliminating time-consuming flipping of the wrench during use. The reversible ratchet mechanism at the ring end with its fine toothing (80 teeth) ensures flexibility even in confined spaces.

Order ID	Type	Parts	Wrench size mm
934096.0100	Joker Switch	4	10 / 13 / 17 / 19

