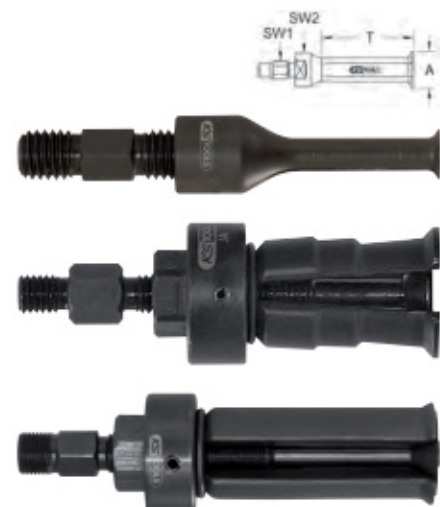


**INTERNAL EXTRACTORS**

**Precision internal extractor**

- Centering shaft
- For the accurate fitting of bearings and bushes
- Special steel



	A mm	connector thread mm	SW1 mm	SW2 mm	T mm	max N·m	Weight
660.0101	5-7	M10	10	13	30.0	3	50
660.0102	6-8	M10	10	13	30.0	3	50
660.0103	7-9	M10	10	13	30.0	7	50
660.0104	8-10	M10	10	13	30.0	7	50
660.0105	9-12	M10	10	13	30.0	12	50
660.0106	10-13	M10	10	13	30.0	15	50
660.0107	12-15	M10	10	13	30.0	15	50
660.0108	13-17	M10	10	13	50.0	24	70
660.0109	14-19	M10	10	13	60.0	28	90
660.0111	15-20	M10	10	13	60.0	28	90
660.0112	16-21	M10	10	13	60.0	32	90
660.0113	18-23	M10	10	17	60.0	40	110
660.0114	20-25	M10	10	17	60.0	40	110
660.0115	22-27	M10	10	17	60.0	40	110
660.0116	25-30	M10	10	17	60.0	40	120
660.0117	25-40	M10	13	19	45.0	45	260
660.0118	28-35	M10	10	17	60.0	45	280
660.0119	30-37	M10	17	22	70.0	45	280
660.0121	35-42	M10	17	22	70.0	45	280
660.0122	38-45	M10	17	22	70.0	45	290
660.0123	40-47	M10	17	22	70.0	45	300
660.0124	43-50	M10	17	22	70.0	45	310
660.0125	40-75	G 3/8"	17	27	100.0	45	760
660.0126	45-55	G 3/8"	19	27	100.0	45	650
660.0127	50-60	G 3/8"	19	27	100.0	45	680
660.0128	70-115	G 3/8"	19	27	130.0	45	1400

**Double ended support for internal extractor**

- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	slide N·m	mm	internal extraction mm	mm	Weight
660.0601	35-75	30	12	M10	M16x1,5 x 136	0.70
660.0602	60-130	60	19	M10/G3/8"	M24x1,5 x 160	1.60
660.0603	60-130	60	19	G3/8"	M24x1,5 x 160	1.50
660.0604	60-210	70	19	G3/8"	M24x1,5 x 160	3.70
660.0605	55-205	100	22	G3/8"	G1/2"x14g x 210	3.80

**Slide hammer**

- Suitable for small ball bearings
- Ideal for limited access areas
- Special steel



	L1 mm	L2 mm	D1 mm	D2 mm	mm	Weight
660.0501	170	40.0	10.0	30.0	M10	0.40
660.0502	170	80.0	10.0	50.0	M10	0.90
660.0503	250	100.0	16.0	45.0	M10	1.30
660.0504	250	100.0	16.0	45.0	M10+G3/8"	1.40
660.0505	250	100.0	16.0	60.0	G3/8"	2.60



**INTERNAL EXTRACTORS SETS**

**Precision internal extractor set ø 10,0 - 37,0 mm**

- Centering shaft
- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case
- For pulling/hitting the pilot bearing



	Weight
660.0014	2.42

consists of:

	Weight
660.0106	50
660.0109	90
660.0114	110
660.0116	120
660.0119	280
660.0601	700
660.0501	400

**Precision internal extractor set ø 10,0 - 45,0 mm**

- Centering shaft
- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



	Weight
660.0011	2.36

consists of:

	Weight
660.0106	50
660.0109	90
660.0114	110
660.0116	120
660.0119	280
660.0122	290
660.0601	700

**Precision internal extractor set ø 10,0 - 75,0 mm**

- Centering shaft
- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



	Weight
660.0012	4.92

consists of:

	Weight
660.0106	50
660.0109	90
660.0114	110
660.0116	120
660.0119	280
660.0122	290
660.0125	760
660.0601	700
660.0602	1600



**Precision internal extractor set ø 15,0 - 75,0 mm**

- Centering shaft
- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



660.0015	5 pcs	Precision internal extractor set ø 15,0 - 75,0 mm	3.60
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**consists of:**

660.0111	Precision internal extractor, 15-20mm	90
660.0114	Precision internal extractor, 20-25mm	110
660.0117	Precision internal extractor, 25-40mm	260
660.0125	Precision internal extractor, 40-75mm	760
660.0602	Double ended support for internal extractor, 60-130mm, M10xG3/8"	1600

**Precision internal extractor set ø 10,0 - 115,0 mm**

- Centering shaft
- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



660.0013	10 pcs	Precision internal extractor set ø 10,0 - 115,0 mm	9.72
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**consists of:**

660.0106	Precision internal extractor, 10-13mm	50
660.0109	Precision internal extractor, 14-19mm	90
660.0114	Precision internal extractor, 20-25mm	110
660.0116	Precision internal extractor, 25-30mm	120
660.0119	Precision internal extractor, 30-37mm	280
660.0122	Precision internal extractor, 38-45mm	290
660.0125	Precision internal extractor, 40-75mm	760
660.0128	Precision internal extractor, 70-115mm	1400
660.0601	Double ended support for internal extractor, 35-75mm	700
660.0604	Double ended support for internal extractor, 60-210mm	3700

**INTERNAL EXTRACTORS & PULLER SETS**

**Precision internal extractor and puller set 10 - 45 mm**

- Through reversing the arms internal and external applications are possible
- Wide range of arms and hydraulic spindles available
- Centering shaft
- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



660.0022	10 pcs	Precision internal extractor and puller set 10 - 45 mm	5.58
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**consists of:**

660.0106	Precision internal extractor, 10-13mm	50
660.0109	Precision internal extractor, 14-19mm	90
660.0114	Precision internal extractor, 20-25mm	110
660.0116	Precision internal extractor, 25-30mm	120
660.0119	Precision internal extractor, 30-37mm	280
660.0122	Precision internal extractor, 38-45mm	290
660.0601	Double ended support for internal extractor, 35-75mm	700
620.0101	Universal 2 arm puller, 20-90mm, legs 100mm	1000
620.3101	Pole clamp 2-jaw puller, 10-60mm	160
670.0221	Draw off lining, Ø 5-32mm	1400

**Precision internal extractor and puller set 10 - 75 mm**

- Through reversing the arms internal and external applications are possible
- Wide range of arms and hydraulic spindles available
- Centering shaft
- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



660.0023	13 pcs	Precision internal extractor and puller set 10 - 75 mm	11.60
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**consists of:**

660.0106	Precision internal extractor, 10-13mm	50
660.0109	Precision internal extractor, 14-19mm	90
660.0114	Precision internal extractor, 20-25mm	110
660.0116	Precision internal extractor, 25-30mm	120
660.0119	Precision internal extractor, 30-37mm	280
660.0122	Precision internal extractor, 38-45mm	290
660.0125	Precision internal extractor, 40-75mm	760
660.0601	Double ended support for internal extractor, 60-130mm, G3/8"	700
660.0603	Double ended support for internal extractor, 60-130mm, G3/8"	1500
620.0101	Universal 2 arm puller, 20-90mm, legs 100mm	1000
620.0103	Universal 2 arm puller, 50-160mm, legs 150mm	3000
620.3101	Pole clamp 2-jaw puller, 10-60mm	160
670.0221	Draw off lining, Ø 5-32mm	1400

**Precision internal extractor and puller set 10 - 115 mm**

- Through reversing the arms internal and external applications are possible
- Wide range of arms and hydraulic spindles available
- Centering shaft
- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



660.0021	14 pcs	Precision internal extractor and puller set 10 - 115 mm	15.63
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**consists of:**

660.0106	Precision internal extractor, 10-13mm	50
660.0109	Precision internal extractor, 14-19mm	90
660.0114	Precision internal extractor, 20-25mm	110
660.0116	Precision internal extractor, 25-30mm	120
660.0119	Precision internal extractor, 30-37mm	280
660.0122	Precision internal extractor, 38-45mm	290
660.0125	Precision internal extractor, 40-75mm	760
660.0128	Precision internal extractor, 70-115mm	1400
660.0601	Double ended support for internal extractor, 35-75mm	700
660.0605	Double ended support for internal extractor, 55-205mm	3800
620.0101	Universal 2 arm puller, 20-90mm, legs 100mm	1000
620.0103	Universal 2 arm puller, 50-160mm, legs 150mm	3000
620.3101	Pole clamp 2-jaw puller, 10-60mm	160
670.0221	Draw off lining, Ø 5-32mm	1400

[www.kstools.com](http://www.kstools.com)



## BALL BEARING EXTRACTORS

### Universal ball bearing extractor set

- Less risk of slippage due to the automatically closing draw off arms
- 13 puller variants possible
- Extremely robust spindle with inductively hardened thread
- Excellent power transfer
- Special steel
- Supplied in a durable plastic case



650.0010	37 pcs	Universal ball bearing extractor set	8.00

consists of:

650.0011	Ball bearing extractor without legs, 25mm	300	
650.0012	Ball bearing extractor without legs, 34mm	400	
650.0013	Ball bearing extractor without legs, 41mm	500	
650.0014	Ball bearing extractor without legs, 49mm	900	
650.0015	Ball bearing extractor without legs, 63mm	1200	
655.0011	Adaptor legs, 4pcs, 120mm	100	
655.0012	Adaptor legs, 4pcs, 120mm	100	
655.0013	Adaptor legs, 4pcs, 130mm	200	
655.0014	Adaptor legs, 4pcs, 130mm	200	
655.0015	Adaptor legs, 4pcs, 150mm	300	
655.0016	Adaptor legs, 4pcs, 150mm	400	
655.0017	Adaptor legs, 4pcs, 190mm	600	
655.0018	Adaptor legs, 4pcs, 190mm	800	

### Ball bearing extractor without legs

- Consists of adaptor and spindle
- For ball bearings in waves or housings
- Extremely robust spindle with inductively hardened thread
- Special steel



	Ø mm	mm	dim mm	
650.0011	26	M10 x 150	12	0.30
650.0012	34	M12 x 199	14	0.40
650.0013	41	M14x1,5 x 200	17	0.50
650.0014	49	M18x1,5 x 240	19	0.90
650.0015	63	G1/2"x14g x 230	22	1.20

### Adaptor legs for ball bearing extractor, 4 pcs

- Can be used with adaptor legs and spindles available separately
- For ball bearings in waves or housings
- Special steel



	L mm	Suitable for ISO bearing	
655.0011	120	6000, 6001, 6002, 6003, 6200	0.10
655.0012	120	6004, 6005, 6201, 6202	0.10
655.0013	130	6006, 6203, 6300	0.20
655.0014	130	6007, 6008, 6204, 6205, 6301, 6302	0.20
655.0015	150	6009, 6010, 6206, 6303, 6304	0.30
655.0016	150	6011, 6012, 6207, 6305	0.40
655.0017	190	6208, 6306	0.60
655.0018	190	6209- 6212, 6307- 6310, 6403- 6406, 6410 8.80	

### Universal ball bearing puller set

- For simple and fast removing of ball bearings without removal of the shaft
- Pulling power influences uniformly on the interior and outside ring
- Special steel
- In durable plastic storage case
- Suited for ISO bearings: 6004-6010, 6201-6206, 6300-6304

Ideal for use in SKF, FAG, Timken, NTN bearings, etc.  
Adaptor diameter: 5.5 - 6 - 8 mm



700.1500	21 pcs	Universal ball bearing puller set	0.82

consists of:

700.1501	Extension set long, 2 pcs	110	
700.1502	Centre point	30	
700.1503	Tie rod set, 2 pcs	60	
700.1504	Ball head bearing adaptor set, 2 pcs, Ø 5,5 mm	24	
700.1505	Ball head bearing adaptor set, 2 pcs, Ø 6,0 mm	24	
700.1506	Ball head bearing adaptor set, 2 pcs, Ø 8,0 mm	26	
700.1507	Extension set short, 2 pcs	30	
700.1508	U disc set for tie rod, 4 pcs	10	
700.1509	Spindle	164	
700.1510	Traverse	202	
700.1511	Nut set for tie rod, 2 pcs	10	

### Universal ball bearing puller set

- For simple and fast removing of ball bearings without removal of the shaft
- Pulling power influences uniformly on the interior and outside ring
- Special steel
- In durable plastic storage case
- Suited for ISO bearings: 6207-6211, 6205-6208, 6303-6305

Ideal for use in SKF, FAG, Timken, NTN bearings, etc.  
Adaptor diameter: 11 - 12.5 - 15 mm



700.1600	21 pcs	Universal ball bearing puller set	1.69

consists of:

700.1601	Extension set long, 2 pcs	204	
700.1602	Centre point	50	
700.1603	Tie rod set, 2 pcs	178	
700.1604	Ball head bearing adaptor set, 2 pcs, Ø 11,0 mm	88	
700.1605	Ball head bearing adaptor set, 2 pcs, Ø 12,5 mm	96	
700.1606	Ball head bearing adaptor set, 2 pcs, Ø 15,0 mm	110	
700.1607	Extension set short, 2 pcs	88	
700.1608	U disc set for tie rod, 4 pcs	10	
700.1609	Spindle	130	
700.1610	Traverse	345	
700.1611	Nut set for tie rod, 2 pcs	10	

## BEARING AND BUSH DRIVER

### Bearing punch set Ø 25.0 mm

- In durable plastic storage case



156.0425	7 pcs	Bearing punch set Ø 25.0 mm	640

consists of:

156.0426	Punch holder without impact	355	
156.0447	Punch attachable head 2 pcs, polyamide, Ø 25 mm	20	
156.0455	Punch attachable head 2 pcs, aluminium, Ø 25 mm	50	
156.0463	Punch attachable head 2 pcs, brass, Ø 25 mm	150	



**Bearing punch set Ø 10.0 - 14.0 mm**

• In durable plastic storage case



156.0440	10 pcs	Bearing punch set Ø 10.0 - 14.0 mm	240
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consists of:

156.0436	Punch holder		100
156.0441	Punch attachable head 2 pcs, polyamide, Ø 10 mm		10
156.0442	Punch attachable head 2 pcs, polyamide, Ø 12 mm		10
156.0443	Punch attachable head 2 pcs, polyamide, Ø 14 mm		10
156.0449	Punch attachable head 2 pcs, aluminium, Ø 10 mm		10
156.0450	Aluminium punch set, 2 pcs., Ø 12 mm		10
156.0451	Punch attachable head 2 pcs, aluminium, Ø 14 mm		20
156.0457	Punch attachable head 2 pcs, brass, Ø 10 mm		20
156.0458	Punch attachable head 2 pcs, brass, Ø 12 mm		20
156.0459	Punch attachable head 2 pcs, brass, Ø 14 mm		50

**Universal bearing and bush driver set**

- Universal applicable range
- Can be used manually with a hammer or workshop press
- Applications from 18.0 - 65.0 mm
- Pressure plates are for the two driving spindles
- Special steel
- In durable plastic storage case



700.1350	51 pcs	Universal bearing and bush driver set	8.00
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consists of:

700.1348	Reception adaptor, 45mm		500
700.1349	Impact drive knurled grip, 220mm		42
700.1351	Pressure plate, 18mm		12
700.1352	Pressure plate, 19mm		14
700.1353	Pressure plate, 20mm		16
700.1354	Pressure plate, 21mm		20
700.1355	Pressure plate, 22mm		22
700.1356	Pressure plate, 23mm		27
700.1357	Pressure plate, 24mm		30
700.1358	Pressure plate, 25mm		34
700.1359	Pressure plate, 26mm		38
700.1360	Pressure plate, 27mm		43
700.1361	Pressure plate, 28mm		47
700.1362	Pressure plate, 29mm		50
700.1363	Pressure plate, 30mm		53
700.1364	Pressure plate, 31mm		59
700.1365	Pressure plate, 32mm		65

consists of:

700.1366	Pressure plate, 33mm		68
700.1367	Pressure plate, 34mm		72
700.1368	Pressure plate, 35mm		77
700.1369	Pressure plate, 36mm		82
700.1370	Pressure plate, 37mm		89
700.1371	Pressure plate, 38mm		94
700.1372	Pressure plate, 39mm		97
700.1373	Pressure plate, 40mm		105
700.1374	Pressure plate, 41mm		111
700.1375	Pressure plate, 42mm		119
700.1376	Pressure plate, 43mm		125
700.1377	Pressure plate, 44mm		132
700.1378	Pressure plate, 45mm		138
700.1379	Pressure plate, 46mm		144
700.1380	Pressure plate, 47mm		153
700.1381	Pressure plate, 48mm		159
700.1382	Pressure plate, 49mm		165
700.1383	Pressure plate, 50mm		172
700.1384	Pressure plate, 51mm		181
700.1385	Pressure plate, 52mm		188
700.1386	Pressure plate, 53mm		196
700.1387	Pressure plate, 54mm		205
700.1388	Pressure plate, 55mm		213
700.1389	Pressure plate, 56mm		221
700.1390	Pressure plate, 57mm		231
700.1391	Pressure plate, 58mm		238
700.1392	Pressure plate, 59mm		247
700.1393	Pressure plate, 60mm		258
700.1394	Pressure plate, 61mm		266
700.1395	Pressure plate, 62mm		276
700.1396	Pressure plate, 63mm		284
700.1397	Pressure plate, 64mm		294
700.1398	Pressure plate, 65mm		305
700.1399	Support plate, 75mm		500

**Brass and aluminium punch**

- For extracting bearing, bolts and bushes, etc.
- Rimed handle for better control
- Brass / Aluminium



	Material	Ø mm	L mm	
156.0415	brass	20,0	300,0	1.13
156.0416	aluminium	30,0	300,0	1.89

**Bearing assembly and disassembly tool set**

- Can be used manually with a hammer or workshop press
- Optimal placing through the pressure plates
- For easy and damage free assembly
- For the correct dismantling and assembly of bearings
- Suitable for commercial, agricultural engineering and construction machines
- Forged, robust execution
- Special steel
- In durable plastic storage case



450.0080	5 pcs	Replacement parts	6.45
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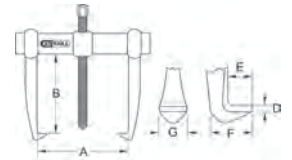
consists of:

450.0082	Pressure plates (use with press)		0.51
450.0083	Impact plates long (use with a hammer)		1.91
450.0084	Special 6 point socket for mandral shaft		0.34
450.0088	Universal 3 jaw thrust piece		0.32
450.0087	Locking bolt for jaw spreading		0.02

**UNIVERSAL 2 ARM PULLER**

**Universal 2 arm puller set with hardened steel legs**

- Through reversing the arms internal and external applications are possible
- Hydraulic spindles available for thread G1/2" / G3/4"
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	C mm	max t mm	mm	D mm	E mm	F mm	G mm	
620.1301	15-80	100	70-130	3.5	M14x1.5 x 130	17	3	12	22	0.90
620.1302	15-120	100	80-170	3.5	M14x1.5 x 130	17	3	12	22	1.00
620.1303	20-160	150	110-210	6	G1/2"x14g x 210	22	4	16	30	2.70
620.1304	20-200	150	120-250	6	G1/2"x14g x 210	27	4	16	30	3.00
620.1305	40-250	200	170-300	8	G3/4"x14g x 280	27	6.5	23	43	6.50
620.1306	40-350	200	190-400	8	G3/4"x14g x 280	27	6.5	23	43	7.60

**Universal 2 arm puller**

- Through reversing the arms internal and external applications are possible
- Hydraulic spindles available for thread G1/2" / G3/4" / G1"
- Extremely robust spindle with inductively hardened thread
- Special steel

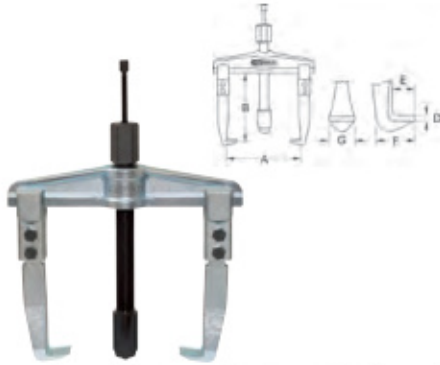


	A mm	B mm	C mm	max t mm	mm	D mm	E mm	F mm	G mm	
620.0101	20-90	100	70-130	4.5	M14x1.5 x 140	17	3	13	25	1.00
620.0102	25-130	100	80-180	4.5	M14x1.5 x 140	17	3	13	25	1.20
620.0103	50-160	150	105-220	6.5	G1/2"x14g x 210	22	4	16	35	3.00
620.0104	60-200	150	120-270	6.5	G1/2"x14g x 210	22	4	16	35	3.30
620.0105	80-250	200	160-330	11	G3/4"x14g x 280	27	5	25	54	7.40
620.0106	90-350	200	180-420	11	G3/4"x14g x 280	27	5	25	54	8.50
620.0107	110-520	200	195-600	13	G3/4"x14g x 280	27	5	25	54	13.00
620.0108	170-640	225	250-720	18	G1"x11g x 310	36	10	33	55	23.70



### Hydraulic universal 2 arm puller

- Quickly modified or internal or external applications
- Different leg variants available
- Includes hydraulic thrust spindle
- Excellent power transfer
- Special steel



	A mm	B mm	max l	Hydraulic spindle mm	D mm	E mm	F mm	G mm	kg	
620.0301	50-160	145	12	615.0002	13/32	4	16	35	25	3.40
620.0302	50-200	145	12	615.0002	13/32	4	16	35	25	3.80
620.0303	80-250	125	12	615.0003	13/36	5	25	54	35	8.00
620.0304	80-350	125	12	615.0003	13/36	5	25	54	35	9.00
620.0305	110-520	125	12	615.0003	13/36	5	25	54	35	13.50
620.0306	170-640	125	12	615.0003	13/36	5	25	54	35	21.00
620.0307	170-640	210	15	615.0004	17/41	10	33	55	50	27.00

### Universal 2 arm puller set with extended legs

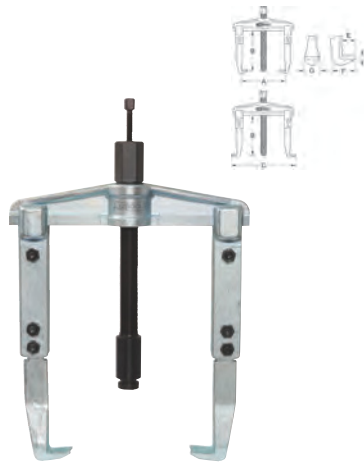
- Through reversing the arms internal and external applications are possible
- Hydraulic spindles available for thread G1/2" / G3/4"
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max l	mm	mm	D mm	E mm	F mm	G mm	kg
620.0501	20-90	200	4.5	M14x1,5 x 140	17	3	13	25	20	1.50
620.0502	25-130	200	4.5	M14x1,5 x 140	17	3	13	25	20	1.70
620.0503	50-160	300	6.5	G1/2"x14g x 210	22	4	16	35	25	4.00
620.0504	60-200	300	6.5	G1/2"x14g x 210	22	4	16	35	25	4.30
620.0505	80-250	300	11	G3/4"x14g x 280	27	5	25	54	35	9.20
620.0506	80-350	300	11	G3/4"x14g x 280	27	5	25	54	35	10.30
620.0507	110-520	300	13	G3/4"x14g x 280	27	5	25	54	35	14.80
620.0508	80-250	400	11	G3/4"x14g x 280	27	5	25	54	35	10.50
620.0509	80-350	400	11	G3/4"x14g x 280	27	5	25	54	35	11.60
620.0510	110-520	400	13	G3/4"x14g x 280	27	5	25	54	35	16.10
620.0511	80-250	500	11	G3/4"x14g x 280	27	5	25	54	35	11.90
620.0512	80-350	500	11	G3/4"x14g x 280	27	5	25	54	35	13.00
620.0513	110-520	500	13	G3/4"x14g x 280	27	5	25	54	35	17.50

### Hydraulic universal 2 arm puller

- Quickly modified or internal or external applications
- Hydraulic spindles available for thread G1/2"
- Includes hydraulic thrust spindle
- Excellent power transfer
- Special steel



	A mm	B mm	C mm	max l	Hydraulic spindle mm	D mm	E mm	F mm	G mm	kg	
620.0701	50-160	225	105-220	12	615.0002	13	4	16	35	25	3.90
620.0702	50-200	225	120-270	12	615.0002	13	4	16	35	25	4.80
620.0703	80-250	225	160-330	12	615.0002	13	5	25	54	35	9.80
620.0704	80-350	225	160-420	12	615.0002	13	5	25	54	35	10.80
620.0705	110-520	225	195-600	12	615.0002	13	5	25	54	35	15.30
620.0706	80-250	325	160-330	12	615.0002	13	5	25	54	35	11.10
620.0707	80-350	325	160-420	12	615.0002	13	5	25	54	35	12.10
620.0708	110-520	325	195-600	12	615.0002	13	5	25	54	35	16.60
620.0709	80-250	425	160-330	12	615.0002	13	5	25	54	35	12.50
620.0710	80-350	425	160-420	12	615.0002	13	5	25	54	35	13.50
620.0711	110-520	425	195-600	12	615.0002	13	5	25	54	35	18.00

### Quick release universal 2 arm puller

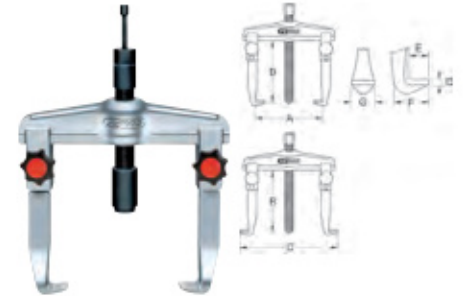
- Quick release function
- Through reversing the arms internal and external applications are possible
- Hydraulic spindles available for thread G1/2" / G3/4"
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	C mm	max l	mm	D mm	E mm	F mm	G mm	kg	
620.1701	20-90	100	70-130	4.5	M14x1,5 x 130	17	3	13	25	20	1.00
620.1702	25-130	100	80-180	4.5	M14x1,5 x 130	17	3	13	25	20	1.20
620.1703	50-160	150	108-225	6.5	G1/2"x14g x 210	22	4	16	35	25	3.00
620.1704	60-200	150	125-270	6.5	G1/2"x14g x 210	22	4	16	35	25	3.30
620.1705	80-250	180	150-330	11	G3/4"x14g x 280	27	5	25	54	35	7.40
620.1706	80-350	200	160-420	11	G3/4"x14g x 280	27	5	25	54	35	8.50

### Hydraulic quick release universal 2 arm puller

- Quick release function
- Through reversing the arms internal and external applications are possible
- Different leg variants available
- Includes hydraulic thrust spindle
- Excellent power transfer
- Special steel



	A mm	B mm	C mm	max l	Hydraulic spindle mm	D mm	E mm	F mm	G mm	kg	
620.1901	50-160	145	105-220	12	615.0003	13/32	4	16	35	25	3.40
620.1902	50-200	145	120-270	12	615.0003	13/32	4	16	35	25	3.80
620.1903	80-250	125	160-330	12	615.0004	13/32	5	25	54	35	8.00
620.1904	80-350	125	160-420	12	615.0004	13/32	5	25	54	35	9.00

### Universal 2 arm puller set with narrow legs

- Best suited for limited access areas
- Uniform load distribution and self centered
- Through reversing the arms internal and external applications are possible
- Supplied with different leg variants and hydraulic thrust spindle
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max l	mm	mm	D mm	E mm	F mm	G mm	kg
620.0901	20-90	100	4.5	M14x1,5 x 140	17	3,6	6	13	27	1.00
620.0902	25-130	100	4.5	M14x1,5 x 140	17	3,6	6	13	27	1.20
620.0903	50-160	150	6.5	G1/2"x14g x 210	22	5	8	17	40	3.00
620.0904	60-200	150	6.5	G1/2"x14g x 210	22	5	8	17	40	3.30

### Quick release universal 2 arm puller set with narrow legs

- Quick release function
- Best suited for limited access areas
- Through reversing the arms internal and external applications are possible
- Hydraulic spindles available for thread G1/2"
- Extremely robust spindle with inductively hardened thread
- Special steel

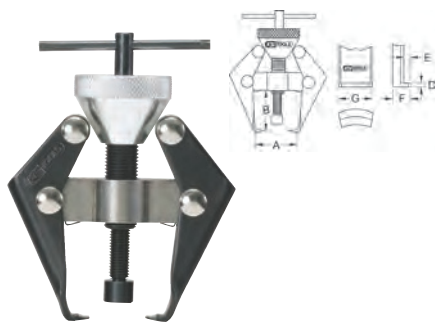


	A mm	B mm	max l	mm	mm	D mm	E mm	F mm	G mm	kg
620.1101	20-90	100	4.5	M14x1,5 x 140	17	3,6	6	13	27	1.00
620.1102	25-130	100	4.5	M14x1,5 x 140	17	3,6	6	13	27	1.20
620.1103	50-160	150	6.5	G1/2"x14g x 210	22	5	8	17	40	3.00
620.1104	60-200	150	6.5	G1/2"x14g x 210	22	5	8	17	40	3.30



**Battery clamp and wiper arm puller 2 arm**

- Ideally suited for drawing-off small parts
- T-handle drive
- Independent pressure of the hooks
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t mm	mm	D mm	E mm	F mm	G mm	H mm
700.1190	15	32	1,2	MB x 50	2,5	9	10,5	11	0,30

**Pole clamp 2 arm puller**

- Ideally suited for drawing off small parts
- Independent pressure of the hooks
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t mm	mm	dim mm	D mm	E mm	F mm	G mm	H mm
620.3101	10-60	40	1	M8 x 85	10	1	5	12	8	160
620.3102	10-70	44/74	1,2	M8 x 85	10	1	5	12	8	200
620.3103	10-90	84	2	M10 x 105	12	1,8	10	20	12	300

**Universal 2 arm puller**

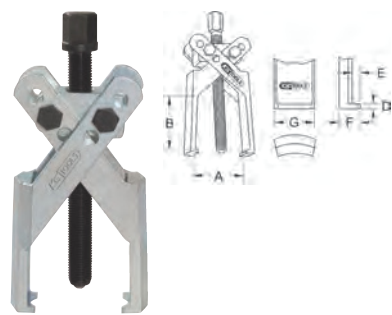
- Robust spindle with hexagon drive
- 640.4103 with locking handle
- Special steel



	A mm	B mm	max t mm	mm	dim mm	D mm	E mm	F mm	G mm	H mm
620.4101	10-60	45	2,5	M10x1 x 90	12	2	9	18	10	0,27
620.4102	10-70	65	3	M10x1 x 110	12	2	9	18	10	0,30
620.4103	10-100	80	3,5	M12x1,25 x 140	14	2,3	12	25	13	0,61

**Universal 2 arm puller**

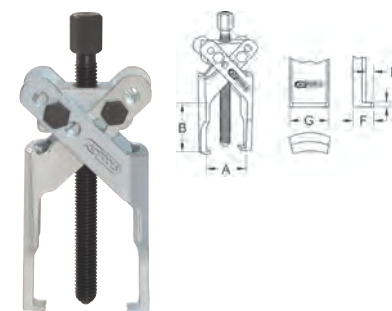
- Legs are adjustable in the working depth
- Independent pressure of the hooks
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t mm	mm	dim mm	D mm	E mm	F mm	G mm	H mm
620.5201	6-100	70/85	1,5	M10 x 105	12	2,5	4,5	8,5	23	0,40
620.5202	10-140	85/120	3,5	M14x1,5 x 130	17	3,5	5	10	31	0,90
620.5203	15-140	125/155	4,5	M14x1,5 x 200	17	3,5	5	10	31	1,10

**Universal 2 arm puller set with narrow legs**

- Legs are adjustable in the working depth
- Ideal for confined spaces
- Independent pressure of the hooks
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t mm	mm	dim mm	D mm	E mm	F mm	G mm	H mm
620.5301	6-100	70/85	1	M10 x 105	12	2,5	4,5	8,5	11	0,40
620.5302	15-140	125/155	2	M14x1,5 x 200	17	3,5	5	11	12	1,00

**Universal bearing ring puller 2 arm with clamping yoke**

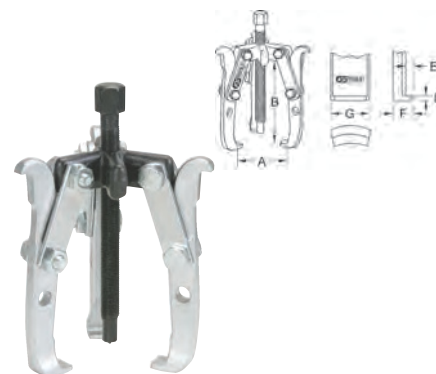
- Clamp compresses hooks firm y
- Prevents slippage
- Pressure peak centers itself optimally in the cone of the hub boring
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t mm	mm	dim mm	D mm	E mm	F mm	G mm	H mm
700.1260	90	100	1,2	M16 x 150	17	6,5	8,5	22,5	27,1	1,76

**Universal puller 2 and 3 arm**

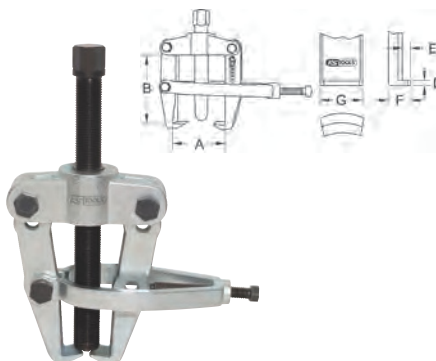
- Hooks for double sided applications
- Reception star for 2 or 3 hooks
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t mm	mm	dim mm	D mm	E mm	F mm	G mm	H mm
700.1120	70	75	1,2	3/8"x24Gg x 120	13	3,2	8,4	20	8,4	0,96
700.1130	120	150	1,2	M14x1,25 x 175	16	7,2	7	17,8	7,0	1,83

**Universal 2 arm puller set with clamping yoke**

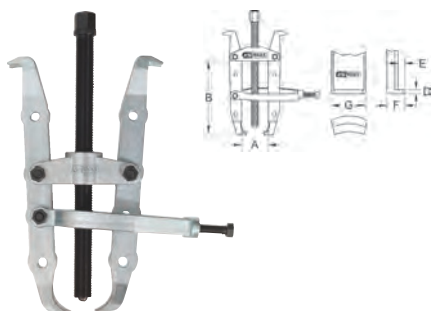
- Clamping yoke compresses the legs firm y
- Prevents slipping
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t mm	mm	dim mm	D mm	E mm	F mm	G mm	H mm
620.5401	80	90	5	M18 x 1,5 x 130	19	3	12	26	24	1,70
620.5402	100	110	6	G1/2"x14g x 210	22	3	14	25	24	2,60
620.5403	150	150	8	G1/2"x14g x 210	22	3	14	25	24	3,40

**Universal 2 arm puller set with clamping yoke**

- Legs are adjustable in the working depth
- Double ended puller legs
- Clamping yoke compresses the legs firm y
- Prevents slipping
- Ideally suited for flushing bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t mm	mm	dim mm	D mm	E mm	F mm	G mm	H mm
620.5501	110	170	5	M18x1,5 x 240	19	3	12	25	24	2,30
620.5502	150	270	6	G1/2"x14g x 270	22	3	14	25	24	4,10
620.5503	150	330	8	G1/2"x14g x 270	22	3	14	25	24	4,50

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**Basic universal 2 arm puller**

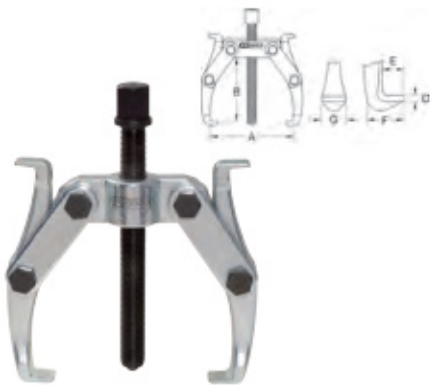
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B max mm	key mm	D mm	E mm	F mm	G mm	kg
620.4301	10-100	80	2.5	M12x1.25 x 162	14	4	12 26 13	0.68
620.4302	10-120	120	3	M14x1.5 x 193	17	5	14 30 16	1.14
620.4303	20-160	160	3.5	M18x1.5 x 243	19	6	18 36 20	2.00
620.4304	20-200	200	4	M22x2 x 293	24	7	22 40 24	3.50

**Universal 2 arm puller**

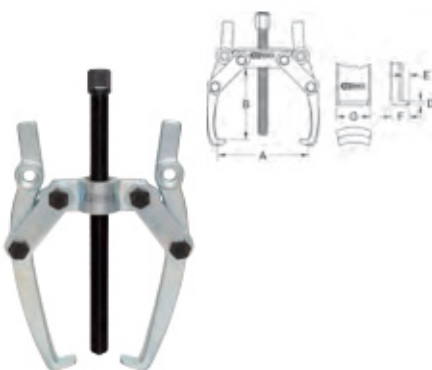
- Double ended legs
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B max mm	key mm	D mm	E mm	F mm	G mm	kg
620.3001	20-150	85	3.5	M14x1.5 x 130	17	2	9 21 12	0.90
620.3002	40-220	130	4	M18x1.5 x 240	19	4	11 25 21	2.20

**Universal 2 arm puller**

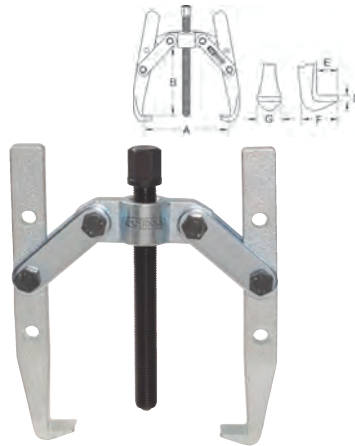
- Legs are adjustable in the working depth
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B max mm	key mm	D mm	E mm	F mm	G mm	kg
620.3401	20-170	130	3.5	M14x1.5 x 130	17	2	11 23 16	1.00
620.3402	20-230	200	4	M18x1.5 x 240	19	4.5	16 33 20	2.30

**Universal 2 arm puller**

- Legs are adjustable in the working depth
- Through reversing the arms internal and external applications are possible
- Hydraulic spindles available for thread G1/2"
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B max mm	key mm	D mm	E mm	F mm	G mm	kg
620.3601	18-100	85	2.5	M10 x 105	12	2	10 20 14	0.40
620.3602	20-200	150	3.5	M14x1.5 x 130	17	3	14 25 18	1.20
620.3603	35-250	220	4	M18x1.5 x 240	19	4	20 35 25	2.80
620.3604	50-300	250	6	G1/2"x14g x 270	22	5	25 48 30	5.40
620.3605	50-350	350	6	G1/2"x14g x 270	22	5	25 48 30	6.10
620.3606	50-400	400	6	G1/2"x14g x 270	22	5	25 48 30	6.40
620.3607	50-450	450	6	G1/2"x14g x 270	22	5	25 48 30	6.90
620.3608	50-500	500	6	G1/2"x14g x 270	22	5	25 48 30	7.00
620.3609	50-500	650	6	G1/2"x14g x 270	22	5	25 48 30	8.40
620.3610	50-500	1000	6	G1/2"x14g x 270	22	5	25 48 30	11.00

**Hydraulic universal 2 arm puller**

- Legs are adjustable in the working depth
- Different leg variants available
- Includes hydraulic thrust spindle
- Excellent power transfer
- Special steel



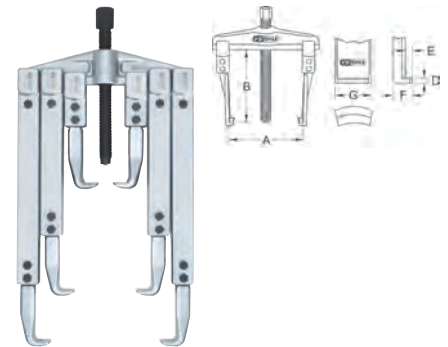
	A mm	B max mm	Hydraulic spindle	D mm	E mm	F mm	G mm	kg
620.3801	50-300	175	12 615.0002	13/32	5	25	48 30	5.70
620.3802	50-350	275	12 615.0002	13/32	5	25	48 30	6.40
620.3803	50-400	325	12 615.0002	13/32	5	25	48 30	6.70
620.3804	50-450	375	12 615.0002	13/32	5	25	48 30	7.20
620.3805	50-500	425	12 615.0002	13/32	5	25	48 30	7.30
620.3806	50-500	575	12 615.0002	13/32	5	25	48 30	8.70

**UNIVERSAL 2 ARM PULLER SET**

**Universal puller set**

- Through reconnecting the hooks internal and external applications are suitable
- Two armed traverse for 2 or 3 hooks
- Different hook variants and hydraulic spindles can be retrofitted
- Extremely robust spindle with inductively hardened thread
- Special steel

**Application range:** Gear wheels, bearings, pinions, synchroniser hubs, etc.



	A mm	B mm	max N-m	key mm	D mm	kg
700.1320	8 pcs	120	260	4,5	80	M14x1.5x150 17 3,54

consists of:

		kg
700.1311	Spindle, M14x1,5	180
700.1312	Two armed traverse	485
700.1321	Draw-off arm, 120mm	260
700.1322	Draw-off arm, 230mm	540
700.1323	Draw-off arm, 280mm	640

**Universal 2 arm puller set with display stand**

- Through reversing the arms internal and external applications are possible
- Wide range of arms and hydraulic spindles available
- Extremely robust spindle with inductively hardened thread
- Special steel
- Supplied inclusive of substantial steel bench display



		kg
620.0250	5 pcs Universal 2 arm puller set with display stand	17.80

consists of:

		kg
620.0101	Universal 2 leg puller, 20-90mm, legs 100 mm	1.00
620.0102	Universal 2 leg puller, 25-130mm, legs 100 mm	1.20
620.0103	Universal 2 leg puller, 50-160mm, legs 150 mm	3.00
620.0104	Universal 2 leg puller, 60-200mm, legs 150 mm	3.30
620.0105	Universal 2 leg puller, 80-250mm, legs 200 mm	7.40

**Universal 2 arm puller set with display stand**

- Quick release function
- Through reversing the arms internal and external applications are possible
- Wide range of arms and hydraulic spindles available
- Extremely robust spindle with inductively hardened thread
- Special steel
- Supplied inclusive of substantial steel bench display



620.1850	5 pcs	Universal 2 arm puller set with display stand	17,80
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**consists of:**

620.1701	Quick release universal 2 arm puller, 20-90mm	1,00
620.1702	Quick release universal 2 arm puller, 25-130mm	1,20
620.1703	Quick release universal 2 arm puller, 50-160mm	3,00
620.1704	Quick release universal 2 arm puller, 60-200mm	3,30
620.1705	Quick release universal 2 arm puller, 80-250mm	7,40

**Universal puller set**

- Hooks for double sided applications
- Reception star for 2 or 3 hooks
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



700.1100	3 pcs	Universal puller set	4,39
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**consists of:**

700.1120	Mechanical 2 and 3 leg puller, 4"	0,96
700.1130	Mechanical 2 and 3 leg puller, 6"	1,83
700.1140	Bearing splitter, for max. Ø 50 mm	1,15

**Quick adjustment universal puller set**

- With quick release function
- Ideal for confined spaces
- Through reconnecting the hooks internal and external applications are suitable
- Different hook variants and hydraulic spindles can be retrofitted
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



625.1701	7 pcs	A mm	B mm	mm	max t	kg
		20 - 90	100	M14 x 1,5	5,5	2,30

**consists of:**

620.1701	Quick release universal 2 arm puller, 20-90mm	1,00
630.1701	Quick release 3 arm puller, 20-90mm	1,30
980.1090	Special thread grease, tube	0,01

**Quick adjustment universal puller set**

- With quick release function
- Ideal for confined spaces
- Through reconnecting the hooks internal and external applications are suitable
- Different hook variants and hydraulic spindles can be retrofitted
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



625.1703	7 pcs	A mm	B mm	mm	max t	kg
		50 - 160	150	G1/2"x14Gg	5,5	6,50

**consists of:**

620.1703	Quick release universal 2 arm puller, 50-160mm	3,00
630.1703	Quick release 3 arm puller, 50-160mm	3,50
980.1090	Special thread grease, tube	0,01

**Hydraulic universal puller set 2 arm and 3 arm**

- Less risk of slippage due to automatically closing pulling arm
- 8 length positions possible
- Extremely robust spindle with inductively hardened thread
- Requires light expenditure of energy
- Special steel
- In durable plastic storage case



700.1200	22 pcs	Hydraulic universal puller set 2 arm and 3 arm	16,40
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**consists of:**

700.1202	Puller legs, ground pulling lugs, 4"	410
700.1203	Puller legs, ground pulling lugs, 6"	600
700.1204	Puller legs, ground pulling lugs, 8"	840
700.1205	Yoke f.2 legs, quickly modifie	300
700.1206	Yoke f.3 legs, quickly modifie	760
700.1207	Thrust bolt extension, 20 mm	50
700.1208	Thrust bolt extension, 35 mm	130
700.1209	Thrust bolt extension, 85 mm	320
700.1210	Pulling ring f.hydraulic thrust bolt	322
700.1220	Separator/puller tool, for max. Ø 105 mm	2540
700.1221	Yoke f.bearing separator tool	1480
700.1222	Spigot f.bearing separator tool, 235mm	1060
700.1223	Extension f.bearing separator tool, 185mm	1110
700.1400-1	Hydraulic spindle 10 t	1344

**Universal puller set**

- Slim hooks
- Ideal for confined spaces
- Uniform load distribution and centered tightening
- Through reconnecting the hooks internal and external applications are suitable
- Different hook variants and hydraulic spindles can be retrofitted
- Extremely robust spindle with inductively hardened thread
- Requires light expenditure of energy
- Special steel



700.1300	12 pcs	Universal puller set	6,69
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**consists of:**

700.1311	Spindle, M14x1,5	180
700.1312	Two armed traverse	485
700.1313	Three armed traverse	675
700.1314	Puller arm, 100mm	250
700.1315	Puller arm, 210mm	530
700.1316	Puller arm, 260mm	640



## UNIVERSAL 3 ARM PULLER

### Universal 3 arm puller

- Uniform load distribution and self centered
- Through reversing the arms internal and external applications are possible
- Hydraulic spindles available for thread G1/2"
- Excellent power transfer
- Special steel



	A mm	B mm	max l	Hydraulic spindle	dm mm	D mm	E mm	F mm	G mm	Wt kg
630.0101	20-90	100	5.5	M14x1,5 x 130	17	3	13	25	20	1.30
630.0102	25-130	100	5.5	M14x1,5 x 130	17	3	13	25	20	1.50
630.0103	50-160	150	7	G1/2"x14 x 210	22	4	16	35	25	3.50
630.0104	50-200	150	7	G1/2"x14 x 210	22	4	16	35	25	4.00

### Quick release 3 arm puller

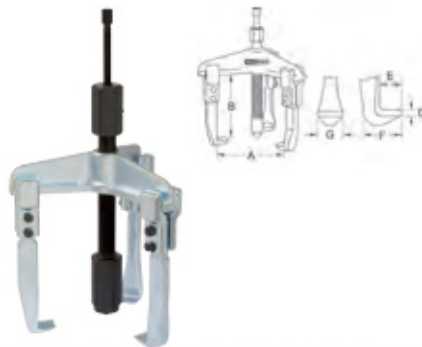
- Quick release
- Best suited for limited access areas
- Uniform load distribution and self centered
- Through reversing the arms internal and external applications are possible
- Hydraulic spindles available for thread G1/2"
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max l	dm mm	D mm	E mm	F mm	G mm	Wt kg	
630.1701	20-90	100	5.5	M14x1,5 x 130	17	3	13	25	20	1.30
630.1702	25-130	100	5.5	M14x1,5 x 130	17	3	13	25	20	1.50
630.1703	50-160	150	7	G1/2"x14 x 210	22	4	16	35	25	3.50
630.1704	60-200	150	7	G1/2"x14 x 210	22	4	16	35	25	4.00

## Hydraulic universal 3 arm puller

- Uniform load distribution and self centered
- Through reversing the arms internal and external applications are possible
- Different leg variants available
- Includes hydraulic thrust spindle
- Excellent power transfer
- Special steel



	A mm	B mm	max l	Hydraulic spindle	dm mm	D mm	E mm	F mm	G mm	Wt kg
630.0301	50-160	145	12	G1/2"x14 x 210	13/32	4	16	35	25	4.00
630.0302	60-200	145	12	G1/2"x14 x 210	13/32	4	16	35	25	4.40

## Hydraulic quick release universal 3 arm puller

- Quick release function
- Uniform load distribution and self centered
- Through reversing the arms internal and external applications are possible
- Different leg variants available
- Includes hydraulic thrust spindle
- Excellent power transfer
- Special steel



	A mm	B mm	max l	Hydraulic spindle	dm mm	D mm	E mm	F mm	G mm	Wt kg
630.1901	50-100	145	12	G1/2"x14 x 210	13/32	4	16	35	25	4.00
630.1902	50-200	145	12	G1/2"x14 x 210	13/32	4	16	35	25	4.40

## Universal 2 + 3 arm puller

- Hooks for double sided applications
- Reception star for 2 or 3 hooks
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max l	dm mm	D mm	E mm	F mm	G mm	Wt kg	
640.4203	60	65	2.0	G3/8"x1,06px110	13	3	10	18	11	0.44
640.4204	90	100	5.0	G9/16"x2,0px130	17	4	15.5	29	17	1.40
640.4205	165	170	7.0	G3/4"x2,0px295	22	4	15.5	29	17	2.88

## Universal 3 arm puller set with narrow legs

- Best suited for limited access areas
- Uniform load distribution and self centered
- Through reversing the arms internal and external applications are possible
- Hydraulic spindles available for thread G1/2"
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max l	dm mm	D mm	E mm	F mm	G mm	Wt kg	
630.0901	20-90	100	5	M14x1,5 x 130	17	3,6	6	13	27	1.30
630.0902	25-130	100	5	M14x1,5 x 130	17	3,6	6	13	27	1.50
630.0903	50-160	150	6,5	G1/2"x14 x 210	22	5	8	17	40	3.50
630.0904	60-200	150	6,5	G1/2"x14 x 210	22	5	8	17	40	4.00

## Quick release 3 arm puller set with narrow legs

- Quick release
- Best suited for limited access areas
- Uniform load distribution and self centered
- Through reversing the arms internal and external applications are possible
- Hydraulic spindles available for thread G1/2"
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max l	dm mm	D mm	E mm	F mm	G mm	Wt kg	
630.1101	20-90	100	5	M14x1,5 x 130	17	3,6	6	13	27	1.30
630.1102	25-130	100	5	M14x1,5 x 130	17	3,6	6	13	27	1.50
630.1103	50-160	150	6,5	G1/2"x14 x 210	22	5	8	17	40	3.50
630.1104	60-200	150	6,5	G1/2"x14 x 210	22	5	8	17	40	4.00

**Pole clamp 3 arm puller**

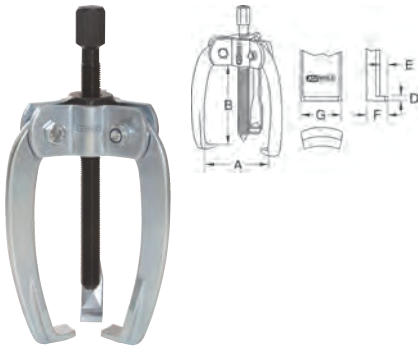
- Uniform load distribution and self centered
- Ideally suited for extracting small parts
- Automatic pressure on the legs
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t	mm	D mm	E mm	F mm	G mm	kg	
630.3101	10-60	40	1,2	M8 x 85	10	1	5	12	8	0.20
630.3102	10-70	44/74	1,3	M8 x 85	10	1	5	12	8	0.30
630.3103	10-90	84	2,5	M10 x 105	12	1,8	10	20	12	0.50

**Basic universal 3 arm puller**

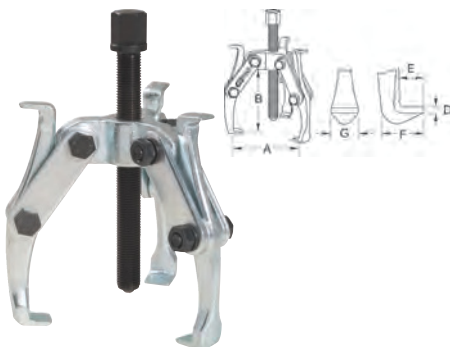
- Uniform load distribution and self centered
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t	mm	D mm	E mm	F mm	G mm	kg	
630.4301	10-100	80	2,5	M12x1,25 x 162	14	4	12	26	13	0.91
630.4302	10-120	120	3	M14x1,5 x 193	17	5	14	30	16	1.49
630.4303	20-160	160	3,5	M18x1,5 x 243	19	6	18	36	20	2.50
630.4304	20-200	200	4	M22x2 x 293	24	7	22	40	24	4.20

**Universal 3 arm puller**

- Double ended legs
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t	mm	D mm	E mm	F mm	G mm	kg	
630.3001	20-150	85	4	M14x1,5 x 130	17	2	9	21	12	1.20
630.3002	40-220	130	4,5	M18x1,5 x 240	19	4	11	25	21	2.90

**Universal 3 arm puller**

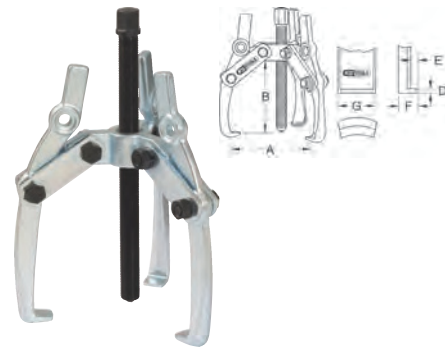
- Locking handle
- Uniform load distribution and self centered
- Ideally suited for extracting small parts
- Automatic pressure on the legs
- Extremely robust spindle with inductively hardened thread
- Special steel



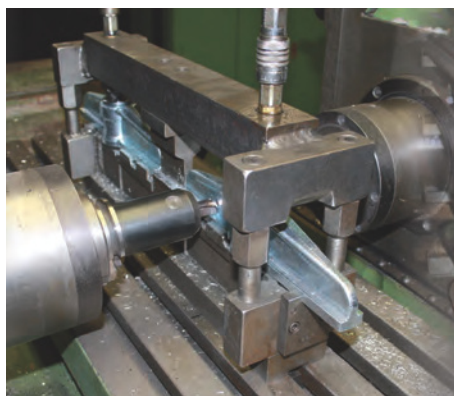
	A mm	B mm	max t	mm	D mm	E mm	F mm	G mm	kg	
630.4101	10-60	45	2,5	M10x1 x 90	12	2	9	18	10	0.30
630.4102	10-70	65	3	M10x1 x 110	12	2	9	18	10	0.30
630.4103	10-100	80	3,5	M12x1,25 x 140	14	2,3	12	25	13	0.80

**Universal 3 arm puller**

- Legs are adjustable in the working depth
- Uniform load distribution and self centered
- Extremely robust spindle with inductively hardened thread
- Special steel

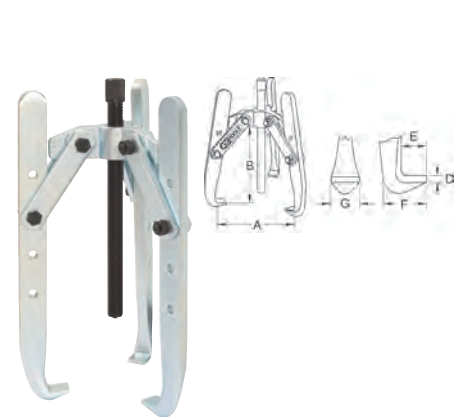


	A mm	B mm	max t	mm	D mm	E mm	F mm	G mm	kg	
630.3401	20-170	130	4	M14x1,5 x 130	17	2	11	23	16	1.30
630.3402	20-230	200	4,5	M18x1,5 x 240	19	4,5	16	33	20	3.10



**Universal 3 arm puller**

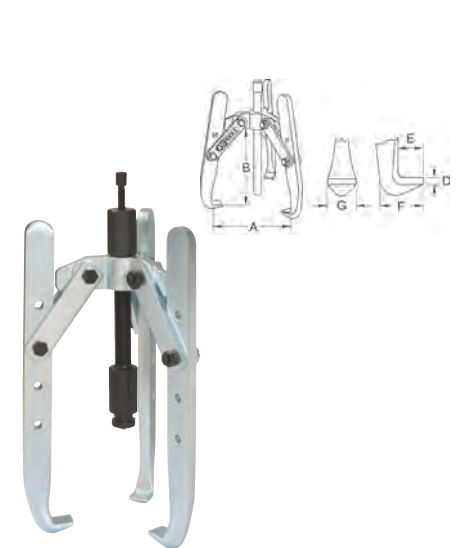
- Legs are adjustable in the working depth
- Uniform load distribution and self centered
- Hydraulic spindles available for thread G1/2"
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t	mm	D mm	E mm	F mm	G mm	kg	
630.3601	18-100	85	3	M10 x 105	12	2	10	20	14	0.50
630.3602	20-200	150	4	M14x1,5 x 130	17	3	14	25	18	1.70
630.3603	35-250	220	4,5	M18x1,5 x 240	19	4	20	36	25	3.90
630.3604	50-300	250	12	G1/2"x14g x 270	22	5	25	48	30	7.30
630.3605	50-350	350	12	G1/2"x14g x 270	22	5	25	48	30	8.30
630.3606	50-400	400	12	G1/2"x14g x 270	22	5	25	48	30	8.80
630.3607	50-450	450	12	G1/2"x14g x 270	22	5	25	48	30	9.40
630.3608	50-500	500	12	G1/2"x14g x 270	22	5	25	48	30	10.00
630.3609	50-500	650	12	G1/2"x14g x 270	22	5	25	48	30	11.60
630.3610	50-500	1000	12	G1/2"x14g x 270	22	5	25	48	30	16.00

**Hydraulic universal 3 arm puller**

- Legs are adjustable in the working depth
- Uniform load distribution and self centered
- Different leg variants available
- Includes hydraulic thrust spindle
- Excellent power transfer
- Special steel



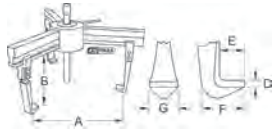
	A mm	B mm	max t	mm	D mm	E mm	F mm	G mm	kg	
630.3801	50-300	250	12	M14x1,5 x 100	17	5	25	48	30	12.50
630.3802	50-350	350	12	M14x1,5 x 100	17	5	25	48	30	13.50
630.3803	50-400	400	12	M14x1,5 x 100	17	5	25	48	30	14.00
630.3804	50-450	450	12	M14x1,5 x 100	17	5	25	48	30	14.50
630.3805	50-500	500	12	M14x1,5 x 100	17	5	25	48	30	15.00
630.3806	50-500	650	12	M14x1,5 x 100	17	5	25	48	30	16.60
630.3807	50-500	1000	12	M14x1,5 x 100	17	5	25	48	30	21.50

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### Universal 3 arm puller

- Uniform load distribution and self centered
- Through reversing the arms internal and external applications are possible
- Draw off arms radial revolving
- Wide range of arms and hydraulic spindles available
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B max mm	mm t	mm G	D mm	E mm	F mm	G mm	kg	
630.2301	150-700	200	15	G1"x11g x 370	36	10	33	55	50	42.50



### UNIVERSAL 3 ARM PULLER SET

#### Universal puller set

- Hooks for double sided applications
- Reception star for 2 or 3 hooks
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



	kg
700.1100 3 pcs Universal puller set	4.39

#### consists of:

	kg
700.1120 Mechanical 2 and 3 leg puller, 4"	0.96
700.1130 Mechanical 2 and 3 leg puller, 6"	1.83
700.1140 Bearing splitter, for max. Ø 50 mm	1.15

### Quick adjustment universal puller set

- With quick release function
- Ideal for confined spaces
- Through reconnecting the hooks internal and external applications are suitable
- Different hook variants and hydraulic spindles can be retrofitted
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



	A mm	B mm	mm max t	kg	
625.1701 7 pcs	20 - 90	100	M14 x 1,5	5,5	2,30

#### consists of:

	kg
620.1701 Quick release universal 2 arm puller, 20-90mm	1,00
630.1701 Quick release 3 arm puller, 20-90mm	1,30
980.1090 Special thread grease, tube	0,01

### Quick adjustment universal puller set

- With quick release function
- Ideal for confined spaces
- Through reconnecting the hooks internal and external applications are suitable
- Different hook variants and hydraulic spindles can be retrofitted
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



	A mm	B mm	mm max t	kg	
625.1703 7 pcs	50 - 160	150	G1/2"x14G	5,5	6,50

#### consists of:

	kg
620.1703 Quick release universal 2 arm puller, 50-160mm	3,00
630.1703 Quick release 3 arm puller, 50-160mm	3,50
980.1090 Special thread grease, tube	0,01

### Hydraulic universal puller set 2 arm and 3 arm

- Less risk of slippage due to automatically closing pulling arm
- 8 length positions possible
- Extremely robust spindle with inductively hardened thread
- Requires light expenditure of energy
- Special steel
- In durable plastic storage case



	kg
700.1200 22 pcs Hydraulic universal puller set 2 arm and 3 arm	16,40

#### consists of:

	kg
700.1202 Puller legs, ground pulling lugs, 4"	410
700.1203 Puller legs, ground pulling lugs, 6"	600
700.1204 Puller legs, ground pulling lugs, 8"	840
700.1205 Yoke f.2 legs, quickly modifie	300
700.1206 Yoke f.3 legs, quickly modifie	760
700.1207 Thrust bolt extension, 20 mm	50
700.1208 Thrust bolt extension, 35 mm	130
700.1209 Thrust bolt extension, 85 mm	320
700.1210 Pulling ring f.hydraulic thrust bolt	322
700.1220 Separator/puller tool,for max. Ø 105 mm	2540
700.1221 Yoke f.bearing separator tool	1480
700.1222 Spigot f.bearing separator tool, 235mm	1060
700.1223 Extension f.bearing separator tool,185mm	1110
700.1400-1 Hydraulic spindle 10 t	1344

### Universal puller set

- Slim hooks
- Ideal for confined spaces
- Uniform load distribution and centered tightening
- Through reconnecting the hooks internal and external applications are suitable
- Different hook variants and hydraulic spindles can be retrofitted
- Extremely robust spindle with inductively hardened thread
- Requires light expenditure of energy
- Special steel



	kg
700.1300 12 pcs Universal puller set	6.69

#### consists of:

	kg
700.1311 Spindle, M14x1,5	180
700.1312 Two armed traverse	485
700.1313 Three armed traverse	675
700.1314 Puller arm, 100mm	250
700.1315 Puller arm, 210mm	530
700.1316 Puller arm, 260mm	640

SEPARATOR PULLER TOOL

Separator puller tool

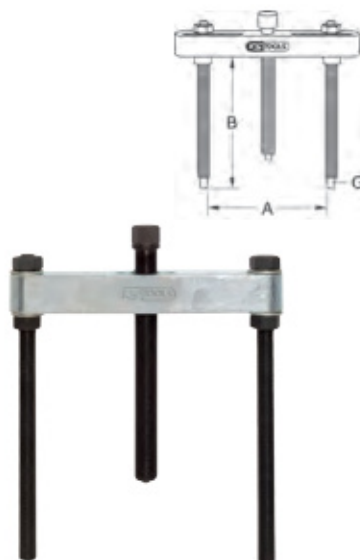
- To be used with separately available separator device
- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	G mm	mm	mm	kg
605.0501	5-60	M12	M10 x 120	17	0.40
605.0502	12-75	M12	M12 x 140	19	0.70
605.0503	22-115	M16	M16x1,5 x 180	24	1.90
605.0504	25-155	M20x1,5	M20x1,5 x 250	30	4.20
605.0505	30-220	M20x1,5	M24x1,5 x 410	36	12.00
605.0506	40-280	M24x1,5	M28x1,5 x 410	41	15.80

Yoke for bearing separator tool

- For use with the separator
- The train bolts are screwed into the threads of the separator
- Extremely robust spindle with inductively hardened thread
- Hydraulic thrust spindle available
- Special steel



	A mm	B mm	G mm	max t mm	mm	mm	kg
605.0111	40-115	150	M12	2	M14x1,5 x 130	17	0.80
605.0112	45-140	150	M12	2,5	M14x1,5 x 130	17	1.10
605.0113	55-205	210	M16	4	G1/2"x14g x 210	22	2.70
605.0114	90-260	315	M20x1,5	5	G1/2"x14g x 210	22	5.20
605.0115	100-360	305	M20x1,5	7	G3/4"x14g x 280	27	8.80
605.0116	140-435	320	M24x1,5	13	G1"x11g x 370	36	16.70

Hydraulic thrust bolt with yoke for bearing separator tool

- For use with the separator
- The train bolts are screwed into the threads of the separator
- Includes hydraulic thrust spindle
- Excellent power transfer
- Special steel



	A mm	B mm	G mm	max t mm	mm	Hydraulic spindle	mm	kg
605.0301	55-205	135	M16	12	M16 x 280	Ø15.002	13/32	3.20
605.0302	90-260	240	M20x1,5	12	M20x1,5 x 370	Ø15.002	13/32	5.70
605.0303	100-360	230	M20x1,5	12	M20x1,5 x 370	Ø15.003	13/36	9.10
605.0304	140-435	230	M24x1,5	15	M24x1,5 x 460	Ø15.004	17/41	17.60



SEPARATOR PULLER TOOL SET

Separator set inclusive with yoke ø 5,0 - 60,0 mm

- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



	kg	
605.0001	3 pcs Separator set inclusive with yoke ø 5,0 - 60,0 mm	1.90

consists of:

	kg	
605.0501	Bearing separator, 5-60mm	0.40
605.0111	Yoke for bearing separator tool, 40-115mm	0.80
605.0401	Extension for pull rod M12 x100mm	0.20

Separator set inclusive with yoke ø 12,0 - 75,0 mm

- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Special steel
- In durable plastic storage case



	kg	
605.0002	3 pcs Separator set inclusive with yoke ø 12,0 - 75,0 mm	2.40

consists of:

	kg	
605.0502	Bearing separator, 12-75mm	0.70
605.0112	Yoke for bearing separator tool, 45-140mm	1.10
605.0401	Extension for pull rod M12 x100mm	0.20

Separator set inclusive with yoke ø 22,0 - 115,0 mm

- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Hydraulic thrust spindle available
- Special steel
- In durable plastic storage case



	kg	
605.0003	3 pcs Separator set inclusive with yoke ø 22,0 - 115,0 mm	6.10

consists of:

	kg	
605.0503	Bearing separator, 22-115mm	1.90
605.0113	Yoke for bearing separator tool, 55-205mm	2.70
605.0401	Extension for pull rod M12 x100mm	0.20



**Separator set inclusive with yoke ø 25,0 - 155,0 mm**

- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Hydraulic thrust spindle available
- Special steel
- In durable plastic storage case



			kg
605.0004	3 pcs	Separator set inclusive with yoke ø 25,0 - 155,0 mm	11.48

consists of:

			kg
605.0504	Bearing separator, 25-155mm	4.20	
605.0114	Yoke for bearing separator tool, 90-260mm	5.20	
605.0401	Extension for pull rod M12 x100mm	0.20	

**Separator set inclusive with yoke ø 30,0 - 220,0 mm**

- For the removal of secure bearings and bushes
- Extremely robust spindle with inductively hardened thread
- Hydraulic thrust spindle available
- Special steel



			kg
605.0005	3 pcs	Separator set inclusive with yoke ø 30,0 - 220,0 mm	29.00

consists of:

			kg
605.0505	Bearing separator, 30-220mm	12.00	
605.0115	Yoke for bearing separator tool, 100-360mm	8.80	
605.0401	Extension for pull rod M12 x100mm	0.20	

**ACCESSORIES**

**Universal clamping yoke**

- For universal 2 arm puller
- Clamping yoke compresses the legs firm y
- Prevents slipping
- Special steel



		A mm	kg
615.5101		10-130	800

**Special thread grease for puller and pusher spindles and nuts subjected high loads**

- Lubricant for components subjected to high static loads, e.g. threaded spindles
- Prevents excessive wear and seizing
- Irregularities in the surface to be protected are completely filled
- Minimises the friction thanks to the closed surface
- Effective protection against corrosion
- Increases the service life of threaded spindles
- Ensures reliable function even at high temperatures up to max. 1200° C



		kg
980.1085	Special thread grease	22
980.1090	Special thread grease	5

**REPLACEMENT HOOK**

**Puller legs, forged ground steel**

- For 2 arm and 3 arm basic universal puller
- Special steel



		B mm	D mm	E mm	F mm	G mm	kg	
615.4101	For puller	620.4101-630.4101	45	2	9	18	10	40
615.4102		620.4102-630.4102	65	2	9	18	10	50
615.4103		620.4103-630.4103	80	2,3	12	25	13	100

**Puller legs, forged ground steel**

- For 2 arm and 3 arm basic universal puller
- Special steel



		B mm	D mm	E mm	F mm	G mm	kg	
615.4301	For puller	620.4301-630.4301	80	4	12	26	13	130
615.4302		620.4302-630.4302	120	5	14	30	16	210
615.4303		620.4303-630.4303	160	6	18	35	20	350
615.4304		620.4304-630.4304	200	7	22	40	24	600

**Puller legs**

- For 2 arm and 3 arm pullers
- Special steel



		B mm	max t	D mm	E mm	F mm	G mm	kg
615.0101		100	4,5	3	13	25	20	250
615.0102		150	6,5	4	16	35	25	650
615.0103		200	11,0	5	25	54	35	1650
615.0104		225	11,0	10	33	50	55	2150

**Puller legs, extra long design**

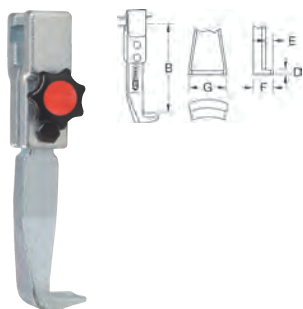
- For 2 arm and 3 arm pullers
- Special steel



		B mm	D mm	E mm	F mm	G mm	kg
615.0501		200	3	13	25	20	0.50
615.0502		300	4	16	35	25	1.10
615.0503		300	5	25	54	35	2.50
615.0504		400	5	25	54	35	3.20
615.0505		500	5	25	54	35	3.90
615.0506		300	10	33	55	50	3.00
615.0507		400	10	33	55	50	3.70
615.0508		500	10	33	55	50	4.40

**Quick adjustment puller legs**

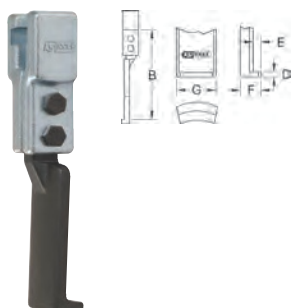
- Quick release function
- For 2 arm and 3 arm pullers
- Special steel



	B mm	D mm	E mm	F mm	G mm	Wt
615.1101	100	3	13	25	20	200
615.1102	150	4	16	35	25	700
615.1103	200	3	13	25	20	500

**Puller legs, narrow design**

- Best suited for limited access areas
- For 2 arm and 3 arm pullers
- Special steel



	B mm	D mm	E mm	F mm	G mm	Wt
615.0901	100	3,6	6	13	27	200
615.0902	200	3,6	6	13	27	500
615.0903	250	3,6	6	13	27	600
615.0904	100	2	6	13	27	200
615.0905	200	2	6	13	27	500
615.0906	250	2	6	13	27	1100
615.0907	150	5	8	17	40	600
615.0908	220	5	8	17	40	800
615.0909	300	5	8	17	40	1800

**Quick adjustment puller legs, narrow design**

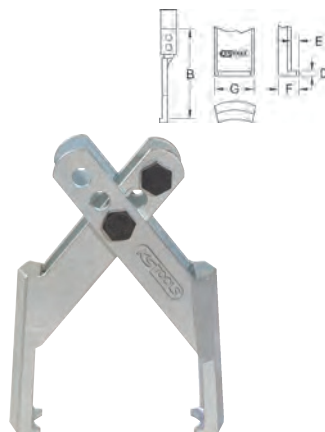
- Quick release function
- Best suited for limited access areas
- For 2 arm and 3 arm pullers
- Special steel



	B mm	D mm	E mm	F mm	G mm	Wt
615.1001	100	3,6	6	13	27	250
615.1002	200	3,6	6	13	27	500
615.1003	250	3,6	6	13	27	600
615.1004	100	2,0	6	13	27	250
615.1005	200	2,0	6	13	27	500
615.1006	250	2,0	6	13	27	600
615.1007	150	5,0	8	17	40	650
615.1008	220	5,0	8	17	40	900
615.1009	300	5,0	8	17	40	1100

**Pair of puller legs**

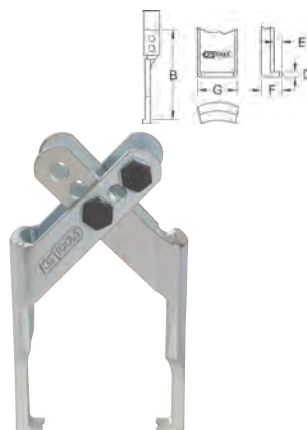
- Legs are adjustable in the working depth
- Special steel



For pullers		B mm	D mm	E mm	F mm	G mm	Wt
615.5201	620.5201	70-85	2,5	4,5	8,5	23	180
615.5202	620.5202	85-120	3,5	5	10	31	450
615.5203	620.5203	125-155	3,5	5	10	31	550

**Pair of puller legs, narrow design**

- Legs are adjustable in the working depth
- Best suited for limited access areas
- Special steel



For pullers		B mm	D mm	E mm	F mm	G mm	Wt
615.5301	620.5301	70-85	2,5	4,5	8,5	11	150
615.5302	620.5302	85-120	3,5	5	11	12	500

**Puller legs with clamping yoke**

- For puller legs with quick adjustment
- Clamping yoke compresses the legs firm y
- Prevents slipping
- Special steel



For pullers		B mm	D mm	E mm	F mm	G mm	Wt
615.5401	620.5401	90	3	12	26	24	260
615.5402	620.5402	110	3	14	25	24	320
615.5403	620.5403	150	3	14	25	24	420

**Puller legs with clamping yoke**

- For 2 arm pullers with quick adjustment
- Legs are adjustable in the working depth
- Legs double ended usable
- Clamping yoke compresses the legs firm y
- Extremely robust spindle with inductively hardened thread
- Special steel



For pullers		B mm	D mm	E mm	F mm	G mm	Wt
615.5501	620.5501	170	3	12	25	24	530
615.5502	620.5502	270	3	14	25	24	800
615.5503	620.5503	330	3	14	25	24	850

**Puller legs double ended usable**

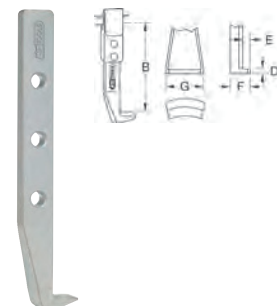
- Legs double ended usable
- Special steel



For pullers		B mm	D mm	E mm	F mm	G mm	Wt
615.3001	620.3001+630.3001	85	2	9	21	12	100
615.3002	620.3002+630.3002	130	4	11	25	21	320

**Puller legs**

- Legs are adjustable in the working depth
- Special steel



For pullers		B mm	D mm	E mm	F mm	G mm	Wt
615.3601	620.3601+630.3601	85	3	14	25	18	100
615.3602	620.3602+630.3602	150	4	20	36	25	260
615.3603	620.3603+630.3603	220	5	25	48	30	650
615.3604	620.3604+630.3604	250	5	25	48	30	1200
615.3605	620.3605+630.3605	350	5	25	48	30	1600
615.3606	620.3606+630.3606	400	5	25	48	30	1800
615.3607	620.3607+630.3607	450	5	25	48	30	2000
615.3608	620.3608+630.3608	500	5	25	48	30	2200
615.3609	620.3609+630.3609	650	5	25	48	30	2800
615.3610	620.3610+630.3610	1000	5	25	48	30	4200



**Puller legs**

- Legs are adjustable in the working depth
- Special steel



Part no.	B mm	D mm	E mm	F mm	G mm	Weight
615.3401	620.3401+630.3401	130	2	11	23	16 150
615.3402	620.3402+630.3402	200	4,5	16	33	20 400

**REPLACEMENT SPINDLE**

**Spindle**

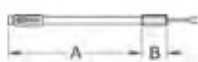
- Extremely robust spindle with inductively hardened thread
- Special steel



Part no.	dm mm	L mm	H mm	Ø mm	Weight
610.1401	12	150	15	10	M10 100
610.1402	14	190	20	12	M12 200
610.1701	17	60	21	14	M14 x 1,5 100
610.1702	17	130	21	14	M14 x 1,5 200
610.1703	17	200	21	14	M14 x 1,5 300
610.1704	17	250	21	14	M14 x 1,5 550
610.1705	17	60	20	16	M16 x 1,5 100
610.1706	17	70	20	16	M16 x 1,5 100
610.1707	17	90	20	16	M16 x 1,5 200
610.1901	19	70	20	18	M18 x 1,5 200
610.1902	19	130	20	18	M18 x 1,5 300
610.1903	19	170	20	18	M18 x 1,5 400
610.1904	19	240	20	18	M18 x 1,5 500
610.2201	22	110	23	21	G1/2"x14g 300
610.2202	22	160	23	21	G1/2"x14g 400
610.2203	22	175	23	21	G1/2"x14g 500
610.2204	22	210	23	21	G1/2"x14g 600
610.2205	22	235	23	21	G1/2"x14g 700
610.2206	22	270	23	21	G1/2"x14g 800
610.2701	27	180	35	26	G3/4"x14g 1000
610.2702	27	280	35	26	G3/4"x14g 1300
610.2703	27	360	35	26	G3/4"x14g 1700
610.3601	36	310	45	33	G1"x11g 2300
610.3602	36	360	45	33	G1"x11g 2650
610.3603	36	455	45	33	G1"x11g 3100
700.5612	21	113	27	16	M16 x 130 200

**Hydraulic compression spindle**

- With low effort maximal pressure
- Special steel



Part no.	L mm	H mm	max t mm	Ø body mm	Body rps	Pressure spindle rps	dm mm	Weight
615.0001	280	23	12	41	UN1.12x16	M1x85	17	1,60
615.0002	410	55	12	32	G1/2"x14	M10x90	13	1,10
615.0003	410	55	12	36	G3/4"x14	M10x90	13	1,60
615.0004	460	80	15	41	G1"x11	M11x5x108	17	3,50

**HYDRAULIC PULLERS AND PUMP**

**Universal 2 arm puller for using with hydraulic cylinder**

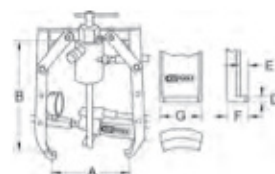
- Consists of traverse and legs
- Through reversing the arms internal and external applications are possible
- Without hydraulic compression spindle / without hydraulic cylinder
- Without hydraulic pump
- Special steel



Part no.	A mm	B mm	max t mm	D mm	E mm	F mm	G mm	Weight
640.0210	640	225	10	10	33	55	50	20,00
640.0215	640	225	15	10	33	55	50	20,00
640.0217	640	225	17	10	33	55	50	21,50

**Universal 2 arm puller for using with hydraulic cylinder**

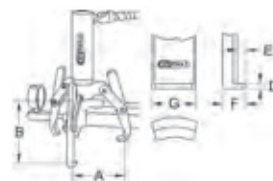
- Consists of traverse and legs
- Through reversing the arms internal and external applications are possible
- Without hydraulic compression spindle / without hydraulic cylinder
- Without hydraulic pump
- Special steel



Part no.	A mm	B mm	max t mm	D mm	E mm	F mm	G mm	Weight
640.0220	420	290	20	17	16	32	32	11,50
640.0230	700	400	30	24	23	48	40	20,00
640.0250	1000	700	50	35	42	87	50	50,00

**Universal 3 arm puller for using with hydraulic cylinder**

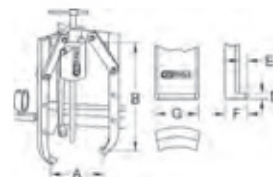
- Consists of traverse and legs
- Legs are adjustable in the working depth
- Traverse arm radial revolving and interchangeable
- Without hydraulic compression spindle / without hydraulic cylinder
- Without hydraulic pump
- Special steel



Part no.	A mm	B mm	max t mm	D mm	E mm	F mm	G mm	Weight
640.0310	350	250	UNC2 1/4" x 14	10	5	25	48	30 9,50
640.0315	350	250	M68 x 2	15	5	25	48	30 7,50
640.0317	350	250	G 1"x11g	17	5	25	48	30 8,50

**Universal 3 arm puller for using with hydraulic cylinder**

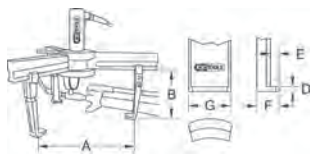
- Consists of traverse and legs
- Legs are adjustable in the working depth
- Traverse arm radial revolving and interchangeable
- Without hydraulic compression spindle / without hydraulic cylinder
- Without hydraulic pump
- Special steel



Part no.	A mm	B mm	max t mm	D mm	E mm	F mm	G mm	Weight
640.0320	420	290	20	17	16	32	32	17,00
640.0330	700	400	30	24	23	48	40	30,00
640.0350	1000	700	50	35	42	87	50	70,00

Universal 3 arm puller for using with hydraulic cylinder

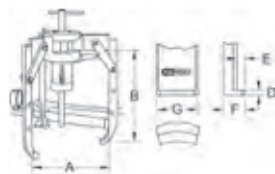
- Consists of traverse and legs
- Legs are adjustable in the working depth
- Traverse arm radial revolving and interchangeable
- Without hydraulic compression spindle / without hydraulic cylinder
- Without hydraulic pump
- Special steel



	A mm	B mm	mm	max t	D mm	E mm	F mm	G mm	kg
640.2315	150-700	200	M68x2	15	10	33	55	50	38.00
640.2317	150-700	200	G1"x11g	17	10	33	55	50	40.00

Universal 3 arm puller for using with hydraulic cylinder

- Consists of traverse and legs
- Legs are adjustable in the working depth
- Traverse arm radial revolving and interchangeable
- Uniform load distribution and centered tightening
- Without hydraulic compression spindle / without hydraulic cylinder
- Without hydraulic pump
- Special steel



	A mm	B mm	max t	D mm	E mm	F mm	G mm	kg
640.2420	500	270	20	17	16	32	32	27.00
640.2430	750	310	30	24	23	48	40	26.00
640.2450	1000	660	50	35	42	87	50	106.00

Spare traverse

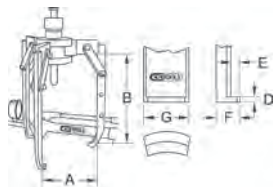
- For hydraulic 3 arm puller
- Special steel



	max t	For pullers	kg
645.0310	10	640.0310	4.00
645.0315	15	640.0315	3.50
645.0317	17	640.0317	4.50
645.0320	20	640.0320	7.00
645.0330	30	640.0330	11.50
645.0350	50	640.0350	20.00
645.2315	15	640.2315	10.00
645.2317	17	640.2317	12.50
645.2415	15	640.2415	10.00
645.2417	17	640.2417	12.50
645.2420	20	640.2420	15.00
645.2430	30	640.2430	27.00
645.2450	50	640.2450	27.00

Hydraulic universal 3 arm puller

- Consists of traverse and legs
- Legs are adjustable in the working depth
- Traverse arm radial revolving and interchangeable
- Uniform load distribution and centered tightening
- Without hydraulic compression spindle / without hydraulic cylinder
- Without hydraulic pump
- Special steel



	A mm	B mm	mm	max t	D mm	E mm	F mm	G mm	kg
640.2415	500	440	M68x2	15	17	16	32	32	22.00
640.2417	500	440	G1"x11g	17	17	16	32	32	24.00



Spare traverse

- For hydraulic 2 arm puller
- Special steel



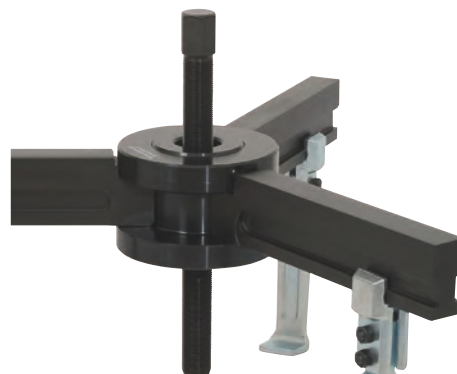
	max t	For pullers	kg
645.0210	10	640.0210	16.00
645.0215	15	640.0215	15.00
645.0217	17	640.0217	16.00
645.0220	20	640.0220	5.00
645.0230	30	640.0230	8.00
645.0250	50	640.0250	16.00

Traverse arm for hydraulic gear puller

- For hydraulic 3 arm puller
- Special steel



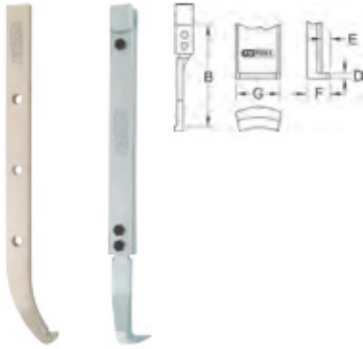
	For pullers	kg
645.2316	640.2315-17	7.00
645.2416	640.2415-17	4.00
645.2421	640.2420	4.00
645.2431	640.2430	5.00
645.2451	640.2450	10.00





**Puller legs**

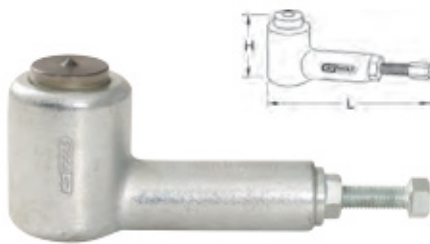
- For 2 arm and 3 arm hydraulic pullers
- Special steel



For puller		B mm	D mm	E mm	F mm	G mm	Wt kg
645.0251	640.0210-17 +640.2315-17	225	10	33	55	50	2.10
645.0252	640.0210-17 +640.2315-17	300	10	33	55	50	3.00
645.0253	640.0210-17 +640.2315-17	400	10	33	55	50	3.70
645.0254	640.0210-17 +640.2315-17	500	10	33	55	50	4.40
645.0261	640.0220	290	17	16	32	32	3.30
645.0262	640.0230	400	24	23	48	40	6.50
645.0263	640.0250	700	35	42	87	50	17.00
645.0351	640.0310-17	250	5	25	48	30	1.80
645.0352	640.0310-17	350	5	25	48	30	1.90
645.0353	640.0310-17	400	5	25	48	30	2.00
645.0354	640.0310-17	500	5	25	48	30	2.20
645.0361	640.0320	290	17	16	32	32	3.30
645.0362	640.0330	400	24	23	48	40	6.50
645.0363	640.0350	700	35	42	87	50	17.00
645.2461	640.2415-17	440	17	16	32	32	3.30
645.2462	640.2420	270	17	16	32	32	3.30
645.2463	640.2430	310	24	23	48	40	6.50
645.2464	640.2450	660	35	42	87	50	17.00

**Hydraulic press**

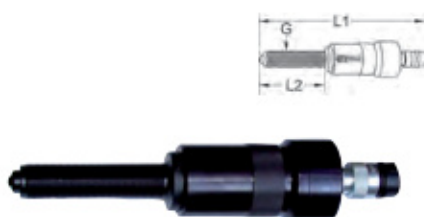
- For mechanical pullers
- Power increase with the normal pressure spindle
- Maximum pressure power with slight power expense
- Special steel



	L mm	H mm	max t	Hydraulic oil ml	mm	Wt kg
640.0160	150.0	75.0	8	8	M14x1.5 x 60	0.80
640.0165	180.0	90.0	15	12	M14x1.5 x 85	1.80

**Spindle hydraulic cylinder**

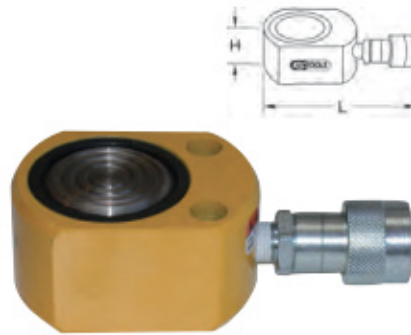
- Simply working with spring withdrawal
- Necessary minimal oil volume 120 cm<sup>3</sup> = 0,12 l
- Maximum pressure power with slight power expense
- Special steel



Connection thread mm	L1 mm	L2 mm	Stroke mm	G	max t	Wt kg	
640.0130	3/8" - 18 NPT	403	150.0	156	G1"x11g	17	4.50

**Flat hydraulic cylinder**

- Simple working with spring withdrawal
- Maximum pressure power with slight power expense
- Special steel



Connection thread mm	L mm	H mm	Stroke mm	Minimal oil volume cm <sup>3</sup>	max t	Wt kg	
640.0140	3/8" - 18 NPT	140	42	12	18/0,018	10	1.60
640.0150	3/8" - 18 NPT	170	51	11	32/0,032	20	2.80

**Single screw hydraulic cylinder**

- Simply working with spring withdrawal
- Interchangeable pressure piece
- Low effort maximal pressure
- Special steel

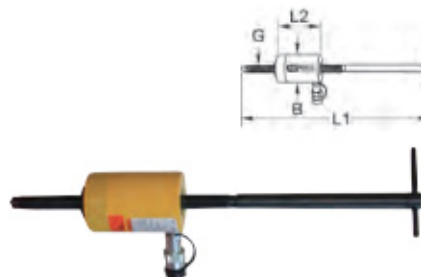


Connection thread mm	L mm	B mm	Stroke mm	G	max t	Wt kg	
640.0110	3/8" - 18 NPT	403	247	156	UNC2.14x14	10	4.00
640.0120	3/8" - 18 NPT	423	271	152	M68x2	15	7.00

**Hollow piston hydraulic cylinder with spindle**

- Simply working with spring withdrawal
- Nickel plated appliance pipe
- Maximum pressure power with slight power expense
- Special steel

Mounting thread at cylinder: 1.) 2 threaded hole with cylinder base (tube side) 2.) external thread: 20t=3-7/8"x12G30t=4-1/2"x12G50t=6-1/4"x12G



Connection thread mm	L1 mm	L2 mm	B mm	Stroke mm	G	max t	Wt kg	
640.0170	3/8" - 18 NPT	670	162.0	98	49	UNC1"-8	20	10.60
640.0180	3/8" - 18 NPT	790	178.0	114	64	UNC1.14x7	30	15.20
640.0190	3/8" - 18 NPT	975	247.0	159	76	UNC1.58x7.5	50	40.50

**Hydraulic hand pump**

- Single stage
- Reverse valve for advance and return stroke
- Safety valve for overload protection
- Includes pressure tube 1.8 meters
- Operating pressure max. 700 bar



Connection thread mm	L mm	B mm	H mm	Flow rate per 100 bar l/min	Wt kg	
640.0010	3/8" - 18 NPT	585	133	119	2.62	9.00



**Pneumatic hydraulic pump**

- Compressed air working
- For simply agent press cylinders
- Safety valve for overload protection
- Includes pressure tube 1.8 meters
- Operating pressure max. 700 bar
- Output per stroke:
  - 0.8 l/min up to 200 bar
  - 0.1 l/min up to 700 bar



Connection thread mm	L mm	B mm	H mm	Wt kg	
640.0020	3/8" - 18 NPT	255	130	200	11.00

**Electric hydraulic pump**

- Two stepped for simply agent press cylinders
- Safety valve for overload protection
- Usable tank volume 1900 cm<sup>3</sup> = 1,9l
- Includes pressure tube 1.8 meters
- Motor specification 0.37kW - 220/230 V - 50/60 hertz, single phase (3.2 amps)
- 1st Step: max. 13 bar
- 2nd. Step: max. 700 bar
- Output per stroke:
  - 1. Steps 3.31 l/min
  - 2. Step: 0.32 l/min



	Connection thread mm	L mm	B mm	H mm	kg
640.0030	3/8" - 18 NPT	244	244	362	14.00

**Hydraulic tension and pressure unit**

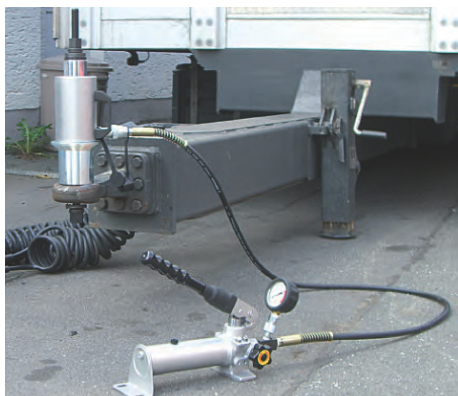
- For the dismantling and assembly of silent support, steering pin, track rod ends, wheel bearings, etc.
- Extremely high and uniform power construction
- Industrial execution with forged piston
- Suitable for both pressure and train uses
- Ideally suited for commercial vehicles
- Special steel
- In durable plastic storage case



		kg
700.1790	4 pcs Hydraulic tension and pressure unit	15.40

consists of:

		kg
700.1791	Hydraulic hollow piston cylinder, 20 t	7.30
700.1792	Hydraulic hand pump, 700 bar	5.50
700.1793	Hydraulic hose, 2 m	1.10
700.1796	Feed shaft for hydraulic M20 x 500 mm	1.50



**Hydraulic hollow piston spindle**

- Simply working with spring withdrawal
- Nickel plated centre tube
- With low effort maximal pressure
- Special steel



**Technical data:**  
 Capacity: 20 t  
 Connection thread: 3/8" NPT IG  
 Piston: industrial forged execution

	L mm	H mm	D1 mm	D2 mm	D3 mm	kg
700.1791	164.0	52.0	100.0	26.0	55.0	7.30

**Hydraulic hand pump**

- For the dismantling and assembly of silent support, steering pin, track rod ends, wheel bearings, etc.
- Extremely high and uniform power construction
- Suitable for both pressure and train uses
- Ideally suited for commercial vehicles
- Supplied without without manometer and hydraulic tube
- Special steel



**Technical data:**  
 Connection thread: 3/8" NPT IG  
 Hand pump: 700 bar high pressure pump  
 Dimensions: 410 x 150 x 135

		kg
700.1792	Hydraulic hand pump	5.50

**Hydraulics tube, 2 m including connection**

- Ideally suited for commercial vehicles



**Technical data:**  
 Connection thread: 3/8" NPT AG x 3/8" NPT AG  
 Length: 2000 mm

		kg
700.1793	Hydraulics tube, 2 m including connection	1.10

**Feed shaft for hydraulic**

- Including nuts and spherical washer



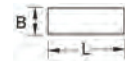
**Technical data:**  
 Flat collar nut: SW 30  
 Spherical washer: Ø 36 mm  
 U-Washer: Ø 51 x 7.5 mm, with central cone

	L mm	Thread	kg
700.1796	500,0	M 20 x 2,5	1,50

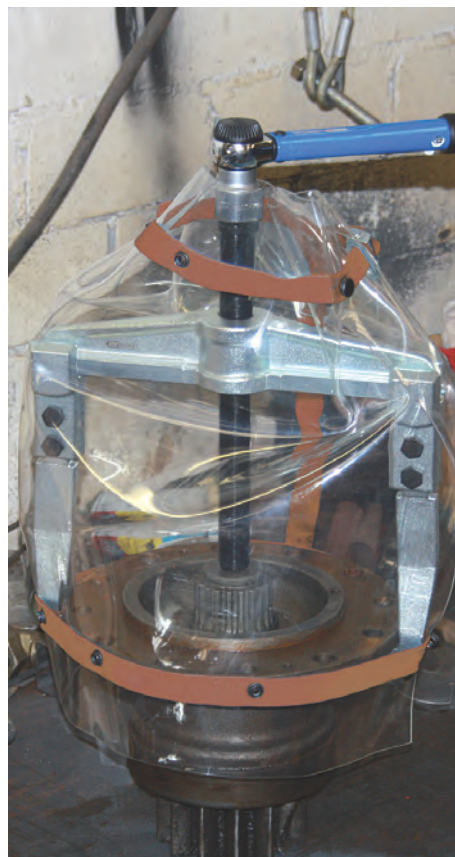
**SAFETY COVERING FOIL**

**Safety covering foil**

- Two ply welded
- High tearing resistance
- Variable adjustment
- UV resistant
- Temperature range of -25°C to +50°C



	B mm	L mm	max t	kg
610.0100	510.0	915.0	18	3.90

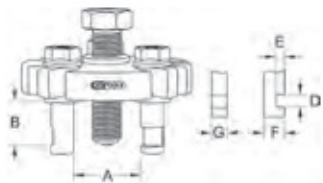




**UNIVERSAL BELT PULLER**

**Universal belt pulley puller 3 arm**

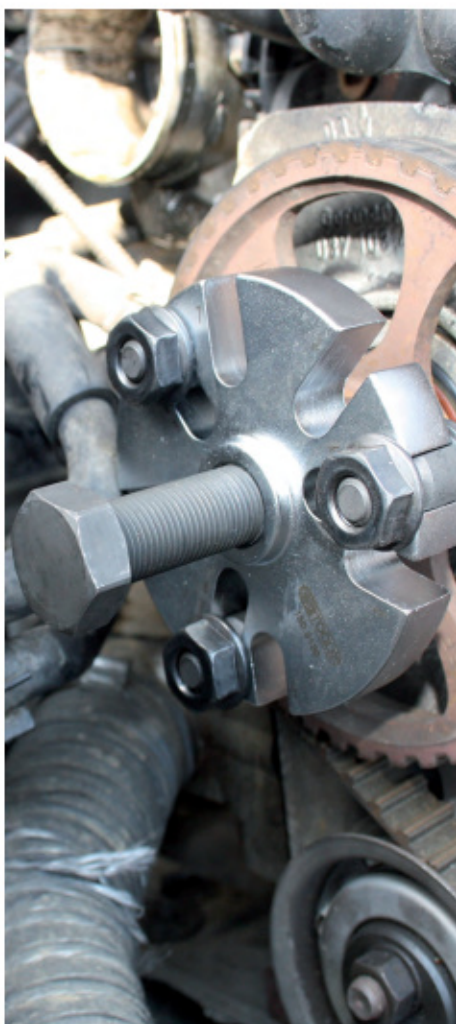
- For the damage free drawing off of pulley belts
- Universal suitable for several diameters and different hole divisions
- Less space requirement through compact method of building
- Suited for working on and finishing engine
- Special steel



	A mm	B mm	key mm	dim mm	D mm	E mm	F mm	G mm	kg
150.3130	90	30	M16x1.5 x 7.5	24	10	6	11	12	0.90

**accessories:**

		kg
150.3133	Spare traverse for 150.3130	300



**Universal belt pulley puller 2 arm**

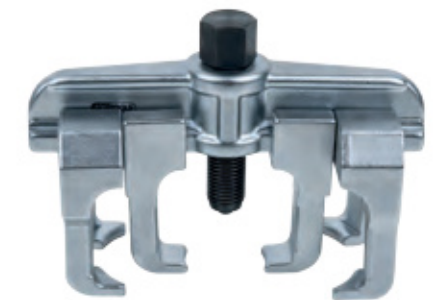
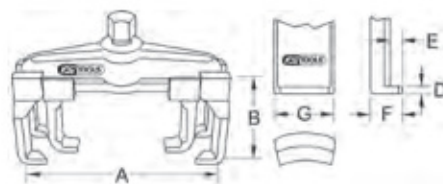
- For grooved belt pulleys
- Draw-off arms with locking device
- Clamp compresses hooks firmly
- Prevents slippage
- Less space requirement through compact method of building
- Suited for working on and finishing engine
- Special steel



	A mm	B mm	key mm	dim mm	D mm	E mm	F mm	G mm	kg
150.3170	40-165	30	M12 x 7.5	17	10	9	18	35	1.60

**Universal camshaft solid wheel puller 2 arm**

- Four special hooks for 5 and 6 armed spoked wheels
- Suitable for many VAG models
- Extremely robust spindle with inductively hardened thread
- Special steel

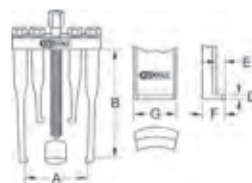


	A mm	B mm	max l	key mm	dim mm	D mm	E mm	F mm	G mm	kg
670.0211	130	44	2.5	M14x1.5 x 55	17	4	9	20	15	0.90

**STEERING WHEEL PULLER**

**Universal steering wheel puller 2 arm for cars**

- Short and long hooks as well as pressure piece for spindle
- Extremely robust spindle with inductively hardened thread
- Special steel

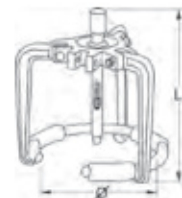


	A mm	B mm	max l	key mm	dim mm	D mm	E mm	F mm	G mm	kg
670.0201	90	135	2.5	M14x1.5 x 130	17	5	3.5	11	7.5	0.90



**Universal steering wheel puller 3 arm**

- For steering wheels with three or four spokes
- Tie rings with rubber sleeve for protection on the steering wheel
- Special steel



	G mm	L mm	max l	dim mm	key mm	kg
670.0191	160	120	4	17	M14x1.5 x 130	1.90

**WINDSCREEN WIPER ARM PULLER**

**Universal windscreen wiper arm puller type 1**

- Special steel



	A mm	B mm	mm	dim mm	kg
700.1193	16	28	M8 x 45	11	0.14

**Universal windscreen wiper arm puller type 2**

- Spindle end with brass cap to prevent damage to the windscreen wiper arm
- Special steel



	A mm	B mm	mm	dim mm	kg
700.1191	26	28	M8 x 75	13	0.45

**Universal windscreen wiper arm puller type 3**

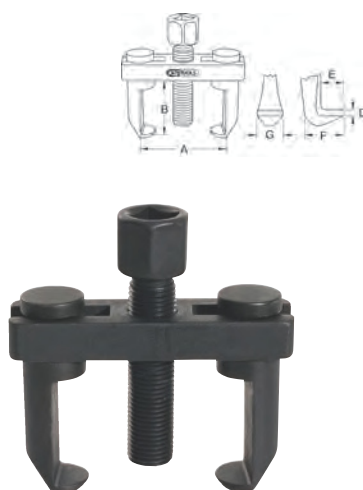
- Spindle end with brass cap to prevent damage to the windscreen wiper arm
- Heavy execution for loosening the tightest of wiper arms
- Suitable for many automobiles and commercial vehicles
- Special steel



	A mm	B mm	mm	dim mm	kg
700.1192	16	41	M10 x 80	17	0.51

**Universal windscreen wiper arm puller 2 arm**

- Hollow draw off spindle to prevent any damage to the rear wiper blades
- Special steel



	A mm	B mm	mm	dim mm	D mm	E mm	F mm	G mm	kg
700.1185	10-60	34	M12x1,25 x 34	17	3	5	14	15	1.00

**Universal windscreen wiper arm puller set**

- Suited for a multitude of vehicle types and car brands
- Alternatively can be used mechanically or with an impact spindle
- Special steel
- In durable plastic storage case



		kg
700.1240	13 pcs Universal windscreen wiper arm puller set	3.81

consists of:

		kg
700.1231	Slide hammer	1130
700.1232	Hollow spindle, L=95mm, M12	170
700.1233	Pull hook Gr.1, opening 22 mm, H = 50 mm	110
700.1234	Pull hook Gr.2, opening 25 mm, H = 50 mm	140
700.1235	Pull hook Gr.3, opening 16 mm, H = 60 mm	150
700.1236	Pull hook Gr.4, opening 25 mm, H = 41 mm	110
700.1237	Pull hook Gr.5, opening 30 mm, H = 50 mm	150
700.1238	Pull hook Gr.6, opening 20 mm, H = 50 mm	100
700.1239	Pull hook Gr.7, opening 17 mm, H = 56 mm	100
700.1241	Pull hook Gr.8, opening 18 mm, H = 80 mm	170
700.1242	Universal 2 Arm Wiper arm puller set with two pairs of arms	690
700.1243	Spindle extension, 30 mm, for 700.1232 and 700.1242	20
700.1244	Spindle design hollow, for 700.1232 and 700.1242	20

**BALL JOINT PULLERS**

**Ball joint extractor cap „VIBRO IMPACT“**

- Pressure pieces in the spindle rotating mounted
- Spindle suitable for impact wrenches
- Less space required
- Cast forged execution
- Special steel
- With inspection panel



	A mm	B mm	mm	dim mm	kg
450.0060	30	58	Tr.22	18	1.10
450.0061	32	90	Tr.24	25	2.51

**Ball joint extractor cap „VIBRO IMPACT“**

- Pressure pieces in the spindle rotating mounted
- Spindle suitable for impact wrenches
- Less space required
- Cast forged execution
- Special steel
- Without inspection panel



	A mm	B mm	mm	dim mm	kg
450.0062	39	58	Tr.24	25	2.83





**Ball joint puller „VIBRO-IMPACT“ with window**

- Pressure pieces in the spindle rotating mouted
- Spindle suitable for impact wrenches
- Less space required
- Cast forged execution
- Special steel

**Application range:** Universal in the HGV sector, e.g. SCANIA, MB, MAN (e.g. 414 drag link), HINO, etc.



	mm	A mm	B mm	mm	kg
450.0066	Tr.26	39	60	39	3.80

**Impact ball joint puller**

- Optimal positioning between suspension arm and axle casing
- Mouted spherical centering point
- Special steel



	A mm	B mm	mm	mm	kg
450.0085	35	60	M27 x 130	24	2.52

**Universal ball joint ejector**

- For many automobiles and commercial vehicles
- Special steel



	A mm	B mm	max l	mm	mm	kg
670.0061	23	55	4	17	M16x1.5 x 60	800
670.0062	28	55	4	17	M16x1.5 x 60	800
670.0063	34	63	4	19	M18x1.5 x 70	900

**Universal ball joint extractor**

- Tools for removing of carrier joint and tie rod joints or track rod joint studs for steering gear, suspension arm, axle casing and stabiliser
- Universal suitable for passenger cars to commercial vehicles
- Compact and durable design
- Extremely robust spindle with inductively hardened thread

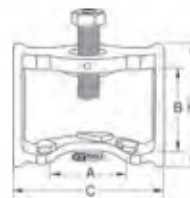


	mm	kg
670.0060	3 pcs. 23 - 28 - 34 mm	2.90



**Brake linkage adjuster extractor, BPW**

- Substantial construction for drawing off firm y sitting BPW brake linkage adjusters
- Suitable for older and automatic linkage adjusters
- Special steel



	A mm	B mm	C mm	H mm	mm	mm	kg
450.0305	65	78	160	127	M22x1.5 x 90	32	2.70

**Universal ball joint separator**

- For many automobiles and commercial vehicles
- Special steel



	A mm	B mm	C mm	max N·m	mm	mm	kg
670.0101	18	40	40	50	M14x1.5x60	17	0.30
670.0102	25	50	50	120	M16x1.5x90	17	0.70
670.0103	29	60	60	160	M18x1.5x75	19	1.00
670.0104	40	80	80	280	G1/2"x14gx110	22	2.10
670.0105	45	100	90	400	G3/4"x14gx125	27	2.80
670.0106	58	80	100	280	G1/2"x14gx110	22	2.10

**Brake linkage adjuster extractor, HALDEX**

- Substantial construction for drawing off firm y sitting brake linkage adjuster
- Certain stop through ring shaped bearing area
- Special steel



	A mm	B mm	C mm	H mm	mm	mm	kg
450.0300	65	78	160	127	M22x1.5 x 95	32	3.10

**Universal ball joint extractor**

- Robust model for loosening the track heads and push pole heads
- Optimal positioning through compact design and slim fork piece
- Special steel



	A mm	B mm	C mm	mm	mm	kg
450.0075	45	75	63	24	M22 x 135	1.63
450.0076	55	100	76	24	M22 x 135	1.84

**Universal ball joint separator 2 stage adjustable**

- Separator 2 stage adjustable
- Ideal for confined spaces
- Spindle hexagonal with additional drive point
- Forged
- Special steel



	A mm	B mm	mm	mm	kg
700.5610	24	0-55	M16 x 90	20	1.05

**Universal ball joint separator 4 stage adjustable**

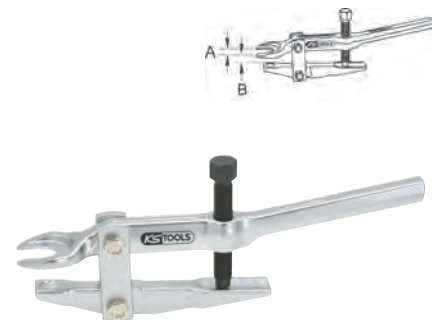
- Separator 4 stage adjustable
- Spindle hexagonal with additional drive point
- Forged
- Special steel
- Stage 1: 24 mm
- Stage 2: 30 mm
- Stage 3: 40 mm
- Stage 4: 45 mm



	A mm	B mm	mm	mm	kg
700.5630	20	24-45	M14 x 105	18	1.50

**Universal ball joint separator**

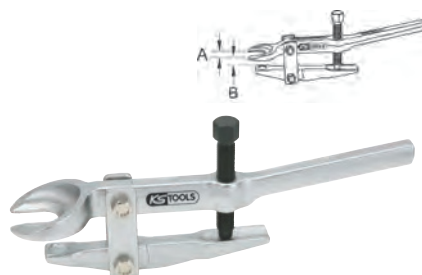
- Extra fl t execution
- Forged
- Special steel



	A mm	B mm	mm	mm	kg
700.5620	18	20-37	M14 x 85	16	0.97

**Universal ball joint separator**

- Extra strong execution
- Forged
- Special steel



	A mm	B mm	mm	mm	kg
700.5625	20	20-37	M12 x 85	16	1.07

**Universal ball joint extractor**

- Robust model for loosening the track heads and push pole heads
- Optimal positioning through compact design and slim fork piece
- Adjustment of the clamp by means of the spindle
- Special steel



	A mm	B mm	mm	mm	kg
450.0070	32	75	M22 x 90	30	2.49
450.0071	45	80	M22 x 90	30	2.61

**Ball joint puller HGV, mechanical**

- Massive execution for loosening the track heads and push pole heads
- Enormous power through lever transmission
- Special steel



	A mm	B mm	mm	mm	kg
450.0051	36	70	M24x3x160	36	4.34

**Hydraulic universal ball joint extractor set**

- Massive execution for loosening the track heads and push pole heads
- Enormous power through lever transmission
- Requires light expenditure of energy
- Special steel



			kg
450.0050	3 pcs	Hydraulic universal ball joint extractor set	6.55

consists of:

		kg
450.0051	Ball Joint Puller HGV, mechanical	4.34
450.0052	Adaptor M24 x 3 for Hydraulic Thrust bolt.	0.66
700.1400-1	Hydraulic spindle with centering point - Ag 1.1/2" x 16 G	1.34

**Clamp screw ejector set**

- For loosening seized clamping screws (M10) on 4-link axles
- For right and left wishbone clamping screws
- For aluminium and steel four link axles
- Release force up to max. 12 t
- Universally applicable hydraulic spindle (mounting thread 1.1/2"x16 start)
- Fine adjustment for optimum efficiency
- In durable plastic storage case

**Application range:** Audi A4, A6, Volkswagen Passat from 97, identical group vehicles



		A mm	kg
670.0075	4 pcs	65 - 125	4.17

consists of:

		kg
615.0001	Hydraulic pressure spindle, 17mm, UN 1.1/2"x16Gx260mm	1.60
670.0074	Clamp screw ejector	0.50
670.0077	Flat thrust piece	0.03
670.0078	Mandrel thruster	0.03





### Clamp screw ejector set without spindle

- For loosening seized clamping screws (M10) on 4-link axles
- For right and left wishbone clamping screws
- For aluminium and steel four link axles
- Release force up to max. 12 t
- Universally applicable hydraulic spindle (mounting thread 1.1/2"x16 start)
- Fine adjustment for optimum efficiency
- In durable plastic storage case

**Application range:** Audi A4, A6, Volkswagen Passat from 97, identical group vehicles



		A mm	kg
670.0076	3 pcs	65 - 125	2.74

consists of:

		kg
670.0074	Clamp screw ejector	0.50
670.0077	Flat thrust piece	0.03
670.0078	Mandrel thruster	0.03

### Hydraulic universal ball joint ejector set

- For extracting the ball joints and ball plug at track rod ends, direct transmissions and suspension axles
- Revolving cylinder reception
- Compact construction
- Requires light expenditure of energy
- Special steel



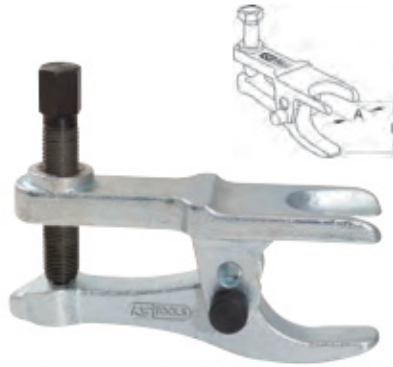
		kg
450.0120	6 pcs Hydraulic universal ball joint ejector set	9.57

consists of:

		kg
450.0121	Ball joint ejector	2.40
450.0122	Clevis, Ø max 25mm	1.35
450.0123	Clevis, Ø max 33mm	1.27
450.0124	Clevis, Ø max 47mm	1.21
450.0126	Hydraulic fl t cylinder, 20 t	2.90
450.0127	Safety chain	0.44

### Universal ball joint separator

- For separating the ball plug in the extension of the ball joint
- Suitable for many vehicles + transporter
- Also suitable for aluminum undercarriages
- Special steel



	A mm	B mm	max t	mm	mm	kg
670.0121	24	50	3.5	17	M16x1.5x70	1.40
670.0122	24	60-80	3.5	17	M15x1.5x90	1.80

### Universal ball joint separator 2 stage adjustable

- Separator 2 stage adjustable
- Ideal for confined spaces
- Extremely high clamping range
- Spindle hexagonal with additional drive point
- Forged
- Special steel



	A mm	B mm	mm	mm	kg
700.5615	18-24	23-110	M16 x 130	16	1.20

### Universal ball joint separator

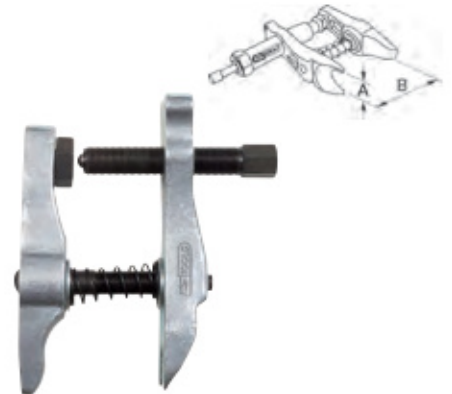
- For separating the ball plug in the extension of the ball joint
- Suitable for many vehicles
- Special steel



	A mm	B mm	max t	mm	mm	kg
670.0111	18-22	50	3.5	19	M14x1.5x48	0.90

### Universal ball joint separator

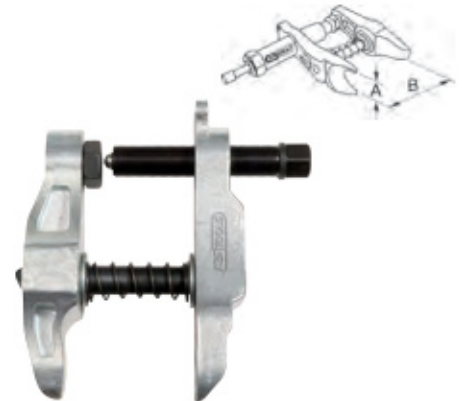
- For separating the ball plug in the extension of the ball joints
- Suitable for many vehicles + moderately heavy trucks
- Special steel



	A mm	B mm	max t	mm	mm	kg
670.0131	36	90	10	22	G1/2"x14gx110	3.70

### Universal ball joint separator

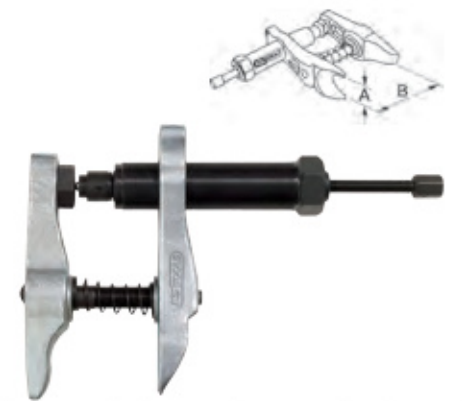
- For separating the ball plug in the extension of the ball joints
- Suitable for many heavy trucks, buses + low floor buses
- For bolts Ø 35.0 - 45.0 mm
- Special steel



	A mm	B mm	max t	mm	mm	kg
670.0161	45	115	20	27	G3/4"x14gx125	6.40

### Hydraulic universal ball joint separator

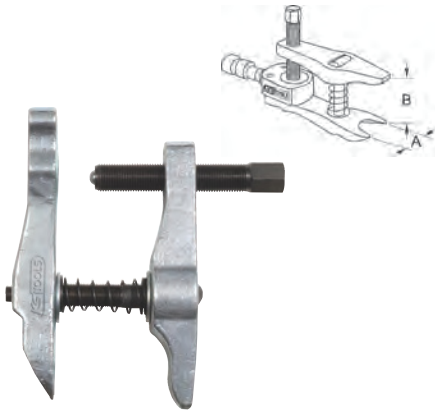
- For separating the ball plug in the extension of the ball joints
- Suitable for many vehicles + moderately heavy trucks
- For bolts Ø 27.0 - 38.0 mm
- Special steel



	A mm	B mm	max t	mm	mm	kg
670.0141	36	90	10	17	1.1/2"x16G	4.70

**Universal ball joint separator without hydraulic cylinder**

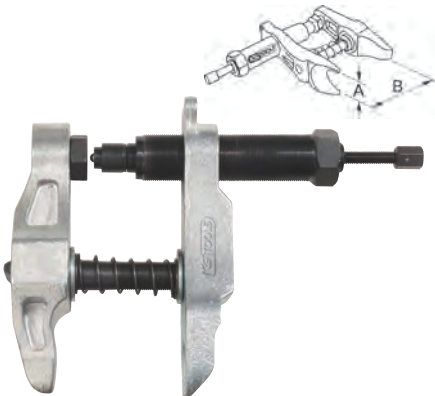
- For separating the ball plug in the extension of the ball joints
- Suitable for many trucks + moderately heavy trucks
- For bolts Ø 27.0 - 36.0 mm
- Special steel
- For use with 640.0140



	A mm	B mm	max t	Adjusting screw mm	Ambos spindle mm	mm	kg
670.0151	36	90	10	M18x1,5x120	G1/2"x14x110	22	3,50

**Hydraulic universal ball joint separator**

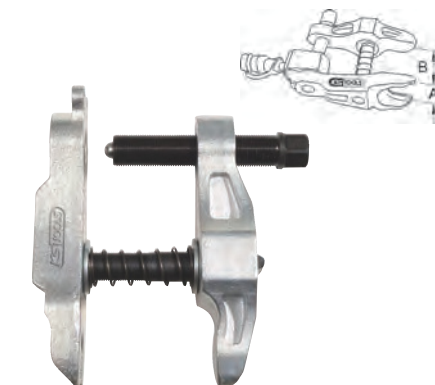
- For separating the ball plug in the extension of the ball joints
- Suitable for many heavy trucks, buses + low floor bu
- For bolts Ø 35.0 - 45.0 mm
- Special steel



	A mm	B mm	max t	mm	mm	kg
670.0171	45	115	20	17	M14x1,5x50	7,00

**Universal ball joint separator without hydraulic cylinder**

- For separating the ball plug in the extension of the ball joints
- Suitable for many heavy trucks, buses + low floor bu
- For bolts Ø 35.0 - 45.0 mm
- Special steel
- For use with 640.0140 / 640.0150



	A mm	B mm	max t	mm	mm	kg
670.0181	45	115	20	27	G3/4"x14gx125	6,00

**Draw off flange with impact puller**

- For stuck axles with 4 or 5 hole divisions
- Special steel



	Rim diameter Ø mm	Ball Ø mm	Hammer Ø mm	Slide rail Ø mm	Acceptor thread mm	kg
670.0001	100-150	max. 14	60	60	M16 x 1.5	3,70

**WHEEL HUB EXTRACTOR & DRIVE SHAFT EJECTOR**

**Flange extractor set**

- In order to separate the flanges in pipes to enable gasket changing or maintenance works
- For screws M16 - M24
- Special steel



	Ø mm	mm	mm	kg	
670.0251	2 pcs	80-250	M24x1,5x110	24	5,60

**Separating and assembly fork**

- For quick loosening of track and steering rod ends steering arms and additional controlling parts
- Ideal for confined spaces
- Special steel



	A mm	L mm	kg
670.0091	18	330,0	0,90
670.0092	23	330,0	0,90
670.0093	31	330,0	1,10
670.0094	35	330,0	1,30
670.0095	45	330,0	1,50

**Universal wheel hub extractor set**

- For bolt circle diameter up to 250 mm
- Clamp foot hole for bolts 14 mm + 22 mm
- Special steel



		kg
670.0013	5 pcs Universal wheel hub extractor set	3,60

**Universal wheel hub extractor set**

- For bolt circle diameter up to 250 mm
- Clamp foot hole for bolts 14 mm, 18 mm + 22 mm
- Special steel



		kg
670.0014	6 pcs Universal wheel hub extractor set	4,10

**Universal wheel hub extractor set**

- For bolt circle diameter up to 250 mm
- Clamp foot hole for bolts 14 mm, 18 mm + 22 mm
- Special steel



		kg
670.0015	7 pcs Universal wheel hub extractor set	4,60

**accessories:**

		kg
670.0017	Traverse bar for wheel hub extractor set	820
670.0018	Puller leg + reception ring Ø14mm + Ø18mm	540
670.0019	Reception ring Ø 14mm	22
670.0020	Reception ring Ø 18mm	16
610.2701	Spindle, 27mm, G3/4"x14Gx180mm	1000

**Universal wheel bearing puller and drive shaft puller, hydraulic**

- Special tool for expressing the joint hubs or drawing off of the wheel hub
- Massive tool, made out of a one piece
- Special steel



		kg
700.1400	11 pcs Universal wheel bearing puller and drive shaft puller, hydraulic	9,34

**consists of:**

		kg
700.1400-1	Hydraulic spindle with centering point - Ag 1,12" x 16 G	1344
700.1400-2	Disc traverse 100 mm	920
700.1400-3	Puller pull arm set, 5 pcs	500
700.1400-4	Impact spanner, 30mm, L=200mm	935
700.1400-5	Impact spindle	2015
700.1400-7	Extension, small	60





**Universal wheel hub extractor**

- Variable use for bolt circle diameter up to 300 mm
- Universal use for bolts up to max. Ø 22 mm
- With 2 rods and trapezoid thread spindle
- Optionally upgradeable with hydraulic spindle or slide hammer
- Special steel



Part No.	Description	Weight (kg)
450.0040	12 pcs Universal wheel hub extractor	15.00

consists of:

Part No.	Description	Weight (kg)
450.0041	Tapered thrust bolt Tr.30	1680
450.0043	Traverse, 370 mm	8000
450.0044	Extension and nut	800
450.0045	Thread adaptor, M18 x 1,5	600
450.0046	Thread adaptor, M20 x 1,5	600
450.0055	Thread adaptor, M22 x 1,5	604
450.0048	Locating thrust piece size1, 90 mm / 65 mm	1140
450.0049	Locating thrust piece size2, 110 mm / 85 mm	1340

**Universal wheel hub extractor set**

- Extra heavy and solid execution
- For the extension of the wheel hub
- Ideal for passenger cars and small vans
- Enormous impact delivery of up to 11 t
- With 6 kg impact weight
- Includes 3 kg additional weight
- With M 20 x 1.5 mm connection thread
- Weights variably attachable and removable
- Special steel



Part No.	Hub diameter Ø mm	Bolt Ø mm	Key mm	L mm	Weight (kg)
700.1420	98-138	max. M14	AG M20x1,5	930,0	15.27

consists of:

Part No.	Description	Weight (kg)
700.1411	Wheel hub/drive flange dismantling tool	2.55
700.1415	Universal slide hammer 6 + 3 kg, 850mm	12.00
700.1421	Adaptor ET UN 1.1/2" x IT M20 x 1.5	0.72

**Brake disc puller set for Ford Transit**

- For damage free removal of the brake disc
- No damages to wheel bearing and ABS sensor
- Quick attachment - large working freedom
- Optimum release force thanks to axially guided impact
- Extra heavy and solid execution
- Enormous impact delivery of up to 11 t
- With 6 kg impact weight
- Includes 3 kg additional weight
- With M 20 x 1.5 mm connection thread
- Weights variably attachable and removable
- Special steel

**Application range:**

Ford Transit 2000.5 (01/200 - 05/2006)  
 Ford Transit 2006.5 (04/2006 - )  
 except vehicles with reinforced front axle (payload over 1850 kg)



Part No.	Bolt Ø mm	Key mm	L mm	Weight (kg)
700.1470	M10	AG M20x1,5	1000,0	14.50

consists of:

Part No.	Description	Weight (kg)
700.1415	Universal slide hammer 6+3kg, 850mm	12.00
700.1471	Brake disc puller flange Ford Transit	2.00
700.1472	Adaptor for slide hammer 1.700.1471	0.50



**Wheel hub and bearing dismantling set**

- Special tool for expressing the joint hubs or drawing off of the wheel hub
- Massive tool, made out of a one piece
- Special steel



Part No.	Description	Weight (kg)
700.1410	7 pcs Wheel hub and bearing dismantling set	4.80

consists of:

Part No.	Description	Weight (kg)
700.1400-1	Hydraulic spindle with centering point - Ag 1.1/2" x 16 G	1344
700.1411	Wheel hub/drive flange dismantling tool	2.55
700.1412	Reception ring set, 5 pcs.	1.50

**Universal wheel hub extractor for commercial vehicles**

- Extracting the wheel hubs and/or housing over the grease cap thread
- Six sided drive enable unscrewing on the cap
- Robust execution
- Trapezoid thread spindle for high removal power drive SW 30
- Special steel



Part No.	AG	Key	L mm	Weight (kg)
450.0000	AG M115x1,5	Tr.30x260	30	3.74
450.0001	AG M125x2,0	Tr.30x260	30	1.56
450.0002	IG M135x2,0	Tr.30x260	30	2.19
450.0003	IG M136x2,5	Tr.30x260	30	1.48
450.0004	AG M155x3,0	Tr.30x260	30	0.71

**UNIVERSAL AUTOMOTIVE PULLERS**

**Draw off lining**

- For drawing off the shoulder housings interior ring of light machines, motor parts and other machine parts
- Special steel



Part No.	Ø mm	L mm	max N/m	Weight (kg)	Key mm	Weight (kg)
670.0221	5-32	135	60	17	M14x1,5 x 130	1.40

**Universal press support**

- Universal adjustable support
- Through the height adjustable bolts a fix ure and vibration safe 3 level points construction is created
- The amount and arrangement at thread enable the conformity to almost every component surface
- Includes lateral safety device



Part No.	L mm	B mm	H mm	Replacement bolt & nut set	Weight (kg)
700.1740	245,0	200,0	40,0	700.1741	8.10

**Universal slide hammer**

- Extra heavy and solid execution
- For universal use for automobiles + trucks
- Enormous impact delivery of up to 11 tonnes
- With 6 kg impact weight
- Includes 3 kg additional weight
- With M 20 x 1.5 mm connection thread
- Additional weights can be screwed together
- Special steel



	L mm	kg
700.1415	850.0	12.00

**Accessories:**

		kg
700.1411	Wheel hub/drive flange dismantling tool	2.55
700.1421	Adaptor ET UN 1.1/2" x IT M20 x 1.5	0.72
700.1423	Adaptor for double hook	0.27
700.1424	Universal hook M20 x 1.5 for ball joints + car body	2.40
700.1425	Double hook	0.75
700.1428	Adaptor ET UN 1.1/2" x IT M16 x 2.0	0.72
700.1430	Adaptor ET UN 1.1/2" x IT M16 x 1.5	0.72
152.1056	Single screw adaptor AG M17 x 1	0.24

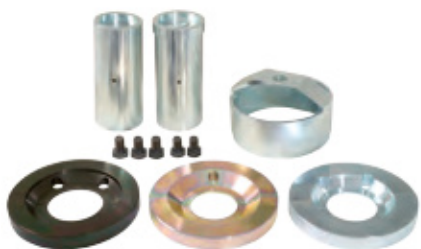


**WHEEL BEARING PULLER**

**VAG wheel bearing tool set**

- For the new VAG models with wheel housings/hub unit
- Required for the correct installation
- High time saving - faster execution at workshop press than at the vehicle ideally suited for Wheel bearing diameters 62 mm / 66 mm / 72 mm (13" / 14" / 15" undercarriages)
- The extension of the wheel housing takes place by means of the available workshop facility

**Application range:** Volkswagen-Polo new, Audi A2, Skoda Fabia, Seat Ibiza



		kg
150.2130	14 pcs VAG wheel bearing tool set	17.20

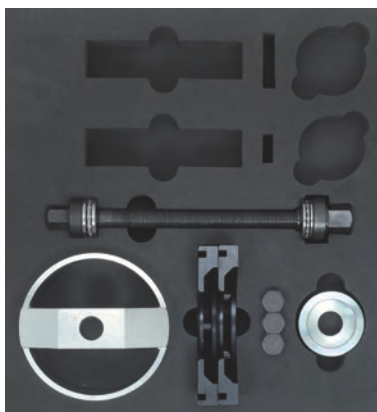
**consists of:**

X		kg
150.2131	1 Half cup pair anodised for bearing Ø62mm	1.99
150.2132	1 Half cup pair chrome for bearing Ø66mm	1.46
150.2133	1 Half cup pair black for bearing Ø72mm	1.71
150.2134	1 Pressure bell universal with bore hole M22	2.10
150.2135	1 Thrust bearing, 66/72mm, L=160mm	4.20
150.2136	1 Thrust bearing, 62mm, L=160mm	4.03
150.2137	2 Fixing screw for half cup, M12x1,5	0.03
150.2138	3 Fixing screw for half cup, M14x1,5	0.05

**Tool set for compact wheel hub/bearing unit**

- Includes spindle M18/M20
- Enables use directly on the vehicle
- Minimum labour - high time savings
- Safe and simple use
- Use also in connection with workshop press
- Possible expansion for bearing Ø 62+66 mm
- Special steel

**Application area:** Audi A2 from MY 00, Skoda Fabia from MY 00, Volkswagen Polo from MY 02 / Fox from MY 05, Seat Ibiza from MY 02, etc.



		Ø mm	kg
150.2145	10 pcs	72.0	9.74

**consists of:**

X		kg
150.2146	1 Drive unit, 3 pcs	0.54
150.2134	1 Pressure bell universal with bore hole M22	2.10
150.2133	1 Half cup pair black for bearing Ø72mm	1.71
150.2149	1 Thrust piece for 150.2143	0.43
150.2138	3 Fixing screw for half cup, M14x1,5	0.05

**accessories:**

		kg
150.2145-1	Compact wheel hub tool set, Ø72mm -spindle	5.93



**Half cup auxiliary kit Ø 62 mm**

- As complement to 150.2145
- Special steel

**Application range:** Volkswagen Lupo, Audi A2 1,2L, etc.



		Ø mm	kg
150.2141	5 pcs	62.0	3.00

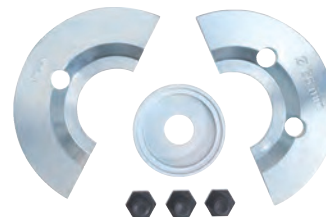
**consists of:**

X		kg
150.2147	1 Thrust piece for 150.2141	4.27
150.2131	1 Half cup pair anodised for bearing Ø62mm	1.990
150.2137	2 Fixing screw for half cup, M12x1,5	30

**Half cup auxiliary kit Ø 66 mm**

- As complement to 150.2145
- Special steel

**Application range:** Volkswagen Polo from MY 02, Skoda Fabia from MY 00, etc.



		Ø mm	kg
150.2142	6 pcs	66.0	3.10

**consists of:**

X		kg
150.2148	1 Thrust piece for 150.2142	0.43
150.2132	1 Half cup pair chrome for bearing Ø66mm	1.46
150.2138	3 Fixing screw for half cup, M14x1,5	0.05

**Half cup auxiliary kit Ø 72 mm**

- As complement to 150.2145
- Special steel

**Application range:** Audi A2 from MY 00, Skoda Fabia from MY 00, Volkswagen Polo from MY 02 / Fox from MY 05, Seat Ibiza from MY 02, etc.



		Ø mm	kg
150.2143	6 pcs	72.0	2.90

**consists of:**

X		kg
150.2149	1 Thrust piece for 150.2143	0.43
150.2133	1 Half cup pair black for bearing Ø72mm	1.71
150.2138	3 Fixing screw for half cup, M14x1,5	0.05



### Drive spindle

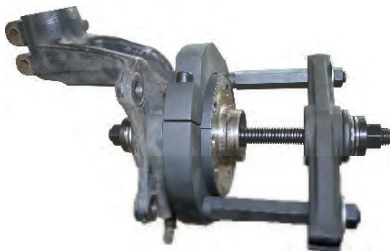
- As complement to wheel bearing puller 150.2145-1
- Special steel



#### Technical data:

Thread: M20  
 Drive spindle: SW 22  
 Drive nut: SW 30

		L mm	
150.2146	3 pcs	300.0	540



### Wheel bearing tool set

- Removal and installation of the compact wheel hubs / bearing unit
- Enables de- and assembly directly on the vehicle
- Minimum labour
- Safe and simple use
- Special steel
- In durable plastic storage case

Application range: VW T5 Transporter



150.2350	13 pcs Wheel bearing tool set	20.00

#### consists of:

150.2351	Cross member with threaded ring	2.60
150.2352	Tie rod set, 2 pcs	1.10
150.2353	Half cup mounting, 2 pcs	4.95
150.2354	Half cup set, 2 pcs Removal	1.70
150.2355	Half cup set, 2 pcs Installation	1.90
150.2356	Thrust piece removal	0.55
150.2357	Thrust piece installation	0.95
150.2358	Trapezoidal threaded spindle with 2x thrust bearing and nut	1.25
980.1085	Special thread grease	0.02

### Wheel hub and bearing extractor supplement set

- By means of this supplement assortment wheel hubs with a hub alliance of more than  $\varnothing 75$  mm can be correctly dismantled
- The wheel hub- and joint cover dismantling flange is through long thread bolts and Distance sheath is a slight distance away so the hub alliance can be placed
- Special bevelled edge which the hub can easily be replaced with contamination to the wheel hub housings
- Includes wall holder



700.1435	21 pcs Wheel hub and bearing extractor supplement set	2.88

#### consists of:

700.1436	Wall holder for supplement set	600
700.1437	Spacer sleeve, length 40 mm	115
700.1438	Threaded bolt M12 x 1.5 mm, length 80 mm	90
700.1439	Threaded bolt M14 x 1.5 mm, length 40 mm	90
700.1440	Threaded bolt M14 x 1.5 mm, length 80 mm	90

### Universal car wheel bearing tool set

- For the dismantling and assembly of wheel housings and hub directly on the vehicle
- Extension of the suspension strut and axle joint is no longer required
- Correct and protective installation of the housings through the correct pressure point at the bearing outer ring
- Suited for axle tube and for axle with the housing adjoining at an alliance
- High time savings as reactive axle alignment is not necessarily required
- 300 mm gear pulling spindle
- Through enclosed bolts (M12 + M14) wheel hubs can be removed
- Pressure bearing protects against increased friction during the process
- Special steel
- In durable plastic storage case

Application range: VW, Audi, Opel, Mercedes Benz, Peugeot, Citroen, Renault, Ford, Honda, Mazda, Mitsubishi, Nissan, Toyota, Austin-Maestro, BMW



150.2250	27 pcs Universal car wheel bearing tool set	11.24

#### consists of:

150.2092	Threaded bolt, f.150.2250, M12x1,5 3p	100
150.2093	Threaded bolt, f.150.2250, M14x1,5 3p	120
150.2251	Bearing plate #1 f.150.2250	525
150.2252	Bearing plate #2 f.150.2250	458
150.2253	Bearing plate #3 f.150.2250	432
150.2254	Bearing plate #4 f.150.2250	386
150.2255	Bearing plate #5 f.150.2250	358
150.2256	Bearing plate #6 f.150.2250	340
150.2257	Bearing plate #7 f.150.2250	304
150.2258	Bearing plate #8 f.150.2250	344
150.2259	Bearing plate #9 f.150.2250	304
150.2260	Bearing plate #10 f.150.2250	282
150.2261	Bearing plate #11 f.150.2250	247
150.2262	Bearing plate #12 f.150.2250	200
150.2263	Bearing plate #13 f.150.2250	217
150.2264	Bearing plate #14 f.150.2250	203
150.2265	Stepped plate, small f.150.2250, Ø77+68mm	608
150.2266	Stepped plate, large f.150.2250, Ø92+81mm	879
150.2267	Puller sleeve f.150.2250, 68mm	399
150.2268	Puller sleeve f.150.2250, 77mm	552
150.2269	Puller sleeve f.150.2250, 81mm	639
150.2270	Puller sleeve f.150.2250, 92mm	707
150.2271	Spindle sleeve f.150.2250	227
150.2272	Thrust bolt f.150.2250	230
150.2273	Washer f.150.2250	20
150.2274	Spindle f.150.2250	911
150.2275	Bearing f.150.2250	55

### Bearing assembly and deassembly tool set

- Can be used manually with a hammer or workshop press
- Optimal placing through the pressure plates
- For easy and damage free assembly
- For the correct dismantling and assembly of bearings
- Suitable for commercial, agricultural engineering and construction machines
- Forged, robust execution
- Special steel
- In durable plastic storage case



450.0080	5 pcs Bearing assembly and deassembly tool set	6.45

#### consists of:

450.0082	Pressure plates (use with press)	0.51
450.0083	Impact plates long (use with a hammer)	1.91
450.0084	Special 6 point socket for mandral shaft	0.34
450.0088	Universal 3 jaw thrust piece	0.20
450.0087	Locking bolt for jaw spreading	2.07

#### accessories:

450.0081	Spare jaw set, 7 pcs	→ 450.0080 6.55



**Press and pull sleeve set**

- For the disassembly and assembly of bearings
- Ideally for silent bearings, hydro bearings, bushings, ball bearing, simmerrings, etc
- Universal use for automobile, truck, municipally, country and forestry technology, etc.
- Outstanding to use also in connection with workshop press or hollow piston cylinder
- According to use application the sheaths individually can be reworked
- Pressure bearing protects against increased friction during the process
- In durable plastic storage case

**Attention:** the spindles need to be greased with a good lubricant for each application! Do not overload spindles, otherwise the thread lengthens and the pitch of the nut and spindle no longer match. The result: the nuts will seize up. Always check the applied force at the drive with a torque wrench!

**Maximum permitted torque:**

- Spindle M10x1,5 60 Nm
- Spindle M12x1,5 100 Nm
- Spindle M14x1,5 180 Nm
- Spindle M16x1,5 250 Nm



700.1700	36 pcs	Press and pull sleeve set	14,80
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consists of:

700.1701	Thrust bolt, M10 with bearing	125
700.1702	Thrust bolt, M12 with bearing	124
700.1703	Thrust bolt, M14 with bearing	130
700.1704	Thrust bolt, M16 with bearing	130
700.1706	Stepped plate, #1	350
700.1707	Stepped plate, #2	390
700.1708	Stepped plate, #3	420
700.1709	Stepped plate, #4	450
700.1710	Spindle, M10, 350 mm	170
700.1711	Spindle, M12, 350 mm	253
700.1712	Spindle, M14, 350 mm	350
700.1713	Spindle, M16, 350 mm	473
700.1714	Pressure sleeve, Internal Ø: 34 mm, External Ø: 44 mm	250
700.1715	Pressure sleeve, Internal Ø: 36 mm, External Ø: 46 mm	260
700.1716	Pressure sleeve, Internal Ø: 38 mm, External Ø: 48 mm	280
700.1717	Pressure sleeve, Internal Ø: 40 mm, External Ø: 50 mm	290
700.1718	Pressure sleeve, Internal Ø: 42 mm, External Ø: 52 mm	300
700.1719	Pressure sleeve, Internal Ø: 44 mm, External Ø: 54 mm	320
700.1720	Pressure sleeve, Internal Ø: 46 mm, External Ø: 56 mm	330
700.1721	Pressure sleeve, Internal Ø: 48 mm, External Ø: 58 mm	340
700.1722	Pressure sleeve, Internal Ø: 50 mm, External Ø: 60 mm	350
700.1723	Pressure sleeve, Internal Ø: 52 mm, External Ø: 62 mm	370
700.1724	Pressure sleeve, Internal Ø: 54 mm, External Ø: 64 mm	380
700.1725	Pressure sleeve, Internal Ø: 56 mm, External Ø: 66 mm	390
700.1726	Pressure sleeve, Internal Ø: 58 mm, External Ø: 68 mm	410
700.1727	Pressure sleeve, Internal Ø: 60 mm, External Ø: 70 mm	420
700.1728	Pressure sleeve, Internal Ø: 62 mm, External Ø: 72 mm	430
700.1729	Pressure sleeve, Internal Ø: 64 mm, External Ø: 74 mm	440
700.1730	Pressure sleeve, Internal Ø: 66 mm, External Ø: 76 mm	460
700.1731	Pressure sleeve, Internal Ø: 68 mm, External Ø: 78 mm	470
700.1732	Pressure sleeve, Internal Ø: 70 mm, External Ø: 80 mm	480
700.1733	Pressure sleeve, Internal Ø: 72 mm, External Ø: 82 mm	490

**Press and pull sleeve kit**

- For the assembly and disassembly of bearings
- Ideally for silent bearings, hydro bearings, bushings, ball bearing, simmer rings, etc.
- Universal use for passenger cars, trucks, communal, agricultural and forest vehicles
- Outstanding to use also in connection with workshop press or hollow piston cylinder
- According to use application the sheaths individually can be reworked
- Pressure bearing protects against increased friction during the process
- In durable plastic storage case

**Caution:** The spindles must be greased before fit use! Overloading leads to unwanted material stresses or breakage Always check the power settings on the drive with a torque wrench Not to be combined with other systems

**Maximum allowable torque moments:**

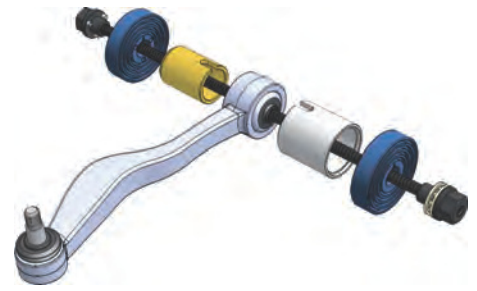
- Spindle (ACME) M10 x P1.5 60 Nm
- Spindle (ACME) M12 x P2.0 120 Nm
- Spindle (ACME) M14 x P2.0 150 Nm
- Spindle (ACME) M16 x P2.5 250 Nm



700.1550	29 pcs	Press and pull sleeve kit	17,00
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consists of:

700.1550-34	Pull sleeve, internal Ø 34mm, external Ø 44mm	250
700.1550-36	Pull sleeve, internal Ø 36mm, external Ø 46mm	260
700.1550-38	Pull sleeve, internal Ø 38mm, external Ø 48mm	280
700.1550-40	Pull sleeve, internal Ø 40mm, external Ø 50mm	290
700.1550-42	Pull sleeve, internal Ø 42mm, external Ø 52mm	300
700.1550-44	Pull sleeve, internal Ø 44mm, external Ø 54mm	320
700.1550-46	Pull sleeve, internal Ø 46mm, external Ø 56mm	330
700.1550-48	Pull sleeve, internal Ø 48mm, external Ø 58mm	340
700.1550-50	Pull sleeve, internal Ø 50mm, external Ø 60mm	350
700.1550-52	Pull sleeve, internal Ø 52mm, external Ø 62mm	360
700.1550-54	Pull sleeve, internal Ø 54mm, external Ø 64mm	380
700.1550-56	Pull sleeve, internal Ø 56mm, external Ø 66mm	390
700.1550-58	Pull sleeve, internal Ø 58mm, external Ø 68mm	410
700.1550-60	Pull sleeve, internal Ø 60mm, external Ø 70mm	420
700.1550-62	Pull sleeve, internal Ø 62mm, external Ø 72mm	430
700.1550-64	Pull sleeve, internal Ø 64mm, external Ø 74mm	440
700.1550-66	Pull sleeve, internal Ø 66mm, external Ø 76mm	460
700.1550-68	Pull sleeve, internal Ø 68mm, external Ø 78mm	470
700.1550-70	Pull sleeve, internal Ø 70mm, external Ø 80mm	480
700.1550-72	Pull sleeve, internal Ø 72mm, external Ø 82mm	490
700.1550-75	Pull sleeve, internal Ø 75mm, external Ø 85mm	500
700.1550-80	Pull sleeve, internal Ø 80mm, external Ø 90mm	520
700.1551	Spindle M10x1,5	170
700.1552	Spindle M12x2,0	200
700.1553	Spindle M14x2,0	350
700.1554	Spindle M16x2,5	380
700.1555	Pressure adapter for step panel hgv size	350
700.1556	Step panel adaptor with 3 holes, A+B side	350
700.1551-01	Pressure nut for M10 x P1,5	30
700.1551-02	Pressure nut with bearing for M10xP1,5	30
700.1552-01	Pressure nut for M12 x P1,75	30
700.1552-02	Pressure nut with bearing for M12xP1,75	30
700.1553-01	Pressure nut for M14 x P2,0	30
700.1553-02	Pressure nut with bearing for M14xP2,0	30
700.1554-01	Pressure nut for M16 x P2,0	30
700.1554-02	Pressure nut with bearing for M16xP2,0	30



**Press and pull sleeve set BASIC**

- For the disassembly and assembly of bearings
- Ideally for silent bearings, hydro bearings, bushings, ball bearing, simmerrings, etc
- Universal use for automobile, truck, municipally, country and forestry technology, etc.
- Outstanding to use also in connection with workshop press or hollow piston cylinder
- According to use application the sheaths individually can be reworked
- Pressure bearing protects against increased friction during the process
- In durable plastic storage case

**Attention:** the spindles need to be greased with a good lubricant for each application! Do not overload spindles, otherwise the thread lengthens and the pitch of the nut and spindle no longer match. The result: the nuts will seize up. Always check the applied force at the drive with a torque wrench!

**Maximum permitted torque:**

- Spindle M10x1,5 60 Nm
- Spindle M12x1,5 100 Nm
- Spindle M14x1,5 180 Nm
- Spindle M16x1,5 250 Nm



700.1760	20 pcs	Press and pull sleeve set BASIC	8,32
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consists of:

700.1702	Thrust bolt, M12	124
700.1704	Thrust bolt, M16	130
700.1706	Stepped plate, #1	350
700.1707	Stepped plate, #2	390
700.1708	Stepped plate, #3	420
700.1709	Stepped plate, #4	450
700.1711	Spindle, M12, 350 mm	253
700.1713	Spindle, M16, 350 mm	473
700.1714	Pressure sleeve, internal Ø 34 mm, external Ø 44 mm	250
700.1718	Pressure sleeve, internal Ø 42 mm, external Ø 52 mm	300
700.1719	Pressure sleeve, internal Ø 44 mm, external Ø 54 mm	320
700.1720	Pressure sleeve, internal Ø 46 mm, external Ø 56 mm	330
700.1723	Pressure sleeve, internal Ø 52 mm, external Ø 62 mm	370
700.1729	Pressure sleeve, internal Ø 64 mm, external Ø 74 mm	440
700.1732	Pressure sleeve, internal Ø 70 mm, external Ø 80 mm	480
700.1733	Pressure sleeve, internal Ø 72 mm, external Ø 82 mm	490



**Universal car wheel bearing tool set**

- For the dismantling and assembly of wheel housings and hub directly on the vehicle
- Extension of the suspension strut and axle joint is no longer required
- Suited for axle tube and for axle with the housing adjoining at an alliance
- High time savings as reactive axle alignment is not necessarily required
- With 300 mm gear pulling spindle
- Through enclosed bolts (M12 + M14) wheel hubs can be removed
- Extra long execution 65 mm pressure nut for better load distribution
- Pressure bearing protects against increased friction during the process
- Special steel
- In durable plastic storage case

**Application range:** Volkswagen, Audi, Opel, Mercedes Benz, Peugeot, Citroen, Renault, Ford, Honda, Mazda, Mitsubishi, Nissan, Toyota, Austin-Maestro, BMW



				ID
150.2075	19 pcs	Universal car wheel bearing tool set	7.51	

**consists of:**

				ID
150.2076	Ball bearing Adaptor 55.5 mm	175		
150.2077	Ball bearing Adaptor 59 mm	200		
150.2078	Ball bearing Adaptor 62 mm	220		
150.2079	Ball bearing Adaptor 65 mm	245		
150.2080	Ball bearing Adaptor 66 mm	250		
150.2081	Ball bearing Adaptor 71.5 mm	315		
150.2082	Ball bearing Adaptor 73 mm	335		
150.2083	Ball bearing Adaptor 78 mm	380		
150.2084	Ball bearing Adaptor 84 mm	470		
150.2085	Reducing sheath 76 mm	270		
150.2086	Ball 88 mm	850		
150.2087	Ball 91 mm	920		
150.2089	Spindle includes Nut, bearing, Discs and sheaths	540		
150.2092	Threaded bolt Set M12 x 1.5 (3 pieces)	100		
150.2093	Threaded bolt Set M14 x 1.5 (3 pieces)	120		



**Universally press frame with hydraulic spindle**

- For the use in connection with the pressure and pull sleeve set 700.1700 for pressing out and pressing on of silent bearings, hydro bearings, bushings, etc.
- Enables de- and assembly directly on the vehicle
- Through the long trailing arm also especially high housings release themselves without problem on and pressing out
- Extremely robust spindle with inductively hardened thread
- Special steel



				ID
700.1750	6 pcs	Universally press frame with hydraulic spindle	9.80	

**consists of:**

				ID
700.1400-1	Hydraulic spindle with centering point - Ag 1.1/2" x 16 G	1.34		
700.1751	Universally press frame set, 5 pcs without hydraulic spindle	8.90		



**Universal press frame, 5 pcs without hydraulic spindle**



				ID
700.1751	5 pcs	Universal press frame, 5 pcs without hydraulic spindle	8.90	

**accessories:**

				ID
700.1751-1	Connection bar 205 mm for 700.1751 (1 piece)	0.71		
700.1751-2	Connection bar 350 mm for 700.1751 (1 piece)	1.20		

**C-clamp and adaptor set, long**

- Very robust execution
- Valuable supplement to the pressure set and hub sheath set 700.1700
- The drive can be used alternatively mechanically or hydraulically
- Suitable for impact wrenches
- Through use of trapezoid spindle and Impact screw maximum power can be transferred (Hammer impact effect)
- Removable spindle and clamping device with staged reception plate
- Silent bearings, sheaths, bushings etc. lets it incorporated itself in that or expanded condition on and compressed
- Trapezoid thread spindle Tr.27 with ball stored pressure tip
- Special steel



				ID
700.1755	5 pcs		245.0 95.0 380.0 180.0 7.82	

**consists of:**

				ID
700.1754	Threaded adaptor with AG 1-1/2" x 16G and IG trapezoid thread Tr.27	0.60		
700.1756	Universal C-clamp	7.00		
700.1757	Spindle with trapezoid thread Tr.27, length 300 mm, drive 24 mm	2.00		
700.1758	Spindle reception adaptor	0.80		
700.1759	C-Clamp reception adaptor	0.60		

**accessories:**

				ID
700.1400-1	Hydraulic spindle with centering point - Ag 1.1/2" x 16 G	1344		
700.1208	Thrust bolt extension, 35 mm	130		
700.1209	Thrust bolt extension, 85 mm	320		

**Silent bearing tool set for VAG Front axle consoles**


- With this tool the plastic silent bearing of the front axle console can be correctly and quickly dismantled and mounted
- By means of the specially pressure piece the plastic housing is safely accepted by what means a damage-free assembly is enabled
- With this tool it can incorporated the condition and can the costly correction of the axle alignment and the dismantling of often strongly console-reinforcements-screws that can be corroded
- Simple handling
- Enables use directly on the vehicle
- High time savings
- Adapter with protective axle-pressure thrust bearing -spindle
- Axle alignment can be omitted
- In durable plastic storage case

**Application range:** Volkswagen Polo (9N), Seat Ibiza IV, Cordoba (from model 2002), Altea, Skoda Fabia, Roomster, Audi A2 + structurally identical group vehicles



				ID
700.1650	8 pcs	Silent bearing tool set for VAG Front axle consoles	3.20	

**consists of:**

		
700.1651	Working spindle M10 x 1,25, 180 mm	170
700.1652	Spindle extension M10 x 1,25, 200 mm	140
700.1653	Special nut with cone shaft 45mm	80
700.1654	Special adaptor with thrust bearing	160
700.1655	Thrust plate stepped Ø 74mm, installation	390
700.1656	Special thrust piece Ø 74mm, installation	1070
700.1657	Distance piece with knurled, extension	240
700.1658	Distance piece with collar, extension	240





**INJECTOR & GLOW PLUG EXTRACTORS**

**Glow plug extractor for CDI engines**

- For turning off and pulling out the glow plugs from the glow plug canal in the cylinder head
- Especially suitable in glow plugs jammed by corrosion and/ or soot coal
- Optimum power transmission with rotary and train movements
- Correct easy and damage free dismantling of the glow plug
- Chrome vanadium

**Application range:** Glow plug dim/10 mm, CDI engines.




		L mm	
152.1080	3/8"	190.0	315

**Injector extractor for 1.25 kg impact weight**

- For Mercedes CDI Bosch common rail injectors
- For the extraction of the firm y burned injectors in the cylinder head
- Arched lever area on the handle hook for exact extraction
- Tilting and jamming of the injector is avoided
- Claw and impact weight can be used separately
- Includes impact weight
- Special steel




	Impact weight kg	Thread impact weight	L mm	Replacement claw	Replacement impact weight	
152.1050	1.25	M10 x 1,5	410.0	152.1045	152.1040	1.45


**Injector extractor with 6 + 3 kg impact weight**

- For Mercedes CDI Bosch common rail injectors
- Robust execution
- For the extraction of the firm y burned injectors in the cylinder head
- Enables short and intensive impact through impact weight
- Cylinder head does not work against the thrust bearing
- Tilting and jamming of the injector is avoided
- Includes impact weight
- Special steel



		
152.1055	3 pcs Injector extractor with 6 + 3 kg impact weight	12.50

**consists of:**

		
700.1415	Universal slide hammer 6 + 3 kg, 850mm	12,00
152.1056	Single screw adaptor AG M17 x 1	0.24
152.1057	Hexagon socket, tamperproof 10 mm	0.10




**STUD BOLT PULLER**

**Stud bolt puller**

- For screwing in or extracting out stud bolts
- Clockwise and anticlockwise clamping function
- Also suitable for extra long stud bolts
- Special steel




	Ø mm	max N·m	
670.0231	5 - 15	120	360
670.0232	10 - 19	120	400
670.0233	18 - 28	120	450

**Stud bolt puller**

- For screwing in or extracting out stud bolts
- Clockwise and anticlockwise clamping function
- Also suitable for extra long stud bolts
- Special steel



	Ø mm	max N·m	
670.0241	5 - 20	120	400

**Eccentric clamping and turning device**

- For the removal and rotation of the round or hexagonal track rod joints (steering and wheel end)
- Due to the knurled eccentric cam it allows from optimal grip even at the joints without drive (round)
- 1/2" drive
- For use on the workbench or directly on the vehicle
- Additional stopper prevents slipping during the splitting process
- Special steel



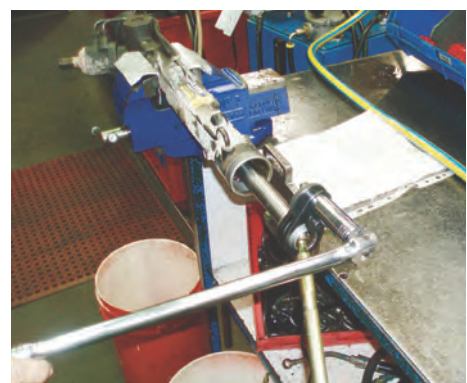
	Ø mm	Ø mm	
150.1640	23-45	31-35	300

**Eccentric clamping and turning device**

- For the removal and rotation of the round or hexagonal track rod joints (steering and wheel end)
- Due to the knurled eccentric cam it allows from optimal grip even at the joints without drive (round)
- 1/2" drive
- For use on the workbench or directly on the vehicle
- Additional stopper prevents slipping during the splitting process
- Special steel



	Ø mm	Ø mm	
150.1642	25-55	25-46	800





**Stud bolt puller**

- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- External drive hexagon socket 21 mm
- Right and left hand clamping function
- Safe clamping due to 3 rollers
- Stud screws can be screwed in or out without using counter nuts on the bolt
- Also for extra long studs that will go through the through socket
- Chrome plated and mirror polished
- Chrome vanadium



Part No.	Size	Weight (kg)
152.1005	M5	150
152.1006	M6	160
152.1007	M7	160
152.1008	M8	170
152.1010	M10	180
152.1012	M12	200
152.1014	M14	200



**Screw bolt puller set**

- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- External drive hexagon socket 21 mm
- Right and left hand clamping function
- Safe clamping due to 3 rollers
- Stud screws can be screwed in or out without using counter nuts on the bolt
- Also for extra long studs that will go through the through socket
- Chrome plated and mirror polished
- Chrome vanadium
- In durable plastic storage case



Part No.	Quantity	Size	Weight (kg)
152.1100	4 pcs	M5 - M8 - M10 - M12	0.79

**Screw bolt puller set**

- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- External drive hexagon socket 21 mm
- Right and left hand clamping function
- Safe clamping due to 3 rollers
- Stud screws can be screwed in or out without using counter nuts on the bolt
- Also for extra long studs that will go through the through socket
- Chrome plated and mirror polished
- Chrome vanadium
- In durable plastic case



Part No.	Quantity	Size	Weight (kg)
152.1101	7 pcs	M5 - M6 - M7 - M8 - M10 - M12 - M14	1.50

**Screw extractor set**

- For screws from M3 - M18
- Enable the loosening of screws and bolts with turned off heads
- Conical tapered spiral
- In durable plastic storage case



Part No.	Quantity	Size	Weight (kg)
150.1330	6 pcs	M3-M6 - M6-M8 - M8-M11 - M11-M14 - M14-M18 - M18-M24	64



**NUT SPLITTER**

**Mechanical nut splitter set**

- For the splitting of seized or over tightened bolts without damage to the bolt thread
- Suitable for nuts to a tensile strength class 8
- Special steel



Part No.	Quantity	Description	Weight (kg)
700.1180	4 pcs	Mechanical nut splitter set	1.58

consists of:

Part No.	Description	Weight (kg)
700.1181	Nut splitter 9 - 12 mm, drive 12 mm	90
700.1182	Nut splitter 12 - 16 mm, drive 14 mm	170
700.1183	Nut splitter 16 - 22 mm, drive 19 mm	380
700.1184	Nut splitter 22 - 27 mm, drive 21 mm	660

**Hydraulic nut splitter set**

- For the splitting of seized or over tightened bolts without damage to the bolt thread
- Working range from 7.0 - 36.0 mm
- Inductively hardened cutting edge
- Suitable for nuts to a tensile strength class 10
- Requires light expenditure of energy
- Special steel



Part No.	Quantity	Description	Weight (kg)
700.1170	7 pcs	Hydraulic nut splitter set	5.00

consists of:

Part No.	Description	Weight (kg)
700.1150	Hydraulic nut splitter 7.0 - 21.0 mm	700
700.1163	Nut splitter	3600
700.1151	Replacement chisel small	50
700.1152	Replacement plate small	50
700.1161	Replacement chisel large	100
700.1162	Replacement plate large	100
151.2073	Hexagon key 3/8" for replacement plate large	110

**Hydraulic nut splitter**

- Small execution
- Suitable for nuts to a tensile strength class 10
- Work pressure max. 5 t
- Especially suitable for narrow hard to access areas



Part No.	mm	L mm	Weight (kg)
700.1150	7-21	210.0	700

**Hydraulic nut splitter set**

- Large execution
- Suitable for nuts to a tensile strength class 10
- Work pressure max. 13 t
- In durable plastic storage case



				kg
700.1160	4 pcs	22 - 36 mm; M14 - M24		3.80

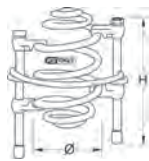
consists of:

				kg
700.1161	Replacement chisel large			100
700.1162	Replacement plate large			100
700.1163	Nut splitter			3600
151.2073	Hexagon key 3/8" for replacement plate large			110

**COIL SPRING COMPRESSOR**

**Coil spring compressor with safety latch**

- Change without removing the shock absorber strut
- Variable safety bar prevents slipping
- For vehicles up to max. 2000 kg
- Meets the requirements of the professional (ZH1/454)
- GS approved
- Special steel



	Ø mm	H mm	max N·m	Max travel mm	max t	mm	mm	kg
670.0021	110-180	240	70	200	3,5	M18x2x280	19	2,40
670.0041	110-180	300	60	300	1,8	M16x2x380	17	2,80

**Coil spring compressor with safety latch and plastic coated hook**

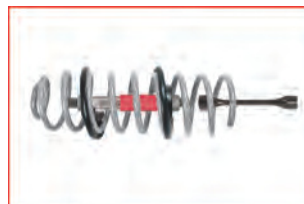
- Change without removing the shock absorber strut
- Variable safety bar prevents slipping
- For vehicles up to max. 2000 kg
- Meets the requirements of the professional (ZH1/454)
- GS approved
- Special steel



	Ø mm	H mm	max N·m	Max travel mm	max t	mm	mm	kg
670.0031	110-180	240	70	200	3,5	M18x2x280	19	2,50
670.0051	110-180	300	60	300	1,8	M16x2x380	17	2,90

**Universal telescopic centre clamp kit**

- For removal/installation of spiral springs on spring strut and independent multilink suspensions
- Safe removal and installation without dismantling the axle
- High time savings
- New, revised version with longer clamping stroke
- Suitable cup springs for reliable holding of the spiral spring
- Clamps the spring reliably in the middle of the spring
- Good positioning thanks to compact form
- Overload protection with torsion drive element
- Suitable for use on vehicles with very small access bores
- Only coil spring compressor which can be used for Volkswagen Touran, Citroen C3, Skoda Octavia and Peugeot 107
- Spring holder with special geometry



**Technical data:**

Opening of jaws min: 95.0 mm  
 Jaw width max: 220.0 mm  
 Square drive: 1/4"  
 Spring force max: 2500 kg

				kg
500.8610	6 pcs	Universal telescopic centre clamp kit		4,42

consists of:

				kg
500.8611	Spring compressor based unit, 2500 kg			0,64
500.8612	Spring holder pair Ø 90-120 mm			0,84
500.8613	Spring holder pair Ø120-140 mm			1,15
500.8614	Torsion drive 1/2"x1/2", 100 Nm			0,26

**Coil spring compressor set**

- Universal for 90% of all common types of vehicles
- With 2 standard jaw holders
- Simple and secure clamping in the vise
- Ergonomic high-tech polyurethane grip
- With working spindle that can be used with an impact wrench
- Jaw holders plastic coated
- Jaws are fitted with a nose that locks the spring during stretching to increase security and safety
- Can bear according to the TUV approval extraordinarily high loads with a maximum capacity of 2250 kg
- A shear pin protects against overload
- Special steel



**technical data:**

Spring force max: 2250 kg  
 Opening of jaws min: 65.0 mm  
 Jaw width max: 375.0 mm  
 Spring capacity: 80,0 - 195,0 mm

				kg
500.8620	5 pcs	Coil spring compressor set		11,66

consists of:

				kg
500.8621	Base body max. load 2250 kg			5,20
500.8504	Special jaws for spring compressor 80 - 165 mm → 500.8501/8601/8621			1,30
500.8505	Special jaws for spring compressor 145 - 195 mm → 500.8501/8601/8621			1,70

**accessories:**

				kg
500.8503	Standard spring jaw, 1 pcs			3,36
500.8504	Standard spring jaw No.III 80-145mm, 1 pair			1,30
500.8505	Standard spring jaw No.V, 145-195mm, 1 pair			1,70
500.8507	Standard spring jaw, 1 pcs, Ø 80-145mm			1,44
500.8509	Spring holder, for BMW and Renault			2,40
500.8510	Spring holder, for MERCEDES C classe type 203			0,80
500.8511	Standard jaw, 1 pc, Ø 140-170mm, 1 pcs			3,50
500.8513	Special jaw, 1 pc, Mercedes E class+Renault Megane2			2,40
500.8514	Special spring holder, Peugeot Break-Citroën C15			2,32
500.8515	Special jaw, 1 pc, Chrysler voyager			2,80



Other tools in relation to special automotive tools can be found in our special automotive catalogue or on our homepage: [www.kstools.com](http://www.kstools.com)

**Universal coil spring compressor set**

- For all standard vehicle springs in the cars and vans sector
- 2 standard jaw holders
- Robust execution
- Cost effective and robust alternative to conventional spring compressor
- Also suitable for conical and ball springs
- Universal for 90% of all common types of vehicles
- Working spindle that can be used with an impact wrench
- Jaw holders plastic coated
- Can bear according to the TÜV approval extremely high loads, with a maximum load of 2600 kg
- A shear pin protects against overload
- Special steel
- Includes safety arrester rope



**Technical data:**

Spring force max: 2600 kg  
 Opening of jaws min: 50.0 mm  
 Jaw width max: 310.0 mm  
 Spring capacity: 80,0 - 195,0 mm

			kg
500.8700	5 pcs	Universal coil spring compressor set	13,50

**consists of:**

			kg
500.8701	Spring compressor based unit, 500 mm, max spring pressure, 2600 kg		8,20
500.8703	Safety pin set 4 + 5 mm, 10 pcs.		0,10
500.8705	Standard spring holder with a double stop function, gr. 1 80 - 160 mm		3,50
500.8706	Standard spring holder with a double stop function, gr. 2 140 - 195 mm		4,00
500.8707	Safety rope for 500.8700		0,20



**Adaptor set for Mercedes Benz and BMW**

- For Mercedes Benz C- and E-class, BMW 3 Series (E64) and 5 series (E39)
- Can be used in conjunction with the spring compressor 500.8700
- Adapter is used in conjunction with the standard jaws
- Special steel



			kg
500.8710	2 pcs	Adaptor set for Mercedes Benz and BMW	500

**consists of:**

			kg
500.8711	Adaptor large		350
500.8712	Adaptor small		150

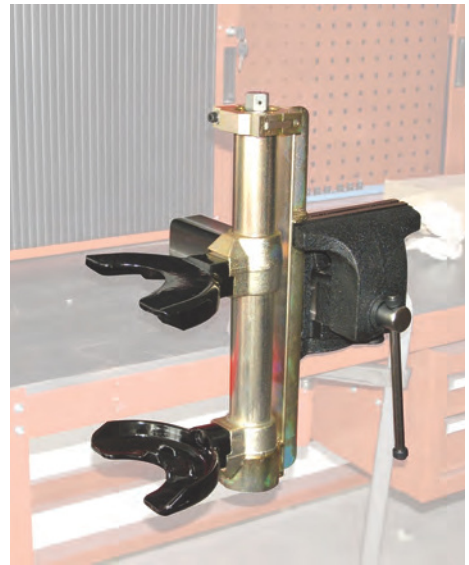


**Special adaptor for BMW E90/81**

- For BMW E 90/81
- Use only in combination with adapter set 500.8710
- For spring compressor 500.8700
- Adapter is used in conjunction with the standard jaws
- Special steel

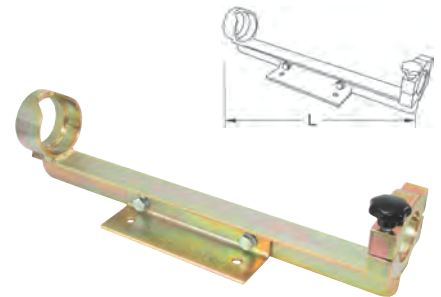


			kg
500.8713		Special adaptor for BMW E90/81	1,34



**Spring compressor bracket**

- Bracket specially designed for spring compressor 500.8700
- Makes working on suspension struts easy and safe
- Can be wall or vice mounted
- Special steel



		L mm	kg
500.8704		500,0	1,50



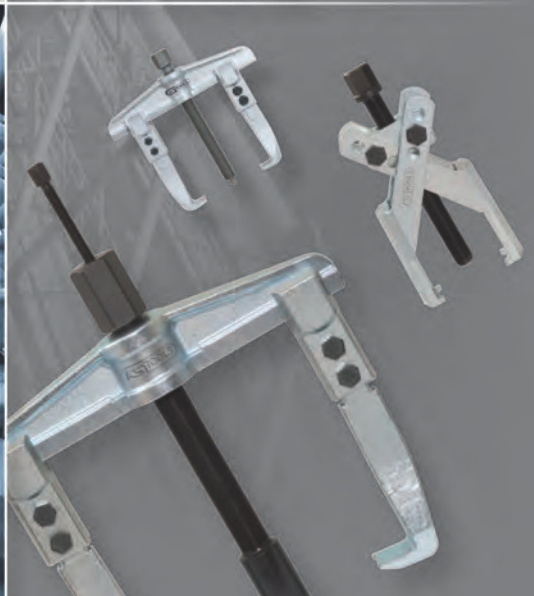
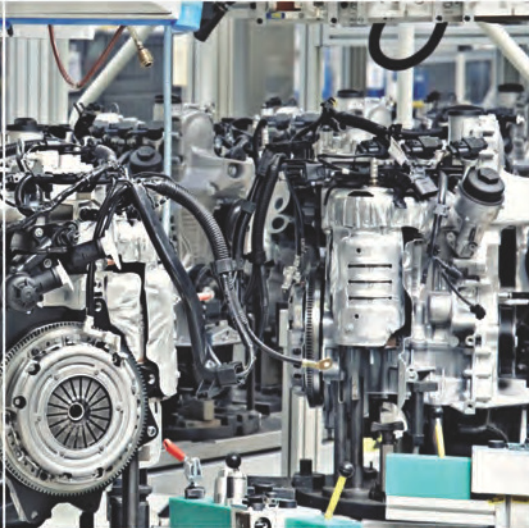
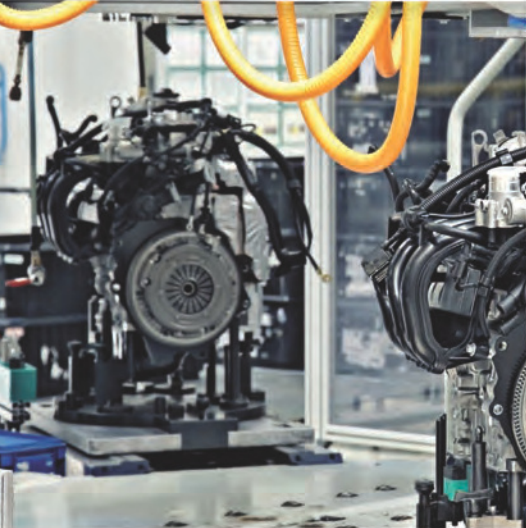




**KSTOOLS**<sup>®</sup>

*Innovation is  
our mission!*

**PULLERS**







Innovation is  
our mission!



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# VIDEOSCOPE TECHNOLOGY

## Technical Videoscope

The application of videoscope in the technical area has grown in the course of the last years and increased in importance. Not only under the aspect of the simple and recognized investigation but can also be used as proof to suppliers, however in particularly in regard to warranty quotations and statements to service providers towards future manufacturing. Another plus for the acquisition of a videoscope lies in the partly immense saving of valuable working hours with searching for the repair.

To be able to do justice to the different demands for the devices or equipment, now there are 3 different executions within the KS Tools range for the correct choice. All the same whether you simply want to consider or review in parallel by video / photo or audio admission, we are sure that you will find a suitable device over the next pages. The operation of the devices is very user friendly and, moreover, can be communicated in the provided, simply understandable manuals.

Concerning the assigned software, first of all, the probes set new graduations. So the picture is produced directly in a mini camera head of the probe end and with led lights that are adjustable in perfect quality and transferred by data cable to the handle (wireless) or to the hand device. Also the light appears directly in the probe head white, adjustable high performance LEDs grant a perfect illumination.

### Various application possibilities e.g.:



#### Automotive

Engine, transmission, tank, car body, dashboard, expert etc.

#### Aviation

Engine, turbine, conduit systems etc.

#### Construction

Evaluation of building substance, water damage, parasite attack etc.

#### Pipeline construction

Welding seams, tracking down of foreign objects, leakages etc.

#### Hydraulic systems

Cylinders leakages etc

#### Heating sanitary air conditioning

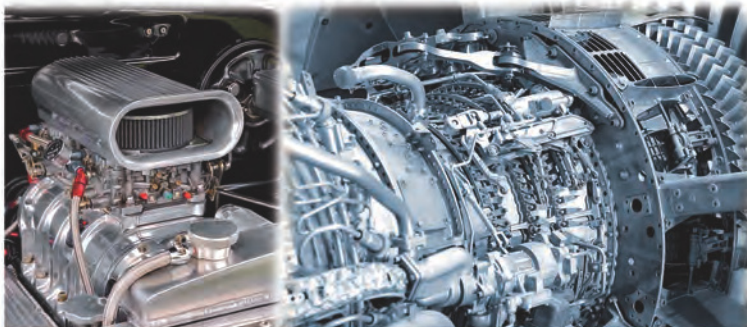
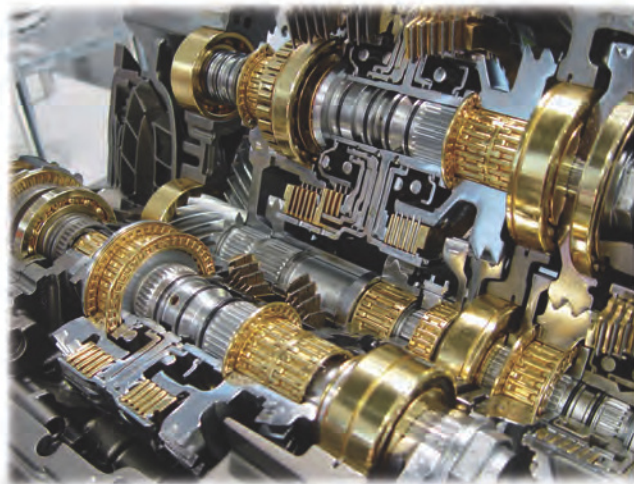
Ovens, fi eplaces, boiler, air conditioning, sewage systems etc.

#### Pest control etc

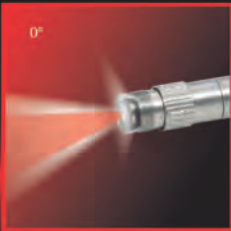
Hives, wasp nest, bird nest, insect infestations etc.

#### Police, customs.


Contraband, stolen goods, drugs, house searches, espionage etc.




ULTIMATE Videoscope  
SUNDERBACHS  
SUI LIECHTENSTEIN



▶ NEW ANTI-REFLECTION FUNCTION AND DUST FILTER FUNCTION ON METAL BODY AND MIRRORS



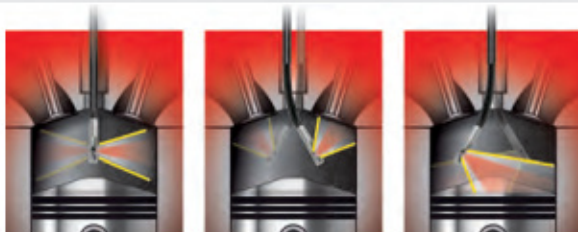
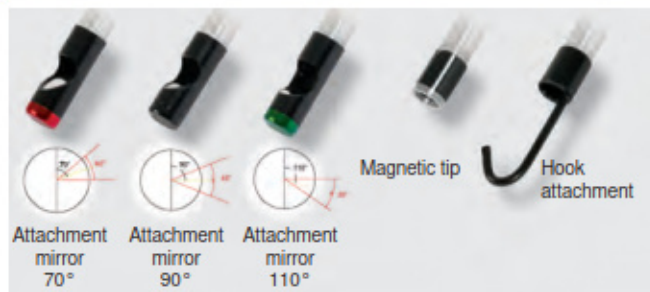
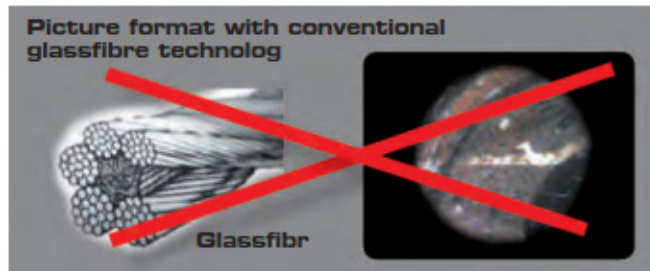
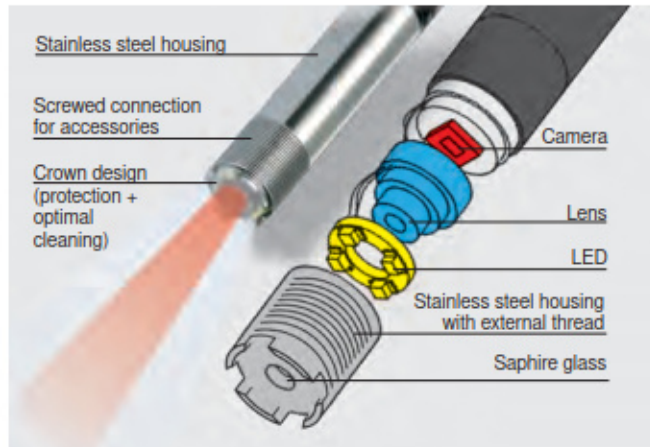
▶ 90°/180°/270°/360° IMAGE ROTATION



▶ INCREASED IMAGE RESOLUTION - HIGH-CONTRAST IMAGES IN LOW LIGHT ENVIRONMENTS



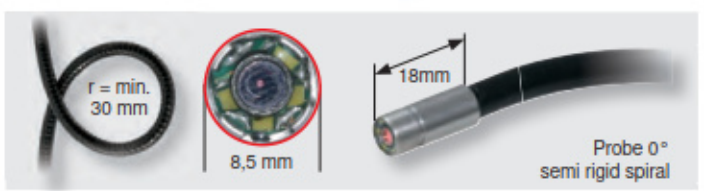
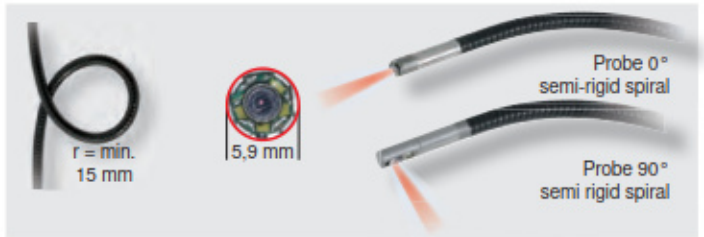
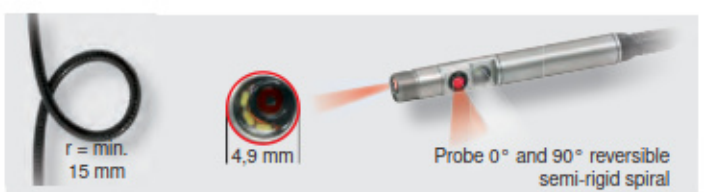
# VIDEOSCOPE TECHNOLOGY **Accessories**



## SUPERCHARGED probes



## MASTER probes





## ULTIMATE<sup>vision</sup> MASTER VIDEOSCOPE SETS

### ULTIMATE<sup>vision</sup> MASTER Videoscope set

- Adjustable function for the angle of vision through the one way sending device
- 3 adjustable Mini-LED-lamps
- Mobile and network independent system
- Optimal handling through network or independent working
- Probes substantially stronger and less breakage, as no glass fibre cable
- Working temperature of + 0 °C to +55 °C
- Excellent picture quality and viewing through special camera in the probe head
- Optionally expandable with other probes
- Very good picture and video quality
- Picture reception in JPEG format
- Video records in MPEG4 format
- View on a TV monitor with AV cable possible
- Multilingual menu (14 languages)
- Versatile usage
- Incl. 4xAA batteries
- 2-component housing protects against light impacts
- With high-quality foam protection material
- In durable plastic storage case

#### Scope of delivery:

- Basic unit
- AV cable
- 4 GB SD card
- USB data cable
- Battery set 4xAAA
- Selected videoscope probe



#### Technical data hand held unit:

Screen:	3,5" TFT LCD VGA
Output format:	NTSC and PAL
Picture storage format:	AVI, JPG (640x480)
Storage medium:	SD card up to a max. 32 GB
Battery:	4 x AA
Operating time:	ca. 4 h
Operating temperature:	-20 °C to +60 °C
Language manual:	DE, EN, FR, ES, IT, DA, ZH, RU, NL, AR, JA, PL, BG

#### Technical data sensor:

Bend radius:	min. 15 mm
Lens type:	aspherical
Camera protection:	designed out of sapphire glasse camera sheath made out of stainless steel
Protection class:	IP 67
Aperture angle:	horizontal 46° - vertical 34° - diagonal 56°
Camera resolution:	640 (H) x 480 (V) = 307.200 Pixel
Focused depth of fi ld:	1 cm - 6 cm
AV Magnifi ation:	is up to 15" over cinch
Resistance:	waterproof to a max. of 1m oil and petrol resistant probe
Mirror attachment:	line of vision 70° - aperture angle 40° line of vision 90° - aperture angle 36° line of vision 110° - aperture angle 32°
Light source:	3 dimmable white mini LED lamps
Brightness:	0 - 275 LUX / 4cm

#### consists of:

550.7999	ULTIMATE Vision handset, no probe	340
550.5008	4 GB SD card	11
550.5003	AV Cable 2 m	20
550.5018	USB data cable	28

### ULTIMATE<sup>vision</sup> MASTER Videoscope set with 90° front camera probe, semi-rigid spiral shaft, 6-pcs.



	1 m	2 m	3 m
3,9 mm	550.7391	550.7392	550.7393

### ULTIMATE<sup>vision</sup> MASTER Videoscope set with 90° front camera probe, semi-rigid spiral shaft, 6-pcs.



	1 m	2 m	3 m
5,5 mm	550.7591	550.7592	550.7593

### ULTIMATE<sup>vision</sup> MASTER Videoscope set with 0° + 90° camera probe, reversible, 6-pcs.



	1 m	2 m	3 m
4,9 mm	550.7049	550.7462	550.7463

### ULTIMATE<sup>vision</sup> MASTER Videoscope set with 150°/0° camera probe, flexible PVC shaft 6-pcs.



	1 m	2 m	3 m
6,0 mm	550.7611	550.7612	550.7613

### ULTIMATE<sup>vision</sup> MASTER Videoscope set with 0° front camera probe, semi-rigid spiral shaft, 6-pcs.



	1 m	2 m	3 m
5,5 mm	550.7055	550.7502	550.7503





### ULTIMATE<sup>vision</sup> MASTER Videoscope set with 150°/90° front camera probe, flexible PVC shaft 6-pcs.



	1 m	2 m	3 m
6,0 mm	550.7621		

**ULTIMATEvision MASTER Videoscope set with 0° front camera probe, semi-rigid spiral shaft, 6-pcs.**




			
8,5 mm	550.7801	550.7802	550.7803

**ULTIMATEvision MASTER CAMERA PROBE**

**ULTIMATEvision Cable extension**

- Cable diameter: 8.5 mm
- Connection diameter: 16 mm
- Universal for all ULTIMATEvision Videoscope applicable



	L m	
550.7854	3.0	600



**ULTIMATEvision MASTER 90° front camera probe semi rigid spiral shaft**

- 4 adjustable mini LED lamps
- Bend radius max. 15 mm
- Suitable for connection to ULTIMATEvision MASTER videoscope



**Technical data probe:**

Format: semi rigid  
 Bend radius: min. 15 mm  
 Lens type: aspherical  
 Camera protection: designed out of sapphire glasse camera sheath made out of stainless steel  
 Protection class: IP 67  
 Aperture angle: horizontal 46° - vertical 34° - diagonal 56°  
 Camera resolution: 320 (H) x 240 (V) = 76,800 Pixel  
 Focused depth of fi ld: 1 cm - 6 cm  
 Operating temperature: 0°C to 75°C  
 AV Magnifi ation: is up to 15" over cinch  
 Resistance: waterproof to a max. of 1m oil and petrol resistant probe  
 Light source: 4 dimmable white mini LED lamps  
 Brightness: 0 ~ 275 LUX / 4cm

	Head Ø mm		L m	
550.7351	3,9	90°	1,0	180
550.7352	3,9	90°	2,0	250
550.7353	3,9	90°	3,0	320



**ULTIMATEvision MASTER Camera probe reversible, 0° and 90°**

- Contains 2 cameras and 2 independent light sources
- Bend radius max. 15 mm
- Semi rigid spiral shaft
- The tip of the probe's head is threaded for convenient attachment of different accessories (mirror / hook / magnet)
- Compatible with KS Tools ULTIMATEvision MASTER videoscope



**Technical data probe:**

Format: semi rigid  
 Bend radius: min. 15 mm  
 Lens type: aspherical  
 Camera protection: designed out of sapphire glasse camera sheath made out of stainless steel  
 Aperture angle: horizontal 46° - vertical 34° - diagonal 56°  
 Camera resolution: 640 (H) x 480 (V) = 307,200 Pixel  
 Focused depth of fi ld: 1 cm - 6 cm  
 AV Magnifi ation: is up to 15" over cinch  
 Operating temperature: +0°C to +60°C  
 Light source: 3 dimmable white mini LED lamps  
 Brightness: 0 ~ 275 LUX / 4cm

	Head Ø mm		L m	
550.7491	4,9	0°/90°	1,0	105
550.7492	4,9	0°/90°	2,0	105
550.7493	4,9	0°/90°	3,0	105



**ULTIMATEvision MASTER 0° front camera probe semi rigid spiral shaft**

- 4 adjustable mini LED lamps
- Bend radius max. 15 mm
- Suitable for connection to ULTIMATEvision MASTER videoscope



**Technical data probe:**

Format: semi rigid  
 Bend radius: min. 15 mm  
 Lens type: aspherical  
 Camera protection: designed out of sapphire glasse camera sheath made out of stainless steel  
 Protection class: IP 67  
 Aperture angle: horizontal 46° - vertical 34° - diagonal 56°  
 Camera resolution: 320 (H) x 240 (V) = 76,800 Pixel  
 Focused depth of fi ld: 1 cm - 6 cm  
 Operating temperature: 0°C to 75°C  
 AV Magnifi ation: is up to 15" over cinch  
 Resistance: waterproof to a max. of 1m oil and petrol resistant probe  
 Light source: 4 dimmable white mini LED lamps  
 Brightness: 0 ~ 275 LUX / 4cm

	Head Ø mm		L m	
550.7551	5,5	0°	1,0	140
550.7552	5,5	0°	2,0	140
550.7553	5,5	0°	3,0	140



**ULTIMATEvision MASTER 90° front camera probe semi rigid spiral shaft**

- 4 adjustable mini LED lamps
- Bend radius max. 15 mm
- Suitable for connection to ULTIMATEvision MASTER videoscope



**Technical data probe:**

Format: semi rigid  
 Bend radius: min. 15 mm  
 Lens type: aspherical  
 Camera protection: designed out of sapphire glasse camera sheath made out of stainless steel  
 Protection class: IP 67  
 Aperture angle: horizontal 46° - vertical 34° - diagonal 56°  
 Camera resolution: 320 (H) x 240 (V) = 76,800 Pixel  
 Focused depth of fi ld: 1 cm - 6 cm  
 Operating temperature: 0°C to 75°C  
 AV Magnifi ation: is up to 15" over cinch  
 Resistance: waterproof to a max. of 1m oil and petrol resistant probe  
 Light source: 4 dimmable white mini LED lamps  
 Brightness: 0 ~ 275 LUX / 4cm

	Head Ø mm		L m	
550.7571	5,5	90°	1,0	230
550.7572	5,5	90°	2,0	260
550.7573	5,5	90°	3,0	400



**ULTIMATE vision MASTER front camera probe 150°/0° flexible PVC shaft**

- 4 adjustable mini LED lamps
- Bend radius max. 15 mm
- Suitable for connection to ULTIMATE vision MASTER videoscope


**Technical data probe:**

Format:	flexible PVC casing
Bend radius:	min. 15 mm
Lens type:	aspherical
Camera protection:	designed out of sapphire glass camera sheath made out of stainless steel
Operating temperature:	+0°C to +55°C
Line of vision:	0°, revolving in 2 directions each to 150°
Aperture angle:	horizontal 46° - vertical 34° - diagonal 56°
Camera resolution:	320 (H) x 240 (V) = 76,800 Pixel
Focused depth of field:	1 cm - 6 cm
AV Magnification:	is up to 15x over cinch
Light source:	4 dimmable white mini LED lamps
Brightness:	0 - 275 LUX / 4cm

	Head Ø mm		L m	
550.7601	6.0	150°/0°	1.00	140
550.7602	6.0	150°/0°	2.00	180
550.7603	6.0	150°/0°	3.00	220

**ULTIMATE vision MASTER front camera probe 150°/90° flexible PVC shaft**

- 4 adjustable mini LED lamps
- Bend radius max. 15 mm
- Suitable for connection to ULTIMATE vision MASTER videoscope


**Technical data probe:**

Format:	flexible PVC casing
Bend radius:	min. 15 mm
Lens type:	aspherical
Camera protection:	designed out of sapphire glass camera sheath made out of stainless steel
Operating temperature:	+0°C to +55°C
Line of vision:	90°, revolving in 2 directions each to 150°
Aperture angle:	horizontal 46° - vertical 34° - diagonal 56°
Camera resolution:	320 (H) x 240 (V) = 76,800 Pixel
Focused depth of field:	1 cm - 6 cm
AV Magnification:	is up to 15x over cinch
Light source:	4 dimmable white mini LED lamps
Brightness:	0 - 275 LUX / 4cm

	Head Ø mm		L m	
550.7606	6.0	150°/90°	1.00	140

**ULTIMATE vision MASTER 0° front camera probe semi rigid spiral shaft**

- 6 adjustable mini LED lamps
- Bend radius max. 30 mm
- Suitable for connection to ULTIMATE vision MASTER Videoscope


**Technical data probe:**

Format:	semi rigid
Bend radius:	min. 30 mm
Lens type:	aspherical
Camera protection:	designed out of sapphire glass camera sheath made out of stainless steel
Protection class:	IP 67
Aperture angle:	horizontal 46° - vertical 34° - diagonal 56°
Camera resolution:	320 (H) x 240 (V) = 76,800 Pixel
Focused depth of field:	1 cm - 6 cm
Operating temperature:	+0°C to +55°C
AV Magnification:	is up to 10x over cinch
Resistance:	waterproof to a max. of 1m oil and petrol resistant probe
Mirror attachment:	line of vision 90° - aperture angle 36°
Light source:	6 dimmable white mini LED lamps
Brightness:	0 - 420 LUX / 4 cm

	Head Ø mm		L m	
550.7851	8.5	0°	1.0	140
550.7852	8.5	0°	2.0	140
550.7853	8.5	0°	3.0	140


**ULTIMATE vision MASTER videoscope set with sensor drum**

- Probe with dimensionally stable pushrod
- Flexible probe head for optimum bend flexibility
- 8 dimmable white mini LED lamps
- Mobile and network independent system
- Abrasion resistant, spring sheathed probe head shaft
- Excellent picture quality and viewing through special camera in the probe head
- Very good picture and video quality
- 1.5 times digital zoom function
- Horizontal picture reflection function
- Picture reception in JPEG format
- Video records in MPEG4-format
- View on large monitor with AV cable
- Data transfer directly through USB cable possible
- SD port for SD card
- Multi lingual menu (14 languages)
- Wide range of applications in pipes and shafts
- 2 Component housing protects against light impacts
- In durable plastic storage case

**Contents:**

- Sensor drum with pushrod + camera head
- Basic unit ULTIMATE vision MASTER
- 2 GB SD card


**Technical data hand held unit:**

Screen:	3.5" TFT LCD VGA
Output format:	NTSC and PAL
Picture storage format:	AVI, JPG (640x480)
Storage medium:	SD card up to a max. 32 GB
Battery:	4 x AA
Operating time:	ca. 4 h
Operating temperature:	-20°C to +60°C
Language manual:	DE, EN, FR, ES, IT, DA, ZH, RU, NL, AR, JA, PL, BG
Length:	24,3 mm
Ø:	28,0 mm

**Technical data probe head:**

Aperture angle:	diagonal 150.8°
Camera resolution:	320 (H) x 240 (V) = 76,800 Pixel
Focused depth of field:	10 - ∞ mm
AV Magnification:	is up to 15x over cinch
Light source:	8 dimmable white mini LED lamps
Brightness:	33 Lux
Operating temperature:	-20°C to +60°C
Camera protection:	designed out of sapphire glass camera sheath made out of stainless steel
Bend radius:	max. 30 mm
Application:	40-100mm - 90° bend flexibility above Ø50mm

**Technical data drum with pushrod:**

Length:	22.00 m
Ø:	6 mm
Bend radius:	min. 150 mm
Operating temperature:	-10°C up to +70°C
Protection class:	IP 65
Drum Ø:	300 mm

550.7221	3 pcs ULTIMATE vision MASTER videoscope set with sensor drum	10.60

**Aluminium adaptor for videoscope**

- Suitable for use with videoscopes



	Ø mm	L mm	g
550.7229	50,0	36,0	61

**Brush for videoscope**

- Suitable for use with videoscopes
- For centric use of the camera



	DN	L mm	g
550.7228	100	150,0	64
550.7227	150	150,0	151

**ULTIMATEvision MASTER PROBE ACCESSORIES**

**ULTIMATEvision MASTER 2 in 1 Magnet sleeve + hook attachment**

- Suitable for connection to ULTIMATEvision MASTER Videoscope



	Head Ø mm	g
550.7459	4,9	20

**ULTIMATEvision MASTER Mirror attachment**

- Suitable for connection to ULTIMATEvision MASTER Videoscope



	Head Ø mm	g	
550.7555	5,5	70°	20
550.7556	5,5	90°	20
550.7557	5,5	110°	20

**ULTIMATEvision MASTER Magnet sleeve**

- Suitable for connection to ULTIMATEvision MASTER Videoscope



	Head Ø mm	g
550.7559	5,5	20

**ULTIMATEvision MASTER Hook attachment**

- Suitable for connection to ULTIMATEvision MASTER Videoscope



	Head Ø mm	g
550.7558	5,5	20

**ULTIMATEvision MASTER Mirror attachment**

- Suitable for connection to ULTIMATEvision MASTER Videoscope



	Head Ø mm	g	
550.7857	8,5	70°-110°	20

**ULTIMATEvision MASTER Magnet sleeve**

- Suitable for connection to ULTIMATEvision MASTER Videoscope



	Head Ø mm	g
550.7859	8,5	20

**ULTIMATEvision MASTER Hook attachment**

- Suitable for connection to ULTIMATEvision MASTER Videoscope



	Head Ø mm	g
550.7858	8,5	20

**SUPERCHARGED**

**ULTIMATEvision SUPERCHARGED VIDEOSCOPE SETS**

**ULTIMATEvision SUPERCHARGED Videoscope set**

- Adjustable function for the angle of vision through the one way sending device
- 3 adjustable Mini-LED-lamps
- Mobile and network independent system
- Optimal handling through network or independent working
- Probes substantially stronger and less breakage, as no glass fibre cable
- Working temperature of +0°C to +55°C
- Excellent picture quality and viewing through special camera in the probe head
- Optionally expandable with other probes
- Very good picture and video quality
- Picture reception in JPEG format
- Video records in MPEG4-format
- View on a TV monitor with AV cable possible
- Multilingual menu (14 languages)
- Versatile usage
- Incl. 4xAA batteries
- 2-component housing of the basic unit protects against light impacts with high-quality foam insert
- In durable plastic storage case

**Scope of delivery:**

- Basic unit
- Mirror attachment
- AV cable
- 4 GB SD card
- USB data cable
- Battery set 4xAA
- Selected videoscope probe



**Technical data hand held unit:**

- Screen: 3,5" TFT LCD VGA
- Output format: NTSC and PAL
- Picture storage format: AVI, JPG (640x480)
- Storage medium: SD card up to a max. 32 GB
- Battery: 4 x AA
- Operating time: ca. 4 h
- Operating temperature: -20°C to +60°C
- Language manual: DE, EN, FR, ES, IT, DA, ZH, RU, NL, AR, JA, PL, BG

**Technical data sensor:**

- Bend radius: min. 15 mm
- Lens type: aspherical
- Camera protection: designed out of sapphire glass camera sheath made out of stainless steel
- Protection class: IP 67
- Aperture angle: horizontal 46° - vertical 34° - diagonal 56°
- Camera resolution: 640 (H) x 480 (V) = 307,200 Pixel
- Focused depth of f. ld: 1 cm - 6 cm
- AV Magnification: is up to 15x over cinch
- Resistance: waterproof to a max. of 1m oil and petrol resistant probe
- Mirror attachment: line of vision 70° - aperture angle 40°  
line of vision 90° - aperture angle 36°  
line of vision 110° - aperture angle 32°
- Light source: 3 dimmable white mini LED lamps
- Brightness: 0 - 275 LUX / 4cm

**consists of:**

	g
550.7999 ULTIMATE Vision handset, no probe	340
550.5008 4 GB SD card	11
550.5003 AV-Cable 2 m	20
550.5018 USB data cable	28

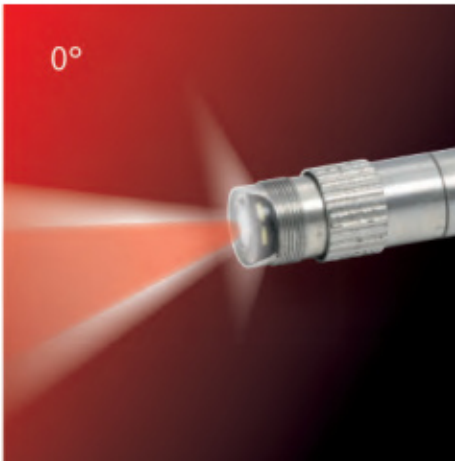


**ULTIMATEvision SUPERCHARGED Videoscope set with 0° front camera probe, flexible spiral shaft, 7-pcs.**



**SUPERCHARGED**

Ø	1 m	2 m	3 m
5.5 mm	550.8055	550.8002	



**ULTIMATEvision SUPERCHARGED Videoscope set with 0° front camera probe, flexible PVC-shaft, 7-pcs.**



**SUPERCHARGED**

Ø	1 m	2 m	3 m
6.0 mm	550.8061	550.8062	

**ULTIMATEvision SUPERCHARGED CAMERA PROBE**

**ULTIMATEvision Cable extension**

- Cable diameter: 8.5 mm
- Connection diameter: 16 mm
- Universal for all ULTIMATEvision Videoscope applicable



	L m	Ø
550.7854	3.0	600

**ULTIMATEvision SUPERCHARGED 0° front camera probe flexible spiral shaft**

- 4 adjustable mini LED lamps
- Bend radius max. 15 mm
- Suitable for connection to ULTIMATEvision SUPERCHARGED videoscope



**SUPERCHARGED**

**Technical data probe:**

- Format: flexible PVC casing  
 Bend radius: min. 15 mm  
 Lens type: aspherical  
 Camera protection: designed out of sapphire glass  
 camera sheath made out of stainless steel  
 IP 67  
 Protection class:  
 Aperture angle: horizontal 45° - vertical 34° - diagonal 55°  
 Camera resolution: 320 (H) x 240 (V) = 76,800 Pixel  
 Focused depth of field: 1 cm - 6 cm  
 Operating temperature: 0°C to 75°C  
 AV Magnification: is up to 15x over cinch  
 Resistance: waterproof to a max. of 1m oil and petrol resistant probe  
 Light source: 4 dimmable white mini LED lamps  
 Brightness: 0 - 275 LUX / 4cm

	Head Ø mm	Ø	L m	Ø
550.8551	5.5	0°	1.00	140
550.8552	5.5	0°	2.00	140

**ULTIMATEvision SUPERCHARGED 0° front camera probe flexible PVC shaft**

- 4 adjustable mini LED lamps
- Bend radius max. 15 mm
- Suitable for connection to ULTIMATEvision SUPERCHARGED videoscope



**SUPERCHARGED**

**Technical data probe:**

- Format: flexible PVC casing  
 Bend radius: min. 15 mm  
 Lens type: aspherical  
 Camera protection: designed out of sapphire glass  
 camera sheath made out of stainless steel  
 IP 67  
 Protection class:  
 Aperture angle: horizontal 45° - vertical 34° - diagonal 55°  
 Camera resolution: 320 (H) x 240 (V) = 76,800 Pixel  
 Focused depth of field: 1 cm - 6 cm  
 Operating temperature: 0°C to 75°C  
 AV Magnification: is up to 15x over cinch  
 Resistance: waterproof to a max. of 1m oil and petrol resistant probe  
 Mirror attachment: line of vision 70° - aperture angle 40°  
 line of vision 90° - aperture angle 35°  
 line of vision 110° - aperture angle 32°

	Head Ø mm	Ø	L m	Ø
550.8601	6.0	150°	1.00	140
550.8602	6.0	150°	2.00	140

**ULTIMATEvision SUPERCHARGED PROBE ACCESSORIES**

**ULTIMATEvision SUPERCHARGED Mirror attachment**

- Suitable for connection to ULTIMATEvision SUPERCHARGED videoscope



**SUPERCHARGED**

	Head Ø mm	Ø	Ø
550.8555	5.5	70°	3
550.8556	5.5	90°	3
550.8557	5.5	110°	3

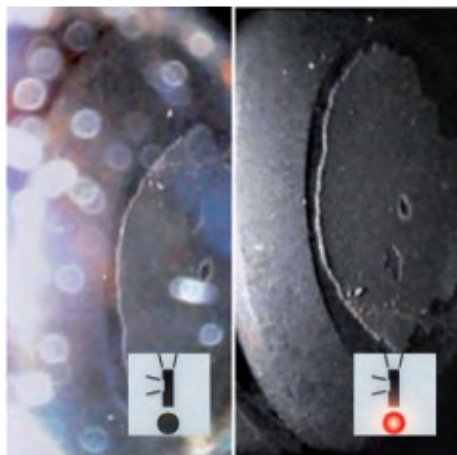
**ULTIMATEvision SUPERCHARGED Hook attachment**

- Suitable for connection to ULTIMATEvision SUPERCHARGED Videoscope



**SUPERCHARGED**

	Head Ø mm	Ø
550.8558	5.5	3



**ULTIMATEvision SUPERCHARGED Mirror attachment**

- Suitable for connection to ULTIMATEvision SUPERCHARGED video scope



**SUPERCHARGED**

	Head Ø mm	Viewing angle	Weight
550.8605	6.0	70°	3
550.8606	6.0	90°	3
550.8607	6.0	110°	3

**GENERAL ACCESSORIES**

**AV cable**

- Suitable for all ULTIMATEvision Videoscopes
- Does not transmit sound
- Available plugs: AV jack on video cinch



	L m	Weight
550.5003	1.00	20

**4 GB SD card**

- Suitable for all ULTIMATEvision Videoscopes



	Weight
550.5008	12

**USB-Data cable**

- Suitable for all ULTIMATEvision Videoscopes



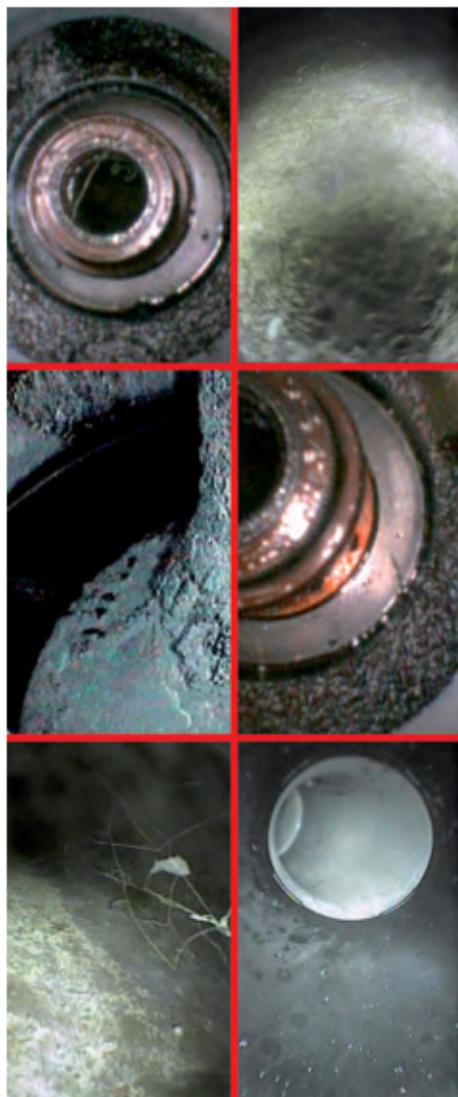
	Weight
550.5018	30

**Alcohol cleaning set**

- Suitable for all ULTIMATEvision Videoscopes



	Weight
550.7998	50



**USB video grabber**

- Just process the files and then burn DVDs, VCDs and more
- Live image broadcasting to TV and laptop
- Supports qualitative high-quality video resolution
- With video software
- Universal serial bus specification Rev.2.0
- NTSC, PAL, video format
- Video and audio input
- USB bus power



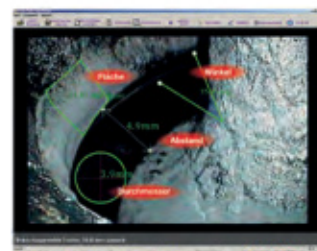
**Technical data:**

Main memory:	256 MB
Operating system:	Windows 2000, XP, 7, Vista 32 bit
Hard disc capacity:	50 MB (free)
USB port:	USB 2.0

	Weight
550.8603	135

**Measurement software**

- Only usable in association with ULTIMATEvision MASTER video scope with 0° 5.5 mm probe
- Ideal for bonding in technical documentation
- Only now with this software it is possible to correctly estimate, measure and interpret damages
- Measuring of angles
- Measuring of gaps
- Measurement of radius
- Calculation of areas
- Saving of the arranged photos
- JPEG data format
- Contains distance blade in the delivery



	Weight
550.5015	300



# PNEUMATIC TOOLS



*Innovation is  
our mission!*

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# PNEUMATIC TOOLS

## Advantages

### slimPOWER

**Extremely versatile**

- For hard to reach places
- Particularly low air consumption
- Low vibration
- Long service life
- Easy operation
- Supplied incl. coupling connector

**Extremely strong**

- Particularly low air consumption
- Low vibration
- Cold insulated handle
- Long service life
- Easy operation
- Supplied incl. coupling connector

## Composition

Angular transmission with lubrication nipple

Collet chuck

Cold insulation handle

Adjusting screw for air supply adjusts speed and performance

Compressed air connection with rotating exhaust

Safety operation lever with locking device

Lever ratchet head (clockwise and anticlockwise)

Cold insulation handle

Adjusting screw for air supply adjusts speed and performance

Compressed air connection with rotating exhaust

Safety operation lever with locking device

**Our pneumatic tools correspond to the demands of the following standards:**

- Standards 2006/42/EC
- EN ISO 12100-1+A1:2009
- EN ISO 12100-2+A1:2009
- EN ISO 14121-1:2007, EN 792-6+A1:2008
- EN ISO 15744:2008, EN ISO 8662-7:1997

## Striking mechanisms

### Single hammer striking mechanisms



- Traditional approved construction
- Grease lubrication

### Pin clutch



- Reliable construction
- Low vibration
- Fast torque progression
- Oil lubrication

### Twin hammer striking mechanisms / clutch



- Excellent power to weight ratio
- Low sensitivity to air pressure fluctuations
- Constant impact with continuous torque progression
- Suitable for heavy and light duty
- Grease lubrication
- Industrial striking mechanisms e.g. 515.1215

## Pneumatic profil

### Reversing ratchets



### Drilling machines



### Spot weld drilling machines



### Grinding tools



### Burnishing tools



### Erasing machines



### Needle scaler



### Pneumatic-nibbler



### Impact wrenches



### Blind rivet gun



### Oscillating cutter



### Grease guns



### Wheel filling gaug



### Combination spray guns



### Compressed air guns



### Sawing





## REVERSIBLE RATCHET

### SlimPOWER mini-pneumatic-reversing ratchet

- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- Air exhaust through the handle rear end
- With ratchet head reversing lever (clockwise and anticlockwise)
- Easy operation
- Triple teeth
- With stepless speed regulation
- Vibration dampened
- Includes 1/4" coupling connector
- Robust housing



1/4"

#### Technical data:

Square drive:	1/4"
Max. tightening torque:	34 N·m
Max. loosening torque:	34 N·m
No load current:	420 r.p.m.
Vibration:	< 2,3 ms <sup>2</sup>
Noise performance level:	92 dbA
Noise pressure level:	85 dbA
Recommended torque:	25 N·m
Air consumption:	240.66 l/min
Operating pressure:	max. 5,5 bar (80 psi)
Min. tube diameter:	1/4" - 4,8 mm
Connection thread:	1/4"PT

	B mm	L mm	W mm
515.5005	35.5	135.0	400

### SlimPOWER mini-pneumatic-reversing ratchet

- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- Air exhaust through the handle rear end
- With ratchet head reversing lever (clockwise and anticlockwise)
- Easy operation
- Triple teeth
- With stepless speed regulation
- Vibration dampened
- Includes 1/4" coupling connector
- Robust housing



3/8"

#### Technical data:

Square drive:	3/8"
Max. tightening torque:	34 N·m
Max. loosening torque:	34 N·m
No load current:	420 r.p.m.
Vibration:	< 2,3 ms <sup>2</sup>
Noise performance level:	92 dbA
Noise pressure level:	85 dbA
Recommended torque:	25 N·m
Air consumption:	240.66 l/min
Operating pressure:	max. 5,5 bar (80 psi)
Min. tube diameter:	3/8" - 4,8 mm
Connection thread:	1/4"PT

	B mm	L mm	W mm
515.5010	35.5	135.0	400

### SlimPOWER mini-pneumatic-reversing ratchet

- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- Air exhaust through the handle rear end
- With ratchet head reversing lever (clockwise and anticlockwise)
- Easy operation
- Triple teeth
- With stepless speed regulation
- Vibration dampened
- Includes 1/4" coupling connector
- Robust housing



1/2"

#### Technical data:

Square drive:	1/2"
Max. tightening torque:	34 N·m
Max. loosening torque:	34 N·m
No load current:	420 r.p.m.
Vibration:	< 2,3 ms <sup>2</sup>
Noise performance level:	92 dbA
Noise pressure level:	85 dbA
Recommended torque:	25 N·m
Air consumption:	240.66 l/min
Operating pressure:	max. 5,5 bar (80 psi)
Min. tube diameter:	1/4" - 4,8 mm
Connection thread:	1/4"PT

	B mm	L mm	W mm
515.5015	35.5	135.0	400

### Mini pneumatic reversing ratchet

- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- Air exhaust through the handle rear end
- With ratchet head reversing lever (clockwise and anticlockwise)
- Easy operation
- Triple teeth
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing special plastic



1/4"

#### Technical data:

Square drive:	1/4"
Max. tightening torque:	40,6 N·m
Max. loosening torque:	40,6 N·m
No load current:	250 r.p.m.
Vibration:	< 4,4 ms <sup>2</sup>
Noise performance level:	97 dbA
Noise pressure level:	87 dbA
Recommended torque:	30 N·m
Air consumption:	90 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	1/4" - 6,35 mm
Connection thread:	1/4"PT

	B mm	L mm	W mm
515.3080	41.0	180.0	0.60

### Pneumatic reversing ratchet

- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- Air exhaust through the handle rear end
- With ratchet head reversing lever (clockwise and anticlockwise)
- Easy operation
- Triple teeth
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing special plastic



#### Technical data:

Square drive:	3/8"
Max. tightening torque:	68 N·m
Max. loosening torque:	68 N·m
No load current:	160 r.p.m.
Vibration:	< 1,0 ms <sup>2</sup>
Noise performance level:	97 dbA
Noise pressure level:	85 dbA
Recommended torque:	50 N·m
Air consumption:	250 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	W mm
515.3085	50.0	260.0	1.20

### Pneumatic reversing ratchet

- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- Air exhaust through the handle rear end
- With ratchet head reversing lever (clockwise and anticlockwise)
- Easy operation
- Triple teeth
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



#### Technical data:

Square drive:	1/2"
Max. tightening torque:	68 N·m
Max. loosening torque:	68 N·m
No load current:	175 r.p.m.
Vibration:	< 1,0 ms <sup>2</sup>
Noise performance level:	97 dbA
Noise pressure level:	85 dbA
Recommended torque:	50 N·m
Air consumption:	85 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	W mm
515.3090	52.0	265.0	1.40

**DIE & ANGLE DRILLING MACHINES**

**SlimPOWER Pneumatic straight drill**

- Straight design
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- Not reversible
- With quick release chuck capacity 1 - 6,5 mm
- For hard to reach places
- Ideally suited for car bodywork and industrial working
- With stepless speed regulation
- Vibration dampened through double bearing guides
- Includes 1/4" coupling connector
- Robust housing



**Technical data:**

Chuck capacity:	1 - 6,5 mm
Chuck thread reception:	3/8" x 24 UNF
Capacity:	190 Watt
No load current:	6000 r.p.m.
Vibration:	< 0,7 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	80 dbA
Air consumption:	240.66 l/min
Min. tube diameter:	1/4" - 4,8 mm
Operating pressure:	max. 5,5 bar (80 psi)
Connection thread:	1/4"NPT

	B mm	L mm	kg
515.5020	35.5	145.0	400

**SlimPOWER Pneumatic angle drill**

- Angled version
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- Not reversible
- With gear rim drill chuck width 1 - 6,5 mm
- For hard to reach places
- Ideally suited for car body work
- With stepless speed regulation
- Vibration dampened through double bearing guides
- Includes 1/4" coupling connector
- Robust housing



**Technical data:**

Chuck capacity:	1 - 6,5
Chuck thread reception:	3/8" x 24 UNF
Capacity:	230 Watt
No load current:	4500 r.p.m.
Vibration:	< 0,7 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	83 dbA
Air consumption:	240.66 l/min
Min. tube diameter:	1/4" - 6,4 mm
Operating pressure:	max. 6,3 bar (90 psi)
Connection thread:	1/4"

	B mm	L mm	kg
515.5025	90.0	145.0	700

**Pneumatic pistol grip drill**

- Very handy and compact construction
- With non slip soft grip handle
- Air exhaust through the handle
- For one handed operation with ergonomic design
- With quick release chuck capacity 0 - 10 mm
- With practical clockwise and anticlockwise switch
- Suitable for continuous duty
- For working in hard to access areas
- Ideally suited for car bodywork and industrial working
- With stepless speed regulation
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



**Technical data:**

Chuck capacity:	1 - 10 mm
Chuck thread reception:	3/8" x 24 UNF
Capacity:	330 Watt
No load current:	1800 r.p.m.
Vibration:	< 0,1 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	113 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"NPT

	B mm	L mm	kg
515.3030	165.0	150.0	0.92

**Pneumatic straight drill**

- Straight design
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- Not reversible
- With quick release chuck capacity 0 - 10 mm
- For hard to reach places
- Ideally suited for car bodywork and industrial working
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened through double bearing guides
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



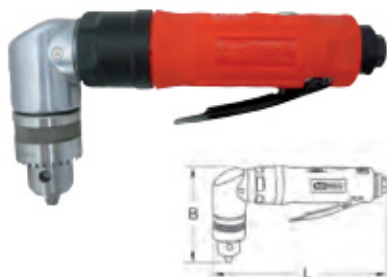
**Technical data:**

Chuck capacity:	1 - 10 mm
Chuck thread reception:	3/8" x 24 UNF
Capacity:	330 Watt
No load current:	2600 r.p.m.
Vibration:	< 0,1 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	85 l/min
Min. tube diameter:	3/8" - 10 mm
Operating pressure:	max. 6,3 bar (90 psi)
Connection thread:	1/4"NPT

	B mm	L mm	kg
515.3025	44.0	215.0	0.75

**Pneumatic angle drill**

- Angled version
- With planetary gearing
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- Not reversible
- With gear rim drill chuck width 0 - 10 mm
- For hard to reach places
- Ideally suited for car body work
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened through double bearing guides
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



**Technical data:**

Chuck capacity:	1 - 10
Chuck thread reception:	3/8" x 24 UNF
Capacity:	330 Watt
No load current:	1800 r.p.m.
Vibration:	< 0,15 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	87 dbA
Air consumption:	85 l/min
Operating pressure:	6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"NPT

	L mm	B mm	kg
515.1265	200.0	100.0	1.15

**Pneumatic pistol grip drill**

- Low rotation speed
- Non slip soft grip handle
- Ultra light robust housing from special plastic
- Air exhaust through the handle
- Quick release chuck capacity 0 - 13 mm
- Practical clockwise and anticlockwise switch
- Suitable for continuous duty
- Ideally suited for working with hard to machine materials
- For spot weld drills, polishing and grinding wheels, erasing rubbers etc.
- Very substantial guide
- Stepless speed regulation
- Vibration dampened
- Handle for 2 hand operation 360° revolving and lockable
- Cold insulated handle
- Includes 1/4" coupling connector



**Technical data:**

Chuck capacity:	1,5 - 13 mm
Chuck thread reception:	3/8" x 24 Gang
Capacity:	330 Watt
No load current:	450 r.p.m.
Vibration:	< 0,15 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	87 dbA
Air consumption:	113 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"NPT

	B mm	L mm	T mm	kg
515.3035	200.0	230.0	43.0	1.60



**SPOT WELD DRILLING MACHINES**

**Pneumatic spot weld drill**

- Air exhaust through the handle
- Easy operation
- Suitable for continuous duty
- Ideally suited for internal and external spot welds
- For spot weld drills
- Very substantial guide
- With adjustable milling machine depth ring in steps of 0,05 mm
- With revolving and removable frame to the fixation on the object
- With large frame for deep lying points
- Feed achievement through pneumatic cylinder
- With stepless speed regulation
- Includes 1/4" coupling connector
- Robust machined housing



**Technical data:**

Drive: Ø 8 mm with set screw  
 Capacity: 500 Watt  
 No load current: 1600 r.p.m.  
 Vibration: < 0,3 ms<sup>2</sup>  
 Noise performance level: 90 dbA  
 Noise pressure level: 81 dbA  
 Air consumption: 280 l/min  
 Operating pressure: max. 6,3 bar (90 psi)  
 Min. tube diameter: 3/8" - 10 mm  
 Connection thread: 1/4" IG

	B mm	L mm	W
515.1206	200.0	235.0	2.20

**accessories:**

		W
515.1207	Counter bracket, small for 515.1206	300
515.1208	Counter bracket, large for 515.1206	500

**Pneumatic spot weld drill set**

- Air exhaust through the handle
- Easy operation
- Suitable for continuous duty
- Ideally suited for internal and external spot welds
- For spot weld drills
- Very substantial guide
- Adjustable milling machine depth ring in steps of 0,05 mm
- Revolving and removable frame on the fixation on the object
- Large frame for deep lying points
- Feed achievement through pneumatic cylinder
- Stepless speed regulation
- Includes 1/4" coupling connector
- Robust machined housing
- In durable plastic case



**Technical data:**

Drive: Ø 8 mm with set screw  
 Capacity: 500 Watt  
 No load current: 1600 r.p.m.  
 Vibration: < 0,2 ms<sup>2</sup>  
 Noise performance level: 90 dbA  
 Noise pressure level: 81 dbA  
 Air consumption: 280 l/min  
 Operating pressure: max. 6,3 bar (90 psi)  
 Min. tube diameter: 3/8" - 10 mm  
 Connection thread: 1/4" IG

		W
515.1205	9 pcs. Pneumatic spot weld drill set	2.20

**consists of:**

		W
515.1206	1/2" pneumatic spot weld drill	2.20
515.1207	Counter bracket, small for 515.1206	0.30
515.1208	Counter bracket, large for 515.1206	0.50
332.0108	HSSE spot weld drill, Ø 8,0mm	0.02
515.3361	Pneumatic tool oil, 100ml	0.25

**Fastdrill pneumatic spot weld drill**

- Special drive for high torque
- With non-slip soft-grip-handle
- Air exhaust through the handle
- Suitable for continuous duty
- Ideally suited for internal and external spot welds
- For carbide spot weld drills
- Very substantial guide
- With revolving and removable frame on the fixation on the object
- Feed achievement through pneumatic-cylinder
- With stepless speed regulation
- Cold insulated handle
- Includes 1/4" coupling connector
- Robust machined housing



**Technical data:**

Drive in mm: 8 mm  
 Capacity: 280 Watt  
 No load current: 1000 r.p.m.  
 Vibration: < 0,233 ms<sup>2</sup>  
 Noise performance level: 95,4 dbA  
 Noise pressure level: 82,4 dbA  
 Air consumption: 340 l/min  
 Operating pressure: 6 bar  
 Min. tube diameter: 3/8" - 10 mm  
 Connection thread: 1/4"PT

	B mm	L mm	W
515.1311	175.0	315.0	1.85

**accessories:**

		W
515.1312	Bracket, small, for Fastdrill	550
515.1313	Bracket, big, for Fastdrill	800

**Fastdrill pneumatic spot weld drill set**

- Special gearbox for high torque
- With non slip soft grip handle
- Air exhaust through the handle
- Suitable for continuous duty
- Ideally suited for internal and external spot welds
- For carbide spot weld drills
- Very substantial guide
- With revolving and removable frame on the fixation on the object
- Feed achievement through Pneumatic-cylinder
- With stepless speed regulation
- Cold insulated handle
- Includes 1/4" coupling connector
- Robust machined housing



**Technical data:**

Drive in mm: 8 mm  
 Capacity: 280 Watt  
 No load current: 1000 r.p.m.  
 Vibration: < 0,233 ms<sup>2</sup>  
 Noise performance level: 95,4 dbA  
 Noise pressure level: 82,4 dbA  
 Air consumption: 340 l/min  
 Operating pressure: 6 bar  
 Min. tube diameter: 3/8" - 10 mm  
 Connection thread: 1/4"PT

		W
515.1310	3 pcs. Fastdrill pneumatic spot weld drill set	2.40

**consists of:**

		W
515.1311	Fastdrill pneumatic spot weld drill	1.85
515.1312	Bracket, small, for Fastdrill	0.55
515.1314	T-handle wrench	0.04

Spot weld drills can be found in the Cutting tools/brushes and files section.

**PIN & DIE GRINDERS**

**Pneumatic pencil grinder, 70.000 rpm**

- Straight design
- Air exhaust through the used air tube
- Ideal for carbide, corundum and tungsten carbide burrs
- For working in hard to access areas
- Very handy and compact construction
- Suitable for different repair works
- With stepless speed regulation
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector and chuck wrench
- Aluminium housing



**Technical data:**

Tube length: 1 m  
 Tube diameter: 5 mm  
 Chuck capacity: 3 mm  
 Capacity: 150 KW  
 No load current: 70000 r.p.m.  
 Vibration: < 2,5 ms<sup>2</sup>  
 Noise performance level: 86 dbA  
 Noise pressure level: 74 dbA  
 Air consumption: 140 l/min  
 Operating pressure: max. 6,3 bar (90 psi)  
 Min. tube diameter: 1/4" - 6,35 mm  
 Connection thread: 1/4"PT

	D mm	L mm	W
515.3198	16.0	132.0	330

**SlimPOWER pneumatic die grinder, straight**

- Straight design
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For HM mills, mini cutting discs and grinding heads with a 6 mm shaft
- Ideal for grinding, polishing and engraving work
- For working in hard to access areas
- Very handy and compact construction
- Secure operation lever with locking device
- With stepless speed regulation
- Vibration dampened
- Includes 1/4" coupling connector
- Robust housing



**Technical data:**

Chuck: 6 mm  
 Capacity: 230 Watt  
 No load current: 25000 r.p.m.  
 Vibration: < 1,5 ms<sup>2</sup>  
 Noise performance level: 95 dbA  
 Noise pressure level: 81 dbA  
 Air consumption: 319.93 l/min  
 Min. tube diameter: 1/4" - 6,4 mm  
 Operating pressure: max. 5,5 bar (80 psi)  
 Connection thread: 1/4"PT

	B mm	L mm	W
515.5030	35.0	123.0	300



**Mini pneumatic die grinder, straight**

- Straight design
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For HM mills, mini cutting discs and grinding heads with a 6 mm shaft
- Ideal for grinding, polishing and engraving work
- For working in hard to access areas
- Very handy and compact construction
- Secure operation lever with locking device
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



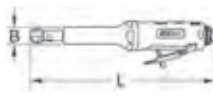
**Technical data:**

Chuck:	6 mm
Capacity:	250 Watt
No load current:	25000 r.p.m.
Vibration:	< 0,1 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	85 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	kg
515.3005	365.0	155.0	920

**Long shaft die grinder**

- Straight design
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For HM mills, mini cutting discs and grinding heads with a 6 mm shaft
- Ideal for grinding, polishing and engraving work
- For working in deep lying areas
- Secure operation lever with locking device
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing special plastic



**Technical data:**

Chuck:	6 mm
Capacity:	330 Watt
No load current:	22000 r.p.m.
Vibration:	< 0,1 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	85 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	kg
515.3015	26.5	280.0	1.08

**Pneumatic die grinder**

- Straight design
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For HM mills, mini cutting discs and grinding heads with a 6 mm shaft
- Ideal for grinding, polishing and engraving work
- For working in hard to access areas
- Very handy and compact construction
- Secure operation lever with locking device
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing special plastic



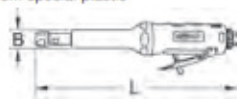
**Technical data:**

Chuck:	6 mm
Capacity:	330 Watt
No load current:	21000 r.p.m.
Vibration:	< 0,1 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	85 l/min
Operating pressure:	6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	kg
515.3010	44.0	175.0	920

**Long shaft die grinder set**

- With 25 mini grinding wheels and mounting mandrel
- Straight design
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For HM mills, mini cutting discs and grindstone with 6 mm shaft
- Ideal for grinding, polishing and engraving work
- For working in deep lying areas
- Secure operation lever with locking device
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



**Technical data:**

Chuck:	6 mm
Capacity:	330 Watt
No load current:	22000 r.p.m.
Vibration:	< 0,1 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	85 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	kg
515.3016	26.5	280.0	1.25

consists of:

		kg
515.3015	Long shaft die grinder, 22.000 r.p.m.	1.08
337.2005	High performance thin disk, 1 mm, pack of 25	0.10
515.3017	Clamping mandrel M6 f. thin cutting disk	0.07

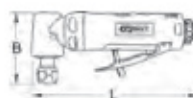
Thin disks can be found in the Cutting tools/brushes and fil s section on page 649



**ANGLE DIE GRINDER**

**SlimPOWER Pneumatic angled die grinder**

- Straight design
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For HM mills, mini cutting discs and grinding heads with a 6 mm shaft
- Ideal for grinding, polishing and engraving work
- For working in hard to access areas
- Secure operation lever with locking device
- With stepless speed regulation
- Vibration dampened
- Includes 1/4" coupling connector
- Robust housing



**Technical data:**

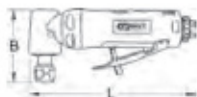
Chuck:	6 mm
Capacity:	190 Watt
No load current:	19000 r.p.m.
Vibration:	< 1,5 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	240.66 l/min
Min. tube diameter:	1/4" - 4,8 mm
Operating pressure:	max. 5,5 bar (80 psi)
Connection thread:	1/4"

	B mm	L mm	kg
515.5035	75.0	123.0	300



**SlimPOWER mini-pneumatic angled die grinder**

- Straight design
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For HM mills, mini cutting discs and grinding heads with a 6 mm shaft
- Ideal for grinding, polishing and engraving work
- For working in hard to access areas
- Secure operation lever with locking device
- With stepless speed regulation
- Vibration dampened
- Includes 1/4" coupling connector
- Robust housing



**Technical data:**

Chuck:	6 mm
Capacity:	230 Watt
No load current:	20000 r.p.m.
Vibration:	< 1,5 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	83 dbA
Air consumption:	319.93 l/min
Min. tube diameter:	1/4" - 6,4 mm
Operating pressure:	max. 6,3 bar (90 psi)
Connection thread:	1/4"

	B mm	L mm	
515.5040	70.0	270.0	700

**Pneumatic angled die grinder**

- 90° offset execution
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For HM mills, mini cutting discs and grinding heads with a 6 mm shaft
- Ideal for grinding, polishing and engraving work
- For working in hard to access areas
- Secure operation lever with locking device
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic
- Grease nipple for maintenance on striking mechanism ensures long life (KS grease gun 980.1070)



**Technical data:**

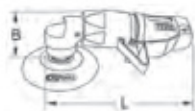
Angle size:	80 mm
Chuck:	6 mm
Capacity:	330 Watt
No load current:	18000 r.p.m.
Vibration:	< 0,1 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	85 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	
515.3020	80.0	180.0	0.92

**BURNISHER**

**SlimPOWER mini-pneumatic burnisher**

- 90° offset execution
- Air exhaust through the handle rear end
- For one hand operation
- Ideal for curved cutting
- For working in hard to access areas
- Secure operation lever with locking device
- With stepless speed regulation
- Vibration dampened
- Very compact construction
- Receiver: External thread
- Includes 3 Velcro receivers
- Includes 1/4" coupling connector
- Robust housing



**Technical data:**

Capacity:	190 Watt
No load current:	4000 r.p.m.
Sponge diameter:	50 + 75 mm
Polishing sponge diameter:	46 mm
Vibration:	1,5 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	81 dbA
Air consumption:	240.66 l/min
Min. tube diameter:	1/4" - 4,8 mm
Operating pressure:	max. 5,5 bar (80 psi)
Connection thread:	1/4"

	B mm	L mm	
515.5125	55.0	140.0	600

**Grinding disc**

- With Velcro receiver
- With internal thread receiver



	Ø mm	Material	Content	
515.5101	46,0	flexible	5	275
515.5102	75,0	flexible	5	125
515.5103	46,0	rigid	5	55

**Burnishing pads**

- For burnishing of smooth surfaces



	Ø mm	Material	Colour code	Content	
515.5126	50,0	plastic	yellow	5	10
515.5122	85,0	plastic	yellow	5	55
515.5127	50,0	plastic	white	5	10
515.5123	85,0	plastic	white	5	55
515.5128	50,0	plastic	black	5	10
515.5129	50,0	leather		5	48
515.5124	80,0	leather		5	80

**Mini pneumatic burnisher set**

- For hard to reach places and improvement work
- With non-slip soft-grip-handle
- 90° offset execution
- Air exhaust through the handle rear end
- For one hand operation
- Ideal for curved cutting
- For working in hard to access areas
- Vibration dampened
- Very compact construction
- Grinding disc with Velcro
- Includes 1/4" coupling connector
- Receiver: Internal thread
- Robust housing
- In durable plastic storage case



**Technical data:**

No load current:	2500 r.p.m.
Vibration:	1,5 ms <sup>2</sup>
Noise performance level:	92 dbA
Noise pressure level:	81 dbA
Air consumption:	113 l/min
Operating pressure:	max. 5,2
Min. tube diameter:	10 mm
Connection thread:	1/4"

515.5120 5 pcs Mini pneumatic burnisher set	1.80

**consists of:**

515.5121 1/4" mini burnishing machine	1000
515.5122 Burnishing pads yellow, Ø 85,0mm	55
515.5123 Burnishing pads white, Ø 85,0mm	55
515.5124 Burnishing pads, Ø 80,0mm	80
515.5112 Grinding disc Ø76.5 mm	20

**Grinding disc**

- With Velcro receiver
- With external thread receiver



	Ø mm	Material	Content	
515.5113	46,0	flexible	5	13
515.5112	76,5	flexible	5	20

**Burnishing pads**

- For burnishing of smooth surfaces



	Ø mm	Material	Colour code	Content	
515.5126	50,0	plastic	yellow	5	10
515.5122	85,0	plastic	yellow	5	55
515.5127	50,0	plastic	white	5	10
515.5123	85,0	plastic	white	5	55
515.5128	50,0	plastic	black	5	10
515.5129	50,0	leather		5	48
515.5124	80,0	leather		5	80

**GRINDING MACHINES**

**SlimPOWER mini pneumatic grinding machine**

- 90° offset execution
- Air exhaust through the handle rear end
- For one hand operation
- Ideal for curved cutting
- For working in hard to access areas
- Secure operation lever with locking device
- With stepless speed regulation
- Vibration dampened
- Very compact construction
- Includes 1/4" coupling connector
- Receiver: External thread
- Robust housing
- Incl. three grinding discs



**Technical data:**

Capacity:	190 Watt
No load current:	16500 r.p.m.
Sponge diameter:	50 + 75 mm
Polishing sponge diameter:	46 mm
Vibration:	< 1,5 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	81 dbA
Air consumption:	240.66 l/min
Min. tube diameter:	1/4" - 4,8 mm
Operating pressure:	max. 5,5 bar (80 psi)
Connection thread:	1/4"

	B mm	L mm	g
515.5100	40,0	120,0	300

**Grinding disc**

- With Velcro receiver
- With internal thread receiver



	Ø mm	Material	Content	g
515.5101	46,0	flexible	5	13
515.5102	75,0	flexible	5	20
515.5103	46,0	rigid	5	13

**Grinding pads**

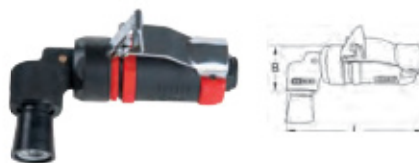
- For polishing rough surfaces made from wood, metal, varnish and natural stone
- For breaking edges



	Ø mm	Grain	Content	g
515.5119	50,0	320	10	16
515.5116	75,0	320	10	19
515.5118	50,0	400	10	16
515.5115	75,0	400	10	19
515.5117	50,0	600	10	16
515.5114	75,0	600	10	19

**SlimPOWER mini pneumatic grinding machine for small pads**

- 90° offset execution
- Air exhaust through the handle rear end
- For one hand operation
- Ideal for curved cutting
- For working in hard to access areas
- Secure operation lever with locking device
- With stepless speed regulation
- Vibration dampened
- Very compact construction
- For screw in pads with 26.7 mm diameter
- Includes 1/4" coupling connector
- Receiver: Internal thread
- Robust housing



**Technical data:**

No load current:	16500 r.p.m.
Vibration:	< 1,5 ms <sup>2</sup>
Noise performance level:	92 dbA
Noise pressure level:	81 dbA
Air consumption:	240.66 l/min
Min. tube diameter:	1/4" - 4,8 mm
Operating pressure:	max. 5,5 bar (80 psi)
Connection thread:	1/4"

	B mm	L mm	g
515.5070	65,0	120,0	300

**Grinding pads 26.7 mm**

- For polishing rough surfaces made from wood, metal, varnish and natural stone
- For breaking edges
- With external thread receiver



	Material	Ø mm	Grain	Colour code	Content	g
515.5071		26,7	60	brown	10	10
515.5072		26,7	80	brown	10	20
515.5073		26,7	150	purple	10	20
515.5074		26,7	300	blue	10	20
515.5075	Strip Rad	26,7		black	10	25

**SlimPOWER mini pneumatic grinding machine for large pads**

- 90° offset execution
- Air exhaust through the handle rear end
- For one hand operation
- Ideal for curved cutting
- For working in hard to access areas
- Secure operation lever with locking device
- With stepless speed regulation
- Vibration dampened
- Very compact construction
- For screw in pads with 50.0 mm diameter
- Includes 1/4" coupling connector
- Receiver: Internal thread
- Robust housing



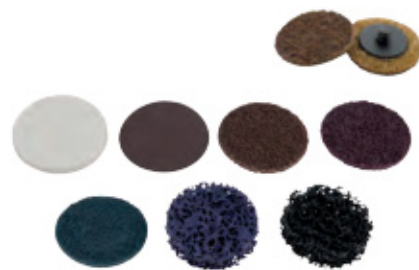
**Technical data:**

No load current:	16500 r.p.m.
Vibration:	< 1,5 ms <sup>2</sup>
Noise performance level:	92 dbA
Noise pressure level:	81 dbA
Air consumption:	240.66 l/min
Min. tube diameter:	1/4" - 4,8 mm
Operating pressure:	max. 5,5 bar (80 psi)
Connection thread:	1/4"

	B mm	L mm	g
515.5080	70,0	120,0	300

**Grinding pads 50.0 mm**

- For polishing rough surfaces made from wood, metal, varnish and natural stone
- For breaking edges
- With external thread receiver



	Material	Ø mm	Grain	Colour code	Content	g
515.5081	Scouring wool	50,0		white	10	100
515.5083	Sand paper	50,0	80	brown	10	90
515.5084	Sand paper	50,0	150	purple	10	100
515.5082	Sand paper	50,0	240	brown	10	60
515.5085	Sand paper	50,0	300	blue	10	90
515.5086	Strip Rad	50,0		purple	10	160
515.5087	Strip Rad	50,0		black	10	120

**BELT SANDER**

**Belt sander**

- With non slip soft grip handle
- Air exhaust through the handle rear end
- Working head is 360° adjustable
- Adjustable for quick sanding belt change
- Ideal for narrow areas (10 mm belt width)
- Secure operation lever with locking device
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Light aluminium housing



**Technical data:**

Belt speed:	1188 m/min
No load current:	18000 r.p.m.
Vibration:	< 2,0 ms <sup>2</sup>
Noise performance level:	81 dbA
Noise pressure level:	73 dbA
Air consumption:	142 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	L1 mm	L2 mm	g
515.3549	150,0	170,0	800

**Sanding belt for belt sander**

- Sanding belt for belt sander 515.3549



	Grain	Content	g
515.3551	80	10	60
515.3552	100	10	80
515.3553	120	10	100



**ROUGH GRINDERS**

**Pneumatic disc cutter**

- Air exhaust through the handle rear end
- For grinding wheels up to Ø 125 mm x 22 mm
- With safety cover
- For grinding metal sheet and steel
- Secure operation lever with locking device
- With detachable second handle
- With stepless speed regulation
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



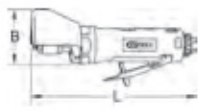
**Technical data:**

Tool holder:	5/8" - 11 Gang
No load current:	10000 r.p.m.
Capacity:	700 Watt
Vibration:	< 0,2 ms <sup>2</sup>
Noise performance level:	103 dbA
Noise pressure level:	90 dbA
Air consumption:	142 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	
515.3045	95.0	210.0	1.75

**Pneumatic disc cutter**

- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For cutting wheels up to Ø 75 mm x 10 mm
- With safety cover
- For cutting metal sheet and steel
- Secure operation lever with locking device
- For working in inaccessible places
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing special plastic



**Technical data:**

Tool holder:	5/16" - 24 mm
No load current:	21000 r.p.m.
Capacity:	330 Watt
Vibration:	< 0,2 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	85 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	
515.3040	80.0	195.0	1.00

**RANDOM ORBIT SANDERS**

**Mini pneumatic random orbital sander set**

- For hard to reach places and improvement work
- With non-slip soft-grip-handle
- 90° offset execution
- Air exhaust through the handle rear end
- For one hand operation
- Ideal for curved cutting
- For working in hard to access areas
- Vibration dampened
- Very compact construction
- Includes 1/4" coupling connector
- Receiver: Internal thread
- Robust housing
- Grinding disc with Velcro
- In durable plastic storage case



**Technical data:**

No load current:	15000 r.p.m.
Vibration:	< 1,5 ms <sup>2</sup>
Noise performance level:	92 dbA
Noise pressure level:	81 dbA
Air consumption:	113 l/min
Operating pressure:	max. 5,2
Min. tube diameter:	10 mm
Connection thread:	1/4"

515.5110 63 pcs Mini pneumatic random orbital sander set	1,45

**consists of:**

515.5111 Mini random orbital sander	1000
515.5119 Replacement grinding pads graining 320, Ø50 mm, 10pcs	16
515.5118 Replacement grinding pads graining 400, Ø50 mm, 10pcs	16
515.5117 Replacement grinding pads graining 600, Ø50 mm, 10pcs	16
515.5116 Replacement grinding pads graining 320, Ø75 mm, 10pcs	19
515.5115 Replacement grinding pads graining 400, Ø75 mm, 10pcs	19
515.5114 Replacement grinding pads graining 600, Ø75 mm, 10pcs	19
515.5113 Grinding disc Ø 46.0 mm	13
515.5112 Grinding disc Ø76.5 mm	20

**Grinding disc**

- With Velcro receiver
- With external thread receiver



	Ø mm	Material	Content	
515.5113	46,0	flexible	5	13
515.5112	76,5	flexible	5	20

**Grinding pads**

- For polishing rough surfaces made from wood, metal, varnish and natural stone
- For breaking edges



	Ø mm	Grain	Content	
515.5119	50,0	320	10	16
515.5116	75,0	320	10	19
515.5118	50,0	400	10	16
515.5115	75,0	400	10	19
515.5117	50,0	600	10	16
515.5114	75,0	600	10	19

**Fine finish e centric sander with dust extraction**

- Air exhaust through the used air tube
- With ergonomic design for fatigue free working
- Compact construction height and light composite housing for controlled working
- For sanding or polishing
- Alternatively can be used with dust bag or industrial vacuum cleaner
- Includes fabric dust collection bag
- With 6 punched hole in pitch circle: 80 mm / Ø 11 mm
- With stepless speed regulation
- Low vibration
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing special plastic



**Technical data:**

Sanding radius:	2,5 mm
Velcro disc receiver:	Ø 152,4 mm = 6"
Tube length:	2 m
Capacity:	240 Watt
No load current:	10000 r.p.m.
Vibration:	3,5 ms <sup>2</sup>
Noise performance level:	71 dbA
Noise pressure level:	60 dbA
Air consumption:	255 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	Ø mm	L mm	
515.3061	150.0	196.0	1.50

**Rapid removal eccentric sander with dust extraction**

- Air exhaust through the used air tube
- With ergonomic design for fatigue free working
- Compact construction height and light composite housing for controlled working
- For sanding or polishing
- Alternatively can be used with dust bag or industrial vacuum cleaner
- Includes fabric dust collection bag
- With 6 punched hole in pitch circle: 80 mm / Ø 11 mm
- With stepless speed regulation
- Low vibration
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing special plastic



**Technical data:**

Sanding radius:	5 mm
Velcro disc receiver:	Ø 152,4 mm = 6"
Tube length:	2 m
Capacity:	240 Watt
No load current:	10000 r.p.m.
Vibration:	3,5 ms <sup>2</sup>
Noise performance level:	71 dbA
Noise pressure level:	60 dbA
Air consumption:	225 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	1/4" - 6,35 mm
Connection thread:	1/4"PT

	Ø mm	L mm	
515.3066	150.0	100.0	900

MULTIGRINDER

Pneumatic multi-grinder set

- For removing underbody coating, sealant, rust, corrosion, clingages, paints, film, text as well as for paint stripping
- With non-slip soft-grip-handle
- For hard to reach places
- Air exhaust through the handle rear end
- Easy operation
- Ideal for grinding and erasing work
- For working in hard to access areas
- Vibration dampened
- Includes 1/4" coupling connector
- Robust housing
- In durable plastic storage case



Technical data:

- No load current: 3500 r.p.m.
- Vibration: < 4.4 ms<sup>2</sup>
- Noise performance level: 94 dbA
- Noise pressure level: 88 dbA
- Air consumption: 113 l/min
- Operating pressure: 6.2
- Min. tube diameter: 1/4" - 6.3 mm
- Connection thread: 1/4"

515.5130	17 pcs	Pneumatic multi-grinder set	4.67

consists of:

515.5131	Mini multi-grinder with handle, 272 mm	1400	
515.5132	Film eraser, light execution, 105mm, pack of 5	1325	
515.5133	Film eraser, dark execution, 105mm, pack of 5	1400	
515.5134	Adaptor for film eraser, pack of 5	100	
515.5135	Brushing belt, coarse, curved tips, 11 mm, pack of 5	250	
515.5136	Brushing belt, coarse, curved tips, 23 mm, pack of 5	375	
515.5137	Brushing belt, straight tips, 11 mm, pack of 5	325	
515.5138	Brushing belt, straight tips, 23 mm, pack of 5	350	
515.5139	Eliminator disc 15 mm, pack of 5	500	
515.5166	Adaptor for 11 mm Ø brushing belt, pack of 5	80	
515.5167	Adaptor for individual eliminator disc, 19 mm, pack of 5	550	
515.5168	Adaptor for double eliminator disc, 31 mm, pack of 5	650	

ERASER

Pneumatic erasing machine

- Straight design
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- Ideal for removing of stickers glue and color remainders
- Includes neutral colored rubber eraser disc
- Stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



Technical data:

- Tool holder: 5/16" - 24
- Capacity: 330 Watt
- No load current: 2600 r.p.m.
- Vibration acceleration: < 0,70 m/s<sup>2</sup>
- Noise performance level: 95 dbA
- Noise pressure level: 82 dbA
- Air consumption: 85 l/min
- Operating pressure: max. 6,3 bar (90 psi)
- Min. tube diameter: 3/8" - 10 mm
- Connection thread: 1/4"PT

	B mm	L mm	Eraser wheel	
515.1244	40.0	225.0	515.1243	1.08

Rubber eraser disc

- For removing of stickers, glue and color remainders on varnished areas
- Includes neutral colored rubber eraser preventing a smearing on the surface
- Not suitable for pneumatic die grinders



Technical data:

- Speed: 4000 rpm
- Shaft: M8

	B mm	D mm	Count	
515.1243	15.0	90.0	1	110
515.1285	15.0	90.0	6	660



CHISEL HAMMER

Pneumatic chisel set

- Non slip soft grip handle
- Air exhaust through the handle
- Ultra light housing from two component plastic
- Ergonomic designed handle
- For ripping out car body sheet metal with pneumatic air
- Ideal for industry
- Also suitable for loosening firm y rusted fittings
- Stepless impact regulation
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- In durable plastic case



Technical data:

- Chisel holder: 10 mm
- Number of blows: 3000 blows/min
- No load current: 3200 r.p.m.
- Vibration: 8.5 ms<sup>2</sup>
- Noise performance level: 99.2 dbA
- Noise pressure level: 110.9 dbA
- Air consumption: 270 l/min
- Operating pressure: max. 6,3 bar (90 psi)
- Min. tube diameter: 3/8" - 10 mm
- Connection thread: 1/4"PT

515.3810	7 pcs	Pneumatic chisel set	1.70

consists of:

515.3801	Pointed chisel	137	
515.3802	Sheet metal cutting chisel	147	
515.3803	Rivet cutting chisel, curved	146	
515.3804	Flat chisel 19 mm	150	
515.3805	Curved cutting chisel	146	
515.3806	Pneumatic chisel with 1/4" connector	1550	
515.3815	Holder for air chisel set	126	



**Pneumatic chisel set**

- Non slip soft grip handle
- Air exhaust through the handle
- Ergonomic designed handle
- For ripping out car body sheet metal with pneumatic air
- Ideal for industry
- Also suitable for loosening firm y rusted fi tings
- Quick release chuck for quick chisel changing
- Stepless impact regulation
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector and chuck
- Ultra light housing from two component plastic
- In durable plastic case



**Technical data:**

Chisel holder:	10 mm
Number of blows:	2900 blows/min
Vibration:	5,35 ms <sup>2</sup>
Noise performance level:	104.9 dbA
Noise pressure level:	90.4 dbA
Air consumption:	77.3 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Connection thread:	1/4"PT

<b>515.3840</b>	7 pcs	Pneumatic chisel set	1.70
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**consists of:**

<b>515.3841</b>	AIR CHISEL	1.73
<b>515.3842</b>	Rivet cutting chisel	0.17
<b>515.3843</b>	Spot weld chisel	0.16
<b>515.3844</b>	Flat chisel	0.16
<b>515.3845</b>	Pointed chisel	0.16
<b>515.3846</b>	Curved sheet metal cutting chisel	0.16
<b>515.3847</b>	Quick change retainer	0.32



**Vibro impact pneumatic chisel hammer set**

- With non slip soft grip handle
- Air exhaust through the handle
- Ergonomic designed handle
- Ideal for industry
- Efficient, gentle loosening of screw fi tings
- With stepless impact regulation
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light housing from two component plastic



<b>515.3880</b>	6 pcs	Vibro impact pneumatic chisel hammer set	5.70
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**consists of:**

<b>515.3881</b>	Pneumatic chisel hammer	2.17
<b>515.3882</b>	Holder for pneumatic chisel hammer	1.55
<b>515.3886</b>	Pneumatic chisel track rod loosener,110mm	0.14
<b>515.3887</b>	Pneumatic chisel hammer,110mm	0.15
<b>515.3888</b>	Pneumatic chisel loosening adapter,130mm	0.16
<b>515.3889</b>	Pneumatic chisel loosening mandrel,100x25x12mm	0.19

**Special Vibro chisel set**

- For loosening seized screw joints and loosening components
- Gentle peeling and driving
- Vibration is transmitted directly to the screw connections
- Impact mandrel attachment as ingenious aid to any removal operation
- For hexagonal and round 10 mm machine mountings
- Including pressure plate adapter for driving out bearings, sleeves, bushings

**Caution:** Use only in conjunction with a pneumatic hammer chisel!



<b>515.3885</b>	4 pcs	Special Vibro chisel set	7.74
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**consists of:**

<b>515.3886</b>	Pneumatic chisel track rod loosener,110mm	138
<b>515.3887</b>	Pneumatic chisel hammer,110mm	148
<b>515.3888</b>	Pneumatic chisel loosening adapter,130mm	159
<b>515.3889</b>	Pneumatic chisel loosening mandrel,100x25x12mm	190

**NEEDLE SCALER**

**Pneumatic needle scaler**

- In handy pistol design
- Air exhaust through the handle
- For removing and/or derusting of coatings and solid metal parts
- Is coarser than a sand blasting and finer than rust hammers
- Equipped with 19 needles of 3 mm a piece
- With adjustable needle cover
- Cold insulated handle
- Includes 1/4" coupling connector
- Robust steel housing



**Technical data:**

Needle amount:	19 pcs. à 3 mm
Number of blows:	3200 blows/min
Vibration:	13,9 ms <sup>2</sup>
Noise performance level:	110 dbA
Noise pressure level:	97 dbA
Air consumption:	170 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	D mm	L mm	Adjustment needle stick	
<b>515.3070</b>	205.0	45.0	330.0	515.3071	2.60

**NIBBLERS**

**Pneumatic nibbler**

- 90° offset execution
- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- Ideal for curved and straight cutting
- Cut is made by punching a series of holes sequentially in sheet metal
- Also suitable for plastic cutting
- For extremely small radius
- With stepless speed regulation
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing special plastic



**Technical data:**

Cutting speed:	2,6 m/min
Cutting output:	steel 1,2 mm Aluminium 1,6 mm
Cutting width:	4,5 mm
Capacity:	330 Watt
Vibration:	< 0,5 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	85 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	
<b>515.3050</b>	100.0	190.0	1.15

SAWING

SlimPOWER mini-pneumatic reciprocating bodywork key hole saw

- Air exhaust through the used air tube to the rear
- For one handed operation
- For works in car body panels, beams and profil
- Secure operation lever with locking device
- Suitable for small sawing radius
- Stepless speed regulation
- Vibration dampened
- Includes 1/4" coupling connector
- Robust metal housing



Technical data:

Stroke:	7.9 mm
Cutting strokes:	5760 strokes/min
Capacity:	190 Watt
Vibration:	< 16.4 ms <sup>2</sup>
Noise pressure level:	92 dbA
Noise performance level:	81.0 dbA
Air consumption:	LUFTVB#240.66 l/min
Operating pressure:	max. 5.5 bar (80 psi)
Min. tube diameter:	4.8 mm
Connection thread:	1/4"

	B mm	L mm		
515.5045	36.0	170.0	129.3740-46	500

LONG-DISC CUTTER

SlimPOWER mini-pneumatic short disc cutter

- Air exhaust through the handle rear end
- For cutting wheels up to Ø 50,4 x 11 x 9,56 mm
- For grinding wheels up to Ø 59,0 x 4,0 x 9,56 mm
- Ideal for loosening worn down and/or rusted connections
- Adjustable sparkguard
- For working in inaccessible places
- Long service life
- Secure operation lever with locking device
- With stepless speed regulation
- Vibration dampened
- Includes 1/4" coupling connector
- Robust housing



Technical data:

Tool holder:	9,60 mm
Capacity:	230 Watt
No load current:	16500 r.p.m.
Vibration:	< 2,0 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	81 dbA
Air consumption:	240.66 l/min
Operating pressure:	max. 5,5 bar (80 psi)
Min. tube diameter:	1/4" - 4,8 mm
Connection thread:	1/4"

	B mm	L mm	
515.5050	60.0	125.0	400



SlimPOWER mini-pneumatic disc cutter, long

- Air exhaust through the handle rear end
- For cutting wheels up to Ø 75,0 x 1,35 x 9,56 mm
- Ideal for loosening worn down and/or rusted connections
- Fixed sparkguard
- For working in inaccessible places
- Long service life
- Secure operation lever with locking device
- With stepless speed regulation
- Vibration dampened
- Very compact construction
- Includes 1/4" coupling connector
- Robust housing



Technical data:

Tool holder:	9,56 mm
Capacity:	230 Watt
No load current:	19000 r.p.m.
Vibration:	< 1,5 ms <sup>2</sup>
Noise performance level:	99.9 dbA
Noise pressure level:	86 dbA
Air consumption:	319.93 l/min
Operating pressure:	max. 6.2 (90 psi)
Min. tube diameter:	1/4" - 6,4 mm
Connection thread:	1/4"

	B mm	L mm	
515.5060	50.0	275.0	700

Pneumatic reciprocating bodywork saw, low vibration

- Air exhaust through the used air tube to the rear
- For one handed operation with ergonomic design
- For works in car body panels, beams and profil
- Secure operation lever with locking device
- Suitable for small sawing radius
- Stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Robust metal housing



Technical data:

Stroke:	10 mm
Cutting strokes:	5760 strokes/min
Vibration:	< 9,1 ms <sup>2</sup>
Noise pressure level:	69.2 dbA
Noise performance level:	81.0 dbA
Air consumption:	196 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4" PT

	B mm	L mm		
515.3000	45.0	790.0	129.3740-46	0.80

SlimPOWER mini-pneumatic long-disc cutter

- Air exhaust through the handle rear end
- For cutting wheels up to Ø 75,0 x 1,35 x 9,56 mm
- Ideal for loosening worn down and/or rusted connections
- Fixed sparkguard
- For working in inaccessible places
- Long service life
- Secure operation lever with locking device
- With stepless speed regulation
- Vibration dampened
- Very compact construction
- Includes 1/4" coupling connector
- Robust housing



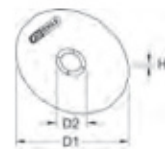
Technical data:

Tool holder:	9,56 mm
Capacity:	230 Watt
No load current:	19000 r.p.m.
Vibration:	< 1,5 ms <sup>2</sup>
Noise performance level:	99.9 dbA
Noise pressure level:	81 dbA
Air consumption:	319.93 l/min
Operating pressure:	max. 6,2 bar (90 psi)
Min. tube diameter:	1/4" - 6,4 mm
Connection thread:	1/4"

	B mm	L mm	
515.5055	50.0	230.0	500

High performances thin disk

- Exact and clean cut
- No deburring necessary
- Very short cutting times
- Machine load reduced
- Inox stainless steel



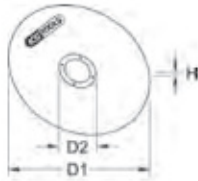
	PPV max	D1 mm	D2 mm	H mm	Contour	
515.5056	3600	50,0	10	1,1	50	650
515.5057	20100	75,0	10	1,5	50	710



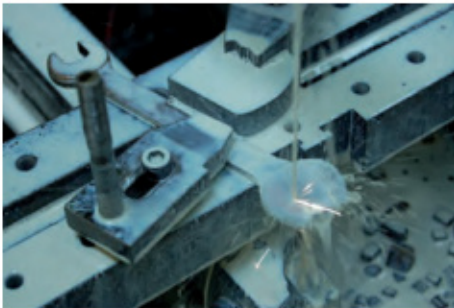
### Allround fla wheel, curved

- For universal usage
- High level of flexibility
- Consistent high cutting power

Ideal for use in metal and stainless steel.

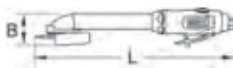


FWH max	D1 mm	D2 mm	H mm	Center	kg
515.5058	22000	59.0	9.56	4.0	25



### Long disc cutter

- Air exhaust through the handle rear end
- With practical clockwise and anticlockwise switch
- For cutting wheels up to Ø 100 x 1,0 x 10 mm
- Ideal for loosening worn down and/or rusted connections
- Adjustable sparkguard
- For working in inaccessible places
- Long service life
- Secure operation lever with locking device
- With stepless speed regulation
- Number of revolutions adjustable through regulating wheel
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing special plastic
- Grease nipple for maintenance on striking mechanism ensures long life (KS grease gun 980.1070)



#### Technical data:

No load current:	12000 r.p.m.
Vibration:	< 2,0 ms <sup>2</sup>
Noise performance level:	100 dbA
Noise pressure level:	90 dbA
Air consumption:	142 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Drive:	16 mm / M10 x 1.0 mm
Min. tube diameter:	1/4" - 6,35 mm
Connection thread:	1/4"PT

B mm	L mm	Replacement or of assets	kg
515.3075	60.0	400.0	337.2010

### High performances thin cutting disk

- Exact and clean cut
- No deburring necessary
- Very short cutting times
- Machine load reduced
- Inox stainless steel

Ideal for use in very thin materials until 2.5 mm, tool steel, sheet metal, thin walled pipes and profiles all type suited for locksmiths, car body building, sanitary and heating fitting, plumbing, sheet metal processing, carpentry, joinery, roofing, metal processing and all motor vehicles businesses.



FWH max	D1 mm	D2 mm	H mm	Center	kg
337.2010	15250	100.0	16.0	1.6	25

### METAL SHEARS

#### Pneumatic sheet metal shear

- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- Ideal for the cutting of car body sheet metal and aluminium sheet
- Eccentric cutting drive
- For curved cutting up to 100 mm radius
- With stepless speed regulation
- Number of revolutions adjustable through regulating screw
- Vibration dampened
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing special plastic



#### Technical data:

Cutting speed:	2,6 m/min
Cutting output:	steel 1,2 mm Aluminium 1,6 mm
Cutting width:	5,0 mm
Vibration:	< 9,1 ms <sup>2</sup>
Noise performance level:	95 dbA
Noise pressure level:	82 dbA
Air consumption:	85 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

B mm	L mm	kg
515.3055	59.0	250.0

### IMPACT WRENCHES

#### miniMONSTER High Performance Pneumatic impact wrench 1.390 Nm

- With non slip soft grip handle
- Air exhaust through the handle
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- High performance industrial jumbo mechanism
- Long service life
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light housing



1/2"

#### Technical data:

Square drive:	1/2"
Max. tightening torque:	1 = 270 N-m 2 = 640 N-m 3 = 965 N-m
Max. loosening torque:	1.390 N-m
No load current:	10000 r.p.m.
Vibration acceleration:	< 9,18 m/s <sup>2</sup>
Noise performance level:	113 dbA
Noise pressure level:	102 dbA
Recommended torque:	615 N-m
Air consumption:	135 l/min
Operating pressure:	max. 6,3 bar
Max. screw size:	M 16
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

B mm	L mm	kg
515.1270	95.0	190.0

#### Mini pneumatic impact wrench 433 N-m

- With non slip soft grip handle
- Air exhaust through the handle
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- Low vibration
- High performance double hammer mechanism
- Long service life
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light magnesium housing
- Grease nipple for maintenance on striking mechanism ensures long life (KS grease gun 980.1070)



1/2"

#### Technical data:

Square drive:	1/2"
Max. tightening torque:	1 = 217 N-m 2 = 346 N-m 3 = 433 N-m
Max. loosening torque:	433 N-m
No load current:	10000 r.p.m.
Vibration:	< 2,01 m/s <sup>2</sup>
Noise performance level:	103,8 dbA
Noise pressure level:	92,8 dbA
Recommended torque:	448 N-m
Air consumption:	75 l/min
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	1/4" - 8 mm
Max. screw size:	M13

B mm	L mm	kg
515.1275	150.0	185.0

**Pneumatic impact wrench 850 N·m**

- With ergonomic soft grip handle
- Air exhaust through the handle
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- Low vibration
- High performance pin hammer mechanism
- Long service life
- Cold insulated handle
- Includes 1/4" coupling connector
- Light aluminium housing



1/2"

**Technical data:**

Square drive: 1/2"

Max. tightening torque: 1 = 474 N·m  
2 = 609 N·m  
3 = 677 N·m

Max. loosening torque: 850 N·m

No load current: 7000 r.p.m.

Vibration: < 1.13 m/s<sup>2</sup>

Noise performance level: 106.1 dbA

Noise pressure level: 95.4 dbA

Recommended torque: 493 N·m

Air consumption: 128 l/min

Operating pressure: max. 6,3 bar (90 psi)

Max. screw size: M16

Min. tube diameter: 1/4" - 8 mm

Connection thread: 1/4"PT

	B mm	L mm	kg
515.1290	180,0	187,6	2,50

**MONSTER High Performance Pneumatic impact wrench 1.690 N·m**

- With non slip soft grip handle
- Air exhaust through the handle
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- High performance double hammer mechanism
- Long service life
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light Aluminium housing



1/2"

**Technical data:**

Square drive: 1/2"

Max. tightening torque: 1 = 510 N·m  
2 = 680 N·m  
3 = 931 N·m

Max. loosening torque: 1.690 N·m

No load current: 7930 r.p.m.

Vibration acceleration: < 13,56 m/s<sup>2</sup>

Noise performance level: 104 dbA

Noise pressure level: 88 dbA

Recommended torque: 542 N·m

Air consumption: 178 l/min

Operating pressure: max. 6,3 bar

Max. screw size: M 16

Min. tube diameter: 1/2" - 13 mm

Connection thread: 1/4"PT

	B mm	L mm	kg
515.1210	195,0	200,0	2,15

**Pneumatic impact wrench 1490 N·m**

- With non slip soft grip handle
- Air exhaust through the handle
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- Low vibration
- High performance double hammer mechanism
- Long service life
- Cold insulated handle
- Includes 3/8" coupling connector
- Ultra light magnesium housing



1"

**Technical data:**

Square drive: 1"

Max. tightening torque: 1 = 969 N·m  
2 = 1267 N·m  
3 = 1490 N·m

Max. loosening torque: 1490 N·m

No load current: 5500 r.p.m.

Vibration: < 2.64 ms<sup>2</sup>

Noise performance level: 106.3 dbA

Noise pressure level: 95.3 dbA

Recommended torque: 1089 N·m

Air consumption: 204 l/min

Operating pressure: max. 6,3 bar (90 psi)

Max. screw size: M 30

Min. tube diameter: 1/2"

Connection thread: 3/8"PT

	B mm	L mm	kg
515.3750	230,0	227,0	5,75

**Pneumatic impact wrench 1490 N·m**

- With non slip soft grip handle
- Air exhaust through the handle
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- Low vibration
- High performance double hammer mechanism
- Long service life
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light magnesium housing



1/2"

**Technical data:**

Square drive: 1/2"

Max. tightening torque: 1 = 444 N·m  
2 = 592 N·m  
3 = 810 N·m

Max. loosening torque: 1490 N·m

No load current: 7500 r.p.m.

Vibration: < 2,69 ms<sup>2</sup>

Noise performance level: 104 dbA

Noise pressure level: 88 dbA

Recommended torque: 542 N·m

Air consumption: 128 l/min

Operating pressure: max. 6,3 bar

Max. screw size: M 16

Min. tube diameter: 3/8" - 10 mm

Connection thread: 1/4"PT

	B mm	L mm	kg
515.1215	190,0	208,0	2,86

**Pneumatic impact wrench 1490 N·m**

- With non slip soft grip handle
- Air exhaust through the handle
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- Low vibration
- High performance double hammer mechanism
- Long service life
- Cold insulated handle
- Includes 3/8" coupling connector
- Ultra light magnesium housing



3/4"

**Technical data:**

Square drive: 3/4"

Max. tightening torque: 1 = 969 N·m  
2 = 1267 N·m  
3 = 1490 N·m

Max. loosening torque: 1490 N·m

No load current: 5500 r.p.m.

Vibration: < 2,64 ms<sup>2</sup>

Noise performance level: 106.3 dbA

Noise pressure level: 95.3 dbA

Recommended torque: 1084 N·m

Air consumption: 206 l/min

Operating pressure: max. 6,3 bar (90 psi)

Max. screw size: M 30

Min. tube diameter: 1/2"

Connection thread: 3/8"PT

	B mm	L mm	kg
515.3735	197,0	227,0	5,70

**Pneumatic impact wrench 2169 N·m**

- With non slip handle
- Air exhaust through the handle rear end
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- Low vibration
- High performance double hammer mechanism
- Long service life
- Cold insulated handle
- Includes 1/2" coupling connector
- Ultra light magnesium housing



1"

**Technical data:**

Square drive: 1"

Max. tightening torque: 1 = 651 N·m  
2 = 1085 N·m  
3 = 1518 N·m  
4 = 2169 N·m

Max. loosening torque: 2169 N·m

No load current: 4500 r.p.m.

Vibration: < 3,0 ms<sup>2</sup>

Noise performance level: 123.6 dbA

Noise pressure level: 111.3 dbA

Recommended torque: 1590 N·m

Air consumption: 283 l/min

Operating pressure: max. 6,3 bar (90 psi)

Max. screw size: M 33

Min. tube diameter: 3/4" - 19 mm

Connection thread: 1/2"PT

	B mm	L mm	kg
515.3770	230,0	334,0	9,74



### Pneumatic impact wrench 3388 N·m

- With non slip handle
- Air exhaust through the handle rear end
- With practical clockwise and anticlockwise switch
- Easy operation
- 4 stage torque adjustment
- Low vibration
- High performance double hammer mechanism
- Long service life
- Includes 1/2" coupling connector
- Ultra light magnesium housing



#### Technical data:

Square drive:	1"
Max. tightening torque:	1 = 1016 N·m 2 = 1694 N·m 3 = 2372 N·m 4 = 3388 N·m
Max. loosening torque:	3388 N·m
No load current:	4200 r.p.m.
Vibration:	< 3,32 ms <sup>2</sup>
Noise performance level:	114.7 dbA
Noise pressure level:	103.8 dbA
Recommended torque:	2481 N·m
Air consumption:	283 l/min
Operating pressure:	max. 6.3 bar (90 psi)
Max. screw size:	M 50
Min. tube diameter:	3/4" - 19 mm
Connection thread:	1/2"PT

	B mm	L mm	
515.3765	230.0	630.0	16.20

### IMPACT WRENCH SETS

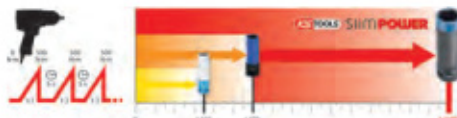
#### Pneumatic impact wrench set

- With ergonomic soft grip handle
- Air exhaust through the handle
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- Low vibration
- High performance pin hammer mechanism
- Long service life
- Cold insulated handle
- Includes 1/4" coupling connector
- Light aluminium housing
- In durable plastic storage case



1/2"

515.5140 17 pcs Pneumatic impact wrench set	6.80
1 x	677 Nm
10 x	12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 21 - 22 mm
3 x	17 - 19 - 21 mm
1 x	1/4"
1 x	125 mm
1 x	68 mm



#### Pneumatic impact wrench set

- With ergonomic soft grip handle
- Air exhaust through the handle
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- Low vibration
- High performance pin hammer mechanism
- Long service life
- Cold insulated handle
- Includes 1/4" coupling connector
- Light aluminium housing
- In durable plastic storage case

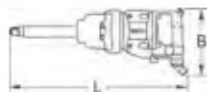


1/2"

515.5150 17 pcs Pneumatic impact wrench set	7.30
1 x	1690 Nm
10 x	12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 21 - 22 mm
3 x	17 - 19 - 21 mm
1 x	1/4"
1 x	125 mm
1 x	68 mm

### Pneumatic impact wrench 2,441 N·m

- With non-slip handle
- Air exhaust through the handle sideways
- With 3 stages torque control for loosening and tightening
- Draw-off is integrated in the handle
- Low vibration
- Low sound level
- With rubber housing
- High performance double hammer mechanism
- With bore for locking pin
- Long service life
- Includes 1/2" coupling connector
- Ultra light housing from aluminium



#### Technical data:

Square drive:	1"
Max. tightening torque:	2033 Nm
Max. loosening torque:	2441 Nm
Vibration:	12.5 ms <sup>2</sup>
No load current:	6000 r.p.m.
Noise performance level:	86 dbA
Noise pressure level:	96 dbA
Operating pressure:	max. 6.3 bar (90 psi)
Air consumption:	282 l/min
Min. tube diameter:	1/2" - 13 mm
Max. screw size:	M 38
Connection thread:	1/2"PT

	B mm	L mm	
515.3745	170.0	467.0	7.30

#### Pneumatic impact wrench set

- With non slip soft grip handle
- Air exhaust through the handle
- With practical clockwise and anticlockwise switch
- Easy operation
- 3 stage torque adjustment
- Low vibration
- High performance double hammer mechanism
- Long service life
- Cold insulated handle
- Includes 1/4" coupling connector
- In durable plastic storage case
- Ultra light magnesium housing



1/2"

515.1220 17 pcs Pneumatic impact wrench set	6.32
1 x	740 Nm
10 x	12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 21 - 22 mm
3 x	17 - 19 - 21 mm
1 x	1/4"
1 x	125 mm
1 x	68 mm



**RIVETING TOOLS PISTOL**

**Pneumatic riveting tool pistol**

- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For pop rivet working
- With swivel joint at the coupling connector for flexible use
- Cold insulated
- Includes 1/4" coupling connector
- Robust aluminium housing



**Technical data:**

Rivet sizes:	2,4 - 3,2 - 4,0 - 4,8 mm
Stroke length:	14 mm
Driving power:	8677,5 N
Vibration:	< 2,5 ms <sup>2</sup>
Noise performance level:	98,6 dbA
Noise pressure level:	85 dbA
Air consumption:	1 l/Hub
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	kg
515.3102	195,0	290,0	1,50

**Pneumatic riveting tool pistol**

- Air exhaust through the handle rear end
- For one handed operation with ergonomic design
- For professional riveting, continuous operation
- For steel, aluminium, stainless steel or copper riveting up to 6,4 mm
- With 6 mouth pieces, 4,8 mm is pre assembled
- Especially low noise level
- Swivel joint at the connection thread for flexible use
- Cold insulated
- Includes 1/4" coupling connector
- Robust aluminium housing



**Technical data:**

Rivet sizes:	3,2 - 4,0 - 4,8 - 6,4 mm
Stroke length:	19 mm
Driving power:	13839,5 N
Vibration:	< 2,5 ms <sup>2</sup>
Noise performance level:	85 dbA
Noise pressure level:	73,3 dbA
Air consumption:	1,8 l/Hub
Operating pressure:	max. 6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	kg
515.3101	210,0	340,0	2,00

**OSCILLATING CUTTER**

**Pneumatic oscillating cutter**

- 90° offset execution
- Air exhaust through used air tube
- For one handed operation with ergonomic design
- For the professional dismantling of vehicle discs
- Universal blade reception for all standard blades
- Secure operation lever with locking device
- Stepless speed regulation
- Includes 1/4" coupling connector and blade changing spanner
- Robust steel housing



**Technical data:**

Oscillating speed:	2000/min
No load current:	22000 r.p.m.
Vibration:	4,3 m/s <sup>2</sup>
Noise performance level:	79,8 dbA
Noise pressure level:	69,9 dbA
Air consumption:	300 l/min
Operating pressure:	6,3 bar (90 psi)
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	L mm	Drive	kg
140.2251	725,0	Ø 22 mm	1,27

**Pneumatic oscillating cutter set**

- 90° offset execution
- Air exhaust through used air tube
- For one handed operation with ergonomic design
- For the professional dismantling of vehicle discs
- Universal blade reception for all standard blades
- Secure operation lever with locking device
- Stepless speed regulation
- Includes 1/4" coupling connector and blade changing spanner
- Robust steel housing



			kg
140.2219	6 pcs	Pneumatic oscillating cutter set	1,51
1 x		57 mm	
1 x		16 mm	
1 x		57 mm	
1 x		90 mm	
1 x		50 mm	
1 x		35 mm	

**Cutting / scraper blades**

- For the pneumatic oscillating cutter
- Special steel



			kg
140.2252	Scraper blade, offset, blade width 16 mm	20	
140.2255	Cutting blade, straight, offset, length 50 mm	20	
140.2256	Cutting blade, straight, offset, length 90 mm	30	
140.2261	Cutting blade, angled, offset, cutting depth 55 mm	20	
140.2263	Cutting blade, straight, cutting depth 35 mm	10	



			kg
515.5093	Scraper blade, curved, curved, blade length 16 mm	13	
515.5094	Scraper blade, curved, curved, blade length 36 mm	15	
515.5095	Scraper blade, curved, curved, blade length 63 mm	19	
515.5096	Scraper blade, curved, curved, blade length 90 mm	25	
515.5097	Scraper blade, curved, straight, blade length 24 mm	12	

**VIBRO EXTRACTOR**

**Glow plug vibro extractor set**

- Ideal for loosening and extracting jammed glow plugs
- Especially suitable in glow plugs jammed by corrosion and/or soot coal
- Produces controlled vibration impulse
- Suitable for all current glow plugs
- Loosening torque in 4 stages in accordance with manufacturer guidelines
- Extensive cost intensive repairs can be avoided through dismantling glow plugs
- Includes 1/4" coupling connector
- In durable steel storage case



**Technical data:**

Square drive:	1/4"
Max. tightening torque:	40 Nm
Max. loosening torque:	1 = 10 Nm 2 = 20 Nm 3 = 30 Nm 4 = 40 Nm
No load current:	7500 r.p.m.
Vibration:	< 2,69 ms <sup>2</sup>
Noise performance level:	104 dbA
Noise pressure level:	88 dbA
Recommended torque:	42 Nm
Air consumption:	128 l/min
Operating pressure:	max. 6,3 (90 psi)
Max. screw size:	M16
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

			kg
152.1060	5 pcs	Glow plug vibro extractor set	1,80

**consists of:**

			kg
152.1061	1/4" Vibro extractor 10-40 N-m	900	
152.1062	1/4" Impact wrench socket long 8 mm	30	
152.1063	1/4" Impact wrench socket long 10 mm	40	
152.1064	1/4" Impact wrench socket long 12 mm	50	
152.1065	1/4" Universal joint	40	



## AXLE BOOTS ASSEMBLY DEVICES

### Pneumatic assembly tool for CV joint boots

- Air exhaust through the handle rear end
- Suitable for all universal and original vehicle CV joint boots
- For CV joint boots diameter from 20 - 120 mm
- Expanding of the joint arms through pneumatic air
- Air pressure is regulated through a button
- No additional lubricant necessary
- Cold insulated handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



#### Technical data:

Max. expansion diameter:	25 - 115 mm
Operating pressure:	max. 8 bar
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	B mm	L mm	kg
515.3100	200.0	490.0	2.27

## OILS & GREASES

### Pneumatic tool oil

- For the lubrication of pneumatic tools
- With lockable nozzle
- Contents 100 ml



	B mm	L mm	kg
515.3361	60.0	148.0	250

### Precision oiler

- In ball point pen form
- Practical pocket clip
- Protective cap
- Oil dosage through pushing a button
- Smallest angles and corners reached
- Suitable for a wide range of applications
- Light aluminium housing



	D mm	L1 mm	L2 mm	kg
550.1035	15.0	140.0	50.0	50

### Mini grease gun

- Grease gun for maintenance work
- Precise, exact dosage per pressure button with return spring
- For tubes
- Includes long, rigid nozzle
- Tube contents 100 g



	Replacement size	kg
980.1070	980.1075	205

### Mini grease gun set

- Grease gun for maintenance work
- Precise, exact dosage per pressure button with return spring
- For exchangeable cartridges and bucket goods
- Includes long, rigid nozzle and an additional nozzle extension
- Tube contents 110 g



	kg
980.1095 3 pcs Mini grease gun set	265

### accessories:

	kg
980.1096 Lubricant 110 g	110
980.1097 Replacement tip for mini grease gun, 1 mm	1
980.1098 Replacement tip for mini grease gun long execution	30

## GREASE GUN

### Pneumatic grease gun

- Air exhaust through the handle
- For one handed operation with balanced ergonomic design
- For cartridges and bucket goods and/or also for loose grease
- Includes flexible hose and nozzle
- Cold insulated handle
- Includes 1/4" coupling connector



<b>Technical data:</b>	
Output pressure:	260 bar
Hauling capacity:	288 cm <sup>3</sup> /min
Capacity:	400g
Air consumption:	170 l/min
Operating pressure:	6,3 bar (90 psi)
Connection thread:	1/4"PT

	B mm	L mm	kg
515.3900	165.0	400.0	1.50

### Grease gun adaptor set

- For standard hand, cordless and pneumatic grease guns
- Adaptor with sliding sleeve for break-proof connection
- Straight and angled grease nipple
- For grease nipples out of steel, brass and stainless steel

**Application range:** Cone, funnel, ball and fl t grease nipples



	kg
980.1100 7 pcs Grease gun adaptor set	1.99



## WHEEL FILLING GAUGE

### Tyre filling gauge

- For one hand operation
- Rubber coated manometer
- Manometer with bar and psi scale
- Filling lever and pressure release button
- Tube with integrated locking male nipple
- Robust rubber coated housing



<b>Technical data:</b>	
Working range:	0 - 11 bar 9 - 160 psi
Tube length:	490 mm
Operating pressure:	max 6,3 bar (90 psi)
Connection thread:	1/4"PT

	Tube length mm	kg
515.1950	530.0	600

Calibrated tyre filli g gauge

- For one handed operation with ergonomic design
- Rubber coated manometer
- Manometer with bar scale
- With filli g lever and pressure release button
- Tube with integrated locking male nipple
- Hanging hole
- Includes 1/4" coupling connector
- Robust rubber coated housing



Technical data:

Working range: 0 - 10 bar  
 Tube length: 400 mm  
 Operating pressure: max. 6,3 bar (90 psi)  
 Connection thread: 1/4"PT

	Total length mm	
515.1960	600.0	450

SPRAY GUNS

Pneumatic combination spray gun

- For underbody coating or acoustic protection or body cavity sealing with wax
- Handy and light
- For standard 1000 ml cartridges
- Attached, flexible 500 mm-hose with spreader nozzle for all-round wax mist permits unproblematic wax application in cavities and interspaces
- Easy application of the underbody coating (or acoustic protection) with standard installed nozzles
- Application tip: Open cartridge, immerse suction pipe and screw in cartridge. Finished!
- Robust housing
- Includes 1/4" coupling connector



Technical data:

Air consumption: 225 l/min  
 Min. tube diameter: 1/4" - 6,3 mm  
 Operating pressure: 6,3 bar (90 psi)  
 Connection thread: 1/4"PT

	L mm	
515.5065	220.0	400

AIR BLOW OUT TOOLS

Compressed blow out pen

- In ball point pen form
- With practical pocket clip
- Controllable air volume
- With 2.5 mm nozzle
- With Euro connection
- Direct air coupling suitable for connection
- Light aluminium housing



Technical data:

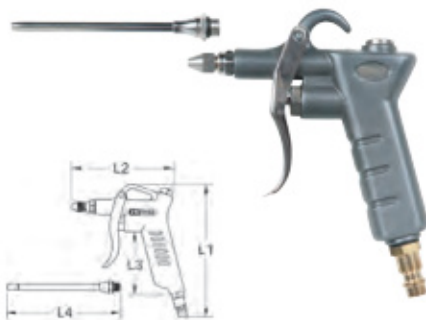
Input pressure: max. 12 bar  
 Operating pressure: max. 6,3 bar (90 psi)  
 Max. fl w rate: 360 l/min  
 Noise pressure level: 90 dbA  
 Connection thread: 1/4"PT

	D mm	L1 mm	L2 mm	
515.1908	10.0	110.0	70.0	150



Pneumatic blow out pistol with extension

- Ergonomic handle
- Controllable air volume
- With 2.5 mm nozzle
- Direct air coupling suitable for connection
- Easily operated
- With hanging hole
- Includes 1/4" coupling connector
- Solid metal base body
- Robust metal housing



Technical data:

Input pressure: max. 15 bar  
 Operating pressure: max. 6,3 bar (90 psi)  
 Max. fl w rate: 130 l/min  
 Noise pressure level: 90 dbA  
 Connection thread: 1/4"PT

	L1 mm	L2 mm	L3 mm	L4 mm	
515.1930	125.0	110.0	75.0	125.0	180

Pneumatic blow out pistol with fl w regulation

- With universal mouth piece
- Ideal for cleaning and removing of foreign objects
- Ergonomic handle
- Controllable air volume
- With hanging function
- Direct air coupling suitable for connection
- Easily operated
- Slip proof handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



Technical data:

Input pressure: max. 15 bar  
 Operating pressure: max. 6,3 bar (90 psi)  
 Max. fl w rate: 300 l/min  
 Noise pressure level: 90 dbA  
 Connection thread: 1/4"PT

	L1 mm	L2 mm	L3 mm	
515.1901	235.0	100.0	75.0	150

Universal pneumatic blow out pistol

- Ideal for cleaning and removing of foreign objects
- Ergonomic handle
- Controllable air volume
- With hanging function
- Direct air coupling suitable for connection
- Easily operated
- Slip proof handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



Technical data:

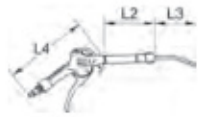
Input pressure: max. 15 bar  
 Operating pressure: max. 6,3 bar (90 psi)  
 Max. fl w rate: 300 l/min  
 Noise pressure level: 90 dbA  
 Connection thread: 1/4"PT

	L1 mm	L2 mm	L3 mm	
515.1902	235.0	95.0	75.0	170
515.1903	470.0	330.0	75.0	240
515.1904	650.0	510.0	75.0	280



**Telescopic pneumatic blow out pistol**

- With stepless extendable nozzle
- Telescopic blast pipe in length and angle adjustable 65 - 280 mm / 360°
- Ideal for cleaning and removing of foreign objects
- Ergonomic handle
- Controllable air volume
- With hanging function
- Direct air coupling suitable for connection
- Easily operated
- Slip proof handle
- Includes 1/4" coupling connector



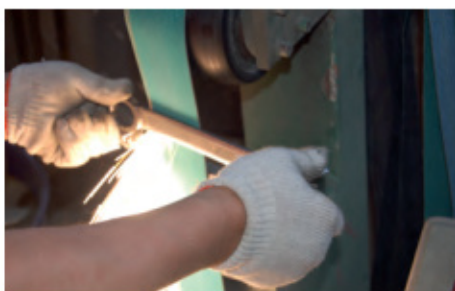
	L2 mm	L3 mm	L4 mm	
515.1907	110.0	55.0	140.0	230

**Pneumatic blow out pistol set**

- Ideal for cleaning and removing of foreign objects
- Ergonomic handle
- Controllable air volume
- With hanging function
- Direct air coupling suitable for connection
- Easily operated
- Slip proof handle
- Includes 1/4" coupling connector
- Ultra light robust housing from special plastic



515.1921 3 pcs Pneumatic blow out pistol set	690
1 x  100 mm	
1 x  330 mm	
1 x  490 mm	



**VACUUMS**

**Pneumatic suction and blow gun**

- Includes reinforced fabric dust collection bag
- Versatile usage
- Includes 1/4" coupling connector
- Robust housing



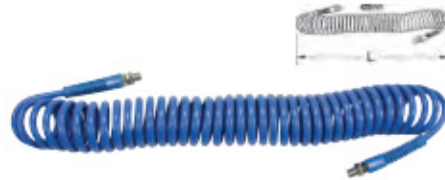
**Technical data:**  
 Operating pressure: max. 6,3 bar (90 psi)  
 Max. fl w rate: 96 l/min  
 Noise performance level: 97 dbA  
 Noise pressure level: 92 dbA  
 Min. tube diameter: 3/8" - 10 mm  
 Connection thread: 1/4"

	L mm	
515.5090	145.0	670

**PNEUMATIC HOSE**

**PU pneumatic spiral coiled tube**

- Flexible, crush resistant polyurethane hose
- Tube ends with anti kink device
- Rotating fi ting
- Flexible in cold
- Oil and petrol resistant



**Technical data:**  
 Max. pressure: 12 bar

	Tube inner Ø mm	Connection	L m	subtle coupling	subtle fit connector	
515.3330	6	G1/4" AG	8.00	515.3483	515.3492	0.60
515.3335	8	G1/4" AG	15.00	515.3483	515.3492	1.20
515.3340	10	G3/8" AG	15.00	515.3484	515.3493	1.80

**PU pneumatic hose**

- High quality pneumatic hose
- Suitable for pneumatic and water
- Light and crush free material
- Suitable accessories
- Long service life
- Oil and petrol resistant

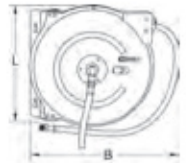


**Technical data:**  
 Temperature constancy: -40°C - +70°C  
 Max. pressure: 15 bar

	Ø Tube mm	Connection	L m	subtle coupling	subtle fit connector	
515.3344	6 x 9	G1/4" AG	20.00	515.3483	515.3492	1.00
515.3345	9 x 12	G1/4" AG	20.00	515.3483	515.3492	1.75

**Automatic pneumatic hose reel Ø 6 mm x 15 m**

- With wall mounting bracket
- For pneumatic and water
- Drum 180° freely tiltable by means of wall mounting
- Flexible PVC hose
- Automatic hose return
- Multi gearlock per rotation
- Device adjusting lock
- Include 1 m connecting hose
- Impact resistant plastic housing



**Technical data:**  
 Tube diameter: 6 mm  
 Hose external diameter: 12 mm  
 Tube length: 15 + 1 m m  
 Max. pressure: 20,0 bar  
 Connection thread: 1/4" - 6,35 mm

	B mm	L mm	
515.3310	435.0	400.0	12.50

**Air line hose reel**

- With wall mounting bracket
- For pneumatic and water
- Drum 180° freely tiltable by means of wall mounting
- Flexible, crush resistant Hybrid-Polymer hose
- Automatic hose return
- Multi gearlock per rotation
- Device adjusting lock
- Include 1 m connecting hose
- Impact resistant plastic housing



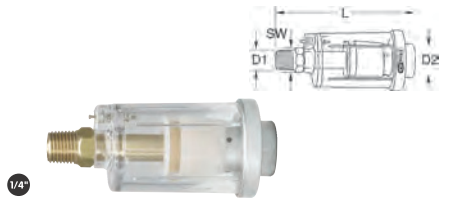
**Technical data:**  
 Tube diameter: 10.0 mm  
 Tube length: 15 m  
 Max. pressure: 20,0 bar

	Connection thread mm	
515.3410	3/8" - 10 mm	6.00
515.3415	1/2" - 13 mm	9.70

**AIR SERVICE UNIT**

**Compressed air water trap**

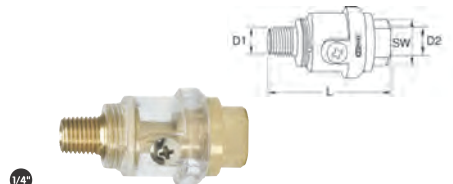
- For separating condensation
- Assembly directly in the access direction
- Made out of sintered metal



	D1	D2	dim mm	L mm	g
515.3370	G1/4"AG	G1/4"IG	14	88.0	140

**Compressed air side oiler**

- For automatic oiling of compressed air tools
- To test oil state through transparent visibility glass
- Compact execution
- Usably in most compressed air tool
- Extends the service life of compressed air tools
- Refillabl
- Assembly directly in the access direction



	D1	D2	dim mm	L mm	g
515.3360	G1/4"AG	G1/4"IG	17	54.0	110

**Air service unit**

- Suitable for wall mounting
- Consists of filter pressure reducer, oil regulator and manometer
- Inspection glass for fluid inspection
- For the assembly of compressed air tools
- Output pressure regulates independent of the input pressure
- Filters dirt particles and condensation
- With adjustable oil regulator
- With integrated wall mounting bracket



**Technical data:**

Max. pressure:	16 bar
Max. working pressure:	12 bar
Pressure gauge:	0.5 - 12 bar
Allowable temperature range:	-10° - +55°C
Air pressure up to 6,3 bar:	1/4" = 1800 l/min 3/8" = 5000 l/min 1/2" = 5000 l/min
Filter pressure more inferior:	1/4" = 30 ml 3/8" = 50 ml 1/2" = 50 ml
Oil trap:	1/4" = 40 ml 3/8" = 170 ml 1/2" = 170 ml

	Connection	B mm	L1 mm	L2 mm	g
515.3355	1/4"	140.0	200.0	135.0	0.43
515.3350	3/8"	140.0	200.0	135.0	1.14
515.3356	1/2"	140.0	200.0	135.0	1.30

**PNEUMATIC ADAPTERS & COUPLINGS**

**Metal swivel joint**

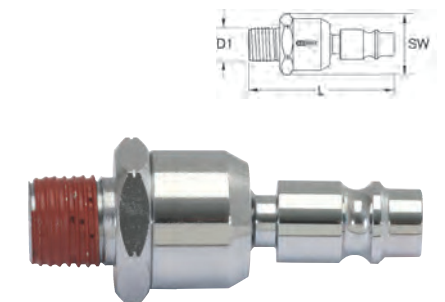
- For compressed air tools 1/4"
- Prevents damages of the compressed air tube
- Execution with compressed air regulator
- Body made out of metal



	D1	D2	dim mm	L mm	g
515.3396	G1/4"AG	G1/4"IG	16	39.0	80

**Metal ball joint fitting nipple**

- Prevents damages of the compressed air tube
- 360° rotating head and 30° angled
- For compressed air tools 1/4" AG
- Ideal for use with paint sprayers
- Body made out of metal



	D1	dim mm	L mm	g
515.3395	G1/4"AG	21	56.0	50

**Metal ball joint fitting nipple**

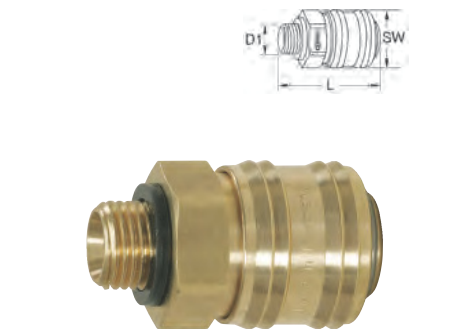
- Prevents damage of the compressed air tube
- Joint takes rotatable movements on the paint sprayer
- 360° rotating head and 30° angled
- For compressed air tools 1/4" IG
- Ideal for use with paint sprayers
- Body made out of metal



	D2	dim mm	L mm	g
515.3394	G1/4"IG	16	46.0	30

**Coupling with male thread**

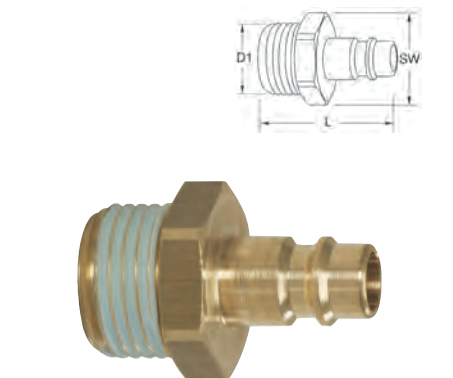
- With one handed operation
- Self sealing on the coupling
- Size 22
- Body made of brass



	D1	dim mm	L mm	g
515.3480	G1/4"AG	22	40.0	70
515.3481	G3/8"AG	22	41.0	90
515.3482	G1/2"AG	22	43.0	90

**Male coupling with male thread**

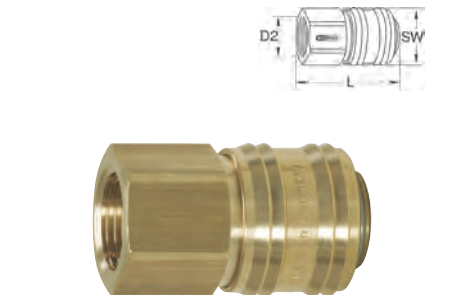
- Size 17, 19 and 24
- Body made of brass



	D1	dim mm	L mm	g
515.3489	G1/4"AG	17	33.0	20
515.3490	G3/8"AG	19	33.0	25
515.3491	G1/2"AG	24	35.0	41

**Brass coupling with female thread**

- Self sealing on the coupling
- Unilaterally closing off
- Size 22 and 24
- Body made of brass

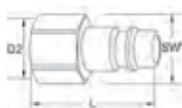


	D2	dim mm	L mm	g
515.3483	G1/4"IG	22	41.0	80
515.3484	G3/8"IG	22	41.0	85
515.3485	G1/2"IG	24	43.0	90



**Brass male coupling with female thread**

- Size 17, 19 and 24
- Body made of brass



	D2	dm mm	L mm	
515.3492	G1/4"IG	17	33.0	24
515.3493	G3/8"IG	19	33.0	22
515.3494	G1/2"IG	24	35.0	40

**Brass Coupling with hose connector**

- With one handed operation
- Roller latch
- Non return valve
- Size 21
- Body made of brass



	D1 mm	L mm	
515.3486	Ø 6mm	55.0	70
515.3487	Ø 9mm	55.0	80
515.3488	Ø 13mm	55.0	90



**Male coupling with hose connector**

- Body made of brass



	D1 mm	D2 mm	L mm	
515.3495	Ø 6mm	7.2	44.0	10
515.3496	Ø 9mm	7.2	44.0	20
515.3497	Ø 13mm	7.2	46.0	25

**Brass reducing nipple**

- Size 19 and 24
- Body made of brass



	D1	D2	dm mm	L mm	
515.3383	G3/8"AG	G1/4"IG	19	14.0	10
515.3384	G1/2"AG	G3/8"IG	24	26.0	30
515.3385	G3/8"AG	G1/2"IG	24	26.0	50
515.3386	G1/4"AG	G3/8"IG	19	18.0	60

**Brass reducing nipple**

- Size 17, 19 and 24
- Body made of brass



	D1	dm mm	L mm	
515.3380	G1/4"AG	17	23.0	20
515.3381	G3/8"AG	19	23.0	30
515.3382	G1/2"AG	24	30.0	50

**Brass compressed air regulator**

- With regulation wheel
- For regulating the air fl w volume
- Assembly directly in the access direction
- Completely lockable
- Body made of brass

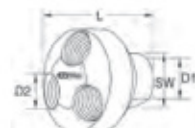


	D1	D2	dm mm	L mm	
515.3385	G1/4"AG	G1/4"IG	18	43.0	80



**Brass compressed air 3 way separator**

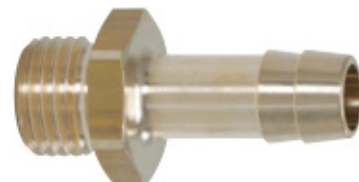
- Connection of 3 departure directions 1/4" IG at each access point
- Body made of solid brass



	D1	D2	dm mm	L mm	
515.3375	G1/4"IG	3xG1/4"IG	19	32.0	160

**Brass hose nipple with male thread**

- Size 17, 19 and 24
- Inner cone 45°
- Body made of brass



	D1	D2 mm	dm mm	L mm	
515.3387	G1/4"AG	Ø 6mm	17	35.0	20
515.3388	G1/4"AG	Ø 9mm	17	35.0	20
515.3389	G3/8"AG	Ø 9mm	19	36.0	30
515.3390	G3/8"AG	Ø 13mm	19	42.0	30
515.3391	G1/2"AG	Ø 9mm	24	40.0	50
515.3392	G1/2"AG	Ø 13mm	24	46.0	50

Ear protection can be found in the Industrial safety & workwear section.





**KSTOOLS®**

*Innovation is our mission!*

**PNEUMATIC TOOLS**

**SLIMPOWER**

- For hard to reach places
- Particularly low air consumption
- Low vibration
- Long service life
- Easy operation
- Supplied incl. DL connection

**MONSTER**

- Particularly low air consumption
- Low vibration
- Cold insulated handle
- Long service life
- Easy operation
- Supplied incl. DL connection





## CORDLESS TOOLS

**KsTOOLS**

Innovation is  
our mission!

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# CORDLESS TOOLS Lithium Ion technology

- The high performance cordless tools for the perfect job
- Working without cables with Lithium ion technology
- Ergonomic design, perfect weight distribution
- Low vibration for fatigue free working

## Advantages

- Lithium is the lightest metal and supplies the largest energy per unit of weight density (approximatly double that of a Standard Nickel Cadmium battery).
- No formatting, a single charge is enough
- Almost no self discharge
- No memory effect
- 30% less weight than conventional rechargeable batteries

## One battery for several devices

### Universal spare batteries 10.8V / 1.5Ah



Cordless reversible ratchet



Cordless drills / drivers



Cordless grinder



Cordless impact wrench



Cordless screwdriver

### Universal spare batteries 18V / 3.0Ah



All 18 V batteries are suitable for fast charging and have a condition status

Display by pushing a button

Capacity:	25%	50%	75%	100%
LED:				



Cordless impact wrench



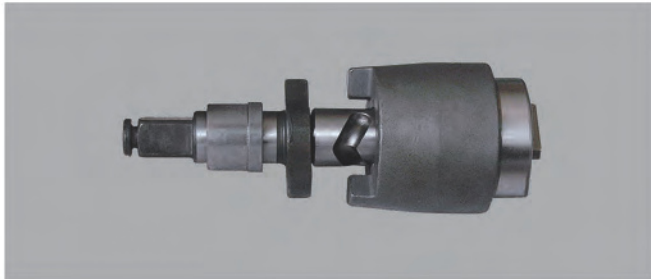
Cordless polisher



Cordless grease gun

## Cordless impact wrench

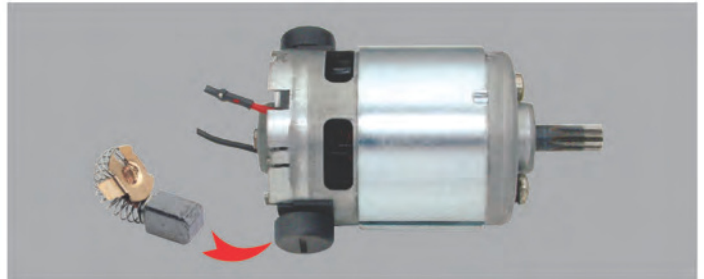
- The high performance pneumatic tools for the hardest application
- Working without cables with Lithium ion technology
- Ergonomic design
- Perfect weight distribution
- Low vibration for fatigue free working



### Striking mechanism:

- High performance striking mechanism, full metal execution
- Highest blow energy due to the extra large anvil weight

- Conventional striking mechanism



### Motor/brushes:

- Super compact high performance motor
- High speed with extra strong torque
- Special carbon brushes, exchangeable
- 40% extended lifespan due to the special carbon brush conductors
- Up to 3-4 brushes changes possible without changing the motor





## CORDLESS REVERSIBLE RATCHETS

### Cordless reversible ratchet

- Light weight
- Handy and ergonomic dual component housing
- Square drive adaptor to DIN 3120 / ISO 1174
- With practical clockwise and anticlockwise reversing function
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing



1/4"

#### Technical data:

- Drive: 1/4"  
 Capacity: 10,8 V  
 Speed: 220 r.p.m.  
 Torque max. 34 Nm  
 No load current: 5 A  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah  
 Weight (basic unit + battery): 905 g

	L1 mm	L2 mm	B mm	H mm	Spare carbon brushes set	Battery pack	Number of Charger batteries	kg	
515.3499	275.0	60.0	30.0	35.0	515.3595	515.3592	0	0	1.00
515.3500	275.0	60.0	30.0	35.0	515.3595	515.3592	1	1	1.90
515.3501	275.0	60.0	30.0	35.0	515.3595	515.3592	2	1	2.10



### Cordless reversible ratchet

- Light weight
- Handy and ergonomic dual component housing
- Square drive adaptor to DIN 3120 / ISO 1174
- With practical clockwise and anticlockwise reversing function
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing



3/8"

#### Technical data:

- Drive: 3/8"  
 Capacity: 10,8 V  
 Speed: 220 r.p.m.  
 Torque max. 49 Nm  
 No load current: 5 A  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah  
 Weight (basic unit + battery): 980 g

	L1 mm	L2 mm	B mm	H mm	Spare carbon brushes set	Battery pack	Number of Charger batteries	kg	
515.3504	270.0	55.0	30.0	35.0	515.3595	515.3592	0	0	1.00
515.3505	270.0	55.0	30.0	35.0	515.3595	515.3592	1	1	1.90
515.3506	270.0	55.0	30.0	35.0	515.3595	515.3592	2	1	2.10

### Cordless reversible ratchet

- Light weight
- Handy and ergonomic dual component housing
- Square drive adaptor to DIN 3120
- With practical clockwise and anticlockwise reversing function
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing



1/2"

#### Technical data:

- Drive: 1/2"  
 Capacity: 10,8 V  
 Speed: 180 rpm  
 Torque max. 62 Nm  
 No load current: 5 A  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah  
 Weight (basic unit + battery): 1,30 kg

	L1 mm	L2 mm	B mm	H mm	Spare carbon brushes set	Battery pack	Number of Charger batteries	kg	
515.3509	300.0	80.0	40.0	45.0	515.3595	515.3592	0	0	1.20
515.3510	300.0	80.0	40.0	45.0	515.3595	515.3592	1	1	2.10
515.3511	300.0	80.0	40.0	45.0	515.3595	515.3592	2	1	2.30

## CORDLESS IMPACT WRENCH

### Cordless impact screwdriver

- Light weight
- Handy and ergonomic dual component housing
- Tool holder female hexagon 6 point to DIN 3163 - E6,3
- With practical clockwise and anticlockwise reversing function
- Stepless controllable motor speed through electronic switch
- With industrial hammer mechanism
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing
- In durable plastic storage case



1/4"

#### Technical data:

- Drive: 1/4"  
 Capacity: 10,8 V  
 Speed: 0 - 1870 rpm  
 Torque max. 117 Nm  
 No load current: 3,5 A  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah

	L mm	B mm	H mm	Spare carbon brushes set	Battery pack	Number of Charger batteries	kg	
515.3539	190.0	55.0	195.0	515.3595	515.3592	0	0	1.50
515.3540	190.0	55.0	195.0	515.3595	515.3592	1	1	2.40
515.3541	190.0	55.0	195.0	515.3595	515.3592	2	1	2.60

### Cordless impact wrench

- Light weight
- Handy and ergonomic dual component housing
- Square drive adaptor to DIN 3120
- With practical clockwise and anticlockwise reversing function
- Stepless controllable motor speed through electronic switch
- With industrial hammer mechanism
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing
- In durable plastic storage case



#### Technical data:

- Drive: 3/8"  
 Capacity: 10,8 V  
 Speed: 0 - 1870 rpm  
 Torque max. 117 Nm  
 No load current: 3,5 A  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah  
 Weight (basic unit + battery): 1,10 kg

	L mm	B mm	H mm	Spare carbon brushes set	Battery pack	Number of Charger batteries	kg	
515.3514	190.0	55.0	195.0	515.3595	515.3592	0	0	1.80
515.3515	190.0	55.0	195.0	515.3595	515.3592	1	1	2.40
515.3516	190.0	55.0	195.0	515.3595	515.3592	2	1	2.60

**Cordless impact wrench**

- Handy and ergonomic dual component housing
- Square drive adaptor to DIN 3120
- With practical clockwise and anticlockwise switch
- Stepless controllable motor speed through electronic switch
- With industrial hammer mechanism
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing
- In durable plastic storage case



**Technical data:**

Drive: 1/2"  
 Capacity: 18 V  
 Speed: 0 - 2000 rpm  
 Torque max.: 402 Nm  
 No load current: 3,5 A  
 Charging time: 1 hour  
 Rechargeable battery: 18 V - 3,0 Ah

	L mm	B mm	H mm	Spare carbon brushes set	Battery pack	Number of Charger batteries	kg	
515.3519	240,8	80,0	273,0	515.3596	515.3599	0	0	2,30
515.3520	240,8	80,0	273,0	515.3596	515.3599	1	1	3,60
515.3521	240,8	80,0	273,0	515.3596	515.3599	2	1	4,40

**Cordless impact wrench with torque control**

- Handy and ergonomic dual component housing
- Square drive adaptor to DIN 3120
- With practical clockwise and anticlockwise reversing function
- With 6 torque-stages
- With industrial hammer mechanism
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing
- In durable plastic storage case



**Technical data:**

Drive: 1/2"  
 Capacity: 18 V  
 Speed: 0 - 1800 rpm  
 Torque max.: 539 Nm  
 Torque stages: 6 stages  
 No load current: 3,5 A  
 Charging time: 1 hour  
 Rechargeable battery: 18 V - 3,0 Ah

	L mm	B mm	H mm	Spare carbon brushes set	Battery pack	Number of Charger batteries	kg	
515.3524	256,0	80,0	273,0	515.3596	515.3599	0	0	2,50
515.3525	256,0	80,0	273,0	515.3596	515.3599	1	1	3,80
515.3526	256,0	80,0	273,0	515.3596	515.3599	2	1	4,60

**CORDLESS DRILL MACHINES**

**Cordless screwdriver**

- Light weight
- Handy and ergonomic dual component housing
- Tool holder female hexagon 6 point to DIN 3126 - E6,3
- With practical clockwise and anticlockwise reversing function
- Stepless controllable motor speed through electronic switch
- With torque control
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing
- In durable plastic storage case



**Technical data:**

Drive: 1/4"  
 Capacity: 10,8 V  
 Speed: 0 - 400 rpm  
 Torque max.: 24 Nm  
 Torque stages: 1 - 16 stages  
 No load current: 2,9 A  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah

	L mm	B mm	H mm	Spare carbon brushes set	Battery pack	Number of Charger batteries	kg	
515.3529	148,0	55,0	190,0	515.3595	515.3592	0	0	1,50
515.3530	148,0	55,0	190,0	515.3595	515.3592	1	1	2,40
515.3531	148,0	55,0	190,0	515.3595	515.3592	2	1	2,60



**Cordless drill machine**

- Light weight
- Handy and ergonomic dual component housing
- Universal use through robust quick release chuck
- With practical clockwise and anticlockwise reversing function
- Stepless controllable motor speed through electronic switch
- With torque control
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing
- In durable plastic storage case



**Technical data:**

Chuck capacity: 1 - 10 mm  
 Capacity: 10,8 V  
 Speed: 0 - 1870 rpm  
 Torque max.: 24 Nm  
 No load current: 3,5 A  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah

	L mm	B mm	H mm	Spare carbon brushes set	Battery pack	Number of Charger batteries	kg	
515.3534	190,0	55,0	200,0	515.3595	515.3592	0	0	1,60
515.3535	190,0	55,0	200,0	515.3595	515.3592	1	1	2,50
515.3536	190,0	55,0	200,0	515.3595	515.3592	2	1	2,70

**CORDLESS GRINDER**

**Cordless high performance grinder**

- Light weight
- Handy and ergonomic dual component housing
- Ideal for carbide, corundum and tungsten carbide burrs
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing
- In durable plastic storage case



**Technical data:**

Chuck capacity: 3 mm  
 Capacity: 10,8 V  
 Speed: 22000 rpm  
 No load current: 3 A  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah

	L mm	B mm	H mm	Spare carbon brushes set	Battery pack	Number of Charger batteries	kg	
515.3544	145,0	50,0	180,0	515.3595	515.3592	0	0	1,20
515.3545	145,0	50,0	180,0	515.3595	515.3592	1	1	0,81
515.3546	145,0	50,0	180,0	515.3595	515.3592	2	1	2,30

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**Cordless grinder**

- Light weight
- Handy and ergonomic dual component housing
- For powerful grinding and polishing on small areas
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing
- In durable plastic storage case



**Technical data:**

Capacity: 10,8 V  
 Speed: 3200 rpm  
 Velcro disc receiver: Ø 75 mm  
 No load current: 3 A  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah

	L mm	B mm	H mm	Spine carbon brushes set	Battery pack	Number of Charge stations	Weight	
515.3548	130,0	50,0	185,0	515.3595	515.3592	0	0	1.30
515.3550	130,0	50,0	185,0	515.3595	515.3592	1	1	2.20
515.3558	130,0	50,0	185,0	515.3595	515.3592	2	1	2.40

**CORDLESS ANGLE GRINDER**

**Cordless angle grinder**

- Light weight
- Handy and ergonomic dual component housing
- For powerful grinding and polishing on small areas
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing
- In durable plastic storage case



**Technical data:**

Velcro disc receiver: Ø 115 mm = 4.1/2"  
 Capacity: 18,0 V  
 Speed: 7000 r.p.m.  
 No load current: 8,5 A  
 Charging time: 1 hour  
 Rechargeable battery: 18 V - 3,0 Ah

	L mm	B mm	H mm	Spine carbon brushes set	Battery pack	Number of Charge stations	Weight	
515.4109	390,0	56,0	80,0	515.3596	515.3599	0	0	3.78
515.4110	390,0	56,0	80,0	515.3596	515.3599	1	1	5.03
515.4111	390,0	56,0	80,0	515.3596	515.3599	2	1	5.83

**CORDLESS POLISHER**

**Cordless polisher**

- Handy and ergonomic dual component housing
- Polishing with a fast and excellent work result
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- Blow mould plastic housing
- With lambswool bonnet
- In durable plastic storage case



**Technical data:**

Capacity: 18 V  
 Speed: 1600 - 2300 rpm  
 Polishing sponge diameter: Ø 125 mm / 5"  
 No load current: 3 A  
 Charging time: 1 hour  
 Rechargeable battery: 18 V - 3,0 Ah  
 Weight (basic unit + battery): 2,5 kg

	L mm	B mm	H mm	Preparation pack	Lambswool bonnet	Spine carbon brushes set	Battery pack	Number of Charge stations	Weight
515.3554	420,0	60,0	100,0	515.3555-21	515.3555-22	515.3596	515.3599	0	4.00
515.3555	420,0	60,0	100,0	515.3555-21	515.3555-22	515.3596	515.3599	1	5.30
515.3756	380,0	60,0	100,0	515.3555-21	515.3555-22	515.3596	515.3599	2	6.06

**CORDLESS GREASE GUN**

**Cordless grease gun 400 ml**

- Handy and ergonomic dual component housing
- For standard grease cartridges or direct filli g
- Ideal for heavy greasing with counter pressure
- With flexible 750 mm filli g tube
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- With a rechargeable battery that can be process up to 15 cartridges
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- In durable plastic storage case



**Technical data:**

Operating pressure: 420 bar / 42 MPa  
 NLGI class: < 2  
 Grease filli g: 75 g / min  
 Capacity of the unit: 400 ml  
 No load current: 3 A  
 Operating current: 2,0 - 5,5 A  
 Charging time: 1 hour  
 Rechargeable battery: 18 V - 3,0 Ah

	L mm	B mm	H mm	Spine carbon brushes set	Battery pack	Number of Charge stations	Weight	
515.3559	237,0	80,0	487,0	515.3596	515.3599	0	0	5.40
515.3560	237,0	80,0	487,0	515.3596	515.3599	1	1	6.70
515.3561	237,0	80,0	487,0	515.3596	515.3599	2	1	7.50

**Grease gun adaptor set**

- For standard hand, cordless and pneumatic grease guns
- Adaptor with sliding sleeve for break-proof connection
- Straight and angled grease nipple
- For grease nipples out of steel, brass and stainless steel

**Application range:** Cone, funnel, ball and fl t grease nipples



			Weight
980.1100	7 pcs	Grease gun adaptor set	1.99

**consists of:**

		L mm	Weight
980.1101	90° Lubricant adaptor	114.0	150
980.1102	Tube extension, 300 mm	390.0	240
980.1103	Straight extension	155.0	230
980.1104	90° fl t nipple adaptor	135.0	160
980.1105	Rubber grease tip	155.0	150
980.1106	Needle shaped tip	135.0	143
980.1107	360° Adaptor, adjustable	185.0	265

**CORDLESS CARTRIDGE GUN**

**Cordless cartridge gun 310 ml**

- Handy and ergonomic dual component housing
- Ideal for glue, silicone or acrylic based cartridges
- Drop free mechanism
- Stepless controllable feed
- Carbon brushes interchangeable
- With lithium ion high performance rechargeable battery
- Processing quantity per rechargeable battery load at room temperature 20°C is up to 15 cartridges
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- In durable plastic storage case



**Technical data:**

Capacity: 10,8 V  
 Capacity of the unit: 310 ml  
 Propulsion without load: 6,1 mm / sec  
 Output pressure: 392 kgf  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah

	L mm	B mm	H mm	Spine carbon brushes set	Battery pack	Number of Charge stations	Weight	
515.3569	410,0	138,0	245,0	515.3595	515.3592	0	0	3.60
515.3570	410,0	138,0	245,0	515.3595	515.3592	1	1	4.50
515.3571	410,0	138,0	245,0	515.3595	515.3592	2	1	4.70



**Cordless cartridge gun 400 ml**

- Handy and ergonomic dual component housing
- Ideal for glue, silicone or acrylic based cartridges
- Drop free mechanism
- Stepless controllable feed
- Carbon brushes interchangeable
- Lithium ion high performance rechargeable battery
- Processing quantity per rechargeable battery load at room temperature 20°C is up to 15 cartridges
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- In durable plastic storage case



**Technical data:**

Capacity: 10,8 V  
 Capacity of the unit: 400 ml  
 Propulsion without load: 6,1 mm / sec  
 Output pressure: 392 kgf  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah

	L mm	B mm	H mm	Spine carbon brushes set	Battery pack	Number of Charge stations	Weight
515.3574	450.0	138.0	245.0	515.3596	515.3592	0	3.70
515.3575	450.0	138.0	245.0	515.3596	515.3592	1	4.60
515.3576	450.0	138.0	245.0	515.3596	515.3592	2	4.80

**Cordless cartridge gun 600 ml**

- Handy and ergonomic dual component housing
- Ideal for glue, silicone or acrylic based cartridges
- Drop free mechanism
- Stepless controllable feed
- Carbon brushes interchangeable
- Lithium ion high performance rechargeable battery
- Processing quantity per rechargeable battery load at room temperature 20°C is up to 15 cartridges
- Longer running time through higher load capacity
- Fast charging function (1 hour)
- Automatic turn off charging station
- In durable plastic storage case



**Technical data:**

Capacity: 10,8 V  
 Capacity of the unit: 600 ml  
 Propulsion without load: 6,1 mm / sec  
 Output pressure: 392 kgf  
 Charging time: 1 hour  
 Rechargeable battery: 10,8 V - 1,5 Ah

	L mm	B mm	H mm	Spine carbon brushes set	Battery pack	Number of Charge stations	Weight
515.3579	560.0	138.0	245.0	515.3596	515.3592	0	4.10
515.3580	560.0	138.0	245.0	515.3596	515.3592	1	2.20
515.3581	560.0	138.0	245.0	515.3596	515.3592	2	5.20

**RIVETING TOOLS PISTOL**

**Cordless riveting tool pistol**

- Handy and ergonomic dual component housing
- Universal use for aluminium and steel rivets Ø 2.4/3.2/4.0/4.8 mm
- Approx. 220 rivets per battery
- With practical clockwise and anticlockwise reversing function
- Very short setup time
- Fast change of rivets
- Short processing time
- Stepless controllable motor speed through electronic switch
- 40% extended lifespan due to changeable special carbon brush conductors
- With lithium-ion high performance rechargeable battery
- Includes automatic turn off charging station
- Fast charging function (1 hour)
- Blow mould plastic housing
- In durable plastic storage case



**Technical data:**

Rivet sizes: 2,4 / 3,2 / 4,0 / 4,8 mm  
 Stroke length: 15 mm  
 Vibration: 3,2 ms<sup>2</sup>  
 Noise performance level: 86,9 dbA  
 Noise pressure level: 75,9 dbA  
 Driving power: 4.900  
 Capacity: 10,8 V  
 Rechargeable battery: 10,8 V - 1,5 Ah

	L mm	B mm	H mm	Spine carbon brushes set	Battery pack	Number of Charge stations	Weight
515.4104	235.0	55.0	200.0	515.3595	515.3592	0	1.15
515.4105	235.0	55.0	200.0	515.3595	515.3592	1	2.69
515.4106	235.0	55.0	200.0	515.3595	515.3592	2	3.07

**RECHARGEABLE BATTERIES AND CHARGERS**

**Universal spare batteries**

- Lithium ion high performance rechargeable battery
- Impact resistant polyethylene housing



**Technical data:**

Battery type: Lithium ion high performance rechargeable battery  
 Charging time: 1 hour  
 Working temperature: -5° / +45°

	Ah	L mm	B mm	H mm	Weight	
515.3592	10,8 V	1,5	60,5	54,0	84,8	200

**Universal push in batteries**

- Lithium ion high performance rechargeable battery
- Integrated automatic safety switching off
- With control LED to discharge
- Impact resistant polyethylene housing
- Ca. 1 hour charge time



**Technical data:**

Battery type: Lithium ion high performance rechargeable battery  
 Charging time: 1 hour  
 Working temperature: -5° / +45°

	Ah	L mm	B mm	H mm	Weight	
515.3597	10,8 V	1,5	73,0	80,0	109,6	300
515.3599	18 V	3,0	73,0	80,0	129,8	800

**Universal fast charger**

- Suitable for 10,8 V Ah lithium ion high performance rechargeable battery
- Integrated automatic safety switching off
- Impact resistant polyethylene housing



**Technical data:**

Battery type: 10,8 V  
 Charging time: 1 hour  
 Charging voltage: AC 100 - 240 V - 50 / 60 Hz  
 Working temperature: -5° / +45°

	L mm	B mm	H mm	Weight
515.3590	145.0	100.0	55.0	500

**Universal fast charger**

- Suitable for 18,0 V Ah lithium ion high performance rechargeable battery
- Integrated automatic safety switching off
- Impact resistant polyethylene housing



**Technical data:**

Battery type: 10,8 V - 18,0 V  
 Charging time: 1 hour  
 Charging voltage: AC 100 - 240 V - 50 / 60 Hz  
 Working temperature: -5° / +45°

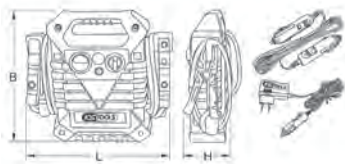
	L mm	B mm	H mm	Weight
515.3591	175.0	115.0	65.0	700



## BOOSTER

### 12 V battery booster - mobile starting aid 700 A

- Ideal for IC and diesel engines from passenger cars to transporters
- Fully insulated terminal clamps (1000 A)
- Integrated electronics protection
- Charge control indicator at press of button
- Acoustic warning if polarity is reversed
- 1.6 m cable length
- With sturdy 35 mm<sup>2</sup> cable cross section
- Current-free cable connection to the vehicle battery
- Charger and cable set included in scope of supply
- Cable can be conveniently stored on the housing
- Impact-resistant housing with rubberised base area



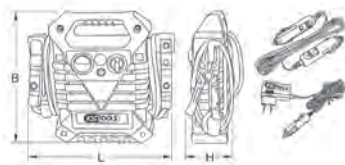
#### Technical data:

Battery:	12 Volt / 22 Ah
Starting current:	700 A
Peak voltage:	2200 A
Cable cross section:	35 mm <sup>2</sup>
Battery charger:	12V DC / 4 A

L mm	B mm	H mm	Charger space	Charging cable	kg	
550.1710	405.0	380.0	120.0	550.1711	550.1712	10.00

### 12 V + 24 V battery booster - mobile starting aid 1400 A

- Ideal for IC and diesel engines from passenger cars to HGV < 12 t
- Fully insulated terminal clamps (1000 A)
- Integrated electronics protection
- Charge control indicator at press of button
- Acoustic warning if polarity is reversed
- 1.6 m cable length
- With sturdy 35 mm<sup>2</sup> cable cross section
- Current-free cable connection to the vehicle battery
- Automatic mains charger and cable set included in scope of supply
- Cable can be conveniently stored on the housing
- Impact-resistant housing with rubberised base area



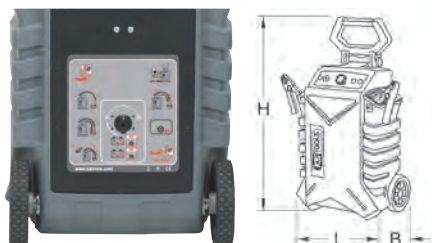
#### Technical data:

Battery:	2 x 12 Volt / 22 Ah
Starting current:	1400 / 700 A
Peak voltage:	4400 / 2200 A
Cable cross section:	35 mm <sup>2</sup>
Battery charger:	12V DC / 4 A

L mm	B mm	H mm	Charger space	Charging cable	kg	
550.1720	405.0	380.0	180.0	550.1721	550.1712	18.00

### 12 V + 24 V Battery Booster - mobile starting aid 3000 A

- Ideal for petrol and diesel engines in passenger cars or commercial vehicles
- Fully insulated battery clips (1000A)
- Integral electronics protection (voltage peak protected)
- Heavy-duty copper cable, cross-section 75 mm<sup>2</sup>
- 2.0 m cable length
- Intelligent, fully-integrated 3-stage automatic charging unit
- Multi-function display with coloured LED bars
- Intelligent protective circuits
- Polarity protection optical/acoustic
- Current-free cable connection to the vehicle battery
- Robust, wheeled housing with cable storage compartments
- Delivery scope includes vehicle charging cable



#### Technical data:

Battery:	2 x 12 Volt / 50 Ah
Starting current:	3000 / 1500 A
Peak voltage:	7200 / 3400 A
Cable cross section:	75 mm <sup>2</sup>

L mm	B mm	H mm	kg	
550.1725	450.0	300.0	750.0	47.00



## ACCESSORIES FOR RECHARGEABLE BOOSTER PACKS

### Battery charger for battery booster

- Designed for continuous usage
- Integrated automatic safety switching off
- Impact resistant polyethylene housing



	Input current	Output current	kg	
550.1711	550.1710	220 - 240 V	12 V / 4 A	439
550.1721	550.1720	220 - 240 V	24 V / 4 A	439

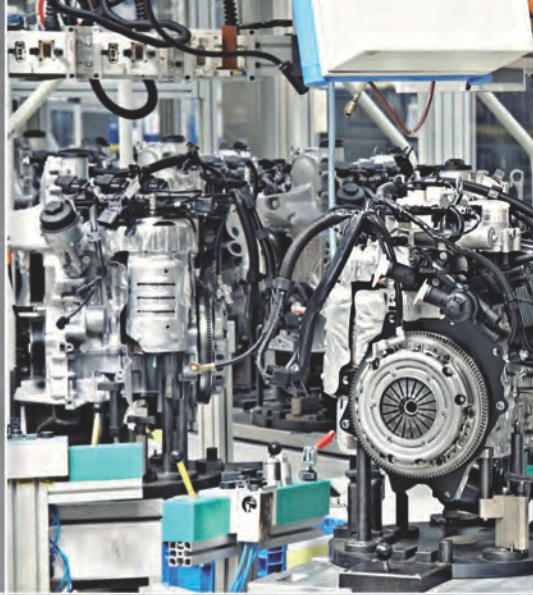
### Car charger lead

- For temporary charge
- No safety switching off
- 1.6 mm cable diameter
- 2.0 m cable length
- With double connector



	kg	
550.1712	→ 550.1710 + 550.1720	62





**KS TOOLS®**

*Innovation is our mission!*

**CORDLESS BATTERY TOOLS**

**LITHIUM ION TECHNOLOGY**

- The high performance cordless tools for the perfect job
- Working without cables with Lithium ion technology
- Ergonomic design, perfect weight distribution
- Low vibration for fatigue free working







*Innovation is  
our mission!*

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# LIGHTING TECHNOLOGY

## Construction LEDMAX POWER STRIPE LED battery operating lamp

### LED Cordless workshop lamp

- Ideal for very long network independent working
- 6 Watt Citizen Power LED
- Housing 180° foldable
- Housing body covered with high quality rubber
- Weatherproof protection IP64
- Shock and impact resistant
- Revolving hooks for suspending
- Magnetic
- With control LED to discharge
- Includes automatic turn off charging station
- 3 hours charging time
- 3 hours lamp duration
- Impact resistant Polycarbonate housing



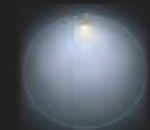
### Technical data

Capacity:	illumination time 3 hours
Light source:	6 W POWER Stripe LED
Luminosity:	420 lumen
Rechargeable battery:	3,6 V / 3600 mAh
Battery type:	Li-polymer
Capacity:	6 Watt
Charging voltage:	AC 100-240 V ~ 50 / 60 Hz
	DC 12-24 V
Working temperature:	-5° / +45°
Weight:	0.50 kg

### Important basic concepts of light engineering

Technical data on the torch market are confusing and often not comparable.

#### lumens



#### Luminous flux in lumens (lm)

The luminous flux is the most important term to characterise the output of a lamp. It describes the actual light quantity or light energy emitted from a light source. What is actually measured? Some manufacturers specify the luminous flux of the LED or light bulb and in the process don't mention that this is significantly reduced in the reflector/lamp head (sometimes by more than 30%). Our luminous flux values are values measured with spectrometers, which the lamps emit with new batteries from the reflectors.

#### lux



#### Illuminance in lux

This value indicates how intensely a surface is illuminated. This comes from photography and light architecture. There are clear specifications as to what illuminance work places or supermarket halls have to have. The illuminance is measured with luxmeters.

#### candela



#### Light intensity in candela (ca)

The light intensity denotes - in a simplified form - the intensity of the light output. This is dependent on the luminous flux (quantity of light) and the output angle of the light. Example: 5 mm LEDs have different beam angles, e.g. 10° and 120°. Despite the same light energy the 10° diode has 12 times more light intensity as the 120° diode. The same quantity of light is distributed once to 10° and once to 120°. 10 m away a 10° diode only operates at an angle of 10°, whereas the 120° diode operates at the same light at an angle of 120°. The light intensity is the designation for the part of the luminous flux emitted in a certain direction.

### LED (Light Emitting Diode)

Light emitting diodes are microstructural solid states and completely unsusceptible to vibrations. They last 1000 times longer than conventional light bulbs, unlike halogen lamps they produce no shades, hardly produce warmth and use less electricity. LEDs contain no harmful filling gases and produce no ultraviolet rays.

### Power consumption

The power consumption of a lamp and their bright performance are two completely different things. The fact that a lamp uses a lot of energy by no means that they produce a lot of light. The largest part of the energy is still moved in warmth. This also applies to LEDs a high efficient 1 watt diode which can supply more light than one low quality 5 watt diode.

### Light efficiency

<b>1% Light*</b>  Flashlights light bulb 100 Hours*	<b>1% Light**</b>  Light bulb 1000 Hours*	<b>13% Light*</b>  High end LED 100,000 Hours***	<b>13% Light*</b>  High end power chip 100,000 Hours***	<b>20% Light*</b>  High end GREE chip 80,000 Hours***
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\* In this juncture, it is about calculated average values. According to type of the lamp abnormalities can occur. \*\* With 15 / 25 watt lamps. According to type of the lamp abnormalities can occur. \*\*\* After 100.000 working hours LEDs still shine with 50% of the brightness.

## Light engineering lines

**LED ball point pen**



**Emergency lamps**



**Head lamps**



**Inspection lamps**



**LED hand lamps**



**Workshop lamps**



**Flash lights**



**Work lamps**



**Cable reels**



### IP Protection class identification mar

The housing protection degree, is fi ed as the standards IEC 529 or DIN EN 60 52 which contain several different protection types. The illustration below shows an overview of the protection classes which are represented as follows.

- If for the designation the 1st or 2nd place is not important, it is replaced by X.
- Perhaps 3rd place Additional touch protection / perhaps 4th place Supplementary character
- Representation in accordance to DIN VDE 0470, DIN EN 60 529, IEC 60529

### IP Protection class definitio

1. ref. number	range of protection
0	no touch protection, no protection against compact foreign objects
1	protection against extensive touch with hand protection against foreign objects Ø >50 mm
2	protection against touch with fi gers protection against foreign objects Ø >12 mm
3	protection against touch with tools, wire etc with Ø >2,5 mm protection against foreign objects Ø >2,5 mm
4	protection against touch with tools, wire etc with Ø >1 mm protection against foreign objects Ø >1 mm
5	protection against touch protection against dust deposit inside
6	complete protection against touch protection against entry of dust

2. ref. number	range of protection
0	no protection against water
1	protection against vertical falling raindrops
2	protection against angular falling raindrops (every angle up to 15° to vertical)
3	protection against water in every angle up to 60° to vertical
4	protection against splash water from all directions
5	protection against jet of water (blast pipe) every angle
6	protection against temporary floodi g
7	protection against ingress of water during temporary immersion
8	protection against pressure water during constant immersion



## LED BALL POINT PEN

### 4 in 1 LED ball point pen

- Ball point pen
- LED lamp
- Laser pointer
- Handheld pencil
- Clip for the breast pocket
- Approx. 60 hours lamp duration
- Includes 4 x LP 41 button cell
- Impact proof housing



	L mm	D mm	Weight
10010	150.0	13.0	110

### 3 in 1 LED ball point pen

- Ball point pen
- LED lamp
- Laser pointer
- Focus lens
- Clip for the breast pocket
- Approx. 60 hours lamp duration
- Includes 3 x LP 41 button cell
- Impact proof housing



	L mm	D mm	Weight
10012	130.0	13.0	100

## EMERGENCY LAMPS

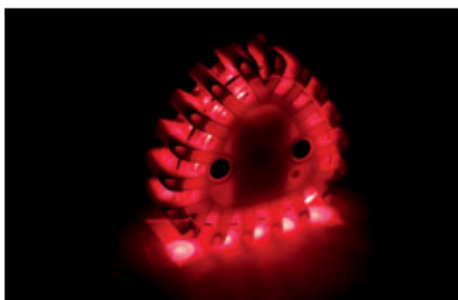
### Emergency light

- In the event of an emergency
- 9 warning functions
- Magnetic
- With suspension device
- Ingress protection according to IP54
- Includes 1 x CR 123 battery
- Impact-resistant



**Technical data:**  
 Luminosity: 13.000 mcd  
 Battery: CR 123  
 Working temperature: -10° to +40°C

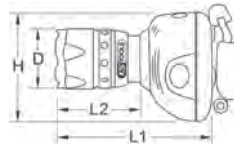
	Ø mm	H mm	Weight
550.1360	107	35.0	230



## HEAD LAMPS

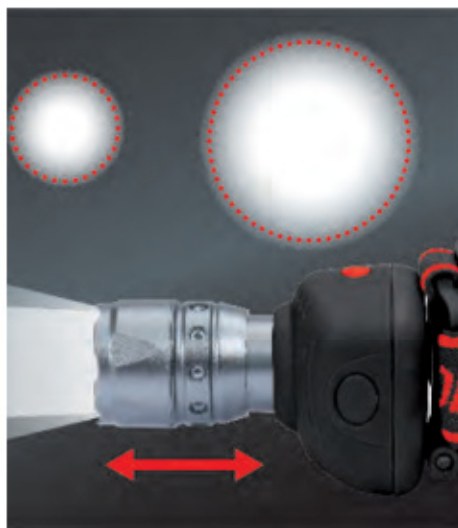
### LEDMAX CREE Power LED headlamp with focus

- 3 Watt CREE Chip Power LED
- Luminous fl x 100 Lumen
- Headlight range of up to 100 meters
- Zoom from spot to flood light
- Multifunctional-button with 4 modes: On/Off / 5W / 3W / Blink
- Adjustable front and head band for comfort and to stay in place
- Lamp can be additionally tilted in 5 click stops
- Weatherproof protection IPX3
- 3 hours lamp duration
- Includes 3 x AAA 1,5V batteries



**Technical data:**  
 Headlight range: max. 100,0 m  
 Luminosity: 3 W  
 Working temperature: 0° / +40° C

	D mm	H mm	L1 mm	L2 mm	Weight
550.1238	30.0	40.0	65.0	30.0	170



## INSPECTION LAMPS

### LEDMAX CREE-Power LED torch

- Ideal for smock and shirt pockets
- 1 Watt CREE Chip LED
- 85 Lumens luminous fl x
- 25 m headlight range
- Ingress protection according to IPX3
- Clip for the breast pocket
- 5 - 10 hours lamp duration
- Includes 2 x AA 1,5 V batteries
- Ultra light and impact resistant aluminium housing



**Technical data:**  
 Headlight range: max. 25,0 m  
 Luminosity: 1 W  
 Working temperature: 0° / +40° C

	L mm	D mm	Weight
150.4370	140.0	16.0	92

### Flexible UV inspection lamp

- LED UV lamp
- Flexible shaft
- Localizes leaks in air conditioning systems
- Clip for the breast pocket
- Approx. 60 hours lamp duration
- Includes 3 x AAAA batteries
- Impact proof housing



	L mm	D mm	Spot size	Weight
550.1165	450.0	7.5	550.1167	150

**Flexible inspection set**

- Halogen lamp
- Flexible shaft
- Includes flexible fibreglass attachment
- Clip for the breast pocket
- Approx. 60 hours lamp duration
- Includes 3 x 1.5 V AAA batteries
- Impact proof housing



	L mm	B mm	H mm	
550.1160	210.0	150.0	25.0	230

**Flexible inspection lamp with magnet**

- Halogen lamp
- Flexible long shaft, 400 mm
- With optional clip-on light-flooded magnet
- Includes extension 500 mm
- Approx. 60 hours lamp duration
- Includes 3 x AA batteries
- Impact proof housing



	L mm	D mm	Spine tube	
550.1185	600.0	7.0	550.1188	120

**Flexible inspection lamp with magnet and mirror**

- Halogen lamp
- Flexible long shaft, 400 mm
- With optional attachable flexible mirror (20 x 35 mm)
- With optional clip-on light-flooded magnet
- Includes extension 500 mm
- Approx. 60 hours lamp duration
- Includes 3 x AA batteries
- Impact proof housing



	L mm	D mm	Mirror size mm	Spine tube	
550.1138	600.0	7.0	20 x 35	550.1188	215

**LED HAND LAMPS**

**MONSTER CREE-Power LED lamp 800**

- Ideal for network independent working
- On/off mode
- 1 x CREE LED light
- 800 lumens luminous flux
- 300 m range
- Scratchproof with hard-coat anodising
- shockproof and waterproof
- splashproof in accordance with IP65
- includes 1 x 3.7V lithium battery (BRC 18650)
- shockproof aluminium housing
- incl. belt clip
- incl. automatically switch off loading station



Technical data:	
Light source:	1 x Cree Power LED
Headlight range:	max. 300,0 m
Luminosity:	800 lumen
Rechargeable battery:	3,7 V / 3000 mAh
Battery type:	Lithium-ion
Capacity:	10 Watt
Charging voltage:	AC 100-240 V - 50 / 60 Hz DC 12-24 V
Working temperature:	-10° / +50°C

	L mm	D mm	Replacement battery	
150.4360	145.0	45.0	150.4361	115

**MONSTER CREE-Power LED lamp 2300**

- Ideal for network independent working
- 5 lighting modes 3 levels of brightness, SOS and stroboscope
- 5 x CREE LED lights
- 2300 lumens luminous flux
- 300 m range
- digitally controlled for consistent brightness
- Aluminium reflector
- Clear glass lens
- Scratchproof with hard-coat anodising
- shockproof and waterproof
- splashproof in accordance with IP65
- includes 3 x 3.7V lithium battery (26650)
- shockproof aluminium housing
- incl. belt clip
- incl. automatically switch off loading station



Technical data:	
Light source:	5 x Cree Power LEDs
Headlight range:	max. 300,0 m
Luminosity:	2300 lumen
Rechargeable battery:	3,7 V / 4000 mAh
Battery type:	Lithium-ion
Capacity:	24 Watt
Charging voltage:	AC 100-240 V - 50 / 60 Hz DC 12-24 V
Working temperature:	-10° / +50°C

	L mm	D mm	Replacement battery	
150.4365	310.0	62.0	150.4362	600

**MONSTER CREE-Power LED lamp 2800**

- Ideal for network independent working
- 5 lighting modes 3 levels of brightness, SOS and stroboscope
- 7 x CREE LED lights
- 2800 lumens luminous flux
- 300 m range
- digitally controlled for consistent brightness
- Aluminium reflector
- Clear glass lens
- Scratchproof with hard-coat anodising
- shockproof and waterproof
- splashproof in accordance with IP65
- includes 3 x 3.7V lithium battery (26650)
- shockproof aluminium housing
- incl. belt clip
- incl. automatically switch off loading station



Technical data:	
Light source:	7 x Cree Power LEDs
Headlight range:	max. 300,0 m
Luminosity:	2800 lumen
Rechargeable battery:	3,7 V / 4000 mAh
Battery type:	Lithium-ion
Capacity:	35 Watt
Charging voltage:	AC 100-240 V - 50 / 60 Hz DC 12-24 V
Working temperature:	-10° / +50°C

	L mm	D mm	Replacement battery	
150.4366	320.0	63.0	150.4362	535

**MONSTER CREE-Power LED lamp 3000**

- Ideal for network independent working
- 5 lighting modes 3 levels of brightness, SOS and stroboscope
- 9 x CREE LED lights
- 3000 lumens luminous flux
- 300 m range
- digitally controlled for consistent brightness
- Aluminium reflector
- Clear glass lens
- Scratchproof with hard-coat anodising
- shockproof and waterproof
- splashproof in accordance with IP65
- includes 3 x 3.7V lithium battery (26650)
- shockproof aluminium housing
- incl. automatically switch off loading station



Technical data:	
Light source:	9 x Cree Power LEDs
Headlight range:	max. 300,0 m
Luminosity:	3000 lumen
Rechargeable battery:	3,7 V / 4000 mAh
Battery type:	Lithium-ion
Capacity:	32 Watt
Charging voltage:	AC 100-240 V - 50 / 60 Hz DC 12-24 V
Working temperature:	-10° / +50°C

	L mm	D mm	Replacement battery	
150.4367	325.0	78.0	150.4362	665



### MONSTER CREE-Power LED lamp 4000

- Ideal for network independent working
- 5 lighting modes 3 levels of brightness, SOS and stroboscope
- 12 x CREE LED lights
- 4000 lumens luminous flux
- 300 m range
- digitally controlled for consistent brightness
- Aluminium reflector
- Clear glass lens
- Scratchproof with hard-coat anodising
- shockproof and waterproof
- splashproof in accordance with IP65
- includes 3 x 3.7V lithium battery (26650)
- shockproof aluminium housing
- incl. automatically switch off loading station



#### Technical data:

Light source:	12 x Cree Power LEDs
Headlight range:	max. 300.0 m
Luminosity:	4000 lumen
Rechargeable battery:	3,7 V / 4000 mAh
Battery type:	Lithium-ion
Capacity:	36 Watt
Charging voltage:	AC 100-240 V - 50 / 60 Hz DC 12-24 V
Working temperature:	-10° / +50°C

	L mm	D mm	Replacement battery	Weight
150.4368	415.0	89.0	150.4362	1000

### WORKSHOP LAMPS

#### LEDMAX LED Cordless work lamp

- Ideal for very long network independent working
- 30 Power Chip LEDs
- Housing body covered with high quality rubber
- Weatherproof protection IP54
- Shock and impact resistant
- Revolving hooks for suspending
- Magnetic
- With control LED to discharge
- Includes automatic turn off charging station
- 4-5 hours charging time
- 9 hours lamp duration
- Impact resistant Polycarbonate housing



#### Technical data:

Capacity:	Illumination time 9 hours
Light source:	30 + 1 W LED
Luminosity:	800 Lux
Rechargeable battery:	3,7 V / 3500 mAh
Battery type:	Lithium-ion
Capacity:	1,2 Watt
Charging voltage:	AC 100-240 V - 50 / 60 Hz DC 12-28 V
Working temperature:	-5° / +45°

	L mm	D mm	Weight
150.4240	280.0	50.0	940

#### LEDMAX SMD Cordless work lamp

- Ideal for very long network independent working
- 30 SMDs
- Housing body covered with high quality rubber
- Weatherproof protection IP54
- Shock and impact resistant
- Revolving hooks for suspending
- Magnetic
- With control LED to discharge
- Includes automatic turn off charging station
- 4-5 hours charging time
- 9 hours lamp duration
- Impact resistant Polycarbonate housing



#### Technical data:

Capacity:	Illumination time 9 hours
Light source:	30 SMDs
Luminosity:	95 lumen
Rechargeable battery:	3,7 V / 3500 mAh
Battery type:	Lithium-ion
Capacity:	1,2 Watt
Charging voltage:	AC 100-240 V - 50 / 60 Hz DC 12-28 V
Working temperature:	-5° / +45°

	L mm	D mm	Weight
150.4330	280.0	50.0	920

#### LEDMAX SUPER BRIGHT LED Cordless work lamp

- Ideal for very long network independent working
- 3 + 1 W SUPER BRIGHT LED's
- Housing body covered with high quality rubber
- Weatherproof protection IP54
- Shock and impact resistant
- Revolving hooks for suspending
- Magnetic
- With control LED to discharge
- Includes automatic turn off charging station
- 4-5 hours charging time
- 4-5 hours lamp duration
- Impact resistant Polycarbonate housing



#### Technical data:

Capacity:	Illumination time 4-5 hours
Light source:	3 + 1 W SUPER BRIGHT LEDs
Luminosity:	2500 Lux
Rechargeable battery:	3,7 V / 3500 mAh
Battery type:	Lithium-ion
Capacity:	2,5 Watt
Charging voltage:	AC 100-240 V - 50 / 60 Hz DC 12-24 V
Working temperature:	-5° / +45°

	L mm	D mm	Weight
150.4340	280.0	50.0	930

#### LEDMAX STRIPE LED-Cordless work lamp

- Ideal for very long network independent working
- 2.5 W Stripe LED
- Housing body covered with high quality rubber
- Weatherproof protection IP54
- Shock and impact resistant
- Revolving hooks for suspending
- Magnetic
- With control LED to discharge
- Includes automatic turn off charging station
- 4-5 hours charging time
- 4-5 hours lamp duration
- Impact resistant Polycarbonate housing



#### Technical data:

Capacity:	Illumination time 4-5 hours
Light source:	2,5 W Stripe LED
Luminosity:	180 lumen
Rechargeable battery:	3,7 V / 3500 mAh
Battery type:	Lithium-ion
Capacity:	2,5 Watt
Charging voltage:	AC 100-240 V - 50 / 60 Hz DC 12-24 V
Working temperature:	-5° / +45°

	L mm	D mm	Weight
150.4350	280.0	50.0	950

#### LEDMAX POWER STRIPE LED Cordless working lamp, foldable

- Ideal for very long network independent working
- 6 Watt Citizen Power LED
- Housing 180° foldable
- Housing body covered with high quality rubber
- Weatherproof protection IP64
- Shock and impact resistant
- Revolving hooks for suspending
- Magnetic
- With control LED to discharge
- Includes automatic turn off charging station
- 3 hours charging time
- 3 hours lamp duration
- Impact resistant Polycarbonate housing



#### Technical data:

Capacity:	Illumination time 3 hours
Light source:	6 W CITIZEN POWER LED
Luminosity:	420 lumen
Rechargeable battery:	3,6 V / 3600 mAh
Battery type:	Li-polymer
Capacity:	6 Watt
Charging voltage:	AC 100-240 V - 50 / 60 Hz DC 12-24 V
Working temperature:	-5° / +45°

	L mm	D mm	Weight
150.4310	290.0	56.0	500

**FLASHLIGHTS**

**Basic workshop inspection hand lamp 8 watts**

- Protection pipe out of polycarbonate
- Impact resistant impact strength IK09
- High quality rubber hand grip casing
- Revolving hooks for suspending
- With contour connector according to CEE 7/17
- Integrated connector
- Includes lamp



**Technical data:**  
 Luminosity: 8 W  
 Lamp length: 500.0 mm  
 Connection cable length: 5 m  
 Cable: H05RN-F 2x1,0 mm<sup>2</sup>  
 Operational voltage: AC 220-240 V  
 Protection class: II

	L mm	Ø mm	W
550.1371	500.0	30,0	470



**Pro workshop inspection hand lamp 8 watts**

- Industrial quality
- Double insulation
- Protection pipe out of polycarbonate
- Impact resistant - impact strength IK09
- High quality rubber hand grip casing
- Revolving hooks for suspending
- With contour connector according to CEE 7/17
- Ingress protection according to IP20
- With integrated connector
- Lamp extension tube interchangeable
- Includes lamp



**Technical data:**  
 Luminosity: 8 W  
 Lamp length: 500.0 mm  
 Connection cable length: 5 m  
 Cable: H05RN-F 2x1,0 mm<sup>2</sup>  
 Operational voltage: AC 220-240 V  
 Protection class: II  
 Weatherproof protection: IP20

	L mm	Ø mm	W
550.1376	500.0	30,0	660

**Pro XL workshop inspection hand lamp 11 watts**

- Industrial quality
- Double insulation
- Protection pipe out of polycarbonate
- Impact resistant - impact strength IK09
- High quality rubber hand grip casing
- Revolving hooks for suspending
- With contour connector according to CEE 7/17
- Ingress protection according to IP20
- With integrated connector
- Lamp extension tube interchangeable
- Includes lamp



**Technical data:**  
 Luminosity: 11 W  
 Lamp length: 630.0 mm  
 Connection cable length: 5 m  
 Cable: H05RN-F 2x1,0 mm<sup>2</sup>  
 Operational voltage: AC 220-240 V  
 Protection class: II  
 Weatherproof protection: IP20

	L mm	Ø mm	W
550.1381	630.0	35,0	710

**Pro XXL workshop inspection hand lamp 13 watts**

- Industrial quality
- Double insulation
- Protection pipe out of polycarbonate
- Impact resistant - impact strength IK09
- High quality rubber hand grip casing
- Revolving hooks for suspending
- With contour connector according to CEE 7/17
- Ingress protection according to IP20
- With integrated connector
- Lamp extension tube interchangeable
- Includes lamp



**Technical data:**  
 Luminosity: 13 W  
 Lamp length: 720.0 mm  
 Connection cable length: 5 m  
 Cable: H05RN-F 2x1,0 mm<sup>2</sup>  
 Operational voltage: AC 220-240 V  
 Protection class: II  
 Weatherproof protection: IP20

	L mm	Ø mm	W
550.1386	720.0	35,0	750



**Professional XXL workshop inspection hand lamp with expander holder**

- Optimum lighting
- Self-clamping and securable
- Span length = 1,335 - 1,800 mm
- Expanding bracket with large, adjustable and rubber coated hooks
- Industrial quality
- Double insulation
- Protection pipe out of polycarbonate
- Impact resistant - impact strength IK09
- High quality rubber hand grip casing
- Revolving hooks for suspending
- With contour connector according to CEE 7/17
- Ingress protection according to IP54
- With integrated connector
- Lamp extension tube interchangeable
- Includes lamp



**Technical data:**  
 Luminosity: 30 W  
 Adjustabel length: 1,335-1,800 mm  
 Connection cable length: 5 m  
 Cable: H05RN-F 2x1,0 mm<sup>2</sup>  
 Operational voltage: AC 220-240V  
 Protection class: II  
 Weatherproof protection: IP54

	L mm	Ø mm	W
150.4305	1335-1800	74,0	2,60

**ACCESSORIES FOR FLASH LIGHTS**

**Magnet holder for workshop lamps**

- Universal mouting clip for workshop lamps
- Extra large pivoting range
- Magnet completely rubberised
- Stop peg out of spring steel



	max Ø pipe mm	Ø magnetic base mm	W
150.4219	43,0	31,0	79

**Workshop cable reel**

- Practical and space-saving
- Extra strong, automatic return mechanism
- With endstopper
- 180° freely revolving
- Cable working length 20 m
- Connection cable 1.5 m
- Metal wall reinforcement rail 270 mm



**Technical data:**  
 Work cable length m: 20 m  
 Connection cable length: 1,5 m  
 Operational voltage: 230 V

		W
150.4320	Workshop cable reel	6,50



## FLASH LIGHTS WITH CABLE REELS

### Cable reel with Basic workshop inspection hand lamp 8 watts

- Protection pipe out of polycarbonate
- Impact resistant impact strength IK09
- High quality rubber hand grip casing
- 360° revolving hooks for suspending
- With contour connector according to CEE 7/17
- Ingress protection according to IP44
- Integrated connector
- Includes lamp
- Includes workshop cable reel



#### Technical data:

Luminosity:	8 W
Lamp length:	500.0 mm
Connection cable length:	5 m
Work cable length m:	20 m
Cable:	H05RN-F 2x1,0 mm <sup>2</sup>
Operational voltage:	AC 220-240 V
Protection class:	II
Weatherproof protection:	IP44

	L mm	Ø mm	kg
550.1370	500.0	30.0	8.08

### Cable reel with pro workshop inspection hand lamp 8 watts

- Industrial quality
- Double insulation
- Protection pipe out of polycarbonate
- Impact resistant - impact strength IK09
- High quality rubber hand grip casing
- 360° revolving hooks for suspending
- With contour connector according to CEE 7/17
- Ingress protection according to IP44
- With integrated connector
- Includes lamp
- Includes cable reel 20 m



#### Technical data:

Luminosity:	8 W
Lamp length:	500.0 mm
Connection cable length:	5 m
Work cable length m:	20 m
Cable:	H05RN-F 2x1,0 mm <sup>2</sup>
Operational voltage:	AC 220-240 V
Protection class:	II
Weatherproof protection:	IP44

	L mm	Ø mm	kg
550.1375	500.0	30.0	8.10

### Cable reel with pro XL workshop inspection hand lamp 11 watts

- Industrial quality
- Double insulation
- Protection pipe out of polycarbonate
- Impact resistant - impact strength IK09
- High quality rubber hand grip casing
- 360° revolving hooks for suspending
- With contour connector according to CEE 7/17
- Ingress protection according to IP54
- With integrated connector
- Includes lamp
- Includes cable reel 20 m



#### Technical data:

Luminosity:	11 W
Lamp length:	630.0 mm
Connection cable length:	5 m
Work cable length m:	20 m
Cable:	H05RN-F 2x1,0 mm <sup>2</sup>
Operational voltage:	AC 220-240 V
Protection class:	II
Weatherproof protection:	IP44

	L mm	Ø mm	kg
550.1380	630.0	35.0	8.12

### Cable reel with pro XXL workshop inspection hand lamp 13 watts

- Industrial quality
- Double insulation
- Protection pipe out of polycarbonate
- Impact resistant - impact strength IK09
- High quality rubber hand grip casing
- 360° revolving hooks for suspending
- With contour connector according to CEE 7/17
- Ingress protection according to IP54
- With integrated connector
- Includes lamp
- Includes cable reel 20 m



#### Technical data:

Luminosity:	13 W
Lamp length:	720.0 mm
Connection cable length:	5 m
Work cable length m:	20 m
Cable:	H05RN-F 2x1,0 mm <sup>2</sup>
Operational voltage:	AC 220-240 V
Protection class:	II
Weatherproof protection:	IP44

	L mm	Ø mm	kg
550.1385	720.0	35.0	8.14

## WORK LAMPS

### Pro workshop inspection hand lamp 36 watt

- Industrial quality
- 2.900 lumens luminous flux
- Polycarbonate protection glass
- Housing cover also rubber
- Impact resistant impact strength IK10
- Hooks for double sided applications and with contour connector according to CEE 7/17
- Ingress protection according to IP54
- Integrated connector
- Lamp extension tube interchangeable
- Includes lamp
- Blow mould plastic housing



#### Technical data:

Luminosity:	36 W
Connection cable length:	5 m
Operational voltage:	230 V
Accessory outlet:	-
Protection class:	II
Weatherproof protection:	IP54

	H mm	B mm	T mm	lamp tube	kg
150.4255	230.0	340.0	110.0	150.4256	2.36

### Pro workshop inspection hand lamp 72 watt

- Industrial quality
- 5.800 lumens luminous flux
- With 2 x 230 V isolated outlet on the back
- Polycarbonate protection glass
- Housing cover also rubber
- Impact resistant impact strength IK10
- Hooks for double sided applications and pedestal with contour connector according to CEE 7/17
- Ingress protection according to IP54
- Integrated connector
- Lamp extension tube interchangeable
- Includes lamp
- Blow mould plastic housing



#### Technical data:

Luminosity:	72 W
Connection cable length:	5 m
Operational voltage:	230 V
Accessory outlet:	2 x 230 V Schuko
Protection class:	II
Weatherproof protection:	IP54

	H mm	B mm	T mm	lamp tube	kg
150.4260	285.0	495.0	110.0	150.4261	5.02

**Pro workshop inspection hand lamp 108 watt**

- Industrial quality
- 8.700 lumens luminous II x
- With 1 x 230 V isolated outlet on the back
- Polycarbonate protection glass
- Housing cover also rubber
- Impact resistant impact strength IK10
- Hooks for double sided applications and pedestal with contour connector according to CEE 7/17
- Ingress protection according to IP54
- Integrated connector
- Lamp extension tube interchangeable
- Includes lamp
- Blow mould plastic housing



**Technical data:**

Luminosity: 108 W  
 Connection cable length: 5 m  
 Operational voltage: 230 V  
 Accessory outlet: 1 x 230 V Schuko  
 Protection class: II  
 Weatherproof protection: IP54

	H mm	B mm	T mm	Scale sub.	kg
150.4265	290.0	500.0	110.0	150.4261	5.82

**Pro Bridgelux LED inspection hand lamp 100 watts**

- Industrial quality
- 1x Bridgelux LED lamp
- 6500 Kelvin
- Extremely impact resistant
- With contour connector according to CEE 7/17
- Waterproof according to IP65
- With integrated connector
- Corresponding to 1000W halogen
- Floodlight with modern LED technology
- With mounting bracket
- Safety glass, transparent
- 100% luminosity without power-on delay
- Mercury-free
- Energy efficient y class: A
- Includes lamp



**Technical data:**

Luminosity: 100 W  
 Connection cable length: 1.5 m  
 Cable: H05RN-F 3x0.75 mm<sup>2</sup>  
 Operational voltage: AC 100-240 V  
 Protection class: II  
 Weatherproof protection: IP65

	H mm	B mm	T mm	kg
150.4390	367.0	285.0	101.0	5.60

**Pro Bridgelux LED inspection hand lamp 50 watts**

- Industrial quality
- 1x Bridgelux LED lamp
- 8500 Kelvin
- Extremely impact resistant
- With contour connector according to CEE 7/17
- Waterproof according to IP65
- With integrated connector
- Corresponding to 500W halogen
- Floodlight with modern LED technology
- With mounting bracket
- Safety glass, transparent
- 100% luminosity without power-on delay
- Mercury-free
- Energy efficient y class: A
- Includes lamp



**Technical data:**

Luminosity: 50 W  
 Connection cable length: 1.5 m  
 Cable: H05RN-F 3x0.75 mm<sup>2</sup>  
 Operational voltage: AC 100-240 V  
 Protection class: II  
 Weatherproof protection: IP65

	H mm	B mm	T mm	kg
150.4385	238.0	288.0	150.0	3.10

**Pro Bridgelux LED inspection hand lamp 150 watts**

- Industrial quality
- 3x Bridgelux LED lamps
- 8500 Kelvin
- Extremely impact resistant
- With contour connector according to CEE 7/17
- Waterproof according to IP65
- With integrated connector
- Corresponding to 1,500W halogen
- Floodlight with modern LED technology
- With mounting bracket
- Safety glass, transparent
- 100% luminosity without power-on delay
- Mercury-free
- Energy efficient y class: A
- Includes lamp



**Technical data:**

Luminosity: 150 W  
 Connection cable length: 1.5 m  
 Cable: H05RN-F 3x0.75 mm<sup>2</sup>  
 Operational voltage: AC 100-240 V  
 Protection class: II  
 Weatherproof protection: IP65

	H mm	B mm	T mm	kg
150.4395	327.0	427.0	185.0	10.00

**WORK LAMPS WITH TRIPODS**

**Pro-workshop-inspection hand lamp 36 watt**

- Industrial quality
- 2.900 lumens luminous II x
- Polycarbonate protection glass
- Housing cover also rubber
- Impact resistant - impact strength IK10
- With contour connector according to CEE 7/17
- Ingress protection according to IP54
- With integrated connector
- Lamp extension tube interchangeable
- Includes lamp
- Blow mould plastic housing
- Fully adjustable through 2 wing screws
- Work height 1.0 to 2.7 m
- With cable holder device
- Galvanised steel pipe
- 3 castor wheels with special rubber tyre



**Technical data:**

Luminosity: 36 W  
 Connection cable length: 5 m  
 Operational voltage: 230 V  
 Accessory outlet: -  
 Protection class: II  
 Weatherproof protection: IP54

	H mm	B mm	T mm	Scale sub.	kg
150.4257	230.0	340.0	110.0	150.4256	9.28

**consists of:**

		kg
150.4255	Pro workshop inspection hand lamp 36 watt	2.36
150.4267	Extending tripod for work lamps	5.92
150.4268	Castor wheel sets for 150.4267	1.00



**Professional cold light work lamp 72 watt**

- Industrial quality
- 5.800 lumens luminous fl x
- With 2 x 230 V isolated outlet on the back
- Polycarbonate protection glass
- Housing cover also rubber
- Impact resistant - impact strength IK10
- With contour connector according to CEE 7/17
- Ingress protection according to IP54
- With integrated connector
- Lamp extension tube interchangeable
- Includes lamp
- Blow mould plastic housing
- Fully adjustable through 2 wing screws
- Work height 1.0 to 2.7 m
- With cable holder device
- Galvanised steel pipe
- 3 castor wheels with special rubber tyre



**Professional cold light work lamp 108 watt with tripod**

- Industrial quality
- 8.700 lumens luminous fl x
- With 1 x 230 V isolated outlet on the back
- Polycarbonate protection glass
- Housing cover also rubber
- Impact resistant - impact strength IK10
- With contour connector according to CEE 7/17
- Ingress protection according to IP54
- With integrated connector
- Lamp extension tube interchangeable
- Includes lamp
- Blow mould plastic housing
- Fully adjustable through 2 wing screws
- Work height 1.0 to 2.7 m
- With cable holder device
- Galvanised steel pipe
- 3 castor wheels with special rubber tyre



**Technical data:**

Luminosity:	72 W
Connection cable length:	5 m
Operational voltage:	230 V
Accessory outlet:	2 x 230 V Schuko
Protection class:	II
Weatherproof protection:	IP54

	H mm	B mm	T mm	Spine tube	kg
150.4263	285.0	495.0	110.0	150.4261	11.94

**consists of:**

		kg
150.4260	Pro workshop inspection hand lamp 72 watt	5.02
150.4267	Extending tripod for work lamps	5.92
150.4268	Castor wheel sets for 150.4267	1.00



**Technical data:**

Luminosity:	108 W
Connection cable length:	5 m
Operational voltage:	230 V
Accessory outlet:	1 x 230 V Schuko
Protection class:	II
Weatherproof protection:	IP54

	H mm	B mm	T mm	Spine tube	kg
150.4271	290.0	500.0	110.0	150.4261	12.74

**consists of:**

		kg
150.4265	Pro workshop inspection hand lamp 108 watt	5.82
150.4267	Extending tripod for work lamps	5.92
150.4268	Castor wheel sets for 150.4267	1.00

**Professional Bridgelux LED work lamp 50Watt with tripod**

- Industrial quality
- 1x Bridgelux LED lamp
- 6500 Kelvin
- Extremely impact resistant
- With contour connector according to CEE 7/17
- Waterproof according to IP65
- With integrated connector
- Corresponding to 500W halogen
- Floodlight with modern LED technology
- With mounting bracket
- Safety glass, transparent
- 100% luminosity without power-on delay
- Mercury-free
- Energy efficiency class: A
- Includes lamp
- Fully adjustable through 2 wing screws
- Work height 1.0 to 2.7 m
- With cable holder device
- Galvanised steel pipe
- 3 castor wheels with special rubber tyre



**Technical data:**

Luminosity:	50 W
Connection cable length:	1.5 m
Operational voltage:	AC 100 - 240V / DC24V
Protection class:	II
Weatherproof protection:	IP65

	H mm	B mm	T mm	kg
150.4386	238.0	288.0	150.0	9.93

**consists of:**

		kg
150.4385	Pro Bridgelux LED inspection hand lamp 50 watts	3.10
150.4267	Extending tripod for work lamps	5.92
150.4268	Castor wheel sets for 150.4267	1.00

**Professional Bridgelux LED-work lamp 100Watt with tripod**

- Industrial quality
- 1x Bridgelux LED lamp
- 6500 Kelvin
- Extremely impact resistant
- With contour connector according to CEE 7/17
- Waterproof according to IP65
- With integrated connector
- Corresponding to 1000W halogen
- Floodlight with modern LED technology
- With mounting bracket
- Safety glass, transparent
- 100% luminosity without power-on delay
- Mercury-free
- Energy efficient y class: A
- Includes lamp
- Fully adjustable through 2 wing screws
- Work height 1.0 to 2.7 m
- With cable holder device
- Galvanised steel pipe
- 3 castor wheels with special rubber tyre



**Technical data:**  
 Luminosity: 100 W  
 Connection cable length: 1.5 m  
 Operational voltage: AC 100 - 240V / DC24V  
 Protection class: II  
 Weatherproof protection: IP65

	H mm	B mm	T mm	kg
150.4391	367.0	285.0	101.0	12.52

**consists of:**

		kg
150.4390	Pro Bridgelux LED inspection hand lamp 100 watts	5.60
150.4267	Extending tripod for work lamps	5.92
150.4268	Castor wheel sets for 150.4267	1.00



**Professional Bridgelux LED-work lamp 150Watt with tripod**

- Industrial quality
- 3x Bridgelux LED lamps
- 6500 Kelvin
- Extremely impact resistant
- With contour connector according to CEE 7/17
- Waterproof according to IP65
- With integrated connector
- Corresponding to 1500W halogen
- Floodlight with modern LED technology
- With mounting bracket
- Safety glass, transparent
- 100% luminosity without power-on delay
- Mercury-free
- Energy efficient y class: A
- Includes lamp
- Fully adjustable through 2 wing screws
- Work height 1.0 to 2.7 m
- With cable holder device
- Galvanised steel pipe
- 3 castor wheels with special rubber tyre



**Technical data:**  
 Luminosity: 150 W  
 Connection cable length: 1.5 m  
 Operational voltage: AC 100 - 240V / DC24V  
 Protection class: II  
 Weatherproof protection: IP65

	H mm	B mm	T mm	kg
150.4396	327.0	427.0	185.0	16.92

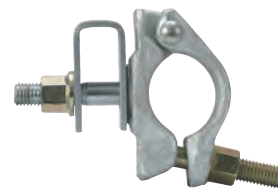
**consists of:**

		kg
150.4395	Pro Bridgelux LED inspection hand lamp 150 watts	10.00
150.4267	Extending tripod for work lamps	5.92
150.4268	Castor wheel sets for 150.4267	1.00

**ACCESSORIES FOR WORK LAMPS**

**Scaffolding clamp for work lamps**

- Universal scaffolding clamp for cold light work lamps
- For all current scaffoldings and pipes up to 50 mm
- Heavy and robust execution
- Galvanised steel



	max Ø pipe mm	kg
150.4269	50,0	1.06

**Extending tripod for work lamps**

- Universal tripod for work lamps
- Expandable through optional extensions
- Optimal illuminating guaranteed
- Secure stand
- Extremely compact transportation size
- On fold away tripod foot part
- Fully adjustable through 2 wing screws
- Work height 1,0 to 2,7 m
- With cable holder device
- Galvanised steel pipe



	H mm	Castor wheel set	kg
150.4267	1000 - 2700	150.4268	5.92

**Castor wheel sets for 150.4267**

- 3 castor wheels with special rubber tyre
- Includes reinforcement screw
- With backing plate on every castor



		kg
150.4268	3 pcs Castor wheel sets for 150.4267	1.00

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*Innovation is  
our mission!*

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# WORKSHOP EQUIPMENT



- Workbenches suitable for any requirement.
- Diverse program for an intelligent system and good overview.
- Many different combinations of drawers and doors.
- Different lengths from 600 mm to 2,000 mm. Fixed workbenches or workbenches with fixable rollers.
- All workbenches are made of sturdy folded sheet steel.
- Surfaces are treated with an environmentally friendly powder coating.
- Individual workplace design with many different combination possibilities.



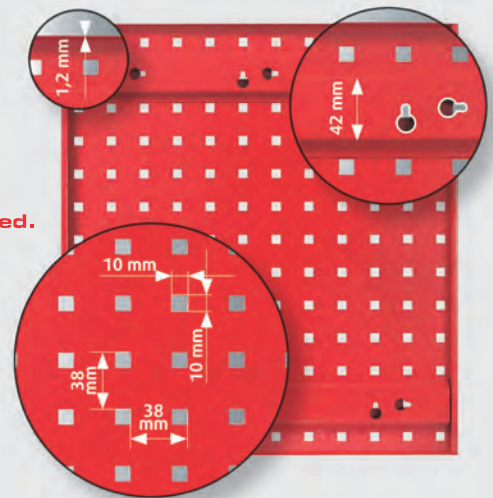
## Perforated plates

10 standard colours,  
4 different sizes

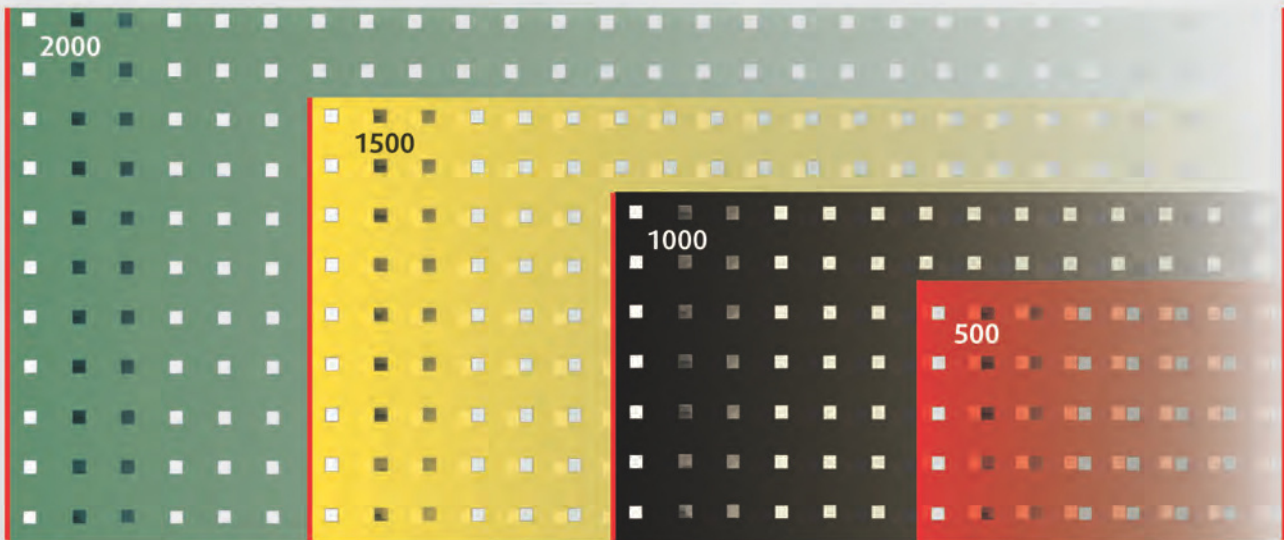
**= 40 variations**



Available in other colours as desired.



RAL5010 RAL5015 RAL5012 RAL7035 RAL9010 RAL6011 RAL7015 RAL9005 RAL1023 RAL3020



## Range of hooks with other 80 different possibilities

Single hook



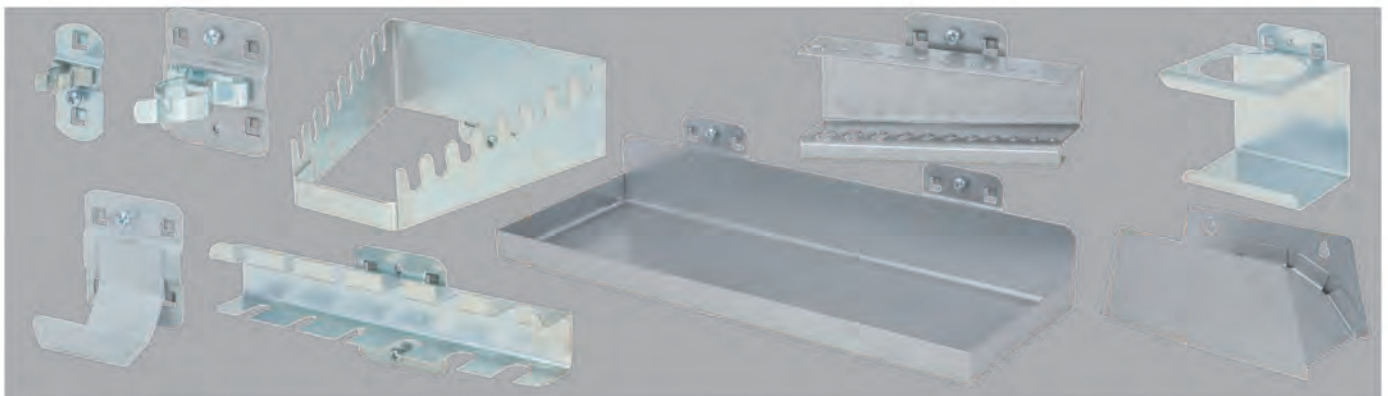
Double hook



Round holder



And much more...





## WORKBENCHES

### Mechanics workbench

- Mobile workbench ideally for vice work
- Foldable for transporting
- Laminated wooden work surface
- Waterproof and resistant to chemicals
- Metal protective edge
- High level of stability due to splayed table legs



	Total depth mm	Width mm	Depth mm	kg
914.1300	850.0	1070.0	620.0	40.00

### Mechanics workbench

- Mobile workbench ideally for vice work
- Foldable for transporting
- Laminated wooden work surface
- Waterproof and resistant to chemicals
- Metal protective edge
- High level of stability due to splayed table legs



	Total depth mm	Width mm	Depth mm	kg
914.2000	850.0	1220.0	620.0	34.00

## WORKBENCHES

### Workbench

- Robust and stable steel construction with 1,0 mm sheet steel - distortion resistant
- High level of stability
- General construction from robust steel - square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- With metal protective edge
- High stability due to all metal parts being welded
- Electrostatic powder coating



	Total depth mm	Width mm	Depth mm	kg
865.0013	840.0	1200.0	500.0	27.00

### Workbench with 1 door

- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- General construction from robust steel square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- Metal protective edge
- High stability due to all metal parts being welded
- Lockable door
- Electrostatic powder coating



	Total depth mm	Width mm	Depth mm	kg
865.0012	840.0	600.0	600.0	42.00



### Workbench with 3 drawers

- Robust and stable steel construction with 1,0 mm sheet steel - distortion resistant
- High level of stability
- General construction from robust steel - square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- With metal protective edge
- High stability due to all metal parts being welded
- Central locking system on all drawers through the cylinder lock
- Ball bearing drawer runners
- Drawers are 100% extendable
- Drawers with non-slip rubber mat
- Side mounted handle
- Electrostatic powder coating



	Total depth mm	Width mm	Depth mm	kg
865.0010	840.0	600.0	600.0	51.00

### Workbench with 1 door

- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- General construction from robust steel square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- Metal protective edge
- High stability due to all metal parts being welded
- Lockable door
- Electrostatic powder coating



### Technical data:

Door dimensions: H 425 x B 430 mm  
Total load capacity: 400.0 kg

	Total depth mm	Width mm	Depth mm	kg
865.0001	840.0	1200.0	600.0	71.00

### PROFI workbench with 2 doors

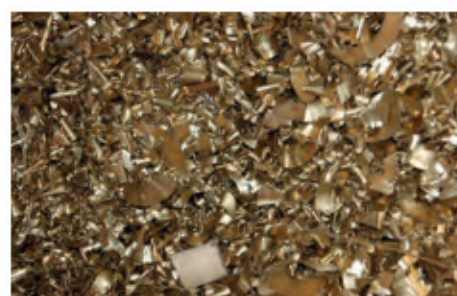
- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- General construction from robust steel square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- Metal protective edge
- High stability due to all metal parts being welded
- Lockable door
- Electrostatic powder coating



### Technical data:

Door dimensions: H 425 x B 430 mm  
Total load capacity: 400.0 kg

	Total depth mm	Width mm	Depth mm	kg
865.0002	840.0	1200.0	600.0	85.00



**Workbench with 3 drawers and 1 door**

- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- General construction from robust steel square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- Metal protective edge
- High stability due to all metal parts being welded
- Lockable door
- Central locking system on all drawers through the cylinder lock
- Ball bearing drawer runners
- Drawers are 100% extendable
- Side mounted handle
- Electrostatic powder coating



**Technical data:**

Drawer dimensions: 2 x H 85 x B 430 x T 520 mm  
1 x H 165 x B 430 x T 520 mm  
Door dimensions: H 425 x B 430 mm  
Total load capacity: 400,0 kg  
Load capacity of each drawer: 35,0 kg

	Total depth mm	Width mm	Depth mm	kg
865.0003	840.0	1200.0	600.0	86.00

**Workbench with 6 drawers**

- Robust and stable steel construction with 1,0 mm sheet steel - distortion resistant
- High level of stability
- General construction from robust steel - square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- With metal protective edge
- High stability due to all metal parts being welded
- Central locking system on all drawers through the cylinder lock
- Ball bearing drawer runners
- Drawers are 100% extendable
- Drawers with non-slip rubber mat
- Side mounted handle
- Electrostatic powder coating



**Technical data:**

Drawer dimensions: 4 x H 85 x B 430 x T 520 mm  
2 x H 165 x B 430 x T 520 mm  
Total load capacity: 400,0 kg  
Load capacity of each drawer: 35,0 kg

	Total depth mm	Width mm	Depth mm	kg
865.0004	840.0	1200.0	600.0	86.00

**Mobile workbench with 3 drawers and 1 door**

- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- General construction from robust steel square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- Metal protective edge
- High stability due to all metal parts being welded
- Lockable door
- Central locking system on all drawers through the cylinder lock
- Ball bearing drawer runners
- Drawers are 100% extendable
- With two castor wheels 125 mm with rolling and turning brake
- Drawers with non slip rubber mat
- Side mounted handle
- Electrostatic powder coating



**Technical data:**

Drawer dimensions: 2 x H 85 x B 430 x T 520 mm  
1 x H 165 x B 430 x T 520 mm  
Door dimensions: H 425 x B 430 mm  
Total load capacity: 400,0 kg  
Load capacity of each drawer: 35,0 kg

	Total depth mm	Width mm	Depth mm	kg
865.0101	840.0	1200.0	600.0	71.00

**Workbench with 4 drawers and 1 door**

- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- General construction from robust steel square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- Metal protective edge
- High stability due to all metal parts being welded
- Lockable door
- Central locking system on all drawers through the cylinder lock
- Ball bearing drawer runners
- Drawers are 100% extendable
- Side mounted handle
- Electrostatic powder coating



	Total depth mm	Width mm	Depth mm	kg
865.0006	840.0	1200.0	500.0	95.00

**Workbench with 8 drawers**

- Robust and stable steel construction with 1,0 mm sheet steel - distortion resistant
- High level of stability
- General construction from robust steel - square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- With metal protective edge
- High stability due to all metal parts being welded
- Central locking system on all drawers through the cylinder lock
- Ball bearing drawer runners
- Drawers are 100% extendable
- Side mounted handle
- Electrostatic powder coating



	Total depth mm	Width mm	Depth mm	kg
865.0007	840.0	1200.0	500.0	112.00

**Mobile workbench with 6 drawers**

- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- General construction from robust steel square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- Metal protective edge
- High stability due to all metal parts being welded
- Lockable door
- Central locking system on all drawers through the cylinder lock
- Ball bearing drawer runners
- Drawers are 100% extendable
- With two castor wheels 200 mm with rolling and turning brake
- Drawers with non slip rubber mat
- Side mounted handle
- Electrostatic powder coating



	Total depth mm	Width mm	Depth mm	kg
865.0011	840.0	1200.0	600.0	108.00



### XXL workbench with 3 drawers and 1 door

- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- General construction from robust steel square type tube
- Laminated wooden board
- Waterproof and resistant to chemicals
- High stability due to all metal parts being welded
- Lockable door
- Central locking system on all drawers through the cylinder lock
- Ball bearing drawer runners
- Drawers are 100% extendable
- Drawers with non slip rubber mat
- Electrostatic powder coating



#### Technical data:

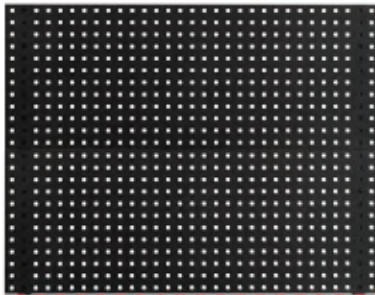
Drawer dimensions: 2 x H 85 x B 430 x T 520 mm  
 1 x H 165 x B 430 x T 520 mm  
 Door dimensions: H 425 x B 430 mm  
 Total load capacity: 400,0 kg  
 Load capacity of each drawer: 35,0 kg

	Total depth mm	Width mm	Depth mm	
865.0201	840,0	2000,0	680,0	86,00

### BACK WALL SYSTEMS

#### Extension back wall system for workbenches

- 2 x posts
- 2 x hole wall
- For the accommodation of additional tools
- For organising and fastening tools
- Steel sheet construction



	Total depth mm	Width mm	Depth mm	
865.0008	710,0	1200,0	8,00	

### Extension back wall system for workbenches with cupboard

- 2 x posts
- 1 x hole wall
- 1 x high level cupboard system, lockable
- For the accommodation of additional tools
- For organising and fastening tools
- Steel sheet construction



	Total depth mm	Width mm	Depth mm	
865.0009	710,0	1200,0	200,0	38,00

### WALL CUPBOARDS

#### Tool cabinet with 2 doors

- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- Central locking system on all doors through the cylinder lock
- Cupboard back wall with hole system
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- 2 mounting rails with 4 connection holes
- Continuous opening without stop
- Electrostatic powder coating



**Technical data:**  
 Door dimensions: H 425 x B 430 mm  
 Usable depth: 164,0 mm

	Total depth mm	Width mm	Depth mm	
865.0205	470,0	970,0	200,0	22,00

### CLOAKROOM CUPBOARD

#### Cloakroom stand

- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- Base and reinforced doors
- All parts have electrostatic powder coating
- Compartment with hat base, clothes rail and 3 adjustable coat hooks
- Lockable by cylinder lock



	Compartment	Total depth mm	Width mm	Depth mm	
850.0502	2	1800,0	600,0	500,0	26,00
850.0503	3	1800,0	890,0	500,0	35,00

### HINGED DOOR CABINET

#### Lockable cupboard

- Robust and stable steel construction with 1,0 mm sheet steel distortion resistant
- High level of stability
- Central locking system on all drawers through the cylinder lock
- Ball bearing drawer runners
- Drawers are 100% extendable
- Front side edges are rounded
- Inside recumbent hinges and locking bar
- 4 shelves have universal height adjustment
- Internal storage wall with square punching, approx. 340 mm high
- Side mounted handle
- Electrostatic powder coating



**Technical data:**  
 Drawer dimensions: H 70 x B 680 x T 310 mm  
 Total load capacity: 400,0 kg  
 Load capacity of each drawer: 35,0 kg

	Total depth mm	Width mm	Depth mm	
865.0000	1920,0	780,0	380,0	84,00

**Lockable cupboard**

- High quality welded sheet metal
- High level of stability
- Reinforced doors with 3-point safety lock
- Inside-recumbent hinges and locking bar
- Galvanised shelves can be adjusted in 25 mm intervals
- Load capacity per shelf max. 60 kg with even load distribution
- Powder coated



Total depth mm	Width mm	Depth mm	Weight kg
865.0005	1950.0	950.0	500.0

**BENCH VICES**

**Bench vice**

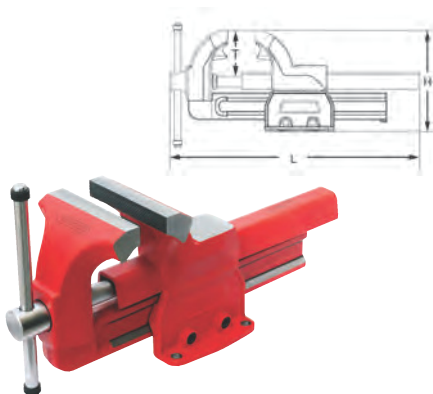
- Swivel base
- Interchangeable jaws
- Includes pipe vice attachment
- Absolutely parallel with adjustable centric drive
- Extra high possible clamping jaws shaped by large embossed casting
- Large anvil for straightening and compression work
- Induction hardened jaws and anvil
- Vise forward opening
- Ground jaws, anvil plate and slide corners
- Special steel



	Jaw length	Jaw length	Clamping	Weight
	mm	mm	range mm	kg
914.0003	3"	75,0	100,0	7,50
914.0004	4"	100,0	120,0	8,70
914.0005	5"	130,0	140,0	11,00
914.0006	6"	150,0	170,0	14,50
914.0008	8"	200,0	200,0	20,50

**Bench vice**

- With adjusting screw and pipe clamps
- Forged front and rear jaws
- Extra high possible clamping jaws shaped by large embossed casting
- Durable prismatic guide
- With mounting screws for turntable
- Induction hardened jaws and anvil
- Double start trapezoidal thread for quick opening and closing
- Vise forward opening
- Ground jaws, anvil plate and slide corners
- Special steel



	Jaw length	Clamping	T	H	L	Coiljet	Weight
	mm	range mm	mm	mm	mm	mm	kg
914.0026	100,0	125,0	70,0	140,0	320,0	12,0	5,00
914.0031	125,0	155,0	80,0	180,0	395,0	14,0	11,00
914.0036	150,0	180,0	98,0	220,0	485,0	16,0	20,00
914.0041	175,0	205,0	110,0	240,0	550,0	18,0	29,00

**Turntable for bench vice**

- Ideal supplement for KS-vices 914.0027 - 914.0041
- Enables accurate positioning of the workpiece
- 360° freely rotatable
- Safe and quick locking via handle
- Flat and stable construction
- Inclusive fastening screws for vice



		Ø	Weight
		mm	kg
914.0027	914.0026	100,0	1,40
914.0032	914.0031	125,0	2,80
914.0037	914.0036	150,0	3,75
914.0042	914.0041	175,0	4,85

**Bench vice with turntable**

- With adjusting screw and pipe clamps
- Forged front and rear jaws
- Extra high possible clamping jaws shaped by large embossed casting
- Durable prismatic guide
- With mounting screws for turntable
- Induction hardened jaws and anvil
- Double start trapezoidal thread for quick opening and closing
- Vise forward opening
- Ground jaws, anvil plate and slide corners
- Special steel



	Jaw length	Weight
	mm	kg
914.0025	2 pcs	100,0
914.0030	2 pcs	125,0
914.0035	2 pcs	150,0
914.0040	2 pcs	175,0

**Aluminium bench vice protective jaws with textured surface**

- Suitable for all bench vices
- The profile is right angled and level parallel
- Integrated special magnet hold the protective jaws safely on the vice
- For material protection and non slip grip on sensitive materials
- For coarse to medium fine work pieces
- Fine textured
- Aluminium



	Protective jaws mm	Weight kg
914.0080	100,0	170
914.0081	120,0	210
914.0082	140,0	240
914.0083	160,0	270
914.0084	175,0	290

**Aluminium bench vice protective jaws with trapezoid notches**

- Suitable for all bench vices
- The profile is right angled and level parallel
- Integrated special magnet hold the protective jaws safely on the vice
- For material protection and non slip grip on sensitive materials
- For different shaped materials
- For trapezoid use
- Aluminium



	Protective jaws mm	Weight kg
914.0085	100,0	140
914.0086	120,0	190
914.0087	140,0	210
914.0088	160,0	240
914.0089	175,0	260

**Aluminium bench vice protective jaws with rubber insert**

- Suitable for all bench vices
- The profile is right angled and level parallel
- Integrated special magnet hold the protective jaws safely on the vice
- For material protection and non slip grip on sensitive materials
- For thin walled wood and plastic parts
- Smooth
- Aluminium / rubber



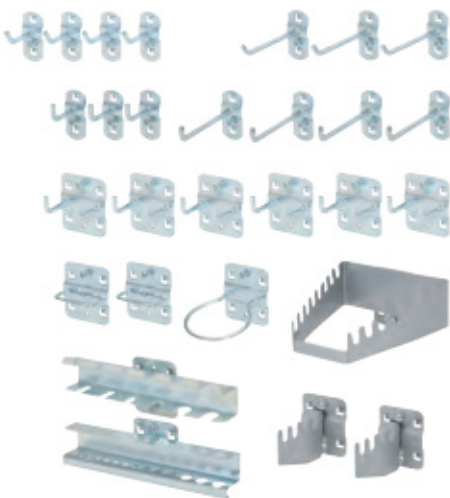
	Protective jaws mm	Weight kg
914.0090	100,0	160
914.0091	120,0	200
914.0092	140,0	240
914.0093	140,0	260
914.0094	175,0	290



## HOOK ASSORTMENT

### Hook assortment for hole wall system

- Peg range for work areas
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



		860.0888	28 pcs	Hook assortment for hole wall system	1.78
1 x				150 x 55 mm	
1 x				65 x 25 mm	
2 x				55 mm	
2 x				150 mm	
1 x				150 x 55 mm	
1 x				150 x 55 mm	
14 x				3 x 35 mm - 4 x 50 mm - 4 x 75 mm - 3 x 100 mm	
6 x				35 mm	



### Tool holder with straight end Ø 6 mm

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	L mm	860
860.0801	6,0	50,0	30
860.0802	6,0	100,0	40
860.0803	6,0	150,0	40

### Double tool holder with straight end Ø 6 mm

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	L mm	860
860.0820	6,0	35,0	60
860.0821	6,0	50,0	80
860.0822	6,0	75,0	110

### Tool holder with angled hook end Ø 6 mm

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	L mm	860
860.0804	6,0	50,0	30
860.0805	6,0	100,0	40
860.0806	6,0	150,0	50
860.0807	6,0	200,0	60

### Double tool holder with angled hook end Ø 6 mm

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	L mm	860
860.0812	6,0	35,0	60
860.0813	6,0	50,0	60
860.0814	6,0	75,0	80
860.0815	6,0	150,0	110

### Tool holder with vertical hook end Ø 6 mm

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	L mm	860
860.0809	6,0	35,0	30
860.0810	6,0	75,0	40
860.0811	6,0	125,0	90

### Double tool holder with vertical hook end Ø 6 mm

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	L mm	860
860.0816	6,0	35,0	60
860.0817	6,0	50,0	70
860.0818	6,0	75,0	90
860.0819	6,0	150,0	100

**Tool clip, single small**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	g
860.0824	6,0	20
860.0825	10,0	20
860.0826	13,0	20
860.0827	16,0	20
860.0828	19,0	20

**Angled hook for nuts and sockets Ø 6 mm**

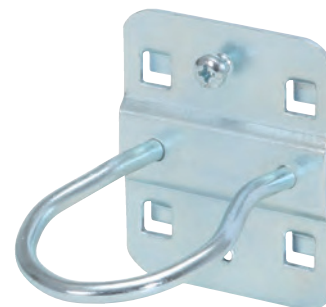
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	L mm	g
860.0823	6,0	40,0	30

**Power tool holder**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	g
860.0841	40,0	50
860.0842	60,0	70
860.0843	80,0	80

**Tool clip, double small**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	g
860.0829	6,0	40
860.0830	10,0	40
860.0831	13,0	40
860.0832	16,0	40
860.0833	19,0	50

**Plier holder depth 20 mm**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	g
860.0837	35,0	60
860.0838	55,0	50
860.0839	75,0	60

**Tool holder 3 way**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	L mm	g
860.0844	6,0	150,0	150

**Tool clip, single large**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	Ø mm	g
860.0834	25,0	50
860.0835	28,0	50
860.0836	32,0	50

**Round holder**

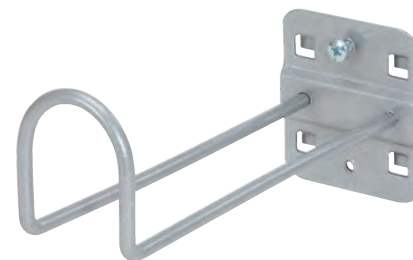
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	L mm	B mm	g
860.0840	65,0	25,0	70

**Cable holder**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



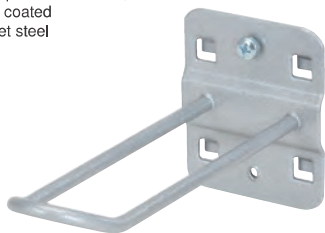
	L mm	B mm	H mm	g
860.0874	150,0	37,0	50,0	110
860.0875	200,0	37,0	50,0	120

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### Tool holder for euro blister packaging

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	L mm	B mm	U
860.0876	125,0	40,0	80
860.0877	150,0	40,0	90

### Screwdriver holder

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



No. holes	L mm	B mm	U	
860.0850	6	150,0	55,0	170
860.0851	12	150,0	55,0	320

### Storage shelf without partition

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	L mm	B mm	U
860.0857	350,0	125,0	1.10
860.0858	450,0	150,0	1.50

### Six way tool holder hook ends 45° angled

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



Ø mm	L mm	B mm	U	
860.0845	6,0	240,0	140,0	240

### Drill- and hexagon socket holder

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



No. holes	L mm	B mm	U	
860.0852	14	150,0	55,0	200
860.0853	28	150,0	55,0	550

### Lin bin holder single

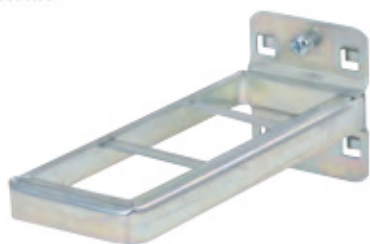
- For size 7 and 8
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	U	
860.0859	Lin bin holder single	60

### Combination holder

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



L mm	B mm	U	
860.0846	150,0	55,0	110

### Saw holder

- To be used in pairs
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



No. holes	L mm	U	
860.0854	4	150,0	70

### Base plate

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	U	
860.0860	Base plate	20
860.0861	Base plate	40

### Spanner holder horizontal

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



No. holes	L mm	B mm	U	
860.0849	8	150,0	55,0	200

### Pipe holder

- To be used in pairs
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



Ø mm	B mm	U	
860.0855	60,0	35,0	100
860.0856	100,0	35,0	150

### Lin bin holder

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	B mm	H mm	U
860.0862	550,0	40,0	520
860.0863	550,0	60,0	660

**Spanner holder tapered for 10 spanners**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	No. holes	L mm	B mm	H mm	g
860.0864	5	145/75,0	50,0	220,0	310
860.0865	5	225/125,0	50,0	255,0	480

**Can holder**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	No. holes	Ø mm	L mm	g
860.0866	1	70,0	100,0	170
860.0867	3	70,0	300,0	580

**Pipe holder**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	L mm	B mm	g
860.0868	230,0	70,0	700

**Small component tray with partition**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	L mm	B mm	g
860.0847	150,0	55,0	240

**Small component tray without partition**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	L mm	B mm	g
860.0848	150,0	55,0	210

**Universal tool holder self drill**

- With plastic pad for DIY drilling
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	L mm	B mm	g
860.0869	70,0	120,0	340
860.0870	45,0	390,0	1030

**Universal tool storage box**

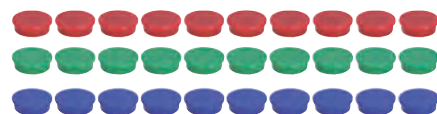
- With wooden insert for DIY drilling
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	L mm	B mm	H mm	kg
860.0871	155,0	120,0	55,0	1,25

**Magnet set**

- Different colours
- Ideally suited for metal surfaces
- Plastic coated magnet



	Colour code	Ø mm	g
860.0882	Red	25,0	90
860.0883	Green	25,0	90
860.0884	Blue	25,0	100

**Sheet steel tray**

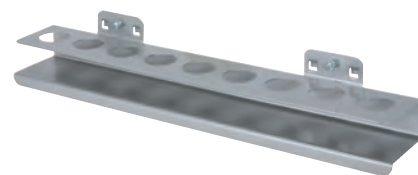
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	L mm	B mm	g
860.0878	250,0	435,0	1390

**Socket holder**

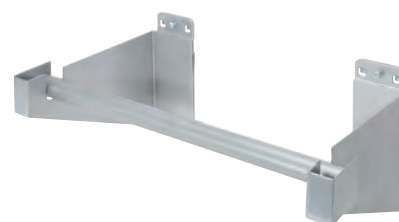
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	No. holes	B mm	H mm	g
860.0873	9	390,0	30,0	150

**Paper roll holder**

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixi g screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	L mm	B mm	H mm	g
860.0879	100,0	355,0	120,0	710



### Document holder

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	B mm	H mm	
860.0880	220.0	310.0	750

### Works order holder

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1.5 mm
- Zinc coated
- Sheet steel



	B mm	H mm	
860.0881	220.0	310.0	690

### Magnetic holder

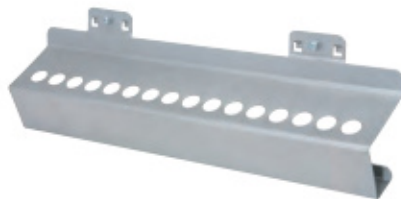
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1.5 mm
- Zinc coated
- Sheet steel



	Ø mm	
860.0885	40.0	150

### Drill holder for MK 2 and MK 3 shafts

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1,5 mm
- Zinc coated
- Sheet steel



	No. holes	B mm	H mm	
860.0886	16	395.0	85.0	570

### Bit holder

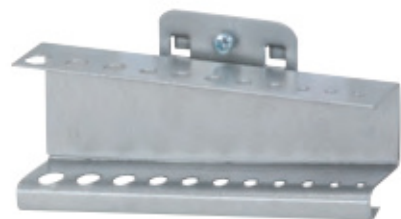
- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1.5 mm
- Zinc coated
- Sheet steel



	No. holes	L mm	B mm	
860.0887	7	35.0	150.0	150

### Hexagon socket holder

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- For Ø 1 - 11 mm
- Baseplate thickness 1.5 mm
- Zinc coated
- Sheet steel



	No. holes	B mm	H mm	
860.0872	11	145.0	70.0	190

### Socket holder for 1/2" sockets

- Suitable for hole measurements 10 x 10 mm hole distance 38 mm
- Includes fixing screws
- Baseplate thickness 1.5 mm
- Zinc coated
- Sheet steel

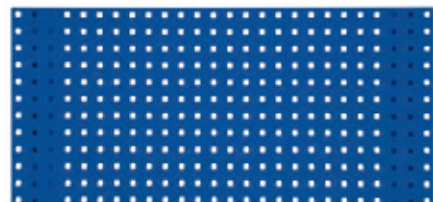


	No. holes	
860.0894	6	200
860.0895	13	360

## HOLE WALL

### Hole wall gentian blue

- Versatile and practical
- 1,25 mm thick steel sheet
- Beveled all around
- Impact and scratch resistant plastic coating
- Electrostatic powder coating



	Pack.	L mm	B mm	
860.0889EB	5010	500.0	450.0	2.00
860.0890EB	5010	1000.0	450.0	5.00
860.0891EB	5010	1500.0	450.0	7.00
860.0892EB	5010	2000.0	450.0	9.00

### Hole wall sky blue

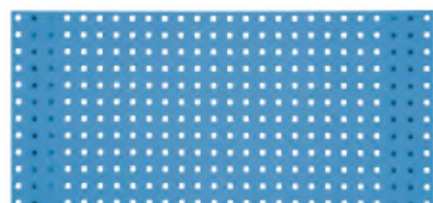
- Versatile and practical
- 1,25 mm thick steel sheet
- Beveled all around
- Impact and scratch resistant plastic coating
- Electrostatic powder coating



	Pack.	L mm	B mm	
860.0889HB	5015	500.0	450.0	2.00
860.0890HB	5015	1000.0	450.0	5.00
860.0891HB	5015	1500.0	450.0	7.00
860.0892HB	5015	2000.0	450.0	9.00

### Hole wall light blue

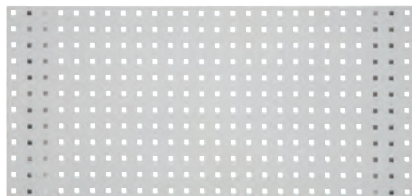
- Versatile and practical
- 1,25 mm thick steel sheet
- Beveled all around
- Impact and scratch resistant plastic coating
- Electrostatic powder coating



	Pack.	L mm	B mm	
860.0889LB	5012	500.0	450.0	2.00
860.0890LB	5012	1000.0	450.0	5.00
860.0891LB	5012	1500.0	450.0	7.00
860.0892LB	5012	2000.0	450.0	9.00

### Hole wall light grey

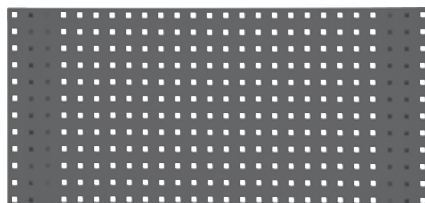
- Versatile and practical
- 1,25 mm thick steel sheet
- Beveled all around
- Impact and scratch resistant plastic coating
- Electrostatic powder coating



	RAL	L mm	B mm	kg
860.0889LG	7035	500.0	450.0	2.00
860.0890LG	7035	1000.0	450.0	5.00
860.0891LG	7035	1500.0	450.0	7.00
860.0892LG	7035	2000.0	450.0	9.00

### Hole wall slate grey

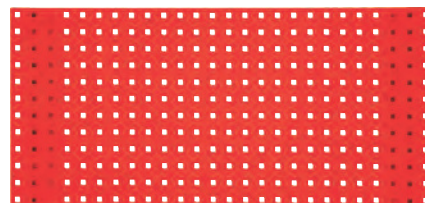
- Versatile and practical
- 1,25 mm thick steel sheet
- Beveled all around
- Impact and scratch resistant plastic coating
- Electrostatic powder coating



	RAL	L mm	B mm	kg
860.0889SG	7015	500.0	450.0	2.00
860.0890SG	7015	1000.0	450.0	5.00
860.0891SG	7015	1500.0	450.0	7.00
860.0892SG	7015	2000.0	450.0	9.00

### Hole wall bright red

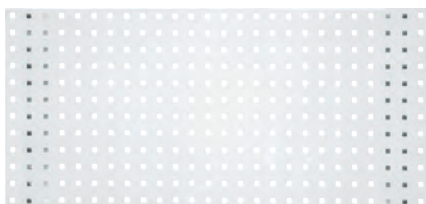
- Versatile and practical
- 1,25 mm thick steel sheet
- Beveled all around
- Impact and scratch resistant plastic coating
- Electrostatic powder coating



	RAL	L mm	B mm	kg
860.0889VR	3020	500.0	450.0	2.00
860.0890VR	3020	1000.0	450.0	5.00
860.0891VR	3020	1500.0	450.0	7.00
860.0892VR	3020	2000.0	450.0	9.00

### Hole wall pure white

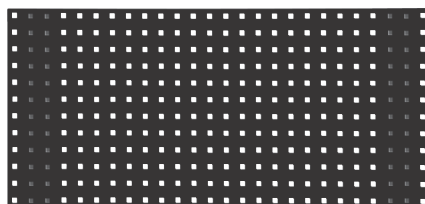
- Versatile and practical
- 1,25 mm thick steel sheet
- Beveled all around
- Impact and scratch resistant plastic coating
- Electrostatic powder coating



	RAL	L mm	B mm	kg
860.0889RW	9010	500.0	450.0	2.00
860.0890RW	9010	1000.0	450.0	5.00
860.0891RW	9010	1500.0	450.0	7.00
860.0892RW	9010	2000.0	450.0	9.00

### Hole wall jet black

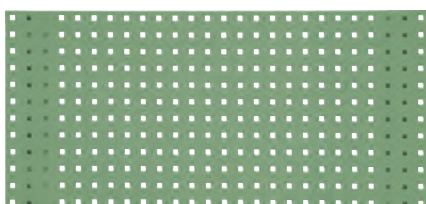
- Versatile and practical
- 1,25 mm thick steel sheet
- Beveled all around
- Impact and scratch resistant plastic coating
- Electrostatic powder coating



	RAL	L mm	B mm	kg
860.0889TS	9005	500.0	450.0	2.00
860.0890TS	9005	1000.0	450.0	5.00
860.0891TS	9005	1500.0	450.0	7.00
860.0892TS	9005	2000.0	450.0	9.00

### Hole wall reseda green

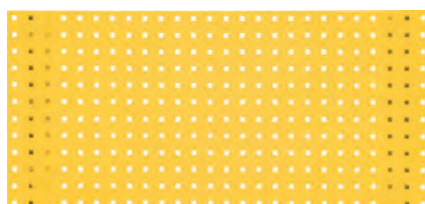
- Versatile and practical
- 1,25 mm thick steel sheet
- Beveled all around
- Impact and scratch resistant plastic coating
- Electrostatic powder coating



	RAL	L mm	B mm	kg
860.0889RG	6011	500.0	450.0	2.00
860.0890RG	6011	1000.0	450.0	5.00
860.0891RG	6011	1500.0	450.0	7.00
860.0892RG	6011	2000.0	450.0	9.00

### Hole wall bright gold

- Versatile and practical
- 1,25 mm thick steel sheet
- Beveled all around
- Impact and scratch resistant plastic coating
- Electrostatic powder coating



	RAL	L mm	B mm	kg
860.0889VG	1023	500.0	450.0	2.00
860.0890VG	1023	1000.0	450.0	5.00
860.0891VG	1023	1500.0	450.0	7.00
860.0892VG	1023	2000.0	450.0	9.00

## SERVICE TROLLEYS

### Workshop service trolley

- Made from robust sheet steel construction
- Non slip foam insert on the upper working surface
- Lower shelf with high retaining border
- 2 castor wheels 100 mm
- 2 castor wheels with brake 100 mm
- High level of stability



#### Technical data:

Total load capacity: 200 kg

	L mm	B mm	H mm	kg
890.0002	697.0	489.0	836.0	19.10

### Workshop service trolley

- Extremely substantial plastic construction
- Without screws easily constructed
- Distance between the ground 30 cm
- 2 castor wheels 100 mm
- 2 castor wheels with brake 100 mm
- High level of stability
- Light profile eight
- Columns made out of anodised aluminum



#### Technical data:

Total load capacity: 200 kg

	L mm	B mm	H mm	kg
800.0020	860.0	480.0	1010.0	12.10

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### Workshop service trolley with lining

- Extremely substantial plastic construction
- Equipment lining
- Without screws easily constructed
- Distance between the ground 30 cm
- 2 castor wheels 100 mm
- 2 castor wheels with brake 100 mm
- High level of stability
- Light profile eight
- Columns made out of anodised aluminum



**Technical data:**  
Total load capacity: 200 kg

	L mm	B mm	H mm	kg
800.0021	860.0	480.0	1010.0	12.10

### Workshop service trolley with 2 drawers

- Extremely robust plastic construction
- Easily constructed without screws
- Two ball bearing drawer runner guides
- 2 castor wheels 100 mm
- 2 castor wheels with brake 100 mm
- High level of stability
- Light profile eight
- Columns made out of anodised aluminum



**Technical data:**  
Drawer dimensions: H 85 x B 430 x T 520 mm  
Total load capacity: 200 kg  
Load capacity of each drawer: 35 kg

	L mm	B mm	H mm	kg
800.0030	860.0	480.0	1010.0	14.20

### Workshop service trolley with 2 drawers and lining

- Extremely substantial plastic construction
- Without screws easily constructed
- Two ball bearing drawer runner guides
- 2 castor wheels 100 mm
- 2 castor wheels with brake 100 mm
- High level of stability
- Light profile eight
- Columns made out of anodised aluminum



**Technical data:**  
Drawer dimensions: H 85 x B 430 x T 520 mm  
Total load capacity: 200 kg  
Load capacity of each drawer: 35 kg

	L mm	B mm	H mm	kg
800.0031	860.0	480.0	1010.0	15.00

### PLATFORM TROLLEY

#### Tyres platform trolley

- Solid construction of steel sheet
- Firmly fixed grasping handle made from steel tube
- Grasping handle is hinged and locked with safety security catches without any tools
- In minimal time
- Rubber surrounding edges protect the trolley and surroundings from damage
- With 4 ball bearing rubber wheels, 2 with steering
- Load area has a plastic covering



**Technical data:**  
Wheel diameter: 100 mm  
Total load capacity: 150 kg

	L mm	B mm	H mm	kg
800.0015	740.0	480.0	810.0	9.20

### PLATFORM

#### Aluminium work platform

- Skid proof profile on the platform stage
- Chequer plate profile on the steps
- Double sided usage
- Large platform for safe standing
- Safety clips for added security
- Beams and step made from aluminium
- Easy to store as the unit is fully collapsible
- The gripped plastic feet protect the surface and add stability
- Substantial aluminium construction



**Technical data:**  
Platform dimensions: 1000 x 300 mm  
Total load capacity: 150 kg

	L mm	B mm	H mm	kg
800.0960	1345.0	405.0	480.0	7.30



#### Safety assembly step

- No tipping over through obliquely placed standing feet
- Anti slip, hot dip galvanised, with the frame riveted lattice rustproof
- Step to DIN 50978
- Massive and distortion stiff steel tube construction
- Base frame plastic coated
- The gripped plastic feet protect the surface and add stability
- Applicable e.g. panel assembly, engine compartment works, roof works truck pit working
- Universal suitable in very high vehicles e.g. motor homes, small vehicles, truck and buses, terrain vehicles



**Technical data:**  
Height 2nd step: 450.0 mm  
Surface area: 690 x 620  
Steel grating: 590 x 290  
Total load capacity: 300 kg

		kg
450.0960	Safety assembly step	14.00

SUPPORTS

Windscreen table with rubber protective pads

- Fully adjustably
- The four large rubber pads hold the windscreen safely in position
- For nearly all windscreen sizes
- Capacity up to 80 kg
- Made from zinc coated steel tube



	L mm	H mm	Support cap Ø mm	kg
140.2225	1030.0	1040.0	125.0	8.40



Windscreen holder

- Fully adjustably
- For nearly all windscreen sizes
- Robust construction
- Capacity up to 80 kg
- Slip proof holding bar offer optimal hold
- Made from zinc coated steel tube



	L mm	H mm	kg
140.2226	1030.0	940.0	6.60

Universal telescopic multi purpose trolley

- Ideally for the car body restoration, panel spraying area or for windshields
- Universal application the all rounder both height and width adjustable
- After use space saving folding away
- Rubber underside to prevent damage to the paintwork and other panels
- 4 substantial wheels, 2 with locking brakes
- Simple handling
- Capacity up to 100 kg
- Robust construction made from square tube



	B mm	H mm	kg
500.8100	257.0-1380.0	845.0-1320.0	23.50

TRANSPORT TROLLEY

Telescopic sack trolley with pneumatic wheels

- Steel tubular structure with deep welded joints
- Light and agile transportation for use in smallest space
- Effortless receiving and transporting of packages, carton and all other objects
- From round tubes welded together manufactured and solid
- Fold away shovel base
- High quality telescopic pole
- Equipped with 2 fi ed wheels with pneumatic tyres
- Safety handles and slip protection
- Perfectly suitable in industry and business



**Technical data:**

Tyre size: Ø 260 x 80 mm

Shovel/base dimensions: B 300 x T 350 mm

Min. dimensions: 810.0 mm

Max. dimensions: 1140.0 mm

	Max load kg	L mm	B mm	H mm	kg
160.0224	120.0 kg	630.0	480.0	1140.0	10.00

Transport sack trolley with pneumatic wheels

- Steel tubular structure with deep welded joints
- Light and agile transportation for use in smallest space
- Effortless receiving and transporting of packages, carton and all other objects
- From round tubes welded together manufactured and solid
- Very wide shovel base
- Equipped with 2 fi ed wheels with pneumatic tyres
- Safety handles and slip protection
- Perfectly suitable in industry and business



**Technical data:**

Tyre size: Ø 260 x 85 mm

Shovel/base dimensions: W 400 x D 170 mm

	Max load kg	L mm	B mm	H mm	kg
160.0225	250.0 kg	430.0	550.0	1100.0	10.00

Transport sack trolley with full rubber tyres

- Steel tubular structure with deep welded joints
- Light and agile transportation for use in smallest space
- Effortless receiving and transporting of packages, carton and all other objects
- From round tubes welded together manufactured and solid
- Equipped with 2 fi ed full rubber wheels
- Safety handles and slip protection
- Perfectly suitable in industry and business



**Technical data:**

Tyre size: Ø 255 x 46 mm

Shovel/base dimensions: W 400 x D 170 mm

	Max load kg	L mm	B mm	H mm	kg
160.0228	250.0 kg	430.0	560.0	1100.0	17.00



### Transport sack trolley with pneumatic wheels

- Steel tubular structure with deep welded joints
- Light and agile transportation for use in smallest space
- Effortless receiving and transporting of packages, carton and all other objects
- From round tubes welded together manufactured and solid
- Fold away shovel base
- Equipped with 2 fixed wheels with pneumatic tyres
- Safety handles and slip protection
- Perfectly suitable in industry and business



#### Technical data:

Tyre size: Ø 260 x 85 mm  
Shovel/base dimensions: B 340 x T 520 mm

Max load kg	L mm	B mm	H mm	Weight kg	
160.0226	250.0	620.0	400.0	1100.0	10.00

### Transport trolley with full rubber tyres

- Steel tubular structure with deep welded joints
- Light and agile transportation for use in smallest space
- Effortless receiving and transporting of packages, carton and all other objects
- From round tubes welded together manufactured and solid
- Fold away shovel base
- Equipped with 2 fixed full rubber wheels
- Safety handles and slip protection
- Perfectly suitable in industry and business



#### Technical data:

Tyre size: Ø 255 x 46 mm  
Shovel/base dimensions: B 340 x T 520 mm

Max load kg	L mm	B mm	H mm	Weight kg	
160.0229	250.0	620.0	400.0	1100.0	19.00

### Sack trolley with full rubber three staged wheels

- Steel tubular structure with deep welded joints
- Light and agile transportation for use in smallest space
- Effortless receiving and transporting of packages, cartons and all other objects
- From round tubes welded together manufactured and solid
- Fold away shovel base
- Problem free overcoming of stairs
- Full rubber three staged wheels
- Perfectly suitable in industry and business



#### Technical data:

Tyre size: Ø 160 x 30 mm  
Shovel/base dimensions: B 340 x T 520 mm

Max load kg	L mm	B mm	H mm	Weight kg	
160.0227	250.0	850.0	715.0	1610.0	15.00



### PROTECTIVE KNEELING MATS

#### Mechanics protection mat

- Helps the mechanic to work easier and safer whilst working in the lower area of vehicles on uneven surfaces
- Moisture and dirt resistant
- Work garments and knees stay dry, clean and protected
- 3 layered padded construction from soft material
- Integrated hand grip
- Petrol and oil resistant
- Universal use in workshops, service and breakdown service vehicles



	L mm	B mm	H mm	Weight kg
500.8040	480.0	320.0	36.0	200
500.8045	1220.0	550.0	36.0	760



### STOOLS

#### Mobile workshop stool

- Robust and mobile stool
- Storage area for the protection of tools and small parts
- Washable cushion
- Four ball bearing solid rubber wheels
- Maximum capacity up to 90 kg
- Construction from robust steel square tube



	L mm	B mm	H mm	Weight kg
500.8020	440.0	360.0	360.0	4.00

#### Mobile and height adjustable workshop stool

- Robust and mobile stool
- Storage area for the protection of tools and small parts
- Washable cushion
- Hydraulic height adjustment
- Five ball bearing solid rubber wheels
- Maximum capacity up to 90 kg
- Durable metal construction



	B mm	H mm	Weight kg
500.8030	370.0	540.0	4.00

AXLE STANDS

Aluminium axle stand set

- Especially light and stable
- High level of stability due to the diameter of the base plate
- Safety locking bolt with chain
- Suits itself especially well in combination with jack for the safe bracing of a load
- Aluminium



	Max load t	Stroke way mm	Min total height mm	Max total height mm	kg
160.0315	3,0	140,0	260,0	400,0	2,20



Steel axle stands with quick adjustment

- 4 feet on each stand
- Solid construction
- For heavy vehicles weights
- High level of stability
- Lifting bar made from cast steel
- Quick adjustment
- Supplied in pairs
- Height adjustment has 13 stages
- Suits itself especially well in combination with jack for the safe bracing of a load
- Made from solid steel



	Max load t	Stroke way mm	Min total height mm	Max total height mm	kg
160.0370	3,0	130,0	295,0	425,0	8,00
160.0371	6,0	205,0	400,0	605,0	15,00
160.0372	12,0	250,0	480,0	730,0	26,00

LIFTING TOOLS

Hydraulic bottle jack 2 - 50 t

- Security valve against overload
- Telescopic piston pole
- Additional spindle for extension (not in 30 and 50 t executions)
- Two piece lever arms
- For heavy vehicles weights
- Especially suitable for narrow hard to access areas
- High level of stability
- Ideally suited in combination with jack for the neutralizing and bracing of a load
- Heavy steel construction



	Max load t	Min total height mm	Max total height mm	Hydraulic lift mm	Screw extension mm	Dimension of base plate mm	kg
160.0350	2,0	181,0	345,0	116,0	48,0	88 x 92	2,90
160.0351	3,0	194,0	372,0	118,0	60,0	92 x 100	3,80
160.0352	5,0	216,0	413,0	127,0	70,0	96 x 112	5,10
160.0354	10,0	230,0	460,0	150,0	80,0	110 x 127	7,10
160.0356	15,0	230,0	460,0	150,0	80,0	113 x 136	9,30
160.0358	20,0	242,0	452,0	150,0	60,0	144 x 155	11,90
160.0359	30,0	285,0	465,0	180,0	-	190 x 155	21,70
160.0360	50,0	300,0	480,0	180,0	-	218 x 176	30,70

Jack for forklifts, hydraulic 4 - 5 t

- Specially developed for forklifts, agricultural and industrial vehicles
- Combination lifting jack with scissor action
- Scissor capacity of 4 tons and cylinder capacity of 5 tons
- Steel wheels



	Max capacity t	Stroke way mm	Min total height mm	Max total height mm	Total length mm	kg
160.0716	5,0	365,0	75,0	440,0	700,0	44,00

WORKSHOP EQUIPMENT

Mobile cleaning station for small parts

- Mounted metal reservoir with 60 lt tank capacity
- Includes compressed air operated drying pistol
- Cleaning brush with strong bristles
- Emptying of the collecting container by means of pneumatic air
- Includes level indicator display
- Safety valve for the vacuum production and pressure emptying
- High quality 2 m tube and compressed air pistol
- Good maneuverability due to the two solid rubber direct castors
- Storage compartment for small parts
- Includes stop handles
- Especially suitable for use in the car industry
- Ideally suited for removing of stubborn soiling
- Base unit made out of cast iron



Technical data:

Operating pressure: 6,3 bar (90 psi)  
Collecting tank: 500 x 810 x 130 mm

	L mm	B mm	H mm	kg
160.0040	490,0	580,0	1040,0	54,00





# TOOL CABINET / INSERT MODULE SYSTEM



Innovation is  
our mission!

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# TOOL CABINETS

**4 colours, 4 drawer configurations, 3 tool cabinet ranges  
= 48 tool cabinet variants!**

## Tool cabinets BASICLine



**BASICLine**

- Robust and stable steel construction with 0.8 mm sheet steel - distortion resistant
- Ball bearing drawer runners
- Drawers are 100% extendable
- Drawers with non slip rubber mat
- Cabinet top has a 10 mm durable foam insert mat
- With full width metal handle
- 2 fixed wheels Ø 100 mm
- 2 castor wheels Ø 100 mm with rolling and turning brake
- Side mounted handle
- Electrostatic powder coating

 **1 stage locking mechanism:**

- Central locking system on all drawers through the cylinder lock

## Tool cabinets MASTERLine



**MASTERLine**

- Very stable steel construction with 0.9 mm sheet steel - distortion resistant
- High level of stability
- Recessed rear and side walls with metal peg board for mounting different accessories
- Ball bearing drawer runners
- Drawers are 100% extendable
- Drawers with non slip rubber mat
- Cabinet top has a 10 mm durable foam insert mat
- With full width polyurethane coated metal handle
- 2 fixed wheels Ø 125 mm
- 2 castor wheels Ø 125 mm with rolling and turning brake
- Side mounted handle
- Electrostatic powder coating

  **2 stage locking mechanism:**

- Central locking system on all drawers through the cylinder lock
- Handle locking system prevents unintentional opening