



*Tools and
more*



PLIERS

K11

PLIERS



Tools and more



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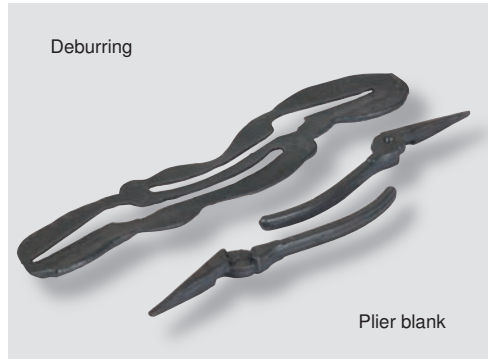
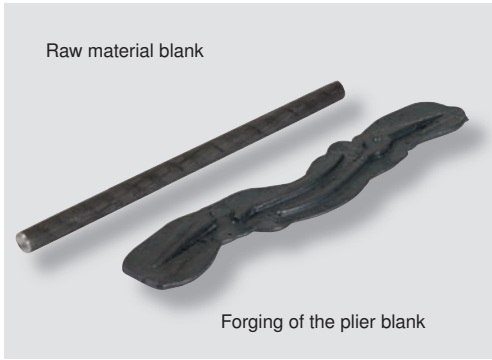
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PLIERS Manufacturing and fabrication steps

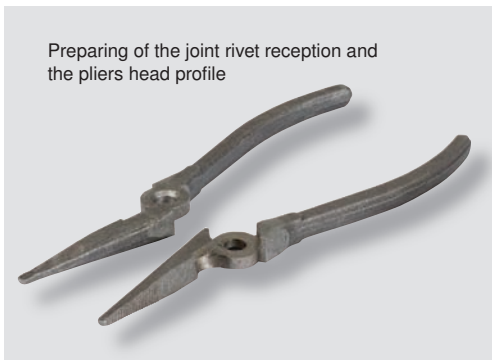


Plier joints

Lay-on joint



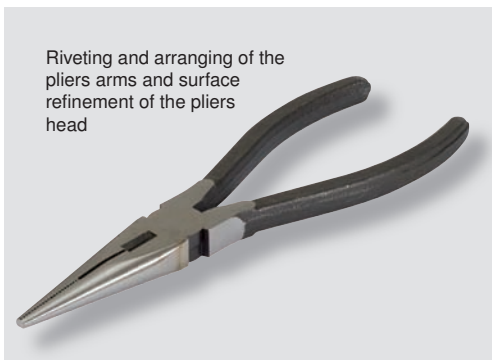
The two halves of the pliers are placed on top of each other and riveted - without being milled out. e.g.: End cutting pliers



Lap joint



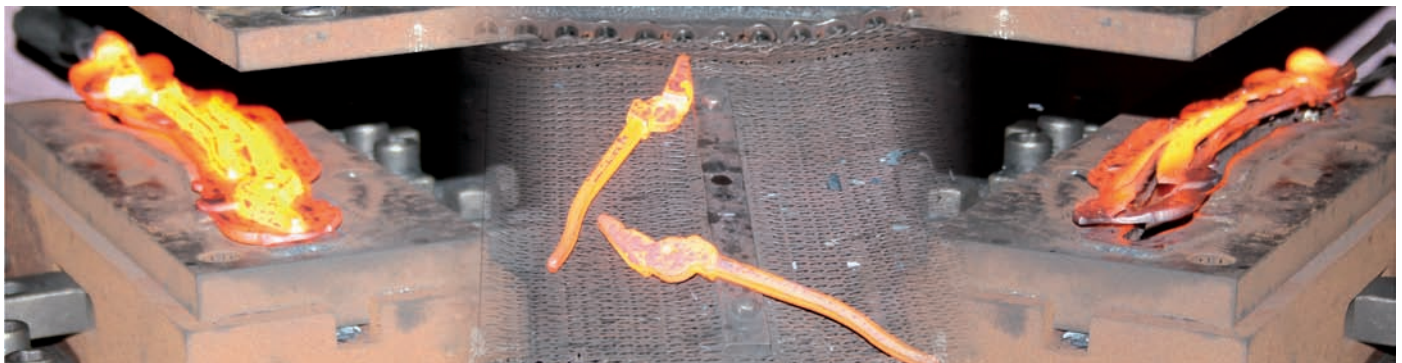
One of the pliers arms revolves in the milled edge and the other arm around the joint bolt. e.g.: Combination pliers



Box joint



Joint which is pushed through in the arm of the pliers by an opening in the other arm. e.g.: Water pump plier



Surfaces

Polished head



Chrome plated and mirror polished



Titan finish



Chrome PTFE coating



Plier profile

CLASSIC

- Dip coated handle
- Hot forged and tempered
- Ground heads
- Precise machined, oil hardened and tempered
- Cutting edges inductively hardened
- High cutting performance
- Special quenched and tempered steel

Handle colour: red

ERGOTORQUE®

- 2 Component handle with ergonomic hand protection
- Hot forged and tempered
- Ground heads
- Precise machines, oil hardened and tempered
- Cutting edges inductively hardened
- Perfect torque transmission
- High cutting performance
- Special quenched and tempered steel

Handle colour: black / red

ERGOTORQUE® plus

- 2 Component handle with ergonomic hand protection
- Hot forged and tempered
- Head chrome plated and mirror polished
- Precise machines, oil hardened and tempered
- Cutting edges inductively hardened
- Perfect torque transmission
- High cutting performance
- Special quenched and tempered steel

Handle colour: black / blue

ULTIMATE PLUS

- 2 Component handle with ergonomic hand protection
- Hot forged and tempered
- Head chrome plated titan finished
- Precise machined, oil hardened and tempered
- Cutting edges inductively hardened
- Perfect torque transmission
- Excellent cutting performance
- Special quenched and tempered steel

Handle colour: black / red

VDE 1000V

- Routine tested in accordance to DIN EN 60900 / IEC 60900:2004 submitted to 10 000V dielectric strength
- Insulated protected 2 component handle with ergonomic hand protection
- Hot forged and tempered
- Head chrome, PTFE coating
- Precise machined, oil hardened and tempered
- Cutting edges inductively hardened
- Special quenched and tempered steel

Handle colour: Yellow / red

CLASSIC 1000V

- Routine tested in accordance to DIN EN 60900 / IEC 60900:2004 submitted to 10 000V dielectric strength
- Two tone layer insulated protection with ergonomic hand protection
- Supported by the directive BGV A3 (VBG-4)
- Faulty isolation layer becomes visible by the yellow layer becoming shining through
- Forged and tempered
- Head chrome plated
- Precise machined, oil hardened and tempered
- Cutting edges inductively hardened
- Special quenched and tempered steel

Handle colour: Yellow / red

Handle designs

Dipped handle

2 component handle

2 component safety handle according to IEC 60900

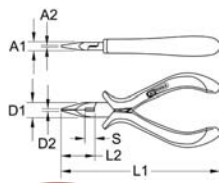
Two tone repeated protection insulated handle according to IEC 60900:2004



PRECISION

ESD precision telephone pliers

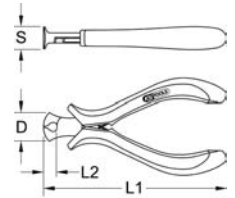
- Electrical working
- Suitable for wire
- Serrated execution
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Black chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
500.7021	7.0	2.0	12.0	3.0	130.0	29.0	8,0	80

ESD precision cutting pliers

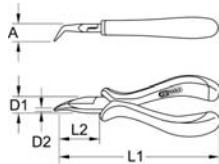
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Black chrome
- Special tool steel



Item	D mm	L1 mm	L2 mm	S mm	
500.7025	18.0	110.0	7.5	14,0	80

ESD precision long nosed pliers, curved

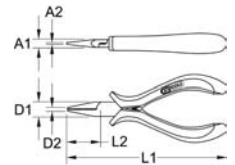
- Electrical working
- Suitable for wire
- 45° curved jaws
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Black chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	
500.7022	7.0	12.0	18.0	130.0	33.0	80

ESD precision flat pliers

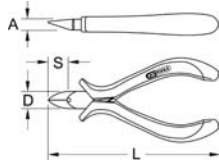
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Black chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	
500.7028	7.0	7.0	13.0	3.0	125.0	27.0	80

ESD precision diagonal side cutter

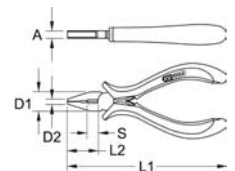
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Black chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	
500.7024	7.0	13.0	120.0	15.0	80

ESD precision combination pliers

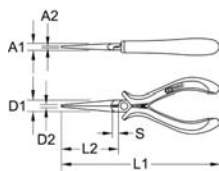
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Black chrome
- Special tool steel



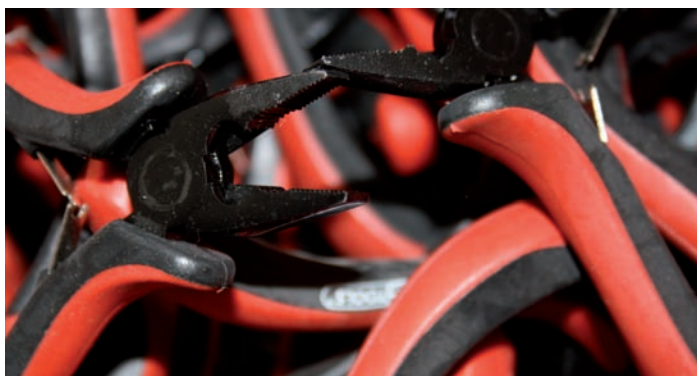
Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
500.7030	7.0	10.0	15.0	120.0	22.0	8,0	90

ESD precision telephone pliers

- Electrical working
- Suitable for wire
- Extra long jaws
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Black chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
500.7032	7.0	2.0	12.0	3.0	160.0	55.0	8,0	90



ESD precision tool set

- Electrical working
- Includes precision screwdrivers and tweezers
- Suitable for wire
- Serrated execution
- Induction-hardened precision cutting
- Self-opening double spring
- With twist end cap
- Ergonomically designed electronic handle
- Hardened blade
- Chrome finish with burnished surface
- With dual component handle
- Black chrome
- Blades made from special steel
- In durable plastic storage case



Item	
500.7180 10 pcs ESD precision tool set	400
1 x 125 mm	
1 x 100 mm	
1 x 145 mm	
3 x PH00 - PH0 - PH1	
4 x 1,4 - 2,0 - 2,4 - 3,0 mm	

ESD precision plier set

- Electro static discharge - electrostatically protect
- Suitable for wire
- Serrated execution
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Black chrome
- Special tool steel



Item	
500.7020 5 pcs ESD precision plier set	420
1 x 125 mm	
1 x 100 mm	
1 x 100 mm	
1 x 125 mm	
1 x 150 mm	

ESD precision tool set

- Electrical working
- Includes precision screwdrivers and tweezers
- Suitable for wire
- Serrated execution
- Induction-hardened precision cutting
- Self-opening double spring
- With twist end cap
- Ergonomically designed electronic handle
- Blades hardened
- Chrome finish with burnished surface
- With dual component handle
- Black chrome
- Blades made from special steel

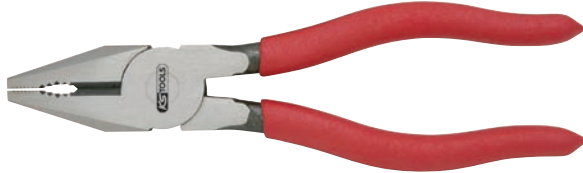
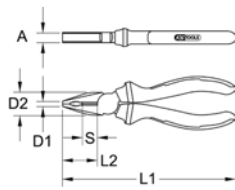


Item	
500.7190 21 pcs ESD precision tool set	1.40
2 x 125 - 130 mm	
1 x 100 mm	
1 x 100 mm	
1 x 125 mm	
1 x 150 mm	
1 x 145 mm	
3 x PH00 - PH0 - PH1	
4 x 1,4 - 2,0 - 2,4 - 3,0 mm	
7 x T6 - T7 - T8 - T9 - T10 - T15 - T20	

STANDARD PLIERS

CLASSIC combination pliers

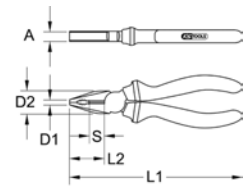
- In accordance to DIN ISO 5748
- Long cutting edge
- Suitable for wire
- Inductively hardened precision cutting edges
- With PVC dipped handle
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
115.1320	11.0	7.0	25.0	165.0	34.0	15,0	150
115.1321	12.0	8.0	28.0	18.0	36.0	16,0	290
115.1322	12.0	9.0	33.0	200.0	41.0	20,0	380

ULTIMATE^{plus} combination pliers

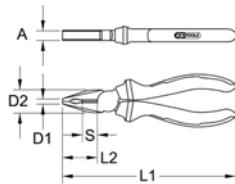
- In accordance to DIN / ISO 5748
- Long cutting edge
- Suitable for wire
- Inductively hardened precision cutting edges
- With dual component handle
- Titanium coated surface
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
119.2020	11.0	7.0	24.0	160.0	35.0	15,0	300
119.2021	12.0	7.0	28.0	180.0	36.0	15,0	300
119.2022	12.0	7.0	32.0	200.0	41.0	20,0	400

ERGOTORQUE[®] combination pliers

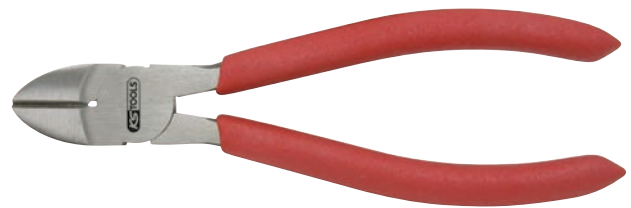
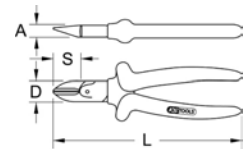
- In accordance to DIN ISO 5748
- Long cutting edge
- Suitable for wire
- Inductively hardened precision cutting edges
- With dual component handle
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
115.1020	11.0	7.0	24.0	160.0	35.0	15,0	300
115.1021	12.0	7.0	28.0	180.0	36.0	15,0	300
115.1022	12.0	7.0	32.0	200.0	41.0	20,0	400

CLASSIC diagonal side cutter

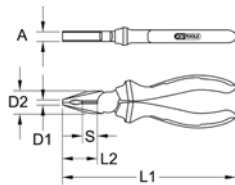
- In accordance to DIN ISO 5749
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With PVC dipped handle
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	
115.1311	20.0	19.0	130.0	5,0	110
115.1312	20.0	22.0	165.0	5,0	160

ERGOTORQUE^{plus} combination pliers

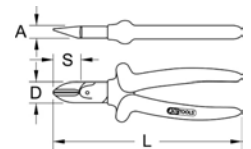
- In accordance to DIN ISO 5748
- Long cutting edge
- Suitable for wire
- Induction-hardened precision cutting
- With dual component handle
- Chrome plated and mirror polished
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
119.1020	11.0	7.0	23.0	165.0	35.0	15,0	250
119.1021	11.0	8.0	27.0	185.0	39.0	15,0	300
119.1022	12.0	8.0	31.0	205.0	42.0	15,0	380

ERGOTORQUE[®] diagonal side cutter

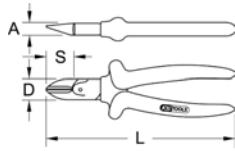
- In accordance to DIN ISO 5749
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	
115.1011	9.0	18.0	125.0	18,0	140
115.1012	11.0	22.0	160.0	20,0	260

ERGOTORQUE^{plus} diagonal side cutter

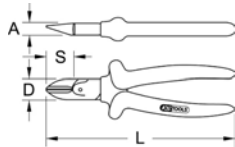
- In accordance to DIN / ISO 5749
- Long cutting edge
- Suitable for soft and hard wire
- Induction-hardened precision cutting
- With dual component handle
- Chrome plated and mirror polished
- Special tool steel



Item	A mm	D mm	L mm	S mm	
119.1011	9.0	19.0	130.0	20.0	160
119.1012	13.0	21.0	165.0	21.0	220

ULTIMATE^{plus} diagonal side cutter

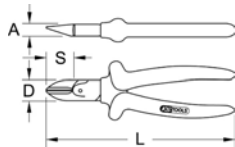
- In accordance to DIN / ISO 5749
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Titanium coated surface
- Special tool steel



Item	A mm	D mm	L mm	S mm	
119.2011	9.0	18.0	125.0	18.0	140
119.2012	11.0	22.0	170.0	20.0	260

CLASSIC high leverage side cutter

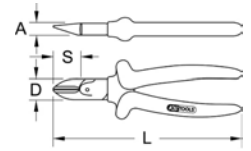
- In accordance to DIN ISO 5749
- 30° angled head
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With PVC dipped handle
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	
115.1313	13.0	28.0	180.0	18.0	230

CLASSIC high leverage side cutter

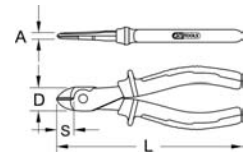
- 30° angled head
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- Capable of extracting levers out and split pins
- With PVC dipped handle
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	
115.1365	13.0	31.0	180.0	28.0	320

ERGOTORQUE^{plus} high leverage side cutter

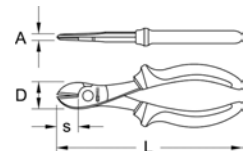
- In accordance to DIN ISO 5749
- 30° angled head
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	
115.1013	0,0-12,0	29.0	180.0	21.0	260

ERGOTORQUE^{plus} high leverage side cutter

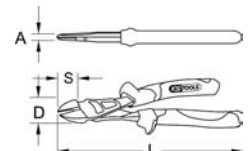
- In accordance to DIN ISO 5749
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- Extremely robust execution
- With dual component handle
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	
115.1025	13.0	32.0	260.0	31.0	390

ERGOTORQUE^{plus} high leverage side cutter

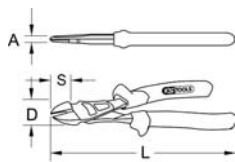
- In accordance to DIN / ISO 5749
- 30° angled head
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Chrome plated and mirror polished
- Special tool steel



Item	A mm	D mm	L mm	S mm	
119.1013	12.0	29.0	180.0	21.0	260

ULTIMATE^{plus} high leverage side cutter

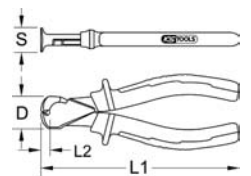
- In accordance to DIN / ISO 5749
- 30° angled head
- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Titanium coated surface
- Special tool steel



Item	A mm	D mm	L mm	S mm	
119.2013	12,0	29,0	180,0	21,0	260

ERGOTORQUE[®] cutting pliers

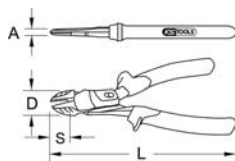
- In accordance to DIN ISO 5748
- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Matt chrome
- Special tool steel



Item	D mm	L1 mm	L2 mm	S mm	
115.1015	31,0	160,0	7,0	24,0	270

ULTIMATE^{plus} high leverage side cutter

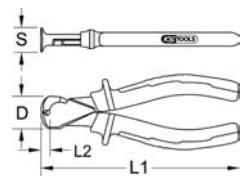
- Long cutting edge
- Induction-hardened precision cutting
- With dual component handle
- Suitable for various types of wire
- Extremely robust execution
- Titanium coated surface
- Special tool steel



Item	A mm	D mm	L mm	S mm	
119.2025	0,0-17,0	30,0	210,0	23,0	300

ERGOTORQUE^{plus} side cutter

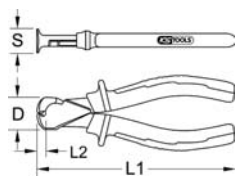
- In accordance to DIN / ISO 5748
- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Chrome plated and mirror polished
- Special tool steel



Item	D mm	L1 mm	L2 mm	S mm	
119.1015	30,0	165,0	7,0	24,0	240

CLASSIC cutting pliers

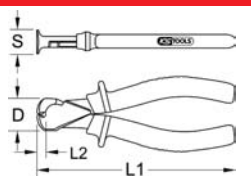
- In accordance to DIN ISO 5748
- Suitable for various types of wire
- Induction-hardened precision cutting
- With PVC dipped handle
- Matt chrome
- Special tool steel



Item	D mm	L1 mm	L2 mm	S mm	
115.1315	31,0	165,0	18,0	39,0	180

ULTIMATE^{plus} side cutter

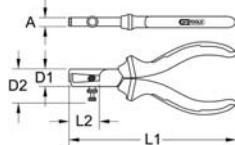
- In accordance to DIN / ISO 5748
- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Titanium coated surface
- Special tool steel



Item	D mm	L1 mm	L2 mm	S mm	
119.2015	31,0	160,0	7,0	24,0	270

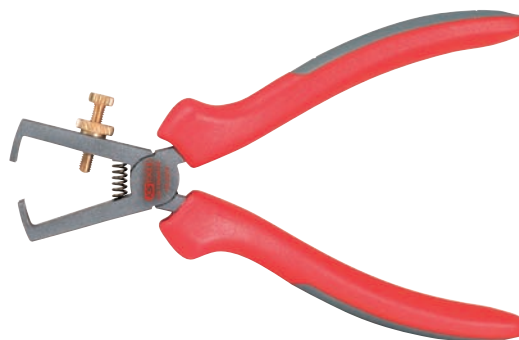
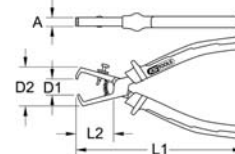
CLASSIC wire strippers

- In accordance to DIN / ISO 5232
- With locking jaw opening
- With adjusting screw and spring
- With PVC dipped handle
- For wires from 0,5 - 4,0 mm²
- Matt chrome
- Special tool steel



ULTIMATEplus wire strippers

- In accordance to DIN / ISO 5232
- With locking jaw opening
- With adjusting screw and spring
- With dual component handle
- For wires from 0,5 - 4,0 mm²
- Titanium coated surface
- Special tool steel

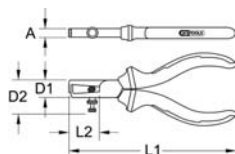


Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
115.1314	9.0	20.5	33.0	176.0	39.0	170

Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
119.2014	9.0	20.5	33.0	180.0	40.0	220

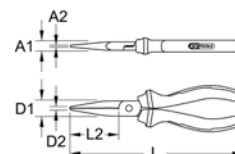
ERGOTORQUE® wire strippers

- In accordance to DIN / ISO 5232
- With locking jaw opening
- With adjusting screw and spring
- With dual component handle
- For wires from 0,5 - 4,0 mm²
- Matt chrome
- Special tool steel



CLASSIC flat pliers

- In accordance to DIN ISO 5745
- Serrated execution
- With PVC dipped handle
- Matt chrome
- Special tool steel

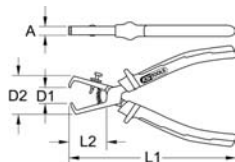


Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
115.1014	9.0	20.5	33.0	179.0	39.0	220

Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
115.1316	11.0	7.0	19.0	7.0	165.0	51.0	150
115.1317	13.0	7.0	20.0	7.0	200.0	63.0	230

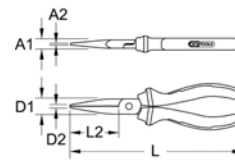
ERGOTORQUEplus® wire stripper

- In accordance to DIN / ISO 5232
- With locking jaw opening
- With adjusting screw and spring
- With dual component handle
- For wires from 0,5 - 4,0 mm²
- Chrome plated and mirror polished
- Special tool steel



ERGOTORQUE® flat pliers

- In accordance to DIN ISO 5745
- Serrated execution
- With dual component handle
- Matt chrome
- Special tool steel

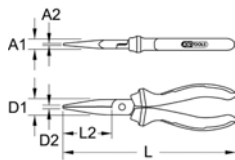


Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
119.1014	9.0	20.5	33.0	180.0	40.0	220

Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
115.1016	9.0	6.0	18.0	5.0	160.0	51.0	250
115.1017	13.0	8.0	20.0	7.0	200.0	65.0	260

ERGOTORQUE^{plus} flat pliers

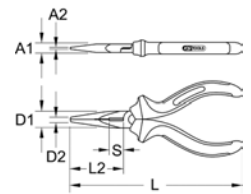
- In accordance to DIN / ISO 5745
- Serrated execution
- With dual component handle
- Chrome plated and mirror polished
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	
119.1016	9.0	9.0	19.0	4.0	165.0	49.0	200

CLASSIC telephone pliers

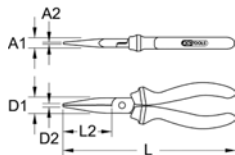
- In accordance to DIN ISO 5745
- Long nosed jaws
- Serrated execution
- With PVC dipped handle
- With intergrated cutting edge
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
115.1323	9.0	3.0	18.0	5.0	165.0	51.0	11,0	150
115.1324	11.0	3.0	22.0	5.0	200.0	75.0	15,0	230

ULTIMATE^{plus} flat pliers

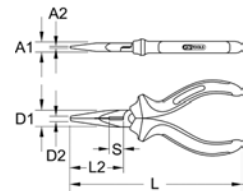
- In accordance to DIN / ISO 5745
- Serrated execution
- With dual component handle
- Titanium coated surface
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	
119.2016	9.0	6.0	18.0	5.0	160.0	51.0	250

ERGOTORQUE^{plus} telephone pliers

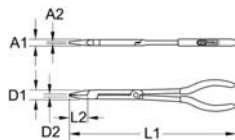
- In accordance to DIN ISO 5745
- Long nosed jaws
- Serrated execution
- With dual component handle
- With intergrated cutting edge
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
115.1023	9.0	3.0	18.0	4.0	160.0	49.0	12,0	150
115.1024	11.0	3.0	22.0	4.0	200.0	75.0	16,0	230

CLASSIC double jointed flat pliers, extra long

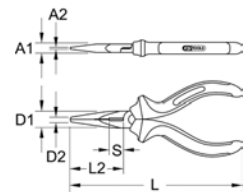
- Serrated execution
- With double joint
- Extremely narrow design
- For difficult to access areas
- With PVC dipped handle
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	
500.7062	11.0	3.0	18.0	5.0	300.0	65.0	450

ERGOTORQUE^{plus} telephone pliers

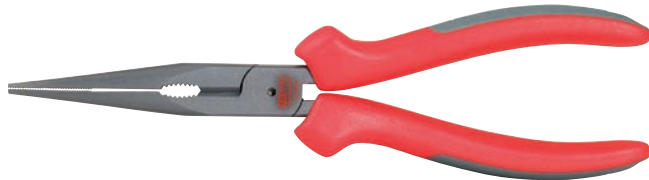
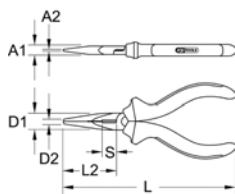
- In accordance to DIN / ISO 5745
- Long nosed jaws
- Serrated execution
- With dual component handle
- With intergrated cutting edge
- Chrome plated and mirror polished
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
119.1023	10.0	3.0	4.0	18.0	170.0	48.0	12,0	190
119.1024	12.0	3.0	4.0	22.0	215.0	70.0	14,0	290

ULTIMATE^{plus} telephone pliers

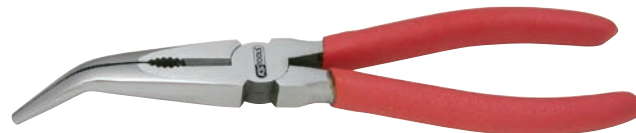
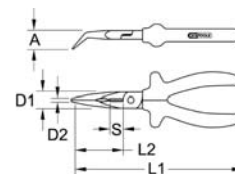
- In accordance to DIN / ISO 5745
- Long nosed jaws
- Serrated execution
- With dual component handle
- With intergrated cutting edge
- Titanium coated surface
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Weight
119.2023	9.0	3.0	18.0	4.0	160.0	49.0	12.0	150
119.2024	11.0	3.0	22.0	4.0	200.0	75.0	16.0	230

CLASSIC long nosed pliers, curved

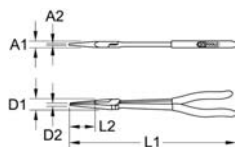
- In accordance to DIN / ISO 5745
- With PVC dipped handle
- 45° curved jaws
- For soft and medium wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Weight
115.1318	14.0	19.0	5.0	165.0	50.0	11.0	150
115.1319	24.0	22.0	5.0	200.0	68.0	14.0	230

CLASSIC telephone pliers, extra long

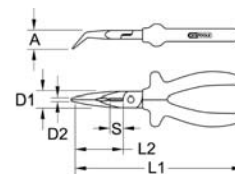
- Long nosed jaws
- Serrated execution
- With PVC dipped handle
- Extra long execution
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7051	11.0	4.0	18.0	7.0	270.0	70.0	330

ERGOTORQUE® long nosed pliers, curved

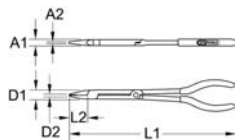
- In accordance to DIN / ISO 5745
- With dual component handle
- 45° curved jaws
- For soft and medium wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Weight
115.1018	18.0	18.0	3.0	165.0	50.0	11.0	250
115.1019	27.0	22.0	5.0	210.0	67.0	16.0	260

CLASSIC double jointed telephone pliers, extra long

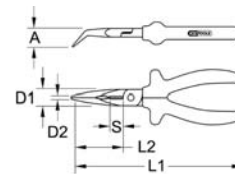
- Serrated execution
- With double joint
- Extremely narrow design
- With PVC dipped handle
- For difficult to access areas
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7061	10.0	10.0	18.0	3.0	340.0	32.0	450

ERGOTORQUE^{plus}® long nosed pliers, curved

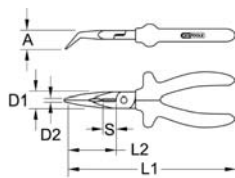
- In accordance to DIN / ISO 5745
- 45° curved jaws
- With dual component handle
- For soft and medium wire
- Inductively hardened precision cutting edges
- Chrome plated and mirror polished
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Weight
119.1018	19.0	18.0	4.0	165.0	43.0	12.0	190
119.1019	20.0	23.0	5.0	210.0	65.0	14.0	290

ULTIMATE^{plus} long nosed pliers, curved

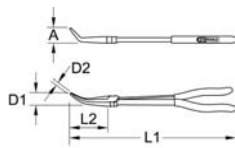
- In accordance to DIN / ISO 5745
- With dual component handle
- 45° curved jaws
- For soft and medium wire
- Inductively hardened precision cutting edges
- Titanium coated surface
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	
119.2018	18.0	18.0	3.0	165.0	50.0	11.0	250
119.2019	27.0	22.0	5.0	210.0	67.0	16.0	270

CLASSIC telephone pliers 45° curved, extra long

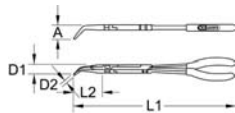
- Long nosed jaws
- Serrated execution
- 45° curved jaws
- With PVC dipped handle
- Extra long execution
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	
500.7052	26.0	18.0	7.0	270.0	70.0	330

Double jointed long nosed pliers 45° curved and extra long

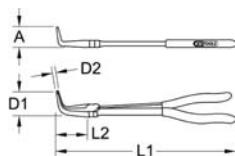
- Serrated execution
- With double joint
- Extremely narrow design
- 45° curved jaws
- With PVC dipped handle
- For difficult to access areas
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	
500.7063	22.0	17.0	5.0	335.0	60.0	450

CLASSIC telephone pliers 90° curved, extra long

- Long nosed jaws
- Serrated execution
- 90° curved jaws
- With PVC dipped handle
- Extra long execution
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	
500.7053	46.0	18.0	7.0	270.0	42.0	330

CLASSIC plier set

- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With PVC dipped handle
- Matt chrome
- Special tool steel



Item	
115.1310	3 pcs CLASSIC plier set 0.90
1 x	165 mm
1 x	180 mm
1 x	205 mm

CLASSIC plier set

- Long cutting edge
- Suitable for various types of wire
- Induction-hardened precision cutting
- With PVC dipped handle
- Matt chrome
- Special tool steel



Item	
115.1304	4 pcs CLASSIC plier set 1.70
1 x	165 mm
1 x	180 mm
1 x	200 mm
1 x	256 mm



ERGOTORQUE® plier set

- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Matt chrome
- Special tool steel



Item			kg
115.1010	3 pcs	ERGOTORQUE® plier set	0.90
1 x		160 mm	
1 x		180 mm	
1 x		200 mm	

ERGOTORQUE® plier set

- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Matt chrome
- Special tool steel



Item			kg
115.1004	4 pcs	ERGOTORQUE® plier set	1.44
1 x		160 mm	
1 x		180 mm	
1 x		200 mm	
1 x		240 mm	

ERGOTORQUEplus® plier set

- With dual component handle
- For soft and medium wire
- Inductively hardened precision cutting edges
- Chrome plated and mirror polished
- Special tool steel



Item			kg
119.1010	3 pcs	ERGOTORQUEplus® plier set	0.80
1 x		165 mm	
1 x		185 mm	
1 x		215 mm	

ERGOTORQUEplus® plier set

- With dual component handle
- With internal spring
- Inductively hardened precision cutting edges
- Chrome plated and mirror polished
- Special tool steel



Item			kg
119.1004	4 pcs	ERGOTORQUEplus® plier set	1.00
1 x		165 mm	
1 x		165 mm	
1 x		185 mm	
1 x		215 mm	

ULTIMATEplus plier set

- In accordance to DIN ISO 5748
- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Titanium coated surface
- Special tool steel



Item			kg
119.2010	3 pcs	ULTIMATEplus plier set	1.00
1 x		160 mm	
1 x		180 mm	
1 x		200 mm	

ULTIMATEplus plier set

- In accordance to DIN ISO 5748
- Suitable for various types of wire
- Induction-hardened precision cutting
- With dual component handle
- Titanium coated surface
- Special tool steel



Item			kg
119.2004	4 pcs	ULTIMATEplus plier set	1.00
1 x		160 mm	
1 x		180 mm	
1 x		180 mm	
1 x		165 mm	

CLASSIC plier set, extra long

- Serrated execution
- With PVC dipped handle
- Extra long execution
- Matt chrome
- Special tool steel



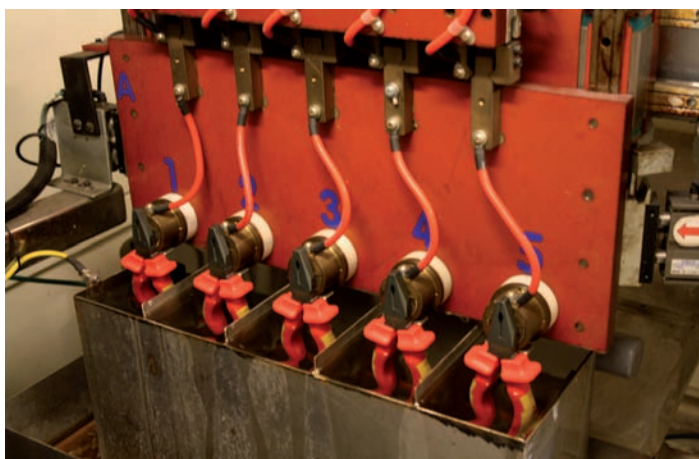
Item			kg
500.7050	3 pcs	CLASSIC plier set, extra long	1.20
1 x		270 mm	
1 x		270 mm	
1 x		270 mm	

CLASSIC double jointed plier set, extra long

- Serrated execution
- With double joint
- Extremely narrow design
- With PVC dipped handle
- For difficult to access areas
- Matt chrome
- Special tool steel



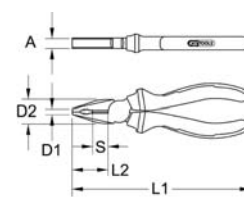
Item			kg
500.7060	3 pcs	CLASSIC double jointed plier set, extra long	1.40
1 x		300 mm	
1 x		340 mm	
1 x		335 mm	



VDE PLIERS

ERGOTORQUE® VDE combination pliers

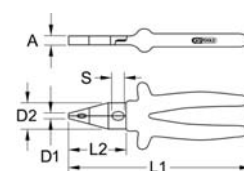
- In accordance to DIN ISO 5748
- Wrap around insulation to DIN EN 60900
- With dual component handle
- Suitable for wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm		kg
117.1111	10.0	6.0	24.0	162.5	35.0	2,4		310
117.1112	11.0	7.0	27.0	180.0	38.5	2,5		380
117.1113	12.0	7.0	30.0	205.0	42.5	3,0		400

CLASSIC 1000V combination pliers

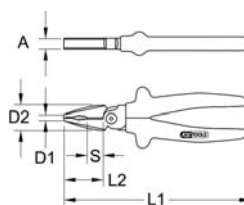
- In accordance to DIN / ISO 5244
- Insulated handle to DIN EN 60900
- With coated working head
- Also suitable for hard wire
- Extra heavy execution
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm		kg
117.1711	16.0	8.0	30.0	185.0	38.0	16,0		280
117.1712	16.0	8.5	32.5	205.0	44.0	18,5		350

CLASSIC 1000V high leverage combination pliers

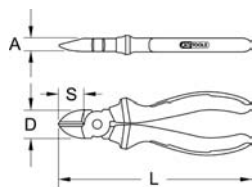
- In accordance to DIN / ISO 5746
- Insulated handle to DIN EN 60900
- Also suitable for hard wire
- Extra heavy execution
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm		kg
117.1278	8.5	6.0	25.0	160.0	36.5	13,0		230
117.1275	11.0	7.5	28.0	185.0	40.0	16,5		290
117.1276	11.5	8.0	28.0	205.0	43.0	18,0		390
117.1279	13.0	8.0	35.0	250.0	53.0	21,5		570

ERGOTORQUE® VDE diagonal side cutters

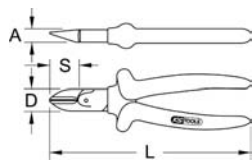
- In accordance to DIN / ISO 5749
- Wrap around insulation to DIN EN 60900
- With dual component handle
- For soft and medium wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	⚡	🔒
117.1119	10.0	20.0	156.0	20.0	⚡ 1000V	210

CLASSIC 1000V side cutters

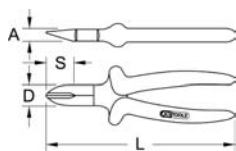
- In accordance to DIN / ISO 5232
- Insulated handle to DIN EN 60900
- For soft and hard wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	⚡	🔒
117.1277	11.0	21.5	160.0	24.0	⚡ 1000V	270
117.1288	11.0	21.5	180.0	24.0	⚡ 1000V	330

CLASSIC 1000V side cutters

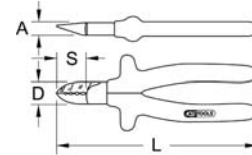
- In accordance to DIN / ISO 5232
- Insulated handle to DIN EN 60900
- Working head coated
- For soft and hard wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	⚡	🔒
117.1721	26.0	25.5	160.0	22.0	⚡ 1000V	230
117.1722	27.0	27.0	180.0	25.0	⚡ 1000V	330

CLASSIC 1000V electrical side cutters

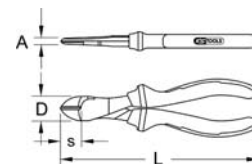
- Insulated handle to DIN / EN 60900
- For cutting, stripping and crimping
- Wire strippers for wires from 1,5 mm² + 2,5 mm²
- For crimping of insulated cable lugs with Ø 1,5 mm + 2,5 mm
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	⚡	🔒
117.1281	10.5	22.0	175.0	27.0	⚡ 1000V	320

ERGOTORQUE® VDE high leverage side cutter

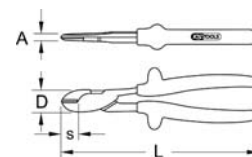
- In accordance to DIN / ISO 5749
- Wrap around insulation to DIN EN 60900
- With dual component handle
- For all types of wire
- Requires light expenditure of energy
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	⚡	🔒
117.1115	12.0	30.0	175.0	22,5	⚡ 1000V	330
117.1116	12.5	30.0	200.0	22,5	⚡ 1000V	370

CLASSIC 1000V high leverage side cutter

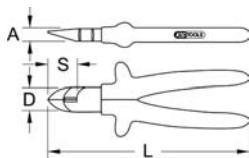
- In accordance to DIN / ISO 5749
- Insulated handle to DIN EN 60900
- For all types of wire
- Especially for the line construction
- Requires light expenditure of energy
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm	⚡	🔒
117.1282	12.0	26.0	180.0	21,0	⚡ 1000V	320
117.1283	12.5	29.0	205.0	24,0	⚡ 1000V	370
117.1284	13.5	33.0	260.0	30,0	⚡ 1000V	580

CLASSIC 1000V lead sealing pliers

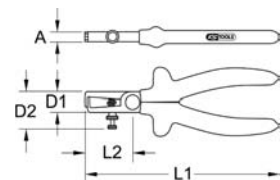
- Insulated handle to DIN / EN 60900
- With interchangeable clamping inserts
- Combined with side cutter
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



Item	A mm	D mm	L mm	S mm		
117.1268	10.0	20.0	160.0	15.0		220

CLASSIC 1000V wire strippers

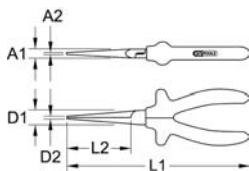
- In accordance to DIN / ISO 5232
- Insulated handle to DIN EN 60900
- With locking jaw opening
- With adjusting screw and spring
- For wires from 0,8 - 6,0 mm²
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm		
117.1271	9.5	18.5	31.5	160.0	44.0		180

CLASSIC 1000V drawing pliers

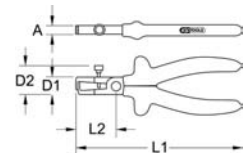
- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- With coated working head
- With flat and smooth gripping jaws
- Rounded edges
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm		
117.1714	7.5	6.5	19.0	4.5	200.0	65.0		220

CLASSIC 1000V wire strippers

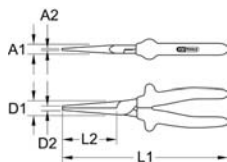
- In accordance to DIN / ISO 5232
- Insulated handle to DIN EN 60900
- With coated working head
- With locking jaw opening
- With adjusting screw and spring
- For wires from 0,8 - 6,0 mm²
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm		
117.1713	11.0	18.5	20.0	160.0	34.0		180

CLASSIC 1000V drawing pliers

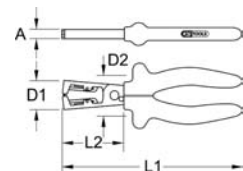
- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- With flat and smooth gripping jaws
- Rounded edges
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	
117.1280	7.5	6.5	17.0	4.5	200.0	65.0	220

CLASSIC 1000V wire strippers

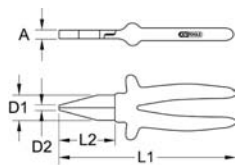
- Insulated handle to DIN EN 60900
- Self-adjusting
- With replaceable knives
- For wires from 0,5 - 5,0 mm²
- With cutting holes for the separation of cables and wires
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm		
117.1272	10.5	28.5	47.5	160.0	20.0	117.1258	220

CLASSIC 1000V flat pliers

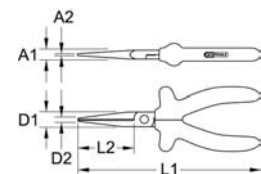
- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- Short and powerful jaws
- Serrated execution
- Matt chrome
- Special tool steel



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡	👤
117.1298	9.0	17.0	4.5	160.0	34.0	⚡ 1000V	200

CLASSIC 1000V flat pliers

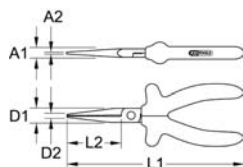
- In accordance to DIN 5745
- Insulated handle to DIN EN 60900
- With long jaws
- Serrated execution
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡	👤
117.1289	8.5	5.5	15.0	3.5	160.0	50.0	⚡ 1000V	210

CLASSIC 1000V flat pliers

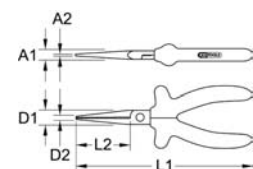
- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- With coated working head
- Short and powerful jaws
- Serrated execution
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡	👤
117.1715	11.0	11.0	19.0	5.0	160.0	36.0	⚡ 1000V	190

CLASSIC 1000V long jaw flat pliers

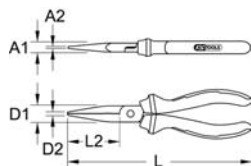
- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- With coated working head
- With long jaws
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡	👤
117.1716	13.0	7.5	18.5	4.5	160.0	50.0	⚡ 1000V	130

ERGOTORQUE® VDE flat pliers

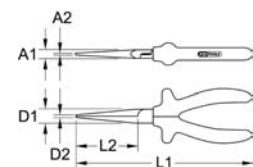
- In accordance to DIN / ISO 5745
- Wrap around insulation to DIN EN 60900
- With dual component handle
- Serrated execution
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡	👤
117.1125	9.0	3.8	18.0	3.0	165.0	49.5	⚡ 1000V	210

CLASSIC 1000V long jaw flat pliers

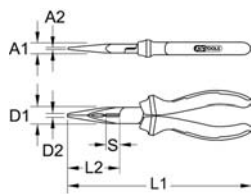
- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- With long jaws
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡	👤
117.1299	7.0	8.5	16.0	4.0	160.0	51.0	⚡ 1000V	210

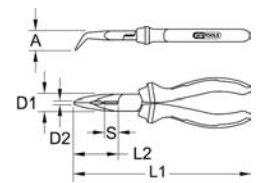
ERGOTORQUE® VDE long nosed pliers

- In accordance to DIN / ISO 5745
- Wrap around insulation to DIN EN 60900
- With dual component handle
- Long jaws
- Suitable for medium and hard wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



ERGOTORQUE® VDE long nosed pliers, curved

- In accordance to DIN / ISO 5745
- Wrap around insulation to DIN EN 60900
- With dual component handle
- Curved jaws
- For soft and medium wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel

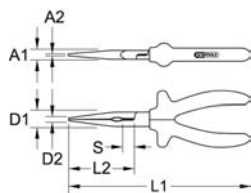


Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	⚡	🔌
117.1117	9.0	2.9	18.0	3.2	165.0	48.0	2,5	⚡	177
117.1118	11.0	3.5	22.0	4.5	208.0	69.0	2,5	⚡	291

Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	⚡	🔌
117.1120	9.0	18.0	3.2	165.0	48.0	2,5	⚡	210
117.1121	11.0	22.0	5.0	208.0	70.0	2,5	⚡	310

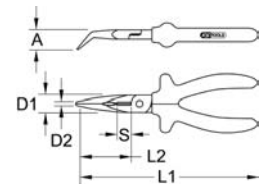
CLASSIC 1000V long nosed pliers

- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- Long jaws
- For soft and medium wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



CLASSIC 1000V long nosed pliers, curved

- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- Curved jaws
- For soft and medium wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel

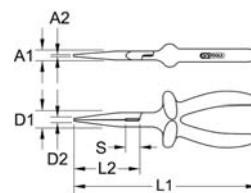


Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	⚡	🔌
117.1291	9.5	2.5	16.0	4.0	200.0	74.0	10,0	⚡	230
117.1293	9.0	2.0	15.5	3.0	160.0	55.0	10,0	⚡	170

Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	⚡	🔌
117.1292	9.5	17.0	4.0	200.0	78.0	14,0	⚡	210
117.1294	9.5	15.5	4.0	160.0	51.0	11,0	⚡	170

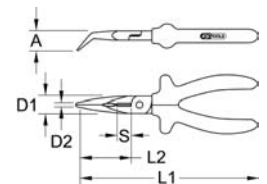
CLASSIC 1000V long nosed pliers

- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- With coated working head
- Long jaws
- Suitable for soft and medium hard wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel



CLASSIC 1000V long nosed pliers, curved

- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- With coated working head
- Curved jaws
- For soft and medium wire
- Inductively hardened precision cutting edges
- Matt chrome
- Special tool steel

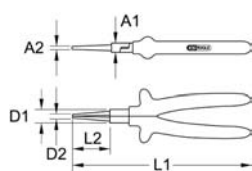


Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	⚡	🔌
117.1717	10.0	3.5	17.5	4.0	160.0	55.0	10,0	⚡	180
117.1718	10.5	3.5	18.0	5.0	200.0	74.0	14,0	⚡	230

Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	⚡	🔌
117.1719	12.0	5.0	19.0	200.0	79.0	14,0	⚡	220

CLASSIC 1000V round pliers

- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- With round, short and strong jaws
- With smooth tips
- Serrated execution
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡	⚖️
117.1297	10.0	3.5	14.0	6.0	160.0	33.0	1000V	180

ERGOTORQUE® VDE plier set

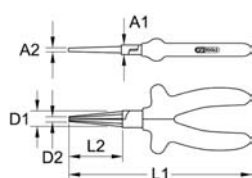
- Wrap around insulation to DIN EN 60900
- With dual component handle
- Matt chrome
- Chrome vanadium



Item	⚖️
117.1160 4 pcs ERGOTORQUE® VDE plier set	1.20
1 x 200 mm	
1 x 160 mm	
1 x 180 mm	
1 x 160 mm	

CLASSIC 1000V long jaw round pliers

- In accordance to DIN / ISO 5745
- Insulated handle to DIN EN 60900
- With round and long jaws
- With smooth tips
- Serrated execution
- Matt chrome
- Special tool steel



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡	⚖️
117.1290	9.0	2.5	14.0	5.5	160.0	47.5	1000V	205

CLASSIC 1000V plier set

- Insulated handle to DIN EN 60900
- Matt chrome
- Special tool steel



Item	⚖️
117.1760 4 pcs CLASSIC 1000V plier set	0.95
1 x 200 mm	
1 x 160 mm	
1 x 180 mm	
1 x 160 mm	

CLASSIC 1000V plier set

- Insulated handle to DIN EN 60900
- Matt chrome
- Special tool steel



Item	⚖️
117.1710 3 pcs CLASSIC 1000V plier set	0.82
1 x 185 mm	
1 x 200 mm	
1 x 160 mm	

ERGOTORQUE® VDE plier set

- Wrap around insulation to DIN EN 60900
- With dual component handle
- Matt chrome
- Special tool steel



Item	⚖️
117.1110 3 pcs ERGOTORQUE® VDE plier set	0.93
1 x 175 mm	
1 x 200 mm	
1 x 150 mm	

ERGOTORQUE® VDE plier set

- Wrap around insulation to DIN EN 60900
- With dual component handle
- Matt chrome
- Special tool steel



Item			kg
117.1100	4 pcs	ERGOTORQUE® VDE plier set	1.44
1 x		150 mm	
1 x		175 mm	
1 x		200 mm	
1 x		250 mm	

CLASSIC 1000V plier set

- Insulated handle to DIN EN 60900
- Matt chrome
- Special tool steel



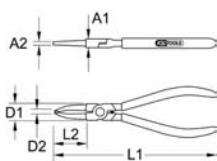
Item			kg
117.1700	4 pcs	CLASSIC 1000V plier set	1.55
1 x		150 mm	
1 x		175 mm	
1 x		200 mm	
1 x		250 mm	



CIRCLIP PLIERS

CLASSIC circlip pliers for internal circlips

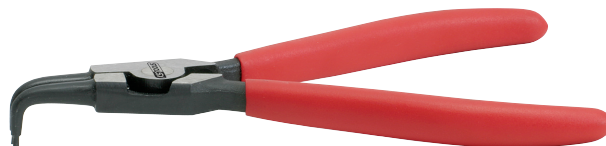
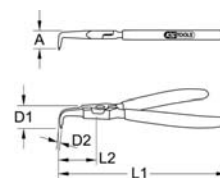
- In accordance to DIN 5254
- Durable, rolled precision tips
- Self opening
- With PVC dipped handle
- Chrome vanadium



Item	∅ mm	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.1034	12,0 - 25,0	8,0	2,0	17,0	2,0	130,0	29,0	120
500.1035	19,0 - 60,0	10,0	2,0	18,0	2,0	160,0	40,0	150
500.1036	40,0 - 100,0	11,0	2,0	22,0	2,0	230,0	44,0	200

CLASSIC circlip pliers for external circlips, angled

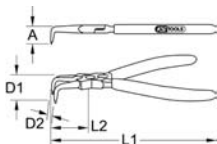
- In accordance to DIN 5254
- Durable precision tips
- 90° angled tips
- Self opening
- With PVC dipped handle
- Chrome vanadium



Item	∅ mm	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.1025	10,0 - 25,0	13,0	12,0	2,0	130,0	18,0	120
500.1026	19,0 - 60,0	19,0	17,0	2,0	160,0	23,0	150
500.1027	40,0 - 100,0	24,0	21,0	2,0	230,0	27,0	200

CLASSIC circlip pliers for internal circlips, angled

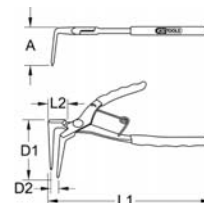
- In accordance to DIN 5256
- Durable, rolled precision tips
- 90° angled tips
- Self opening
- With PVC dipped handle
- Chrome vanadium



Item	∅ mm	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.1031	12,0 - 25,0	11,0	15,0	2,0	130,0	21,0	120
500.1032	19,0 - 60,0	19,0	17,0	2,0	160,0	23,0	150
500.1033	40,0 - 100,0	25,0	23,0	2,0	230,0	30,0	200

CLASSIC long arm circlip pliers for external circlips, angled

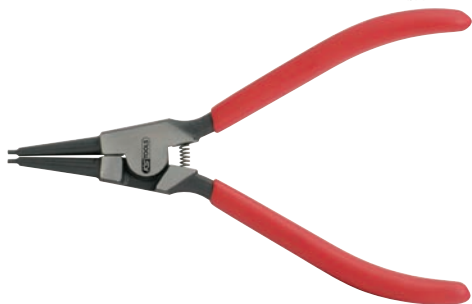
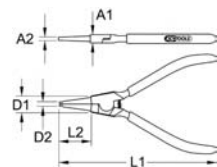
- Durable, extra long precision points
- 90° angled tips
- Self opening
- With PVC dipped handle
- Ideal for brake caliper and transmission work
- Chrome vanadium



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.1037	63,0	18,0	4,0	185,0	18,0	190

CLASSIC circlip pliers for external circlips

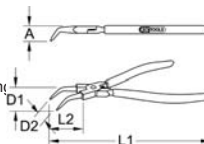
- In accordance to DIN 5254
- Durable, straight precision tips
- Self opening
- With PVC dipped handle
- Chrome vanadium



Item	∅ mm	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.1028	10,0 - 25,0	8,0	1,0	18,0	1,0	130,0	28,0	120
500.1029	19,0 - 60,0	10,0	2,0	30,0	6,0	160,0	38,0	150
500.1030	40,0 - 100,0	11,0	3,0	33,0	6,0	230,0	44,0	200

CLASSIC wheel bearing circlip pliers, angled

- Durable precision tips
- 45° angled tips
- Self opening
- With PVC dipped handle
- For the disassembly and assembly of wheel bearing retaining rings
- Can be used on the front and rear
- For all common wheel bearing retaining rings
- Chrome vanadium



Item	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.1038	22,0	23,0	2,3	240,0	32,0	250
500.1039	22,0	23,0	3,0	300,0	46,0	490

Circlip plier set with ratchet function

- For inside and outside circlips
- With rubber grip
- Interchangeable tips
- 6 types of pliers by reversing the tips
- Includes disassembly and assembly heads
- Chrome vanadium

Internal circlips: 78,0 mm - 159,0 mm
External circlips: 89,0 mm - 159,0 mm



Item			kg
500.1300	14 pcs	Circlip plier set with ratchet function	1.80

Universal circlip plier set

- For inside and outside circlips
- Simply plier reconfiguration
- With rubber grip
- Interchangeable tips
- 16 types of pliers by reversing the tips
- Includes disassembly and assembly heads
- Chrome vanadium



Item			kg
500.1320	10 pcs	Universal circlip plier set	1.80
4 x		1,0 - 1,2 - 1,8 - 2,3 mm	
4 x		1,0 - 1,2 - 1,8 - 2,3 mm	
1 x		120 mm	
1 x		120 mm	

Circlip plier set with ratchet function

- For inside and outside circlips
- With rubber grip
- Interchangeable tips
- 8 types of pliers by reversing the tips
- Includes disassembly and assembly heads
- Chrome vanadium

Internal circlips: 60,0 mm - 100,0 mm
External circlips: 40,0 mm - 85,0 mm

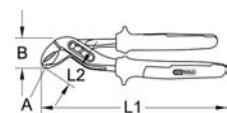


Item			kg
500.1350	20 pcs	Circlip plier set with ratchet function	1.80

INSTALLATION PLIERS

Water pump pliers

- In accordance to DIN 8976
- Toothed gripping surfaces
- Optimum power transfer
- Industrial and ground heads
- Red powder coating
- Chrome vanadium



Item	A	B mm	L1 mm	L2 mm	kg
115.1000	1"	30.0	175.0	30.0	160
115.2000	1.1/4"	35.0	240.0	36.0	310
115.3000	1.1/2"	40.0	300.0	42.0	620

Water pump plier set

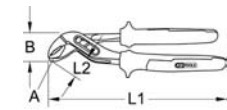
- In accordance to DIN 8976
- Toothed gripping surfaces
- Optimum power transfer
- 7-stage adjustment
- Industrial and ground heads
- Red powder coating
- Chrome vanadium



Item			kg
115.0000	3 pcs	7" - 10" - 12"	1.20

Water pump pliers

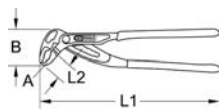
- In accordance to DIN 8976
- With PVC dipped handle
- Toothed gripping surfaces
- Optimum power transfer
- Industrial and ground heads
- Chrome vanadium



Item	A mm	B mm	L1 mm	L2 mm	kg
115.2001	36.0	46.0	240.0	34.0	330
115.4000	70.0	84.0	400.0	60.0	1300

Water pump pliers

- With accurate industrial adjustment
- With safety clamping protection
- Optimum power transfer
- Double-sided gripping jaws
- Ground heads
- With PVC dipped handle
- Chrome vanadium



Item	A mm	B mm	L1 mm	L2 mm	kg
115.8502	36.0	44.0	175.0	26.5	185
115.8000	51.0	54.0	250.0	33.5	340
115.8500	61.5	65.0	300.0	41.5	510

Water pump plier set

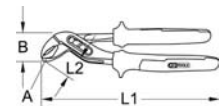
- With accurate industrial adjustment
- With safety clamping protection
- Optimum power transfer
- Double-sided gripping jaws
- Ground heads
- With PVC dipped handle
- Chrome vanadium



Item	kg
115.8501	2 pcs 10" - 12" 960

Water pump pliers, black

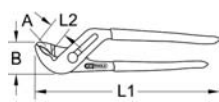
- In accordance to DIN 8976
- With PVC dipped handle
- Toothed gripping surfaces
- Optimum power transfer
- With grooved handle adjustment
- Chrome vanadium



Item	A mm	B mm	L1 mm	L2 mm	kg
115.7000	45.0	55.0	250.0	40.0	340

Professional water pump pliers

- Toothed gripping surfaces
- Optimum power transfer
- With grooved handle adjustment
- Progressive teeth
- With PVC dipped handle
- Chrome vanadium

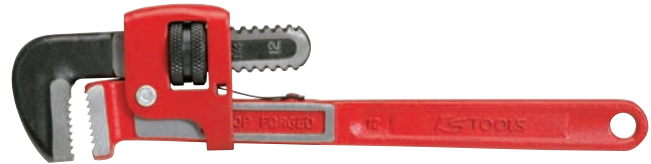
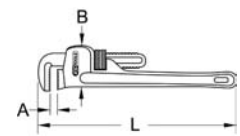


Item	Industrial	A mm	B mm	L1 mm	L2 mm	kg
115.1350	7	46.0	45.0	165.0	50.0	380
115.1351	7	66.0	60.0	330.0	60.0	920
115.1352	11	77.0	74.0	420.0	74.0	1150

PIPE WRENCHES

One handed pipe pliers

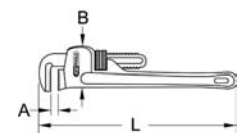
- Type „Stillson“
- Heavy execution
- Ground heads
- Infinitely variable
- Drop-forged



Item	A	B mm	L mm	kg
114.0008	3/4"	50.0	200.0	0.25
114.0010	1"	64.0	250.0	0.60
114.0012	1.1/4"	68.0	300.0	0.70
114.0014	1.1/2"	82.0	350.0	1.10
114.0018	2"	93.0	450.0	1.75
114.0024	2.1/2"	111.0	600.0	3.50
114.0036	3.1/2"	134.0	900.0	6.25

One handed pipe pliers

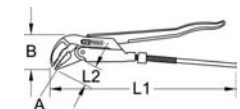
- Type „Stillson“
- Aluminium cast body
- Ground heads
- Infinitely variable
- Drop-forged
- Aluminium forged



Item	A	B mm	L mm	kg
111.3100	2"	75.0	350.0	0.88
111.3200	2.1/2"	90.0	450.0	1.46
111.3300	3.1/2"	100.0	600.0	2.44

Offset pipe pliers, 45° angled

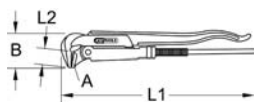
- In accordance to DIN 5234
- Swedish form
- Jaw 45° offset
- Infinitely variable
- Gear, contrary to the direction of rotation
- Red powder coating
- Chrome vanadium



Item	A	B mm	L1 mm	L2 mm	kg
112.1000	1"	65.0	320.0	65.0	0.75
112.1500	1.1/2"	70.0	430.0	75.0	1.38
112.2000	2"	75.0	580.0	85.0	2.75

Offset pipe pliers, 90° angled

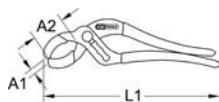
- In accordance to DIN 5234
- Swedish form
- Jaw 90° offset
- Infinitely variable
- Gear, contrary to the direction of rotation
- Red powder coating
- Chrome vanadium



Item	A	B mm	L1 mm	L2 mm	
111.1000	1"	35.0	320.0	15.0	0.79
111.1500	1.1/2"	31.0	430.0	41.0	1.40
111.2000	2"	51.0	580.0	58.0	2.69
111.3000	3"	60.0	670.0	62.0	3.45

Siphon pliers

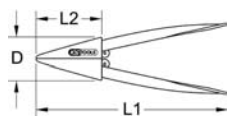
- With 4 adjustable steps
- Insulated foot for chrome fittings
- For screw fittings up to max. Ø 60 mm
- With PVC dipped handle
- For loosening pipe fittings
- Interchangeable jaw protector
- For hard to reach places
- Chrome plated and mirror polished
- Chrome vanadium



Item	A1 mm	A2 mm	L mm	Replacement jaws	
116.1200	0 - 100	45.0	225.0	116.1201	320

Lead pipe expanding pliers

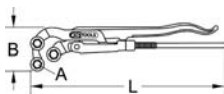
- For the widening of lead pipes up to max. Ø 1.1/2"
- Powder coated
- Body made of sheet steel tongs



Item	Ø mm	Ø	L1 mm	L2 mm	
116.7000	0 - 38,1	1.1/2"	240.0	84.0	360

Thread roughing pliers

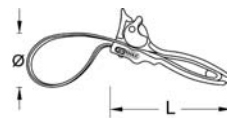
- For roughening of the thread after thread cutting
- Uniform roughening over the entire circumference
- Special tool steel



Item	A mm	A	B mm	L mm	
995.6500	12,7 - 50,8	1/2" - 2"	100.0	335.0	1.77

Strap pipe pliers

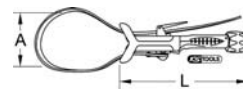
- For hard to reach places
- Especially suited for plastic pipes
- Glass fibre reinforced handle
- Belt made of reinforced, non-slip rubber



Item	Ø mm	L mm	
114.0150	0 - 110,0	190.0	180

Strap pipe pliers

- With metal grip
- For hard to reach places
- Especially suited for plastic pipes
- Belt made of reinforced, non-slip rubber
- Chrome vanadium



Item	A mm	L mm	
114.0160	0,0-160,0	250.0	1.00

Chain pipe wrench

- Function is similar to a ratchet
- For hard to reach places
- Hardened teeth
- Drop-forged
- Chrome vanadium



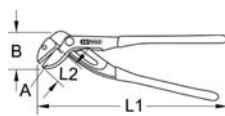
Item	Ø mm	L mm	
114.0040	0,0-110,0	390.0	1.36



FITTERS PLIERS

Fitters pliers

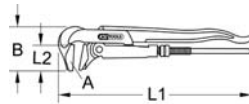
- With accurate industrial adjustment
- With safety clamping protection
- With setting scale
- Smooth, polished head area
- Optimum power transfer
- Ground heads
- With PVC dipped handle
- Chrome vanadium



Item	A mm	B mm	L1 mm	L2 mm	
115.8510	53.0	50.0	250.0	60.0	350

Fitters pliers, angled

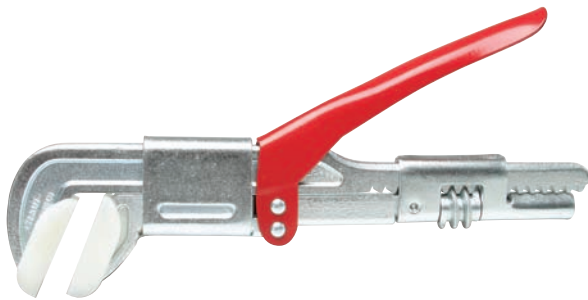
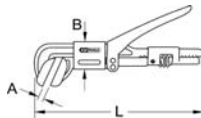
- 90° Jaw position
- Interchangeable jaw protector
- For pipe up to max. Ø 35 mm
- For mild assembly
- Infinitely variable
- Red powder coating
- Chrome vanadium



Item	A	A mm	B mm	L1 mm	L2 mm	Replacement jaws	
116.1000	1"	25.4	81.0	315.0	54.0	116.1001	790

Fitters wrench

- Interchangeable jaw protector
- For screw fittings up to max. Ø 60 mm
- Smooth, parallel adjustment jaws
- For mild assembly
- Infinitely variable
- Matt chrome
- Chrome vanadium

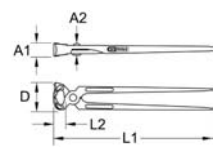


Item	A mm	B mm	L mm	Replacement jaws	
116.1002	0 - 60,0	47.0	265.0	116.1003	550

WIRE PROCESSING PLIERS

Bodywork end pincers

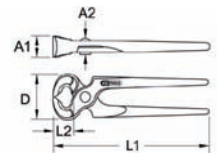
- In accordance with DIN 5173
- Polished head
- Ideal suitable for bodywork
- With horse shoe nail head
- Oil-hardened
- Cutting-hardness approximately 55 HRC
- Black surface
- Special tool steel



Item	A1 mm	A2 mm	D mm	L1 mm	L2 mm	
116.1415	22.0	25.0	49.0	300.0	20.0	785

Rabbit pliers

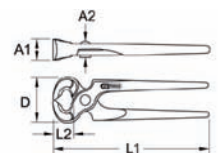
- In accordance to DIN / ISO 9242
- With PVC dipped handle
- Ground heads
- For cutting and twisting tie wire
- Oil-hardened
- Black surface
- Special tool steel



Item	A1 mm	A2 mm	D mm	L1 mm	L2 mm	
116.1404	18.0	19.0	26.0	190.0	17.0	350
116.1401	20.0	19.0	29.0	220.0	17.0	400
116.1400	25.0	20.0	36.0	250.0	17.0	400
116.1403	26.0	20.0	37.0	280.0	17.0	500

Heavy pincers

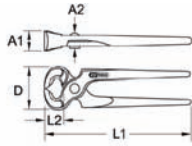
- In accordance to DIN / ISO 9243
- With PVC dipped handle
- Ground heads
- For heavy applications
- Oil-hardened
- Black surface
- Special tool steel



Item	A1 mm	A2 mm	D mm	L1 mm	L2 mm	
116.1300	24.0	23.0	52.0	200.0	23.0	410

Self opening rabbitz pliers

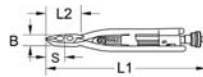
- In accordance to DIN / ISO 9242
- With PVC dipped handle
- Ground heads
- Self-opening handle with internal spring
- For cutting and twisting tie wire
- Oil-hardened
- Black surface
- Special tool steel



Item	A1 mm	A2 mm	D mm	L1 mm	L2 mm	
116.1411	23.0	20.0	30.0	220.0	17.0	400
116.1410	27.0	22.0	36.0	250.0	19.0	400
116.1412	25.0	21.0	35.0	280.0	18.0	400

Wire twisting pliers

- Anticlockwise
- Serrated execution
- 30° angled jaws
- With additional cutting
- Enables precise, in seconds wire twisting
- Suitable for wire up to 1,0 mm
- Narrow nose for optimal mobility
- Burnished
- Special tool steel



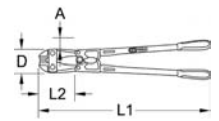
Item	B mm	L1 mm	L2 mm	S mm	
116.1301	10.0	215.0	40.0	10,0	230
116.1302	12.0	265.0	60.0	13,0	360



BOLT CUTTERS

Bolt cutters

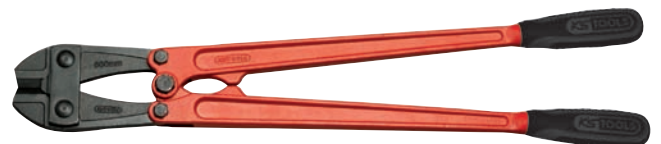
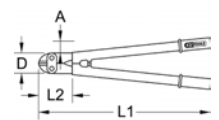
- With pipe handle
- With steel tube legs and eccentric adjustment
- With interchangeable cutter head
- Cutter head made of high quality special steel
- Inductively hardened precision cutting edges
- Phosphate finish
- Special tool steel



Item	A mm	D mm	L1 mm	L2 mm	Replacement cutter head	
118.0118	20.0	65.0	450.0	115.0	118.0119	1.50
118.0124	22.0	85.0	600.0	136.0	118.0125	2.50
118.0130	27.0	95.0	750.0	155.0	118.0131	4.88
118.0136	35.0	110.0	900.0	170.0	118.0137	6.70
118.0142	40.0	120.0	1050.0	195.0	118.0143	6.70

Bolt cutters

- With forged arms
- With steel tube legs and eccentric adjustment
- With interchangeable cutter head
- Cutter head made of high quality special steel
- Inductively hardened precision cutting edges
- Phosphate finish
- Special tool steel



Item	A mm	D mm	L1 mm	L2 mm	Replacement cutter head	
118.0218	20.0	65.0	460.0	120.0	118.0119	2.60
118.0224	25.0	82.0	610.0	135.0	118.0125	2.90
118.0230	30.0	65.0	760.0	155.0	118.0131	3.20
118.0236	35.0	110.0	900.0	170.0	118.0137	5.40

Bolt cutter display

- With steel tube legs and eccentric adjustment
- With interchangeable cutter head
- Cutter head made of high quality special steel
- Inductively hardened precision cutting edges
- Phosphate finish
- Special tool steel
- In display stand



Item	
118.0024 25 pcs Bolt cutter display	62.02
12 x 2 x 460 - 4 x 610 - 4 x 760 - 2 x 900 mm	
12 x 2 x 460 - 4 x 610 - 4 x 760 - 2 x 900 mm	

Bolt cutter display

- With steel tube legs and eccentric adjustment
- With interchangeable cutter head
- Cutter head made of high quality special steel
- Inductively hardened precision cutting edges
- Phosphate finish
- Special tool steel
- In display stand



Item			kg
118.0028	29 pcs	Bolt cutter display	79.02
8 x		1 x 450 - 2 x 600 - 2 x 750 - 2 x 900 - 1 x 1050 mm	
8 x		1 x 450 - 2 x 600 - 2 x 750 - 2 x 900 - 1 x 1050 mm	
6 x		1 x 460 - 2 x 610 - 2 x 760 - 1 x 900 mm	
6 x		1 x 460 - 2 x 610 - 2 x 760 - 1 x 900 mm	

Bolt cutter display

- With steel tube legs and eccentric adjustment
- With interchangeable cutter head
- Cutter head made of high quality special steel
- Inductively hardened precision cutting edges
- Phosphate finish
- Special tool steel
- In display stand

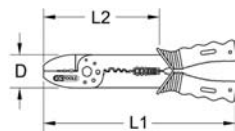


Item			kg
118.0032	37 pcs	Bolt cutter display	96.16
16 x		2 x 450 - 4 x 600 - 4 x 750 - 4 x 900 - 2 x 1050 mm	
16 x		2 x 450 - 4 x 600 - 4 x 750 - 4 x 900 - 2 x 1050 mm	

CRIMPING PLIERS

Multifunction pliers for insulated and non insulated cable terminals

- For cable cutting and stripping of wires from 0,75 - 6,0 mm²
- For crimping cable lugs and connectors of 1,5 - 6,0 mm²
- With shearing function
- With two component handle
- Plier body made of flat steel



Item	D mm	L1 mm	L2 mm	kg
115.1231	40.0	220.0	130.0	230

Multifunction crimping plier set

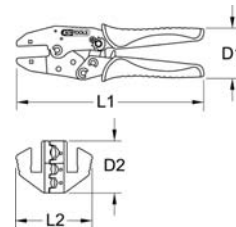
- For insulated and un-insulated cable terminals
- Includes 270 pcs consumables
- For cable cutting and stripping wires from 0,75 - 6,0 mm²
- For crimping cable terminals and connectors from 1,5 - 6,0 mm²
- With shearing function
- With two component handle
- Plier body made of flat steel
- In durable plastic storage case



Item			kg
115.1230	271 pcs	Multifunction crimping plier set	560

Crimping pliers for non insulated terminals

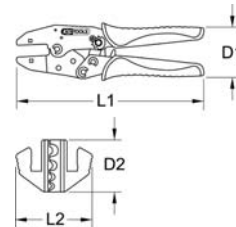
- Extremely robust and reliable
- With safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profile
- With ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- With two component handle
- Burnished
- Plier body made of flat steel



Item	σ mm ²	AWG	D1 mm	D2 mm	L1 mm	L2 mm	kg
115.1425	0,5-1,0 / 1,5-2,5 / 4,0-6,0	22-18 / 16-14 / 12-10	52.0	34.0	220.0	50.0	115.1415 491

Crimping pliers for insulated terminals

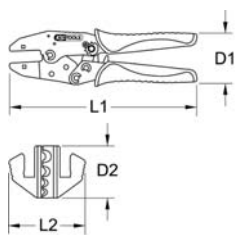
- Extremely robust and reliable
- With safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profile
- With ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- With two component handle
- Burnished
- Plier body made of flat steel



Item	σ mm ²	AWG	D1 mm	D2 mm	L1 mm	L2 mm	kg
115.1430	1,5 / 2,5 / 6,0 / 10,0	20-18 / 16-14 / 12-10 / 8	52.0	34.0	220.0	50.0	115.1416 487

Crimping pliers for pin terminals

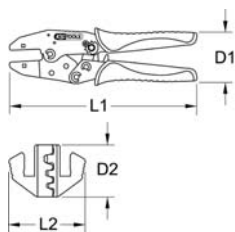
- Extremely robust and reliable
- With safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profile
- With ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- With two component handle
- Burnished
- Plier body made of flat steel



Item	Ø mm ²	AWG	D1 mm	D2 mm	L1 mm	L2 mm		
115.1440	0,5 / 0,75 / 1,0 / 1,5 / 2,5 / 4,0	22 / 20 / 18 / 16-14 / 12-10	52.0	34.0	220.0	50.0	115.1418	499
115.1450	6,0 / 10,0 / 16,0	10 / 8 / 6	52.0	34.0	220.0	50.0	115.1420	499

Crimping pliers for spade terminals

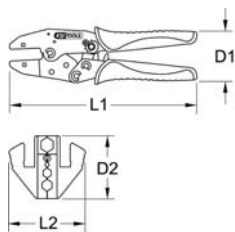
- Extremely robust and reliable
- With safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profile
- With ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- With two component handle
- Burnished
- Plier body made of flat steel



Item	Ø mm ²	AWG	D1 mm	D2 mm	L1 mm	L2 mm		
115.1435	0,5-1,0 / 1,5-2,5 / 4,0-6,0	20-18 / 16-14 / 12-10	52.0	34.0	220.0	50.0	115.1417	499
115.1455	2,5 / 0,5 / 8,0 / 10,0	14-22 / 8-6	52.0	34.0	220.0	50.0	115.1421	505

Crimping pliers for coaxial terminals

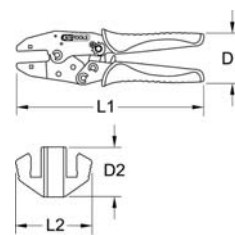
- Extremely robust and reliable
- With safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profile
- With ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- With two component handle
- Burnished
- Plier body made of flat steel



Item	Ø mm ²	AWG	D1 mm	D2 mm	L1 mm	L2 mm		
115.1445	1,72 / 2,50 / 5,40 / 6,48 / 8,23	RG58, RG59, RG62	52.0	34.0	220.0	50.0	115.1419	491

Crimping pliers for Western terminals

- Extremely robust and reliable
- With safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profile
- With ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- With two component handle
- Burnished
- Plier body made of flat steel



Item	Ø mm ²	AWG	D1 mm	D2 mm	L1 mm	L2 mm		
115.1460	RJ22	22-24	52.0	34.0	220.0	50.0	115.1422	500
115.1465	RJ11 / RJ12	22-24	52.0	34.0	220.0	50.0	115.1423	505
115.1470	RJ45	22-24	52.0	34.0	220.0	50.0	115.1424	505

Electricians crimping plier set

- Ideal configuration for electricians
- Extremely robust and reliable
- With safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profile
- With ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- In durable plastic storage case
- With two component handle
- Burnished
- Plier body made of flat steel



Item	
115.1480	3 pcs Electricians crimping plier set 910
1 x	220 mm
1 x	Ø 0,5 - 4,0 mm, H
1 x	Ø 1,5 - 10,0 mm, B



Net working crimping plier set

- Ideal configuration for network cabling
- Extremely robust and reliable
- With safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profile
- With ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- In durable plastic storage case
- With two component handle
- Burnished
- Plier body made of flat steel



Item			kg
115.1490	5 pcs	Net working crimping plier set	1.05

1 x		220 mm
1 x		AWG: 22 - 14 - 6 - 8, H
1 x		AWG: 22 - 24, G1
1 x		AWG: 22 - 24, G2
1 x		AWG: 22 - 24, G3

Universal crimping tool set with automatic wire stripper

- Extremely robust and reliable crimping plier
- With safety lock
- Inserts lock and to they click to prevent possible misuse
- Optimal crimping through precision profile
- With ratchet function
- Adjustment of the crimping pressure
- Easy to change the crimp heads through quick locking device
- In durable plastic storage case
- With two component handle
- Burnished
- Plier body made of flat steel
- Includes self-closing and damage free automatic wire stripper



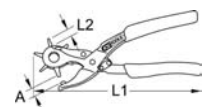
Item			kg
115.1400	8 pcs	Universal crimping tool set with automatic wire stripper	2.37

1 x		220 mm
1 x		Ø 0,5 - 4,0 mm, H
1 x		Ø 1,5 - 10,0 mm, B
1 x		Ø 0,5 - 6,0 mm, C
1 x		Ø 0,5 - 4,0 mm, D
1 x		RG 58 - RG 71, E
1 x		1,0 - 3,2 mm
1 x		

REVOLVING PUNCH PLIERS

Revolving punch pliers

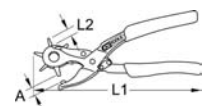
- With an ergonomic, molded handle
- With inspection panel
- Automatic locking device
- Interchangeable hole punches
- Nickel plated
- Chrome vanadium



Item	A mm	L1 mm	L2 mm	kg
118.0041	15.0	220.0	10.0	325

Revolving punch and eyelet pliers

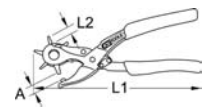
- Ideal for working with eyelets
- With an ergonomic, molded handle
- With inspection panel
- Automatic locking device
- Interchangeable hole punches
- Nickel plated
- Chrome vanadium



Item	A mm	L1 mm	L2 mm	kg
118.0042	18.0	220.0	10.0	325

Revolving punch pliers, normal hand

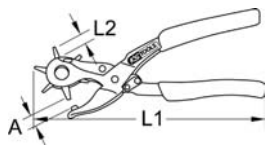
- Up to 70% power savings
- With an ergonomic, molded handle
- With inspection panel
- Automatic locking device
- Interchangeable hole punches
- Nickel plated
- Chrome vanadium



Item	A mm	L1 mm	L2 mm	kg
118.0043	15.0	250.0	10.0	430

Revolving punch pliers, heavy duty

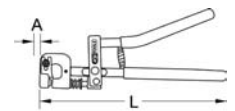
- Extremely heavy duty execution
- With ergonomic handle
- With inspection panel
- Automatic locking device
- Interchangeable hole punches
- Chrome vanadium



Item	A mm	L1 mm	L2 mm	kg
118.0044	20.0	220.0	15.0	480

Joggler pliers

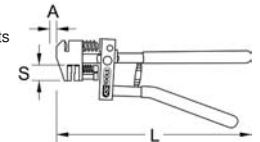
- Self opening
- For punching straight and bent sheet metal
- Up to 1,25 mm thickness
- Radius to 40,0 mm
- Hole diameter 5 mm
- Requires light expenditure of energy
- Special tool steel



Item	A mm	L mm	kg
118.0057	15.0	300.0	1.00

Punched hole and Joggler pliers

- Self opening
- Fast conversion by simply turning the head
- For the flanging and punching sheet metal and body parts
- Punching up to 1,25 mm thickness
- Hole diameter 5 mm
- Requires light expenditure of energy
- Special tool steel

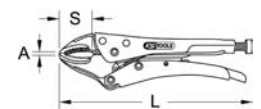


Item	A mm	L mm	S mm	kg
118.0055	22.0	285.0	13,0	1.23

LOCKING PLIERS

Locking pliers

- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With quick-release lever
- With easy locking action
- For round and flat material
- To hold when welding
- Nickel plated
- Chrome vanadium

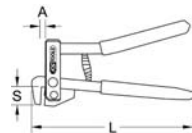


Item	A mm	L mm	S mm	kg
115.1031	0,0-50,0	125.0	19,3	180
115.1032	0,0-55,0	175.0	24,0	340
115.1033	0,0-60,0	250.0	27,5	520

JOGLLER PLIERS

Mini Joggler pliers

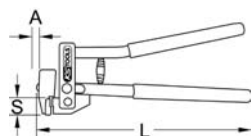
- Self opening
- For the flanging of sheet metal and body parts
- Up to 1 mm thickness
- Particularly suitable for thin sheet metal edges, curves and arches
- Requires light expenditure of energy
- Hardened flanging jaws
- Special tool steel



Item	A mm	L mm	S mm	kg
118.0056	10.0	220.0	13,0	900

Joggler pliers

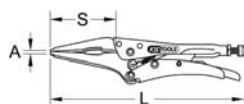
- Self opening
- For the flanging of sheet metal and body parts
- Up to 1 mm thickness
- Requires light expenditure of energy
- Hardened flanging jaws
- Special tool steel



Item	A mm	L mm	S mm	kg
118.0058	13.0	280.0	13,0	1.00

Long nose locking pliers

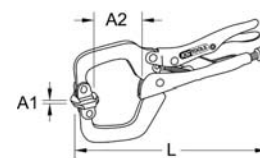
- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- With quick-release lever
- With easy locking action
- For round and flat material
- To hold when welding
- Nickel plated
- Chrome molybdenum



Item	A mm	L mm	S mm	
115.1034	0,0-35,0	150,0	45,0	180
115.1035	0,0-45,0	225,0	65,0	340

Welding clamp gripping pliers with movable clamping jaws

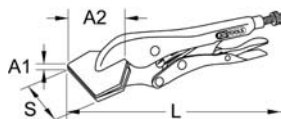
- Flat gripping jaws
- Movable clamping jaws
- With quick-release lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Good adaptation to existing surfaces
- Nickel plated
- Chrome molybdenum



Item	A1 mm	A2 mm	L mm	
115.1073	0,0-35,0	40,0	170,0	240

Wide jaw flat jaw gripping pliers

- Forged gripping jaws
- With quick-release lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For clamping of flat or bended metal sheets
- Nickel plated
- Chrome molybdenum



Item	A1 mm	A2 mm	L mm	S mm	
115.1076	0,0-53,0	40,0	205,0	90,0	480
115.1077	0,0-57,0	45,0	245,0	100,0	650

Welding clamp gripping pliers, extra long

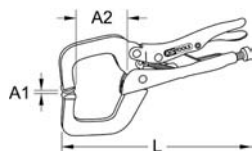
- Round forged gripping jaws
- With quick-release lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Large clamping depth for front and rear panels
- Good adaptation to existing surfaces
- Nickel plated
- Chrome molybdenum



Item	A1 mm	A2 mm	L mm	
115.1072	0,0-270,0	250,0	450,0	1.18

Welding clamping gripping pliers

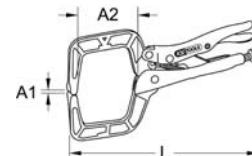
- Forged semi-circular gripping jaws
- With quick-release lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Good adaptation to existing surfaces
- Nickel plated
- Chrome molybdenum



Item	A1 mm	A2 mm	L mm	
115.1070	0,0-35,0	40,0	170,0	240

Welding clamping gripping pliers

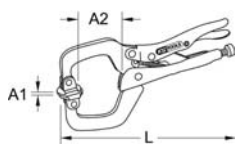
- Very good clamping capacity
- Round forged gripping jaws
- With quick-release lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Good adaptation to existing surfaces
- Nickel plated
- Chrome molybdenum



Item	A1 mm	A2 mm	L mm	
115.1071	0,0-100,0	90,0	285,0	780

Welding clamp gripping pliers with movable clamping jaws

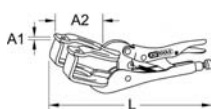
- Flat gripping jaws
- Movable clamping jaws
- With quick-release lever
- With easy locking action
- Size adjustment using the adjustment wheel
- For profiled bulky components
- Good adaptation to existing surfaces
- Nickel plated
- Chrome molybdenum



Item	A1 mm	A2 mm	L mm	Weight
115.1074	0,0-100,0	70.0	285.0	780
115.1075	0,0-270,0	240.0	450.0	1250

Welding gripping pliers

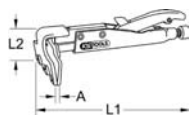
- With malleable cast iron jaws
- Suitable for setting the welding points between the cut outs
- With quick-release lever
- Size adjustment using the adjustment wheel
- To hold and adjust sheets and profiles
- With easy locking action
- Nickel plated
- Chrome molybdenum



Item	A1 mm	A2 mm	L mm	Weight
115.1078	0,0-45,0	70.0	220.0	600
115.1079	0,0-55,0	70.0	280.0	780

Welding gripping pliers

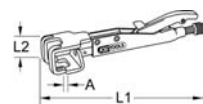
- For applications that need a straight jaw
- Jaws from special steel
- With easy locking action
- With quick-release lever
- Size adjustment using the adjustment wheel
- Ideal for spot welding
- Nickel plated handle
- Chrome molybdenum



Item	A mm	L1 mm	L2 mm	Weight
115.1080	0,0-20,0	205.0	56.0	548

Welding gripping pliers

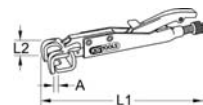
- For applications that required double curved jaws
- Jaws from special steel
- With easy locking action
- With quick-release lever
- Size adjustment using the adjustment wheel
- Ideal for fitting and mounting of body parts
- Nickel plated handle
- Chrome molybdenum



Item	A mm	L1 mm	L2 mm	Weight
115.1081	0,0-20,0	230.0	39.0	548

Welding gripping pliers

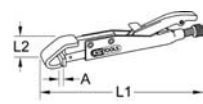
- For applications that required double curved jaws
- Jaws from special steel
- With easy locking action
- With quick-release lever
- Size adjustment using the adjustment wheel
- For welding of the hole between the panels
- Also suitable for U-profile
- Nickel plated handle
- Chrome molybdenum



Item	A mm	L1 mm	L2 mm	Weight
115.1082	0,0-15,0	215.0	26.0	548

Welding gripping pliers

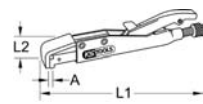
- For applications that need a angled jaw
- Jaws from special steel
- With easy locking action
- With quick-release lever
- Size adjustment using the adjustment wheel
- Ideal for welding in the fold
- Also suitable for U-profile
- Nickel plated handle
- Chrome molybdenum



Item	A mm	L1 mm	L2 mm	Weight
115.1083	0,0-20,0	210.0	30.0	548

Welding gripping pliers

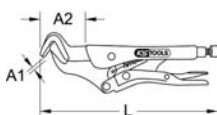
- For applications that need a straight jaw
- Slim design
- Jaws from special steel
- With easy locking action
- With quick-release lever
- Size adjustment using the adjustment wheel
- For right-angled terminals in the fold
- For difficult to access areas
- Nickel plated handle
- Chrome molybdenum



Item	A mm	L1 mm	L2 mm	Weight
115.1084	0,0-16,0	210.0	30.0	548

Automotive Welding gripping pliers

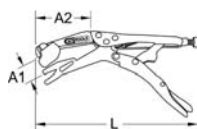
- Forged gripping jaws
- Serrated execution
- With quick-release lever
- With easy locking action
- For flanged material
- To hold when welding
- Nickel plated
- Chrome molybdenum



Item	A1 mm	A2 mm	L mm	Weight
115.1068	0,0-40,0	60,0	200,0	400

Welding gripping pliers

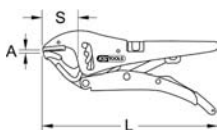
- Flat gripping jaws
- Movable clamping jaws
- Serrated execution
- No sticking to the electrode
- With quick-release lever
- With easy locking action
- Good adaptation to existing surfaces
- Copper alloy clamping jaws
- Nickel plated handle
- Chrome molybdenum



Item	A1 mm	A2 mm	L mm	Weight
115.1180	0,0-70,0	85,0	240,0	500

Locking pliers, serrated

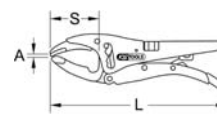
- Forged gripping jaws
- Serrated execution
- With quick-release lever
- Size adjustment using the adjustment wheel
- For round and flat material
- To hold when welding
- Nickel plated
- Chrome vanadium



Item	A mm	L mm	S mm	Weight
115.1036	0,0-55,0	250,0	40,0	670

Locking pliers, serrated

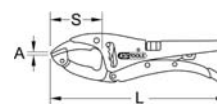
- Forged gripping jaws
- Serrated execution
- With quick-release lever
- Size adjustment using the adjustment wheel
- For round and flat material
- To hold when welding
- Nickel plated
- Chrome vanadium



Item	A mm	L mm	S mm	Weight
115.1037	0,0-85,0	250,0	60,0	800

Locking pliers, serrated

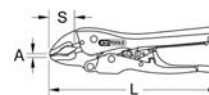
- Forged gripping jaws
- Movable clamping jaws
- Serrated execution
- With quick-release lever
- Size adjustment using the adjustment wheel
- For round and flat material
- To hold when welding
- Nickel plated
- Chrome vanadium



Item	A mm	L mm	S mm	Weight
115.1038	0,0-85,0	250,0	60,0	800

Automatic locking pliers

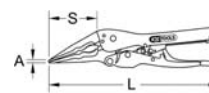
- Forged gripping jaws
- Automatic adjustment by cam mechanism
- Serrated execution
- With quick-release lever
- For round and flat material
- With heavy but controlled clamping
- To hold when welding
- Knurled handle
- Nickel plated
- Chrome vanadium



Item	A mm	L mm	S mm	Weight
115.1150	0,0-32,0	125,0	22,0	250
115.1155	0,0-47,0	250,0	29,0	620

Automatic long nosed locking pliers

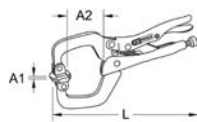
- Forged gripping jaws
- Automatic adjustment by cam mechanism
- Serrated execution
- With quick-release lever
- With heavy but controlled clamping
- For round and flat material
- To hold when welding
- Knurled handle
- Nickel plated
- Chrome molybdenum



Item	A mm	L mm	S mm	Weight
115.1160	0,0-51,0	175,0	55,0	260

Automatic clamping gripping pliers

- Flat gripping jaws
- Movable clamping jaws
- Automatic adjustment by cam mechanism
- With quick-release lever
- With heavy but controlled clamping
- For round and flat material
- For profiled bulky components
- Good adaptation to existing surfaces
- Knurled handle
- Nickel plated
- Chrome molybdenum



Item	A1 mm	A2 mm	L mm	Weight
115.1165	0,0-68,0	55,0	175,0	330
115.1170	0,0-90,0	90,0	275,0	650

Special clamping gripping pliers

- For the cutting of plastic pipes
- Enormous time and costs saving
- Suitable for narrow hard to access areas
- Versatile use

Application range: Mercedes Benz, MAN, DAF, Iveco, Volvo, Scania, Renault etc.



Item	Quantity	Ø mm	Weight
450.0350	1	8 / 9 / 10 / 11 / 12	775
450.0351	2	7 / 9 / 10 / 12 / 14	775
450.0352	3	15 / 16 / 18	636

Hose clamp pliers

- Work side
- For compressing locking hose clips
- With PVC dipped handle
- Chrome vanadium



Item	L mm	Weight
115.1185	240,0	335

Hose clamp pliers with prism reception

- For self-tensioning hose clamps with flat 3-terminal ends
- In particular for fuel lines, cooling and washing water hoses
- With prism reception
- Self opening
- Surface nickel-plated
- Special steel

Application range: VW, Audi, Mercedes Benz, Toyota etc.



Item	Clamping range mm	L mm	Weight
115.1187	8-18	195,0	170

Hose clamp pliers with swivel prism reception

- For self-tensioning hose clamps with flat 3-terminal ends
- In particular for fuel lines, cooling and washing water hoses
- With swivel prism reception
- Self opening
- Surface nickel-plated
- Special steel

Application range: VW, Audi, Mercedes Benz, Toyota etc.



Item	Clamping range mm	L mm	Weight
115.1188	8-18	210,0	200,0

Exhaust rubber unhooking tool

- For removal of rubber exhaust holders
- A 25° angle
- For all common vehicle types
- Plastic coated handle
- Chrome vanadium



Item	L mm	Weight
150.1245	280,0	345

Hose strap cutter, angled

- To be sliced from earless hose clamps
- For connections on axle boots, coolers and fuel hoses
- With dipped covered handle
- Chrome vanadium



Item	L mm	Weight
115.1186	220,0	345

Piston ring pliers

- For the removal and replacement of piston rings
- Suitable for most cars and vans
- Plastic coated handle
- Self-closing pliers
- Special steel



Item	L mm	Weight
150.1179	221,0	210

Brake spring pliers

- For the disassembly and assembly of hand brake cables
- Allows a safe working environment
- Chrome vanadium

Application range VW, Audi, BMW, Citroën, Nissan, Peugeot, Renault, Rover, Seat etc.



Item	L mm	
150.2118	225.0	175

Car brake spring pliers

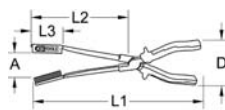
- For attaching and dismantling the brake shoes retaining spring
- For glued and riveted brake shoes
- With special surround
- Chrome vanadium



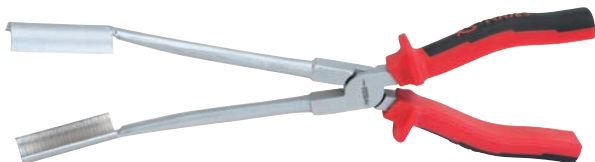
Item	A mm	L mm	
150.2116	130.0	220.0	340

Spark plug pliers

- Long, angular gripper sleeves
- Gripping sleeves with milled inner profile
- Long plier arms
- Wide safety margin to the hot assembly
- For extracting low-lying spark plugs
- With two component handle
- Chrome vanadium



Application range: Audi V6 / V8 engine and Jaguar 12-cylinder.

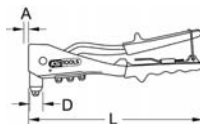


Item	A mm	D mm	L1 mm	L2 mm	L3 mm	
500.7510	0,0-80,0	65.0	290.0	145.0	50.0	280

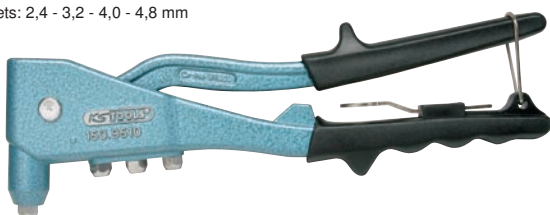
RIVETING PLIERS

Standard hand rivetting tool

- Suitable for blind rivets
- Including four interchangeable mouthpieces
- Magazine and key in the riveter body
- Narrow head pliers
- With safety lock on the handle end
- With rubber grip
- Die-cast metal body



Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm



Item	A mm	D mm	L mm	
150.9510	24.0	21.0	270.0	920

Standard hand rivetting tool set

- Suitable for blind rivets
- Four interchangeable mouthpieces
- Magazine and key in the riveter body
- Includes 200 blind rivets
- With rubber grip
- Die-cast metal body

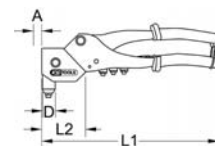
Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm



Item	
150.9520	205 pcs Standard hand rivetting tool set 1.25

Hand rivet tool

- Suitable for blind rivets
- 360° rotating head
- For difficult to access areas
- Narrow head pliers
- With safety lock on the handle end
- Including four interchangeable mouthpieces
- Die-cast metal body



Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm



Item	A mm	D mm	L1 mm	L2 mm	
150.9540	27.0	21.0	290.0	70.0	870

Universal hand riveting tool set

- Suitable for blind rivets and blind rivet nuts
- 360° rotating head
- For difficult to access areas
- Four interchangeable mouthpieces and nut rivet pulling inserts
- Die-cast metal body

Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm

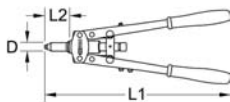
Rivet nuts: M3 - M4 - M5 - M6



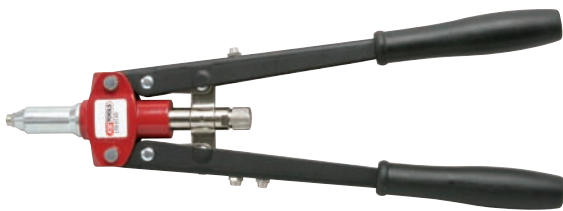
Item	
150.9610	10 pcs Universal hand riveting tool set 1.96

Long arm hand rivetting tool

- Suitable for blind rivets
- Including four interchangeable mouthpieces
- Extra long lever arms
- High power transmission
- Magazine and key in the riveter body
- With rubber grip
- Die-cast metal body



Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm



Item	D mm	L1 mm	L2 mm	
150.9530	21.0	410.0	59.0	1.50

Universal riveting tool set

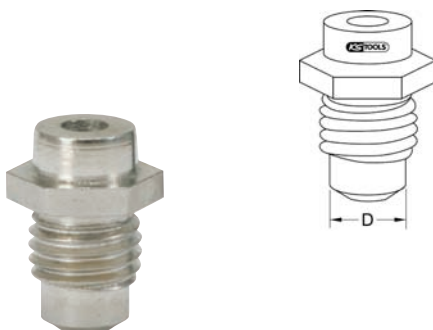
- Suitable for blind rivets and blind rivet nuts
- Retractable legs for increased power consumption
- Mouthpiece magazine intergrated in the handle
- With two component handle
- Die-cast metal body

Blind rivets: 2,4 - 3,2 - 4,0 - 4,8 mm
Rivet nuts: M3 - M4 - M5 - M6



Item	
150.9630	11 pcs Universal riveting tool set 2.67

Mouthpieces for riveting



Item	D mm	Suitable for	
150.9570	2.4	150.9610+150.9630	10
150.9571	3.2	150.9610+150.9630	10
150.9572	4.0	150.9610+150.9630	10
150.9573	4.8	150.9610+150.9630	10
150.9574	5.0	150.9610+150.9630	10
150.9575	6.4	150.9610+150.9630	10

Replacement jaws for gripping rivet



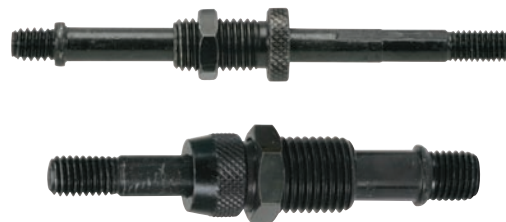
Item	Suitable for	
150.9578	150.9610	10
150.9579	150.9630	10

Rivet head



Item	Suitable for	
150.9620	150.9610	160

Rivet nut pulling spindle for riveting tools



Item		Suitable for	
150.9613	M3	150.9610	30
150.9614	M4	150.9610	30
150.9615	M5	150.9610	30
150.9616	M6	150.9610	30
150.9634	M4	150.9630	40
150.9635	M5	150.9630	40
150.9636	M6	150.9630	40
150.9638	M8	150.9630	70
150.9640	M10	150.9630	70

Replacement rivet heads for rivet tools



Item	Suitable for	
150.9611	150.9610	60
150.9631	150.9630	100
150.9632	150.9630	40

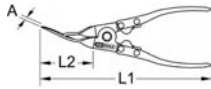
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- i



AUTOMOTIVE CLIP REMOVAL PLIERS

Door panel rivet tool

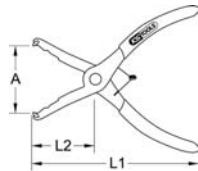
- For the gentle release of clips of all kinds on the entire vehicle
- Through the gentle release of the clips can be reused
- Self-closing
- With spring clip
- Head burnished
- Chrome vanadium



Item	A mm	L1 mm	L2 mm	Weight
115.1051	32.0	240.0	80.0	240

Trim clip pliers

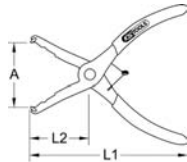
- 35° angled tips
- With various profiles
- For the removal of re-usable plastic rivets and clips
- Self opening
- Chrome vanadium



Item	A mm	L1 mm	L2 mm	Weight
115.1087	0,0-82,0	190.0	60.0	180

Trim clip pliers

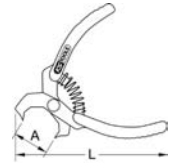
- 80° angled tips
- With various profiles
- For the removal of re-usable plastic rivets and clips
- Self opening
- Chrome vanadium



Item	A mm	L1 mm	L2 mm	Weight
115.1088	0,0-72,0	200.0	66.0	190

Rivet removal pliers, offset

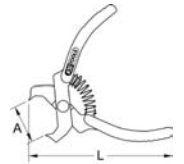
- For the removal of two piece plastic rivets
- Self opening
- Plastic



Item	A mm	L mm	Weight
115.1097	0,0-28,0	100.0	20

Rivet removal tool

- For the removal of two piece plastic rivets
- Self opening
- Plastic

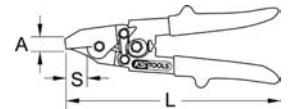


Item	A mm	L mm	Weight
115.1098	0,0-20,0	100.0	20

WINDSCREEN PLIERS

Cartridge tip pliers

- With PVC dipped handle
- Very versatile
- With safety locking device
- Clean V-cut in the cartridge tip
- Cut from solid steel
- Chrome vanadium

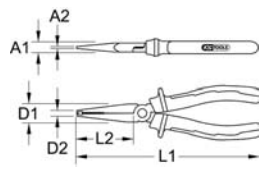


Item	A mm	L mm	S mm	Weight
140.2220	33.0	210.0	20.0	420

WHEELS & TYRES PLIERS

Wheel nut cap pliers

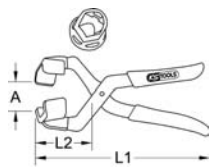
- For the disassembly and assembly of nut caps
- With two component handle
- Easy removal due to the special mouth pliers
- Chrome vanadium



Item	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
150.2023	0,0-11,5	6.5	20.0	7.0	200.0	64.0	260

Commercial vehicle wheel nut cap pliers

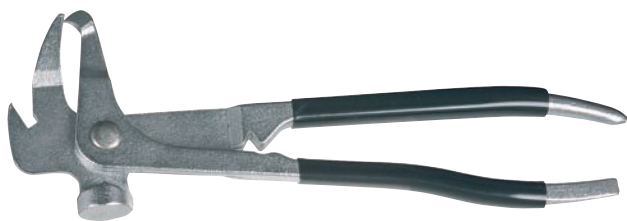
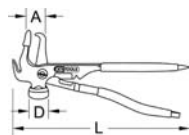
- With PVC dipped handle
- For removing of wheel nut caps
- No slipping through specially coated jaws
- Ideally suited for commercial vehicles
- Special tool steel



Item	A mm	L1 mm	L2 mm	Weight
150.1995	28,0-60,0	250.0	72.0	305

Wheel balance weight pliers

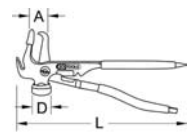
- With dipped covered handles
- For cutting off the balance weights
- For cutting off the balance weights
- With additional function for opening and closing the spring clips
- Chrome vanadium



Item	A mm	D mm	L mm	Weight
150.2025	26.0	22.0	250.0	450

Wheel balance weight pliers, self opening

- With dipped covered handles
- For cutting off the balance weights
- For cutting off the balance weights
- Pliers and Hammer plastic covered
- Suitable for alloy wheels
- With additional function for opening and closing the spring clips
- Chrome vanadium

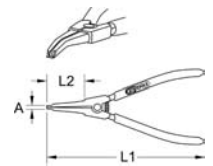


Item	A mm	D mm	L mm	Weight
150.2024	32.0	28.0	250.0	380

CHASSIS & BRAKE PLIERS

Drive shaft removal pliers

- 30° angled
- With PVC dipped handle
- Self-closing
- Plier head with cut out and ring stop body
- For the disassembly and assembly of nut caps without lug retainer
- Chrome vanadium



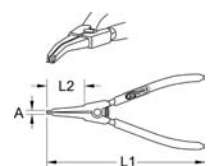
Application range: For the dismantling of the external (bellow joints in the exchange of the axle boots and / or the drive shaft sleeves.) e.g.: for Audi, Opel, VW (Golf, T4), Fiat, Mitsubishi.



Item	A mm	L1 mm	L2 mm	Weight
115.0991	0,0-33,0	210.0	50.0	215

Drive shaft removal pliers

- Slightly angled
- With PVC dipped handle
- Self-closing
- Checkered plier head
- For the disassembly and assembly of drive shaft circlips without lug retainer
- Slip proof
- Chrome vanadium



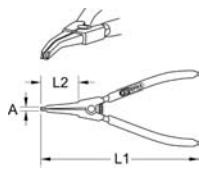
Application range: For the removal of external circlips e.g. on synchronisation joints



Item	A mm	L1 mm	L2 mm	Weight
115.0992	0,0-37,0	210.0	50.0	220

Drive shaft removal pliers

- Straight form
- With PVC dipped handle
- Self-closing
- Checkered plier head
- For the disassembly and assembly of drive shaft circlips without lug retainer
- Slip proof
- Chrome vanadium



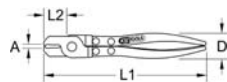
Application range: For the removal of external circlips e.g. on drive shafts, transmissions, etc



Item	A mm	L1 mm	L2 mm	Weight
115.0993	0,0-37,0	210,0	48,0	220

Ear type hose clamp pliers

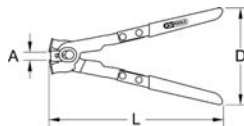
- Knurled handle
- To the dismantling and assembly of „ear type“ hose clamp
- For connections on axle boots, coolers and fuel hoses
- Universal usage
- Chrome molybdenum



Item	A mm	D mm	L1 mm	L2 mm	Weight
115.1039	0,0-60,0	36,0	230,0	25,0	320

Hose clamp pliers, ear type

- With PVC dipped handle
- For the fitting of ear clamps
- No sticking up of the ears during the press process
- Uniform compressing of the ear piece
- No damage of the sleeve
- Nickel plated execution
- Chrome molybdenum



Ideally suitable for axle boots, radiators and fuel pipes on models from VW, Audi, Opel, BMW, Mercedes Benz, Honda, Nissan and Mazda.

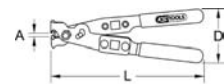


Item	A mm	D mm	L mm	Weight
115.1050	0,0-22,0	40,0	260,0	380



O clip hose clamp pliers

- With PVC dipped handle
- With 3/8" drive for use with a torque wrench
- For the fitting and clamping of ear clamps
- 1/2" 4-point recess in the handle for additional use with a torque wrench
- Chrome molybdenum



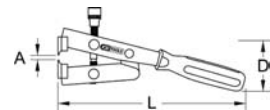
Ideally suitable for VW, Opel, Seat, GM, Ford, Nissan, Mercedes, Mazda, Honda, Chrysler, BMW and Audi.



Item	A mm	D mm	L mm	Weight
115.1053	0,0-17,0	45,0	240,0	540

Hose clamp pliers with for torque wrench

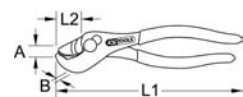
- With black plastic handle
- With 3/8" drive for use with a torque wrench
- Enables clamping and/or copressing of the hose clamps
- Suitable for the stainless steel hose clamps on drive shafts
- Very light and robust aluminium construction



Item	A mm	D mm	L mm	Weight
115.1056	0,0-45,0	31,0	270,0	570

Special pipe wrench

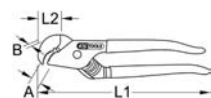
- 2-stage adjustment
- With PVC dipped handle
- Ideal for round turned pipe fittings
- Polished surface
- Chrome vanadium



Item	A mm	B mm	L1 mm	L2 mm	Weight
115.1361	0,0-16,0	7,0	178,0	23,0	180

Special pipe wrench

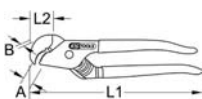
- 4-stage industrial adjustment
- With PVC dipped handle
- Optimum power transfer
- With grooved handle adjustment
- Polished surface
- Ideally suited for twisting both thrust and track rods
- Usably on axle joints and exhaust pipes
- Chrome vanadium



Item	A mm	B mm	L1 mm	L2 mm	Weight
115.1362	0,0-30,0	12,0	242,0	30,0	470

Special pipe wrench

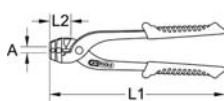
- 6-stage industrial adjustment
- With PVC dipped handle
- Optimum power transfer
- With grooved handle adjustment
- Polished surface
- Ideally suited for twisting both thrust and track rods
- Usably on axle joints and exhaust pipes
- Chrome vanadium



Item	A mm	B mm	L1 mm	L2 mm	kg
115.1363	0,0-51,0	15,0	345,0	41,0	1,10

Brake pipe bending pliers, 2 in 1

- For 4,75 and 6,00 mm brake pipes
- With plastic handle
- Ideally suitable for bending pipes directly
- Suitable for copper, steel, and plastic coated brake pipes
- Burnished
- Special tool steel



Item	A mm	L1 mm	L2 mm	kg
120.2000	0,0-27,5	240,0	37,0	400

Car brake spring pliers

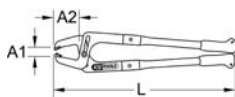
- For attaching and dismantling the brake shoes retaining spring
- For glued and riveted brake shoes
- With special surround
- Chrome vanadium



Item	A mm	L mm	kg
150.2211	130,0	325,0	335

Grease cap pliers

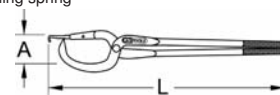
- With hard rubber handle
- For the damage-free drawing-off of grease caps
- 2x6-moveable adjustable steps
- Wedge-shaped jaw profile
- Head burnished
- Special tool steel



Item	A1 mm	A2 mm	L mm	kg
450.0210	0,0-100,0	85,0	500,0	1,20

Truck brake spring pliers

- For attaching and dismantling the brake shoes retaining spring
- For glued and riveted brake shoes
- With special surround
- With interchangeable tip
- Knurled handle
- Chrome vanadium

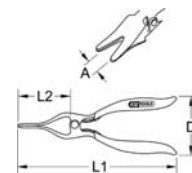


Item	A mm	L mm	Replacement tip	kg
450.0320	205,0	500,0	450.0321	1,25

OIL SERVICE PLIERS

Special hose pliers

- With PVC dipped handle
- Extra flat jaws to the end
- For dismantling and assembly
- For removing of hose connections from hose tails
- Special tool steel



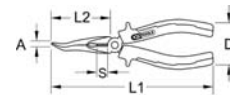
Ideally suited in e.g. fuel vacuum hoses, low pressure systems and water hoses.



Item	A mm	D mm	L1 mm	L2 mm	kg
115.1044	0,0-30,0	40,0	195,0	70,0	190

Fuel pipe pliers

- With two component handle
- Cranked execution
- With integrated cutting edge
- For loosening and tightening on fuel lines that are difficult to reach
- No damage of the overflow pipe
- Matt chrome
- Chrome vanadium



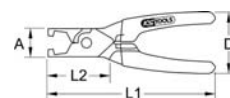
Ideally usable in security ring at fuel directions and change valve on BMW motorcycles with 2-valve technology Suitable e.g. for VW/Audi, Mercedes Benz, Ford, Opel, Peugeot, Volvo, Daihatsu, Mazda and Toyota.



Item	A mm	D mm	L1 mm	L2 mm	S mm	kg
115.1067	0,0-75,0	60,0	200,0	75,0	15,0	220

Fuel connection pliers

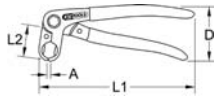
- With PVC dipped handle
- For unbolting of fuel pipe sized connections
- Suitable for service and maintenance works
- Special tool steel



Item	A mm	D mm	L1 mm	L2 mm	kg
115.1094	0,0-30,0	55,0	160,0	50,0	220

Fuel pipe pliers, offset

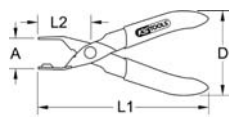
- With PVC dipped handle
- 90° angled head
- For the correct unbolting of the siezed connections with rest tongues
- Suitable for service and maintenance works on the fuel tank
- For difficult to access areas
- Chrome molybdenum



Item	A mm	D mm	L1 mm	L2 mm	
115.1099	0,0-24,0	70.0	220.0	39.0	280

Fuel connection pliers

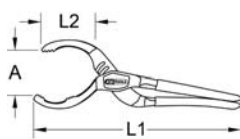
- With PVC dipped handle
- For opening the coupling on fuel pipe connections
- Blue and green: for compression couplings connected to the fuel pipe
- Red: with 2 noses 6,5 mm x 6,0 mm for GM and Opel fuel pipe
- Special tool steel



Item	A mm	D mm	L1 mm	
115.1091	20.0	62.0	120.0	80
115.1092	22.0	62.0	120.0	80
115.1093	22.0	62.0	120.0	80

Oil filter pliers

- With PVC dipped handle
- 5-stage industrial adjustment
- Universal usage
- Special tooth profile on the jaws
- Safety stop on the external diameter
- Special tool steel



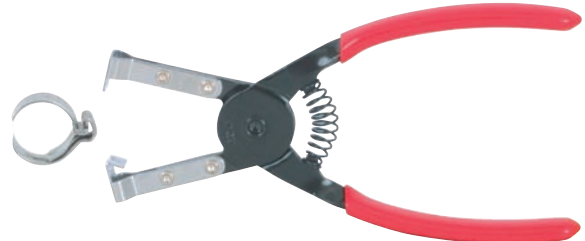
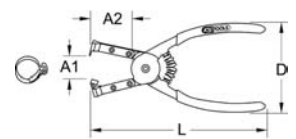
Item	A mm	L1 mm	L2 mm	
150.9317	0,0-145,0	290.0	110.0	500



ENGINE PLIERS

Click hose clamp pliers

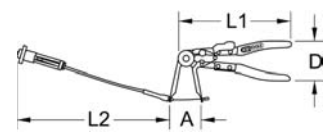
- For opening and closing of click hose clamps
- With PVC dipped handle
- Self opening
- Chrome molybdenum



Item	A1 mm	A2 mm	D mm	L mm	
115.1040	0,0-250,0	40.0	54.0	160.0	120

Hose clamp pliers with bowden cable

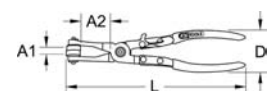
- With PVC dipped handle
- For spring pipe clamps
- With 650 mm bowden cable
- Includes locking mechanism
- Internal spring
- For difficult to reach clamps
- Chrome molybdenum



Item	A mm	D mm	L1 mm	L2 mm	
115.1041	0,0-60,0	70.0	200.0	650.0	115.1041-1 470

Hose clamp pliers, angled

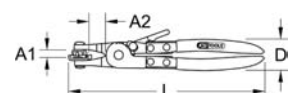
- 45° angled head
- With variable jaws
- For difficult to reach clamps
- Includes locking mechanism
- With PVC dipped handle
- Chrome molybdenum



Item	A1 mm	A2 mm	D mm	L mm	
115.1042	0,0-65,0	55.0	51.0	220.0	210

Universal hose clamp pliers

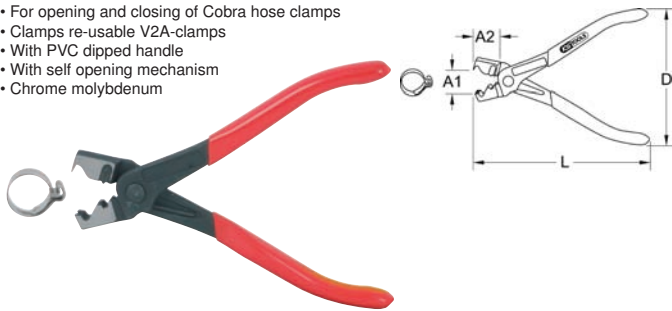
- Universal crown profile
- For difficult to reach clamps
- With PVC dipped handle
- Includes locking mechanism
- Versatile usage
- Chrome molybdenum



Item	A1 mm	A2 mm	D mm	L mm	
115.1043	0,0-48,5	40.0	39.0	220.0	240

Click hose clamp pliers, forged

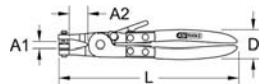
- For opening and closing of Cobra hose clamps
- Clamps re-usable V2A-clamps
- With PVC dipped handle
- With self opening mechanism
- Chrome molybdenum



Item	A1 mm	A2 mm	D mm	L mm	
115.1045	0,0-38,0	25,0	50,0	180,0	200

Hose clamp pliers

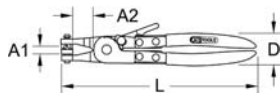
- With PVC dipped handle
- For spring pipe clamps
- Includes locking mechanism and ratchet function
- Chrome molybdenum



Item	A1 mm	A2 mm	D mm	L mm	
115.1046	0,0-45,0	37,0	42,0	220,0	230

Hose clamp pliers

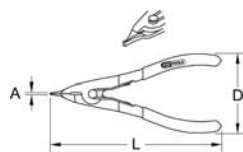
- With PVC dipped handle
- For spring pipe clamps
- Includes locking mechanism and ratchet function
- Chrome molybdenum



Item	A1 mm	A2 mm	D mm	L mm	
115.1047	0,0-45,0	37,0	42,0	220,0	230

Lockring pliers, serrated

- With PVC dipped handle
- Serrated and angular tip
- With self closing mechanism
- For the dismantling and assembly locking
- For external security rings
- No slipping due to the serrated tips
- Chrome molybdenum



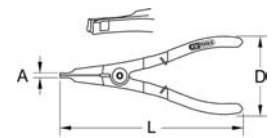
Ideally suited for the dismantling and assembly of locking on drive shafts on for example VW, MB and Opel.



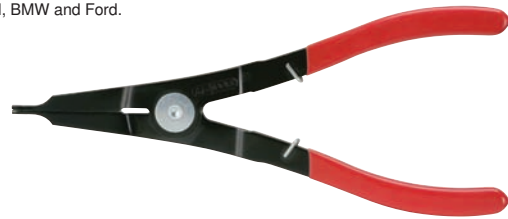
Item	A mm	D mm	L mm	
115.1048	0,0-20,0	45,0	210,0	220

Lockring pliers, fully formed tips

- With PVC dipped handle
- Fully formed tips
- With self closing mechanism
- For the dismantling and assembly locking
- For external security rings
- No slipping due to the serrated tips
- Chrome molybdenum



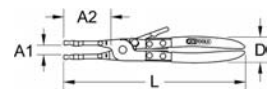
Ideally suited for the dismantling and assembly of locking on drive shafts on for example VW, MB, Opel, BMW and Ford.



Item	A mm	D mm	L mm	
115.1049	0,0-20,0	45,0	240,0	600

Soldering wire pliers

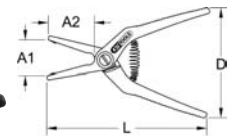
- With PVC dipped handle
- For the safe fixing of braded wire
- With self opening internal spring
- Includes locking mechanism
- Chrome molybdenum



Item	A1 mm	A2 mm	D mm	L mm	
115.1052	78,0	65,0	36,0	245,0	260

Incandescent bulbs plier

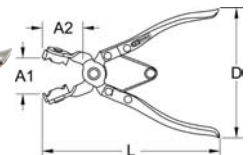
- With protecting foam material
- For the removal and replacement of incandescent bulbs
- With internal spring
- Plier jaws with foam protection material
- Suited for glass socket lamps of 4,0 mm until 6,0 mm
- Special plastic



Item	A1 mm	A2 mm	D mm	L mm	
115.1054	0,0-32,0	45,0	43,0	160,0	70

Hose clamp pliers

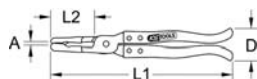
- With variable jaws
- 45° angled head
- For opening and closing of click and click R hose clamps
- Especially suitable for narrow hard to access areas
- Chrome molybdenum



Item	A1 mm	A2 mm	D mm	L mm	
115.1057	0,0-30,0	45,0	60,0	200,0	180

Valve shaft removal pliers

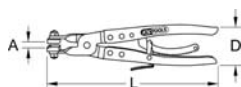
- Slim execution
- Plastic coated jaws
- Knurled handle
- With self opening mechanism
- Quick and easy removal of valves from the valve shaft
- For the extension of the valve spring lever
- Ideally suitable for engines with 4-Valve-Technology
- Nickel plated execution
- Special tool steel



Item	A mm	D mm	L1 mm	L2 mm	
115.1061	0,0-125,0	45,0	255,0	100,0	380

Hose clamp pliers type MU1

- For secure and correct dismantling and assembly of clamps
- Suitable for flat fitting and eccentric clamps
- Includes locking mechanism and ratchet function
- For difficult to reach clamps
- For new type and hard to access steel band clamps
- Special tool steel



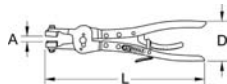
Suitable for VAG



Item	A mm	D mm	L mm	
115.1062	0,0-30,0	200,0	235,0	390

Hose clamp pliers type MU2

- For secure and correct dismantling and assembly of clamps
- Suitable for flat fitting and eccentric clamps
- Includes locking mechanism and ratchet function
- For difficult to reach clamps
- For new type and hard to access steel band clamps
- Special tool steel



Suitable for VAG 2,0 TDI / MC: BKD, VW Passat from 2005, Touran, Golf V, Skoda Oktavia, Audi A3 etc.

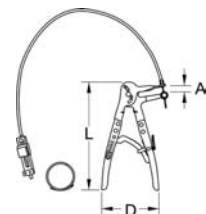


Item	A mm	D mm	L mm	
115.1063	0,0-40,0	170,0	295,0	470



Hose clamp pliers type MU3

- For secure and correct dismantling and assembly of clamps
- Suitable for flat fitting and eccentric clamps
- With 600 mm bowden cable
- Adjustable length bowden cable
- Includes locking mechanism and ratchet function
- For difficult to reach clamps
- For new type and hard to access steel band clamps
- Special tool steel



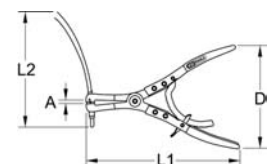
Suitable for VAG 2,0 TDI / MC: BKD, VW Passat from 2005, Touran, Golf V, Skoda Octavia, Audi A3.



Item	A mm	D mm	L mm	
115.1064	0,0-50,0	125,0	240,0	115.1066 540

Hose clamp pliers with double bowden cable

- With PVC dipped handle
- For spring pipe clamps
- With 600 mm bowden cable
- Adjustable length bowden cable
- Includes locking mechanism
- For difficult to reach clamps
- Special tool steel



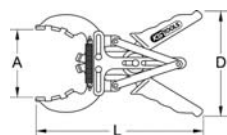
Item	A mm	D mm	L1 mm	L2 mm	
115.1065	70,0	90,0	270,0	600,0	540

Accessories:

Item	
115.1065-1 Double bowden cable 600mm, lockable, for self opening steel band clamps	20

Piston ring pliers

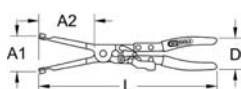
- With PVC dipped handle
- For the safe disassembly and assembly of piston rings
- Nickel plated surface
- Special tool steel



Item	Ø mm	A mm	D mm	L mm	Weight
150.1175	50,0-110,0	0,0-110,0	60,0	210,0	305
150.1176	80,0 - 120,0	0,0-120,0	60,0	220,0	340
150.1177	110,0 - 160,0	0,0-158,0	60,0	280,0	445

Exhaust clamp pliers PSA

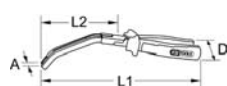
- With PVC dipped handle
- Includes locking mechanism
- With self opening mechanism
- For the dismantling and assembly of exhaust clamps
- Plier points-guide sleeve prevents slippage
- No tension loss when holding
- Chrome molybdenum



Item	A1 mm	A2 mm	D mm	L mm	Weight
150.1535	0,0-55,0	95,0	47,0	310,0	430

Glow plug pliers, angled

- With two component handle
- Angled head
- Specially milled plier profile for positive holding
- Suitable for very firmly seated glow plugs
- For the expert installation and removal of glow plugs
- For difficult to access areas
- Special tool steel



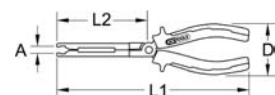
Ideally suitable for glow plugs in the newer diesel engine generation e.g. Mercedes, BMW, VW and Audi.



Item	A mm	D mm	L1 mm	L2 mm	Weight
500.7310	0,0-105,0	55,0	235,0	120,0	400

Glow plug pliers

- With two component handle
- Specially milled pliers profile for positive holding
- Suitable for very firmly seated glow plugs
- For the expert installation and removal of glow plugs
- For difficult to access areas
- Special tool steel



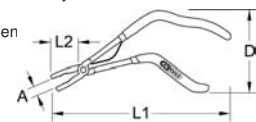
Ideally suitable for glow plugs in the newer diesel engine generation e.g. Mercedes, BMW, VW and Audi.



Item	A mm	D mm	L1 mm	L2 mm	Weight
500.7330	0,0-125,0	76,0	265,0	95,0	400

Glow plug dismantling pliers

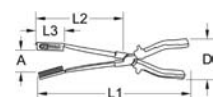
- With rubber handle
- Serrated jaws
- Length wise mounted handle arranged at the plier jaw
- With self opening mechanism
- In order to pull out the glow plugs from the glow plug canal in the cylinder head
- Range also possible to extract incompleated glow plugs
- Optimum power transmission with rotary and train movemen
- Special tool steel



Item	A mm	D mm	L1 mm	L2 mm	Weight
500.7335	0,0-35,0	55,0	260,0	40,0	280

Spark plug pliers

- Long, angular gripper sleeves
- Gripping sleeves with milled inner profile
- Long plier arms
- Wide safety margin to the hot assembly
- For extracting low-lying spark plugs
- With two component handle
- Chrome vanadium



Application range: Audi V6 / V8 engine and Jaguar 12-cylinder.



Item	A mm	D mm	L1 mm	L2 mm	L3 mm	Weight
500.7510	0,0-80,0	65,0	290,0	145,0	50,0	280

item	page	item	page	item	page	item	page	item	page
1		115.1061	330	115.1430	313	117.1294	304	120.2000	327
111.1000	310	115.1062	330	115.1435	314	117.1297	305	140.2220	324
111.1500	310	115.1063	330	115.1440	314	117.1298	303	150.1175	331
111.2000	310	115.1064	330	115.1445	314	117.1299	303	150.1176	331
111.3000	310	115.1065	330	115.1450	314	117.1700	306	150.1177	331
111.3100	309	115.1065-1	330	115.1455	314	117.1710	305	150.1179	320
111.3200	309	115.1067	327	115.1460	314	117.1711	300	150.1245	320
111.3300	309	115.1068	319	115.1465	314	117.1712	300	150.1535	331
112.1000	309	115.1070	317	115.1470	314	117.1713	302	150.1995	325
112.1500	309	115.1071	317	115.1480	314	117.1714	302	150.2023	325
112.2000	309	115.1072	317	115.1490	315	117.1715	303	150.2024	325
114.0008	309	115.1073	317	115.2000	308	117.1716	303	150.2025	325
114.0010	309	115.1074	318	115.2001	308	117.1717	304	150.2116	321
114.0012	309	115.1075	318	115.3000	308	117.1718	304	150.2118	321
114.0014	309	115.1076	317	115.4000	308	117.1719	304	150.2211	327
114.0018	309	115.1077	317	115.7000	309	117.1721	301	150.9317	328
114.0024	309	115.1078	318	115.8000	309	117.1722	301	150.9510	321
114.0036	309	115.1079	318	115.8500	309	117.1760	305	150.9520	321
114.0040	310	115.1080	318	115.8501	309	118.0024	312	150.9530	322
114.0150	310	115.1081	318	115.8502	309	118.0028	313	150.9540	321
114.0160	310	115.1082	318	115.8510	311	118.0032	313	150.9570	322
115.0000	308	115.1083	318	116.1000	311	118.0041	315	150.9571	322
115.0991	325	115.1084	318	116.1002	311	118.0042	315	150.9572	322
115.0992	325	115.1087	324	116.1200	310	118.0043	315	150.9573	322
115.0993	326	115.1088	324	116.1300	311	118.0044	316	150.9574	322
115.1000	308	115.1091	328	116.1301	312	118.0055	316	150.9575	322
115.1004	299	115.1092	328	116.1302	312	118.0056	316	150.9578	322
115.1010	299	115.1093	328	116.1400	311	118.0057	316	150.9579	322
115.1011	292	115.1094	327	116.1401	311	118.0058	316	150.9610	321
115.1012	292	115.1097	324	116.1403	311	118.0118	312	150.9611	322
115.1013	293	115.1098	324	116.1404	311	118.0124	312	150.9613	322
115.1014	295	115.1099	328	116.1410	312	118.0130	312	150.9614	322
115.1015	294	115.1150	319	116.1411	312	118.0136	312	150.9615	322
115.1016	295	115.1155	319	116.1412	312	118.0142	312	150.9616	322
115.1017	295	115.1160	319	116.1415	311	118.0218	312	150.9620	322
115.1018	297	115.1165	320	116.7000	310	118.0224	312	150.9630	322
115.1019	297	115.1170	320	117.1100	306	118.0230	312	150.9631	322
115.1020	292	115.1180	319	117.1110	305	118.0236	312	150.9632	322
115.1021	292	115.1185	320	117.1111	300	119.1004	299	150.9634	322
115.1022	292	115.1186	320	117.1112	300	119.1010	299	150.9635	322
115.1023	296	115.1187	320	117.1113	300	119.1011	293	150.9636	322
115.1024	296	115.1188	320	117.1115	301	119.1012	293	150.9638	322
115.1025	293	115.1230	313	117.1116	301	119.1013	293	150.9640	322
115.1031	316	115.1231	313	117.1117	304	119.1014	295	4	
115.1032	316	115.1304	298	117.1118	304	119.1015	294	450.0210	327
115.1033	316	115.1310	298	117.1119	301	119.1016	296	450.0320	327
115.1034	317	115.1311	292	117.1120	304	119.1018	297	450.0350	320
115.1035	317	115.1312	292	117.1121	304	119.1019	297	450.0351	320
115.1036	319	115.1313	293	117.1125	303	119.1020	292	450.0352	320
115.1037	319	115.1314	295	117.1160	305	119.1021	292	5	
115.1038	319	115.1315	294	117.1268	302	119.1022	292	500.1025	307
115.1039	326	115.1316	295	117.1271	302	119.1023	296	500.1026	307
115.1040	328	115.1317	295	117.1272	302	119.1024	296	500.1027	307
115.1041	328	115.1318	297	117.1275	300	119.2004	299	500.1028	307
115.1042	328	115.1319	297	117.1276	300	119.2010	299	500.1029	307
115.1043	328	115.1320	292	117.1277	301	119.2011	293	500.1030	307
115.1044	327	115.1321	292	117.1278	300	119.2012	293	500.1031	307
115.1045	329	115.1322	292	117.1279	300	119.2013	294	500.1032	307
115.1046	329	115.1323	296	117.1280	302	119.2014	295	500.1033	307
115.1047	329	115.1324	296	117.1281	301	119.2015	294	500.1034	307
115.1048	329	115.1350	309	117.1282	301	119.2016	296	500.1035	307
115.1049	329	115.1351	309	117.1283	301	119.2018	298	500.1036	307
115.1050	326	115.1352	309	117.1284	301	119.2019	298	500.1037	307
115.1051	324	115.1361	326	117.1288	301	119.2020	292	500.1038	307
115.1052	329	115.1362	326	117.1289	303	119.2021	292	500.1039	307
115.1053	326	115.1363	327	117.1290	305	119.2022	292	500.1300	308
115.1054	329	115.1365	293	117.1291	304	119.2023	297	500.1320	308
115.1056	326	115.1400	315	117.1292	304	119.2024	297	500.1350	308
115.1057	329	115.1425	313	117.1293	304	119.2025	294	500.7020	291



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