

# PRECISION TOOLS



Innovation is  
our mission!

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# PRECISION



For the protection of electrostatically endangered construction elements and in order to avoid disturbances in circuits. These handles have as the required and relevant standards and rules (e.g., IEC TR 61340-5, DIN EN 61340-5, SP Method 2472) for slow and controlled discharging of electrical loads.



**CAUTION:**  
ESD tools should not be used on live working i.e. the power source must be disconnected. Damages are not to be expelled by an electrical impact!

## ESD standard IEC61340-5-1

Capacity :	Definition according to DIN EN 61340-5-1
Slightly rechargeable:	Minimisation of the load generation
Against screen properties electrostatic unloading: (protection)	Barrier or exposure which limits the current passage and the energy of an electrostatic unloading is dampend that the maximum energy of a human body model discharge from 1000 V does not exceed 50nJ.
Electrostatic conductivity:	$1 \times 10^2 \Omega \leq R_o < 1 \times 10^5 \Omega$
Electrostatic sliding:	$1 \times 10^5 \Omega \leq R_o < 1 \times 10^{11} \Omega$
Insulation:	$R_o \geq 1 \times 10^{11} \Omega$

### Applications:





# ESD - electrical working (electrostatic discharge)

## Pliers

- 2 Component handle with ergonomic design
- Hot forged and tempered
- Head with anti glare surface
- Precise machines, oil hardened and tempered
- Cutting edges inductively hardened
- Accurately worked joint for even opening with very little friction
- Self opening due to a double spring
- Perfect torque transmission
- High cutting performance
- Ideal for delicate applications in electronics, precision mechanics as well as model construction area

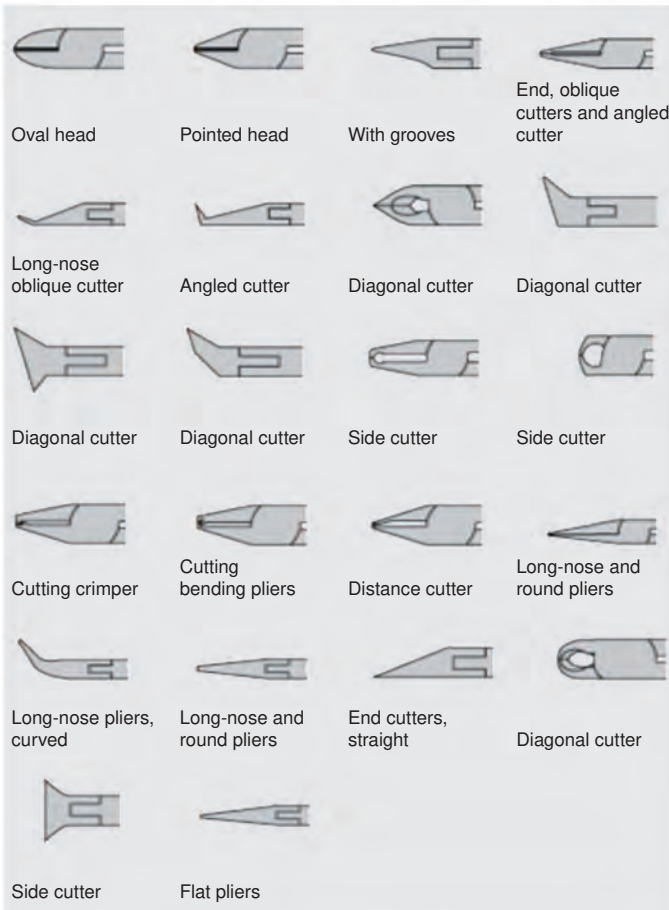
Optimum power transmission and perfect operation due to the ergonomic handle design



ESD protection - suitable for ESD workplace

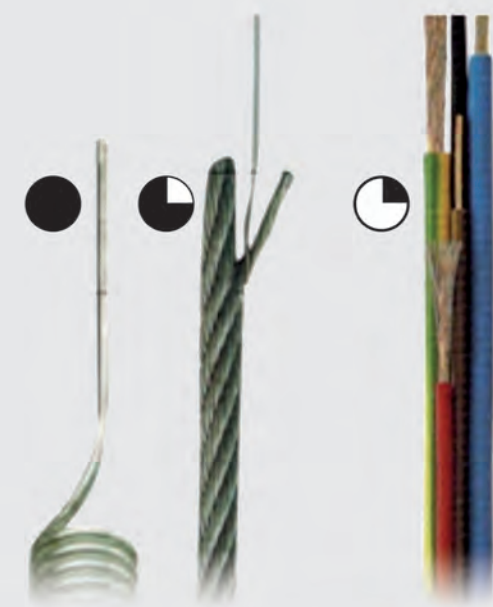


## Pliers profile



## Wire classes

Material examples	Copper, plastic	Wire cable fibre, steel wire	Spring steel wire
Wire type	Flexible	Hard	Piano wire
Tensile strength N/mm <sup>2</sup>	220	1800	2300
kp/mm <sup>2</sup>	22	180	230



## MAGNETIC LIFTER

### 2 in 1 Telescopic magnetic holder

- Load capacity to 0.5 kg
- Extendable telescopic function
- Cleaning needle
- Clip for the breast pocket
- Ideal for adjusting wiper nozzles
- Aluminium



	Head Ø mm	L mm	g
550.1001	8.0	150,0 - 675,0	500

### Telescopic magnetic lifter

- Magnet power raised 35% due to energy safety cap
- Stainless steel



	Head Ø mm	L mm	g
550.1004	13.0	178,0-675,0	70

### Telescopic magnetic lifter

- Load capacity to 1.5 kg
- Extendable telescopic function
- Clip for the breast pocket
- Magnet power raised 35% due to energy safety cap
- Stainless steel



	Head Ø mm	L mm	g
550.1002	18.0	178,0-675,0	80

### Telescopic magnetic lifter

- Load capacity to 2 kg
- With an extendable telescopic function
- Clip for the breast pocket
- Special steel



	Head Ø mm	L mm	g
550.1000	13.0	130,0-630,0	30

### Telescopic magnetic lifter

- Load capacity to 5 kg
- With rotary head
- With an extendable telescopic function
- Clip for the breast pocket
- Magnet power raised 35% due to energy safety cap
- Stainless steel



	Head Ø mm	L mm	g
550.1003	18.0	130,0-675,0	90

## Flexible magnetic holder

- 200 g capacity
- Flexible shaft
- 4 mm with a very thin magnetic seat
- One component handle



	L mm	g
550.1032	400.0	20

## Flexible magnet lifter

- Load capacity to 1 kg
- Flexible shaft
- Two component handle
- Special steel



	Head Ø mm	L mm	g
550.1025	15.0	510.0	30

## Flexible magnet lifter

- Load capacity to 2 kg
- Detachable inner cover
- Magnet power raised 35% due to energy safety cap
- Special steel



	Head Ø mm	L mm	g
550.1010	10.0	585.0	130

## Flexible magnet lifter

- Load capacity to 2 kg
- Flexible shaft
- Two component handle
- Special steel



	Head Ø mm	L mm	g
550.1026	17.0	510.0	30

## Telescopic magnetic lifter

- Load capacity to 2.5 kg
- With flexible magnetic head
- With an extendable telescopic function
- Includes cleaning needle for washer jet nozzles
- Clip for the breast pocket
- Aluminium



	Head Ø mm	L mm	g
550.1023	11.0	150,0 - 590,0	60

## Flexible magnet lifter

- Load capacity to 3 kg
- Flexible shaft
- Two component handle
- Special steel



	Head Ø mm	L mm	g
550.1027	19.0	510.0	30

## Flexible pick up tool

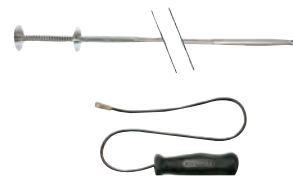
- Flexible
- Circular diameter max. 20.0 mm
- Stainless steel



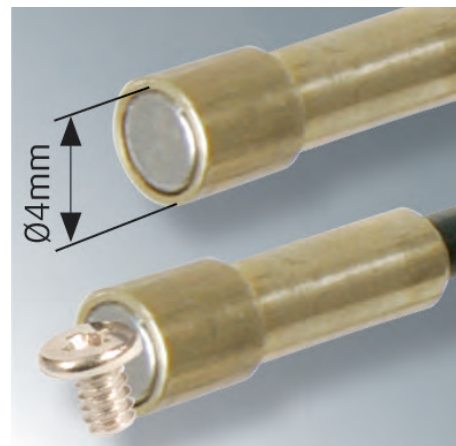
	Ø mm	L mm	g
550.1301	20	600.0	150

## Magnet lifting and claw type gripper set

- Ideally suited for picking up screws and small parts
- Load capacity to 200 g
- Flexible shaft
- 4 mm with a very thin magnetic seat
- Pick-up tool with max. diameter of 20.0 mm
- Magnet holder with one component handle
- Stainless steel pick-up tool



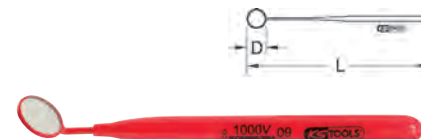
			g
550.1050	2 pcs	Magnet lifting and claw type gripper set	180



## INSPECTION MIRRORS

### Insulated inspection mirror

- Insulated handle to IEC 60900
- Insulated
- Chrome vanadium



	D mm	L mm	⚡ 1000V	g
117.1630	22.0	175.0	1000V	20

**Mechanics mirror**

- For visual monitoring and troubleshooting
- Ideal for difficult to access areas
- Special steel



	D mm	L mm	👤
118.0086	12.0	130.0	4
118.0087	21.0	130.0	9
118.0088	27.0	130.0	16

**Telescopic mechanics mirror**

- Extendable telescopic function
- For visual monitoring and troubleshooting
- Double ball joint
- Head swiveling in all directions
- Clip for the breast pocket
- Ideal for difficult to access areas
- Special steel



	D mm	L mm	👤
550.1030	32.0	178 - 530	40

**Telescopic inspection mirror**

- Extendable telescopic function
- For visual monitoring and troubleshooting
- With single ball joint
- Head swivels in all directions
- Impact resistant mirror
- Stainless steel



	B mm	H mm	L mm	👤
550.1007	45.0	63.0	178,0-675,0	100

**Telescopic inspection mirror**

- Extendable telescopic function
- For visual monitoring and troubleshooting
- Single ball joint
- Mirror out of stainless steel with plate-glass
- Stainless steel



	B mm	H mm	L mm	👤
550.1019	57.0	63.0	178,0-630,0	100



**Telescopic inspection mirror**

- Extendable telescopic function
- For visual monitoring and troubleshooting With single ball joint
- Stainless steel Mirror



	B mm	H mm	L mm	👤
550.1021	57.0	95.0	178,0-630,0	20

**Telescopic set TK 1000**

- Extendable telescopic function
- Telescopic-Magnet up to 5 kg
- Magnet power raised 35% due to energy safety cap
- Telescopic-Inspection mirror, 45,0 x 63,0 mm
- Length 178,0-860,0 mm
- Special steel
- In durable plastic storage case



	👤
550.1102 2 pcs Telescopic set TK 1000	280

consists of:

	👤
550.1007 Telescopic-Inspection mirror, L=178-675mm, 45x63mm	100
550.1002 Telescopic-Magnet holder up to 5,0 kg, 178 - 675mm	80

**Illuminated inspection mirror**

- LED lamp
- Flexible shaft
- Adjustable by thumb pressure to 90°
- Approx. 60 hours lamp duration
- Includes 2 x AA batteries
- Stable plastic housing



	L mm	B mm	Mirror size mm	Spare bulb	👤
550.1138	600.0	40.0	38 x 73	550.1139	280

**Magnetic welding mirrors**

- Mirror chrome
- Flexible arm
- Special steel



	B mm	L1 mm	L2 mm	👤
903.6000	70.0	500.0	80.0	470

**Telescopic magnifying glass**

- Extendable telescopic function
- Single ball joint
- 360° revolving
- Impact proof acrylic glass
- Special steel



	B mm	H mm	L mm	👤
550.1009	44.0	63.5	178,0-660,0	50

**VDE PRECISION SCREWDRIVER**

**Insulated precision screwdriver for slotted screws**

- Slotted
- Insulated to IEC 60900
- Twist end cap
- Colour coding
- Hardened blade
- Burnished tip
- Blades made from special steel



	D mm	L1 mm	L2 mm	L3 mm	⚡	👤
500.6138	1,5	140,0	40,0	100,0	🔌	10
500.6139	1,8	160,0	60,0	100,0	🔌	10
500.6140	2,0	160,0	60,0	100,0	🔌	15
500.6141	2,5	175,0	75,0	100,0	🔌	15
500.6142	3,0	175,0	75,0	100,0	🔌	15



### Insulated precision screwdriver for phillips screws PH

- PH
- Insulated to IEC 60900
- Twist end cap
- Colour coding
- Hardened blade
- Burnished tip
- Blades made from special steel



		L1 mm	L2 mm	L3 mm		
500.6136	PH 00	175.0	75.0	100.0		15
500.6137	PH 0	175.0	75.0	100.0		15

### VDE PRECISION SCREWDRIVER SETS

#### Insulated precision screwdriver set

- Insulated to IEC 60900
- Twist end cap
- Colour coding
- Hardened blade
- Burnished tip
- Blade made of chrome vanadium
- In durable ABS storage case



500.6165	7 pcs	Insulated precision screwdriver set	310
2 x		PH 0 - PH 00	
5 x		1,5 - 1,8 - 2,0 - 2,5 - 3,0 mm	



### PRECISION SCREWDRIVER

#### Precision screwdriver for slotted screws

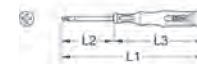
- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



	D mm	D	L1 mm	L2 mm	L3 mm	
500.7701	0,8	-	145,0	50,0	95,0	10
500.7141	1,0	-	145,0	50,0	95,0	10
500.7702	1,2	-	145,0	50,0	95,0	10
500.7108	1,4	-	145,0	50,0	95,0	10
500.7109	2,0	-	145,0	50,0	95,0	15
500.7110	2,4	-	145,0	50,0	95,0	20
500.7111	3,0	-	145,0	50,0	95,0	20
500.7713	3,5	-	145,0	50,0	95,0	20
500.7142	4,0	-	145,0	50,0	95,0	20
500.7144	-	1/16"	145,0	50,0	95,0	10
500.7145	-	3/32"	145,0	50,0	95,0	10
500.7146	-	9/64"	145,0	50,0	95,0	20

#### Precision screwdriver for phillips screws PH

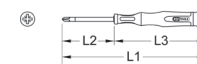
- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		Ø mm	L1 mm	L2 mm	L3 mm	
500.7126	PH 000	1,6	145,0	50,0	95,0	10
500.7106	PH 00	2,0	145,0	50,0	95,0	15
500.7107	PH 0	2,4	145,0	50,0	95,0	20
500.7128	PH 1	3,0	145,0	50,0	95,0	20
500.7125	PH 1	3,5	145,0	50,0	95,0	20
500.7129	PH 1	4,0	145,0	50,0	95,0	20

#### Precision screwdriver for phillips screws PZ

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		Ø mm	L1 mm	L2 mm	L3 mm	
500.7156	PZ 0	3,0	145,0	50,0	95,0	10
500.7157	PZ 1	4,0	145,0	50,0	95,0	10

### Precision screwdriver for TX screws

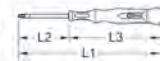
- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	
500.7726	T1	145,0	50,0	95,0	10
500.7727	T2	145,0	50,0	95,0	10
500.7728	T3	145,0	50,0	95,0	10
500.7729	T4	145,0	50,0	95,0	10
500.7140	T5	145,0	50,0	95,0	10
500.7112	T6	145,0	50,0	95,0	10
500.7113	T7	145,0	50,0	95,0	15
500.7114	T8	145,0	50,0	95,0	20
500.7115	T9	145,0	50,0	95,0	20
500.7116	T10	145,0	50,0	95,0	20
500.7117	T15	145,0	50,0	95,0	25
500.7124	T20	145,0	50,0	95,0	25

#### Precision screwdriver for TX tamperproof screws

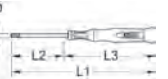
- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		L1 mm	L2 mm	L3 mm	
500.7151	TB7	145,0	50,0	95,0	20
500.7152	TB8	145,0	50,0	95,0	20
500.7153	TB9	145,0	50,0	95,0	20
500.7154	TB10	145,0	50,0	95,0	20
500.7155	TB15	145,0	50,0	95,0	25
500.7730	TB20	145,0	50,0	95,0	25

#### Precision screwdriver for hexagon screws

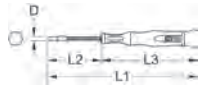
- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium



		D mm	D	L1 mm	L2 mm	L3 mm	
500.7721		0,7	-	145,0	50,0	95,0	10
500.7722		0,9	-	145,0	50,0	95,0	10
500.7723		1,3	-	145,0	50,0	95,0	10
500.7119		1,5	-	145,0	50,0	95,0	10
500.7120		2,0	-	145,0	50,0	95,0	10
500.7121		2,5	-	145,0	50,0	95,0	15
500.7122		3,0	-	145,0	50,0	95,0	20
500.7123		3,5	-	145,0	50,0	95,0	20
500.7718		-	0,05"	145,0	50,0	95,0	10
500.7147		-	1/16"	145,0	50,0	95,0	10
500.7724		-	5/64"	145,0	50,0	95,0	10
500.7148		-	3/32"	145,0	50,0	95,0	15
500.7725		-	7/64"	145,0	50,0	95,0	15
500.7149		-	1/8"	145,0	50,0	95,0	20

**Precision screwdriver for external hexagon screws**

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Blades made from special steel



	D mm	D	L1 mm	L2 mm	L3 mm	g
500.7731	1,5	-	165,0	75,0	90,0	10
500.7130	2,0	-	165,0	75,0	90,0	10
500.7131	2,5	-	165,0	75,0	90,0	10
500.7132	3,0	-	165,0	75,0	90,0	15
500.7133	3,2	-	165,0	75,0	90,0	30
500.7134	3,5	-	165,0	75,0	90,0	30
500.7135	4,0	-	165,0	75,0	90,0	30
500.7733	4,5	-	165,0	75,0	90,0	30
500.7734	5,0	-	165,0	75,0	90,0	30
500.7735	5,5	-	165,0	75,0	90,0	30
500.7136	-	3/32"	165,0	75,0	90,0	20
500.7137	-	7/64"	165,0	75,0	90,0	20
500.7738	-	1/8"	165,0	75,0	90,0	25
500.7138	-	9/64"	165,0	75,0	90,0	30
500.7139	-	11/64"	165,0	75,0	90,0	30

**PRECISION SCREWDRIVER SETS**

**Precision screwdriver set**

- Reversible interchangeable bits
- Twist end cap
- Clip for the breast pocket
- Plastic handle
- Bits made of special steel



			g
911.2175	4 pcs	Precision screwdriver set	150
1 x		PH000 - PH00 - PH0 - PH1	
1 x		PZ000 - PZ00 - PZ0 - PZ1	
1 x		1,5 - 2,0 - 2,5 - 3,0 mm	
1 x		T6 - T7 - T8 - T9	



**Precision screwdriver set TX**

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In durable ABS storage case



			g
500.7160	7 pcs	Precision screwdriver set TX	100
7 x		T6 - T7 - T8 - T9 - T10 - T15 - T20	



**Precision screwdriver set PH and slotted**

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In durable ABS storage case



			g
500.7165	7 pcs	Precision screwdriver set PH and slotted	100
3 x		PH00 - PH0 - PH1	
4 x		1,4 - 2,0 - 2,4 - 3,0 mm	

**Precision screwdriver set PH, slotted and TX**

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In durable plastic storage case



			g
500.7170	14 pcs	Precision screwdriver set PH, slotted and TX	200
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	

**Precision screwdriver set**

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- In durable plastic storage case



			g
500.7150	37 pcs	Precision screwdriver set	1.80
6 x		PH000 - PH00 - PH0 x 3,0 - PH0 x 2,0 - PH1 x 3,5 - PH1 x 4,0	
7 x		1,0 - 2,0 - 3,0 - 4,0 mm - 1/16" - 3/32" - 9/64"	
2 x		T5 - T6	
7 x		1,5 - 2,0 - 2,5 - 3,0 - 1/16" - 3/32" - 1/8"	
10 x		2,0 - 2,5 - 3,0 - 3,2 - 3,5 - 4,0 - 3/32" - 7/64" - 9/64" - 1.1/64"	
5 x		TB7 - TB8 - TB9 - TB10 - TB15	



### Precision tool set

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



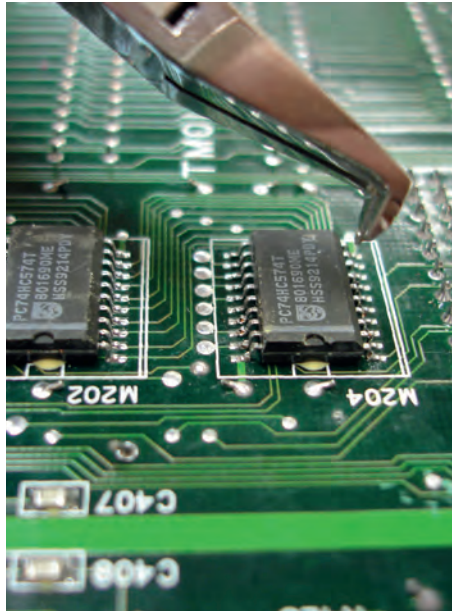
500.7180			
10 pcs	Precision tool set	400	
1 x		125 mm	
1 x		100 mm	
1 x		145 mm	
3 x		PH00 - PH0 - PH1	
4 x		1,4 - 2,0 - 2,4 - 3,0 mm	

### Precision tool set

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



500.7190			
21 pcs	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	



### PRECISION SCREWDRIVER DISPLAY STANDS

#### Precision screwdriver display stand

- Twist end cap
- Ergonomically designed electronic handle
- Two component handle
- Hardened blade
- Chrome finish with burnished tips
- Blade made of chrome vanadium
- Display of robust sheet steel construction



500.0190			
190 pcs	Precision screwdriver display stand	1.80	
30 x		5 x (PH000 - PH00 - PH0 x 3 mm - PH0 x 2 mm - PH1 x 3,5 mm - PH1 x 4 mm)	
35 x		5 x (1,0 - 2,0 - 3,0 - 4,0 mm - 1/16" - 3/32" - 9/64")	
10 x		5 x (T5 - T6)	
25 x		5 x (TB7 - TB8 - TB9 - TB10 - TB15)	
35 x		5 x (1,5 - 2,0 - 2,5 - 3,0 mm - 1/16" - 3/32" - 5 x 1/8")	
50 x		5 x (2,0 - 2,5 - 3,0 - 3,2 - 3,5 - 4,0 mm - 3/32" - 7/64" - 9/64" - 1.1/64")	
5 x		5 x 4 mm	



### MAGNETIZERS AND DEMAGNETIZERS

#### Magnetizer and demagnetizer

- Easy to use
- To magnetise by pulling the blade through
- To demagnetise by pulling the blade over the recess
- For screwdrivers, tweezers and similar tools made of steel
- Plastic housing

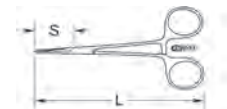


550.1126	B mm	H mm	L mm	Weight
	15.0	20.0	47.0	70

### PRECISION PLIERS

#### Mounting clamp pliers

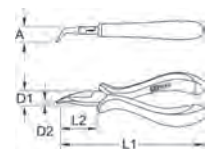
- 3 way adjustable locking
- Toothed gripping surfaces
- Anti glare - no annoying reflection
- Matt finish
- Stainless special steel



	L mm	S mm	Weight
500.7006	140.0	35.0	30
500.7007	160.0	40.0	40

#### Precision long nosed pliers, curved

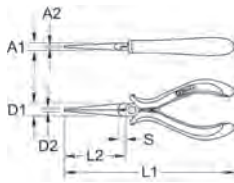
- Electrical working
- Suitable for wire
- 45° curved jaws
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



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

**Precision telephone pliers**

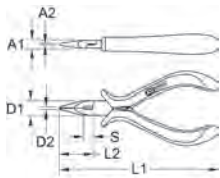
- Electrical working
- Suitable for wire
- Extra long jaws
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Weight
500.7032	7.0	2.0	12.0	3.0	160.0	55.0	8.0	90

**Precision telephone pliers**

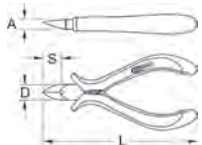
- Electrical working
- Suitable for wire
- Serrated execution
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Weight
500.7021	7.0	2.0	12.0	3.0	130.0	29.0	8.0	80

**Precision diagonal side cutter**

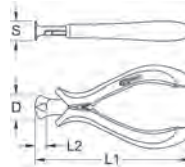
- Electrical working
- Suitable for wire
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



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

**Precision cutting pliers**

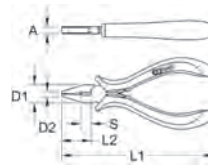
- Electrical working
- Suitable for wire
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	D mm	L1 mm	L2 mm	S mm	Weight
500.7025	18.0	110.0	7.5	14.0	80

**Precision combination pliers**

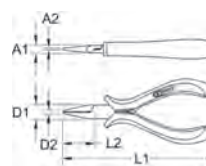
- Electrical working
- Suitable for wire
- Induction hardened precision cutting
- Self opening double spring
- Dual component handle
- Black chrome
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	S mm	Weight
500.7030	7.0	10.0	15.0	120.0	22.0	8.0	90

**Precision flat pliers**

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



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7028	7.0	2.0	13.0	3.0	125.0	27.0	80

**PRECISION PLIER SETS**

**Precision plier set**

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



	500.7020	5 pcs	Precision plier set	Weight
				420
1 x			130 mm	
1 x			120 mm	
1 x			110 mm	
1 x			120 mm	
1 x			160 mm	

**Precision tool set**

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



	500.7180	10 pcs	Precision tool set	Weight
				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	



### Precision tool set

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



500.7190	21 pcs	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					

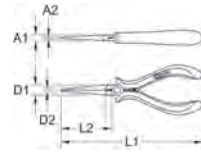


### ESD PRECISION PLIERS

Tweezers can be found in the VDE and general electrician tool kits section.

#### ESD long-nose pliers – straight – without cut

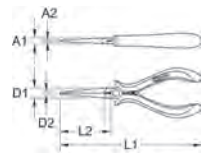
- Electrical working
- Suitable for wire
- Short, straight jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡
500.7064	6.5	1.0	10.0	2.0	130.0	23.0	62

#### ESD long-nose pliers – straight – with cut

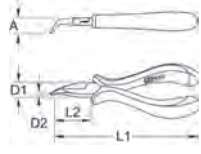
- Electrical working
- Suitable for wire
- Short, straight jaws
- With cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡
500.7065	6.5	1.0	10.0	2.0	130.0	23.0	62

#### ESD long-nose pliers – curved – without cut

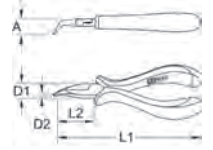
- Electrical working
- Suitable for wire
- Short, curved jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡
500.7066	10.0	10.0	2.0	130.0	20.0	62

#### ESD long-nose pliers – curved – with cut

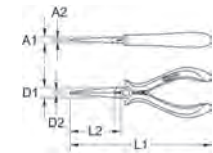
- Electrical working
- Suitable for wire
- Short, curved jaws
- With cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡
500.7067	10.0	10.0	2.0	130.0	20.0	62

#### ESD long-nose pliers – straight – without cut

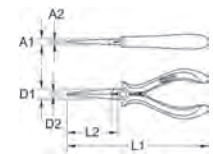
- Electrical working
- Suitable for wire
- Long, straight jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡
500.7068	6.5	1.0	10.0	2.0	140.0	32.0	68
500.7077	7.5	1.2	12.5	2.4	155.0	40.0	93

#### ESD long-nose pliers – straight – with cut

- Electrical working
- Suitable for wire
- Long, straight jaws
- With cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel

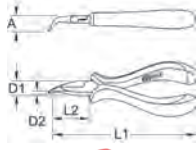


	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	⚡
500.7069	6.5	1.0	10.0	2.0	140.0	32.0	68
500.7072	7.5	1.2	12.5	2.4	155.0	40.0	93



**ESD long-nose pliers – curved – without cut**

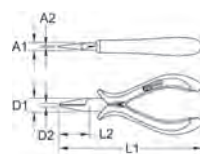
- Electrical working
- Suitable for wire
- Long, curved jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7070	14.0	10.0	2.0	140.0	26.0	68
500.7073	20.0	12.5	2.4	155.0	33.0	93

**ESD flat pliers**

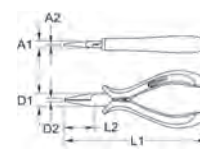
- Electrical working
- Suitable for wire
- Short jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7075	6.5	3.5	10.0	1.5	130.0	22.0	61

**ESD flat pliers**

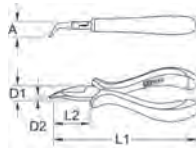
- Electrical working
- Suitable for wire
- Long jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7079	7.5	4.5	12.0	1.5	150.0	40.0	82

**ESD long-nose pliers – curved – with cut**

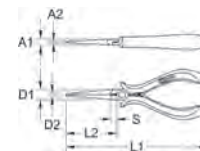
- Electrical working
- Suitable for wire
- Long, curved jaws
- With cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7071	14.0	10.0	2.0	140.0	26.0	68

**ESD round pliers**

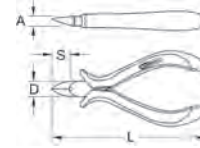
- Electrical working
- Suitable for wire
- Short jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7076	6.0	1.0	10.0	2.0	130.0	20.0	62

**ESD mini side cutters**

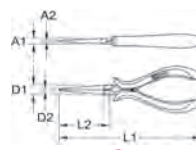
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 0.8 mm/AWG 20
- Copper wire: 1.5 mm/AWG 15
- Small, oval head
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
500.7080	6.0	9.0	120.0	9.0	55

**ESD needle-nose pliers – straight – without cut**

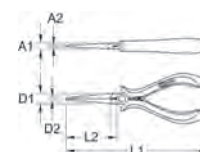
- Electrical working
- Suitable for wire
- Very fine, long jaws
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7074	7.5	1.2	11.0	2.0	150.0	37.0	74

**ESD long-nose pliers – straight – without cut**

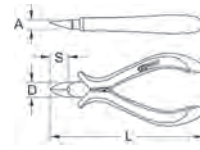
- Electrical working
- Suitable for wire
- Short, straight jaws
- Ultra-fine precision tips for extremely fine work
- Without cut
- Induction-hardened precision cutting
- Self-opening double spring
- With dual component handle
- Special tool steel



	A1 mm	A2 mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7078	6.5	0.1	10.0	0.2	130.0	22.0	56

**ESD mini side cutters**

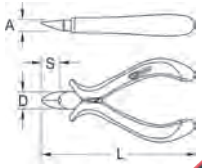
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 0.8 mm/AWG 20
- Copper wire: 1.5 mm/AWG 15
- Small, pointed head
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
500.7081	6.0	9.0	120.0	9.0	55

### ESD mini side cutters

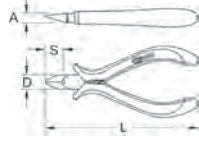
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 0.8 mm/AWG 20
- Copper wire: 1.5 mm/AWG 15
- Short, pointed head with grooving
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	g
500.7082	6.0	9.0	120.0	9.0	53

### ESD side cutters

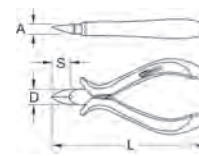
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.4 mm/AWG 26
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Oval head with wire holder
- With control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	g
500.7085	7.5	11.0	125.0	13.0	75

### ESD side cutters

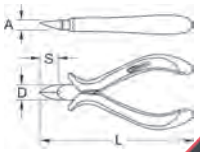
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.7 mm/AWG 21
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Oval, sturdy head
- With control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	g
500.7088	9.0	14.5	135.0	20.0	105

### ESD side cutters

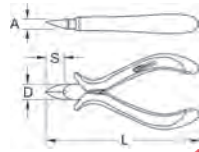
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.4 mm/AWG 26
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Oval head
- With control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	g
500.7083	7.5	11.0	125.0	13.0	70

### ESD side cutters

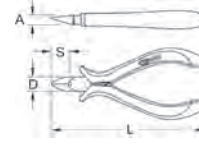
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.3 mm/AWG 28
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Pointed head
- With control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	g
500.7086	7.5	11.0	125.0	13.0	62

### ESD side cutters

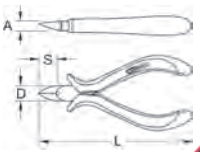
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 1.5 mm/AWG 15
- Copper wire: 2.0 mm/AWG 12
- Pointed, sturdy head
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	g
500.7089	9.0	14.5	135.0	18.0	105

### ESD side cutters

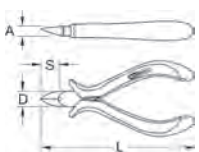
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Oval head
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	g
500.7084	7.5	11.0	125.0	13.0	70

### ESD side cutters

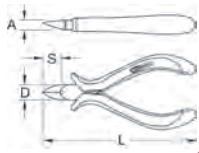
- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Flexible steel: 1.0 mm/AWG 18
- Copper wire: 1.5 mm/AWG 15
- Pointed head
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	g
500.7087	7.5	11.0	125.0	13.0	62

### ESD carbide side cutters

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 84-86 HRA
- Piano wire: 0.6 mm/AWG 22
- Hard wire: 1.0 mm/AWG 18
- Flexible wire: 2.0 mm/AWG 12
- Oval head
- With control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	g
500.7090	7.5	11.0	125.0	10.0	62

**ESD carbide side cutters**

- Electrical working
- Suitable for wire
- Hard metal cutting edge in plier head for the highest cutting performance
- Induction-hardened precision cutting, 84-86 HRA
- Oval head
- With special control only for glass fibre (e.g. Kevlar)
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
500.7091	7.5	11.0	125.0	10,0	62

**ESD carbide side cutters**

- Electrical working
- Suitable for wire
- Hard metal cutting edge in plier head for the highest cutting performance
- Induction-hardened precision cutting, 84-86 HRA
- Piano wire: 0.4 mm/AWG 26
- Hard wire: 0.8 mm/AWG 20
- Flexible wire: 1.8 mm/AWG 13
- Pointed head with grooves for working in hard to access places
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
500.7092	7.5	11.0	125.0	10,0	61

**ESD end cutters**

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Medium wire: 0.6 mm/AWG 22
- Flexible wire: 0.8 mm/AWG 20
- Slim jaws
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
500.7093	6.5	11.0	130.0	5,0	64

**ESD mini angled cutters**

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.4 mm/AWG 26
- Medium wire: 1.0 mm/AWG 18
- Flexible wire: 1.2 mm/AWG 16
- Straight head for working in small spaces
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
500.7094	6.5	10.0	120.0	12,0	61

**ESD mini carbide oblique cutter**

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 84-86 HRA
- Piano wire: 0.6 mm/AWG 22
- Hard wire: 1.0 mm/AWG 18
- Flexible wire: 2.0 mm/AWG 12
- Straight head for working in small spaces
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
500.7095	6.5	10.0	120.0	12,0	62

**ESD mini angled cutters**

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.5 mm/AWG 24
- Medium wire: 1.2 mm/AWG 16
- Flexible wire: 1.6 mm/AWG 14
- Wide head with long cutters
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D mm	L mm	S mm	Weight
500.7096	7.5	11.0	125.0	18,0	77

**ESD mini side cutter**

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Medium wire: 0.6 mm/AWG 22
- Flexible wire: 0.8 mm/AWG 22
- Slim jaws with small cutting edges
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	D mm	L1 mm	L2 mm	S mm	Weight
500.7097	10.0	120.0	17.0	2,5	63

**ESD side cutter**

- Electrical working
- Suitable for wire
- Induction-hardened precision cutting, 61-63 HRC
- Hard wire: 0.5 mm/AWG 24
- Medium wire: 1.2 mm/AWG 16
- Flexible wire: 1.6 mm/AWG 14
- Wide head with long cutters
- With subtle control
- Self-opening double spring
- With dual component handle
- Special tool steel



	D mm	L1 mm	L2 mm	S mm	Weight
500.7098	11.0	125.0	6.0	15,0	74

**ESD wire strippers**

- Electrical working
- With internal brass adjusting screw
- Suitable for PVC, Teflon etc.
- Induction-hardened precision cutting
- Medium wire: 0.8 mm/AWG 20
- Self-opening double spring
- With dual component handle
- Special tool steel



	A mm	D1 mm	D2 mm	L1 mm	L2 mm	Weight
500.7099	12.0	32.0	18.0	140.0	50.0	79

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## ESD PRECISION PLIER SETS

### ESD pliers service map

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



			g
500.7019	6 pcs	ESD pliers service map	612
1 x		140 mm	
1 x		140 mm	
1 x		130mm	
1 x		120 mm	
1 x		125 mm	
1 x		120 mm	



## SOLDERING TECHNOLOGY

### Mini pocket soldering torch

- Gas operated micro soldering device up to 1,300°C / 2,450°F
- Piezo ignition
- Optimal for light soldering
- Safety lock



		L mm	g
960.1110		80.0	130

### Mini pocket soldering torch

- Gas operated micro soldering device up to 1,300°C / 2,450°F
- With piezo ignition
- For melting, hard soldering, small soldering jobs
- Filled with standard lighter gas/ISO butane gas
- Compact construction
- With child-proofing and switch-off function



	L1 mm	L2 mm	H mm	g
960.1215	75.0	50.0	110.0	80



### Small soldering torch

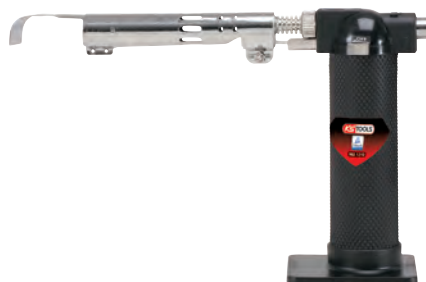
- Gas operated micro soldering device up to 1,300° / 2,450°F
- With piezo ignition
- Optimal for fine soldering
- Table stand



	L mm	g
960.1200	140.0	350

### Small soldering torch with flame reflector

- Gas operated micro soldering device up to 1,300° / 2,450°F
- With piezo ignition
- Optimal for fine soldering
- Shrink / flame reflector
- Table stand



	L mm	g
960.1210	140.0	350

### Micro terminal set

- Gas operated micro soldering device up to 1,300°C / 2,450°F
- Optimal for fine working
- Gas supply totally adjustable
- Filled with standard lighter gas / ISO butane gas
- Includes different attachments soldering wire and soldering sponge
- In durable plastic storage box



			g
960.1150	13 pcs	Micro terminal set	200

consists of:

			g
960.1151	Gas soldering iron		110
960.1152	Bunsen burner nozzle head		20
960.1153	Soldering head including 6 different on screw solder tips		30
960.1154	Flat attachment for flame protection for Bunsen burner nozzle head		10
960.1155	Attachment for Bunsen burner nozzle head		10
960.1156	Soldering sponge		6
960.1157	Soldering wire spool		24

### Micro terminal set

- Gas operated micro soldering device up to 1,300 / 2,450°F
- With piezo ignition
- Optimal for fine working
- Gas supply totally adjustable
- Filled with standard lighter gas / ISO butane gas
- Includes different attachments soldering wire and soldering sponge
- In durable plastic storage box




			g
960.1160	10 pcs	Micro terminal set	370

consists of:

			g
960.1161	Soldering iron with piezo ignition		80
960.1162	Soldering head for screw solder tips		9
960.1163	Soldering tip 3.5 mm, chisel		3
960.1164	Soldering tip 4.5mm, diagonal		3
960.1165	Soldering tip knife		3
960.1166	Shrink hose attachment		3
960.1167	Soldering sponge		12
960.1168	Soldering wire spool		25
960.1169	Protective cap		14
960.1170	Housing for additional adaptors for 960.1160		7





Innovation is  
our mission!

**PRECISION TOOLS**

