



Safety Tools



Dear customer,

In the year 2006 we celebrate our 30th Company Anniversary. This is an opportunity to look back to what we have achieved in the past but more important to look forward to the latest developments and technical improvements in the future.

This new edition of our catalogue will show you some interesting novelties in the range of our **Safety Tools**.

But before you start studying our product programme, we would like to answer **three questions** which are often asked.

Why such enormous efforts regarding tool safety control?

Europe is constantly growing together – the responsible bodies of each country have joined in the “CENELEC” Association and have developed

new guidelines and test requirements which are binding for all member countries as per August 1, 1999. We have early adapted ourselves to these new conditions and test our products according to these strict guidelines. For work on live parts requires that “safe” actually means “**safe**”!

Why is it not possible to identify the manufacturer blankets?

Our goods receipt controls are **very strict**. Not any tool manufacturer is accepted as a supplier. We only use products of **continuous high quality**. This is what we understand by “**Made in Germany**”!

Why are the tools equipped with a 2-coloured multilayer insulation yellow inside – red outside)?

This is certainly **not a matter of fashion**. Safety is too important for superficial considerations of this kind! The 2-coloured multilayer insulation clearly supports the **VBG 4 (BGVA3) Regulation**, which requires all tools to be subjected to a

visual control for externally perceptible damages prior to starting work.

So it is logical to coat the tools, wherever possible, with a contrasting colour to allow **immediate identification of damages** to the outer insulation. This is another measure to ensure maximum safety for the user.



Our products have already today the safety Features of the Future

It is generally known that the basic requirements for tests and certifications have considerably changed since 1978.

The tests and certifications continue to be based on the VDE standards. On an international level, the regulations of today's EU have been taken into consideration and included.

Since January 1996 the VDE Corporation has tested and certified our products according to the **new EN/IEC60900:2004**.

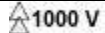
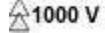
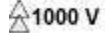
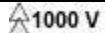
This new standard EN/IEC6000:2004 is already included in the currently applicable general standards. This means that even today **our products** provide the **safety features of the future** in contrast to those from other suppliers of dip-insulated safety tools.

This is new: Many tests have been changed in EN/IEC60900:2004 compared to the prior VDE standard VDE specification 0680, e.g.

- Cold impact Test increased from – 10°C to – 25°C.
- Heat Pressure Test increased from +65°C to + 70°C.
- Insulation Resistance Test increased to 10,000V
- 100% piece by piece test

The piece-by-piece test mentioned above certainly presents the most important modification of the test system. In the past the VDE Corporation required 1% of the goods produced to be checked whereas now each single piece has to be tested at a voltage of 10,000 volts D.C. This results in ten times increased safety for each product.

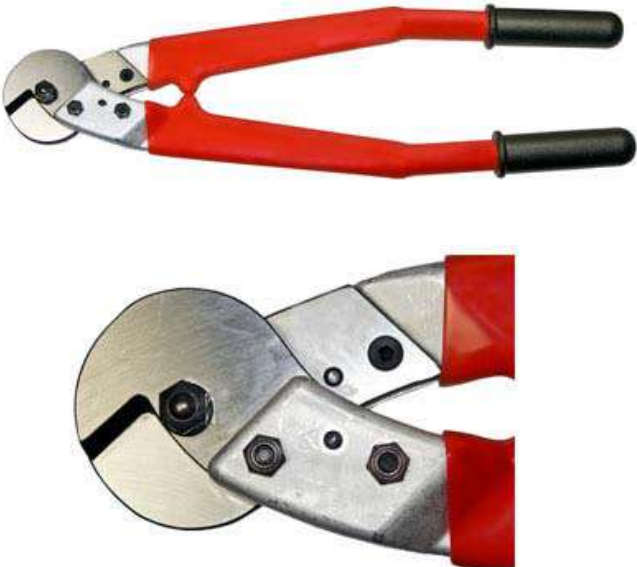
Moreover – provided that this is possible under the actual technological conditions – our safety tools are equipped with a 2-coloured multilayer insulation

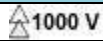
	• 100 Engineers' Pliers • DIN ISO 5746 • heavy version • from special steel • forged, oil hardened • induction-hardened cutting edges • also suitable for hard wire	mm	Weight g	Norm
		160	230	
		185	290	
		205	390	
		250	570	
	• Wire Stripper • from special steel • for wires of 0,5-5 mm Ø • self-adjusting • with cutting hole for separating cables and stranded wires of up to 5 mm Ø	mm	Weight g	Norm
		160	220	
	• 102 Wire Stripper • from special tool steel • forged, oil hardened • with adjustment screw and spring • for all wire thicknesses up to 5 mm Ø / 10 mm²	mm	Weight g	Norm
		160	180	
	• 103 Heavy Duty End Cutting Nipper • DIN ISO 5748 • from special steel C60 • piano wire up to 2mm Ø max. • Al + Cu wire up to 3 mm Ø max	mm	Weight g	Norm
		160	280	

	• 104 Long Nose Pliers • DIN ISO 5745 • forged from tool steel • oil hardened • induction-hardened cutting edges • for hard and soft wire	mm	Weight g	Norm
		160	170	1000 V
		200	230	GS
	• 106 Long Nose Pliers • DIN ISO 5745 (=bent nose) • forged from tool steel • oil hardened • induction-hardened cutting edges • for hard and soft wire	mm	Weight g	Norm
		160	170	1000 V
		200	210	GS
	• 107 Wire Netting Pliers • DIN ISO 5745 • forged from special tool steel • oil hardened • long, flat, smooth jaws with rounded edges	mm	Weight g	Norm
		200	220	1000 V
	• 108 Flat Nose Pliers • DIN ISO 5745 • forged from special tool steel • oil hardened • with short, strong jaws • toothed clamping jaws	mm	Weight g	Norm
		160	200	GS

	• 109 Long Flat Nose Pliers • DIN ISO 5745 • forged from special tool steel • oil hardened • with long jaws	mm	Weight g	Norm
		160	210	 1000 V
	• 110 Rounded Nose Pliers • DIN ISO 5745 • forged from special tool steel • oil hardened • with short, strong jaws • specie cleanly dressed	mm	Weight g	Norm
		160	180	  
	• 111 Long Round Nose Pliers • DIN ISO 5745 • forged from special tool steel • oil hardened • with long jaws	mm	Weight g	Norm
		160	205	 1000 V
	• 112 Side cutting Nippers • DIN ISO 5749 • Swedish pattern • forged from special tool steel • oil hardened • precision cutting edges relief-milled and induction-hardened	mm	Weight g	Norm
		160	270	  
		180	330	  

	• 113 Electricians' Side Cutting Nippers • from special steel • with three functions:: - o Cut off - o Strip - o Crimp • for stripping flexible and solid copper wires of 1,5-2,5 square mm • crimping insulated cable terminals of 1,5-2,5 mm Ø	mm	Weight g	Norm
		175	320	 1000 V
	• 114 Heavy Duty Side Cutter • DIN ISO 5749 • with lap joint • forged from tool steel • oil-hardened • induction-hardened cutting edges • for hard wire • especially for overhead line construction	mm	Weight g	Norm
		180	320	 1000 V
		205	370	 1000 V
		260	580	  
	• 115 Water pump Pliers • heavy version • with adjusting roll • from chrome vanadium	mm	Weight g	Norm
		260	560	 1000 V

	• 116 Water pump Pliers to DIN ISO 8976 • box joint • from chrome vanadium 31 CrV3	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>240</td><td>350</td><td>⚡1000 V</td></tr> <tr> <td>300</td><td>690</td><td>⚡1000 V</td></tr> </table>	mm	Weight g	Norm	240	350	⚡1000 V	300	690	⚡1000 V						
mm	Weight g	Norm															
240	350	⚡1000 V															
300	690	⚡1000 V															
	Nr.117 Cable and Core Cutters • without leverage transmission • from highly refined special steel, forged • exchangeable cutters • with excellent cutting performance for pinch-free cutting of steel-aluminium cords up to 120 sq.mm, and Cu- und Al cables • opening approx. 20 mm • 117 MK-Spare Heads	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>Art.117</td><td></td><td></td></tr> <tr> <td>600</td><td>1800</td><td>⚡1000 V</td></tr> <tr> <td>Art. 117 MK-Spare Heads</td><td></td><td></td></tr> <tr> <td></td><td>335</td><td></td></tr> </table>	mm	Weight g	Norm	Art.117			600	1800	⚡1000 V	Art. 117 MK-Spare Heads				335	
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600	1800	⚡1000 V															
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	• 118 Cable and Core Cutters • without leverage transmission • from highly refined special steel, forged • exchangeable cutters • with excellent cutting performance for pinch-free cutting of steel-aluminium cords up to 120 sq.mm, and Cu- und Al cables • opening approx. 20 mm	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>600</td><td>2700</td><td>⚡1000 V</td></tr> <tr> <td>700</td><td>3300</td><td>⚡1000 V</td></tr> </table>	mm	Weight g	Norm	600	2700	⚡1000 V	700	3300	⚡1000 V						
mm	Weight g	Norm															
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700	3300	⚡1000 V															

	• 118 MK-Spare Heads	für 600	320	
		für 700	340	
	• 118 118 AT-Storing Bag for Cable cutter • bag for storing 1 cable cutter • Storing either 118-600 or 118-700	bis 700	240	
	• 119 Cable Cutters • from alloyed tool steel • induction-hardened an chromium-plated cutting edges • for pinch-free cutting of Cu- und Al cables to 150 sq. mm • opening approx. Ø 27mm • Not to be used on Steel Rods or hard single Cu-wire!	mm	Weiht g	Norm
		500	1480	 1000 V
	• 120 One-Hand Cable Cutters • solid version from vanadium steel • Forged, oil hardened • for pinch-free cutting of Cu- und Al cables, single wire up to 25 sq. mm, multi-wire up to 50 sq. mm and fine wire up to 70 sq. mm • opening approx. Ø 22 mm • Not to be used on Steel Rods or hard single Cu-wire!	mm	Weight g	Norm
		215 VDE	360	

	• 121 One-Hand Cable Cutters • solid version from vanadium steel refined • precision screw joint • Cutting performance: • Cu/Al cables: single wire up to 16 sq. mm, • multi wire up to 25 sq. mm, • fine wire up to 50sq. mm • opening approx. Ø 15 mm • Not to be used on Steel Rods or hard single Cu-wire	mm	Weight g	Norm
		160 VDE	250	 1000 V
	• 122 One-Hand Cable Cutters • drop forged • precision-ground and with adjustable screw transmission • For splitting cross-sections of up to 35 sq. mm soft, multi-wire copper and aluminium wires • opening Ø 17 mm • Not to be used on Steel Rods or hard single Cu-wire	mm	Weight g	Norm
		165 VDE	240	 1000 V
	• 123 Double-Blade-Cable-Cutters • with leverage transmission • Precision ground with excellent cutting performance for one-hand use • For Cu and Al cables, single wire and multi-wire up to 50 sq. mm • opening approx. Ø 20 mm • Not suitable for steel cord or hard copper cord • forged from special tool steel	mm	Weight g	Norm
		200	365	 1000 V
	• 124 Lead Seal Pliers • from special steel • combined with Side Cutting Nippers • with exchangeable indent letters	mm	Weight g	Norm
		160	220	 1000 V

	• 125 Cable Cutter • easy cutting • dropped forged, oil hardened • Only for Cu- and Al wire • Multi wire up to 50 sq. mm	mm	Weight g	Norm	
		240	455	 1000 V	
	• 126 Cable and Core Cutters • from alloyed tool steel • opening width 12 mm • for hard steel wire	mm	Weight g	Norm	
		700	2400	 1000 V	
	• 127 Ratchet Cable Cutters • two-hand operation • high strength special steel • locking lever • cuts stranded + fine Cu/Al wire • up to Ø 62 mm or Ø 80 mm • Not to be used on Steel Wire !	Ø mm	mm ²	Weight g	Norm
		62	840	2200	 1000 V
		80	1000	3150	 1000 V

	• 128 Ratchet Cable Cutters • one-hand operation • high strength special steel • locking lever • cuts stranded + fine Cu/Al wire • cutting blade can be brought back through spring reverse • Not to be used on Steel Wire !! • Can also be delivered without insulated head.	mm	mm ²	Weight g	Norm
		290	185 Al oder 150 Cu	1000	 1000 V
		310	240 Al oder Cu	1150	 1000 V
	• 130 Bolt Cutters • head from special steel • induction hardened • replaceable head	mm	Weight g		Norm
		610	2700		 1000 V
	• Cable Cutters with Telescopic Handles • with leverage transmission • Only to be used on Cu/Al cable ! • Replaceable head (possible) • 131 MK-Spare Head	Ø mm / mm ²	Weight g		Norm
		31 / 185	2000		 1000 V
			300		

Pliers with Coated Working Heads

The coated working head is available for nearly each pliers version. It offers additional protection against bridging.

The highly flexible material at the head is firmly connected to the metal and allows an opening angle of approx. 30 degrees.

	• 132 Engineers' Pliers • DIN ISO 5244 • working head coated • as• 100	mm	Weight g	Norm
		185	280	⚠1000 V
	• 134 Insulation Stripper • working head coated • as• 102	mm	Weight g	Norm
		160	180	⚠1000 V
	• 136 Long Nose Pliers • DIN ISO 5745 • working head coated • as• 104	mm	Weight g	Norm
		160	180	⚠1000 V
		200	230	⚠1000 V

	• 138 Bent Long Nose Pliers • DIN ISO 5745 • working head coated • as• 106	mm	Weight g	Norm
		200	220	 1000 V
	• 139 Wire Netting Pliers • DIN ISO 5745 • working head coated • as• 107	mm	Weight g	Norm
		200	220	 1000 V
	• 142 Flat Nose Pliers • DIN ISO 5745 • working head coated • as• 108	mm	Weight g	Norm
		160	190	 1000 V
	• 144 Flat Long Nose Pliers • DIN ISO 5745 • working head coated • as• 109	mm	Weight g	Norm
		160	130	 1000 V

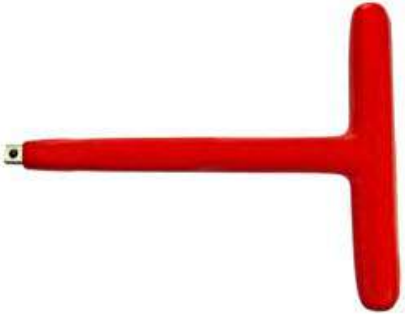
	• 148 Side Cutters • DIN ISO 5749 • working head coated • as• 112	mm	Weight g	Norm
		160	230	△1000 V
		180	330	△1000 V
	• 150 Electrical Scissor • dropped forged, oil hardened • cuts fine wire and thin plates • Only to be used on Cu/Al cable ! • Not to be used on steel !	mm	Weight g	Norm
		180	170	△1000 V
	• 200 Open-Ended-Spanners • DIN 7446 • forged from Chrome-Vanadium-Steel (DIN 3110) • offset 15 °	mm	Weight g	Norm
		6	32	△GS△
		7	32	△GS△
		8	34	△GS△
		9	38	△GS△
		10	40	△GS△
		11	46	△GS△
		12	54	△GS△
		13	65	△GS△
		14	80	△GS△
		15	92	△GS△
		16	115	△GS△
		17	115	△GS△
		18	115	△GS△
		19	150	△GS△
		22	190	△GS△
		24	300	△GS△
		27	390	△GS△

		30	510	  
		32	550	  
	• 210 Ring Spanners • DIN 7447 • forged from Chrome Vanadium Steel (DIN 838) • deep cranked	Other dimensions upon request		
		mm	Weight g	Norm
		6	46	  
		7	60	  
		8	60	  
		9	60	  
		10	80	  
		11	86	  
		12	100	  
		13	110	  
		14	160	  
		15	170	  
		16	202	  
		17	260	  
		18	260	  
		19	290	  
		22	320	  
		24	490	  
		27	540	  
		30	580	  
		32	290	  
	• 212 Gear Wrench • Safety insulated to EN/IEC 60900:2004 specification • Chrome-Vanadium-Steel • Torque tested ISO 3110	Other dimensions upon request		
		mm	Weight g	Norm
		8	50	   1000 V
		9	52	   1000 V
		10	56	   1000 V
		11	56	   1000 V
		12	68	   1000 V
		13	80	   1000 V
		14	86	   1000 V
		15	120	   1000 V
		16	144	   1000 V
		17	174	   1000 V
		Other dimensions upon request		

	• 220 Counter-Hold-Spanners • from 31 CrV3-Stahl	mm	Weight g	Norm
		10	100	⚠1000 V
		12	110	⚠1000 V
		13	110	⚠1000 V
		14	130	⚠1000 V
		15	160	⚠1000 V
		16	220	⚠1000 V
		17	240	⚠1000 V
		18	280	⚠1000 V
		19	290	⚠1000 V
		20	290	⚠1000 V
		22	310	⚠1000 V
		24	360	⚠1000 V
		Other dimensions upon request		
		mm	Weight g	Norm
		240	280	⚠1000 V
	• 222 Counter-Hold-Spanner • used for easier assembly of cables with connectors • stepless adjustable • diameter between 0-15 mm adjustable			
	• 223 Counter-Hold-Spanner • used for easier assembly of cables with connectors • stepless adjustable • diameter between 15 -40 mm adjustable	mm	Weight g	Norm
		220	380	⚠1000 V

	• 224 Counter-Hold-Spanner • used for easier assembly of cables with connectors • stepless adjustable • diameter between 25 -50 mm adjustable	mm	Weight g	Norm
		300	610	 1000 V
	New: Not mechanically locked retaining system with 50Nm according to the EN 60900 standard			
	• 280 Reversible Ratchet • Chrome-Vanadium-Steel • Clock and counter clock operation • Easy assembly of tools • Not Mechanically Locked System! • Insulated to EN 60900	mm	Weight g	Norm
		¼" – 140	128	 1000 V
		• - 190	350	 1000 V
		½ - 260	700	 1000 V
	• 281 Torque Wrench „Mini“ ¼" • Safety insulated to EN 60900/IEC60900:2004 specification • smallest build • with reversible ratchet • adjustable from 2-12 Nm • Length: approx. 200 mm	mm	Weight g	Norm
		2-10 Nm	400	 1000 V
		5-25 Nm	420	 1000 V

	• 282 Torque Wrench • Safety insulated to EN 60900/IEC60900:2004 specification • smallest built • with reversible ratchet • adjustable from 5-25 Nm • Length: approx. 200 mm • available in • “ and ½”	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>• “ 5-25 Nm</td><td>440</td><td>⚡ 1000 V</td></tr> <tr> <td>½” 5-25 Nm</td><td>490</td><td>⚡ 1000 V</td></tr> </table>	mm	Weight g	Norm	• “ 5-25 Nm	440	⚡ 1000 V	½” 5-25 Nm	490	⚡ 1000 V																		
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• “ 5-25 Nm	440	⚡ 1000 V																											
½” 5-25 Nm	490	⚡ 1000 V																											
	• 285 Extension Bars • Chrome-Vanadium-Steel • Easy assembly of tools • Not Mechanically Locked System ! • Insulated to EN 60900/IEC60900:2004	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>¼ - 50</td><td>40</td><td>⚡ 1000 V</td></tr> <tr> <td>¼ 75</td><td>45</td><td>⚡ 1000 V</td></tr> <tr> <td>¼ - 100</td><td>56</td><td>⚡ 1000 V</td></tr> <tr> <td>¼ - 150</td><td>68</td><td>⚡ 1000 V</td></tr> <tr> <td>• - 125</td><td>140</td><td>⚡ 1000 V</td></tr> <tr> <td>• - 250</td><td>280</td><td>⚡ 1000 V</td></tr> <tr> <td>½ - 125</td><td>190</td><td>⚡ 1000 V</td></tr> <tr> <td>½ - 250</td><td>400</td><td>⚡ 1000 V</td></tr> </table>	mm	Weight g	Norm	¼ - 50	40	⚡ 1000 V	¼ 75	45	⚡ 1000 V	¼ - 100	56	⚡ 1000 V	¼ - 150	68	⚡ 1000 V	• - 125	140	⚡ 1000 V	• - 250	280	⚡ 1000 V	½ - 125	190	⚡ 1000 V	½ - 250	400	⚡ 1000 V
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½ - 250	400	⚡ 1000 V																											
	• 286 Extension • “ with Bit-Holder ¼” • Safety insulated to EN 60900/IEC60900:2004 specification • • “ drive • Bitholder ¼” DIN 3126/FORM C 6,3	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>• x 125</td><td>165</td><td>⚡ 1000 V</td></tr> <tr> <td>• x 250</td><td>250</td><td>⚡ 1000 V</td></tr> </table>	mm	Weight g	Norm	• x 125	165	⚡ 1000 V	• x 250	250	⚡ 1000 V																		
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• x 125	165	⚡ 1000 V																											
• x 250	250	⚡ 1000 V																											
	• 287 Adaptor ¼” with Bitholder ¼” • Safety insulated to EN 60900/IEC60900:2004 specification • Adaptor for Torque Wrench No. 281 • Bitholder ¼” DIN 3126/FORM C 6,3	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>¼ x 40</td><td>240</td><td>⚡ 1000 V</td></tr> </table>	mm	Weight g	Norm	¼ x 40	240	⚡ 1000 V																					
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	• 290 T-Shaped Lever • Chrome Vanadium Steel • Insulated to EN 60900/IEC60900:2004 • Easy assembly of tools • Not Mechanically Locked System !	<table border="1"> <thead> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>¼ – 160</td><td>115</td><td>⚡ 1000 V</td></tr> <tr> <td>• - 200</td><td>350</td><td>⚡ 1000 V</td></tr> <tr> <td>½ - 200</td><td>490</td><td>⚡ 1000 V</td></tr> </tbody> </table>	mm	Weight g	Norm	¼ – 160	115	⚡ 1000 V	• - 200	350	⚡ 1000 V	½ - 200	490	⚡ 1000 V
mm	Weight g	Norm												
¼ – 160	115	⚡ 1000 V												
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	Mechanically locked system with 500 Nm according to EN/IEC 60900:2004 standard • Reversible Ratchet • patented secure socket holding and easy use safety lock device to ensure accidental loosening of insert tools • Easy handling • Manufactured from Chrome-Vanadium-Steel • Clock and counter clock operation • Also available for left-hand use • Certification to EN 60900/IEC60900:2004	<table border="1"> <thead> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>• “ – 190</td><td>370</td><td>⚡ GS ⚡</td></tr> <tr> <td>½“ – 260</td><td>750</td><td>⚡ GS ⚡</td></tr> </tbody> </table>	mm	Weight g	Norm	• “ – 190	370	⚡ GS ⚡	½“ – 260	750	⚡ GS ⚡			
mm	Weight g	Norm												
• “ – 190	370	⚡ GS ⚡												
½“ – 260	750	⚡ GS ⚡												
	• 304 Torque Stopper • “ • Fully insulated to EN 60900/IEC60900:2004 with short extension • for all sockets • “ • 315 • 320 • 322 • 350	<table border="1"> <thead> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>• “ - 12 Nm*</td><td>310</td><td>⚡ 1000 V</td></tr> <tr> <td>• “ – 18 Nm*</td><td>310</td><td>⚡ 1000 V</td></tr> <tr> <td>• “ – 25 Nm*</td><td>310</td><td>⚡ 1000 V</td></tr> </tbody> </table> Other sizes 7-25 Nm on request * *locked tight	mm	Weight g	Norm	• “ - 12 Nm*	310	⚡ 1000 V	• “ – 18 Nm*	310	⚡ 1000 V	• “ – 25 Nm*	310	⚡ 1000 V
mm	Weight g	Norm												
• “ - 12 Nm*	310	⚡ 1000 V												
• “ – 18 Nm*	310	⚡ 1000 V												
• “ – 25 Nm*	310	⚡ 1000 V												
	• 305 Locked Torque Wrench • “ and ½“ • Chrome Vanadium Steel • clock and counter clock operation • Counter clock without restriction • Mechanically Locked System • insulated after EN/IEC 60900/IEC60900:2004	<table border="1"> <thead> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>5 – 27 Nm</td><td>550</td><td>⚡ 1000 V</td></tr> </tbody> </table> Please advise Nm with order !	mm	Weight g	Norm	5 – 27 Nm	550	⚡ 1000 V						
mm	Weight g	Norm												
5 – 27 Nm	550	⚡ 1000 V												

	• 306 Torque T-Handle Lever • Adjustable for the following sockets • “: • 315 • 320 • safety insulated to EN 60900/IEC60900:2004 specification	<table border="1"> <thead> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>• “ - 12 Nm*</td><td>540</td><td> 1000 V</td></tr> <tr> <td>• “ – 18 Nm*</td><td>540</td><td> 1000 V</td></tr> <tr> <td>• “ – 25 Nm*</td><td>540</td><td> 1000 V</td></tr> </tbody> </table> Other sizes 7-25 Nm on request * *locked tight	mm	Weight g	Norm	• “ - 12 Nm*	540	1000 V	• “ – 18 Nm*	540	1000 V	• “ – 25 Nm*	540	1000 V			
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• “ - 12 Nm*	540	1000 V															
• “ – 18 Nm*	540	1000 V															
• “ – 25 Nm*	540	1000 V															
	• 307 Torque Wrench • “ • safety insulated to EN/IEC 60900/IEC60900:2004 specification • with built-in reversible ratchet • adjustable • available in length 280,370 mm • Suitable for sockets wrenches • “ • 315 • 320 • 322 • 350	<table border="1"> <thead> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>2-27 Nm*</td><td>920</td><td> 1000 V</td></tr> <tr> <td>5-50 Nm*</td><td>1070</td><td> 1000 V</td></tr> </tbody> </table> * free changeable	mm	Weight g	Norm	2-27 Nm*	920	1000 V	5-50 Nm*	1070	1000 V						
mm	Weight g	Norm															
2-27 Nm*	920	1000 V															
5-50 Nm*	1070	1000 V															
	• 308 Torque Wrench ½“ • safety insulated to EN 60900/IEC60900:2004 specification • with built-in reversible ratchet • adjustable • available in length of 280, 370, 460, 530 mm • Suitable for sockets wrenches • “ • 316 • 321 • 323 • 324 • 355	<table border="1"> <thead> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>2-27 Nm*</td><td>930</td><td> 1000 V</td></tr> <tr> <td>5-50 Nm*</td><td>1100</td><td> 1000 V</td></tr> <tr> <td>20-100 Nm*</td><td>120</td><td> 1000 V</td></tr> <tr> <td>40-220 Nm*</td><td>1300</td><td> 1000 V</td></tr> </tbody> </table> * einstellbar	mm	Weight g	Norm	2-27 Nm*	930	1000 V	5-50 Nm*	1100	1000 V	20-100 Nm*	120	1000 V	40-220 Nm*	1300	1000 V
mm	Weight g	Norm															
2-27 Nm*	930	1000 V															
5-50 Nm*	1100	1000 V															
20-100 Nm*	120	1000 V															
40-220 Nm*	1300	1000 V															

	• 310 Extension Bars • DIN 7434 • Chrome Vanadium Steel • Forged, oil-hardened • With fixing device to avoid accidental loosening of the driving and insert tools • • 310 (125 mm) is equipped with a continuous bore which allows fixing of hexagon inserts, too • 350 und • 355 possible	mm	Weight g	Norm
		• " -125 durchgeb.	140	
		• " -250	280	
		½" - 125 durchgeb.	190	
		½" - 250	400	
	• 311 Extensions with lock screw device (Automatic) • DIN 7434 • Spring loaded retaining ball for secure socket holding • Automatically lock screw device by tool connection • Usable for all screw wrenches	mm	Weight g	Norm
		• " -125	150	
		• " -250	310	
		• " - 125 .	220	
		½" - 250	430	
	• 312 Adapter • DIN 3120/ISO 1174 • Safety insulated to EN 60900/IEC60900:2004 • Manufactured from Chrome Vanadium Steel • Without locking device	mm	Weight g	Norm
		• " innen ½" außen	80	
		½" innen • " außen	220	



• **313 6-Point Sockets** ¼

- DIN 7448
- with ¼" – Square Drive
- Chrome Vanadium Steel
- Forged, oil-hardened
- With inside grooves to accept the fixing devices at the operation tools

mm	Weight g	Norm
5	12	1000 V
6	12	1000 V
7	15	1000 V
8	15	1000 V
9	16	1000 V
10	18	1000 V
11	18	1000 V
12	24	1000 V
13	26	1000 V
14	29	



• **315 12-Point Sockets** • "

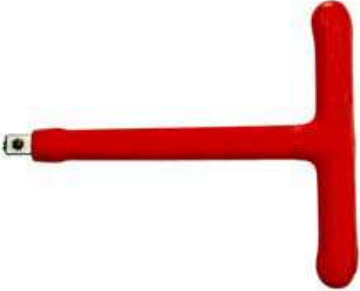
- DIN 7448
- with • " – Square Drive
- Chrome Vanadium Steel
- Forged, oil-hardened
- With inside grooves to accept the fixing devices at the operation tools

mm	Weight g	Norm
6	30	
7	30	
8	30	
9	35	
10	35	
11	35	
12	40	
13	40	
14	40	
15	45	
16	45	
17	50	
18	50	
19	60	
20	60	
21	60	
22	60	

	• 316 6-Point Sockets ½" • DIN 7448 • with ½" – Square Drive • Chrome Vanadium Steel • Forged, oil-hardened • With inside grooves to accept the fixing devices at the operation tools Holding tight box spanner uses on enquiry	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr><td>8-9</td><td>65</td><td> </td></tr> <tr><td>10</td><td>70</td><td> </td></tr> <tr><td>11-13</td><td>75</td><td> </td></tr> <tr><td>14-15</td><td>80</td><td> </td></tr> <tr><td>16</td><td>85</td><td> </td></tr> <tr><td>17</td><td>85</td><td> </td></tr> <tr><td>18</td><td>90</td><td> </td></tr> <tr><td>19-20</td><td>100</td><td> </td></tr> <tr><td>21-22</td><td>120</td><td> </td></tr> <tr><td>23</td><td>125</td><td> </td></tr> <tr><td>24</td><td>140</td><td> </td></tr> <tr><td>26</td><td>175</td><td> </td></tr> <tr><td>27</td><td>190</td><td> </td></tr> <tr><td>28</td><td>195</td><td> </td></tr> <tr><td>30</td><td>230</td><td> </td></tr> <tr><td>32</td><td>280</td><td> </td></tr> </table>	mm	Weight g	Norm	8-9	65		10	70		11-13	75		14-15	80		16	85		17	85		18	90		19-20	100		21-22	120		23	125		24	140		26	175		27	190		28	195		30	230		32	280	
mm	Weight g	Norm																																																			
8-9	65																																																				
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19-20	100																																																				
21-22	120																																																				
23	125																																																				
24	140																																																				
26	175																																																				
27	190																																																				
28	195																																																				
30	230																																																				
32	280																																																				
	• 317 Sockets • DIN 7448 • with ½" – Square Drive • Chrome Vanadium Steel • Forged, oil-hardened • With inside grooves to accept the fixing devices at the operation tools Other dimensions on request	<table> <tr> <th>Zoll</th><th>Weight g</th><th>Norm</th></tr> <tr><td>5/16</td><td>70</td><td> 1000 V</td></tr> <tr><td>3/8</td><td>70</td><td> 1000 V</td></tr> <tr><td>7/16</td><td>75</td><td> 1000 V</td></tr> <tr><td>15/32</td><td>75</td><td> 1000 V</td></tr> <tr><td>1/2</td><td>75</td><td> 1000 V</td></tr> <tr><td>9/16</td><td>80</td><td> 1000 V</td></tr> <tr><td>5/8</td><td>85</td><td> 1000 V</td></tr> <tr><td>11/16</td><td>90</td><td> 1000 V</td></tr> <tr><td>23/32</td><td>85</td><td> 1000 V</td></tr> <tr><td>3/4</td><td>100</td><td> 1000 V</td></tr> <tr><td>13/16</td><td>110</td><td> 1000 V</td></tr> <tr><td>7/8</td><td>120</td><td> 1000 V</td></tr> <tr><td>15/16</td><td>140</td><td> 1000 V</td></tr> <tr><td>1</td><td>175</td><td> 1000 V</td></tr> <tr><td>1•</td><td>190</td><td> 1000 V</td></tr> <tr><td>1¼</td><td>280</td><td> 1000 V</td></tr> </table>	Zoll	Weight g	Norm	5/16	70	1000 V	3/8	70	1000 V	7/16	75	1000 V	15/32	75	1000 V	1/2	75	1000 V	9/16	80	1000 V	5/8	85	1000 V	11/16	90	1000 V	23/32	85	1000 V	3/4	100	1000 V	13/16	110	1000 V	7/8	120	1000 V	15/16	140	1000 V	1	175	1000 V	1•	190	1000 V	1¼	280	1000 V
Zoll	Weight g	Norm																																																			
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1	175	1000 V																																																			
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 	• 320 12-Point Sockets (long) • DIN 7448 • with • “ – Square Drive • Hex. Key width • Chrome Vanadium Steel • Forged, oil-hardened • With inside grooves to accept the fixing devices at the operation tools • Length 55-65 mm	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr><td>10-11</td><td>60</td><td>⚠1000 V</td></tr> <tr><td>12-13</td><td>70</td><td>⚠1000 V</td></tr> <tr><td>14-15</td><td>80</td><td>⚠1000 V</td></tr> <tr><td>16-17</td><td>110</td><td>⚠1000 V</td></tr> <tr><td>18</td><td>145</td><td>⚠1000 V</td></tr> <tr><td>19/22</td><td>180</td><td>⚠1000 V</td></tr> </table>	mm	Weight g	Norm	10-11	60	⚠1000 V	12-13	70	⚠1000 V	14-15	80	⚠1000 V	16-17	110	⚠1000 V	18	145	⚠1000 V	19/22	180	⚠1000 V																																				
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18	145	⚠1000 V																																																									
19/22	180	⚠1000 V																																																									
 	• 321 6-Point Sockets (long) • DIN 7448 • with ½“ – Square Drive • Hex. Or bi-hex. Key width • Chrome Vanadium Steel • Forged, oil-hardened • With inside grooves to accept the fixing devices at the operation tools • Length 80 mm	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr><td>8</td><td>105</td><td>⚠1000 V</td></tr> <tr><td>10</td><td>110</td><td>⚠1000 V</td></tr> <tr><td>11</td><td>130</td><td>⚠1000 V</td></tr> <tr><td>12</td><td>145</td><td>⚠1000 V</td></tr> <tr><td>13</td><td>145</td><td>⚠1000 V</td></tr> <tr><td>14</td><td>145</td><td>⚠1000 V</td></tr> <tr><td>15</td><td>145</td><td>⚠1000 V</td></tr> <tr><td>16</td><td>160</td><td>⚠1000 V</td></tr> <tr><td>17</td><td>180</td><td>⚠1000 V</td></tr> <tr><td>18</td><td>190</td><td>⚠1000 V</td></tr> <tr><td>19</td><td>210</td><td>⚠1000 V</td></tr> <tr><td>21</td><td>215</td><td>⚠1000 V</td></tr> <tr><td>22</td><td>230</td><td>⚠1000 V</td></tr> <tr><td>23</td><td>235</td><td>⚠1000 V</td></tr> <tr><td>24</td><td>250</td><td>⚠1000 V</td></tr> <tr><td>27</td><td>390</td><td>⚠1000 V</td></tr> <tr><td>30</td><td>420</td><td>⚠1000 V</td></tr> <tr><td>32</td><td>460</td><td>⚠1000 V</td></tr> </table>	mm	Weight g	Norm	8	105	⚠1000 V	10	110	⚠1000 V	11	130	⚠1000 V	12	145	⚠1000 V	13	145	⚠1000 V	14	145	⚠1000 V	15	145	⚠1000 V	16	160	⚠1000 V	17	180	⚠1000 V	18	190	⚠1000 V	19	210	⚠1000 V	21	215	⚠1000 V	22	230	⚠1000 V	23	235	⚠1000 V	24	250	⚠1000 V	27	390	⚠1000 V	30	420	⚠1000 V	32	460	⚠1000 V
mm	Weight g	Norm																																																									
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27	390	⚠1000 V																																																									
30	420	⚠1000 V																																																									
32	460	⚠1000 V																																																									

	• 322 Deep Sockets (extra long) • with • “ – Square Drive • Hex. • Length approx. 125 mm	mm	Weight g	Norm
		10	180	△1000 V
		11	185	△1000 V
		12	200	△1000 V
		13	210	△1000 V
		14	220	△1000 V
		17	240	△1000 V
		19	260	△1000 V
		22	280	△1000 V
	• 323 Deep Sockets (extra long) • with ½“ – Square Drive • Hex. • Length approx. 125 mm	mm	Weight g	Norm
		13	250	△1000 V
		14	260	△1000 V
		17	280	△1000 V
		19	295	△1000 V
		22	310	△1000 V
		24	330	△1000 V
		27	350	△1000 V
		30	380	△1000 V
		32	410	△1000 V
	• 324 Deep Sockets (extra long) • with ½“ – Square Drive • Hex. • Length approx. 250 mm	mm	Weight g	Norm
		13	485	△1000 V
		14	500	△1000 V
		17	530	△1000 V
		19	550	△1000 V
		22	580	△1000 V
		24	605	△1000 V
		27	635	△1000 V
		30	660	△1000 V
		32	670	△1000 V

	• 325 T-Shaped Lever • DIN 7436 • Forged from Vanadium Steel • Oil-hardened • With safety screw to prevent accidental loosening of the tools	mm	Weight g	Norm
		• " -200	350	
		½" -200	490	
	• 330 Cross-Type Socket Wrench • D.B.G.M. registered • Middle section reinforced with hard glass fibre, so that a torque of approx. 80 Nm is achieved • The metal inserts do not contact each other so that current cannot flow • Each socket combination between 8 and 22 mm possible	mm	Weight g	Norm
		220x220	430	
	• 331 Cross-Type Socket Wrench • Fully insulated • Middle section from impact-resistant plastic • The hexagon steel inserts do not contact each other which means full insulation • Length 140x140xmm	mm	Weight g	Norm
		10x11x12x13	230	
		10x11x13x17	230	
		10x11x14x17	230	
		10x12x14x17	230	
		10x13x14x17	230	
		11x12x13x17	230	
		11x13x14x17	230	
		13x17x19x22	340	
		14x17x19x22	340	

	• 332 Cross-Type Socket Wrench • 4 x ½“ Aexternal square socket • lockable • For exchangeable standard inserts ½“,40 mm • Overall length 168 mm, with inserts 220 mm • Side length with inserts 95 mm • Torque approx. 100 Nm • No electrical contact	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>168</td><td>480</td><td>⚠1000 V</td></tr> </table>	mm	Weight g	Norm	168	480	⚠1000 V			
mm	Weight g	Norm									
168	480	⚠1000 V									
	• 335 Align-Tool • “ • Used to align sector conductor cables with 3 or 4 inside wires • Impact resistance plastic	<table> <tr> <th>Ø mm / mm ^{2*}</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>95-150</td><td>75</td><td>⚠1000 V</td></tr> <tr> <td>185-240</td><td>88</td><td>⚠1000 V</td></tr> </table>	Ø mm / mm ^{2*}	Weight g	Norm	95-150	75	⚠1000 V	185-240	88	⚠1000 V
Ø mm / mm ^{2*}	Weight g	Norm									
95-150	75	⚠1000 V									
185-240	88	⚠1000 V									



• 340/ • 341 T-Handle Sockets Wrenches

- DIN 7440
- From precision steel tube
- hardened
- Hex., heat-treated
- For extremely long threaded bolts

mm	Weight g	Norm
• 340		
10x200	320	△ 1000 V
11x200	380	△ 1000 V
12x200	370	△ 1000 V
13x200	370	△ 1000 V
14x200	370	△ 1000 V
16x200	420	△ 1000 V
17x200	430	△ 1000 V
18x200	460	△ 1000 V
19x200	440	△ 1000 V
20x200	460	△ 1000 V
22x200	570	△ 1000 V
24x200	590	△ 1000 V
• 341		
8x300	350	△ 1000 V
10x300	380	△ 1000 V
11x300	430	△ 1000 V
12x300	430	△ 1000 V
13x300	420	△ 1000 V
14x300	440	△ 1000 V
17x300	520	△ 1000 V
19x300	590	△ 1000 V
22x300	690	△ 1000 V
24x300	780	△ 1000 V



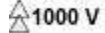
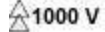
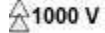
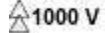
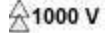
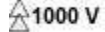
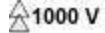
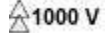
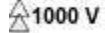
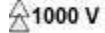
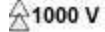
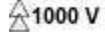
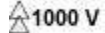
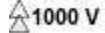
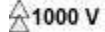
• 345 Hexagon-Nut Wrenches

- DIN 7445
- from vanadium steel
- oil-hardened
- With plastic handle from tough-elastic and impact-resistant

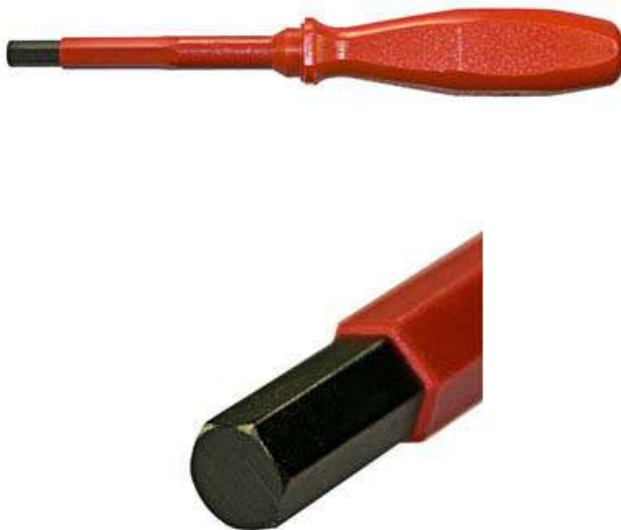
mm	Weight g	Norm
3	65	△ 1000 V
3,5	70	△ 1000 V
4	70	△ 1000 V
4,5	70	△ 1000 V
5	75	△ GS △
5,5	70	△ GS △
6	75	△ GS △
7	115	△ GS △
8	115	△ GS △
9	115	△ GS △

		10	120	
		11	160	
		12	170	
		13	170	
		14	170	
		17	190	
	• 349 Hexagon Screwdriver Sockets • from vanadium steel • forged, oil-hardened • With inside grooves to accept fixing devises at the driving tools • with 1/4" – Square Drive	mm	Weight g	Norm
		3	13	
		4	133	
		5	14	
		6	15	
		8	19	
	• 350 Hexagon Screwdriver Sockets • from vanadium steel • forged, oil-hardened • With inside grooves to accept fixing devises at the driving tools • with 1/2" – Square Drive	mm	Weight g	Norm
		4x65	45	
		5x65	50	
		6x65	50	
		8x65	65	
		10x65	80	
		12x65	85	
		4x100	70	
		5x100	75	
		6x100	76	
		8x100	75	
		10x100	80	
		12x100	85	
		5x140	100	
		6x140	100	
		5x250	115	
		6x250	120	
		8x250	140	
		10x250	170	
		Andere Längen auf Anfrage		

	• 335 Hexagon Screwdriver Sockets • from vanadium steel • forged, oil-hardened • With inside grooves to accept fixing devises at the driving tools • with½ “ – Square Drive	mm	Weight g	Norm		
		4x70	80	⚠1000 V		
		5x70	80	⚠GS⚠		
		6x70	85	⚠GS⚠		
		8x70	95	⚠GS⚠		
		10x70	105	⚠1000 V		
		12x70	125	⚠1000 V		
		14x70	170	⚠1000 V		
		17x70	185	⚠1000 V		
		19x70	195	⚠1000 V		
		4x100	95	⚠1000 V		
		5x100	100	⚠1000 V		
		6x100	100	⚠1000 V		
		8x100	110	⚠1000 V		
		10x100	110	⚠1000 V		
		12x100	160	⚠1000 V		
		5x140	110	⚠1000 V		
		6x140	110	⚠1000 V		
		5x250	125	⚠1000 V		
		6x250	145	⚠1000 V		
		8x250	155	⚠1000 V		
		10x250	190	⚠1000 V		
		Other dimensions upon request				
			• 360 Hexagon Screwdriver with T-Shaped Handle • for hexagon screws • from 50 CrV4-Stahl • Oil-hardened	mm	Weight g	Norm
				3x120	80	⚠1000 V
				3x160	140	⚠1000 V
4x120	85			⚠1000 V		
4x160	145			⚠GS⚠		
4x200	150			⚠1000 V		
4x250	168			⚠1000 V		
5x120	85			⚠1000 V		
5x160	250			⚠GS⚠		
5x200	150			⚠1000 V		
5x250	168			⚠1000 V		
6x120	110			⚠1000 V		

		6x160	250	
		6x200	150	
		6x250	168	
		8x160	260	
		8x200	325	
		8x250	360	
		10x200	390	
		10x250	420	
		10x300	450	
		11x200	400	
		12x200	420	
		13x200	450	
		14x200	490	
		17x200	640	
		Other dimensions upon request		
	• 361 T-Bitholder for Bits 1/4" • Safety insulated to EN 60900/IEC60900:2004 specification • Bitholder 1/4" DIN 3126/FORM C 6,3 • 3 sizes available	mm	Weight g	Norm
		1/4" x 120	185	
		1/4" x 160	248	
		1/4" x 250	310	

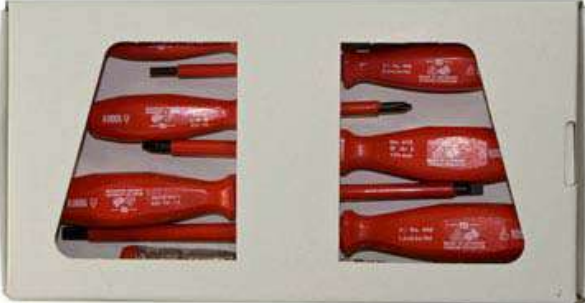
	• 362 T-Handle Sockets Key with Magic-Ring • For hexagon scrwes to DIN 912 • Secure screw locking device • Safety insulated to EN 60900/IEC60900:2004 specification	<table border="1"> <thead> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>5x160</td><td>140</td><td>⚡ 1000 V</td></tr> <tr> <td>6x160</td><td>150</td><td>⚡ 1000 V</td></tr> <tr> <td colspan="3">Other dimensions upon request</td></tr> </tbody> </table>	mm	Weight g	Norm	5x160	140	⚡ 1000 V	6x160	150	⚡ 1000 V	Other dimensions upon request														
mm	Weight g	Norm																								
5x160	140	⚡ 1000 V																								
6x160	150	⚡ 1000 V																								
Other dimensions upon request																										
	• 365 Hexagon Key Wrenches • DIN 7439 • For hexagon screws • from vanadium steel • forged, oil-hardened • especially for cable ring connectors	<table border="1"> <thead> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>3x130</td><td>20</td><td>⚡ 1000 V</td></tr> <tr> <td>4x120</td><td>25</td><td>⚡ 1000 V</td></tr> <tr> <td>5x140</td><td>45</td><td>⚡ 1000 V</td></tr> <tr> <td>6x140</td><td>60</td><td>⚡ 1000 V</td></tr> <tr> <td>8x150</td><td>110</td><td>⚡ 1000 V</td></tr> <tr> <td>10x220</td><td>230</td><td>⚡ 1000 V</td></tr> <tr> <td>12x260</td><td>350</td><td>⚡ 1000 V</td></tr> </tbody> </table>	mm	Weight g	Norm	3x130	20	⚡ 1000 V	4x120	25	⚡ 1000 V	5x140	45	⚡ 1000 V	6x140	60	⚡ 1000 V	8x150	110	⚡ 1000 V	10x220	230	⚡ 1000 V	12x260	350	⚡ 1000 V
mm	Weight g	Norm																								
3x130	20	⚡ 1000 V																								
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8x150	110	⚡ 1000 V																								
10x220	230	⚡ 1000 V																								
12x260	350	⚡ 1000 V																								

	• 367 Wad Punch • With T-Handle	<table><tr><th>Ø mm</th><th>Weight g</th><th>Norm</th></tr><tr><td>4</td><td>120</td><td> 1000 V</td></tr></table>			Ø mm	Weight g	Norm	4	120	 1000 V																					
		Ø mm	Weight g	Norm																											
4	120	 1000 V																													
	• 370 Hexagon Socket Wrenches • DIN 7439 • for hexagon screws • from vanadium steel • forged, oil-hardened • with plastic handle from tough-elastic and impact-resistant plastic	<table><tr><th>mm</th><th>Weight g</th><th>Norm</th></tr><tr><td>1,5</td><td>25</td><td> 1000 V</td></tr><tr><td>2</td><td>25</td><td> 1000 V</td></tr><tr><td>2,5</td><td>50</td><td>  </td></tr><tr><td>3</td><td>50</td><td>  </td></tr><tr><td>4</td><td>55</td><td>  </td></tr><tr><td>5</td><td>80</td><td>  </td></tr><tr><td>6</td><td>100</td><td>  </td></tr><tr><td>8</td><td>135</td><td>  </td></tr></table>			mm	Weight g	Norm	1,5	25	 1000 V	2	25	 1000 V	2,5	50	  	3	50	  	4	55	  	5	80	  	6	100	  	8	135	  
		mm	Weight g	Norm																											
1,5	25	 1000 V																													
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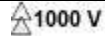
 	• 400 Screwdriver • DIN 7437 • for slotted screws • forged special vanadium • For extremely high torque loads • with plastic handle from tough-elastic and impact-resistant plastic • insulated blades	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>04x2,5x75</td><td>25</td><td></td></tr> <tr> <td>0,6x2,8x75</td><td>30</td><td></td></tr> <tr> <td>0,6x3,5x100</td><td>35</td><td></td></tr> <tr> <td>0,8x4,0x100</td><td>55</td><td></td></tr> <tr> <td>1,0x5,5x125</td><td>100</td><td></td></tr> <tr> <td>1,2x6,5x150</td><td>125</td><td></td></tr> <tr> <td>1,2x8,0x175</td><td>100</td><td></td></tr> <tr> <td>1,6x10,0x200</td><td>260</td><td></td></tr> </table>	mm	Weight g	Norm	04x2,5x75	25	  	0,6x2,8x75	30	  	0,6x3,5x100	35	  	0,8x4,0x100	55	  	1,0x5,5x125	100	  	1,2x6,5x150	125	  	1,2x8,0x175	100	  	1,6x10,0x200	260	  
mm	Weight g	Norm																											
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1,2x6,5x150	125	  																											
1,2x8,0x175	100	  																											
1,6x10,0x200	260	  																											
 	• 410 Cross-Slotted-Screwdriver • DIN 4738 • forged special vanadium • For extremely high torque loads • with plastic handle from tough-elastic and impact-resistant plastic • insulated blades	<table> <tr> <th></th><th>Weight g</th><th>Norm</th></tr> <tr> <td>Gr.0</td><td>30</td><td></td></tr> <tr> <td>Gr.1</td><td>60</td><td></td></tr> <tr> <td>Gr. 2</td><td>95</td><td></td></tr> <tr> <td>Gr.3</td><td>150</td><td></td></tr> <tr> <td>Gr.4</td><td>260</td><td></td></tr> </table>		Weight g	Norm	Gr.0	30	 	Gr.1	60	  	Gr. 2	95	  	Gr.3	150	  	Gr.4	260	 									
	Weight g	Norm																											
Gr.0	30	 																											
Gr.1	60	  																											
Gr. 2	95	  																											
Gr.3	150	  																											
Gr.4	260	 																											

	• 420 Cross-Slotted-Screwdriver Pozidriv		Weight g	Norm
		Gr. 1 PZD	55	 1000 V
		Gr. 2 PZD	95	 1000 V
		Gr. 3 PZD	150	 1000 V
	• 422 Screwdriver for flatslot and cross recess screws PZ/FL • Safety insulated to EN 60900/IEC60900:2004 specification • for cross recess and flatslot screws • High alloy molybdenum vanadium		Weight g	Norm
		Gr.1	48	 
		Gr. 2	76	 
	• 425 Screwdriver-Set • Consisting of on piece each: • 400 0,4x2,5x75 mm 0,8x4,0x100 mm 1,0x5,5x125 mm 1,2x6,5x150 mm • 410 Gr. 1 Gr. 2 • 695 100 mm GS		Weight g	Norm
			680	 
	• 430 Screw-Holding Screwdriver • from vanadium steel • oil-hardened • Impact resistance plastic • Screw is retained by polyamid clamping piece	mm	Weight g	
		2,5x75	25	
		3x100	40	
		4x125	63	
		5x150	110	
		6x175	135	

 	• 440 Crosspoint Screw-Holding Screwdriver • from vanadium steel • oil-hardened • Impact resistance plastic • Screw is retained by polyamid clamping piece	<table border="1"> <thead> <tr> <th>Gr.</th><th>Weight g</th><th></th></tr> </thead> <tbody> <tr> <td>0</td><td>66</td><td></td></tr> <tr> <td>1</td><td>110</td><td></td></tr> <tr> <td>2</td><td>135</td><td></td></tr> </tbody> </table>	Gr.	Weight g		0	66		1	110		2	135	
Gr.	Weight g													
0	66													
1	110													
2	135													
 	• 445 Magazin Screwdriver • Bitholder 1/4" magnetic • Equipped with 6 bits (25mm) stored inside of the handle • Impact resistance plastic • EN 60900 standard • Consisting of: 4x25 mm, 5,5x25 mm, 6,5x25 mm, PH-Gr. 1+2+3	<table border="1"> <thead> <tr> <th></th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td></td><td>170</td><td>  </td></tr> </tbody> </table>		Weight g	Norm		170	  						
	Weight g	Norm												
	170	  												

	• 446 M Magazin Screwdriver Torx • Bitholder ¼" magnetic • Equipped with 5 bits (25mm) stored inside of the handle • Impact resistance plastic • EN 60900 standard • Consisting of: • Torx:T10/T15/T20/T25//T30		Weight g	Norm
			165	  
	• 450 Screwdriver –Set • With square handles to VDE regulation EN 60900 • Blade dimension to EDIN 7437 • Handle from impact-resistant PLASTIC • Blade from chrom vanadium special steel • Consisting of: • 4 Screwdriver 2,5x75 mm , 3,5x100 mm 5,5x125 mm, 6,5x150 mm • 2 Cross-Slotted Screwdriver , size.1+.2 • 1 Voltmeter 60 mm GS • Screwdriver only available as a set		Weight g	Norm
			430	  
		Schraubendreher können nur im Satz verkauft werden		
	• 500 Cable Stripping Knife • With straight, strong blade • Grip from tough-elastic, impact-resistant plastic • With blade protection device	Blade	Weight g	Norm
		50	105	  

	• 503 Cable Stripping Knife • With straight, strong blade • Grip from tough-elastic, impact-resistant plastic • With blade protection device	Blade	Weight g	Norm
		50	115	
	• 505 Insulation Stripping Knife • For plastic cables • With straight blade • Hooked cutting edge • Half-round ground • Handle from tough-elastic, impact-resistant plastic • With blade protection device	Blade	Weight g	Norm
		35	95	
	• 510 Paper Knifer • With very sharp blade • Grip from tough-elastic, impact-resistant plastic • With blade protection device	Blade	Weight g	Norm
		50	90	
	• 515 Gutta Percha Knife • Strong blade with bowed cutting edge • Handle from tough-elastic, impact-resistant plastic • With blade protection device	Blade	Weight g	Norm
		50	95	

	• 520 Electricians Knife • With hooked, insulated blade • Handle from tough-elastic, impact-resistant plastic • With blade protection device	Blade	Weight g	Norm
		35	75	
	• 525 Cable Stripping Knife • Blade with short, offset cutting edge for precise working on cables • Grip from tough-elastic, impact-resistant plastic • With blade protection device	Blade	Weight g	Norm
		45	95	
	• 530 Cable Knife • With hooked blade for slitting and dismantling damproom cables • Grip from tough-elastic, impact-resistant plastic • With blade protection device	Blade	Weight g	Norm
		40	100	
	• 535 Phase-Stripping –Knives • Blade with narrow, straight cutting edge for precise working • Grip from tough-elastic, impact-resistant plastic • With blade protection device	Blade	Weight g	Norm
		50	95	

	• 550 Wire Stripper • Safety insulated EN60900/IEC60900:2004 • For cutting and dismantling of insulation cable made from PVC, PE and VPE • Limited cutting depth to avoid cable damage • Easy-to-use operation	<table><tr><th>Cable-Ø</th><th>Weight g</th><th>Norm</th></tr><tr><td>26-52 mm</td><td>690</td><td>⚡ 1000 V</td></tr><tr><td>Längsschnitt 2,5 mm</td><td></td><td></td></tr><tr><td>Rundschnitt 2,0 mm</td><td></td><td></td></tr><tr><td colspan="3">Other sizes on request</td></tr></table>	Cable-Ø	Weight g	Norm	26-52 mm	690	⚡ 1000 V	Längsschnitt 2,5 mm			Rundschnitt 2,0 mm			Other sizes on request		
Cable-Ø	Weight g	Norm															
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Längsschnitt 2,5 mm																	
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Other sizes on request																	
	• 555 Wire Stripper • Normal type • Same features as • 550	<table><tr><th>Cable-Ø</th><th>Weight g</th><th></th></tr><tr><td>45-75 mm</td><td>925</td><td></td></tr><tr><td>Long cut 3,3 mm</td><td></td><td></td></tr><tr><td>Round cut 2,8 mm</td><td></td><td></td></tr><tr><td colspan="3">Other sizes on request</td></tr></table>	Cable-Ø	Weight g		45-75 mm	925		Long cut 3,3 mm			Round cut 2,8 mm			Other sizes on request		
Cable-Ø	Weight g																
45-75 mm	925																
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Round cut 2,8 mm																	
Other sizes on request																	
	• 560 Wire Stripper • Normal type • Same features as • 550	<table><tr><th>Cable-Ø</th><th>Weight g</th><th></th></tr><tr><td>26-52 mm</td><td>670</td><td></td></tr><tr><td>Long cut 2,5 mm</td><td></td><td></td></tr><tr><td>Round cut 2,0 mm</td><td></td><td></td></tr><tr><td colspan="3">Other sizes on request</td></tr></table>	Cable-Ø	Weight g		26-52 mm	670		Long cut 2,5 mm			Round cut 2,0 mm			Other sizes on request		
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Other sizes on request																	
Keine Abbildung	• 562 Cuttingcut Wheel Round Cut • Replacement cutting wheel for • • 550• 555• 560 • 1 set = 4 pcs.	<table><tr><th>Sizes</th></tr><tr><td>• 562</td></tr><tr><td>0,5-0,9-1,1-1,3-1,5-1,8-2,0-2,1-2,5-2,8-3,0-3,5</td></tr><tr><td></td></tr></table>	Sizes	• 562	0,5-0,9-1,1-1,3-1,5-1,8-2,0-2,1-2,5-2,8-3,0-3,5												
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0,5-0,9-1,1-1,3-1,5-1,8-2,0-2,1-2,5-2,8-3,0-3,5																	
Keine Abbildung	• 563 Cuttingcut Wheel Long Cut • Replacement cutting wheel for • • 550• 555• 560 • 1 piece	<table><tr><th>Sizes</th></tr><tr><td>0,5-0,9-1,1-1,3-1,5-1,8-2,0-2,1-2,5-2,8-3,15-3,3-3,5-4,0-5,0</td></tr><tr><td></td></tr></table>	Sizes	0,5-0,9-1,1-1,3-1,5-1,8-2,0-2,1-2,5-2,8-3,15-3,3-3,5-4,0-5,0													
Sizes																	
0,5-0,9-1,1-1,3-1,5-1,8-2,0-2,1-2,5-2,8-3,15-3,3-3,5-4,0-5,0																	



• 590 Neoprene Towels • to VDE 0680/1 – thickness 1 mm • UV-stabilized – therefore especially suitable for outdoor use • highly flexible and very resistant to tearing and piercing • with VDE certification	mm	Weight g	Norm
	130x130	40	
• 591 Neoprene Towels 10-m-rolls • Thickness 1 mm • 1000 mm wide • 592 Neoprene Towels 10-m-rolls • Thickness 1 mm • 1200 mm wide • 600 Rubber Towels 10-m-rolls • to VDE 0680/1 • Thickness 1,6 mm with cloth padding • 602 Rubber Towels 10-m-rolls • Thickness 1,6 mm • 1000 mm wide • 603 Rubber Towels 10-m-rolls • Thickness 1,6 mm • 1200 mm wide	250x350	210	
	500x500	430	
	600x600	700	
	1000x1000	1800	
	1200x1200	2950	
	mm	Weight g	Norm
	• 591		
	10000x10000	16750	
	• 592		
	1200x10000	20100	
	• 600		
	130x130	45	
	250x350	220	
	500x500	440	
	600x600	720	
	1000x1000	1900	
	1200x1200	3100	
	• 602		
	1000x10000	18600	
	• 603		
	1200x10000	25600	

	• 604 Isolation Floor Mat • thickness 3 mm • Approved to VDE 0303-20000 Volt D.C • 606 Isolation Floor Mat • thickness 4,5 mm • Approved to VDE 0303-50000 Volts D.C. • 607 Isolation Floor Mat Roll of 10 meter • thickness 4,5 mm • Approved to VDE 0303-50000 Volt D.C.	<table> <tr> <th>mm</th><th>Weight g</th><th></th></tr> <tr> <td>• 604</td><td></td><td></td></tr> <tr> <td>1000x1000</td><td>3975</td><td></td></tr> <tr> <td></td><td></td><td></td></tr> <tr> <td>• 606</td><td></td><td></td></tr> <tr> <td>1000x10000</td><td>40000</td><td></td></tr> <tr> <td></td><td></td><td></td></tr> <tr> <td>• 607</td><td></td><td></td></tr> <tr> <td>1000x1000</td><td>6000</td><td></td></tr> <tr> <td></td><td></td><td></td></tr> </table>	mm	Weight g		• 604			1000x1000	3975					• 606			1000x10000	40000					• 607			1000x1000	6000				
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1000x1000	3975																															
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• 607																																
1000x1000	6000																															
	• 608 Bag for Isolation Floor Mat • from red leather cloth • with strap	<table> <tr> <th>mm</th><th>Weight g</th><th></th></tr> <tr> <td>1000x300</td><td>900</td><td></td></tr> <tr> <td></td><td></td><td></td></tr> </table>	mm	Weight g		1000x300	900																									
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1000x300	900																															
	• 610 Electrical Safety Gloves 60903 • Red, anatomically shaped • Recommendation: • We recommend to use liner under Gloves to absorb skin moisture and improve breathing of the skin. Also to protect sensitive skin. • 620	<table> <tr> <th>Stärke*/ Größe</th><th>Weight</th><th>Norm</th></tr> <tr> <td>1,0 / 9</td><td>215</td><td>△ 1000 V</td></tr> <tr> <td>1,0/10</td><td>215</td><td>△ 1000 V</td></tr> <tr> <td colspan="3">* Angaben in mm</td></tr> </table>	Stärke*/ Größe	Weight	Norm	1,0 / 9	215	△ 1000 V	1,0/10	215	△ 1000 V	* Angaben in mm																				
Stärke*/ Größe	Weight	Norm																														
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	• 611 Electrical Safety Gloves 60903 • Anatomically shaped • Recommendation: • We recommend to use liner under Gloves to absorb skin moisture and improve breathing of the skin. Also to protect sensitive skin. • 620	strenght*/size	Weight	Norm
		1,0 / 9	215	 1000 V
		1,0/10	215	 1000 V
		* declaration in mm Other sizes on request		
	• 612 Protection Bag for Electrical Safety Gloves • Belt Bag from red leather cloth • Recommended for storing and protection Electrical Safety Gloves	mm	Weight g	
		200x180	200	
	• 618 Glove Tester • Pneumatic tester for electrical Safety Gloves • Recommendation: We recommend to always make this test before starting work.	Weight g		
		80		

	• 620 Liner Under Gloves • From fine, white cotton • To protect electrical safety gloves	<table><tr><th colspan="3">Weight g</th></tr><tr><td colspan="3">50</td></tr></table>			Weight g			50		
Weight g										
50										
	• 622 Insulating Combination Plier with cutting function • DIN EN 60900/IEC 60900:2004 • Safety insulated to • extremely hard plastic • No metal parts inside	<table><tr><th>mm</th><th>Weight g</th><th>Norm</th></tr><tr><td>200</td><td>152</td><td> 1000 V</td></tr></table>	mm	Weight g	Norm	200	152	 1000 V		
mm	Weight g	Norm								
200	152	 1000 V								
	• 623 Insulating Flat Nose Plier • DIN EN 60900/IEC 60900:2004 • extremely hard plastic • No metal parts inside	<table><tr><th>mm</th><th>Weight g</th><th>Norm</th></tr><tr><td>200</td><td>106</td><td> 1000 V</td></tr></table>	mm	Weight g	Norm	200	106	 1000 V		
mm	Weight g	Norm								
200	106	 1000 V								
	• 624 Insulating Flat Nose Plier with cutting function • nach DIN EN 60900/IEC 60900:2004 • extremely hard plastic • No metal parts inside	<table><tr><th>mm</th><th>Weight g</th><th>Norm</th></tr><tr><td>190</td><td>108</td><td> 1000 V</td></tr></table>	mm	Weight g	Norm	190	108	 1000 V		
mm	Weight g	Norm								
190	108	 1000 V								

	• 625 Plastic Clamp • With fitted steel spring which cannot be touched	mm	Weight g	Norm
		160	70	
	• 627 Plastic Clamp • Very small • With steel spring which cannot be touched	mm	Weight g	Norm
		80	30	
	• 630 Solid Plastic Flat Nose Pliers • For meter connections and meter locking without metal parts	mm	Weight g	Norm
		180	85	

	• 633 Insulator Cap without Self-Clamping • For insulating single wires • Made from tough-elastic-plastic	Ø x length (mm) 2x40	Weight g 1	Norm  1000 V
		3x40	1	 1000 V
		4x40	2	 1000 V
		5x40	4	 1000 V
		7x50	5	 1000 V
		10x70	8	 1000 V
		15x110	16	 1000 V
		20x110	19	 1000 V
		25x110	28	 1000 V
		30x120	35	 1000 V
		35x140	48	 1000 V
		40x140	55	 1000 V
		Other sizes on request		
		Øxlength (mm)	Weight g	Norm
		10x75	10	 1000 V
	• 635 Self-Clamping Caps • To insulate cable ends and single wires • From tough-insulating material • With cross-cut cover	15x100	15	 1000 V
		20x100	20	 1000 V
		25x110	30	 1000 V
		30x120	40	 1000 V
		40x135	55	 1000 V
		50x155	95	 1000 V
		60x130	105	 1000 V
		60x200	162	 1000 V
	• 640 Meter Caps • To insulate single wires • tapered • From tough-insulating material	Øxlength (mm)	Weight g	Norm
		• 640-1		
		10x80	6	 1000 V
		• 640-2		
		10x80	6	 1000 V
		• 640-2		
		10x80	6	 1000 V

	• 642 Slip-on Cap • For insulating single wires • Conical • From tough-elasticized plastic	<table> <tr> <th>Øxlength (mm)</th><th>Weight g</th><th>Norm</th></tr> <tr><td>6x40</td><td>3</td><td>△1000 V</td></tr> <tr><td>6x60</td><td>4</td><td>△1000 V</td></tr> <tr><td>8x40</td><td>3</td><td>△1000 V</td></tr> <tr><td>10x30</td><td>3</td><td>△1000 V</td></tr> <tr><td>10x40</td><td>4</td><td>△1000 V</td></tr> <tr><td>12x90</td><td>8</td><td>△1000 V</td></tr> <tr><td>15x110</td><td>17</td><td>△1000 V</td></tr> <tr><td>20x110</td><td>22</td><td>△1000 V</td></tr> <tr><td>25x110</td><td>28</td><td>△1000 V</td></tr> <tr><td>30x110</td><td>31</td><td>△1000 V</td></tr> <tr><td>40x110</td><td>38</td><td>△1000 V</td></tr> </table>	Øxlength (mm)	Weight g	Norm	6x40	3	△1000 V	6x60	4	△1000 V	8x40	3	△1000 V	10x30	3	△1000 V	10x40	4	△1000 V	12x90	8	△1000 V	15x110	17	△1000 V	20x110	22	△1000 V	25x110	28	△1000 V	30x110	31	△1000 V	40x110	38	△1000 V
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30x110	31	△1000 V																																				
40x110	38	△1000 V																																				
	• 643 Slip-on Cap • For insulation single wires • oval • From tough-elasticized plastic	<table> <tr> <th>Øxlength (mm)</th><th>Weight g</th><th>Norm</th></tr> <tr><td>30x60x140</td><td>83</td><td>△1000 V</td></tr> <tr><td>40x80x140</td><td>97</td><td>△1000 V</td></tr> </table>	Øxlength (mm)	Weight g	Norm	30x60x140	83	△1000 V	40x80x140	97	△1000 V																											
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	• 645 Insulation Tape • roll	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr><td>50(rot)</td><td>105</td><td>△GS△</td></tr> <tr><td>100(rot)</td><td>190</td><td>△GS△</td></tr> <tr><td>100(rot)</td><td>190</td><td>△GS△</td></tr> </table>	mm	Weight g	Norm	50(rot)	105	△GS△	100(rot)	190	△GS△	100(rot)	190	△GS△																								
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50(rot)	105	△GS△																																				
100(rot)	190	△GS△																																				
100(rot)	190	△GS△																																				

	• 650 Safty Helmet • To DIN 4840 • Made from special plastics • 655 Safety Face Shield • For Safety Helmet• 650	<table><tr><th>Colour</th><th>Weight g</th><th></th></tr><tr><td>• 650</td><td></td><td></td></tr><tr><td>weiß</td><td>370</td><td></td></tr><tr><td>gelb</td><td>370</td><td></td></tr><tr><td>rot</td><td>370</td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td>• 655</td><td></td><td></td></tr><tr><td></td><td>195</td><td></td></tr></table>	Colour	Weight g		• 650			weiß	370		gelb	370		rot	370					• 655				195	
Colour	Weight g																									
• 650																										
weiß	370																									
gelb	370																									
rot	370																									
• 655																										
	195																									
	• 656 Stroing Bag for • 650 und • 655 • From red leather cloth • With carrying strap	<table><tr><th>Weight g</th></tr><tr><td>500</td></tr></table>	Weight g	500																						
Weight g																										
500																										
	• 658 Safeyty Boots • With fitted steel cap • Approved to CE-EN 345-1	<table><tr><th>Sizes</th><th>Weight g</th><th>Norm</th></tr><tr><td>39-47</td><td>3000</td><td>⚡1000 V</td></tr></table>	Sizes	Weight g	Norm	39-47	3000	⚡1000 V																		
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39-47	3000	⚡1000 V																								
	• 660 Insulator Caps • Single-faced • Soft plastic inside • Solid plastic outside • For transformers etc.	<table><tr><th>Wings*/Height*</th><th>Weight g</th><th>Norm</th></tr><tr><td>80/160</td><td>320</td><td>⚡1000 V</td></tr><tr><td>300/160</td><td>700</td><td>⚡1000 V</td></tr><tr><td colspan="3">* sizes in mm</td></tr></table>	Wings*/Height*	Weight g	Norm	80/160	320	⚡1000 V	300/160	700	⚡1000 V	* sizes in mm														
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	• 662 Insulator Caps • Single-faced • Soft plastic inside • Solid plastic outside • For transformers etc.	<table border="1"> <thead> <tr> <th>Wings*/Height*</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>130/100</td><td>260</td><td>⚡ 1000 V</td></tr> <tr> <td colspan="3">* sizes in mm</td></tr> <tr> <td colspan="3"></td></tr> </tbody> </table>	Wings*/Height*	Weight g	Norm	130/100	260	⚡ 1000 V	* sizes in mm								
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130/100	260	⚡ 1000 V															
* sizes in mm																	
	• 663 Insulators Caps • Double faced • From soft PVC • For transformers etc.	<table border="1"> <thead> <tr> <th>Wings*/Height*</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>130/100</td><td>330</td><td>⚡ 1000 V</td></tr> <tr> <td colspan="3">* sizes in mm</td></tr> <tr> <td colspan="3"></td></tr> </tbody> </table>	Wings*/Height*	Weight g	Norm	130/100	330	⚡ 1000 V	* sizes in mm								
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	• 665 Insulator Caps • Double faced • Soft plastic inside • Solid plastic outside • For transformers etc.	<table border="1"> <thead> <tr> <th>Wings*/Height*</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>80/160</td><td>390</td><td>⚡ 1000 V</td></tr> <tr> <td>220/160</td><td>1000</td><td>⚡ 1000 V</td></tr> <tr> <td colspan="3">* sizes in mm</td></tr> <tr> <td colspan="3"></td></tr> </tbody> </table>	Wings*/Height*	Weight g	Norm	80/160	390	⚡ 1000 V	220/160	1000	⚡ 1000 V	* sizes in mm					
Wings*/Height*	Weight g	Norm															
80/160	390	⚡ 1000 V															
220/160	1000	⚡ 1000 V															
* sizes in mm																	
	• 667 Insulator Caps for Gable-Insulations • With plastic buttons, ideal to use in bad weather conditions • Made from weather-resistant soft plastic material • Especially suitable for lasting strain	<table border="1"> <thead> <tr> <th>Flügel*/Höhe*</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>245/270</td><td>900</td><td>⚡ 1000 V</td></tr> <tr> <td colspan="3">Also available without buttons</td></tr> <tr> <td colspan="3">* sizes in mm</td></tr> <tr> <td colspan="3"></td></tr> </tbody> </table>	Flügel*/Höhe*	Weight g	Norm	245/270	900	⚡ 1000 V	Also available without buttons			* sizes in mm					
Flügel*/Höhe*	Weight g	Norm															
245/270	900	⚡ 1000 V															
Also available without buttons																	
* sizes in mm																	

	• 668 Insulator Caps for Cable-Insulations • With plastic buttons, ideal to use in bad weather conditions • Secure touch-protection as well as on the inside • Made from weather resistant soft plastic material	<table><tr><th>Wings*/Height*</th><th>Weight g</th><th>Norm</th></tr><tr><td>115/270</td><td>1100</td><td> 1000 V</td></tr></table>	Wings*/Height*	Weight g	Norm	115/270	1100	 1000 V			
		Wings*/Height*	Weight g	Norm							
		115/270	1100	 1000 V							
Also available without buttons * sizes in mm											
	• 670 Insulator Caps • From soft PVC • For transformer etc.	<table><tr><th>Wings*/Height*</th><th>Weight g</th><th>Norm</th></tr><tr><td>100/140</td><td>400</td><td> 1000 V</td></tr></table>	Wings*/Height*	Weight g	Norm	100/140	400	 1000 V			
		Wings*/Height*	Weight g	Norm							
		100/140	400	 1000 V							
* sizes in mm											
	• 672 NH-Protector Caps • Moulded protector caps for covering spring contacts	<table><tr><th>mm</th><th>Weight g</th><th>Norm</th></tr><tr><td>170x140</td><td>115</td><td> 1000 V</td></tr><tr><td>260x140</td><td>190</td><td> 1000 V</td></tr></table>	mm	Weight g	Norm	170x140	115	 1000 V	260x140	190	 1000 V
		mm	Weight g	Norm							
		170x140	115	 1000 V							
		260x140	190	 1000 V							
	• 673 NH-Protector Caps • Moulded protector caps for covering NH fuse holders	<table><tr><th>mm</th><th>Weight g</th><th>Norm</th></tr><tr><td>340x170</td><td>350</td><td> 1000 V</td></tr></table>	mm	Weight g	Norm	340x170	350	 1000 V			
		mm	Weight g	Norm							
		340x170	350	 1000 V							

	• 680 NH-Fuse Insertion Glove • To insert and remove low-tension high-performance fuses (INH fuse inserts) • Manufactured to DIN 43620 Part 1 • Sizes 00 and 0-3 for nominal voltages of up to 600 V alternating voltage	<table border="1"> <thead> <tr> <th>Länge</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>385</td><td>460</td><td>Glocke ⚠ 1000 V</td></tr> <tr> <td>445</td><td>465</td><td>Glocke ⚠ 1000 V</td></tr> </tbody> </table>	Länge	Weight g	Norm	385	460	Glocke ⚠ 1000 V	445	465	Glocke ⚠ 1000 V
Länge	Weight g	Norm									
385	460	Glocke ⚠ 1000 V									
445	465	Glocke ⚠ 1000 V									
	• 691 Universal Voltmeters • 2-way • Test range: 45 – 380 Volt • For direct and alternating current	<table border="1"> <thead> <tr> <th></th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td></td><td>100</td><td>⚠ 1000 V</td></tr> </tbody> </table>		Weight g	Norm		100	⚠ 1000 V			
	Weight g	Norm									
	100	⚠ 1000 V									
	• 695 Voltmeters • With clear transparent , impact-resistant handle • Test range: 150-250 V	<table border="1"> <thead> <tr> <th>Blade</th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td>75</td><td>25</td><td>⚠</td></tr> <tr> <td>100</td><td>45</td><td>⚠</td></tr> </tbody> </table>	Blade	Weight g	Norm	75	25	⚠	100	45	⚠
Blade	Weight g	Norm									
75	25	⚠									
100	45	⚠									

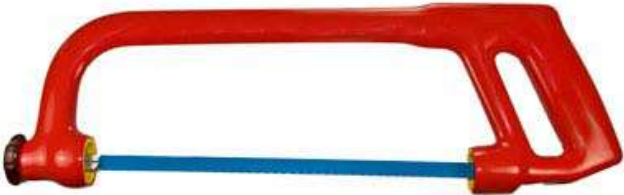
	• 700 Two-Way Voltmeters "Duspol" • From 12 – 750 Volt • Direct and alternating current shown by LED • Current: 12 – 50 - 120 – 230 – 400 – 500- 750 V		Weight g	Norm
			210	
		Andere Ausführungen auf Anfrage		
	• 705 Test Ball • Basis measuring range 500 – 1000 Volt • Available as: • 500 V without phase tester • 500 V with phase tester • 705-3 1000 V		Weight g	Norm
			600	
	• 708 Dust Brush • Short version • Completely plastic • No electrical contact	Maße	Weight g	Norm
		1"x180	11	1000 V
	• 710 Dust Brush • Completely from plastic • Without metal parts • No electrical contact	Maße	Weight g	Norm
		1"x400	70	1000 V
		1,5"x400	75	1000 V
		2"x400	80	1000 V

	• 714 Insulation Wedges, red • Made from shockproof Polyamid	<table><tr><th>Size</th><th>Weight g</th><th>Norm</th></tr><tr><td>170x27x10</td><td>90</td><td> 1000 V</td></tr></table>			Size	Weight g	Norm	170x27x10	90	 1000 V			
		Size	Weight g	Norm									
		170x27x10	90	 1000 V									
	• 715 Plastic Insulation Wedges • Without groove • 720 Wooden Insulating Wedges (no Picture) • Without groove	<table><tr><th>Sizes</th><th>Weight g</th><th>Norm</th></tr><tr><td>160x15</td><td>60</td><td> 1000 V</td></tr><tr><td>170x17</td><td>40</td><td></td></tr></table>			Sizes	Weight g	Norm	160x15	60	 1000 V	170x17	40	
		Sizes	Weight g	Norm									
		160x15	60	 1000 V									
		170x17	40										
	• 723 Insulating Wedge • Short version • Completely plastic • Without groove • Oval form without sharp edges	<table><tr><th>Size</th><th>Weight g</th><th>Norm</th></tr><tr><td>150x25x10</td><td>40</td><td> 1000 V</td></tr></table>			Size	Weight g	Norm	150x25x10	40	 1000 V			
		Size	Weight g	Norm									
		150x25x10	40	 1000 V									
	• 724 Insulating Wedges • Made from Polyamid	<table><tr><th>Size</th><th>Weight g</th><th>Norm</th></tr><tr><td>170x20x10</td><td>100</td><td> 1000 V</td></tr></table>			Size	Weight g	Norm	170x20x10	100	 1000 V			
		Size	Weight g	Norm									
		170x20x10	100	 1000 V									

	• 725 Insulating Wedges • Without groove • Oval, without sharp edges • Large size with impact-resistant head	<table><tr><th>Size*</th><th>Weight g</th><th>Norm</th></tr><tr><td>200x25x10</td><td>55</td><td> 1000 V</td></tr></table>	Size*	Weight g	Norm	200x25x10	55	 1000 V
		Size*	Weight g	Norm				
		200x25x10	55	 1000 V				
*dimensions in mm								
	• 730 Insulating Wedges • From wood • With groove	<table><tr><th>Maße*</th><th>Weight g</th><th></th></tr><tr><td>185x18</td><td>45</td><td></td></tr></table>	Maße*	Weight g		185x18	45	
		Maße*	Weight g					
		185x18	45					
	• 740 Insulating Wedges • From plastic • With groove	<table><tr><th>Size*</th><th>Weight g</th><th>Norm</th></tr><tr><td>170x20</td><td>80</td><td> 1000 V</td></tr></table>	Size*	Weight g	Norm	170x20	80	 1000 V
		Size*	Weight g	Norm				
		170x20	80	 1000 V				
	• 742 Insulating Wedges • With large groove for all popular cable cutters • Oval type, without sharp edges	<table><tr><th>Size*</th><th>Weight g</th><th>Norm</th></tr><tr><td>225x45x30</td><td>225</td><td> 1000 V</td></tr></table>	Size*	Weight g	Norm	225x45x30	225	 1000 V
		Size*	Weight g	Norm				
		225x45x30	225	 1000 V				
*dimensions in mm								

	• 745 Soft Faced Hammer • recoilless • Replaceable hammer head • Fully insulated hammer • 745 Relacement Heads • (2 yellow pieces)	<table> <tr> <th>mm Ø*</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>25</td><td>560</td><td> 1000 V</td></tr> <tr> <td>35</td><td>790</td><td> 1000 V</td></tr> <tr> <td colspan="3">* Diameter Hammer Head</td></tr> </table>	mm Ø*	Weight g	Norm	25	560	1000 V	35	790	1000 V	* Diameter Hammer Head								
mm Ø*	Weight g	Norm																		
25	560	1000 V																		
35	790	1000 V																		
* Diameter Hammer Head																				
	• 746 Plastic Hammer • Fully insulated hammer • No metal parts inside	<table> <tr> <th>mm Ø*</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>55</td><td>325</td><td> 1000 V</td></tr> <tr> <td colspan="3">Diameter Hammer Head</td></tr> </table>	mm Ø*	Weight g	Norm	55	325	1000 V	Diameter Hammer Head											
mm Ø*	Weight g	Norm																		
55	325	1000 V																		
Diameter Hammer Head																				
	• 752 Straight , Tweezers • With 2-layer safety insulation and slide-off protection	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>130 spitz</td><td>30</td><td> 1000 V</td></tr> <tr> <td>130 flach</td><td>30</td><td> 1000 V</td></tr> <tr> <td>145 flach</td><td>55</td><td> </td></tr> <tr> <td>200 flach</td><td>72</td><td> 1000 V</td></tr> <tr> <td colspan="3">Other tweezer versions on request</td></tr> </table>	mm	Weight g	Norm	130 spitz	30	1000 V	130 flach	30	1000 V	145 flach	55		200 flach	72	1000 V	Other tweezer versions on request		
mm	Weight g	Norm																		
130 spitz	30	1000 V																		
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145 flach	55																			
200 flach	72	1000 V																		
Other tweezer versions on request																				
	• 753 Bent Tweezers • With 2-layer safety insulation and slide-off protection	<table> <tr> <th>mm</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>145</td><td>35</td><td> </td></tr> <tr> <td>200</td><td>72</td><td> 1000 V</td></tr> <tr> <td colspan="3">Other tweezer versions on request</td></tr> </table>	mm	Weight g	Norm	145	35		200	72	1000 V	Other tweezer versions on request								
mm	Weight g	Norm																		
145	35																			
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	• 755 Inspection Mirror • Fully insulated	<table><tr><th>mm Ø</th><th>Weight g</th><th>Norm</th></tr><tr><td>22</td><td>20</td><td> 1000 V</td></tr></table>	mm Ø	Weight g	Norm	22	20	 1000 V						
		mm Ø	Weight g	Norm										
		22	20	 1000 V										
	• 760 Adjustable Spanners • to DIN 3117 A • BAHCO model • burnished	<table><tr><th>mm</th><th>Weight g</th><th>Norm</th></tr><tr><td>200</td><td>345</td><td> 1000 V</td></tr><tr><td>250</td><td>530</td><td> 1000 V</td></tr><tr><td>300</td><td>800</td><td> 1000 V</td></tr></table>	mm	Weight g	Norm	200	345	 1000 V	250	530	 1000 V	300	800	 1000 V
		mm	Weight g	Norm										
		200	345	 1000 V										
		250	530	 1000 V										
		300	800	 1000 V										
Other lengths on request														
	• 762 Adjustable Spanners • to DIN 3117 B • Chrome-plated	<table><tr><th>mm</th><th>Weight g</th><th>Norm</th></tr><tr><td>200</td><td>260</td><td> 1000 V</td></tr><tr><td>250</td><td>515</td><td> 1000 V</td></tr><tr><td>300</td><td>750</td><td> 1000 V</td></tr></table>	mm	Weight g	Norm	200	260	 1000 V	250	515	 1000 V	300	750	 1000 V
		mm	Weight g	Norm										
		200	260	 1000 V										
		250	515	 1000 V										
		300	750	 1000 V										
	• 765 mini Metal Hacksaw Frame • Fully insulated	<table><tr><th>Length*/ Blade length*</th><th>Weight g</th><th>Norm</th></tr><tr><td>250/150</td><td>215</td><td> 1000 V</td></tr></table>	Length*/ Blade length*	Weight g	Norm	250/150	215	 1000 V						
		Length*/ Blade length*	Weight g	Norm										
		250/150	215	 1000 V										
		*declaration in mm												

	• 766 Mini Metal Hacksaw Frame • Fully insulated • Plastic handle for removing blade • Small version	<table> <tr> <th>Length*/ Blade length*</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>280/150</td><td>225</td><td> 1000 V</td></tr> <tr> <td colspan="3">*declaration in mm</td></tr> <tr> <td colspan="3"></td></tr> </table>	Length*/ Blade length*	Weight g	Norm	280/150	225	 1000 V	*declaration in mm					
Length*/ Blade length*	Weight g	Norm												
280/150	225	 1000 V												
*declaration in mm														
	• 767 Metal Hacksaw Frame • Fully insulated • With plastic screw for tensioning the blade	<table> <tr> <th>Length*/ Blade length*</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>450/300</td><td>700</td><td> 1000 V</td></tr> <tr> <td colspan="3">*declaration in mm</td></tr> <tr> <td colspan="3"></td></tr> </table>	Length*/ Blade length*	Weight g	Norm	450/300	700	 1000 V	*declaration in mm					
Length*/ Blade length*	Weight g	Norm												
450/300	700	 1000 V												
*declaration in mm														
	• 770 Metal Hacksaw Frame • Fully insulated • Heavy version • 771 spare Sawblades • 771-1 for • 765 (150 mm) • 771-2 for • 767 und • 770 (300 mm)	<table> <tr> <th>Length*/ Blade length*</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>520/300</td><td>770</td><td> 1000 V</td></tr> <tr> <td colspan="3">*declaration in mm</td></tr> <tr> <td colspan="3"></td></tr> </table>	Length*/ Blade length*	Weight g	Norm	520/300	770	 1000 V	*declaration in mm					
Length*/ Blade length*	Weight g	Norm												
520/300	770	 1000 V												
*declaration in mm														
	• 774 Duo-Crimp • Simply stripping of conductors from 0,5-6,0 sq. mm² • The scanning system automatically adjusts itself to the conductor cross section • Afterwards it is possible to twist the cord conductor	<table> <tr> <th>mm²</th><th>Weight g</th><th></th></tr> <tr> <td>0,5-6,0</td><td>117</td><td></td></tr> <tr> <td colspan="3"></td></tr> </table>	mm ²	Weight g		0,5-6,0	117							
mm ²	Weight g													
0,5-6,0	117													

	• 775 Wire Stripper	<table> <tr> <th>mm²</th><th>Weight g</th><th></th></tr> <tr> <td>0,2-6,0</td><td>125</td><td></td></tr> </table>	mm ²	Weight g		0,2-6,0	125	
mm ²	Weight g							
0,2-6,0	125							
	• 776 Coaxial-Stripper • Step-by-step stripping of all kinds of coaxial cables with an outer diameter from 4.8 – 7.5 mm • Also suitable for flexible cables of e.g. 3 x 0,75 sq. mm, 10 sq. mm and 16 sq. mm	<table> <tr> <th>mm²</th><th>Weight g</th><th></th></tr> <tr> <td>4,8-7,5</td><td>28</td><td></td></tr> </table>	mm ²	Weight g		4,8-7,5	28	
mm ²	Weight g							
4,8-7,5	28							
	• 777 Duo-Stripper • for dismantling all standard round cables of 4.8 to 28 mm diam. • Cutting depth to be adjusted exactly to sheath thickness • The blade automatically changes from round to longitudinal cuts • The securing clamp is adjustable to cables from 4 to 28 mm diam. • Perfect stripping performance from 0.5 to 6.0 sq. mm	<table> <tr> <th>Cable Diameter (sq. Mm)</th><th>für Kabel</th><th>Weight g</th></tr> <tr> <td>0,5-6,0 mm²</td><td>4,0-28 mm</td><td>120</td></tr> </table>	Cable Diameter (sq. Mm)	für Kabel	Weight g	0,5-6,0 mm ²	4,0-28 mm	120
Cable Diameter (sq. Mm)	für Kabel	Weight g						
0,5-6,0 mm ²	4,0-28 mm	120						

	• 778 Round Cable Stripper • for round and damp proof installation cables with diameters from 8 – 13 mm Ø • flush stripping also in places which are difficult to access, e.g. on ceilings and walls, in conduit boxes and distribution boxes	<table> <tr> <th>mm Ø</th><th>Weight g</th><th></th></tr> <tr> <td>8-13</td><td>42</td><td></td></tr> </table>	mm Ø	Weight g		8-13	42	
mm Ø	Weight g							
8-13	42							
	• 780 Star Stripper • Stripping of outer insulations • Stripping of one- and multiwire conductors • For round and longitudinal stripping	<table> <tr> <th>Cable Diameter (sq. Mm)</th><th>For Cable</th><th>Weight g</th></tr> <tr> <td>0,5-16 mm²</td><td>4,0-12 mm</td><td>105</td></tr> </table>	Cable Diameter (sq. Mm)	For Cable	Weight g	0,5-16 mm²	4,0-12 mm	105
Cable Diameter (sq. Mm)	For Cable	Weight g						
0,5-16 mm²	4,0-12 mm	105						
	• 785 Cable Knife • Applicable for 8 – 28 mm diam. • With additional straight blade fitted	<table> <tr> <th>mm Ø</th><th>Weight g</th><th></th></tr> <tr> <td>4-28</td><td>95</td><td></td></tr> </table>	mm Ø	Weight g		4-28	95	
mm Ø	Weight g							
4-28	95							
	• 787 Cable Knife • Grip made from tough-elasticized • One-piece handle with slip protection • Blade with round and threesquare scraper	<table> <tr> <th>Lenght</th><th>Weight g</th><th></th></tr> <tr> <td>200 mm</td><td>82</td><td></td></tr> </table>	Lenght	Weight g		200 mm	82	
Lenght	Weight g							
200 mm	82							

	• 788 Multi Purpose Mast + Cabinet Key Equipped with : • Inner square 6 mm  • Inner square 7-8 mm  • Inner triangle drive 8 mm  • Bit on chain for slotted head screws 1x7mm  • Bit on chain for crosspoint screws PH 2  • plastic adapter 1/4" 	Weight g		
		88		
	• 789 Multi Purpose Mast + Cabinet Key Equipped with : • Inner square 5 mm  • Inner square 7 mm  • Inner square 8 mm  • Bit on chain for slotted head screws 1x7mm  • Bit on chain for crosspoint screws PH 2  • conical male square 6-10mm 	Weight g		
		91		
	• 790 Insulated LED Light • Short version (90 mm length) • Fully insulated • Lithium Battery include • White light • Used in electrical cabinets etc.	mm	Weight g	Norm
		Ø 19xL90	58	 1000 V

	• 791 Subkey Elektro Universal key and screw driver Equipped with: • Inner square 6 mm • Inner square 7-8 mm • Inner triangle drive 9 mm • Doppelbart 3-5 mm • Bit on chain for crosspoint screws PH2 • plastic adapter 1/4" Bits	<table><tr><th colspan="3">Weight g</th></tr><tr><td colspan="3">158</td></tr></table>			Weight g			158					
	Weight g												
	158												
													
	• 800 Tool Case, empty • from heavy yellow or red leather • with straps • front and middle wall collapsible • plastic foil • chrome-plated fittings • robust model to carry approx. 5 tools and protection parts	<table><tr><th>mm</th><th>Weight g</th><th></th></tr><tr><td>440x350x190</td><td>4300</td><td></td></tr></table>	mm	Weight g		440x350x190	4300		<table><tr><th colspan="3">Other tool case sizes on request</th></tr></table>		Other tool case sizes on request		
	mm	Weight g											
	440x350x190	4300											
Other tool case sizes on request													

	• 810 Tool Case, empty • from red leather • with straps • collapsible front wall • robust sheet-metal bottom to carry approx.400 • VDE tools and protector pieces at free of choice • Especially fit for mechanics	<table> <tr> <th>mm</th><th>Weight g</th><th></th></tr> <tr> <td>420x310x170</td><td>3400</td><td></td></tr> <tr> <td colspan="3">Other tool case sizes on request</td></tr> </table>	mm	Weight g		420x310x170	3400		Other tool case sizes on request		
mm	Weight g										
420x310x170	3400										
Other tool case sizes on request											
	• 815 Tool case • red hard-shell case • complete with 33 safety and devices: - 1 Tool Case • 817 - 1 Engineers Pliers 180 mm • 100 - 1 Wire Stripper 160 mm • 102 - 1 Teleph.Pliers Straight 200mm • 104 - 1 Telephone Pliers bent. 200mm • 106 - 1 Side Cutter 160mm • 112 - 1 Round Nose Pliers160mm • 110 - 1 Plastic Flat Nose Pliers 180mm • 630 - 2 Hexagon Key Wrenches • 365 - 5 Srewdrivers for Slotted screws • 400 2,8x75, 4x100, 5,5x125, 6,5x125, 8xx175 - 2 Srewdrivers for Philips srew, size 1-2 • 410 - 2 slotted Srew-Holding Srewdrivers, size 1-2 • 420 - 2 slotted Srew-Holding Srewdrivers, 3x100, 4x125 • 430 - 1 Cross-slotted Screw- Holding Srewdriver size1 • 440 - 4 Socket Wrenches 5,5, 6, 7, 8 • 345 - 1 Cable stripping Knife • 500 - 1 Cable Knife • 785 - 1 Cable Cutter 215 mm • 120 - 1 Voltmeter „Duspol“ • 700 - 1 NH-Fuse Insertion Glove • 680 - 1 pair of Electrical Safety Gloves size 10x1 • 610 - 1 pair of Under Gloves • 620 - 1 Insulation Tape 100 red • 645	<table> <tr> <th></th><th>Weight g</th><th>Norm</th></tr> <tr> <td></td><td>9400</td><td>  </td></tr> </table>		Weight g	Norm		9400	  			
	Weight g	Norm									
	9400	  									

	• 817 Tool Case, empty • From heavy yellow or red leather • With straps • Front and middle wall collapsible • Chrome-plated fittings • Robust model to carry approx 50 tools and protection parts	<table><tr><th>mm</th><th>Weight g</th><th></th></tr><tr><td>470x310x130</td><td>5000</td><td></td></tr></table>	mm	Weight g		470x310x130	5000																																															
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		470x310x130	5000																																																			
Other tool case sizes on request																																																						
	• 820 Tool Case • From heavy yellow or red leather • With straps • Complete with 53 pieces <table><tr><td>- 1 Tool</td><td>• 800</td></tr><tr><td>- 1 pair of Engineers Pliers 180mm 180 mm</td><td>• 100</td></tr><tr><td>- 1 Insulation Stripper 160 mm</td><td>• 102</td></tr><tr><td>- 1 pair of Tel. Plier straight 200mm</td><td>• 104</td></tr><tr><td>- 1 Side Cutter 160mm</td><td>• 112</td></tr><tr><td>- 1 Cable Cutter 215 mm</td><td>• 120</td></tr><tr><td>- 6 Open-Ended-Spanners 10, 13, 14, 17, 19, 22 mm</td><td>• 200</td></tr><tr><td>- 6 Ring spanners 10, 13, 14, 17, 19, 22 mm</td><td>• 210</td></tr><tr><td>- 1 Change-Over-Ratched ½“</td><td>• 300</td></tr><tr><td>- 1 Extension 250 mm ½“</td><td>• 310</td></tr><tr><td>- 1 Extension 125 mm ½“</td><td>• 310</td></tr><tr><td>- 1 T-Shaped Lever ½“</td><td>325</td></tr><tr><td>- 9 Sockets ½“ 10, 11, 12, 13, 14, 17, 19, 22, 24 mm</td><td>• 316</td></tr><tr><td>- 1 Cable Knife</td><td>• 500</td></tr><tr><td>- 1 Cable Stripping Knife</td><td>• 505</td></tr><tr><td>- 3 Rubber Mats 130x130</td><td>• 600</td></tr><tr><td>- 3 Rubber Mats 250x350</td><td>• 600</td></tr><tr><td>- 3 Rubber Mats 500x500</td><td>• 600</td></tr><tr><td>- 2 Plastic Clamps</td><td>• 627</td></tr><tr><td>- 4 Plastic Clamps</td><td>• 625</td></tr><tr><td>- 1 pair of Electrical Safety - Gloves, size .9x1</td><td>• 610</td></tr><tr><td>- 1 pair of Under Gloves</td><td>• 620</td></tr><tr><td>- 4 Screwdrivers 2,8x75, 4x100, ,5x125,6,5x150- 4</td><td>• 400</td></tr></table>	- 1 Tool	• 800	- 1 pair of Engineers Pliers 180mm 180 mm	• 100	- 1 Insulation Stripper 160 mm	• 102	- 1 pair of Tel. Plier straight 200mm	• 104	- 1 Side Cutter 160mm	• 112	- 1 Cable Cutter 215 mm	• 120	- 6 Open-Ended-Spanners 10, 13, 14, 17, 19, 22 mm	• 200	- 6 Ring spanners 10, 13, 14, 17, 19, 22 mm	• 210	- 1 Change-Over-Ratched ½“	• 300	- 1 Extension 250 mm ½“	• 310	- 1 Extension 125 mm ½“	• 310	- 1 T-Shaped Lever ½“	325	- 9 Sockets ½“ 10, 11, 12, 13, 14, 17, 19, 22, 24 mm	• 316	- 1 Cable Knife	• 500	- 1 Cable Stripping Knife	• 505	- 3 Rubber Mats 130x130	• 600	- 3 Rubber Mats 250x350	• 600	- 3 Rubber Mats 500x500	• 600	- 2 Plastic Clamps	• 627	- 4 Plastic Clamps	• 625	- 1 pair of Electrical Safety - Gloves, size .9x1	• 610	- 1 pair of Under Gloves	• 620	- 4 Screwdrivers 2,8x75, 4x100, ,5x125,6,5x150- 4	• 400	<table><tr><th></th><th>Weight g</th><th>Norm</th></tr><tr><td></td><td>13000</td><td>  </td></tr></table>		Weight g	Norm		13000	  
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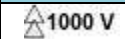
• **821 Tool Case**

- From heavy yellow or red leather
- With straps
- Complete with 53 pieces

- 1 Tool • 800
- 1 pair of Engineers Pliers 180 mm • 010
- 1 Insulation Stripper 160 mm • 012
- 1 pair of Tel. Pliers straight 200mm • 014
- 1 Side Cutter 160mm • 024
- 1 Cable Cutter 215 mm • 120
- 6 Open-Ended-Spanners • 200
 - 10, 13, 14, 17, 19, 22 mm
- 6 Ring Spanners • 210
 - 10, 13, 14, 17, 19, 22 mm
- 1 Reversible Ratchet ½“ • 280
- 1 Extension 250 mm ½“ • 285
- 1 Extension 125 mm ½“ • 285
- 1 T-Shaped Lever ½“ • 290
- 9 Sockets ½“ • 316
 - 10, 11, 12, 13, 14, 17, 19, 22, 24 mm
- 1 Cable Knife • 500
- 1 Cable Stripping Knife • 505
- 3 Rubber Mats 130x130 • 590
- 3 Rubber Mats 250x350 • 590
- 3 Rubber Mats 500x500 • 590
- 2 Plastic Clamps • 627
- 4 Plastic Clamps • 625
- 1 pair of Electrical- Safety Gloves size.9x1 • 611
- 1 pair of Under Gloves • 620
- 4 Screwdriver • 400
 - 2,8x75, 4x100, ,5x125, 6,5x150

Weight g

12500

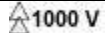
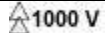
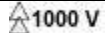


	• 825 Tool Case • From heavy yellow or red leather • With straps • Complete with 53 pieces - 1 Tool • 810 - 1 Engineers Pliers 180 mm • 100 - 1 Wire Stripper 160 mm • 102 - 1 pair of Tel.-Pliers straight 200mm • 104 - 1 Side Cutter 160mm • 112 - 1 Cable Cutter 215 mm • 120 - 7 Open-Ended-Spanners • 200 10, 11, 12, 13, 14, 17, 19 mm - 7 Sockets • " 315 10, 11, 12, 13, 14, 17, 19 mm - 1 T-Handle Socket Wrench • " • 325 - 2 Socket Wrenches 8-9 • 345 - 3 Screwdrivers with power handles • 400 2,8x75, 4x100, 5,5x125 - 1 Cable Knife • 500 - 1 Insulation Stripping Knife • 505 - 1 Rubber Towel • 600 1000x1000x1,6 mm - 1 Rubber Towel • 600 250x350x1,6 mm - 1 Rubber Mats • 600 130x130x1,6 mm - 2 Plastic Clamps • 627 - 4 Plastic Clamps • 625 - 1 Cap Ø 30 mm • 500 - 1 Voltmeter „Duspol“ • 700	<table border="1"> <thead> <tr> <th></th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td></td><td>9400</td><td></td></tr> </tbody> </table>		Weight g	Norm		9400	
	Weight g	Norm						
	9400							
	• 830 Tool Set in black folding bag • Contains: - 1 pair of Engineers Pliers 180 mm • 100 - 1 Insulation Stripper 160 mm • 102 - 1 pair of Tel. Pliers straight. 200mm • 104 - 1 pair of Tel. Pliers bent 200mm • 106 - 1 Side Cutter 160mm • 112 - 1 pair of Waterpump Pliers 240 mm -1000V • 116	<table border="1"> <thead> <tr> <th></th><th>Weight g</th><th>Norm</th></tr> </thead> <tbody> <tr> <td></td><td>2500</td><td></td></tr> </tbody> </table>		Weight g	Norm		2500	
	Weight g	Norm						
	2500							

	• 832 Tool Set in black folding bag • Contains: - 1 pair of Engineers Pliers 180 mm • 010 - 1 Insulation Stripper 160 mm • 012 - 1 pair of Tel. Pliers straight. 200mm • 014 - 1 pair of Tel. Pliers bent. 200mm • 016 - 1 Side Cutter 160mm • 024 - 1 pair of water pump Pliers 240 mm • 029	<table> <tr> <th></th><th>Weight g</th><th>Norm</th></tr> <tr> <td></td><td>2400</td><td>△1000 V</td></tr> </table>		Weight g	Norm		2400	△1000 V
	Weight g	Norm						
	2400	△1000 V						
	• 840 Tool Set in black folding bag • Contains: - 1 pair of Engineers Pliers 180 mm • 100 - 1 Insulation Stripper 160 mm • 102 - 1 pair of Round Nose Pliers 160mm • 110 - 1 Side Cutter 160mm • 112 - 1 Voltmeter 100 mm • 695 - 1 Voltmeter 100 mm  • 695 - 4 Screwdrivers • 400 - 2,8x75, 4x100, 5,5x125, 6,5x150 - 1 Cross-slotted Screwdriver size1 • 410	<table> <tr> <th></th><th>Weight g</th><th>Norm</th></tr> <tr> <td></td><td>2000</td><td> △</td></tr> </table>		Weight g	Norm		2000	 △
	Weight g	Norm						
	2000	 △						
	• 900 Plastic Case with foam padding • Contains 26 pieces - 1 pair of Engineers Pliers 200 mm • 100 - 1 Side Cutter 160 mm • 112 - 1 pair of Tel.-Pliers straight. 200mm • 104 - 1 Reversible Ratched ½" - 1 Extension 250 mm ½" - 1 Stripper Knife • 505 - 1 Cable Knife • 500 - 7 Sockets ½" • 316 10, 11, 12, 13, 14, 17, 19 mm - 7 Open-End-Spaners • 200 10, 11, 12, 13, 14, 17, 19 mm - 1 Voltmeter • 691 - 4 Scrweddrivers for slotted screws • 400 3,5x100, 5,5x125, 6,5x150, 8x175	<table> <tr> <th>Maße</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>450x350x100</td><td>5000</td><td> △</td></tr> </table>	Maße	Weight g	Norm	450x350x100	5000	 △
Maße	Weight g	Norm						
450x350x100	5000	 △						

	• 901 Plastic Case with foam padding • Contains 26 pieces - 1 pair of Engineers Pliers 200 mm • 010 - 1 Side Cutter 160 mm • 124 - 1 pair of Tel.-Pliers straight. 200mm • 014 - 1 Reversible Ratchet ½" • 280 - 1 Extension 250 mm ½" • 285 - 1 Stripper Knife • 505 - 1 Cable Knife • 500 - 7 Sockets ½" • 316 10, 11, 12, 13, 14, 17, 19 mm - 7 Open-Ended-Spanners • 200 10, 11, 12, 13, 14, 17, 19 mm - 1 Voltmeter • 691 - 4 Screwdrivers for slotted screws • 400 3,5x100, 5,5x125, 6,5x150, 8x175	<table> <tr> <th>Maße</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>450x350x100</td><td>4900</td><td> 1000 V</td></tr> </table>	Maße	Weight g	Norm	450x350x100	4900	 1000 V
Maße	Weight g	Norm						
450x350x100	4900	 1000 V						
	• 905 Plastic Tool Case with foam padding • Contains 15 pieces 1 Torque Wrench • " 5-50 Nm • 307 - 2 Extensions • " 125/250 mm • 310 - 5 Deep Sockets extra long • 320 sizes 10, 13, 14, 17, 19 mm - 5 Hexagon Screwdriver 350 Sockets • " in 4, 5, 6, 8, 10 mm - 1 Screwdriver 2,8 x 75 • 400 - 1 Adjustment Tool • " in 95-150 mm • 335	<table> <tr> <th>Maße</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>450 x 350 x 100</td><td>3870</td><td>  </td></tr> </table>	Maße	Weight g	Norm	450 x 350 x 100	3870	  
Maße	Weight g	Norm						
450 x 350 x 100	3870	  						

	• 910 Plastic Tool Case with foam padding • “ • Contains 17 pieces Contains 17 pieces - 1 Reversible Ratchet • “ • 300 - 2 Extensions 125/250 mm • “ • 310 - 1 T-Shaped Lever • “ • 325 - 8 Sockets for drive ratchet • • 315 10, 11, 12, 13, 14, 17, 19, 22 mm - 3 Sockets for Allen Screws • “ - • 350 5, 6, 8 mm - 1 Torque Stopper • “ opt 12-25 Nm • 304 - 1 Screwdriver 3,5x100 mm • 400	Maße	Weight g	Norm
		450 x 350 x 100	4000	
	• 911 Plastic Tool Case with foam padding • “, New Comb • Contains 16 pieces Contains 16 pieces - 1 Reversible Ratchet • “ • 280 - 2 Extensions 125/250 mm • “ • 285 - 1 T-Shaped Lever • “ • 290 - 8 Sockets for drive ratchet • “ • 315 10, 11, 12, 13, 14, 17, 19, 22 mm - 3 Sockets for Allen Screws • “ - • 355 5, 6, 8 mm - 1 Torque Stopper • “ opt. 12-25 Nm • 304 - 1 Screwdriver 3.5 x 100 mm • 400	Maße	Weight g	Norm
		450x350x100	3800	
	• 915 Plastic Case with foam padding ½ • Contains 16 pieces Contains 16 pieces - 1 Reversible Ratchtet ½“ • 300 - 2 Extensions 125/250 mm ½“ • 310 - 1 T-Shaped Lever ½“ • 325 - 8 Sockets for drive ratchet ½“ • 315 10, 11, 12, 13, 14, 17, 19, 22 mm - 3 Sockets for Allen Screws-½“ • 355 5, 6, 8 mm - 1 Screwdriver 3,5x100 mm • 400	Maße	Weight g	Norm
		450 x 350 x 100	4500	

	• 916 Plastic Case with foam padding ½" New Combination • Contains 15 pieces - 1 Reversible Ratchet ½" • 280 - 2 Extensions 125/250 mm ½" • 285 - 1 T-Shaped Lever ½" • 290 - 8 Sockets for drive ratchet ½" • 316 10, 12, 13, 14, 17, 19, 22, 24 mm - 3 Sockets for Allen Screws-½" • 355 5, 6, 8 mm	<table> <tr> <th>Maße</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>450 x 350 x 100</td><td>4400</td><td> 1000 V</td></tr> </table>	Maße	Weight g	Norm	450 x 350 x 100	4400	 1000 V
Maße	Weight g	Norm						
450 x 350 x 100	4400	 1000 V						
	• 920 Plastic Case with foam padding • Contains 20 pieces - 1 pair of Engineers Pliers 200 mm • 100 - 1 Side Cutter 180mm • 112 - 1 pair of Tel. Pliers straight 200mm • 104 - 1 Insulation Stripper 160 mm • 102 - 1 pair of Flat Nose Pliers 160 mm • 108 - 1 pair of Round Nose Pliers 160 mm • 110 - 1 Voltmeter • 691 - 3 Sockets 8, 10, 13 mm • 345 - 6 Screwdriver for slotted screws • 400 2,5x75, 3,5x100, 5,5x125, 6,5x150, 8x175, 10x200 - 2 Screwdriver for cross-slotted screws • 410 Size 1+2 - 1 Stripper Knife • 505 - 1 Cable Knife • 500	<table> <tr> <th>Maße</th><th>Weight g</th><th>Norm</th></tr> <tr> <td>450x350x100</td><td>4500</td><td></td></tr> </table>	Maße	Weight g	Norm	450x350x100	4500	
Maße	Weight g	Norm						
450x350x100	4500							

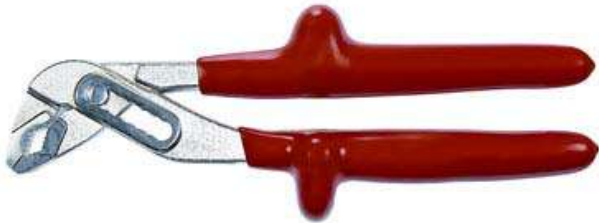
	• 921 Plastic Case with Foam Padding - Contains 20 pieces - 1 Pair of Engineers Pliers 200 mm • 010 - 1 Side Cutter 180mm • 024 - 1 Pair of Tel. Pliers straight. 200mm • 014 - 1 Insulation Stripper 160 mm • 012 - 1 Pair of Flat Nose Pliers 160 mm • 018 - 1 Pair of Round Nose Pliers 160 mm • 020 - 1 Voltmeter • 691 - 3 Sockets 8, 10, 13 mm • 345 - 6 Screwdriver for slotted screws • 400 2,5x75, 3,5x100, 5,5x125, 6,5x150, 8x175, 10x200 - 2 Screwdriver for cross-slotted screws • 410 size.1+2 - 1 Stripper Knife • 505 - 1 Cable Knife • 500	Maße	Weight g	Norm
		450x350x100	4600	 1000 V
	• 925 Plastic Case for Cable Assembly - Contains 16 pieces - 1 Reversible Ratchet • “ • 300 - 1 Extension 125 mm • “ • 310 - 1 Extension 250 mm • “ • 310 - 1 Soft Faced Hammer , recoilless Ø 25 mm • 745 - 1 Plastic Wedge • 715 - 2 Allen Key Wrenches 5 und 6 mm • 365 - 3 Sockets for • “,drive Ratchet • 315 13,17,19 mm - 4 Allen Key Inserts for • “drive • 350 5, 6, 8, 10 mm - 1 Allen Key Insert • “,5x100 mm • 350 - 1 Screwdriver 2,8x75 mm • 400	Maße	Weight g	Norm
		450x350x100	3400	 1000 V

	• 928 Plastic Case with Foam Padding • Contains 13 pieces - 1 Reversible Ratchet • “ • 300 - 2 Extension Bars 125 / 250 mm • “ • 310 - 1 T-Shaped Lever • “ • 325 - 5 Sockets • “ • 315 8, 10, 13, 17, 19 mm - 4 Sockets for Allen Screws • “, • 350 4,5,6,8 mm	Maße	Weight g	Norm
		380x280x100	2500	
	• 929 Plastic Case with Foam Padding Equipped as • 928, but without T-Shaped Lever • “ • 325 And Extension Bar 250 mm • “ • 310	Maße	Weight g	Norm
		380x280x100	1800	
	• 932 Plastic Case with Foam Padding • Contains 13 pieces - 1 Reversible Ratchet • “ • 280 - 2 Extension Bars 125 / 250 mm • “ • 285 - 1 T-Shaped Lever • “ • 290 - 5 Sockets • “ • 315 8, 10, 13, 17, 19 mm - 4 Sockets for Allen Screws • “, - • 350 4,5,6,8 mm	Maße	Weight g	Norm
		380x280x100	2400	
	• 933 Plastic Case with Foam Padding Equipped as • 932, but without 1 T-Shaped Lever • “ • 290 1 Extension Bar 250 mm • “ • 285	Maße	Weight g	Norm
		380x280x100	1750	
		Further Cases with your requirement on your request		

Greenware not from german production

	• 010 Combination Pliers • DIN ISO 5746 • from special steel • forged, oil hardened • induction-hardened cutting edges	mm	Weight g	Norm
		165	225	⚠ 1000 V
		185	280	⚠ 1000 V
		205	350	⚠ 1000 V
	• 012 Wire stripper • from special steel • forged, oil hardened • with adjustment screw and spring • for all wire thicknesses up to 5mm or 10 square mm	mm	Weight g	Norm
		160	180	⚠ 1000 V
	• 014 Long Nose Plies • DIN ISO 5745 • induction-hardened cutting edges • from special steel • Forged, oil hardened	mm	Weight g	Norm
		170	180	⚠ 1000 V
		200	220	⚠ 1000 V
	• 016 Long Nose Pliers (Bent) • DIN ISO 5745 / Bent Nose • from special steel • Forged, oil hardened • induction-hardened cutting edges	mm	Weight g	Norm
		200	215	⚠ 1000 V

	• 018 Flat Nose Pliers • DIN ISO 5745 • from special steel • Forged, oil hardened • with long jaws • toothed clamping jaws	mm	Weight g	Norm
		160	210	 1000 V
	• 020 Rounded Long Nose Pliers • DIN ISO 5745 • from special steel • oil hardened • with long jaws	mm	Weight g	Norm
		160	210	 1000 V
	• 024 Side cutter • DIN ISO 5749 • from special steel • forged, oil hardened • induction-hardened cutting edges • for all wire types	mm	Weight g	Norm
		160	280	 1000 V
		185	335	 1000 V
	• 027 Heavy Duty Side Cutter • DIN ISO 5749 • from special steel • forged, oil hardened • induction-hardened cutting edges • for all wire types • Piano wire up to 3 square mm	mm	Weight g	Norm
		205	320	 1000 V

	• 029 Water pump wrenches • DIN ISO 8976 • box joint • from Chrome-Vanadium-steel • dropped forged, oil hardened	mm	Weight g	Norm
		240	340	 1000 V
	• 040 Cable Cutter • easy cutting blades • dropped forged, oil hardened • only for Al-and Cu wire • cuts 250/500 mm² and cable diameters of 35/50 mm • Not to be used on Steel Rods or hard single Cu-wire!	mm	Weight g	Norm
		600	2100	 1000 V
 	• 042 Rod + Cable Cutter • blades with triangular cutting system which keeps a clean cut • made from precision steel • for rod wire, Cu + Al cable and also soft massive wires • Cutting Performance in Ø mm: • Piano Wire up to 5 mm, • Hard Rod Wire up to 9 mm, • Flexible Rod Wire up to 12 mm	mm	Weight g	Norm
		600	2900	 1000 V