Automation and Network Solutions

HIRSCHMANN

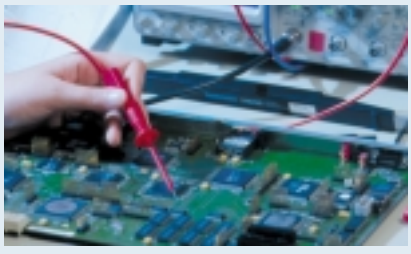
Measuring Highlights

Edition 1

Precision and reliability in research and technology

For all types of measuring and testing equipment

Hi-Test measuring and testing accessories
Whether pole clamps, test probes or banana plugs, Hirschmann measuring and testing accessories have long been indispensable aids for the transmission of measurement data, voltages and currents, hence their use in R&D laboratories, test bays and workshops, service facilities, schools, training centres and institutes.



A must in research and technology
Hirschmann Hi-Test measuring and testing products comprise a comprehensive range of shockproof measuring leads and accessories. From miniature connectors for safety extra-low voltage to safety-type products for measuring tasks up to 1.000 V.

The high-quality materials used for the contacts of plug pins and sockets made of tin- or gold-plated brass or copper beryllium, affording outstanding connection, ensure consistent contact quality over prolonged time periods.

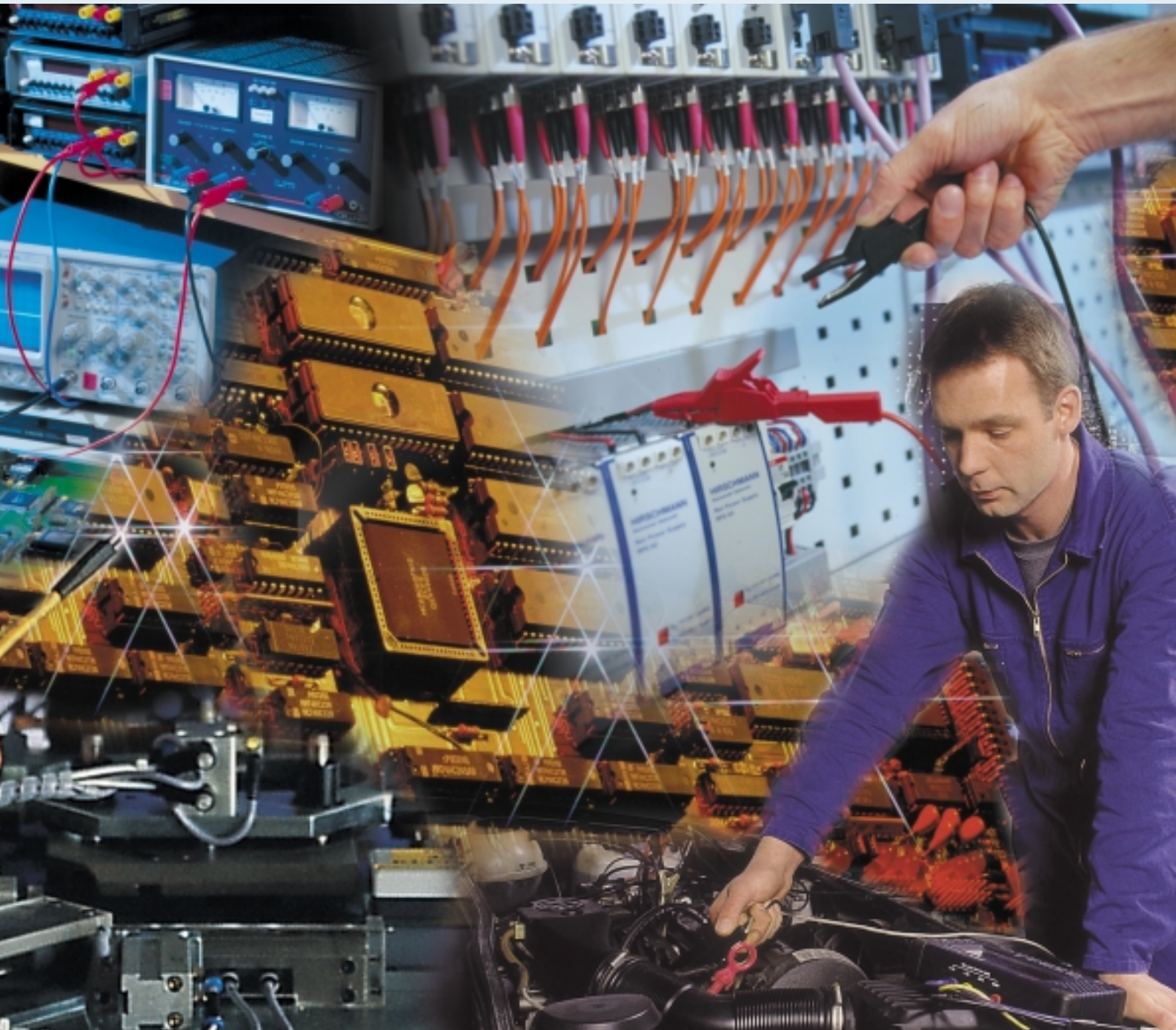
For all types of measuring and testing equipment.
To achieve the optimum degree of protection for users of hand-held measuring accessories, the entire product range is provided with double-strength reinforced insulation. Hirschmann attaches considerable importance to ergonomics and design, providing the user with the optimum degree of protection against electric shocks and other hazards.

FULL-SPECTRUM SOLUTIONS FROM THE SPECIALIST

Seeking dialogue, among ourselves and with users. Developing innovative ideas together. Making use of synergies. Establishing productive links. And this via state-of-the-art communication technologies to transmit voice, data and visual information. From modern antenna systems in automobiles, satellite reception and transmission systems to enterprise-wide network solutions. The Hirschmann Group, a subsidiary of ADITRON AG, employs some 2,700 people around the world who are all committed to achieving this vision.

AUTOMATION AND NETWORK SOLUTIONS DIVISION

With its connectors, fieldbus and fiber optic systems, Hirschmann offers automation solutions in bus, sensor and actuator category. A broad range of connectors for measuring and testing applications, machine and plant construction as well as building technology are incorporated into the program as well. Industry-specific solutions for company-wide data networks from the workgroup to the backbone, from industrial to office networking, from LAN to WAN complete our range. In all commonly used standards - with a focus on ETHERNET, Fast ETHERNET and Gigabit ETHERNET.



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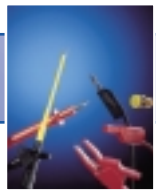


Measuring Highlights

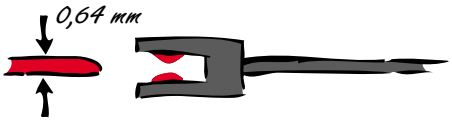
Hi Test

Descriptions of systems

The catalogue is subdivided into sections according to applications, e.g. testing with test probes or establishing connections with measuring leads.
All the products are assigned to a system and are fully compatible within that system.

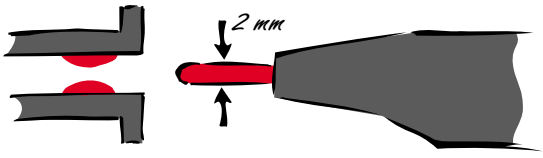
System designations are assigned to the products on the following pages. Unmarked products are unrelated to a system and can be used in combination with any system.

(64) 0.64 mm system



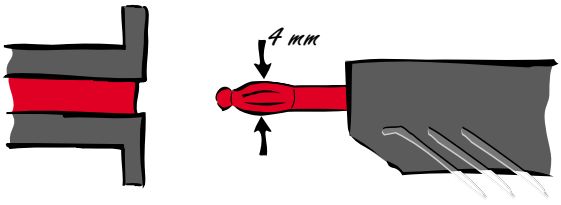
The 0.64 mm system is compatible with standard 0.64 mm printed circuit board plugs. Miniature contacts, fully protected with high-quality contact material ensures efficient connecting and prolonged endurance.
With this system, exceptionally small components and measuring points can be tested.
Max. 60 V

(2) 2 mm system



The 2 mm system consists of a solid contact pin and a spring-loaded socket. As a result, the small, high-quality contact pin is protected against mechanical influences.
Max. 60 V

(4) 4 mm system



The 4 mm system comprises a spring-loaded contact pin and springless sockets. A variety of compatible contact techniques enable the user to resolve any individual problem. 4 mm plugs can be used in combination with safety sockets, clamp-type test probes, crocodile clips, etc.
Max. 60 V

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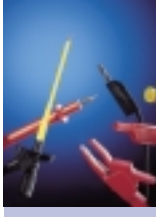
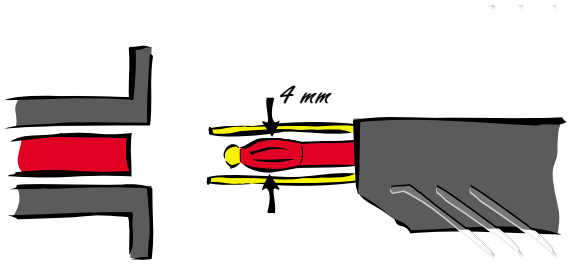
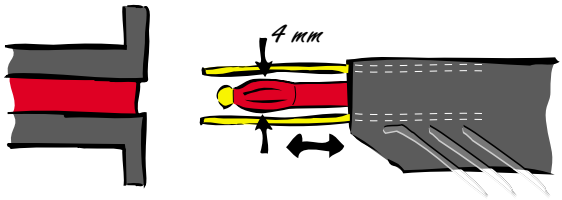


4 mm safety system



The 4 mm safety system comprises a 4 mm pin with contact spring. The pin is protected against physical contact by a plastic coating and the tip by a plastic cap. The system is completely shockproof and short circuit proof. 4 mm plugs can be plugged into safety sockets (SEB..., KLEPS..., AK...).
The component with the lowest electric strength determines the maximum permissible voltage of the whole system.
The system complies with IEC 1010 (EN 61 010).
Max. 1000 V

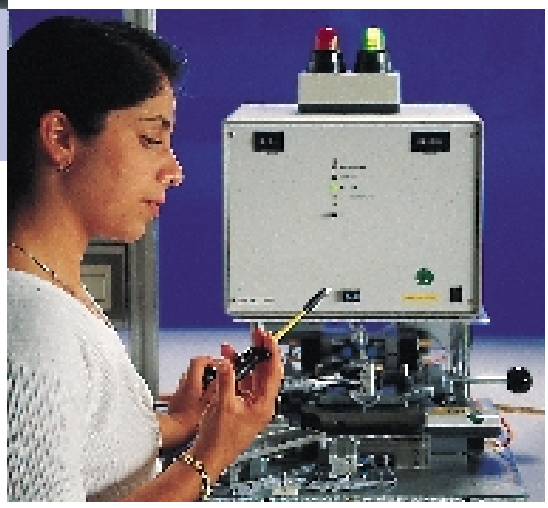
4 mm sliding sleeve system



The 4 mm sliding sleeve system is a safety system which provides protection against physical contact by means of a sliding locking spring.
The system can be used in combination with any 4 mm system.
Max. 300 V

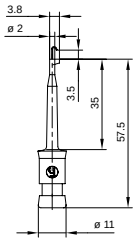
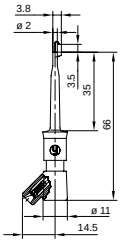
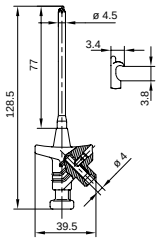
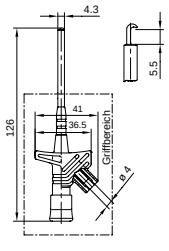
Total insulation
Contacts
Housing

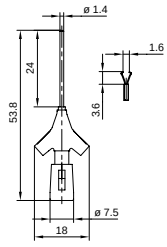
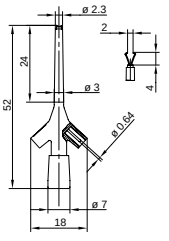
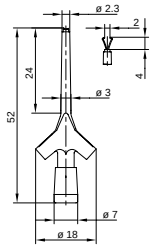
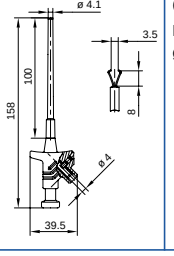
Clamp-type test probes



Product description

Clamp-type test probes provide the simple, rapid measurement of voltages.
A variety of types and sizes permit the measuring point to be accessed and gripped without difficulty.
The ergonomic design has been optimised to facilitate handling to the utmost extent.
The KLEPS 2700 permits a lead to be tested without the insulation being stripped.
The KLEPS 2800 is provided with claw-type clamps with which large test specimens can be gripped.
It is also suitable for testing currents. The classic KLEPS 30, used in millions of applications worldwide, serves as a versatile voltage tap.

*System Article type		Technical Data	Order no. Colour
 KLEPS 2		Clamping range max. ø 2 mm, contact hook, solder contact	**931 467-100** ● **931 467-101** ●
②  KLEPS 2-BU		Clamping range max. ø 2 mm, contact hook	**973 501-100** ● **973 501-101** ●
④  KLEPS 10		20 A clamping range max. ø 2 mm	**930 111-100** ● **930 111-101** ●
⦿  KLEPS 2900		20 A clamping range 5.5 mm	**972 309-100** ● **972 309-101** ●

*System Article type		Technical Data	Order no. Colour
(64)  MICRO-KLEPS		Very thin wires and densely packed contact points, clamping range ø 2 mm	**973 972-100** ● **973 972-101** ●
(64)  KLEPS 3 ST		Very thin wires and densely packed contact points, clamping range ø 3.5 mm	**973 592-100** ● **973 592-101** ●
(64)  KLEPS 4		Very thin wires and densely packed contact points, clamping range ø 3.5 mm	**973 649-100** ● **973 649-101** ●
(4)  KLEPS 30		Clamping range ø 4 mm	**930 113-100** ● **930 113-101** ●

* System: (64) = 0.64 mm system / (2) ≙ 2 mm system / (4) ≙ 4 mm system / ⦿ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

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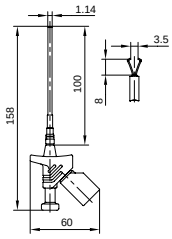
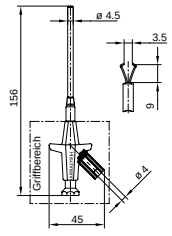
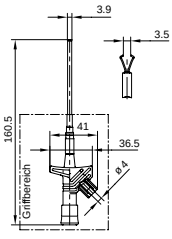
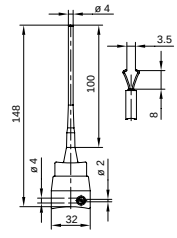
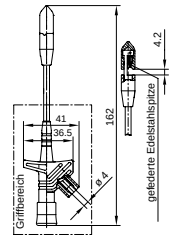
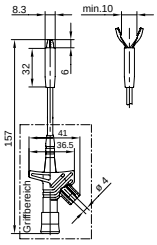
Clamp-type test probes

*System Article type		Technical Data	**Order no. Colour**
↔  KLEPS 250		300 V = clamping range ø 4 mm	**973 528-100** ● **973 528-101** ●
⊙  KLEPS 2000		Clamping range ø 4 mm	**972 378-100** ● **972 378-101** ●
⊙  KLEPS 2600		Clamping range ø 4 mm	**972 306-100** ● **972 306-101** ●
4  KLEPS 60		Clamping range ø 4 mm	**973 053-100** ● **973 053-101** ●
⊙  KLEPS 2700		0.25 mm² up to 1.5 mm² (ø 3.5 mm) contact without the need to strip them „Piercing Clip“	**972 307-100** ● **972 307-101** ●

*System Article type		Technical Data	**Order no. Colour**
⊙  KLEPS 2800		20 A clamping range ø 10 mm, grip claws	**972 308-100** ● **972 308-101** ●

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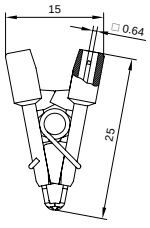
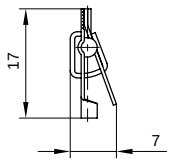
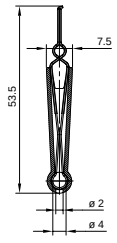
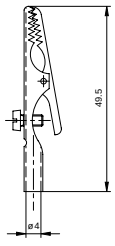
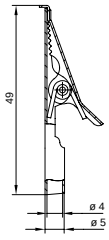
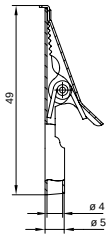
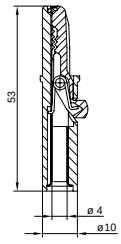
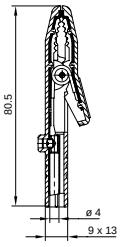
Alligator clips

Product description

Alligator clips, also known as crocodile clips, are outstandingly suitable for the testing and transfer of currents.
The sharp teeth of the clips bite into the test specimen with little contact resistance.
Thanks to their thin wire clamping capability, they are able to make contact with extra finely stranded conductors of minimal cross sections.
Opening widths up to 30 mm permit large contacts to be securely gripped.

The MICRO-SMD CLIP is used for the two-pole testing of very small SMD components.
Crocodile clips are also widely used in non-electrical applications.

*System Article type		Technical Data	**Order no. Colour**
(64)  MICRO-SMD CLIP 1		2-pole test clip, clamping range 0 up to 8 mm	**972 416-100**
 AGF 1		Solder contact	**930 476-001**
(2) (4)  AGF 2		Clamping range up to 4 mm	**931 272-100** ● **931 272-101** ●
(4)  AGS 20		Terminal screw, clamping range max. 5 mm	**603 006-001**

*System Article type		Technical Data	**Order no. Colour**
(4)  AGF 20			**930 120-000**
(4)  AGF 30		Stainless steel, rust and acid-proof, non-magnetic	**930 122-000**
(4)  AK 10		6 A clamping range max. 6 mm	**930 126-100** ● **930 126-601** ● **930 126-102** ● **930 126-103** ● **930 126-104** ●
(4)  AK 2 S		25 A clamping range max. 9.5 mm	**932 146-100** ● **932 146-101** ●

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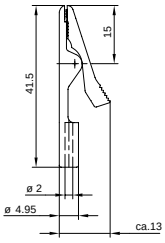
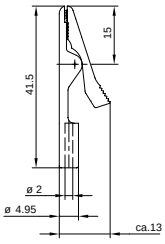
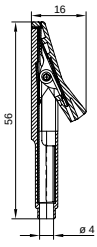
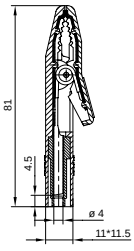
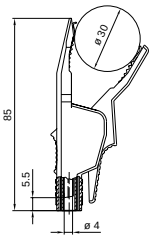
*System Article type		Technical Data	**Order no. Colour**	Notes
②  MA 1		Clamping range up to 4 mm	**930 317-800** ● **930 317-801** ●	
②  MA 1 S		Rust and acid-proof, clamping range up to 4 mm	**973 584-100** ● **973 584-101** ●	
⊙  MA 260 SH		15 A 300 V clamping range ø 6 mm	**973 889-100** ● **973 889-101** ●	
⊙  AK 2 B		25 A 300 V clamping range ø 9.5 mm	**932 435-100** ● **932 435-101** ●	
⊙  AK 2 B 2540 I		34 A clamping range ø 30 mm	**972 405-100** ● **972 405-101** ●	

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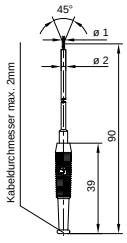
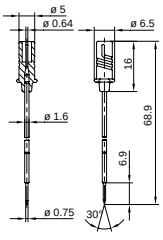
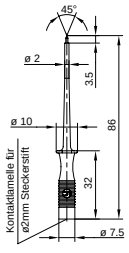
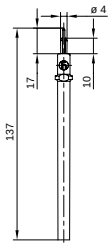
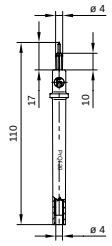
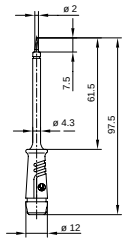
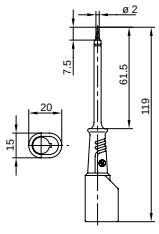
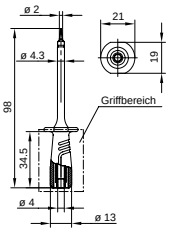
Test probes

Product description

Test probes are used for voltage testing purposes.
Their needle-like steel tips penetrate oxidation layers, thereby establishing an effective connection with the test specimen.
The spring-loaded prods of the MICRO-PRUEF and PRUEF 2610 FT make contact with sensitive components with gently applied spring force.
Contact with less vulnerable contact points can be established with the PRUEF 2700, which is also equipped with a 4 mm pin.
The SS 260 prod guard protects the user from injury and ICs from short circuits.

*System Article type		Technical Data	**Order no. Colour**
 PRUEF 1		Solder contact	**931 376-100** ● **931 376-101** ●
(64)  MICRO-PRUEF MPS 2/0,64 FT		Sprung probe tip	**973 995-100** ● **973 995-101** ●
(2)  MPS 1			**973 531-100** ● **973 531-101** ●
 PRUEF 10		Solder contact	**930 227-100** ● **930 227-101** ●

*System Article type		Technical Data	**Order no. Colour**
(4)  PRUEF 20			**973 505-100** ● **973 505-101** ●
(4)  PRUEF 2			**973 368-100** ● **973 368-101** ●
(↔)  PRUEF 2 S			**973 659-100** ● **973 659-100** ●
(•)  PRUEF 2600			**972 317-100** ● **972 317-101** ●

* System: (64) = 0.64 mm system / (2) ≙ 2 mm system / (4) ≙ 4 mm system / (•) ≙ 4 mm safety system / (↔) ≙ 4 mm sliding sleeve system

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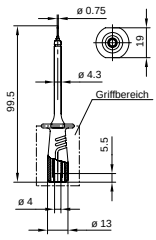
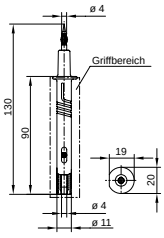
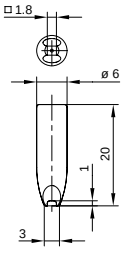
*System Article type		Technical Data	**Order no. Colour**	Notes
⊙  PRUEF 2610 FT		Sprung stainless steel tip	**972 318-100** ● **972 318-101** ●	
⊙  PRUEF 2700			**972 319-100** ● **972 319-101** ●	
 SS 260		Contact protector, contact help for ICs	**973 865-001**	

*System: (64) = 0.64 mm system / (2) ≙ 2 mm system / (4) ≙ 4 mm system / ⊙ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

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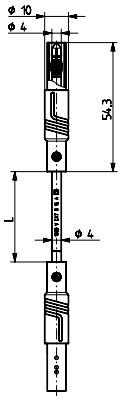
Measuring leads

Product description

Measuring leads connect hardware items such as machines, test equipment, measuring instruments, experimental set-ups, etc. A variety of types permits optimised cable layouts, expansion facilities through stacking and use in differing voltage ranges.
The selection of special-purpose insulating material and cross-sections ensures adaptability and high loading capacities.
A special cable configuration incorporates a white tell-tale mark, indicating possible mechanical damage and a consequential risk to the user. Testing leads, which are typical accessories for multimeters, consist of measuring leads with test probes.

*System		Article type	Length "L" in cm	Technical Data	**Order no. Colour**
⊙	 	MLS GG 25/1	25 cm	1 mm², PVC 16 A	**934 070-Colour**** ● ● ● ● ●
		MLS GG 25/2,5	25 cm	2,5 mm², PVC 32 A	**934 071-Colour**** ● ● ● ● ● ●
		MLS GG 50/1	50 cm	1 mm², PVC 16 A	**934 072-Colour**** ● ● ● ● ●
		MLS GG 50/2,5	50 cm	2,5 mm², PVC 32 A	**934 073-Colour**** ● ● ● ● ● ●
		MLS GG 100/1	100 cm	1 mm², PVC 16 A	**934 074-Colour**** ● ● ● ● ●
		MLS GG 100/2,5	100 cm	2,5 mm², PVC 32 A	**934 075-Colour**** ● ● ● ● ● ●
		MLS GG 200/1	200 cm	1 mm², PVC 16 A	**934 076-Colour**** ● ● ● ● ●
		MLS GG 200/2,5	200 cm	2,5 mm², PVC 32 A	**934 077-Colour**** ● ● ● ● ● ●

* System: (64) = 0.64 mm system / (2) ≙ 2 mm system / (4) ≙ 4 mm system / ⊙ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system
** Colour: ● -100 ● -101 ● -102 ● -103 ● -104 ● -188

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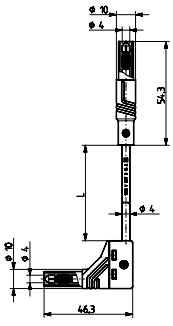
*System		Article type	Length "L" in cm	Technical Data	**Order no. Colour**
⊙		MLS WG 25/1	25 cm	1 mm², PVC 16 A	**934 078-Colour****
		MLS WG 25/2,5	25 cm	2,5 mm², PVC 32 A	**934 079-Colour****
		MLS WG 50/1	50 cm	1 mm², PVC 16 A	**934 080-Colour****
		MLS WG 50/2,5	50 cm	2,5 mm², PVC 32 A	**934 081-Colour****
		MLS WG 100/1	100 cm	1 mm², PVC 16 A	**934 082-Colour****
		MLS WG 100/2,5	100 cm	2,5 mm², PVC 32 A	**934 083-Colour****
		MLS WG 200/1	200 cm	1 mm², PVC 16 A	**934 084-Colour****
		MLS WG 200/2,5	200 cm	2,5 mm², PVC 32 A	**934 085-Colour****



*System: (64) = 0.64 mm system / (2) ≙ 2 mm system / (4) ≙ 4 mm system / ⊙ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

**Colour: ●-100 ●-101 ●-102 ●-103 ●-104 ●-188

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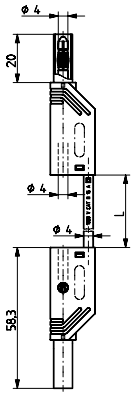
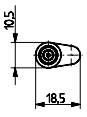
Measuring leads

*System		Article type	Length "L" in cm	Technical Data	**Order no. Colour**
⊙	  	MLS WS 25/1	25 cm	1 mm², PVC 16 A	**934 067-Colour**** ● ● ● ● ●
		MLS WS 25/2,5	25 cm	2,5 mm², PVC 32 A	**934 086-Colour**** ● ● ● ● ● ●
		MLS WS 50/1	50 cm	1 mm², PVC 16 A	**934 068-Colour**** ● ● ● ● ●
		MLS WS 50/2,5	50 cm	2,5 mm², PVC 32 A	**934 087-Colour**** ● ● ● ● ● ●
		MLS WS 100/1	100 cm	1 mm², PVC 16 A	**934 095-Colour**** ● ● ● ● ●
		MLS WS 100/2,5	100 cm	2,5 mm², PVC 32 A	**934 088-Colour**** ● ● ● ● ● ●
		MLS WS 200/1	200 cm	1 mm², PVC 16 A	**934 069-Colour**** ● ● ● ● ●
		MLS WS 200/2,5	200 cm	2,5 mm², PVC 32 A	**934 089-Colour**** ● ● ● ● ● ●

* System: (64) = 0.64 mm system / (2) ≙ 2 mm system / (4) ≙ 4 mm system / ⊙ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

** Colour: ● -100 ● -101 ● -102 ● -103 ● -104 ● -188

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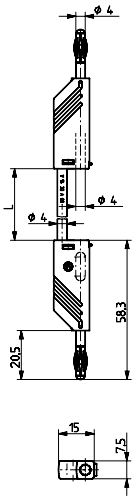
*System		Article type	Length "L" in cm	Technical Data	**Order no. Colour**
④	 	MLN 25/1	25 cm	1 mm², PVC 16 A	**934 058-Colour**** ● ● ● ● ●
		MLN 25/2,5	25 cm	2,5 mm², PVC 32 A	**934 059-Colour**** ● ● ● ● ● ●
		MLN 50/1	50 cm	1 mm², PVC 16 A	**934 060-Colour**** ● ● ● ● ●
		MLN 50/2,5	50 cm	2,5 mm², PVC 32 A	**934 061-Colour**** ● ● ● ● ● ●
		MLN 100/1	100 cm	1 mm², PVC 16 A	**934 062-Colour**** ● ● ● ● ●
		MLN 100/2,5	100 cm	2,5 mm², PVC 32 A	**934 063-Colour**** ● ● ● ● ● ●
		MLN 150/1	150 cm	1 mm², PVC 16 A	**934 064-Colour**** ● ● ● ● ●
		MLN 200/1	200 cm	1 mm², PVC 16 A	**934 065-Colour**** ● ● ● ● ●
		MLN 200/2,5	200 cm	2,5 mm², PVC 32 A	**934 066-Colour**** ● ● ● ● ● ●

*System: (64) = 0.64 mm system / (2) ≙ 2 mm system / (4) ≙ 4 mm system / ⊙ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

**Colour: ● -100 ● -101 ● -102 ● -103 ● -104 ● -188

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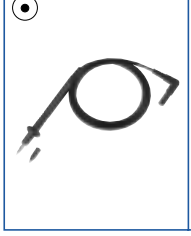
Measuring leads

*System		Article type	Length "L" in cm	Technical Data	Order no. Colour
(4)		MLN SIL 25/1	25 cm	1 mm², Silicon 16 A	**934 090-Colour****
		MLN SIL 50/1	50 cm	1 mm², Silicon 16 A	**934 091-Colour****
		MLN SIL 100/1	100 cm	1 mm², Silicon 16 A	**934 092-Colour****
		MLN SIL 150/1	150 cm	1 mm², Silicon 16 A	**934 093-Colour****
		MLN SIL 200/1	200 cm	1 mm², Silicon 16 A	**934 094-Colour****
(↔)		MLB 25/1 V	25 cm	1 mm², PVC 16 A 60 V DC	**973 644-Colour****
		MLB 50/1 V	50 cm	1 mm², PVC 16 A 60 V DC	**973 645-Colour****
		MLB 100/1 V	100 cm	1 mm², PVC 16 A 60 V DC	**973 646-Colour****
		MLB 200/1 V	200 cm	1 mm², PVC 16 A 60 V DC	**973 647-Colour****
(•)		PL 2600 S W	100 cm	1 mm², PVC 16 A Angle plug	**934 158-Colour****
		PL 2600 S	100 cm	1 mm², PVC 16 A Straight plug	**934 159-Colour****

* System: (64) = 0.64 mm system / (2) ≙ 2 mm system / (4) ≙ 4 mm system / (•) ≙ 4 mm safety system / (↔) ≙ 4 mm sliding sleeve system

** Colour: ●-100 ●-101 ●-102 ●-103 ●-104 ●-188

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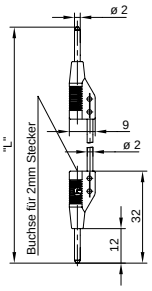
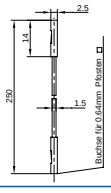
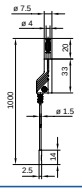
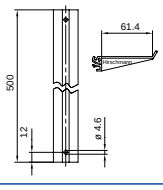
*System		Article type	Length "L" in cm	Technical Data	**Order no. Colour**
②			MVL 2/25	25 cm	0,5 mm², PVC 6 A, 17 mΩ	**973 594-Colour**** ● ●
			MVL 2/50	50 cm	0,5 mm², PVC 6 A, 26 mΩ	**973 595-Colour**** ● ●
			MVL 2/100	100 cm	0,5 mm², PVC 6 A, 44 mΩ	**973 596-Colour**** ● ●
⑥④			MKL 0,64/25-0,25	25 cm	0,25 mm², PVC 3 A	**973 604-Colour**** ● ●
⑥④			BNC - AL 0,64	120 cm	RG 58 A/U	**933 844-001**
④ ⑥④			MAL N 4-0,64/100-0,25	100 cm	0,25 mm², PVC 3 A	**934 160-Colour**** ● ●
			LMLH 50		30 plastic brackets	**973 919-001**

*System: ⑥④ = 0.64 mm system / ② ≙ 2 mm system / ④ ≙ 4 mm system / ⦿ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

**Colour: ● -100 ● -101 ● -102 ● -103 ● -104 ● -188

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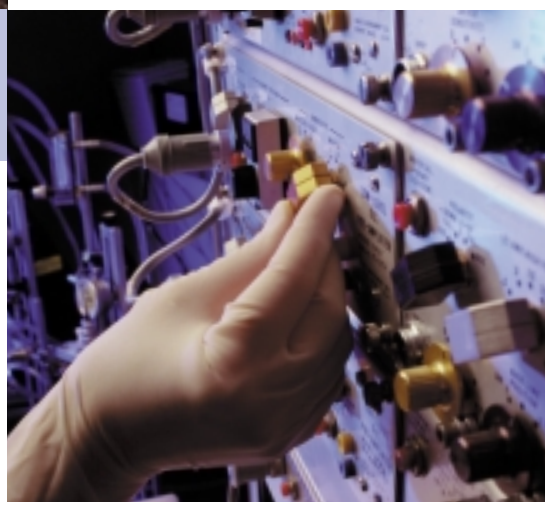
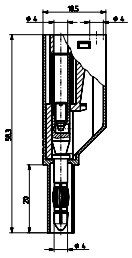
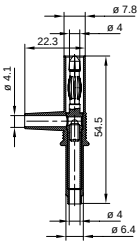
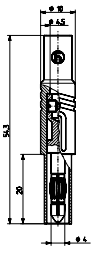
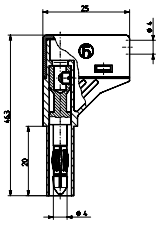
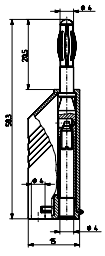
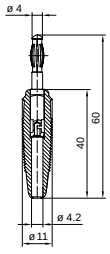
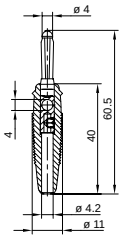
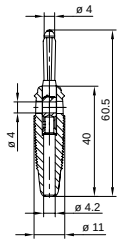
Plugs



Product description

Plugs and connectors permit users to assemble their own measuring and testing leads. A variety of contact-making and connecting systems offer the ideal solution for every application. Safety plugs with screw connectors comply with IEC 1010 and can be used for voltages up to 1000 V. Connectors permit the assembly of extensions and connecting leads.
All the products are simply plugged, screwed or soldered together without the need for specialised tools.

*System Article type		Technical Data	Order no. Colour
⦿  LAS S WS		20 A screw connection up to 1.5 mm²	**934 099-100** ● **934 099-101** ● **934 099-102** ● **934 099-103** ● **934 099-104** ●
⦿  SLS 2000 SH		25 A screw connection up to 2.5 mm²	**972 320-100** ● **972 320-101** ●
⦿  LAS S G		20 A screw connection max. 1.5 mm²	**934 097-100** ● **934 097-101** ● **934 097-102** ● **934 097-103** ● **934 097-104** ●
⦿  LAS S W		20 A screw connection up to 1.5 mm²	**934 098-100** ● **934 098-101** ● **934 098-102** ● **934 098-103** ● **934 098-104** ●

*System Article type		Technical Data	Order no. Colour
④  LAS N WS		20 A screw connection up to 1.5 mm²	**934 100-100** ● **934 100-101** ● **934 100-102** ● **934 100-103** ● **934 100-104** ●
④  LAS 30		20 A solder contact up to 1.5 mm²	**972 518-100** ● **972 518-101** ●
④  BUELA 20 K		16 A screw connection max. 1.5 mm²	**930 726-100** ● **930 726-101** ● **930 726-102** ● **930 726-103** ● **930 726-104** ●
④  BUELA 30 K		30 A solder contact max. 2.5 mm²	**930 727-100** ● **930 727-101** ● **930 727-102** ● **930 727-103** ● **930 727-104** ●

* System: (64) = 0.64 mm system / (2) ≙ 2 mm system / (4) ≙ 4 mm system / ⦿ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

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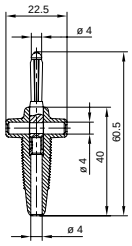
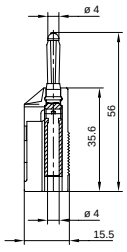
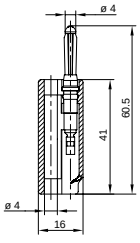
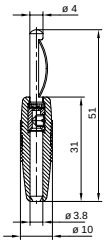
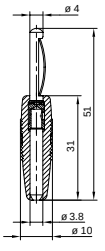
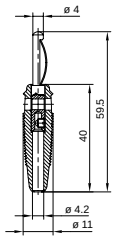
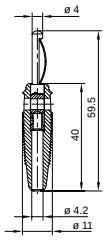
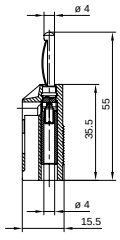
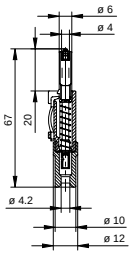
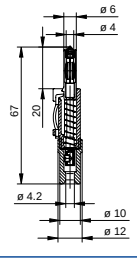
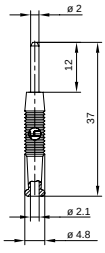
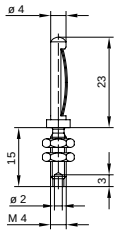
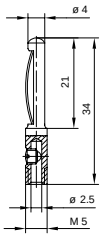
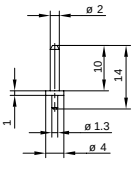
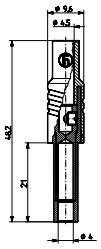
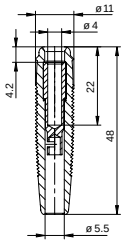
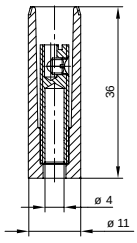
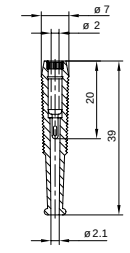
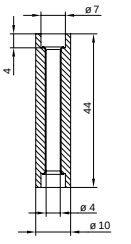
*System Article type		Technical Data	Order no. Colour
④  BUELA 300 K		30 A solder contact max. 2.5 mm²	**931 667-100** ● **931 667-101** ● **931 667-102** ● **931 667-103** ● **931 667-104** ●
④  BSB 20 K		30 A screw connection max. 2.5 mm²	**930 729-100** ● **930 729-101** ● **930 729-102** ● **930 729-103** ● **930 729-104** ●
④  BSB 300		16 A solder contact max. 1.5 mm²	**931 294-100** ● **931 294-101** ●
④  VON 20		16 A screw connection max. 1.5 mm²	**930 046-100** ● **930 046-101** ● **930 046-102** ● **930 046-103** ● **930 046-104** ●
④  VON 30		30 A solder contact max. 2.5 mm²	**930 047-100** ● **930 047-101** ● **930 047-102** ● **930 047-103** ● **930 047-104** ●

*System Article type		Technical Data	Order no. Colour
④  VQ 20		16 A screw connection max. 1.5 mm²	**930 058-100** ● **930 058-101** ● **930 058-102** ● **930 058-103** ● **930 058-104** ●
④  VQ 30		30 A solder contact max. 2.5 mm²	**930 061-100** ● **930 061-101** ● **930 061-102** ● **930 061-103** ● **930 061-104** ●
④  VSB 20		30 A screw connection max. 2.5 mm²	**930 435-100** ● **930 435-101** ● **930 435-102** ● **930 435-103** ● **930 435-104** ●
⇹  SLS 10 B		30 A 60 V DC	**931 824-100** ● **931 824-101** ●
⇹  SLS 20 B		16 A 300 V screw connection up to 1.5 mm²	**931 825-100** ● **931 825-101** ●

* System: (64) = 0.64 mm system / (2) ≙ 2 mm system / (4) ≙ 4 mm system / (•) ≙ 4 mm safety system / ⇹ ≙ 4 mm sliding sleeve system

Plugs

*System Article type		Technical Data	Order no. Colour
⇿		30 A 300 V screw connection up to 2.5 mm²	**932 153-100** ● **932 153-101** ●
SLS 200			
②		6 A solder contact	**973 509-100** ● **973 509-101** ● **973 509-102** ● **973 509-103** ● **973 509-104** ● **973 509-106** ●
MST 3			
④		16 A solder contact max. 2 mm²	**930 050-000**
VST 20			
④		16 A screw connection max. 1.5 mm²	**930 581-000**
VST 100			
②			**931 338-001**
MST 201			
⊙			**934 096-100** ● **934 096-101** ● **934 096-102** ● **934 096-103** ● **934 096-104** ●
KUN S			
④		16 A solder contact up to 2.5 mm²	**931 804-100** ● **931 804-101** ● **931 804-102** ● **931 804-103** ● **931 804-104** ●
KUN 30			
④		16 A screw connection up to 1.5 mm²	**930 189-100** ● **930 189-101** ●
KUN 10			
②		6 A	**930 320-100** ● **930 320-101** ●
MKU 1			
④		10 A	**930 109-100** ● **930 109-101** ●
KD 10			

* System: (64) = 0.64 mm system / ② ≙ 2 mm system / ④ ≙ 4 mm system / ⊙ ≙ 4 mm safety system / ⇿ ≙ 4 mm sliding sleeve system

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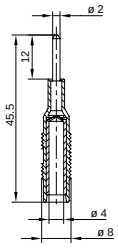
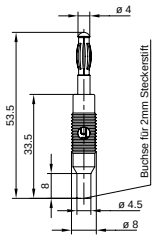
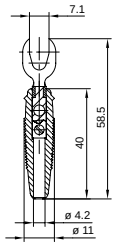
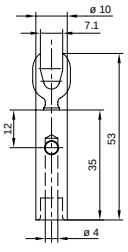
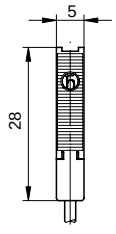
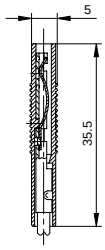
*System Article type		Technical Data	Order no. Colour
② ④  MZS 2		6 A	**973 600-100** ● **973 600-101** ●
④ ②  MZS 4		6 A	**973 599-100** ● **973 599-101** ●
 KB 2		30 A max. 2.5 mm²	**930 584-100** ● **930 584-101** ●
④  KB 20		30 A	**930 110-100** ● **930 110-101** ●
 FLAK 2,8		12 A for tab connectors 2.8 x 0.8 and 2.8 x 0.5 complying with DIN 46 244 crimp connection 0.5 mm² up to 0.75 mm²	**909 009-100** ● **909 009-101** ●

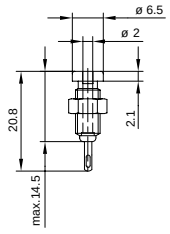
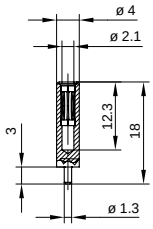
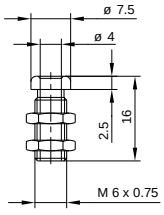
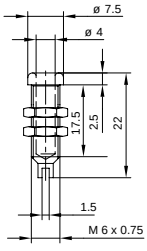
*System Article type		Technical Data	Order no. Colour
 FLAK 6,3		16 A for tab connectors 6.3 x 0.8 complying with DIN 46 244 crimp connection 1.5 mm² up to 2.5 mm²	**909 004-100** ● **909 004-101** ● **909 004-107** ○

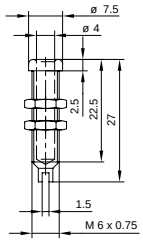
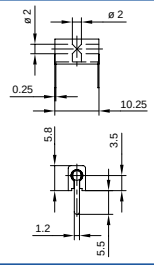
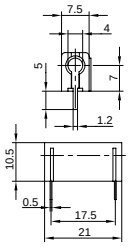
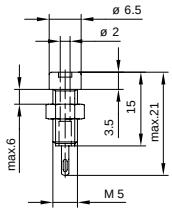
*System: ⑥④ = 0.64 mm system / ② ≙ 2 mm system / ④ ≙ 4 mm system / ⦿ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

Sockets

Product description

Sockets are built in equipment, housings or panels and permit the rapid, simple connection of measuring leads, plugs or, when configured as pole terminals, the secondary connection of leads and cable lugs.
Tin plated and gold plated surfaces, and a choice of connector cross sections, permit the reliable transmission of low-level signals and powerful currents.
The insulation of the PKI 110 incorporates a spring which permits leads to be efficiently connected in the minimum of time.

*System Article type		Technical Data	**Order no. Colour**
②  MBU 1		6 A	**930 312-000**
②  MBU 2		6 A	**931 337-000**
④  BO 10		16 A opening for installation ø 6 mm	**930 160-000**
④  BU 10		16 A opening for installation ø 6 mm	**930 147-000**

*System Article type		Technical Data	**Order no. Colour**
④  BU 20		16 A opening for installation ø 6 mm	**930 177-000**
②  MPB 1		6 A	**930 224-100** ● **930 224-101** ●
④  PB 4		16 A	**973 582-100** ● **973 582-101** ●
②  MBI 1		6 A	**930 308-100** ● **930 308-101** ● **930 308-102** ● **930 308-103** ● **930 308-104** ● **930 308-106** ●

* System: (64) = 0.64 mm system / ② ≙ 2 mm system / ④ ≙ 4 mm system / ⦿ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

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*System Article type		Technical Data	Order no. Colour
②		6 A press-fit sleeve	**973 642-100** ● **973 642-101** ●
MBI 2			
④		max. 32 A opening for installation ø 8 mm	**930 164-100** ● **930 164-101** ●
BI 20			
④		max. 32 A opening for installation ø 8 mm	**930 176-100** ● **930 176-101** ● **930 176-102** ● **930 176-103** ● **930 176-104** ● **930 176-107** ○
BIL 20			
④		max. 32 A opening for installation ø 8 mm	**930 166-100** ● **930 166-101** ●
BIL 30			
④		max. 32 A opening for installation ø 6 mm	**930 175-100** ● **930 175-101** ● **930 175-102** ● **930 175-103** ● **930 175-104** ●
BUG 10			

*System Article type		Technical Data	Order no. Colour
⦿		32 A screw connection, M4, solder	**972 354-100** ● **972 354-101** ● **972 354-102** ● **972 354-103** ● **972 354-104** ● **972 354-188** ●●
SEB 2600 G M4			
⦿		32 A screw connection, M4, solder, press-fit sleeve	**972 360-100** ● **972 360-101** ● **972 360-102** ● **972 360-103** ● **972 360-104** ● **972 360-188** ●●
SEP 2600-G M4			
⦿		24 A 4.8 x 0.8, tab connector	**972 355-100** ● **972 355-101** ● **972 355-102** ● **972 355-103** ● **972 355-104** ● **972 355-188** ●●
SEB 2610 F4,8			
⦿		24 A press-fit sleeve, tab connector 4.8 x 0.8	**972 361-100** ● **972 361-101** ● **972 361-102** ● **972 361-103** ● **972 361-104** ● **972 361-188** ●●
SEP 2610-F4,8			
⦿		32 A 6.3 x 0.8, tab connector	**972 356-100** ● **972 356-101** ● **972 356-102** ● **972 356-103** ● **972 356-104** ● **972 356-188** ●●
SEB 2620 F6,3			

* System: (64) = 0.64 mm system / ② ≙ 2 mm system / ④ ≙ 4 mm system / ⦿ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

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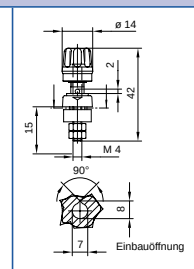
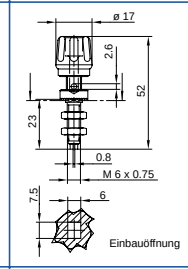
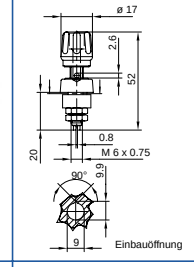
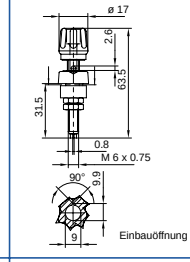
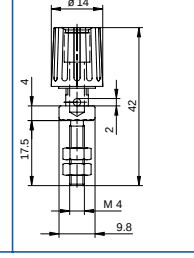
Sockets

*System Article type		Technical Data	Order no. Colour
⦿		32 A press-in socket, tab connector 6.3 x 0.8	**972 362-100** ● **972 362-101** ● **972 362-102** ● **972 362-103** ● **972 362-104** ● **972 362-188** ●●
SEP 2620-F6,3			
⦿		24 A soldering spike 1.9 mm	**972 359-100** ● **972 359-101** ● **972 359-102** ● **972 359-103** ● **972 359-104** ● **972 359-188** ●●
SEB 2630-S1,9			
⦿		24 A press-in socket, soldering spike 1.9 mm	**972 363-100** ● **972 363-101** ● **972 363-102** ● **972 363-103** ● **972 363-104** ● **972 363-188** ●●
SEP 2630-S1,9			
②		6 A	**930 268-100** ● **930 268-101** ●
MPK 1			
④		max. 35 A opening for installation ø 6 mm	**930 099-100** ● **930 099-101** ● **930 099-102** ● **930 099-103** ● **930 099-104** ● **930 099-188** ●●
PK 10 A			

*System Article type		Technical Data	Order no. Colour
④		max. 35 A	**930 103-100** ● **930 103-101** ● **930 103-102** ● **930 103-103** ● **930 103-104** ● **930 103-188** ●●
PKI 10 A			
④		63 A	**930 117-100** ● **930 117-101** ●
PKN 10 B			
④		63 A	**930 136-100** ● **930 136-101** ●
PKNI 10 B			
④		63 A	**930 144-100** ● **930 144-101** ●
PKNI 20 B			
④		max. 35 A opening for installation ø 6 mm	**931 713-100** ● **931 713-101** ●
PK 110			

* System: (64) = 0.64 mm system / ② ≙ 2 mm system / ④ ≙ 4 mm system / ⦿ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

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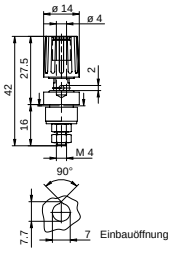
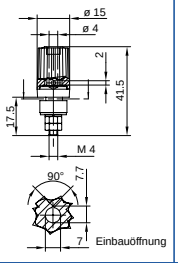
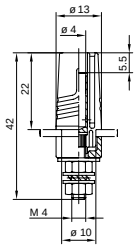
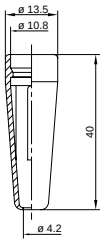
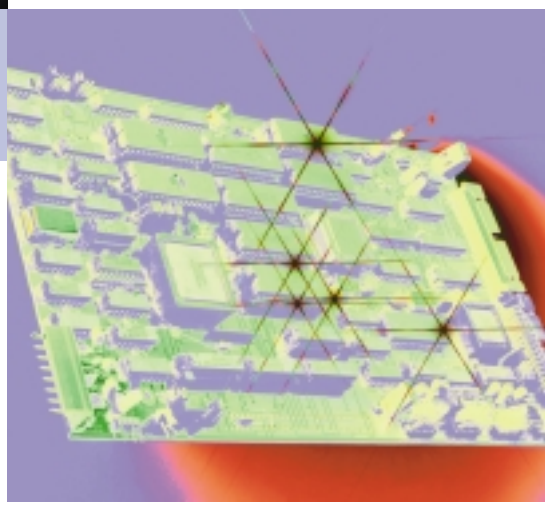
*System Article type		Technical Data	**Order no. Colour**	Notes
④  PKI 110		max. 35 A	**931 714-100** ● **931 714-101** ● **931 714-102** ● **931 714-103** ● **931 714-104** ● **931 714-188** ●●	
④  PKI 100		max. 35 A	**930 757-100** ● **930 757-101** ● **930 757-102** ● **930 757-103** ● **930 757-104** ● **930 757-188** ●●	
⊙  SAB 2600 G M4		32 A surface-mounted socket, screw connection, M4	**972 357-100** ● **972 357-101** ● **972 357-102** ● **972 357-103** ● **972 357-104** ● **972 357-188** ●●	
⊙  BES 1000		Contact protection for screw-in and press-in sockets (SEB and SEP)	**973 616-103** ●	

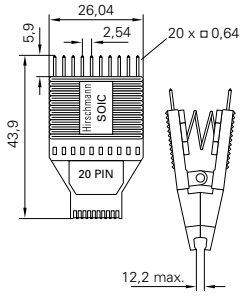
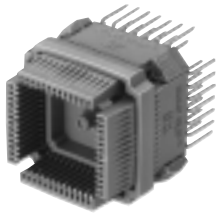
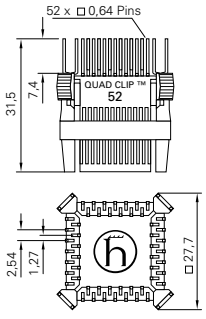
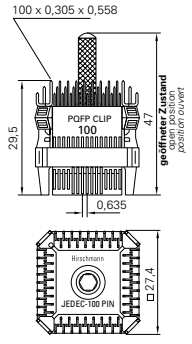
* System: ⑥④ = 0.64 mm system / ② ≙ 2 mm system / ④ ≙ 4 mm system / ⊙ ≙ 4 mm safety system / ↔ ≙ 4 mm sliding sleeve system

IC testers



Product description

IC testers serve as adapters for for testing of soldered ICs with SOIC, PLCC and JEDEC type housings.
By means of a retaining mechanism, testers can be securely connected to a specimen for testing with a test instrument.
A variety numbers of poles cover the most commonly used types.
Thanks to the compact size of the testers, even printed circuit boards with densely mounted components can be tested.

Type			Number of poles	**Order no.**
		SOIC-T-8 SOIC-T-14 SOIC-T-16 SOIC-T-20 SOIC-T-24	8 14 16 20 24 IC tester (8- to 24-pole) for SMD-SOIC and SOJ with 1.27 mm pin spacing	**933 080-001** **933 081-001** **933 082-001** **933 083-001** **933 084-001**
		PLCC-T-20 PLCC-T-28 PLCC-T-32 PLCC-T-44 PLCC-T-52 PLCC-T-68 PLCC-T-84	20 28 32 44 52 68 84 IC tester (20- to 84-pole) for SMD-PLCC and PCC with 1.27 mm pin spacing	**933 085-001** **933 086-001** **933 087-001** **933 088-001** **933 089-001** **933 090-001** **933 091-001**
		JEDEC-T-100 JEDEC-T-132 JEDEC-T-196	100 132 196 IC tester (100- to 196-pole) for SMD-JEDEC QFP with 0.635 mm pin spacing	**933 092-001** **933 093-001** **933 094-001**

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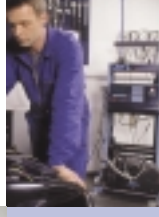


Sets

Product description

Sets are composed of products which serve as the basic equipment for specific applications. A set contains products from a system, e.g. measuring leads, test probes, crocodile clips, etc., coloured red and black in each case. Sets also serve as the basic equipment and provide expansion facilities for multimeters:

- Original electronic equipment (PMS 0.64)
- Vehicle service set (PMS 4 KFZ)
- Safety set for electricians (PMS 2600)

PL 2600 S W Set

Test probe set as accessory for measuring devices
- Test lead with dual function test probe PL 2600 S W; **

Order no.: 972 425-002

PL 2600 S Set

Test probe set as accessory for measuring devices
- Test lead with dual function test probe PL 2600 S; **

Order no.: 972 337-002

PMS 0,64

Micro test equipment set for SMD components and 0.64 mm miniature system
- MICRO-KLEPS micro clamp-type test probe; **
- MICRO-PRUEF MPS 2/0.64 FT sprung micro test probe; **
- AGF 1 crocodile clip; *
- MAL N 4-0.64/100-0.25 measuring lead from 0.64 mm to 4 mm; **

Order no.: 932 959-001

PMS 2

Test equipment set for 2 mm miniature system
- KLEPS 2 BU clamp-type test probe; **
- MPS 1 miniature test probe; **
- MA 1 miniature crocodile clip; **
- MVL 2/100 measuring lead; **

Order no.: 932 961-001

PMS 4

Test equipment set for 4 mm system
- KLEPS 30 clamp-type test probe; **
- PRUEF 2 test probe; **
- AK 2 S crocodile clip; **
- MLN 100/1 measuring lead; **

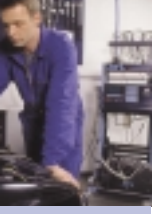
Order no.: 932 793-001

PMS 4 KFZ

Test equipment set for automobile service and workshops, 4 mm system
- KLEPS 2700 piercing clip; **
- PRUEF 2610 FT sprung test probe; **
- AK 2 B 2540 crocodile clip; **
- MLN SIL 150/1 silicon measuring lead; **; lead length 1.5 m

Order no.: 933 003-001

* 1 each blank, ** 1 each red and 1 each black



Sets

 PMS 250	**Sliding sleeve test equipment set for 4 mm system** • KLEPS 250 clamp-type test probe; ** • PRUEF 2 S test probe; ** • AK 2 B crocodile clip; ** • MLB 100/1 V measuring lead; ** **Order no.: 932 827-001**	 MMS 2020	**Multimeter set as accessory for measuring devices** • PRUEF 2700 test probe; ** • AK 2 B 2540 crocodile clip; ** • MLS WG 100/1 contact-protected measuring lead; ** **Order no.: 972 340-001**
 PMS 2600	**Test equipment set for safety applications** • KLEPS 2600 clamp-type test probe; ** • PRUEF 2600 test probe; ** • AK 2 B crocodile clip; ** • MLS GG 100/1 contact-protected measuring lead; ** **Order no.: 972 338-001**	 MMS 2030	**Multimeter set as accessory for measuring devices** • KLEPS 2600 clamp-type test probe; ** • PRUEF 2700 test probe; ** • MLS WG 100/1 contact-protected measuring lead; ** **Order no.: 972 341-001**
 MMS 2010	**Multimeter set as accessory for measuring devices** • KLEPS 2800 clamp-type test probe; ** • PRUEF 2700 test probe; ** • MLS WG 100/1 contact-protected measuring lead; ** **Order no.: 972 339-001**	 MMS 2040	**Multimeter set as accessory for measuring devices** • KLEPS 2600 clamp-type test probe; ** • AK 2 B crocodile clip; ** • PL 2600 test lead; ** • MLS WG 100/1 contact-protected measuring lead; ** **Order no.: 972 342-001**

** 1 each red and 1 each black

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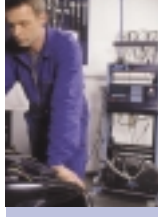

Notes

Warranty clause

Our written and verbal advice in respect of applications is intended to assist you in your work.
It is not binding, even as regards any thirdparty proprietary rights, and does not discharge you from your obligation to carry out corresponding tests determining the suitability of your products for the intended processes and purposes.

Product descriptions do not give any indication as to liability for any damage that may be caused. Should liability arise nevertheless, it is limited to no more than the value of the goods supplied and used, regardless of the damage.

Hirschmann Electronics GmbH & Co.
Automation and Network Solutions

HIRSCHMANN

Hirschmann. Solutions for communication.

Germany
Hirschmann Electronics GmbH & Co.
Automation and Network Solutions
Stuttgarter Straße 45–51
D-72654 Neckartenzlingen
Postfach 1649
D-72606 Nürtingen
Tel +49-7127-14-1479/-1480
Fax +49-7127-14-1495/-1496/-1502
E-mail: ans-hi-line@nt.hirschmann.de
http://www.hirschmann.com

Austria
Hirschmann Austria GmbH
Oberer Paspelsweg 6-8
A-6830 Rankweil-Brederis
Tel +43-55 22 307-0
Fax +43-55 22 307-555
E-mail: info@rw.hirschmann.at

Switzerland
Richard Hirschmann GmbH & Co.
Neckartenzlingen
Niederlassung Uster
Seestraße 16
CH-8610 Uster
Tel +41-1-905 82 82
Fax +41-1-905 82 89
E-mail: ans_ch@hirschmann.ch

France
Richard Hirschmann Electronique S.A.
24, rue du Fer à Cheval, Z.I.
F-95200 Sarcelles
Tel +33-1-39 33 02 80
Fax +33-1-39 90 59 68
E-mail: ans@hirschmann.fr

Great Britain
Richard Hirschmann Electronics UK Ltd.
St. Martins Way
St. Martins Business Centre
GB-Bedford MK42 OLF
Tel +44-1234-34 59 99
Fax +44-1234-35 22 22
E-mail: enquiry@hirschmann.co.uk

Netherlands
Richard Hirschmann
Electronica Nederland B.V.
Pampuslaan 170
NL-1380 AB Weesp
Tel +31-2944-6 25 55
Fax +31-2944-8 06 39
E-mail: ans@hirschmann.nl

Spain
Hirschmann España S. A.
Calle Trespaderne, 29
Edifico Barajas I, 2ª Planta
E-28042 Madrid
Tel +34-91-74 617 30
Fax +34-91-74 61 735
E-mail: hes@hirschmann.es

Hungary
Hirschmann Hungária
Híradástechnikai Kft.
Rokolya u. 1–13
H-1131 Budapest
Tel +36-1-349 41 99
Fax +36-1-329 84 53
E-mail: hirh.vez@nap-szam.hu

USA
Richard Hirschmann of America Inc.
30 Hook Mountain Road – Unit 201
Pine Brook, New Jersey 07058, USA
Tel +1-973-830 2000
Fax +1-973-830 1470
E-mail: ans@hirschmann-usa.com

Singapore
Hirschmann Electronics
(Asia Pacific) Pte. Ltd.
3 Toh Tuck Link
#04-01 German Districentre
Singapore 596228
Tel +65-4 63 58 55
Fax +65-4 63 57 55
E-mail: hirschmann.ap@pacific.net.sg

China (PRC)
Hirschmann Electronics
Shanghai Rep. Office
Room 518, No. 109 Yangdang Road
Lu Wan District, 200020
Shanghai, PRC
Tel +86-21 63 58 51 19
Fax +86-21 63 58 51 25
E-mail: hirschsh@public4.sta.net.cn

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