

# Industrial Highlights



# Innovative and universal

Connectors for power connection,  
control signals and consumer electronics

**HiPower** connectors and leads can be used in extreme applications that have dirty, humid and vibration-prone environments. With these connectors terminations are realized quickly and easily in the field. In addition they fulfil the requirements for the mechanical engineering, measuring and control technologies with international certification. These connectors are widely used in industry, plant manufacturing, mechanical engineering, building automation as well as in medical technologies and communication systems.



**HiMedia** connectors for secure connection of communication and consumer systems. Compact dimensions, high density I/O and latching/locking characteristics make these products universally useable.



Conforming to international standards HiMedia connectors are used all over the world in hifi systems, measuring technology, entertainment electronics and loud-speaker systems, industrial automation, intrusion and fire alarm systems and in TV and multimedia presentation equipment.





## 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

Rheinmetall Elektronik 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 technologies. A broad range of






connectors for laboratory 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.



# Table of contents



## Connectors for mains connection

	CA-series . . . . .	6 – 9
	CR-series . . . . .	10 – 11
	ST-series . . . . .	12 – 19
	G-series . . . . .	20 – 27
	N-series . . . . .	28 – 32



## Connectors for control signals

	NR-series . . . . .	34 – 43
	CM-series . . . . .	44 – 49
	R-series . . . . .	50 – 53
	ME-series . . . . .	54 – 59
	SP-series . . . . .	60 – 65
	Contacts, crimping systems, accessories . . .	66 – 70



## Connectors for consumer electronics

	MAS/MAK . . . . .	72 – 91
	MIS/MIK . . . . .	92 – 95
	TOS/TOK . . . . .	96

# Connectors for mains connection







# Connectors for mains connection

## CA-series



### Product description


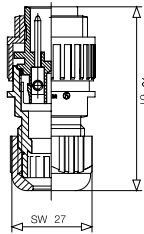

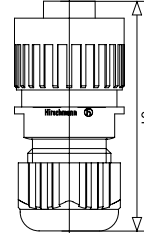

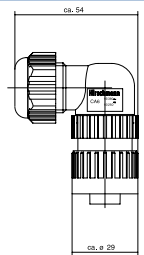

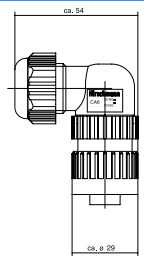
Robust, universal circular connector for machinery engineering in general, control engineering, electrical medical equipment as well as for the chemical industry.

- International approvals for worldwide use: VDE, UR, SEV, CSA

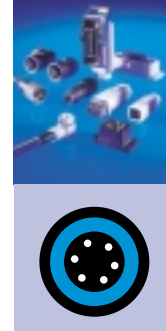
- Housings made of impact-resistant plastic with screw locking system for troublefree, permanent connections
- Easy handling for a quick assembly with integrated strain relief
- Useful in industry due to protection against dust and water

### Basic data

Operating voltage: 250 V AC / DC, (400 V AC 3-pole)  
 Operating current: 10 A AC / DC (at 20° C), 16 A AC 3-pole (at 20° C)  
 Protection class: IP 67  
 Pollution severity class: 3  
 Strain relief by means of cable: 6 mm-12 mm  
 Contact surface: Cu Zn

Type		Number of poles	Description	Order no.
 CA 3 LS		3 + PE	Cable connector Type of connection: screw Conductor cross-section: max. 1.5 mm <sup>2</sup> Operating voltage: 250 V DC / 400 V AC Operating current: 10 A DC / 16 A AC	934 124-100
 CA 3 LD		3 + PE	Cable socket Type of connection: screw Conductor cross-section: max. 1.5 mm <sup>2</sup> Operating voltage: 250 V DC / 400 V AC Operating current: 10 A DC / 16 A AC	934 125-100
 CA 3 W LS		3 + PE	Cable connector Type of connection: screw Conductor cross-section: max. 1.5 mm <sup>2</sup> Operating voltage: 250 V DC / 400 V AC Operating current: 10 A DC / 16 A AC	934 128-100
 CA 3 W LD		3 + PE	Cable socket Type of connection: screw Conductor cross-section: max. 1.5 mm <sup>2</sup> Operating voltage: 250 V DC / 400 V AC Operating current: 10 A DC / 16 A AC	934 129-100

# Connectors for mains connection



## CA-series

HiPower

Type		Number of poles	Description	Order no.
 CA 6 LS		6 + PE	Cable connector Type of connection: solder Conductor cross-section: max. 0.75 mm <sup>2</sup> Operating voltage: 250 V AC/DC Operating current: 10 A AC/DC	934 126-100
 CA 6 LD		6 + PE	Cable socket Type of connection: solder Conductor cross-section: max. 0.75 mm <sup>2</sup> Operating voltage: 250 V AC/DC Operating current: 10 A AC/DC	934 127-100
 CA 6 W LS		6 + PE	Cable connector Type of connection: solder Conductor cross-section: max. 0.75 mm <sup>2</sup> Operating voltage: 250 V AC/DC Operating current: 10 A AC/DC	934 130-100
 CA 6 W LD		6 + PE	Cable socket Type of connection: solder Conductor cross-section: max. 0.75 mm <sup>2</sup> Operating voltage: 250 V AC/DC Operating current: 10 A AC/DC	934 131-100
 CA 3 GS		3 + PE	Panel-mounted connector Type of connection: screw Conductor cross-section: max. 1.5 mm <sup>2</sup> Operating voltage: 250 V DC / 400 V AC Operating current: 10 A DC / 16 A AC	932 322-100



# Connectors for mains connection

## CA-series

HiPower

Type		Number of poles	Description	Order no.
 <p>CA 3 GD</p>		3 + PE	Panel-mounted socket Type of connection: screw Conductor cross-section: max. 1.5 mm <sup>2</sup> Operating voltage: 250 V DC / 400 V AC Operating current: 10 A DC / 16 A AC	<b>932 321-100</b>
 <p>CA 6 GS</p>		6 + PE	Panel-mounted connector Type of connection: solder Conductor cross-section: max. 0.75 mm <sup>2</sup> Operating voltage: 250 V AC/DC Operating current: 10 A AC/DC	<b>932 326-100</b>
 <p>CA 6 GD</p>		6 + PE	Panel-mounted socket Type of connection: solder Conductor cross-section: max. 0.75 mm <sup>2</sup> Operating voltage: 250 V AC/DC Operating current: 10 A AC/DC	<b>932 325-100</b>
 <p>CA 00 SD 1</p>		-	Protection cap for all cable connectors with variable thread	<b>831 530-400</b>
 <p>CA 00 SD 3</p>		-	Protection cap for all cable sockets with variable thread	<b>831 532-400</b>




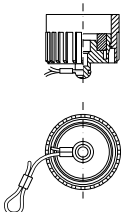

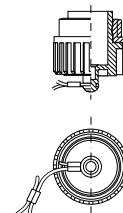
# Connectors for mains connection



## CA-series

HiPower



Type		Number of poles	Description	Order no.
 CA 00 SD 2		-	Protection cap for all panel-mounted connectors, with tight thread	831 529-100
 CA 00 SD 4		-	Protection cap for all panel-mounted sockets, with tight thread	831 531-100

## Notes



# Connectors for mains connection



## CR-series

HiPower

### Product description

Robust, universal circular connector for machinery engineering in general, control engineering, electrical medical equipment and the use in sun blinds, roller shutters, awnings.


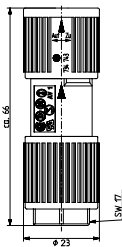

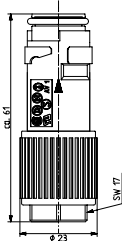

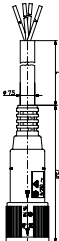

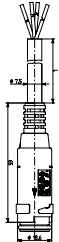
- International approvals for world-wide use: VDE, UR
- Easy handling for a quick assembly, contact-making with insulation

piercing connectors, eliminating the need for wire stripping, integrated strain relief

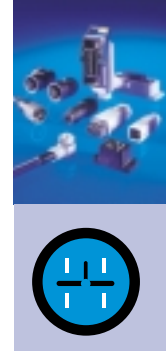
- Casing of impact-proof plastic with bayonet locking for troublefree permanent connections (enclosed with connector)
- Useful in industry and applicable outdoors due to protection against dust and water

### Basic data

Operating voltage: 250 AC / DC  
 Operating current: 8 A  
 Number of poles: 3 + PE  
 Protection class: IP 65  
 Temperature range: -40°C ... + 90°C  
 Strain relief by means of a cable: 6,8mm - 8,8mm  
 Cable cross-section: 0.5 mm<sup>2</sup> ... 0.75 mm<sup>2</sup>, strand



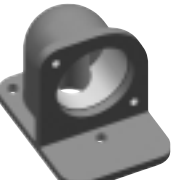
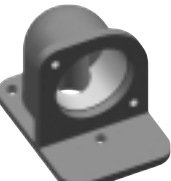
Type		Number of poles	Description	Order no.
 CR M 3A		3 + PE	Cable connector Type of connection: quickfit Bayonet locking	<b>933 759-100</b>
 CR F 3A		3 + PE	Cable socket Type of connection: quickfit	<b>933 760-100</b>
 CR M 3M		3 + PE	Moulded-on cable connector, cable HO5 RR F4G075, 1m Bayonet locking	<b>933 761-001</b>
 CR M 3F		3 + PE	Moulded-on cable socket, cable HO5 RR F4G075, 1m	<b>933 762-001</b>

# Connectors for mains connection



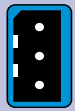
## CR-series

HiPower

Type	Number of poles	Description	Order no.
 CR Panel-mounted connector	3 + PE	Panel-mounted connector with flange Type of connection: quickfit Bayonet locking via cable socket	<b>In preparation</b>
 CR Panel-mounted socket	3 + PE	Panel-mounted socket with flange Type of connection: quickfit	<b>In preparation</b>
 CR Surface-mounted connector	3 + PE	Surface-mounted connector Type of connection: quickfit Bayonet locking via cable socket	<b>In preparation</b>
 CR Surface-mounted socket	3 + PE	Surface-mounted socket Type of connection: quickfit	<b>In preparation</b>



# Connectors for mains connection



## ST-series

HiPower

### Product description


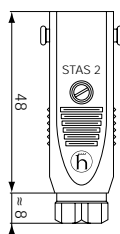

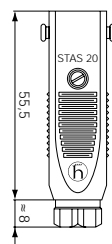

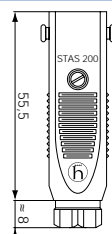

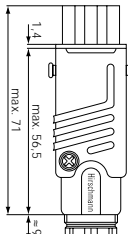
Compact connectors for mains and control lead connections.

- Robust design, by a safety bracket, vibration-proof plug connection, can be assembled as required and moulded-on versions 2-, 3-, 4-, 5-pole + PE
- Panel-mounted as well as surface-mounted versions of connector and socket

- Protection against dust and splashes
- International approvals for worldwide use: VDE, SEV, NEMKO, SEMKO, UL
- Colour of product: grey

### Basic data

Operating voltage: 250 V AC / DC, (400 V AC 3-pole)  
 Operating current: 10 A AC / DC (16 A AC 3-pole)  
 Protection class: IP 54  
 Pollution severity class: 3  
 Lead cross-section: 6mm - 12mm  
 Contact surface: Sn/5-pole Ag  
 Type of connection: screw / crimp  
 Connection cross-section: max 1.5mm<sup>2</sup>

Type		Number of poles	Description	Order no.
		2 + PE	Cable connector without strain relief Operating current: 16 A AC / 10 A DC Product without approvals	<b>930 620-106</b>
		2 + PE	Cable connector with strain relief Operating current: 16 A AC / 10 A DC Product without approvals	<b>931 265-106</b>
		2 + PE	Cable connector with strain relief and coding fin Operating current: 16 A AC / 10 A DC	<b>932 038-106</b>
		3 + PE	Cable connector with strain relief Operating current: 16 A AC / 10 A DC	<b>932 143-100</b> black <b>932 143-106</b> grey

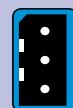



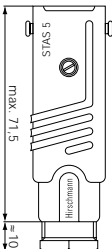

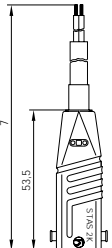

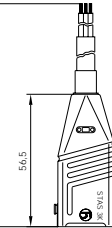

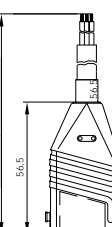

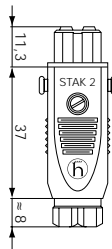
# Connectors for mains connection



## ST-series

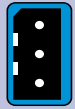
HiPower



Type		Number of poles	Description	Order no.
		5 + PE	Cable connector with strain relief, not assembled with additional contacts Operating current: 6 A AC / 10 A DC	931 692-106
		2 + PE	Moulded-on cable connector, harmonized lead (DIN VDE 0282), safety bracket Cable length on request Operating current: 10 A AC / DC Product without approvals	972 246-...
		3 + PE	Moulded-on cable connector with harmonized lead (DIN VDE 0282) and safety bracket Cable length on request Operating current: 10 A AC / DC	931 300-...
		4 + PE	Moulded-on cable connector with harmonized lead (DIN VDE 0282) and safety bracket Cable length on request Operating current: 10 A AC / DC	932 578-...
		2 + PE	Cable socket without strain relief Operating current: 16 A AC / 10 A DC Product without approvals	930 621-106


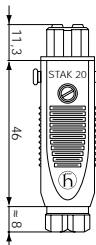

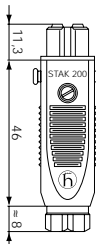

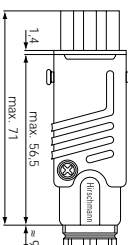

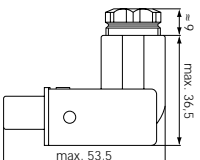

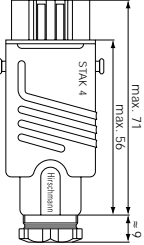


# Connectors for mains connection



## ST-series

HiPower

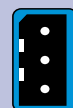
Type		Number of poles	Description	Order no.
		2 + PE	Cable socket with strain relief Operating current: 16 A AC / 10 A DC Product without approvals	<b>931 264-106</b>
		2 + PE	Cable socket with strain relief and coding slot Operating current: 16 A AC / 10 A DC	<b>932 037-106</b>
		3 + PE	Cable socket with strain relief Operating current: 16 A AC / 10 A DC	<b>932 140-100</b> black <b>932 140-106</b> grey
		3 + PE	Cable socket, angled design Operating current: 16 A AC / 10 A DC	<b>932 413-106</b>
		4 + PE	Cable socket with strain relief Operating current: 10 A AC / DC	<b>932 533-106</b>


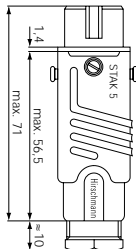

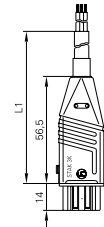

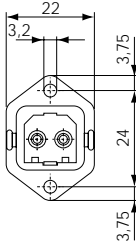

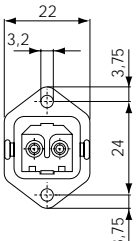

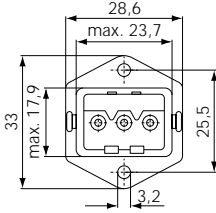
# Connectors for mains connection



## ST-series

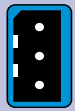
HiPower



Type		Number of poles	Description	Order no.
		5 + PE	Cable socket with strain relief, not assembled with additional contacts and gasket Operating current: 6 A AC / 10 A DC	<b>931 691-106</b>
		3 + PE	Moulded-on cable connector with harmonized lead (DIN VDE 0282) Cable length on request Operating current: 10 A AC / DC	<b>932 187-...</b>
		2 + PE	Panel-mounted connector, added gasket Operating current: 16 A AC / 10 A DC Product without approvals	<b>930 622-106</b>
		2 + PE	Panel-mounted connector with coding fin, added gasket Operating current: 16 A AC / 10 A DC	<b>932 048-106</b>
		3 + PE	Panel-mounted connector, added gasket Operating current: 16 A AC / 10 A DC	<b>932 145-106</b>


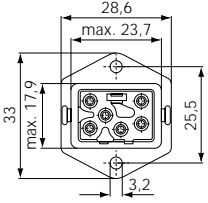

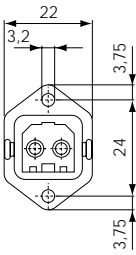

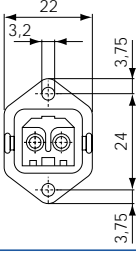

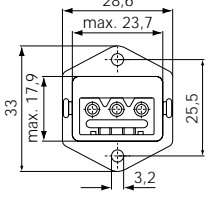

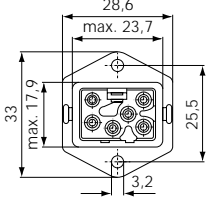


# Connectors for mains connection



## ST-series

HiPower

Type		Number of poles	Description	Order no.
 STASEI 5		5 + PE	Panel-mounted connector, not assembled with added contacts, added gasket Operating current: 6 A AC / 10 A DC	<b>931 697-106</b>
 STAKEI 2		2 + PE	Panel-mounted socket, added gasket Operating current: 16 A AC / 10 A DC Product without approvals	<b>930 647-106</b>
 STAKEI 200		2 + PE	Panel-mounted socket with coding slot, added gasket Operating current: 16 A AC / 10 A DC	<b>932 047-106</b>
 STAKEI 3 N		3 + PE	Panel-mounted socket, added gasket Operating current: 16 A AC / 10 A DC	<b>932 142-106</b>
 STAKEI 5		5 + PE	Panel-mounted socket, not assembled with added contacts, added gasket Operating current: 6 A AC / 10 A DC	<b>931 694-106</b>

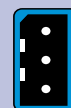



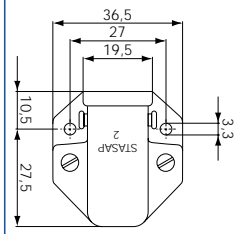

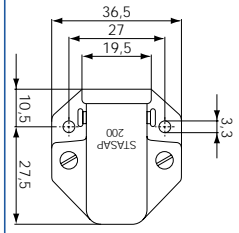

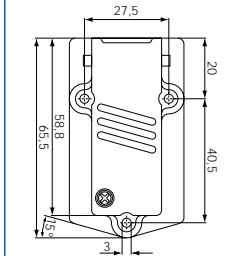

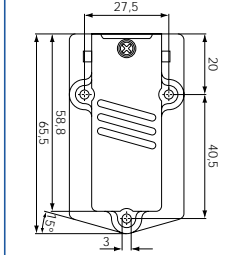

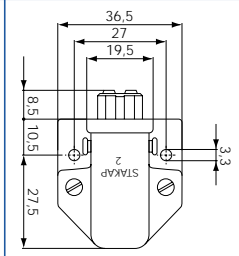
# Connectors for mains connection



## ST-series

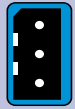
HiPower



Type		Number of poles	Description	Order no.
 <p>STASAP 2 B</p>		2 + PE	Surface-mounted connector with cast baseplate, additional sealing for IP 54 necessary Operating current: 16 A AC / 10 A DC Product without approvals	930 822-106
 <p>STASAP 200</p>		2 + PE	Surface-mounted connector with cast baseplate and coding fin, additional sealing for IP 54 necessary Operating current: 16 A AC / 10 A DC	932 046-106
 <p>STASAP 3 N</p>		3 + PE	Surface-mounted connector Operating current: 16 A AC / 10 A DC	932 514-106
 <p>STASAP 5</p>		5 + PE	Surface-mounted connector, not assembled with added contacts Operating current: 6 A AC / 10 A DC	932 512-106
 <p>STAKAP 2</p>		2 + PE	Surface-mounted socket with cast baseplate, additional sealing for IP 54 necessary Operating current: 16 A AC / 10 A DC Product without approvals	930 329-106


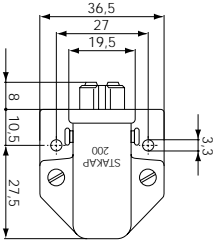

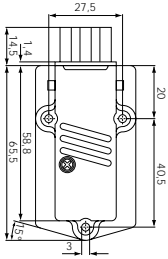

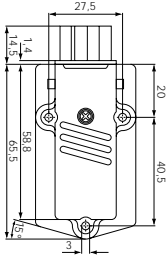

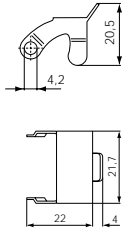

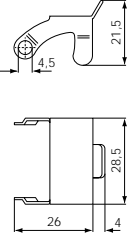


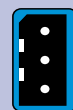
# Connectors for mains connection



## ST-series

HiPower

Type		Number of poles	Description	Order no.
 <p>STAKAP 200</p>		2 + PE	Surface-mounted socket with cast baseplate and coding slot, additional sealing for IP 54 necessary Operating current: 16 A AC / 10 A DC	932 045-106
 <p>STAKAP 3 N</p>		3 + PE	Surface-mounted socket Operating current: 16 A AC / 10 A DC	932 513-106
 <p>STAKAP 5</p>		5 + PE	Surface-mounted socket, not assembled with added contacts Operating current: 6 A AC / 10 A DC	932 511-106
 <p>STASI 2</p>		-	Safety brackets for 2 + PE - versions	732 044-000
 <p>STASI 3</p>		-	Safety bracket for 3 + PE and 5 + PE - versions	732 045-001






# Connectors for mains connection

## G-series



### Product description


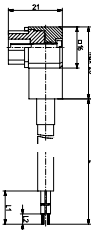

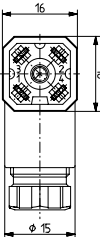

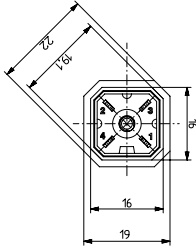

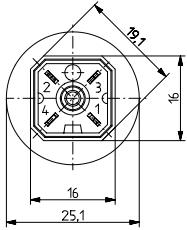
- Compact and robust series of angled connectors protected against dust and water jets (IEC 60529-IP 65) with VDE expertise 
- Cable sockets, can be assembled as required and with injection-moulded leads in different lengths
- Surface-mounted connectors with solder- and crimp contacts, also suitable for mounting to light bar-

riers by ultrasonic welding

### Product characteristics

- Big variety of versions
  - Two different series (G/GO) coded to prevent confusion
  - Number of poles 2-7, with/without PE
- Operating voltage up to 250 V AC / DC

- Exceptionally small dimensions, therefore particularly suitable for electrical connections in hydraulic and pneumatic control systems even in very confined spaces
- For actuators, sensors, signalling systems, miniature drives, electro-medical equipment, suitable for use under extreme conditions, heavy machine construction

Type		Number of poles	Description	Colour	Order no.
 G 2 KW 1 F		2	Cable socket with moulded-on lead Cable length: 1,5 m Operating voltage: 50 V AC / DC	black	<b>931 494-603</b>
 G 4 W 1 F		4	Cable socket with PG 7 cable gland, with solder contacts Operating voltage: 50 V AC / DC	black grey	<b>932 157-100</b> <b>932 157-106</b>
 G 4 A 1 M		4	Surface-mounted connectors for printed circuit boards, with solder contacts Operating voltage: 50 V AC / DC	grey	<b>931 807-106</b>
 G 4 A 1 M MT		4	Press-fit surface-mounted connector, with solder contacts Operating voltage: 50 V AC / DC	black	<b>932 823-100</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories

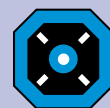



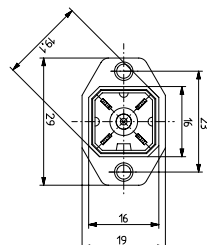

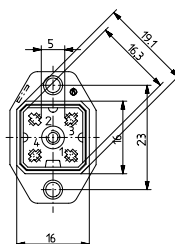

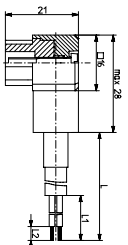

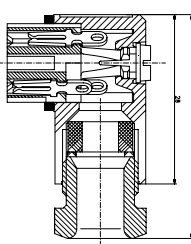

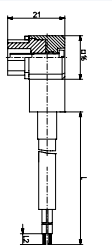
# Connectors for mains connection



## G-series

HiPower



Type		Number of poles	Description	Colour	Order no.
		4	Surface-mounted connector with flange, with solder contacts Operating voltage: 50 V AC / DC	black grey	<b>932 092-100</b> <b>932 092-106</b>
		4	Panel-mounted connector for crimp contacts Operating voltage: 50 V AC / DC	black grey	<b>731 802-500</b> <b>731 802-506</b>
		4	Cable socket with moulded-on lead Cable length: 2 m Operating voltage: 50 V AC / DC	grey	<b>931 805-602</b>
		2 + PE	Cable socket with PG 7 cable gland, with solder contacts Operating voltage: 250 V AC / DC	black grey	<b>932 185-100</b> <b>932 185-106</b>
		2 + PE	Cable socket with moulded-on lead Cable length: 2 m Operating voltage: 250 V AC / DC	grey	<b>932 041-601</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories




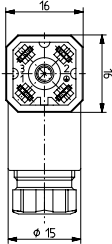


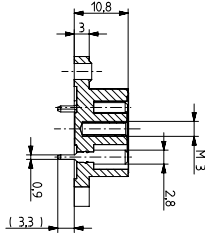


# Connectors for mains connection

## G-series

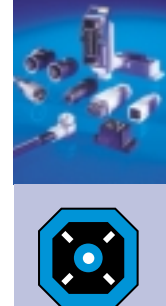
HiPower



Type		Number of poles	Description	Colour	Order no.
		2 + PE	Cable socket with moulded-on lead Cable length: 3 m Operating voltage: 250 V AC / DC	grey	<b>932 041-002</b>
		2 + PE	Cable connector with moulded-on lead Cable length: 1,5 m Operating voltage: 250 V AC / DC	grey	<b>931 793-001</b>
		3 + PE	Cable socket with PG 7 cable gland, with solder contacts Operating voltage: 250 V AC / DC	black grey	<b>932 186-100</b> <b>932 186-106</b>
		3 + PE	Surface-mounted connector for printed circuit boards, with solder contacts Operating voltage: 250 V AC / DC	grey	<b>931 700-106</b>
		3 + PE	Surface-mounted connector with flange, with solder contacts Operating voltage: 250 V AC / DC	black	<b>932 840-100</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


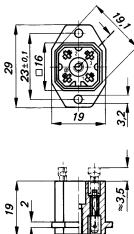
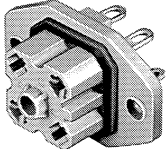
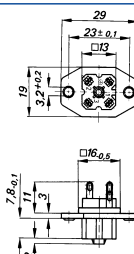

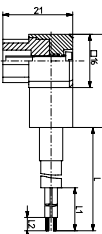



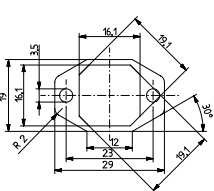
# Connectors for mains connection



## G-series

HiPower



Type		Number of poles	Description	Colour	Order no.
		3 + PE	Panel-mounted connector for crimp contacts Operating voltage: 250 V AC / DC	grey	<b>731 996-506</b>
		3 + PE	Panel-mounted socket with flange, with solder contacts Operating voltage: 250 V AC / DC	grey	<b>931 782-106</b>
		3 + PE	Cable socket with moulded-on lead Cable length: 2 m Operating voltage: 250 V AC / DC	grey	<b>931 608-003</b>
		3 + PE	Cable connector with moulded-on lead Cable length: 2 m Operating voltage: 250 V AC / DC	grey	<b>931 783-001</b>
		–	Flat gasket NBR, 2 mm thick		<b>732 135-002</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


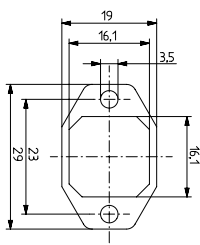

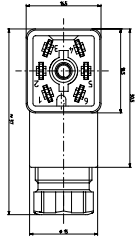

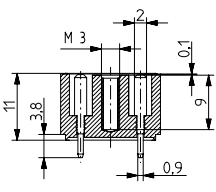

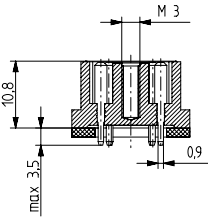

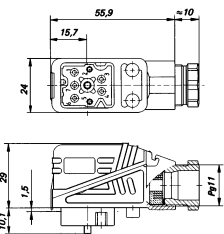


# Connectors for mains connection

## G-series

HiPower

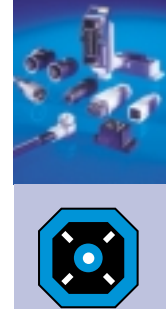


Type		Number of poles	Description	Colour	Order no.
		–	Flat gasket NBR, 0,8 mm thick		<b>733 415-002</b>
		6	Cable socket with PG 7 cable gland, with solder contacts Operating voltage: 50 V AC / DC	black	<b>932 447-100</b>
		6	Surface-mounted connector for printed circuit boards, with solder contacts Operating voltage: 50 V AC / DC	black	<b>932 350-100</b>
		6	Surface-mounted connector with flange, with solder contacts Operating voltage: 50 V AC / DC	black	<b>932 669-100</b>
		7	Cable socket with PG 11 cable gland, with solder contacts Operating voltage: 50 V AC / DC	black	<b>932 483-100</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories

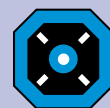



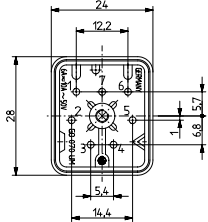

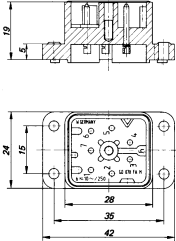

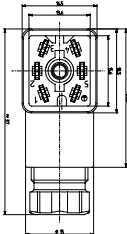

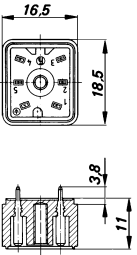

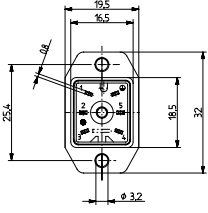
# Connectors for mains connection



## G-series

HiPower



Type		Number of poles	Description	Colour	Order no.
 GO 070 UM		7	Surface-mounted connector for printed circuit boards, with solder contacts Operating voltage: 50 V AC / DC	black	<b>932 466-100</b>
 GO 070 FA M		7	Surface-mounted connector with flange, with solder contacts Operating voltage: 50 V AC / DC	black	<b>932 470-100</b>
 GO 51 WF		5 + PE	Cable socket with PG 7 cable gland, with solder contacts Operating voltage: 250 V AC / DC	black	<b>932 351-200</b>
 GO 51 UM		5 + PE	Surface-mounted connector for printed circuit boards, with solder contacts Operating voltage: 250 V AC / DC	black	<b>932 352-100</b>
 GO 51 FAV M		5 + PE	Surface-mounted connector with flange, with solder contacts Operating voltage: 250 V AC / DC	black	<b>932 919-100</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


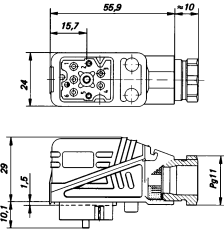

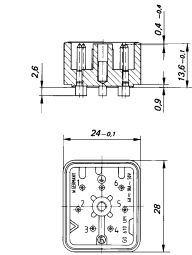

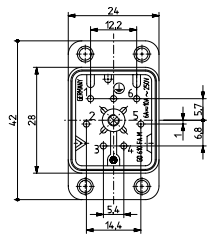

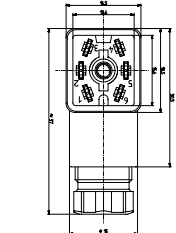

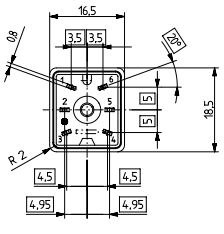


# Connectors for mains connection

## G-series

HiPower



Type		Number of poles	Description	Colour	Order no.
 <p>GO 610 WF</p>		6 + PE	Cable socket with PG 11 cable gland, with solder contacts Operating voltage: 250 V AC / DC	black	932 484-100
 <p>GO 610 UM</p>		6 + PE	Surface-mounted connector with solder contacts Operating voltage: 250 V AC / DC	black	932 464-100
 <p>GO 610 FA M</p>		6 + PE	Surface-mounted connector with flange, with solder contacts Operating voltage: 250 V AC / DC	black	932 478-100
 <p>GO 60 WF</p>		6	Cable socket with PG 7 cable gland, with solder contacts Operating voltage: 250 V AC / DC	black	932 448-100
 <p>GO 60 UM</p>		6	Surface-mounted connector for printed circuit boards, with solder contacts Operating voltage: 250 V AC / DC	black	932 344-100

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


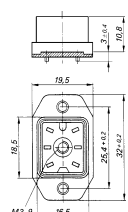

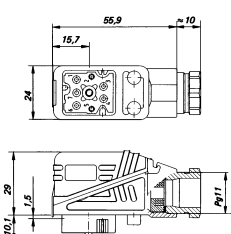

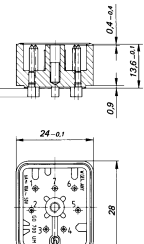

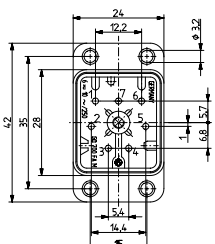
# Connectors for mains connection



## G-series

HiPower



Type		Number of poles	Description	Colour	Order no.
 GO 60 FAV M		6	Surface-mounted connector with flange, with solder contacts Operating voltage: 250 V AC / DC	black	<b>932 918-100</b>
 GO 700 WF		7	Cable socket with PG 11 cable gland, with solder contacts Operating voltage: 250 V AC / DC	black	<b>932 485-100</b>
 GO 700 UM		7	Surface-mounted connector with solder contacts Operating voltage: 250 V AC / DC	black	<b>932 465-100</b>
 GO 700 FA M		7	Surface-mounted connector with flange, with solder contacts Operating voltage: 250 V AC / DC	black	<b>932 477-100</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories



# Connectors for mains connection



## N-series

HiPower

### Product description


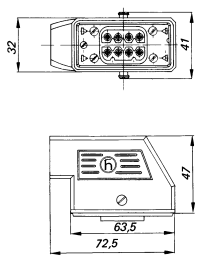

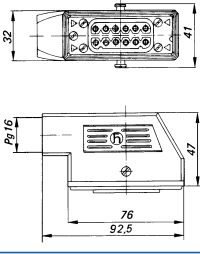

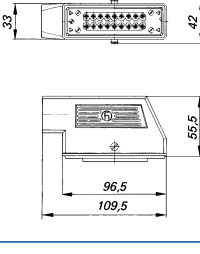

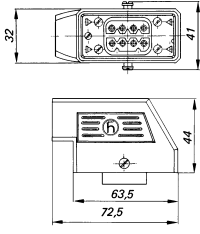
Robust connectors 6-, 10-, and 16-pole, narrow plastic housing, angled, for industrial application.

- Housing made of glass-fibre-reinforced, impact-resistant and unbreakable plastic
- Suitable for the use in machinery engineering in general, control engineering and in the chemical industry

- Protection against dust and splashes
- Safety bracket for vibration-proof plug connection, the connection is broken by unlocking
- Coding: Comprising 4 pins and 4 sockets per plug connection, offset at 120° each
- VDE-expertise with process inspection

### Basic data

Operating voltage: 400 V AC / 250 V DC  
 Operating current: 10 A AC/DC  
 Protection class: IP 54  
 Outer cable diameter: 10mm - 13mm  
 Type of connection: screw  
 Colour of product: grey

Type		Number of poles	Description	Order no.
 NS 6		6 + PE	Cable connector Cable gland must be ordered separately Operating current: 10A/250 V DC, 10A/400 V AC	932 293-106
 NS 10		10 + PE	Cable connector Cable gland must be ordered separately Operating current: 10A/250 V DC, 10A/400 V AC	932 294-106
 NS 16		16 + PE	Cable connector Cable gland must be ordered separately Operating current: 10A/250 V DC, 10A/400 V AC	932 295-106
 NK 6		6 + PE	Cable socket Cable gland must be ordered separately Operating current: 10A/250 V DC, 10A/400 V AC	932 290-106


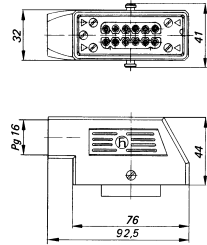

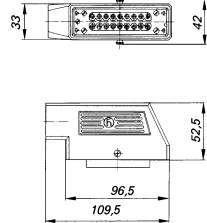

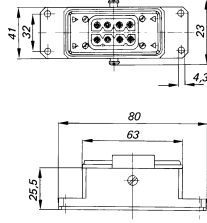

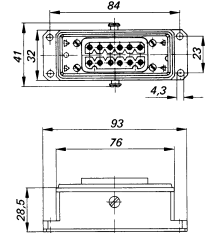

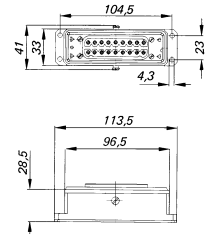
# Connectors for mains connection



## N-series

HiPower



Type		Number of poles	Description	Order no.
 NK 10		10 + PE	Cable socket Cable gland must be ordered separately Operating current: 10A/250 V DC, 10A/400 V AC	932 291-106
 NK 16		16 + PE	Cable socket Cable gland must be ordered separately Operating current: 10A/250 V DC, 10A/400 V AC	932 292-106
 NSE 6		6 + PE	Panel-mounted connector Operating current: 10A/250 V DC, 10A/400 V AC	932 299-106
 NSE 10		10 + PE	Panel-mounted connector Operating current: 10A/250 V DC, 10A/400 V AC	932 300-106
 NSE 16		16 + PE	Panel-mounted connector Operating current: 10A/250 V DC, 10A/400 V AC	932 301-106


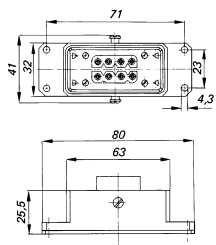

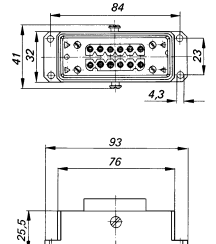

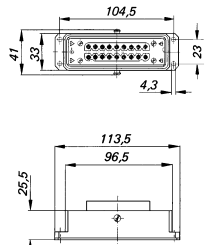




# Connectors for mains connection



## N-series

HiPower

Type		Number of poles	Description	Order no.
 NKE 6		6 + PE	Panel-mounted socket Operating current: 10A/250 V DC, 10A/400 V AC	932 296-106
 NKE 10		10 + PE	Panel-mounted socket Operating current: 10A/250 V DC, 10A/400 V AC	932 297-106
 NKE 16		16 + PE	Panel-mounted socket Operating current: 10A/250 V DC, 10A/400 V AC	932 298-106
 NVZ 6 B		–	Cable gland Gland Pg 13,5 with strain relief bracket for cable diameter 10 - 13 mm	831 491-001
 NVZ 10 B		–	Cable gland Gland Pg 16 with strain relief bracket for cable diameter 10,5 - 15 mm	831 492-001



# Connectors for mains connection



## N-series

HiPower



Type		Number of poles	Description	Order no.
 <p>NVZ 16 B</p>		-	Cable gland Gland Pg 21 with strain relief bracket for cable diameter 14 - 18,5 mm	831 493-001
 <p>NSI 6-1</p>		-	Accessories Safety bracket steel, galvanized	731 307-000
 <p>NSI 10-1</p>		-	Accessories Safety bracket steel, galvanized	731 051-000
 <p>NSI 16-1</p>		-	Accessories Safety bracket steel, galvanized	731 343-000
 <p>NC 10</p>		-	Accessories Coding consisting of 4 coding pins and 4 coding sockets	930 626-000



# Notes



# Connectors for control signals





# Connectors for control signals



## NR-series

HiPower

### Product description

Multi-pole shielded circular connectors. Design according to DIN 43651, all-metal construction, used for control and measurement systems.

- Connection of shielded cables with PG-cable gland, efficient shielding ensures transmission free of electromagnetic and parasitic interference from the PG-cable gland to the machine

- For situations susceptible to interference and safety-related applications
- Suitable for use under extreme mechanical stress

### Basic data

Number of poles: 6 + PE, 11 + PE  
 Operating voltage: 25 V AC; 50 V DC  
 Operating current:  
 10 A (6-pole), 5 A (11-pole)

Contact material/surface:

CuZn silver-plated

Protection class: IP 65

Type of connection: crimp / solder


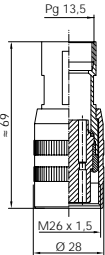

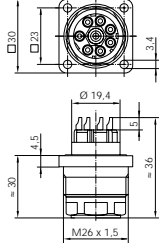

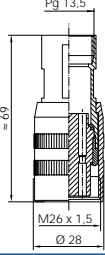

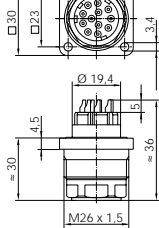
Connection cross-section: max.

1,5 mm<sup>2</sup> (6-pole), 0,5 mm<sup>2</sup> (11-pole)

Ambient temperature: -25 ... +90°C


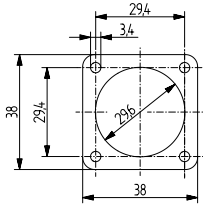

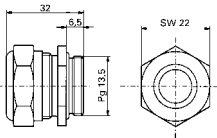

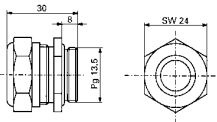

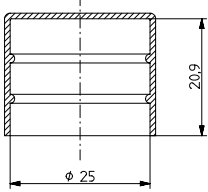
Contacts are to be ordered separately, see chapter: Contacts, crimping

systems, accessories

Type		Number of poles	Description	Suitable for	Order no.
 N6R EFS		6 + PE	Cable socket, straight Type of connection: crimp Contacts: RBC 162	N6R BM FA S (EMV-PG-cable gland is to be ordered separately!)	933 711-001
 N6R BM FAS		6 + PE	Surface-mounted connector with flange Type of connection: solder	N6R EF S	933 710-001
 N11R EFS		11 + PE	Cable socket, straight Type of connection: crimp Contacts: RBC 162/1	N11R BM FAS (EMV-PG-cable gland is to be ordered separately!)	933 700-001
 N11R BM FAS		11 + PE	Surface-mounted connector with flange Type of connection: solder	N11R EF S	933 699-001

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories

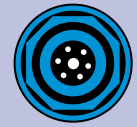


Type		Number of poles	Description	Suitable for	Order no.
 <p>N6R-40</p>		–	Conductive flat gasket	N6R BM FAS, N11R BM FAS	<b>734 633-001</b>
 <p>N6R-41</p>		–	EMV-PG-cable gland for lead diameter 6 - 12 mm	N6R EF S N11R EF S	<b>734 605-001</b>
 <p>N6R-42</p>		–	EMV-PG-cable gland for lead diameter 12 - 15 mm	N6R EF S, N11R EF S	<b>734 606-001</b>
 <p>SHK 4</p>		–	Protective cover for surface-mounted connector	N6R BM FAS, N11R BM FAS	<b>734 582-001</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories



# Connectors for control signals



## NR-series

HiPower

### Product description

Multi-pole circular connectors according to DIN 43651.

- Robust design
- Casing out of impact-proof, unbreakable plastic, glass-fibre reinforced
- Splash-proof, protection class IP 65 (DIN 40050)
- Vibration-proof connection due to central screw or screw bushing
- Strain relief due to claw cage in the

PG-cable gland

- Colour of product: grey

### Basic data

Number of poles: 6 + PE, 11 + PE

Operating voltage:

250 V AC / DC (6-pole)

60 V AC / DC (11-pole)

Operating current: 10 A (6-pole),

5 A (11-pole)

Contact material/surface:

CuZn silver-plated

Protection class: IP 65

Type of connection:

crimp / screw / solder

Connection cross-section: max.


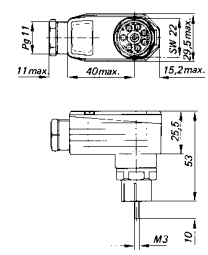


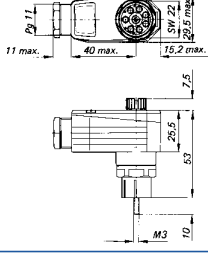


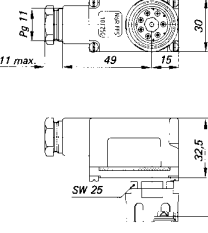

1,5 mm<sup>2</sup> (6-pole), 0,5 mm<sup>2</sup> (11-pole)

Outer cable diameter: 7-9 mm

(6-pole), 8-10 mm (11-pole)

Ambient temperature: -30 ... +90°C

Contacts are to be ordered separately, see chapter: Contacts, crimping systems, accessories

Type		Number of poles	Description	Suitable for	Order no.
 N6R FF		6 + PE 	Cable socket, angled Type of connection: crimp Contacts: RBC 162	N6R AM, N6R AM..., N6R BM..., N6R DM	<b>931 435-106</b>
 N6R FF R		6 + PE 	Cable socket, angled with knurled screw Type of connection: crimp Contacts: RBC 162	N6R AM, N6R AM..., N6R BM..., N6R DM	<b>931 553-106</b>
 N6R FF S11		6 + PE 	Cable socket, angled, transparent cap, for installation of the LED insert Type of connection: screw <sup>2</sup>	N6R AM, N6R AM..., N6R BM..., N6R DM	<b>932 194-112</b>

1) In accordance with the repl. docs. issued by the German PTT, No. 64.5060.678.00

2) (Socket clamp connection); LED insert type N6R 3 LED 24 or N6R 3 LED 24DB - order separately

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories

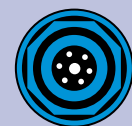



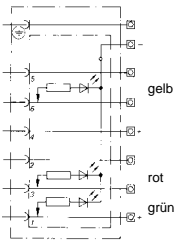

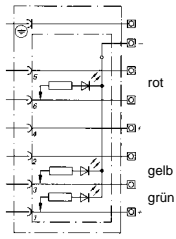

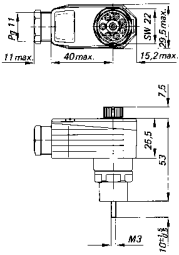


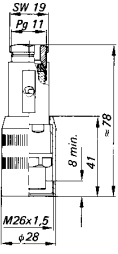


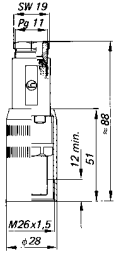

# Connectors for control signals



## NR-series

HiPower

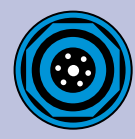


Type		Number of poles	Description	Suitable for	Order no.
		–	LED insert with 3 LEDs (green, red, yellow), Operating voltage DC 24 V Type of connection: plug in	N6R FF S 11	<b>831 411-001</b>
		–	LED insert with 3 LEDs (green, yellow, red), Operating voltage DC 24 V Type of connection: plug in	N6R FF S 11	<b>831 618-001</b>
		6 + PE 	Cable connector, angled with knurled screw, Type of connection: crimp Contacts: RSC 162	N6R AF, N6R AF 5, N6R BF...	<b>931 727-106</b>
		6 + PE 	Cable socket, straight Type of connection: crimp Contacts: RBC 162	N6R AM, N6R AM..., N6R BM..., N6R DM	<b>931 720-001</b>
		6 + PE 	Cable connector, straight Type of connection: crimp Contacts: RSC 162	N6R AF, N6R AF 5, N6R BFE	<b>931 776-001</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


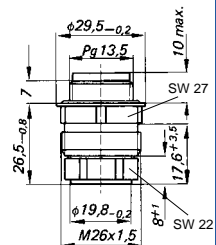


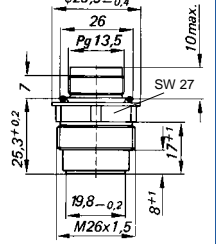


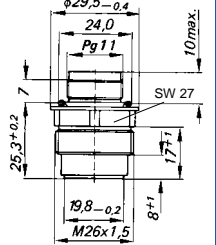


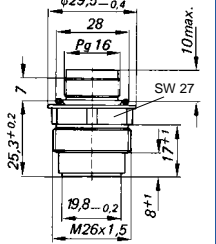


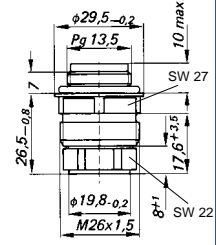



# Connectors for control signals



## NR-series

HiPower

Type		Number of poles	Description	Suitable for	Order no.
		6 + PE 	Panel-mounted connector with metal screw-in casing, PG 13,5 Type of connection: crimp Contacts: RSC 162	N6R FF, N6R FFR, N6R EF	<b>931 434-001</b>
		6 + PE 	Panel-mounted connector with contact bearer in the casing (monoblock design), PG 13,5 Type of connection: crimp Contacts: RSC 162	N6R FF, N6R FFR, N6R EF	<b>931 592-001</b>
		6 + PE 	Panel-mounted connector with contact bearer in the casing (monoblock design), PG 11 Type of connection: crimp Contacts: RSC 162	N6R FF, N6R FFR, N6R EF N6R EF	<b>931 592-002</b>
		6 + PE 	Panel-mounted connector with contact bearer in the casing (monoblock design), PG 16 Type of connection: crimp Contacts: RSC 162	N6R FF, N6R FFR, N6R EF	<b>931 592-003</b>
		6 + PE 	Panel-mounted connector with metal screw-in insert in the casing (metal segment), PG 13,5 Type of connection: crimp Contacts: RSC 162	N6R FF, N6R FFR, N6R EF	<b>931 773-001</b>

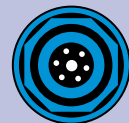
Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


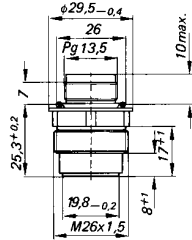


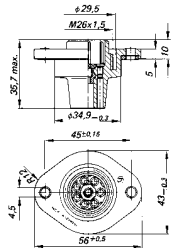


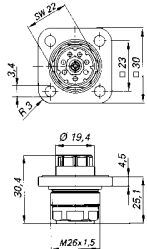

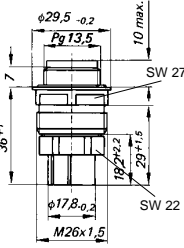


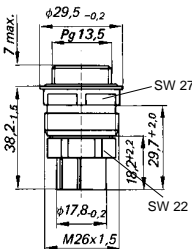

# Connectors for control signals



## NR-series

HiPower



Type		Number of poles	Description	Suitable for	Order no.
		6 + PE 	Panel-mounted connector with contact bearer in the casing (monoblock design), PG 13,5 pins hermetically mounted to prevent ingress of liquids Type of connection: solder	N6R FF, N6R FFR, N6R EF	<b>932 207-206</b>
		6 + PE 	Panel-mounted connector with flange Type of connection: crimp Contacts: RSC 162	N6R FF, N6R FFR, N6R EF	<b>931 731-106</b>
		6 + PE	Surface-mounted connector with flange Type of connection: crimp Contacts: RSC 162	N6R FF, N6R FFR, N6R EF, N6R FF S 11	<b>932 437-206</b>
		6 + PE 	Panel-mounted socket with metal screw-in casing, PG 13,5 Type of connection: crimp Contacts: RBC 162	N6R FMR, N6R EM, N6R DM	<b>931 855-001</b>
		6 + PE 	Panel-mounted socket with metal screw-in insert in the casing (metal segment), PG 13,5 Type of connection: crimp Contacts: RBC 162	N6R FMR, N6R EM, N6R DM	<b>932 164-001</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


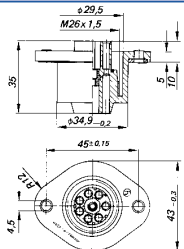


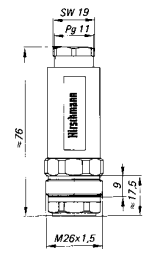

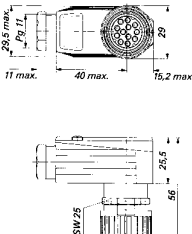
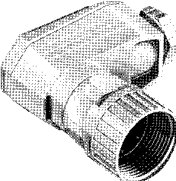
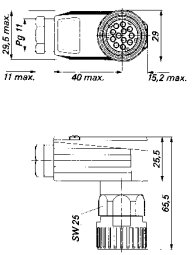

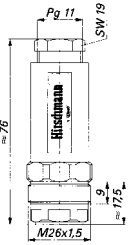


# Connectors for control signals



## NR-series

HiPower

Type		Number of poles	Description	Suitable for	Order no.
 <p>N6R BFE</p>		6 + PE 	Panel-mounted socket with flange Type of connection: crimp Contacts: RBC 162	N6R FMR, N6R EM, N6R DM	931 730-106
 <p>N6R DM</p>		6 + PE	Coupling connector for cable socket N6R EF Type of connection: crimp Contacts: RSC 162	N6R EF	932 273-106
 <p>N11R FF</p>		11 + PE	Cable socket, angled Type of connection: crimp Contacts: RBC 162/1	N11R AM, N11R AM 5, N11R BM FA	932 632-106
 <p>N11R FM</p>		11 + PE	Cable connector, angled Type of connection: crimp Contacts: RSC 162/1	N11R AF, N11R AF 5	932 633-106
 <p>N11R DM</p>		11 + PE	Coupling connector for cable socket N11R EF Type of connection: crimp Contacts: RSC 162/1	N11R EF	932 629-106

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


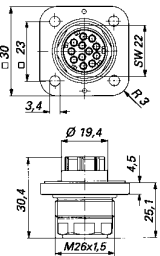

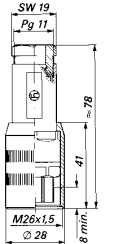

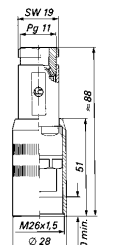

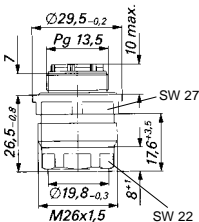

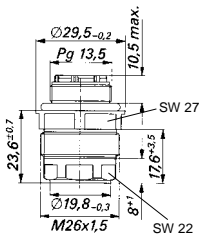
# Connectors for control signals



## NR-series

HiPower



Type		Number of poles	Description	Suitable for	Order no.
 N11R BM FA		11 + PE	Surface-mounted connector with flange Type of connection: crimp Contacts: RSC 162/1	N11R FF, N11R EF	<b>932 628-206</b>
 N11R EF		11 + PE	Cable socket, straight Type of connection: crimp Contacts: RBC 162/1	N11R AM, N11R AM 5, N11R BM FA, N11R DM	<b>932 630-106</b>
 N11R EM		11 + PE	Cable connector, straight Type of connection: crimp Contacts: RSC 162/1	N11R AF, N11R AF 5	<b>932 631-106</b>
 N11R AM		11 + PE	Panel-mounted connector with metal screw-in casing, PG 13,5 Type of connection: crimp Contacts: RSC 162/1	N11R FF, N11R EF	<b>932 626-106</b>
 N11R AM 5		11 + PE	Panel-mounted connector with metal screw-in insert in the casing (metal segment), PG 13,5 Type of connection: crimp Contacts: RSC 162/1	N11R FF, N11R EF	<b>932 627-106</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


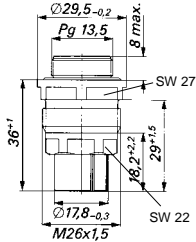

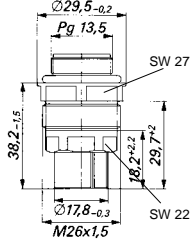
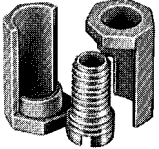


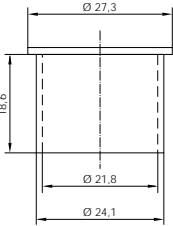


# Connectors for control signals



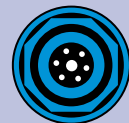
## NR-series


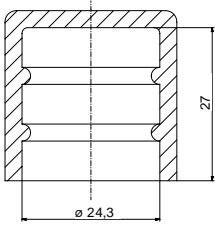

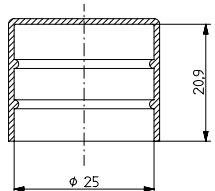
HiPower

Type		Number of poles	Description	Suitable for	Order no.
		11 + PE	Panel-mounted socket with metal screw-in casing, PG 13,5 Type of connection: crimp Contacts: RBC 162/1	N11R FM, N11R EM	<b>932 624-106</b>
		11 + PE	Panel-mounted socket with metal screw-in insert in the casing (metal segment), PG 13,5 Type of connection: crimp Contacts: RBC 162/1	N11R FM, N11R EM	<b>932 625-106</b>
		–	Coding, complete	All connectors N6R...	<b>831 002-011</b>
		–	Central screw with knurled head	Cable connectors and sockets N6R...	<b>731 735-001</b>
		–	Protective cover for transport	N6R AM 2, N6R AM 3, N6R AM 4, N6R AM 2 D	<b>733 849-011</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories





Type		Number of poles	Description	Order no.
 SHK2		-	Protective cover for transport Suitable for: N6R AM, N6R AM 5, N6R BM FA, N6R AF, N6R AF 5, N6R DM, N11R DM, N11R BM FA, N11R AM, N11R AM 5, N11R AF, N11R AF 5	<b>733 845-001</b>
 SHK4		-	Protective cover for surface-mounted connectors. Suitable for: N6R AM, N6R AM 2, N6R AM 3, N6R AM 4, N6R AM 5, N6R AM 2 D, N6R BME, N6R DM, N6R BM FA, N11R DM, N11R BM FA, N11R AM, N11R AM 5	<b>734 582-001</b>

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories

## Notes



# Connectors for control signals



## CM-series

HiPower

### Product description


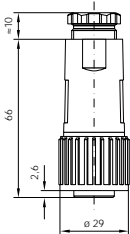

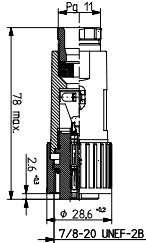

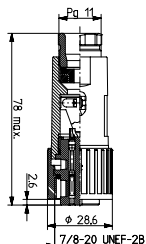

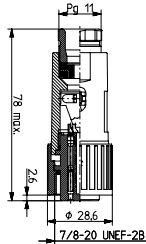
Robust, universal circular connector for control lead connections in hydraulic- and pneumatic systems and in special machinery engineering.

- Compatible with connectors according to MIL-C 5015 resp. VG 95 342

- Housing made of impact-resistant plastic, glass-fibre-reinforced, with screw locking systems for trouble-free, permanent connections
- Easy handling for a quick assembly with integrated strain relief

### Basic data

Operating voltage: 50 V AC / DC  
 Operating current: max. 16 A  
 Protection class: IP 67  
 Pollution severity class: 3  
 Outer cable diameter: 8mm - 14mm  
 Contact surface: Cu Zn/Ag  
 Type of connection: solder

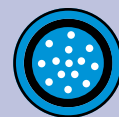
Type		Number of poles	Description	Order no.
 CM 06 EA 14S-7 S		3	Cable socket, straight design, strain relief by means of a clamp Operating current: 10 A	933 049-100
 CM 06 EA 14S-2 S		4	Cable socket, straight design, strain relief by means of a clamp Operating current: 10 A	932 457-100
 CM 06 EA 14S-5 S		5	Cable socket, straight design, strain relief by means of a clamp Operating current: 10 A	932 841-100
 CM 06 EA 14S-6 S		6	Cable socket, straight design, strain relief by means of a clamp Operating current: 10 A	932 458-100

# Connectors for control signals



## CM-series

HiPower



Type		Number of poles	Description	Order no.
		6 + PE	Cable socket, straight design, strain relief by means of a clamp Operating voltage: 10 A	932 460-100
CM 06 EA 14S-61 S				
		7	Cable socket, straight design, strain relief by means of a clamping cage Operating current: 16 A	933 052-100
CM 06 EA 20-15 S				
		8	Cable socket, straight design, strain relief by means of a clamping cage Operating current: 10 A	932 842-100
CM 06 EA 20-7 S				
		14	Cable socket, straight design, strain relief by means of a clamping cage Operating current: 5 A	933 067-100
CM 06 EA 20-27 S				
		17	Cable socket, straight design, strain relief by means of a clamping cage Operating current: 4 A	933 068-100
CM 06 EA 20-29 S				


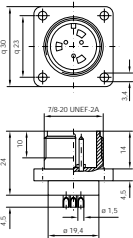


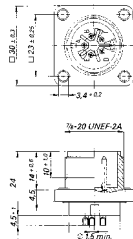
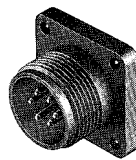
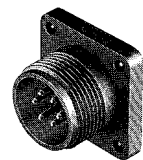


# Connectors for control signals



## CM-series

HiPower

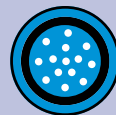
Type		Number of poles	Description	Order no.
 CM 02 E 14S-7 P		3	Surface-mounted connector with flange, contacts with solder bucket Operating current: 10 A	933 047-100
 CM 02 E 14S-2 P		4	Surface-mounted connector with flange, contacts with solder bucket Operating current: 10 A	932 449-100
 CM 02 E 14S-5 P		5	Surface-mounted connector with flange, contacts with solder bucket Operating current: 10 A	932 843-100
 CM 02 E 14S-6 P		6	Surface-mounted connector with flange, contacts with solder bucket Operating current: 10 A	932 451-100
 CM 02 E 14S-61 P		6 + PE	Surface-mounted connector with flange, contacts with solder bucket Operating current: 16 A	932 455-100


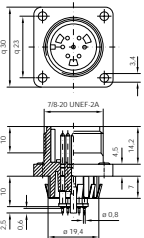

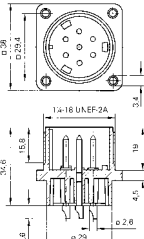

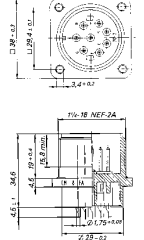

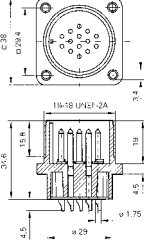

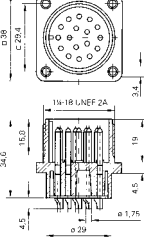
# Connectors for control signals



## CM-series

HiPower



Type		Number of poles	Description	Order no.
		6 + PE	Surface-mounted connector with flange, tipped with filters 6x1 nF Operating current: 2 A	932 988-100
		7	Surface-mounted connector with flange, contacts with solder bucket Operating current: 16 A	933 050-100
		8	Surface-mounted connector with flange, contacts with solder bucket Operating current: 10 A	932 845-100
		14	Surface-mounted connector with flange, contacts with solder bucket Operating current: 5 A	933 062-100
		17	Surface-mounted connector with flange, contacts with solder bucket Operating current: 4 A	933 063-100


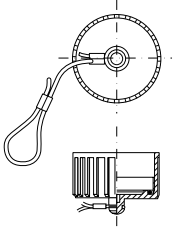
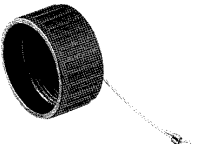
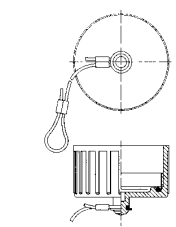

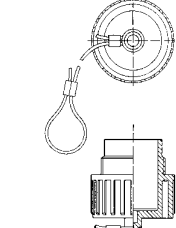

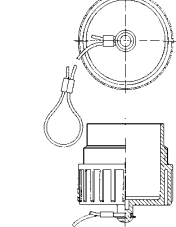

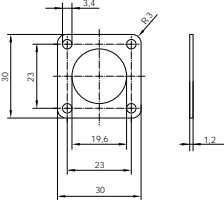


# Connectors for control signals



## CM-series

HiPower


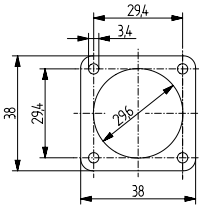

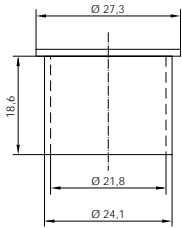
Type		Number of poles	Description	Order no.
 <p>CM 02 SD 14S</p>		-	Protection cap for surface-mounted connectors 3 – 6-pole	<b>831 620-100</b>
 <p>CM 02 SD 20</p>		-	Protection cap for surface-mounted connectors 7 – 17-pole	<b>831 766-100</b>
 <p>CM 06 SD 14S</p>		-	Protection cap for cable sockets 3 – 6-pole	<b>831 621-100</b>
 <p>CM 06 SD 20</p>		-	Protection cap for cable sockets 7 – 17-pole	<b>831 767-100</b>
 <p>CM 02 D 14S</p>		-	Flat gasket NBR	<b>733 321-002</b>





## CM-series

HiPower

Type		Number of poles	Description	Order no.
 CM 02 D 20		-	Flat gasket NBR	733 818-002
 SHK 1		-	Protective cover for surface-mounted connectors	733 849-001

## Notes



# Connectors for control signals

## R-series



### Product description


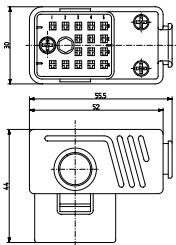

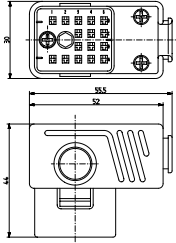

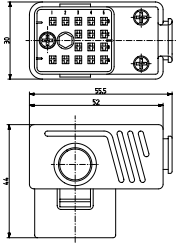

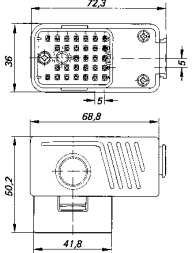
15- and 29-pole connector with additional earth contact. Equipped with either flat or fork-type contacts.

- Manifold application in telecommunications, measurement and control systems as well as in medical technology, test bays and in consumer electronics
- Vibration-proof connection by automatic interlock of contact bearers

- Coding by variation of position and colour of coding pins
- Suitable for integration into surface-mounted and panel-mounted trunking systems
- VDE-expertise with process inspection

### Basic data

Operating voltage: max. 250 V AC / DC  
 Operating current: 5 A AC / DC  
 Protection class: IP 42  
 Type of connection: solder / crimp  
 Outer cable diameter: 5mm - 12mm  
 Contact material: Cu Zn  
 Contact surface:  
 Gal Ni3 SN 5 / solder  
 Gal Ni2 SN 4 / crimp  
 Colour of product: black

Type		Number of poles	Description	Order no.
 RW 15		15 + PE	Angled socket/resp. -connector with protective cover, strain relief and lock, can be equipped with flat and fork-type contacts as desired  Type of connection: solder / crimp	<b>973 654-100</b>
 RSW 15		15 + PE	Angled connector with protective cover, strain relief and lock, set comprises: protective cover, contact bearer, contacts, dust cap  Type of connection: solder	<b>973 680-001</b> black <b>973 680-002</b> pearl white
 RSWC 15		15 + PE	Angled connector with protective cover, strain relief and lock, set comprises: protective cover, contact bearer, contacts, dust cap  Type of connection: crimp	<b>973 682-001</b>
 RW 29		29 + PE	Angled socket/resp. -connector with protective cover, strain relief and lock, can be equipped with flat and fork-type contacts as desired  Type of connection: solder / crimp	<b>973 763-100</b>

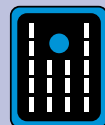
Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


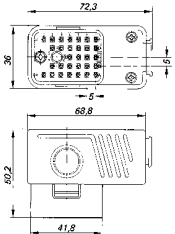

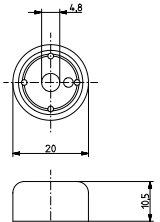

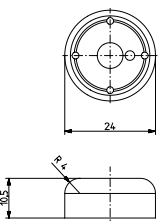

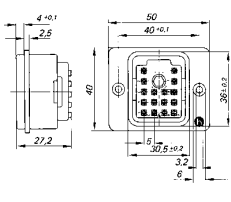

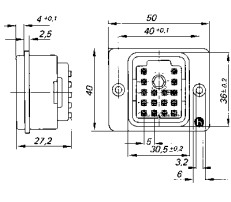
# Connectors for control signals



## R-series

HiPower



Type		Number of poles	Description	Order no.
 <p>RSWC 29</p>		29 + PE	<p>Angled connector with protective cover, strain relief and lock, set comprises: protective cover, contact bearer, contacts, dust cap</p> <p>Type of connection: crimp</p>	973 768-001
 <p>RD 512</p>		15	Dust cap for lead diameter 5-12 mm, required for IP 42	973 666-100
 <p>RD 716</p>		29	Dust cap for lead diameter 7-16 mm, required for IP 42	973 765-100
 <p>RE 15</p>		15 + PE	<p>Panel-mounted socket/resp. -connector with two-hole flange, can be equipped with flat and fork-type contacts as desired</p> <p>Type of connection: solder / crimp</p>	973 653-100
 <p>RBE 15</p>		15 + PE	<p>Panel-mounted socket with two-hole flange, set with fork-type contacts</p> <p>Type of connection: solder</p>	973 681-001

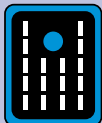
Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories


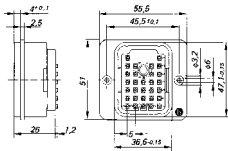

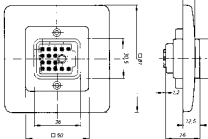

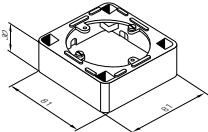

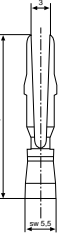


# Connectors for control signals

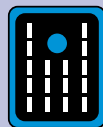
## R-series

HiPower



Type		Number of poles	Description	Order no.
 RE 29		29 + PE	Panel-mounted socket/resp.-connector with two-hole flange, can be equipped with flat and fork-type contacts as desired Type of connection: solder / crimp	<b>973 764-100</b>
 RAUP 15		15 + PE	15-pole insert for panel-mounted sockets according to DIN 49 073 (58x33 mm, 58x40 mm) with AR 20, suitable for surface mounting Type of connection: solder / crimp	<b>973 852-135</b> pearl white
 AR 20		–	Frame for surface mounting	<b>933 650-001</b> white
 RC 600		–	Coding	<b>973 667-100</b> black <b>973 667-101</b> red

Contacts and accessories can be found in chapter: Contacts, crimping systems, accessories





# Connectors for control signals

## ME-series

HiPower


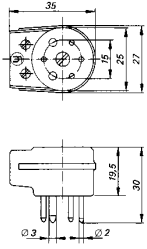

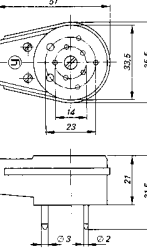
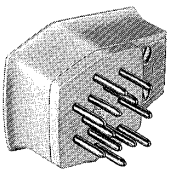
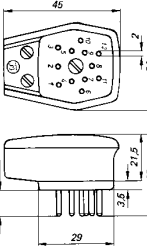
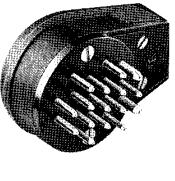
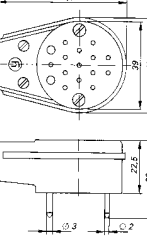
### Product description

Angled connector with small dimensions and a large number of contacts. 6- pole to 24-pole.

- For connections in telecommunications, emergency call systems, paging and intercom equipment
- Connections in control and measurement systems, house installations and laboratory equipment

### Basic data

Operating voltage: 60V AC / 75V DC  
 Operating current:  
 10 A AC / DC 3mm contacts  
 4 A AC / DC 2mm contacts  
 1 A AC / DC GSK types  
 Outer lead diameter: 9,5mm - 14mm  
 Protection class: IP 30  
 Type of connection: solder  
 Socket clamp for GSK types

Type		Number of poles	Description	Order no.
 MES 60 BZ		6	Cable connector with strain relief Contacts: 2x3 mm, 4x2 mm Colour: contact bearer black Casing black, grey, white RAL 1014	<b>973 016-100</b> black <b>973 016-114</b> grey <b>973 016-135</b> white
 MES 100		10	Cable connector with strain relief Contacts: 2x3 mm, 8x2 mm Colour: contact bearer black Casing black, white	<b>973 017-100</b> black <b>973 017-190</b> white
 MES 120		12	Cable connector with strain relief Contacts: 12x2 mm Colour: contact bearer grey RAL 7032 Casing white RAL 1013	<b>973 089-135</b>
 MES 160		16	Cable connector with strain relief Contacts: 2x3 mm, 14x2 mm Colour: contact bearer black Casing black or white RAL 1013	<b>973 018-100</b> black <b>973 018-190</b> white

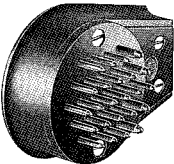
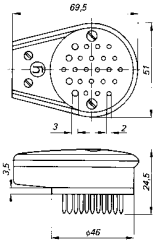
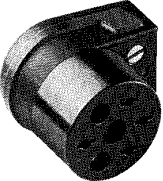
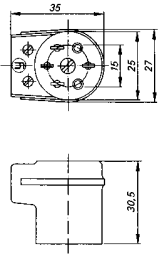
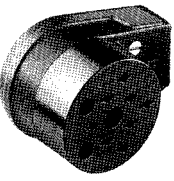
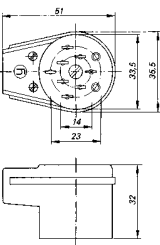
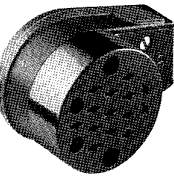
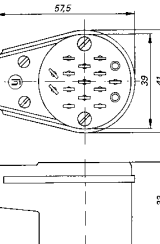
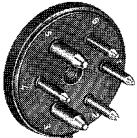
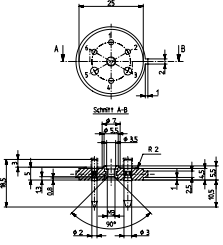
# Connectors for control signals



## ME-series

HiPower



Type		Number of poles	Description	Order no.
 <p>MES 240</p>		24	Cable connector with strain relief Contacts: 4x3 mm, 20x2 mm Colour: contact bearer black Casing black or white RAL 1013	<b>973 019-100</b> black <b>973 019-190</b> white
 <p>MEK 60 BZ</p>		6	Cable socket with strain relief Contacts: 2x3 mm, 4x2 mm Colour: black	<b>973 025-100</b>
 <p>MEK 100</p>		10	Cable socket with strain relief Contacts: 2x3 mm, 8x2 mm Colour: black	<b>973 033-100</b>
 <p>MEK 160</p>		16	Cable socket with strain relief Contacts: 2x3 mm, 14x2 mm Colour: black	<b>973 014-100</b>
 <p>MESEI 60</p>		6	Panel-mounted connector for injection moulding Contacts: 2x3 mm, 4x2 mm Colour: black	<b>973 020-100</b>



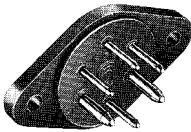
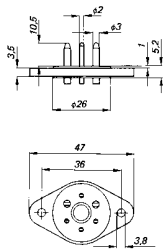
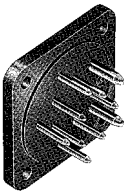
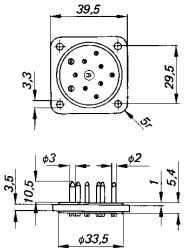
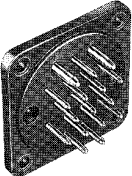
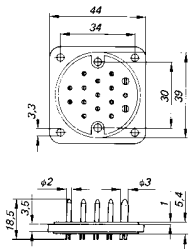

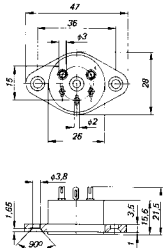

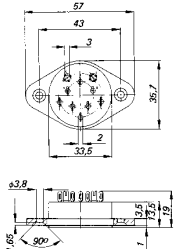


# Connectors for control signals



## ME-series

HiPower

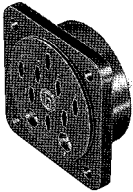
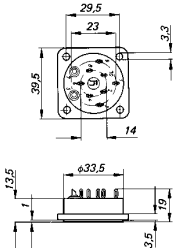
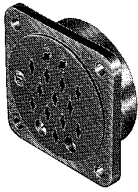
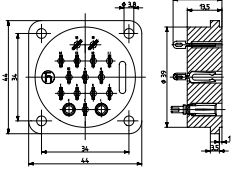
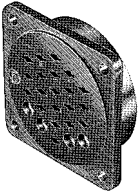
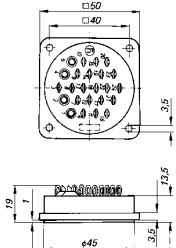
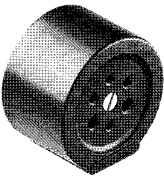
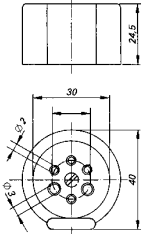
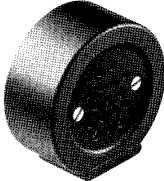
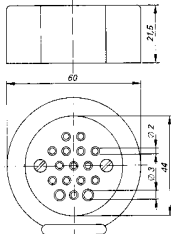
Type		Number of poles	Description	Order no.
 MESEI 60 F		6	Panel-mounted connector with flange Contacts: 2x3 mm, 4x2 mm Colour: black	<b>973 021-100</b>
 MESEI 100		10	Panel-mounted connector with 4-hole flange Contacts: 2x3 mm, 8x2 mm Colour: black	<b>973 006-100</b>
 MESEI 160		16	Panel-mounted connector with 4-hole flange Contacts: 2x3 mm, 8x2 mm Colour: black	<b>973 023-100</b>
 MEB 60 HS		6	Panel-mounted socket with flange Contacts: 2x3 mm, 4x2 mm Colour: black	<b>973 087-100</b>
 MEB 100 S		10	Panel-mounted socket with 2-hole flange Contacts: 2x3 mm, 8x2 mm Colour: black	<b>973 088-100</b>

# Connectors for control signals



## ME-series

HiPower

Type		Number of poles	Description	Order no.
 MEB 100 A		10	Panel-mounted socket with 4-hole flange Contacts: 2x3 mm, 8x2 mm Colour: black	<b>973 002-100</b>
 MEB 160		16	Panel-mounted socket with 4-hole flange Contacts: 2x3 mm, 14x2 mm Colour: black	<b>973 009-100</b>
 MEB 240		24	Panel-mounted socket with 4-hole flange Contacts: 4x3 mm, 20x2 mm Colour: black	<b>973 013-100</b>
 MED 60		6	Surface-mounted socket round Contacts: 2x3 mm, 4x2 mm	<b>973 012-100</b> black <b>973 012-114</b> grey
 MED 160		16	Surface-mounted socket Contacts: 2x3 mm, 14x2 mm Colour: black	<b>973 004-100</b>

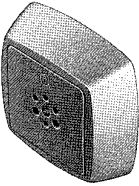
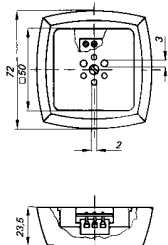

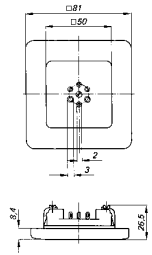

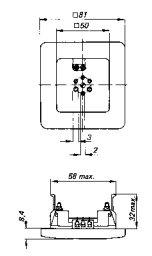
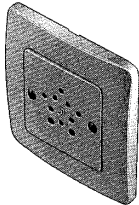
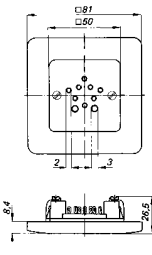
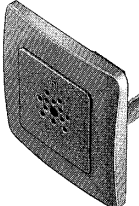
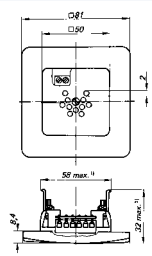


# Connectors for control signals

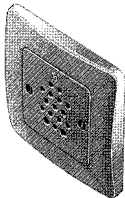
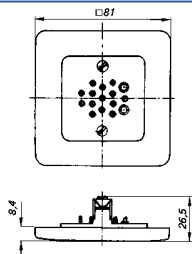
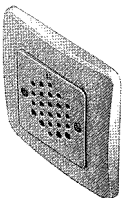
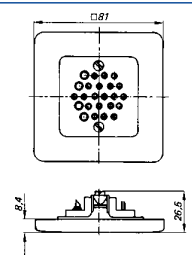

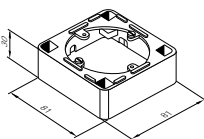
## ME-series

HiPower



Type		Number of poles	Description	Order no.
 MED 600 GSK		6	Surface-mounted socket square Contacts: 2x3 mm, 4x2 mm Colour: grey	<b>973 346-114</b>
 MEDU 600		6	Screw-in wall outlets for panel-mounted sockets Contacts: 2x3 mm, 4x2 mm Colour: white RAL 1013	<b>973 077-135</b>
 MEDU 600 GSK		6	Screw-in wall outlets for panel-mounted sockets and claw-fastening of insert A (58 x 33) or B (58 x 40) DIN 49 073 Contacts: 2x3 mm, 4x2 mm	<b>973 347-135</b> white RAL 1013
 MEDU 1000		10	Screw-in wall outlets for panel-mounted sockets Contacts: 2x3 mm, 8x2 mm Colour: white RAL 1013	<b>973 078-135</b>
 MEDU 1200 GSK		12	Screw-in wall outlets for panel-mounted sockets and claw-fastening of insert A (58 x 33) or B (58 x 40) DIN 49 073 Contacts: 12x2 mm	<b>973 349-135</b> white RAL 1013

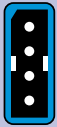


Type		Number of poles	Description	Order no.
 MEDU 1600		16	Screw-in wall outlets for panel-mounted sockets Contacts: 2x3 mm, 14x2 mm Colour: white RAL 1013	973 079-135
 MEDU 2400		24	Screw-in wall outlets for panel-mounted sockets Contacts: 4x3 mm, 20x2 mm Colour: white RAL 1013	973 080-135
 AR 20		–	Frame for surface-mounting	933 650-001

## Notes



# Connectors for control signals



## SP-series



### Product description


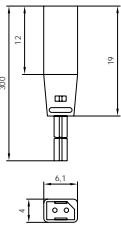

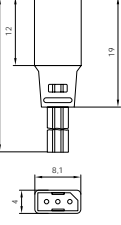

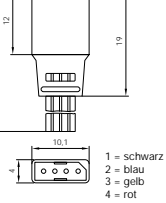

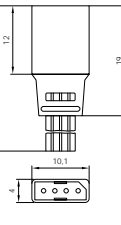
Subminiature connectors with 2mm contact spacing, 2-5-pole.

- For use in security systems, intrusion alarm systems, model-making and as versatile circuit board connector
- Moulded cable connectors and cable sockets in different lengths and colours

- Straight and angled outgoing lead; suitable for round and ribbon cables or individual twisted leads
- Reliable connections and high quality :
  - locking lug prevents unintentional release

### Basic data

Operating voltage: 30V AC / 36V DC  
 Operating current: 1,5 A  
 Pollution severity class: 2  
 Contacts: pin and spring fork  
 Pin diameter: 1mm  
 Type of connection: solder  
 Lead cross section: 0,14mm<sup>2</sup>  
 Ambient temperature: -30 ... 90°C

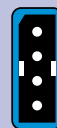
Type		Number of poles	Description	Order no.
		2	Cable connector integrally extruded ribbon cable Cable length: 300 mm	<b>932 797-100</b>
		3	Cable connector integrally extruded ribbon cable Cable length: 300 mm	<b>932 798-100</b>
		4	Cable connector integrally extruded ribbon cable Cable length: 300 mm	<b>932 662-100</b>
		4	Cable connector integrally extruded ribbon cable, silver-grey Cable length: 300 mm	<b>932 879-100</b>


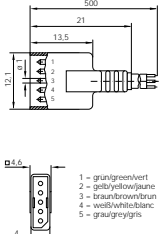

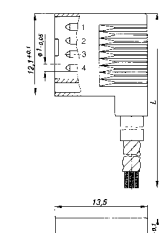

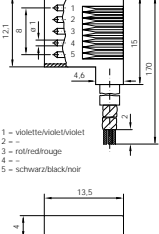

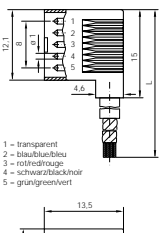

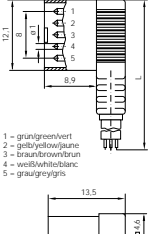
# Connectors for control signals



## SP-series

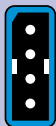
HiPower



Type		Number of poles	Description	Order no.
		5	Cable connector integrally extruded round cable Cable length: 500 mm	932 244-200
SP SG 55 RA				
		4	Angled cable connector with integrally extruded individual leads Cable length: 700 mm	931 738-300
SP SW 44 EA				
		5	Angled cable connector with three integrally extruded individual leads Cable length: 170 mm	931 736-100
SP SW 53 EA				
		5	Angled cable connector with integrally extruded individual leads Cable length: 287 mm	931 362-100
SP SW 55 EA				
		5	Angled cable connector integrally extruded round cable Cable length: 300 mm	932 246-100
SP SW 55 RA				


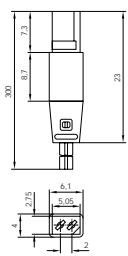

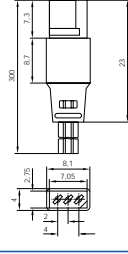

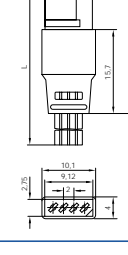

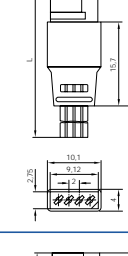

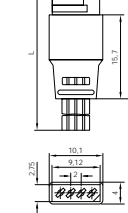


# Connectors for control signals



## SP-series

HiPower

Type		Number of poles	Description	Order no.
 <p>SP BG 22 FA</p>		2	Cable socket integrally extruded ribbon cable Cable length: 300 mm	<b>932 864-100</b>
 <p>SP BG 33 FA</p>		3	Cable socket integrally extruded ribbon cable Cable length: 300 mm	<b>932 865-100</b>
 <p>SP BG 44 FG</p>		4	Cable socket integrally extruded ribbon cable, silver-grey Cable length: 1500 mm	<b>932 803-100</b>
 <p>SP BG 44 FG</p>		4	Cable socket integrally extruded ribbon cable, silver-grey Cable length: 5000 mm	<b>932 803-300</b>
 <p>SP BG 44 FG</p>		4	Cable socket integrally extruded ribbon cable, silver-grey Cable length: 10000 mm	<b>932 803-800</b>

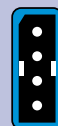


# Connectors for control signals



## SP-series

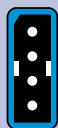
HiPower



Type		Number of poles	Description	Order no.
 <p>SP S 4</p>		4	Pin strip withstanding extreme mechanical stress thanks to locking hooks, Soldering time: max. 3s Soldering tip temperature: max. 350 C	<b>932 237-100</b>
 <p>SP S 5</p>		5	Pin strip withstanding extreme mechanical stress thanks to locking hooks, Soldering time: max. 3s Soldering tip temperature: max. 350 C	<b>932 238-100</b>
 <p>SP B 3</p>		3	Socket strip solder tabs, seating support prevents angled displacement	<b>932 800-100</b>
 <p>SP B 4</p>		4	Socket strip solder tabs, seating support prevents angled displacement	<b>932 239-100</b>
 <p>SP B 5</p>		5	Socket strip solder tabs, seating support prevents angled displacement	<b>932 240-100</b>


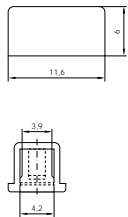

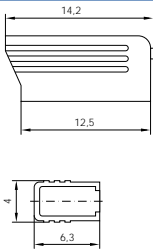


# Connectors for control signals

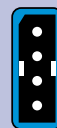


## SP-series

HiPower

Type		Number of poles	Description	Order no.
 <p>SP SG 44 FB-4</p>		4	Protection cap for all 4-pole pin strips	733 532-100
 <p>SP H 45</p>		4	Universal cover for 4- and 5-pole pin and socket strips	732 984-300

## Notes

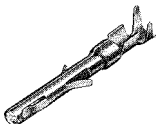
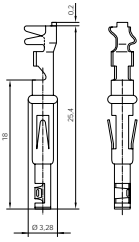
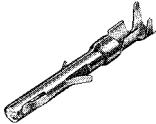
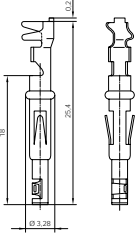
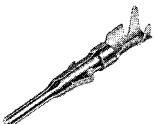
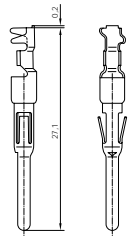
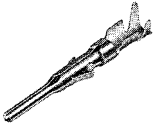
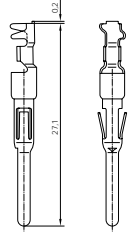

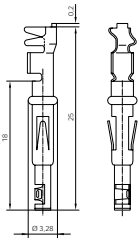




# Connectors for control signals

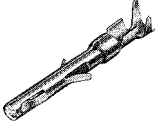
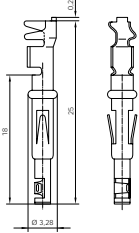
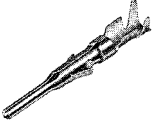
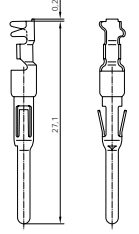
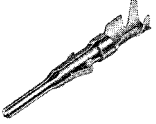
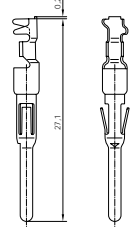

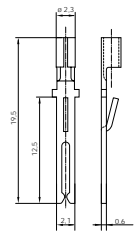

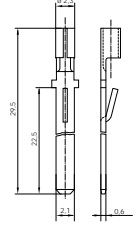


## Contacts, crimping systems, accessories

Contacts		Description	Quantity boxed-pieces	Order no.
 <p>RBC 162/1</p>		<p>Rolled engaging crimp contact (socket), <math>\varnothing</math> 1.6 mm, BO crimp CuZn/silver-plated Range of cross-section: 0,14-0,5 mm<sup>2</sup> Contacts for NR-series</p>	100 pieces	<b>733 383-021</b>
 <p>RBCB 162/1</p>		<p>Rolled engaging crimp contact (socket), <math>\varnothing</math> 1,6 mm, BO crimp CuZn/silver-plated Range of cross-section: 0,14-0,5 mm<sup>2</sup> Contacts for NR-series</p>	<p>200 pieces coiled 2000 pieces coiled</p>	<p><b>733 385-002</b> <b>733 385-001</b></p>
 <p>RSC 162/1</p>		<p>Rolled engaging crimp contact (pin contact), <math>\varnothing</math> 1,6 mm, BO crimp CuZn/silver-plated Range of cross-section: 0,14-0,5 mm<sup>2</sup> Contacts for NR-series</p>	100 pieces	<b>733 384-021</b>
 <p>RSCB 162/1</p>		<p>Rolled engaging crimp contact (pin contact), <math>\varnothing</math> 1,6 mm, BO crimp CuZn/silver-plated Range of cross-section: 0,14-0,5 mm<sup>2</sup> Contacts for NR-series</p>	<p>200 pieces coiled 2000 pieces coiled</p>	<p><b>733 386-002</b> <b>733 386-001</b></p>
 <p>RBC 162</p>		<p>Rolled engaging crimp contact (socket), <math>\varnothing</math> 1,6 mm, BO crimp CuZn/silver-plated Range of cross-section: 0,5 -1,5 mm<sup>2</sup> Contacts for NR-series</p>	<p>10 pieces 100 pieces</p>	<p><b>731 724-211</b> <b>731 724-221</b></p>



## Contacts, crimping systems, accessories


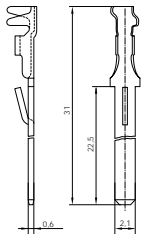

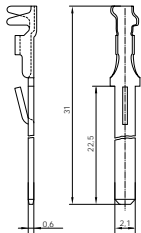

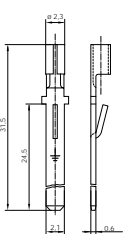

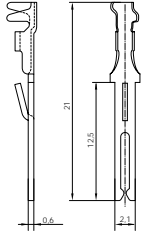

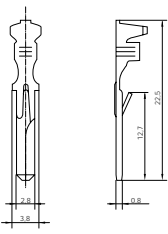
Contacts		Description	Quantity boxed-pieces	Order no.
 RBCB 162		Rolled engaging crimp contact (socket), ø 1,6 mm, BO crimp	200 pieces	<b>731 726-202</b>
		CuZn/silver-plated Range of cross-section: 0,5 -1,5 mm <sup>2</sup> Contacts for NR-series	coiled 2000 pieces	<b>731 726-201</b>
 RSC 162		Rolled engaging crimp contact (pin contact), ø 1,6 mm, BO crimp	10 pieces	<b>731 725-011</b>
		CuZn/silver-plated Range of cross-section: 0,5 -1,5 mm <sup>2</sup> Contacts for NR-series	100 pieces	<b>731 725-021</b>
 RSCB 162		Rolled engaging crimp contact (pin contact), ø 1,6 mm, BO crimp	200 pieces	<b>731 727-002</b>
		CuZn/silver-plated Range of cross-section: 0,5 -1,5 mm <sup>2</sup> Contacts for NR-series	coiled 2000 pieces	<b>731 727-001</b>
 RGL 060		Engaging solder contact, fork-type contact	100 pieces	<b>973 874-021</b>
		CuZn/silver-plated, CuZn/tin-plated Range of cross-section: up to 0,5 mm <sup>2</sup> Contacts for R-series	silver-plated 100 pieces	<b>973 665-021</b>
 RML 060		Engaging solder contact, flat contact	100 pieces	<b>973 872-021</b>
		CuZn/silver-plated, CuZn/tin-plated Range of cross-section: bis 0,5 mm <sup>2</sup> Contacts for R-series	silver-plated 100 pieces	<b>973 664-021</b>
			tin-plated	



# Connectors for control signals


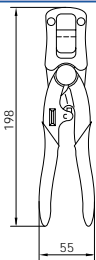
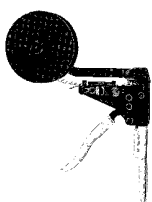



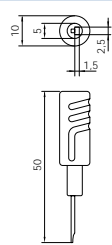
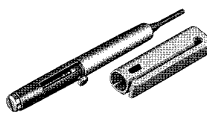
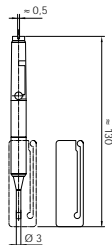
## Contacts, crimping systems, accessories

Contacts		Description	Quantity boxed-pieces	Order no.
 <p>RMC 060</p>		Engaging solder contact, flat contact BO crimp CuZn/tin-plated Range of cross-section: up to 0,5 mm <sup>2</sup> Contacts for R-series	100 pieces	<b>973 735-021</b>
 <p>RMCB 060</p>		Engaging solder contact, flat contact BO crimp CuZn Range of cross-section: up to 0,5 mm <sup>2</sup> Contacts for R-series	8000 pieces coiled 8000 pieces coiled 15000 pieces coiled	<b>973 870-001</b> silver-plated <b>973 737-001</b> tin-plated <b>973 737-002</b> tin-plated
 <p>RSL 060</p>		Protective contact for fork-type contact RGL 060, leading 2 mm in assembled condition, CuZn/tin-plated Range of cross-section: up to 0.5 mm <sup>2</sup> Contacts for R-series	10 pieces	<b>973 663-011</b>
 <p>RGCB 060</p>		Engaging crimp contact, fork-type contact, BO crimp CuZn/silver-plated Range of cross-section: up to 0,5 mm <sup>2</sup> Contacts for R-series	8000 pieces coiled	<b>973 871-001</b>
 <p>RMC 280</p>		Engaging crimp contact, flat contact, BO crimp CuZn/tin-plated Range of cross-section: 0,5-1 mm <sup>2</sup> Contacts for G-series	100 pieces	<b>731 991-021</b>



## Contacts, crimping systems, accessories

Crimping tools		Description	Order no.
 XZC 0700		Manual crimping tool for B and O crimp with 3 profiles. Stroke length 5.5 mm. Weight approx. 270 g Profile 1: 0,14-0,5 mm <sup>2</sup> (BO); Profile 2: 0,5-1,5 mm <sup>2</sup> (B) Profile 3: 0,5 -1,5 mm <sup>2</sup> (BO)	<b>932 507-001</b>
 XZC 0720		Manual crimp feeder with XZC 0700 but with mount for coil. The tool is fitted with a detent, ensuring that it cannot be opened until the crimp connection has been completed Profile 1: 0,14-0,5 mm <sup>2</sup> ; Profile 2: 0,5-1,5 mm <sup>2</sup>	<b>932 558-001</b>

Ejector tools		Description	Order no.
 XWA 060		Ejector tool for flat and fork-type contacts R-series	<b>973 669-001</b>
 XWA 164		Ejector tool for crimping contacts $\varnothing$ 1.6 mm ST-series (5-pole), NR-series	<b>931 812-001</b>





# Notes



# Connectors for consumer electronics





# Connectors for consumer electronics



## MAS/MAK-series

HiMedia

### Product description

Shielded miniature multipole connectors, 3- pole to 8-pole.

- Numerous different versions ensure a variety of uses in audio- and video equipment, measurement and control instruments, on projectors and in the computer technology

- Safe connection of connector, couplings, panel-mounted sockets and panel-mounted connectors with screw locking system
- All cable connectors feature clamping tabs to relieve the strain
- UM types as standard, but industry package, quantity boxed: 1000 units

### Basic data

Operating voltage: 34 V AC / DC


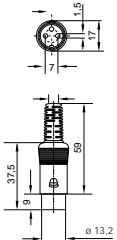


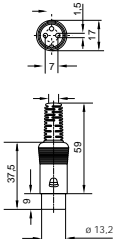


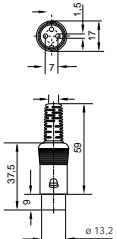


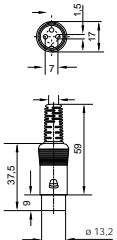

Operating current: 4 A

Flashover voltage: 1 kV

Insulation resistance:  $10^{11} \Omega$

Type of connection: solder

Plug illustrations: EN 60130-9

Type		Number of poles	Description	Colour	Order no.
 MAS 30 MAS 30 UM			Connector with insulated handle, solder connection	grey	<b>930 014-517</b>
				UM black	<b>931 002-100</b>
				UM grey	<b>931 002-117</b>
 MAS 40 MAS 40 UM			Connector with insulated handle, solder connection	grey	<b>930 015-517</b>
				UM grey	<b>931 018-117</b>
 MAS 50 MAS 50 UM			Connector with insulated handle, solder connection	grey	<b>930 016-517</b>
				UM black	<b>931 034-100</b>
				UM grey	<b>931 034-117</b>
 MAS 50 S MAS 50 S UM			Connector with insulated handle, solder connection	black	<b>930 131-500</b>
				grey	<b>930 131-517</b>
				UM black	<b>931 036-100</b>
				UM grey	<b>931 036-117</b>

# Connectors for consumer electronics

## MAS/MAK-series

HiMedia



Type		Number of poles	Description	Colour	Order no.
 MAS 50 W		5	Connector with insulated handle, solder connection	grey	930 805-517
 MAS 60 MAS 60 UM		6	Connector with insulated handle, solder connection	black grey UM black UM grey	930 017-500 930 017-517 931 044-100 931 044-117
 MAS 70 S MAS 70 S UM		7	Connector with insulated handle, solder connection	black grey UM black UM grey	930 356-500 930 356-517 931 050-100 931 050-117
 MAS 80 S MAS 80 S UM		8	Connector with insulated handle, solder connection	black grey UM black UM grey	930 298-500 930 298-517 931 183-100 931 183-117
 MAS 80 SN MAS 80 SN UM		8	Connector with insulated handle, solder connection	black grey black UM grey UM	931 518-500 931 518-517 931 521-100 931 521-117






# Connectors for consumer electronics



## MAS/MAK-series

HiMedia


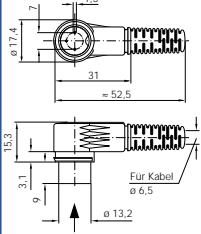

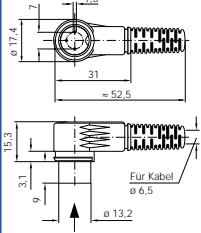

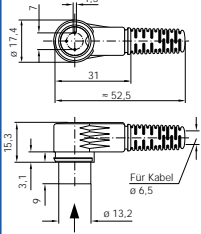

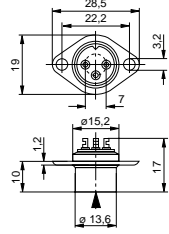

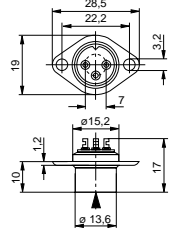
Type		Number of poles	Description	Colour	Order no.
 <p>MAWI 30 B MAWI 30 B UM</p>		<p>3</p> 	<p>Angled connector with insulated handle, solder connection</p>	<p>grey UM black UM grey</p>	<p>931 597-517 931 621-100 931 621-117</p>
 <p>MAWI 40 B</p>		<p>4</p> 	<p>Angled connector with insulated handle, solder connection</p>	<p>grey</p>	<p>931 567-517</p>
 <p>MAWI 50 B</p>		<p>5</p> 	<p>Angled connector with insulated handle, solder connection</p>	<p>grey</p>	<p>931 569-517</p>
 <p>MAWI 50 SB MAWI 50 SB UM</p>		<p>5</p> 	<p>Angled connector with insulated handle, solder connection</p>	<p>grey UM black UM grey</p>	<p>931 571-517 931 572-100 931 572-117</p>
 <p>MAWI 60 B MAWI 60 B UM</p>		<p>6</p> 	<p>Angled connector with insulated handle, solder connection</p>	<p>grey UM black UM grey</p>	<p>931 573-517 931 574-100 931 574-117</p>

# Connectors for consumer electronics

## MAS/MAK-series

HiMedia



Type		Number of poles	Description	Colour	Order no.
		7	Angled connector with insulated handle, solder connection	grey	<b>931 575-517</b>
		8	Angled connector with insulated handle, solder connection	grey UM black UM black	<b>931 740-517</b> <b>931 741-100</b> <b>931 741-117</b>
		8	Angled connector with insulated handle, solder connection	grey UM black UM grey	<b>931 577-517</b> <b>931 578-100</b> <b>931 578-117</b>
		3	Panel-mounted connector with flange, solder connection, die-cast casing and and flange, nickel-plated		<b>930 063-500</b>
		5	Panel-mounted connector with flange, solder connection, die-cast casing and and flange, nickel-plated		<b>930 934-500</b>



# Connectors for consumer electronics



## MAS/MAK-series

HiMedia

Type		Number of poles	Description	Colour	Order no.
 <p>MAK 30 S MAK 30 S UM</p>		3	Coupling with insulated handle, solder connection	grey UM grey	930 149-517 931 080-117
 <p>MAK 40 MAK 40 UM</p>		4	Coupling with insulated handle, solder connection	grey UM black UM grey	930 150-517 931 086-100 931 086-117
 <p>MAK 50</p>		5	Coupling with insulated handle, solder connection	grey	930 151-517
 <p>MAK 50 S MAK 50 S UM</p>		5	Coupling with insulated handle, solder connection	grey UM black UM grey	930 172-517 931 092-100 931 092-100
 <p>MAK 60 MAK 60 UM</p>		6	Coupling with insulated handle, solder connection	grey UM black	930 152-517 931 100-100


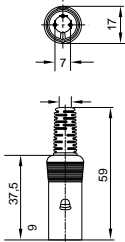
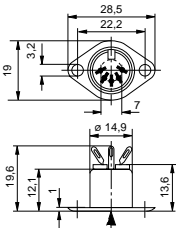
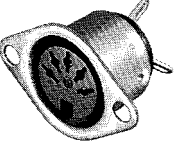
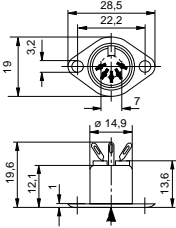


# Connectors for consumer electronics

## MAS/MAK-series

HiMedia



Type		Number of poles	Description	Colour	Order no.
 MAK 70 S		7	Coupling with insulated handle, solder connection	grey	930 388-517
 MAK 80 S		8	Coupling with insulated handle, solder connection	grey	930 348-517
 MAK 80 SN		8	Coupling with insulated handle, solder connection	grey	931 519-517
 MAB 3 S		3	Panel-mounted socket with flange	black	930 018-200
 MAB 4		4	Panel-mounted socket with flange	black	930 009-200


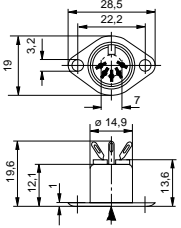
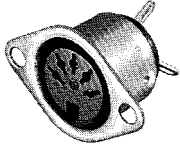
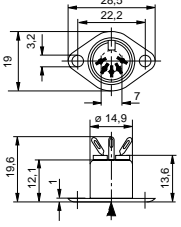
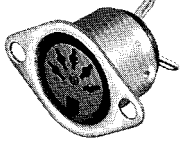
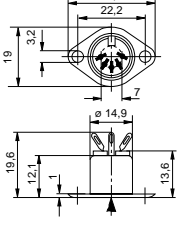
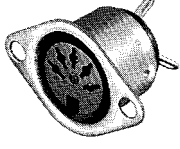
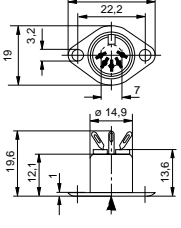
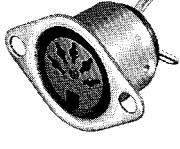
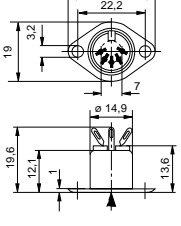


# Connectors for consumer electronics



## MAS/MAK-series

HiMedia


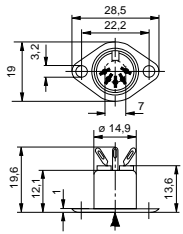

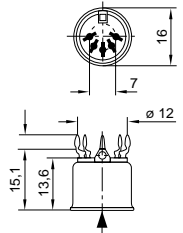

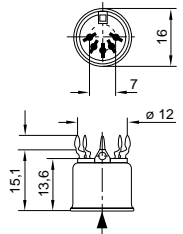

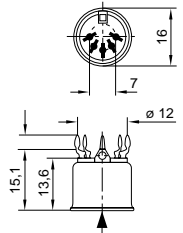

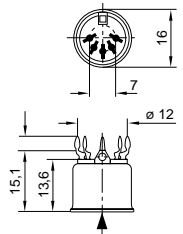
Type		Number of poles	Description	Colour	Order no.
 MAB 5		5	Panel-mounted socket with flange	black	930 010-200
 MAB 5 S		5	Panel-mounted socket with flange	black	930 071-200
 MAB 6		6	Panel-mounted socket with flange	black	930 011-200
 MAB 7 S		7	Panel-mounted socket with flange	black	930 343-200
 MAB 8 S		8	Panel-mounted socket with flange	black	930 345-200

# Connectors for consumer electronics

## MAS/MAK-series

HiMedia


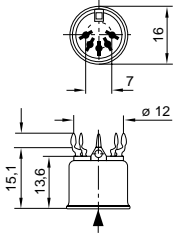
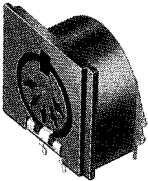
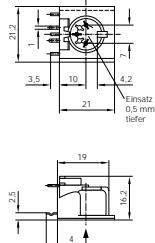
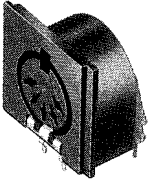
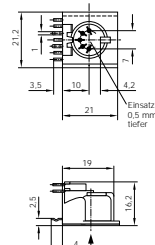
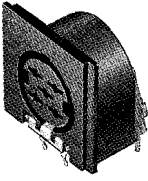
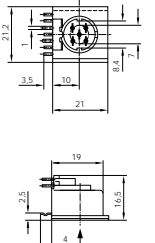
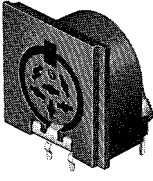
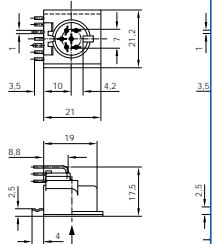


Type		Number of poles	Description	Colour	Order no.
 MAB 8 SN		8	Panel-mounted socket with flange	black	931 613-200
 MAB 5 SV		5	Panel-mounted socket for printed circuits, Plug-in direction perpendicular to the circuit board	black	930 777-200
 MAB 6 V		6	Panel-mounted socket for printed circuits, Plug-in direction perpendicular to the circuit board	black	930 812-200
 MAB 7 SV		7	Panel-mounted socket for printed circuits, Plug-in direction perpendicular to the circuit board	black	931 657-200
 MAB 8 SN V		8	Panel-mounted socket for printed circuits, Plug-in direction perpendicular to the circuit board	black	932 664-200

# Connectors for consumer electronics

## MAS/MAK-series

HiMedia

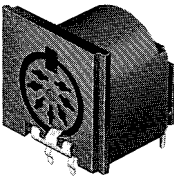
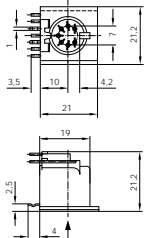

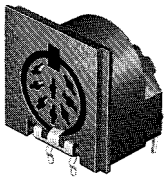
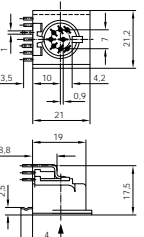

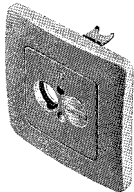
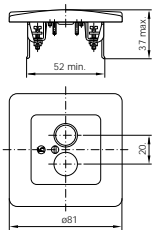

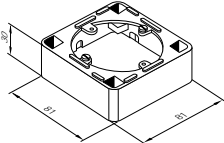

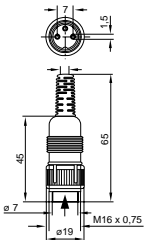

Type		Number of poles	Description	Colour	Order no.
		8	Panel-mounted socket for printed circuits, Plug-in direction perpendicular to the circuit board	black	931 735-200
		3	Panel-mounted socket for printed circuits, Plug-in direction parallel to the circuit board, Board thickness 1,5 mm	black	930 360-200
		5	Panel-mounted socket for printed circuits, Plug-in direction parallel to the circuit board, Board thickness 1,5 mm	black	931 744-200
		5	Panel-mounted socket for printed circuits, Plug-in direction parallel to the circuit board, Board thickness 1,5 mm	black	930 236-200
		6	Panel-mounted socket for printed circuits, Plug-in direction parallel to the circuit board, Board thickness 1,5 mm	black	930 778-200

# Connectors for consumer electronics

## MAS/MAK-series

HiMedia



Type		Number of poles	Description	Colour	Order no.
 MAB 7 SH-L		7 	Panel-mounted socket for printed circuits, Plug-in direction parallel to the circuit board, Board thickness 1,5 mm	black	<b>930 518-200</b>
 MAB 8 SH		8 	Panel-mounted socket for printed circuits, Plug-in direction parallel to the circuit board, Board thickness 1,5 mm	black	<b>931 399-200</b>
 MABU LD-V		–	Connecting socket for 58 mm panel-mounted sockets, can be equipped with flanged panel-mounted sockets, e.g. MAB 5S	ivory	<b>930 698-108</b>
 AR 20		–	Surface-mounted frame for MABU LD-V	ivory	<b>933 650-001</b>
 MAS 3100 MAS 3100 UM		3 	Connector with locking screw, solder connection	grey UM grey	<b>930 304-517</b> <b>931 068-117</b>


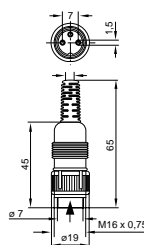


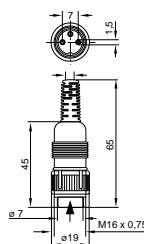


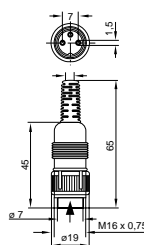


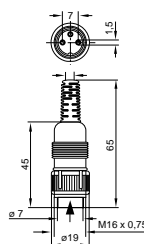


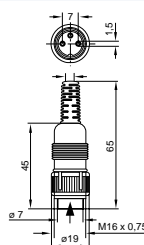



# Connectors for consumer electronics



## MAS/MAK-series

HiMedia


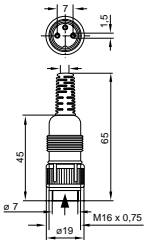

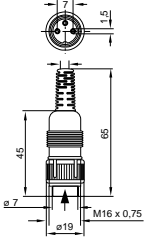
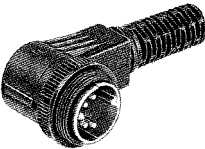
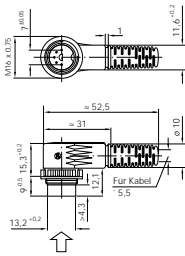
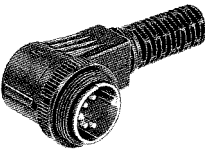
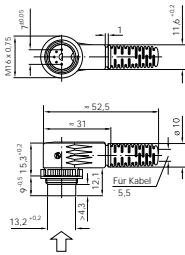
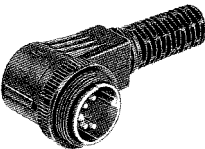
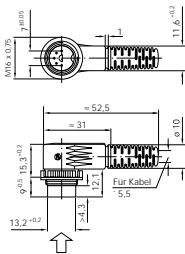
Type		Number of poles	Description	Colour	Order no.
 MAS 4100 MAS 4100 UM		4 	Connector with locking screw, solder connection	grey UM black UM grey	<b>930 963-517</b> <b>931 173-100</b> <b>931 173-117</b>
 MAS 5100 MAS 5100 UM		5 	Connector with locking screw, solder connection	grey UM black UM grey	<b>930 964-517</b> <b>931 189-100</b> <b>931 189-117</b>
 MAS 5100 S MAS 5100 S UM		5 	Connector with locking screw, solder connection	grey UM grey	<b>930 965-517</b> <b>931 174-117</b>
 MAS 6100 MAS 6100 UM		6 	Connector with locking screw, solder connection	grey UM grey	<b>930 966-517</b> <b>931 151-117</b>
 MAS 7100 S MAS 7100 S UM		7 	Connector with locking screw, solder connection	grey UM grey	<b>930 688-517</b> <b>930 689-117</b>

# Connectors for consumer electronics

## MAS/MAK-series

HiMedia



Type		Number of poles	Description	Colour	Order no.
 MAS 8100 S		8	Connector with locking screw, solder connection	grey UM black UM grey	930 539-517 931 240-100 931 240-117
 MAS 8100 SN UM		8	Connector with locking screw, solder connection	UM black UM grey	931 750-100 931 750-117
 MAWI 3100		3	Angled connector with locking screw, solder connection	grey	932 906-117
 MAWI 4100		4	Angled connector with locking screw, solder connection	grey	932 907-117
 MAWI 5100		5	Angled connector with locking screw, solder connection	grey	932 908-117

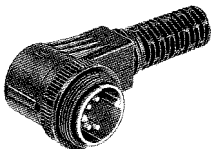
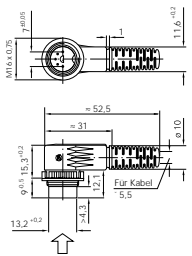
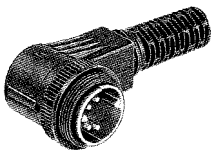
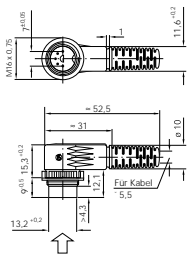
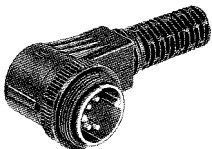
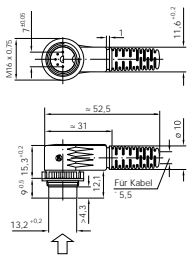

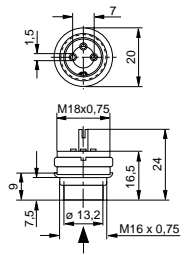

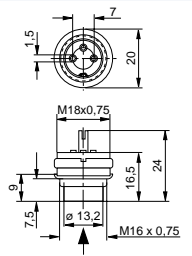


# Connectors for consumer electronics



## MAS/MAK-series

HiMedia

Type		Number of poles	Description	Colour	Order no.
 <p>MAWI 5100 S</p>		5	Angled connector with locking screw, solder connection	grey	932 909-117
 <p>MAWI 6100</p>		6	Angled connector with locking screw, solder connection	grey	932 910-117
 <p>MAWI 8100 S</p>		8	Angled connector with locking screw, solder connection	grey	932 912-117
 <p>MASEI 3100</p>		3	Panel-mounted connector with locking screw, solder connection	grey	930 296-517
 <p>MASEI 4100</p>		4	Panel-mounted connector with locking screw, solder connection	grey	930 955-517


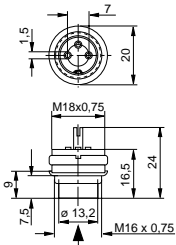

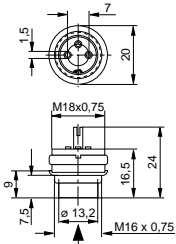

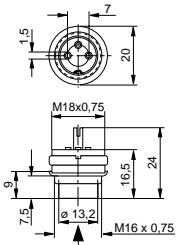

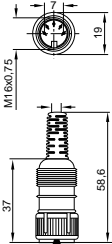

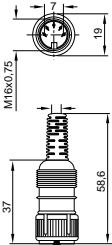


# Connectors for consumer electronics

## MAS/MAK-series

HiMedia



Type		Number of poles	Description	Colour	Order no.
 MASEI 5100		5	Panel-mounted connector with locking screw, solder connection	grey	930 956-517
 MASEI 5100 S		5	Panel-mounted connector with locking screw, solder connection	grey	930 957-517
 MASEI 6100		6	Panel-mounted connector with locking screw, solder connection	grey	930 958-517
 MAK 3100 S MAK 3100 S UM		3	Coupling with locking screw, solder connection	grey UM grey	930 764-517 931 110-117
 MAK 4100 MAK 4100 UM		4	Coupling with locking screw, solder connection	grey UM black UM grey	930 959-517 931 175-100 931 175-117


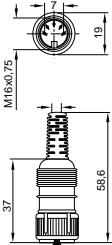

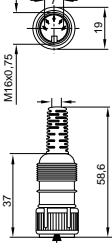

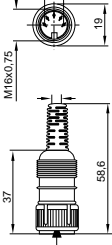

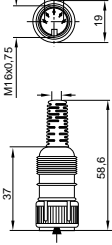

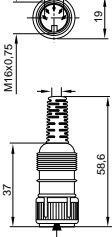


# Connectors for consumer electronics



## MAS/MAK-series

HiMedia


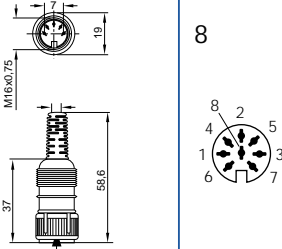

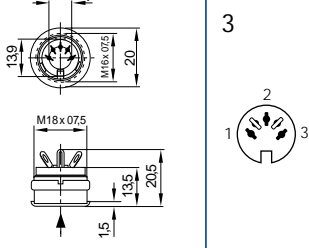

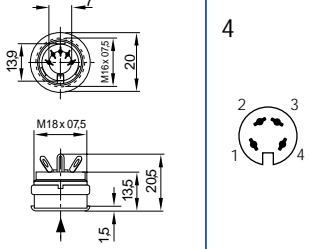

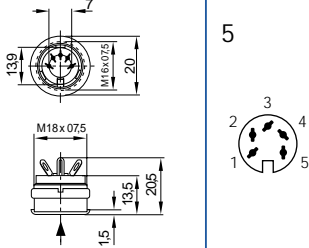

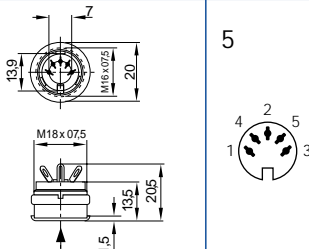
Type		Number of poles	Description	Colour	Order no.
 MAK 5100 MAK 5100 UM		5	Coupling with locking screw, solder connection	grey UM black UM grey	930 960-517 931 176-100 931 176-117
 MAK 5100 S MAK 5100 S UM		5	Coupling with locking screw, solder connection	grey UM black UM grey	930 961-517 931 177-100 931 177-117
 MAK 6100 MAK 6100 UM		6	Coupling with locking screw, solder connection	grey UM grey	930 962-517 931 178-117
 MAK 7100 S MAK 7100 S UM		7	Coupling with locking screw, solder connection	grey UM grey	930 682-517 930 690-117
 MAK 8100 S MAK 8100 S UM		8	Coupling with locking screw, solder connection	grey UM black UM grey	930 538-517 931 127-100 931 127-117

# Connectors for consumer electronics

## MAS/MAK-series

HiMedia



Type		Number of poles	Description	Colour	Order no.
 MAK 8100 SN UM		8	Coupling with locking screw, solder connection	UM black UM grey	931 765-100 931 765-117
 MAB 3100 S		3	Panel-mounted socket with locking screw, solder connection, not shielded	black grey	930 303-500 930 303-517
 MAB 4100		4	Panel-mounted socket with locking screw, solder connection, not shielded	grey	930 951-517
 MAB 5100		5	Panel-mounted socket with locking screw, solder connection, not shielded	grey	930 952-517
 MAB 5100 S		5	Panel-mounted socket with locking screw, solder connection, not shielded	black grey	930 953-500 930 953-517


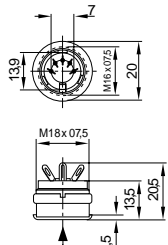

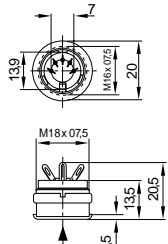

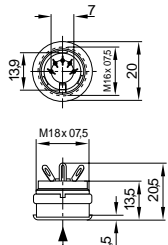

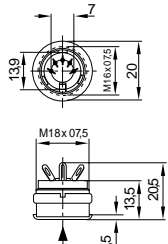
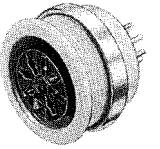
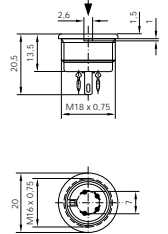


# Connectors for consumer electronics



## MAS/MAK-series

HiMedia

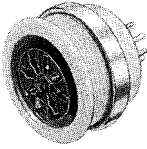
Type		Number of poles	Description	Colour	Order no.
 MAB 6100		6	Panel-mounted socket with locking screw, solder connection, not shielded	black grey	930 954-500 930 954-517
 MAB 7100 S		7	Panel-mounted socket with locking screw, solder connection, not shielded	grey	931 351-517
 MAB 8100 S		8	Panel-mounted socket with locking screw, solder connection, not shielded	grey	930 537-517
 MAB 8100 SN		8	Panel-mounted socket with locking screw, solder connection, not shielded	black grey	931 749-500 931 749-517
 MAB 4100 V		4	Panel-mounted socket with locking screw, for print assembly, solder connection, not shielded	grey	932 254-517

# Connectors for consumer electronics

## MAS/MAK-series

HiMedia



Type		Number of poles	Description	Colour	Order no.
 MAB 5100 SV		5 	Panel-mounted socket with locking screw, for print assembly, solder connection, not shielded	grey	932 201-517
 MAB 6100 V		6 	Panel-mounted socket with locking screw, for print assembly, solder connection, not shielded	grey	932 202-517
 MAB 7100 SV		7 	Panel-mounted socket with locking screw, for print assembly, solder connection, not shielded	grey	932 423-517
 MAB 8100 SV		8 	Panel-mounted socket with locking screw, for print assembly, solder connection, not shielded	grey	932 203-517
 MAB 4500 V		4 	Panel-mounted socket with locking screw, for installation in rear panels; max. 4 mm, solder connection, not shielded	grey	933 053-517


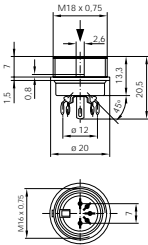

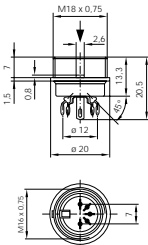

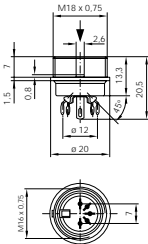


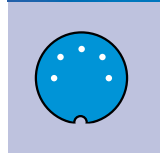
# Connectors for consumer electronics



## MAS/MAK-series

HiMedia

Type		Number of poles	Description	Colour	Order no.
 <p>MAB 5500 SV</p>		5	Panel-mounted socket with locking screw, for installation in rear panels; max. 4 mm, solder connection, not shielded	black grey	932 885-500 932 885-517
 <p>MAB 8500 SV</p>		8	Panel-mounted socket with locking screw, for installation in rear panels; max. 4 mm, solder connection, not shielded	grey	933 141-517
 <p>MAB 8500 SN V</p>		8	Panel-mounted socket with locking screw, for installation in rear panels; max. 4 mm, solder connection, not shielded	grey	933 058-517



# Connectors for consumer electronics

## MIS/MIK-series

HiMedia

### Product description


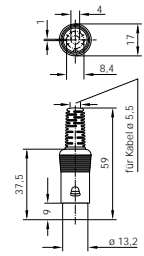

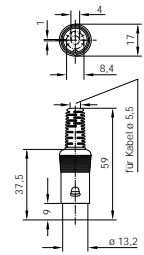
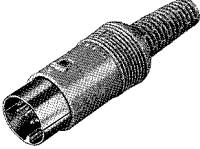
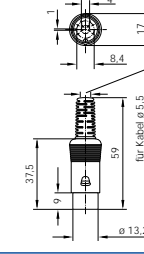
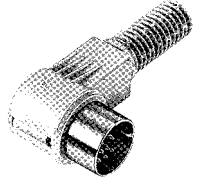
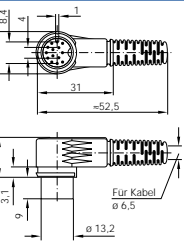
- Small, compact size, large number of poles
- Shielded miniature multiple connectors, 10- and 14-pole according to DIN EN 60 130-9
- For the use in electrical and electronic control of slide and film projectors, picture, film and television cameras as well as in measurement

and control systems and in medical technology

- Easy and quick assembly, contact plate of the 14-pole connector is made up of 3 solder levels. All cable connectors include clamping lugs to relieve the strain on the connected cable
- Are of the same size as the connectors in the MAS/MAK-series

### Basic data

Operating voltage: 34 V AC / DC  
 Operating current: max. 3 A AC / DC  
 Protection class: IP 30  
 Contact surface: tin-plated brass

Type		Number of poles	Description	Order no.
 MIS 100		10	Connector with solder connection	<b>931 867-517</b> grey
 MIS 100 UM		10	Connector with solder connection, not assembled	<b>931 826-100</b> black <b>931 826-117</b> grey
 MIS 140		14	Connector with solder connection	<b>932 222-500</b> black <b>932 222-517</b> grey
 MIWI 140		14	Angled connector with solder connection	<b>932 943-100</b> black <b>932 943-117</b> grey

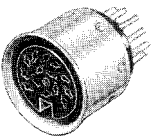
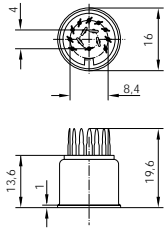
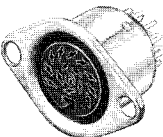
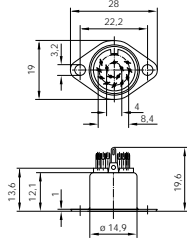

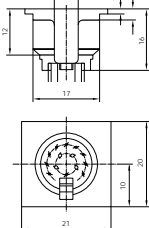
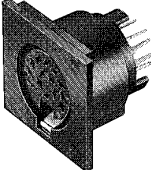
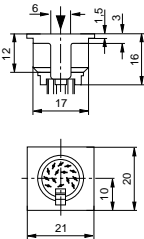
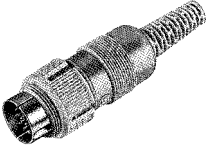
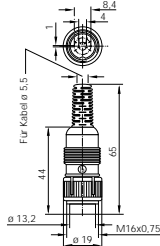


# Connectors for consumer electronics

## MIS/MIK-series

HiMedia



Type		Number of poles	Description	Order no.
 MIB 100 V		14	Panel-mounted socket with solder tabs, direction of insertion perpendicular to the circuit board, solder connection	<b>932 255-500</b> black
 MIB 140		14	Panel-mounted socket with solder lugs, flange fixture, solder connection	<b>931 842-500</b> black
 MIB 100 VA		10	Panel-mounted socket with solder tabs, direction of insertion perpendicular to the circuit board, solder connection, with switch, (closing contact) without shielding	<b>932 315-500</b> black
 MIB 140 VA		14	Panel-mounted socket with solder tabs, direction of insertion perpendicular to the circuit board, solder connection, with switch, (closing contact) without shielding	<b>932 428-500</b> black
 MIS 1400 AU		14	Connector with solder connection	<b>932 219-517</b> grey

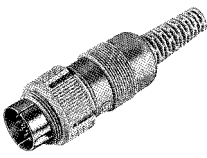
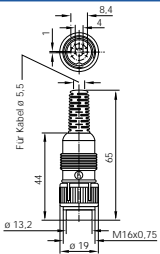

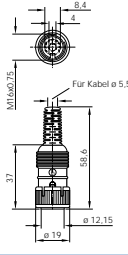

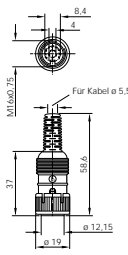
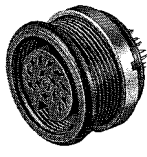
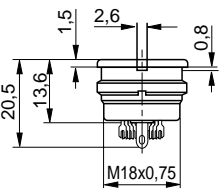


# Connectors for consumer electronics



## MIS/MIK-series

HiMedia

Type		Number of poles	Description	Order no.
 <p>MIS 1400 AU UM</p>		14	Connector with solder connection, not assembled	932 173-117 grey
 <p>MIK 1400 AU</p>		14	Coupling with solder connection	932 220-517 grey
 <p>MIK 1400 AU UM</p>		14	Coupling with solder connection, not assembled	932 174-100 black 932 174-117 grey
 <p>MIB 1400</p>		14	Panel-mounted socket with solder lugs, solder connection, without shielding!	932 221-500 black





# Connectors for consumer electronics



## TOS/TOK-series

HiMedia


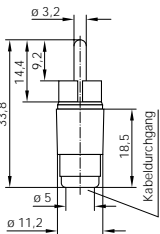

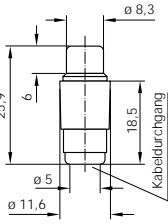
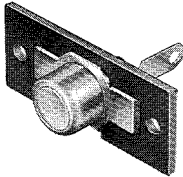
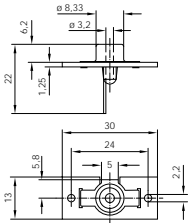

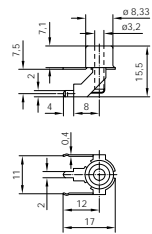
### Product description

Coaxial connector (cinch).

- Coaxial pin assignment, reliable connection
- Connectors and couplings are made up of only two parts
- Solder connection up to 1 mm<sup>2</sup> and shielding

### Applications:

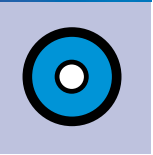
- Connections in audio and video equipment and computers
- Connections of shielded cables in measurement, test and control instrumentation

Type		Number of poles	Description	Order no.
 <p>TOST 10</p>		2	Connector with solder connection, screwed-on insulating sleeve	<b>931 903-100</b> black <b>931 903-101</b> red
 <p>TOK 10</p>		2	Coupling with solder connection, screwed-on insulating sleeve	<b>931 904-100</b> black <b>931 904-101</b> red
 <p>TOBU 2</p>		2	Socket with solder connection	<b>930 043-000</b>
 <p>TOBU 3</p>		2	Socket for soldering into printed circuit boards	<b>930 092-000</b>





# Notes





**Germany**

Richard Hirschmann 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 +49-7127-14-11495/-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.  
Niederlassung Schweiz  
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.  
Postbus 92  
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.  
c/Trespaderne, 29  
Edificio Barajas 1-2ª Plta.  
E-28042 Madrid  
Tel +34-91-74 617 30  
Fax +34-91-74 617 35  
E-mail:  
hirschmann.fuente@mad.servicom.es

**Hungary**

Hirschmann-Hungária Kft.  
Rokolya u. 1-13  
H-1131 Budapest  
Tel +36-1-149 41 99  
Fax +36-1-129 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