

8595/1-PB1-S-P10-002 Art. No. 298967



- Simple handling using hot swap technology
- Versatile application possibilities thanks to modular structure
- Most extreme operating conditions in hazardous areas
- Reliable data and signal connections or power supplies
- Simple connection and disconnection thanks to one-handed operation

MY R. STAHL 8595B



R. STAHL's Series 8595/1 explosion-protected miniCON plug connectors with up to eight poles keep you safely connected. The high-quality plastic or stainless steel plug connectors have impressed many customers with their reliability and versatility in application. Their hot swap disconnecting capacity means that intrinsically safe signal supplies and power supplies up to 500 V/16 A can be connected and disconnected reliably and safely without the need for a hot work permit or other hot work authorisation. The miniCON connectors designed for conductor cross-sections of 0.25 mm<sup>2</sup> to 2.5 mm<sup>2</sup> are available for directly connecting electrical lines or for device installation in the device plug and flange socket types of construction. The new plug connectors for hazardous areas in Zones 1 and 21 stand out from the competition thanks to their modular structure and logically arranged components, which enable quick, easy mounting. Our patented single-handed operation means that matching plug connectors, which can be defined by the installer using internal coding for up to three applications, can be connected in no time.

## Technical Data

### Explosion Protection

|                                   |  |
|-----------------------------------|--|
| Area of application               | European Union (ATEX)<br>IECEX         |
| Application range (zones)         | 1, 2, 21, 22                           |
| IECEX gas certificate             | IECEX EPS 20.0035X                     |
| IECEX gas certificate             | IECEX EPS 20.0035X                     |
| IECEX gas explosion protection    | Ex db eb IIC T6 / T5 Gb                |
| IECEX gas explosion protection 2  | Ex ia IIC T6 Ga                        |
| IECEX dust certificate            | IECEX EPS 20.0035X                     |
| IECEX dust explosion protection   | Ex tb IIIC T80 °C / T95 °C Db          |
| IECEX dust explosion protection 2 | Ex ia IIIC T80 °C Da                   |
| ATEX gas certificate              | EPS 20 ATEX 1075 X                     |
| ATEX gas certificate              | EPS 20 ATEX 1075 X                     |
| ATEX gas explosion protection     | ⊕ II 2 G Ex db eb IIC T6 / T5 Gb       |
| ATEX gas explosion protection 2   | ⊕ II 1 G Ex ia IIC T6 Ga               |
| ATEX dust certificate             | EPS 20 ATEX 1075 X                     |
| ATEX dust explosion protection    | ⊕ II 2 D Ex tb IIIC T80 °C / T95 °C Db |
| ATEX dust explosion protection 2  | ⊕ II 1 D Ex ia IIIC T80 °C Da          |
| Certificates                      | ATEX (EPS), IECEX (EPS)                |
| Declaration of Conformity         | ATEX (EUK)                             |

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### Electrical Data

|                                    |   |
|------------------------------------|---|
| Rated operational voltage AC       | 500 V   |
| Rated operational voltage DC       | max. 110 V  |
| Voltage tolerance                  | +10%  |
| Rated insulation voltage           | 690 V   |
| Rated operational current for AC   | 16 A  |
| Rated operational current for DC   | 8 A   |
| Rated operational current for DC 2 | 16 A  |
| No. of poles                       | 7   |
| No. of poles                       | 7 P + PE / 8 P  |
| No. of poles note                  | Eight contacts are included in the delivery as standard. One to eight contacts can be used. |
| AC frequency range                 | 50 – 60 Hz  |

### Device Specific Data

|   |         |
|---|---------|
| Back-up fuse with thermal protection    | 25 A GL |
| Back-up fuse without thermal protection | 16 A GL |

### Ambient Conditions

|                        |                    |
|------------------------|--------------------|
| Ambient temperature °C | -60 °C ... +75 °C  |
| Ambient temperature °F | -76 °F ... +167 °F |

### Mechanical Data

|                                       |                            |
|---------------------------------------|----------------------------|
| Version                               | Plug                       |
| Degree of protection (IP) (IEC 60529) | IP66<br>IP67               |
| IP degree of protection (IEC 60079)   | IP64                       |
| Base part                             | Plug                       |
| Enclosure material                    | Nickel-plated brass        |
| Contact type                          | Pin contact                |
| Connection cross-section              | 0.75 – 1 mm <sup>2</sup>   |
| Connection cross-section 2            | 0.34 – 0.5 mm <sup>2</sup> |
| Connection cross-section AWG          | 18 AWG                     |
| Connection cross-section AWG          | 22 AWG - 20 AWG            |
| Connection cross-section 2 min.       | 0.34 mm <sup>2</sup>       |
| Connection cross-section 2 max.       | 0.5 mm <sup>2</sup>        |
| Connection cross-section 2 AWG min.   | 22 AWG                     |
| Connection cross-section 2 AWG max.   | 20 AWG                     |
| Connection thread                     | M25 x 1.5                  |
| Impact strength (IEC 60079)           | 7 J                        |
| Coding                                | 1-3, arbitrary             |
| Seal                                  | Silicone                   |
| Weight                                | 491 g                      |
| Weight                                | 1.08 lb                    |

### Mounting / Installation

|                   |        |
|-------------------|--------|
| Connection type   | crimp  |
| Connection type 2 | solder |

### Components

|                          |     |
|--------------------------|-----|
| Protective cap available | Yes |
|--------------------------|-----|

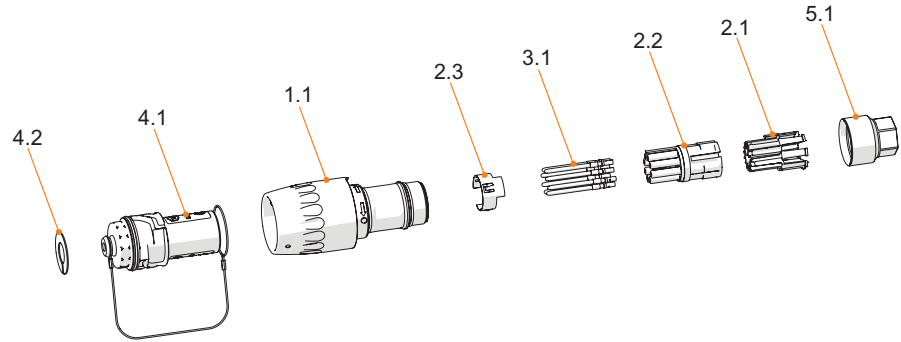
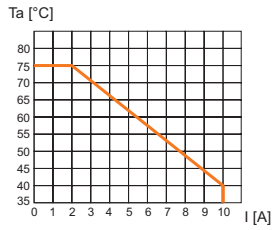
# Installation equipment

## miniCON plug connector



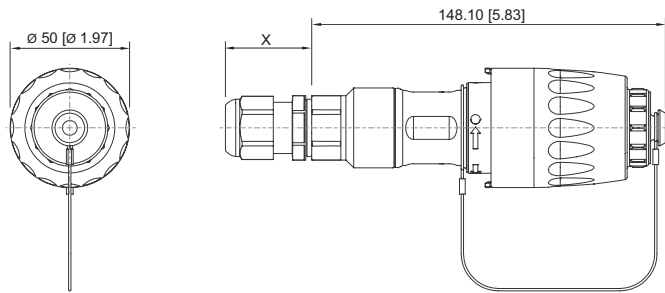
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### Technical Drawings – Subject to Alterations



- 4.2 Code disk
- 4.1 Protective cap
- 1.1 Plug basic part
- 2.3 PE contact (only for metal variant)
- 3.1 Contacts
- 2.2 Insulator
- 2.1 Contact holder
- 5.1 Adapter for cable gland

### Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



8595/1 plug  
X = depending on the cable gland used

### Accessories

#### Coupling



Enclosure material: Nickel-plated brass  
Contact type: Socket contact  
Connection cross-section: 0.75 to 1 mm<sup>2</sup>  
Number of poles: 7 P + PE/8 P  
Connection type: Crimping

Art. No.

298979



Enclosure material: Plastic  
Contact type: Socket contact  
Connection cross-section: 0.75 to 1 mm<sup>2</sup>  
Number of poles: 7 P + PE/8 P  
Connection type: Crimping

286559

#### Ex e flange socket

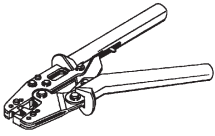
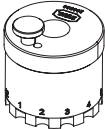



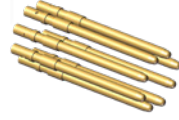





Enclosure material: Nickel-plated brass  
Contact type: Socket contact  
Connection cross-section: 0.75 to 1 mm<sup>2</sup>  
Number of poles: 7 P + PE/8 P  
Connection type: Crimping

Art. No.

298980

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| Crimping tool  |  | Art. No. |
|--|--|----------|
|    | For all versions with crimp connection of 0.14 to 6 mm <sup>2</sup>  | 295689   |
| Contact mounts/positioners for rotated industrial contacts                         |  | Art. No. |
|    | The selection of the contact mount is based on the crimp contacts to be processed.<br>- Exact positioning of the crimp contact during the crimping process<br>- Reliable, reproducible crimping result<br>- Adapted for miniCON contacts | 299586   |
| 2-ear clamps   |  | Art. No. |
|    | KIT 8595 2-ear clamps, big<br>Strain relief depending on the cable gland used<br>Cable outer diameter 13 to 17 mm  | 286169   |
| Adapters   |  | Art. No. |
|   | 8595 nickel-plated brass adapter<br>for cable gland, M16 x 1.5   | 314522   |
| Adaptor  |  | Art. No. |
|  | KIT 8595 nickel-plated brass adaptor<br>for cable gland, M25 x 1.5   | 296753   |
| Pin contact  |  | Art. No. |
|  | KIT 8595 pin contacts (0.75 to 1 mm <sup>2</sup> ), 8 pieces   | 286156   |
| Code disks   |  | Art. No. |
|  | KIT coding plate 8595, four colours, without labelling<br>Customer-specific labelling available on request   | 289939   |
| Metal cable gland  |  | Art. No. |
|  | CMP type 25C2K, Ex e<br>Nickel-plated brass, M25 x 1.5, for armoured cables, thread length 10 mm<br>Cable outer diameter 18.2 to 26.2 mm   | 309135   |
|  | CMP type 25A2e100, Ex e<br>Nickel-plated brass, M25 x 1.5, for unarmoured cables<br>Cable outer diameter 11.5 to 19.5 mm   | 309138   |

## Spare Parts

# Installation equipment

## miniCON plug connector



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### Jam nut, nickel-plated brass

Art. No.



Material: Nickel-plated brass One piece  
Thread size: M32

110869

### Contact holder for pin contact

Art. No.



KIT 8595 pin contact insert + PE

286148

### Protective cap

Art. No.



KIT 8595 plug protective cap (pin/socket)  
Incl. KIT 8595 coding plates, four colours, without labelling

286161

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.