NEC®/CE Code miniCON Ex plug connector

Series 8595





- · 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 8595H



R. STAHL's Series 8595/1 explosion-protected miniCON plug connectors with up to eight poles keep you safely connected. The high-quality stainless steel plug connectors have impressed many customers with their reliability in a diverse range of applications. Their hot swap disconnecting capacity means that intrinsically safe signal supplies and power supplies up to 500 V/8 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 24 AWG to 14 AWG (0.25 mm² to 2.5 mm²) 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 Class I, II, Division 2 and 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. If required, nickel-plated brass versions are available.

| | IECEx / ATEX | | | | | |
|-----------------|--------------|---|---|----|----|----|
| Zone | 0 | 1 | 2 | 20 | 21 | 22 |
| Installation in | | • | • | | • | • |

| | NEC® 500 CE Code Appendix J Class I Class II Class III | | | | | s III |
|-----------------|--|---|---|---|---|-------|
| Division | 1 | 2 | 1 | 2 | 1 | 2 |
| Installation in | | • | | • | | • |

| | CE Code Secti NEC® 505 Class I | | | | | | |
|-----------------|--------------------------------------|---|---|----|----|----|--|
| Zone | 0 | 1 | 2 | 20 | 21 | 22 | |
| Installation in | | • | | | • | | |

| Selection Table | | | | | | | |
|-------------------------------|-------------------|---|--------------------------|------------------------------|----------------------|----------|--------|
| Version Enclosure material | | Coupling Stainless steel 1.440 | 4 | | | | |
| Figure | Connection thread | Contact type | Connection cross-section | Connection cross-section AWG | Product Type | Art. No. | Weight |
| QS. | M20 x 1.5 | Socket contact | 0.5 mm² | 20 AWG | 8595/1-CS2-S-S05-001 | 324652 | 200 |
| | | Socket contact | 2.5 mm ² | 14 AWG | 8595/1-CS2-S-S25-001 | 324653 | 200 (|
| Version Enclosure material | | Ex e device plug Stainless steel 1.440 | 4 | | | | |
| Figure | Connection thread | Contact type | Connection cross-section | Connection cross-section AWG | Product Type | Art. No. | Weight |
| | M32 x 1.5 | Pin contact | 0.5 mm² | 20 AWG | 8595/1-PS2-S-P05-00E | 324646 | 200 |
| | | Pin contact | 2.5 mm² | 14 AWG | 8595/1-PS2-S-P25-00E | 324647 | 200 (|

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| Selection Table | | | | | | | |
|-------------------------------|-------------------|--|--------------------------|------------------------------|----------------------|----------|--------|
| Version Enclosure material | | Ex e flange socket Stainless steel 1.4404 | 4 | | | | |
| Figure | Connection thread | Contact type | Connection cross-section | Connection cross-section AWG | Product Type | Art. No. | Weight |
| | M32 x 1.5 | Socket contact | 0.5 mm ² | 20 AWG | 8595/1-CS2-S-S05-00E | 324648 | 200 g |
| | | Socket contact | 2.5 mm ² | 14 AWG | 8595/1-CS2-S-S25-00E | 324649 | 200 g |
| Version Enclosure material | | Plug Stainless steel 1.4404 | 4 | | | | |
| Figure | Connection thread | Contact type | Connection cross-section | Connection cross-section AWG | Product Type | Art. No. | Weight |
| | M20 x 1.5 | Pin contact | 0.5 mm ² | 20 AWG | 8595/1-PS2-S-P05-001 | 324650 | 200 g |
| | | Pin contact | 2.5 mm ² | 14 AWG | 8595/1-PS2-S-P25-001 | 324651 | 200 g |

Cable glands are not part of the standard metallic product.

| Explosion Protection | |
|----------------------------------|--|
| Scope of validity | European Union (ATEX) CE Code IECEx NEC® |
| Certificate ULus | E531347 |
| Marking ULus | Class I, Div. 2, Groups A,B,C,D Class II, III, Div. 2, Groups F,G Class I, Zone 1, AEx db eb IIC Gb Class I, Zone 0, AEx ia IIC Ga Zone 21, AEx tb IIIC Db Zone 20, AEx ia IIIC Da |
| Certificate cUL | E531347 |
| Marking cUL | Ex db eb IIC T6,T5 Gb Ex ia IIC T6 Ga Ex tb IIIC T80 °C T95 °C Db Ex ia IIIC T80 °C Da Class I, Div. 2, Groups A,B,C,D Class II, III, Div. 2, Groups F,G |
| IECEx gas explosion protection | Ex db eb IIC T6 / T5 Gb |
| IECEx dust explosion protection | Ex tb IIIC T80 °C / T95 °C Db |
| ATEX gas explosion protection | |
| ATEX dust explosion protection | ⑤ II 2 D Ex tb IIIC T80 °C / T95 °C Db |
| Certificates | ATEX (EPS), Canada (UL), IECEx (EPS), USA (UL) |
| Declaration of Conformity | ATEX (EUK) |
| Electrical Data | |
| Rated operational voltage AC | 500 V |
| Voltage tolerance | +10% |
| Rated insulation voltage | 690 V |
| Rated operational current for AC | 8 A |
| Switching capacity | AC-3: 550 V/8 A |
| No. of poles | 7 P + PE / 8 P |
| AC frequency range | 50 – 60 Hz |
| Notes | Data transfer rate: 1000 Mbps |
| Ambient Conditions | |
| Ambient temperature | -60 °C +75 °C |
| Ambient temperature | -76 °F +167 °F |
| Mechanical Data | |
| Enclosure type (UL50 & UL50E) | 3, 4, 4X |

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| Technical Data | |
|---------------------------------------|--|
| Mechanical Data | |
| Degree of protection (IP) (IEC 60529) | IP66 IP67 |
| IP degree of protection (IEC 60079) | IP64 |
| Impact strength (IEC 60079) | 7 J |
| Seal | Silicone |
| Coding | 1-3, arbitrary |
| Notes | For preassembled variants, coding 1 is pre-set |
| Mounting / Installation | |
| Connection type | crimp |
| Connection type 2 | solder |
| | |

The standard connection type is crimping. Soldering is possible in the range of 0.25 – 1.5 mm² (24 AWG - 16 AWG).

| Accessories | | | |
|-------------------|--|----------|-------|
| Figure | Description | Art. No. | Weigh |
| EMC/shielding | | | |
| OC | To create an EMC-compliant connection of braided, shielded or reinforced conductors. | 307512 | 29 |
| Crimping tool | | | |
| | For all versions with crimp connection of 0.14 to 6 mm ² | 295689 | 11 |
| Contact mounts/po | sitioners for rotated industrial contacts | | |
| | The selection of the contact mount is based on the crimp contacts to be processed. - Exact positioning of the crimp contact during the crimping process - Reliable, reproducible crimping result - Adapted for miniCON contacts | 299586 | 100 |
| Adapters | | | |
| | 8595 nickel-plated brass adapter for cable gland, M16 x 1.5 | 314522 | 500 |
| | 8595 stainless steel adapter for cable gland, M16 x 1.5 | 314521 | 500 |
| Adaptor | | | |
| | KIT 8595 nickel-plated brass adaptor for cable gland, M20 x 1.5 | 296752 | 100 |
| | KIT 8595 stainless steel adaptor for cable gland, M20 x 1.5 | 286164 | 63 |
| | KIT 8595 nickel-plated brass adaptor for cable gland, M25 x 1.5 | 296753 | 100 |
| | KIT 8595 stainless steel adaptor for cable gland, M25 x 1.5 | 286165 | 62 |
| 0 | KIT 8595 stainless steel adaptor, M20 x 1.5, for installation in Ex e enclosure | 304565 | 139 |
| U O | KIT 8595 stainless steel adaptor, M25 x 1.5, for installation in Ex e enclosure | 304567 | 140 |



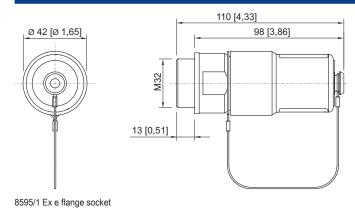
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E3

| Accessories | | | |
|----------------|--|----------|--------|
| Figure | Description | Art. No. | Weight |
| Socket contact | | | |
| | KIT 8595 socket contacts (0.25 to 0.5 mm²), 8 pieces | 286151 | 25 g |
| | KIT 8595 socket contacts (2.5 mm²), 8 pieces | 286154 | 26 g |
| Pin contact | | | |
| 200 | KIT 8595 pin contacts (0.25 to 0.5 mm²), 8 pieces | 286155 | 26 g |
| | KIT 8595 pin contacts (2.5 mm²), 8 pieces | 286158 | 26 g |

| Spare Parts | | | | | | |
|--------------------|---|-------------------|----------|--------|--|--|
| Figure | Description | | Art. No. | Weight | | |
| Jam nut, nickel-pl | am nut, nickel-plated brass | | | | | |
| | Material: Nickel-plated brass Thread size: M32 | One piece | 110869 | 11 g | | |
| Contact holder for | r socket contact | | | | | |
| | KIT 8595 socket contact insert + PE | | 286146 | 33 g | | |
| Contact holder for | r pin contact | | | | | |
| | KIT 8595 pin contact insert + PE | | 286148 | 23 g | | |
| Protective cap | | | | | | |
| 0 | KIT 8595 coupling protective cap (socket) Incl. KIT 8595 coding plates, four colours, | vithout labelling | 286159 | 32 g | | |

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



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