

8581/22-509 Art. No. 153647



- Degree of protection IP66, extreme temperature range of –30 to +40 °C
- No impact of torsional forces from the cable on the seal
- Wear-free contacts even in aggressive atmosphere

WebCode 8581C



R. STAHL Series 8581/22 plugs for Class I, Div. 2, Groups A, B, C, D and Zone 1/21 are 4- or 5-pole 100 A plugs. The floating pins allow them to be inserted and removed quickly and easily. The pivoting strain relief makes it easier to install the cable. Self-cleaning and corrosion-free plug pins made from high-quality materials ensure optimum electrical contact.

Technical Data

| Explosion Protection            |                                                                                                                                 |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Scope of validity               | European Union (ATEX)<br>Canada<br>IECEX<br>USA                                                                                 |
| Scope of validity Note          | Other country markings available on request                                                                                     |
| Application range (zones)       | 1<br>2<br>21<br>22                                                                                                              |
| IECEX gas certificate           | IECEX PTB 06.0034                                                                                                               |
| IECEX gas explosion protection  | Ex db eb IIC T6 ... T5 Gb                                                                                                       |
| IECEX dust certificate          | IECEX PTB 06.0034                                                                                                               |
| IECEX dust explosion protection | Ex tb IIIC T65 °C / T85 °C Db                                                                                                   |
| ATEX gas certificate            | PTB 01 ATEX 1161                                                                                                                |
| ATEX gas explosion protection   | Ex II 2 G Ex db eb IIC T6 ... T5 Gb                                                                                             |
| ATEX dust certificate           | PTB 01 ATEX 1161                                                                                                                |
| ATEX dust explosion protection  | Ex II 2 D Ex tb IIIC T65 °C / T85 °C Db                                                                                         |
| FMus certificate                | 0R6A2.AX                                                                                                                        |
| cFM certificate                 | 3050350                                                                                                                         |
| Marking FMus                    | Class I, Div. 2, Groups A,B,C,D;<br>Class II, III, Div. 1, Groups E,F,G;<br>TYPE 3, 4, 4X<br>Class I, Zone 1, AEx d e IIC T5 Gb |
| Marking cFM                     | Cl. I, Div. 2 per CEC J18-150,<br>Class II, Div. 1, Groups G;<br>Class I, Zone 1, Ex d e IIC T5 Gb                              |
| Certificates                    | ATEX (PTB), Brazil (ULB), Canada (FM), China (CQST), IECEX (PTB), Korea (KGS), USA (FM)                                         |

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### Electrical Data

|                           |                     |
|---------------------------|---------------------|
| Rated operational voltage | 208Y/120 V AC       |
| Rated operational current | 100 A               |
| Mechanical service life   | > 250 mating cycles |
| Type of voltage           | Low voltage         |
| Frequency range           | 50 / 60 Hz          |

### Ambient Conditions

|                     |                                                    |
|---------------------|----------------------------------------------------|
| Ambient temperature | -30 °C ... +45 °C (T6)<br>-30 °C ... +60 °C (T5)   |
| Ambient temperature | -22 °F ... +113 °F (T6)<br>-22 °F ... +140 °F (T5) |

### Mechanical Data

|                                              |                                                    |
|----------------------------------------------|----------------------------------------------------|
| IP degree of protection (IEC 60529)          | IP66                                               |
| IP degree of protection (IEC 60079)          | IP66                                               |
| Enclosure type (NEMA250)                     | 3, 4, 4X                                           |
| Enclosure material                           | Polyamide                                          |
| Silicone-free                                | Yes                                                |
| Finely stranded connection cross-section     | 1 x 2.5 mm <sup>2</sup> ... 1 x 35 mm <sup>2</sup> |
| Finely stranded connection cross-section AWG | 1 x AWG 14 ... 1 x AWG 2                           |
| Width                                        | 129 mm                                             |
| Width in inches                              | 5.08 in                                            |
| Height                                       | 129 mm                                             |
| Height, inches                               | 5.08 in                                            |
| Length                                       | 31 mm                                              |
| Length, inches                               | 12.2 in                                            |
| Impact strength (IEC 60079)                  | 7 J                                                |
| Impact strength (IEC 62262)                  | IK10                                               |
| Colour code                                  | Blue                                               |
| Coding (clock hour position)                 | 9                                                  |
| Series                                       | SolConeX                                           |
| Detailed number of poles                     | 4-pole, 5 conductors                               |
| Weight                                       | 1.38 kg                                            |
| Weight                                       | 3.04 lb                                            |

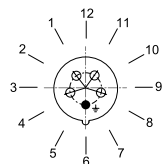
### Mounting / Installation

|            |                |
|------------|----------------|
| Connection | Screw terminal |
|------------|----------------|

### Components

|                     |                |
|---------------------|----------------|
| Cable diameter      | 30 – 45 mm     |
| Cable diameter inch | 1.18 – 1.77 in |

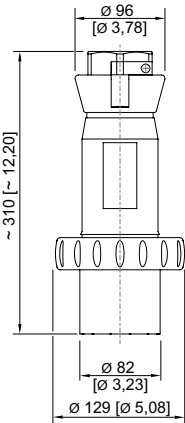
### Technical Drawings – Subject to Alterations



Position of clock hour position  
Example: 6 h position

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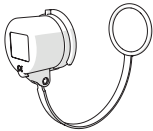
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Accessories

Protective cap for plugs 125 A

Art. No.



4-/5-poles

153730

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.