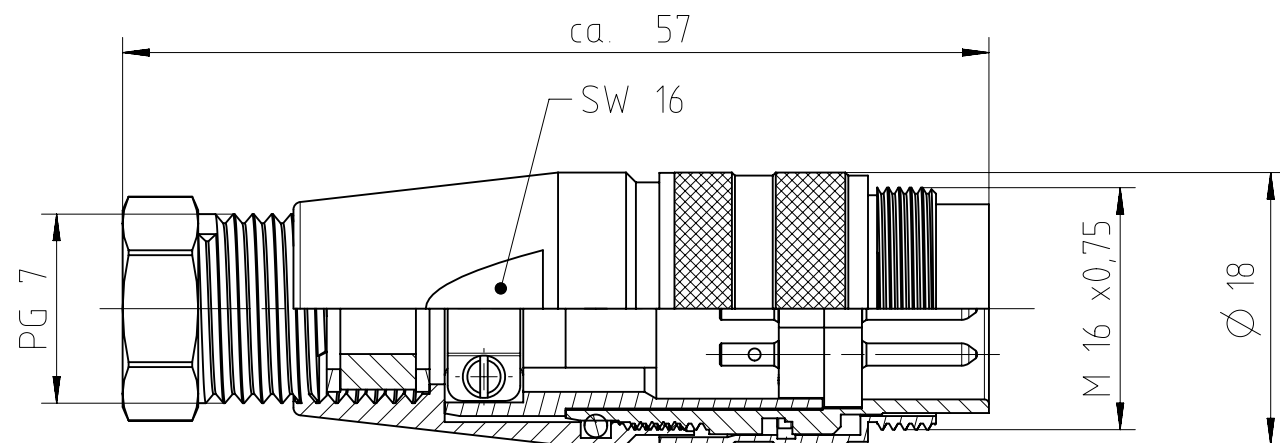


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|--------------------------------------------------|-----------------------------------|------------------------------------------------------|------|-----------------|-------------------|--------------------|------|-------------------|------|-------------------|------|----------------|------|
| Number of contacts                               | Standard                          | 3                                                    | 4    | 5               | 5                 | 6                  | 7    | 7                 | 8    | 12                | 14   | 14             | 19   |
| Contact arrangement                              | IEC 61076-2-106                   | 03-a                                                 | 04-a | 05-a            | 05-b              | 06-a               | 07-a | 07-b              | 08-a | 12-a              | 14-a | 14-b           | 19-a |
| Contact arrangement                              | IEC 60130-9 <sup>1)</sup>         | yes                                                  |      | no              | yes               |                    | no   | yes               |      | no                |      |                |      |
| Rated voltage <sup>2)</sup>                      | IEC 60664-1                       | 300 V<br>(100 V)                                     |      | 300 V<br>(63 V) | 100 V<br>(32 V)   | 300 V<br>(63 V)    |      | 100 V<br>(32 V)   |      | 150 V<br>(32 V)   |      | 60 V<br>(32 V) |      |
| Rated voltage                                    | UL 1977                           | 250V                                                 |      |                 |                   |                    |      |                   |      | 60V               |      |                |      |
| Rated impulse<br>withstand voltage <sup>2)</sup> | IEC 60664-1                       | 1500 V<br>(1500 V)                                   |      |                 | 1200 V<br>(800 V) | 1500 V<br>(1500 V) |      | 1200 V<br>(800 V) |      |                   |      |                |      |
| Pollution degree <sup>2)</sup>                   | IEC 60664-1                       | 1 (3 <sup>3)</sup> )                                 |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| Installation category                            | IEC 60664-1                       | I                                                    |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| Insulation group                                 | IEC 60664-1                       | II, 400 ≤ CTI < 600                                  |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| Current rating                                   | IEC 60512-5-2<br>UL 1977          | 10A/+40°C                                            |      | 7A/+40°C        |                   |                    |      |                   |      | 3A/+40°C          |      |                |      |
| Insulation resistance                            | IEC 60512-3-1                     | >10 <sup>10</sup> Ohm <sup>4)</sup>                  |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| Contact resistance                               | IEC 60512-2-1                     | <5mOhm                                               |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| Climatic category                                | IEC 60668-1                       | 40 / 100 / 56                                        |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| Temperatur range                                 | IEC 60668-1                       | -40°C...+100°C / -40°F...+212°F                      |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| Salt spray resistance                            | DIN IEC 60068-2-11,<br>test Ka    | 720h                                                 |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| IP degree                                        | IEC 60529                         | IP 69K / IP 67 / IP 65 (in mated condition)          |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| Insertion and<br>withdrawal force                | IEC 60512-13-2                    | 25N                                                  | 30N  | 35N             | 35N               | 50N                | 55N  | 55N               | 60N  | 50N               | 50N  | 50N            | 60N  |
| mechanical operation                             | IEC 60512-9-1                     | Silver ≥500 mating cycles / Gold ≥1000 mating cycles |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| housing material                                 |                                   | brass and / or zinc die cast, nickel plated          |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| dielectric material                              |                                   | thermoplastic                                        |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| sealing material                                 |                                   | Chloroprene                                          |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| contacts                                         |                                   | silver or gold plated                                |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| termination technique                            |                                   | solder                                               |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| wire gauge                                       |                                   | ≤0,5mm² / 20 AWG                                     |      |                 |                   |                    |      |                   |      | ≤0,35mm² / 22 AWG |      |                |      |
| flamability                                      |                                   | UL 94 V0                                             |      |                 |                   |                    |      |                   |      |                   |      |                |      |
| locking system                                   | IEC 60130-9<br>DIN EN 61076-2-106 | metal screw coupling; tightening torque 0,7 - 1,5 Nm |      |                 |                   |                    |      |                   |      |                   |      |                |      |

<sup>a</sup> Edition 2000-05  
<sup>a</sup> values in brackets are according to DIN EN 61076-2-106  
<sup>b</sup> designed acc. pollution degree 2, can be used under pollution degree 3 when the rules of IEC 60644-1 are fulfilled  
<sup>d</sup> under operating conditions >10<sup>8</sup> Ohm

Do not connect or disconnect under load. Metal housing parts shall be securely incorporated to protected ground.

Remark for gold plated contacts:  
In order to avoid brittle inter-metallic connections, gold plated terminals have to be tin-plated in the solder area.  
All technical data have been measured in a laboratory environment and can be different during practical usage of the product. Any product information is for descriptive usage only and not legally binding, particularly the information does not constitute or provide any legal guaranties ("Beschaffenheitsgarantie" or "Haltbarkeitsgarantie").

|                                            |                                                                     |                     |                     |
|--------------------------------------------|---------------------------------------------------------------------|---------------------|---------------------|
|                                            | 19<br>(19-a)                                                        | C091 31H019 100 2 U | C091 31H019 200 2 U |
|                                            | 14<br>(14-b)                                                        | C091 31H114 100 2 U | C091 31H114 200 2 U |
|                                            | 14<br>(14-a)                                                        | C091 31H014 100 2 U | C091 31H014 200 2 U |
|                                            | 12<br>(12-a)                                                        | C091 31H012 100 2 U | C091 31H012 200 2 U |
|                                            | 8<br>(08-a)                                                         | C091 31H008 100 2 U | C091 31H008 200 2 U |
|                                            | 7<br>(07-b)                                                         | C091 31H107 100 2 U | C091 31H107 200 2 U |
|                                            | 7<br>(07-a)                                                         | C091 31H007 100 2 U | C091 31H007 200 2 U |
|                                            | 6<br>(06-a)                                                         | C091 31H006 100 2 U | C091 31H006 200 2 U |
|                                            | 5<br>(05-b)                                                         | C091 31H105 100 2 U | C091 31H105 200 2 U |
|                                            | 5<br>(05-a)                                                         | C091 31H005 100 2 U | C091 31H005 200 2 U |
|                                            | 4<br>(04-a)                                                         | C091 31H004 100 2 U | C091 31H004 200 2 U |
|                                            | 3<br>(03-a)                                                         | C091 31H003 100 2 U | C091 31H003 200 2 U |
| Contact arrangement<br>View on mating side | Number of contacts<br>(Contact arrangement<br>acc. IEC 61076-2-106) | Part number-Ag      | Part number-Au      |

|                                         |                        |              |       |                                    |              |                      |                     |                                                       |  |  |             |
|-----------------------------------------|------------------------|--------------|-------|------------------------------------|--------------|----------------------|---------------------|-------------------------------------------------------|--|--|-------------|
| Gewicht (errechnet) / Calc WT: 39,408 g |                        |              |       | Zul. Abw./Tolerances:              |              | Maßstab / Scale: 2:1 |                     | A3                                                    |  |  |             |
| Prüfmaß / Testdimension                 |                        |              |       | ISO 2768-c                         |              |                      |                     | CUSTOMER DRAWING                                      |  |  |             |
| Teileindex / Partindexnumber:           |                        |              |       |                                    |              |                      |                     | Male cable connector<br>for cable diameter 4-6mm      |  |  |             |
| Bagatelle change:                       |                        |              |       |                                    |              |                      |                     |                                                       |  |  |             |
|                                         |                        |              |       | Gez.                               | 09.06.2017   |                      |                     |                                                       |  |  |             |
|                                         |                        |              |       | Drawn                              | AZN_NPFEIFFE |                      |                     |                                                       |  |  |             |
|                                         |                        |              |       | Status                             | Released     |                      |                     |                                                       |  |  |             |
|                                         |                        |              |       | Gepr.                              | 11.01.2021   |                      |                     |                                                       |  |  |             |
|                                         |                        |              |       | Checked                            | MBERTSCH     |                      |                     |                                                       |  |  |             |
| 05                                      | 202000083              | 26.10.2020   | MCARL | Amphenol Tuchel<br>Industrial GmbH |              | M                    | C091 31HXXX X00 2 U |                                                       |  |  | Blatt/Sheet |
| 04                                      | 201700004              | 12.06.2017   | NPFEI |                                    |              |                      |                     |                                                       |  |  | 1 Bl.       |
| Index                                   | Änderung / Description | Datum / Date | Name  |                                    |              |                      |                     | Ers. f. l. Replacement for: M-C091 31HXXX X00 2 Rev03 |  |  |             |

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[C091-31G012-209-2](#) [C091-61C007-110-2](#) [C091-61C006-804-2](#) [T13350609](#) [T 3427 518 C](#) [C091-61W006-830-2](#)  
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