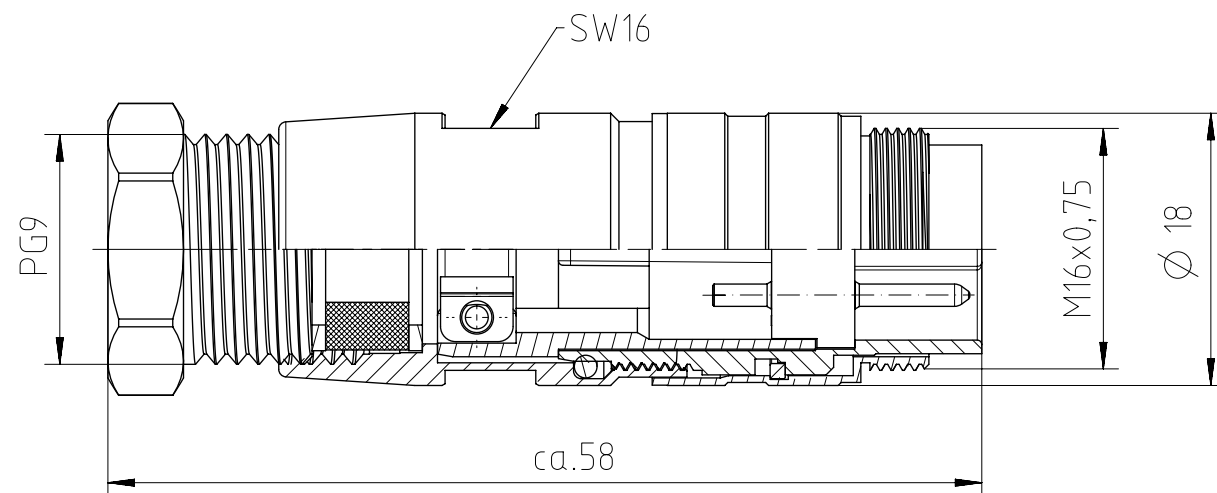


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|-----------------------|--------------------------------------------------|-----------------------------------|------------------------------------------------------|------------------------------------------------------|-----------------|-------------------|--------------------|------|-------------------|------|-----------------|-------------------|----------------|------|--|
| D                     | 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>n</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                                                    |                                                      |                 |                   |                    |      |                   |      |                 |                   |                |      |  |
| C                     | 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  |  |
|                       | B                                                | 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>n</sup> Edition 2000-05  
<sup>2)</sup> values in brackets are according to DIN EN 61076-2-106  
<sup>3)</sup> designed acc. pollution degree 2, can be used under pollution degree 3 when the rules of IEC 60644-1 are fulfilled  
<sup>4)</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 101 2 U                   | C091 31H019 201 2 U                 |
|                                            | 14<br>(14-b)                                                        | C091 31H114 101 2 U                   | C091 31H114 201 2 U                 |
|                                            | 14<br>(14-a)                                                        | C091 31H014 101 2 U                   | C091 31H014 201 2 U                 |
|                                            | 12<br>(12-a)                                                        | C091 31H012 101 2 U                   | C091 31H012 201 2 U                 |
|                                            | 8<br>(08-a)                                                         | C091 31H008 101 2 U                   | C091 31H008 201 2 U                 |
|                                            | 7<br>(07-b)                                                         | C091 31H107 101 2 U                   | C091 31H107 201 2 U                 |
|                                            | 7<br>(07-a)                                                         | C091 31H007 101 2 U                   | C091 31H007 201 2 U                 |
|                                            | 6<br>(6-a)                                                          | C091 31H006 101 2 U                   | C091 31H006 201 2 U                 |
|                                            | 5<br>(05-b)                                                         | C091 31H105 101 2 U                   | C091 31H105 201 2 U                 |
|                                            | 5<br>(05-a)                                                         | C091 31H005 101 2 U                   | C091 31H005 201 2 U                 |
|                                            | 4<br>(04-a)                                                         | C091 31H004 101 2 U                   | C091 31H004 201 2 U                 |
|                                            | 3<br>(03-a)                                                         | C091 31H003 101 2 U                   | C091 31H003 201 2 U                 |
| Contact arrangement<br>View on mating side | Number of contacts<br>(Contact arrangement acc. DIN EN 61076-2-106) | Part number<br>silver plated contacts | Part number<br>gold plated contacts |

|                                         |  |                      |  |                                         |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
|-----------------------------------------|--|----------------------|--|-----------------------------------------|--|-------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------|--|----|--|---------------------------------------------------------------------------------------|--|
| Gewicht (errechnet) / Calc WT: 0,039 kg |  |                      |  | Zul. Abw./Tolerances:<br><br>ISO 2768-c |  | <br>DIN / ISO<br>13715 |  | Maßstab / Scale: 2:1 ; 1:1                             |  | A3 |  |  |  |
| Prüfmaß / Testdimension                 |  |                      |  |                                         |  |                                                                                                             |  | CUSTOMER DRAWING                                       |  |    |  |                                                                                       |  |
| Teileindex / Partindexnumber:           |  |                      |  |                                         |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
| Bagatelle change:                       |  |                      |  |                                         |  |                                                                                                             |  | Male cable connector<br>for cable diameter 6-8mm       |  |    |  |                                                                                       |  |
|                                         |  |                      |  |                                         |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
|                                         |  |                      |  | Gez. 26.04.2016                         |  |                                                                                                             |  | M C091 31HXXX X01 2 U                                  |  |    |  |                                                                                       |  |
|                                         |  |                      |  | Drawn MTOLKSDORF                        |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
|                                         |  |                      |  | Status Released                         |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
|                                         |  |                      |  | Gepr. 11.01.2021                        |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
|                                         |  |                      |  | Checked MBERTSCH                        |  |                                                                                                             |  | Blatt/Sheet<br>1                                       |  |    |  |                                                                                       |  |
|                                         |  |                      |  |                                         |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
|                                         |  |                      |  |                                         |  |                                                                                                             |  | 1 Bl.                                                  |  |    |  |                                                                                       |  |
|                                         |  |                      |  |                                         |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
|                                         |  |                      |  |                                         |  |                                                                                                             |  | Ers. f. / Replacement for: M-C091 31HXXX X01 2 U Rev01 |  |    |  |                                                                                       |  |
|                                         |  |                      |  |                                         |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
| 03 202000083 26.10.2020 MCARL           |  |                      |  | Amphenol Tuchel<br>Industrial GmbH      |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
| 02 201600004 27.04.2016 MTOLK           |  |                      |  |                                         |  |                                                                                                             |  |                                                        |  |    |  |                                                                                       |  |
| Index                                   |  | Änderung/Description |  | Datum/Date                              |  | Name                                                                                                        |  |                                                        |  |    |  |                                                                                       |  |

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