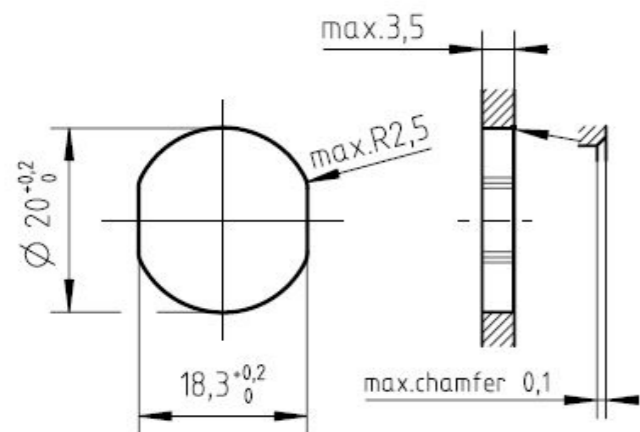
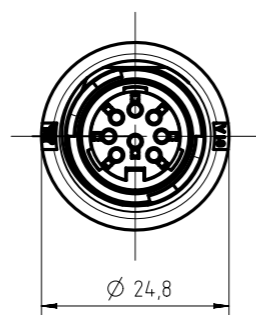


Panel Cutout M1:1

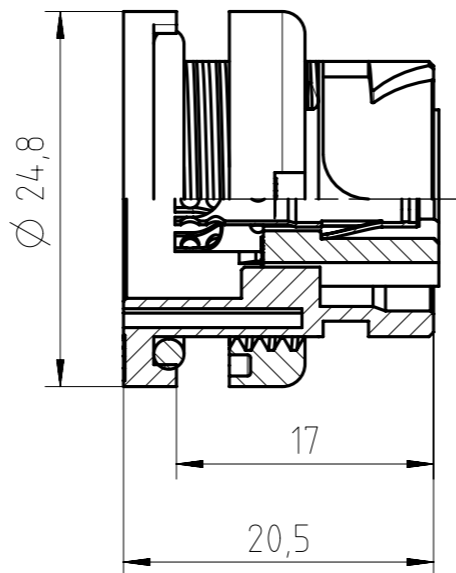
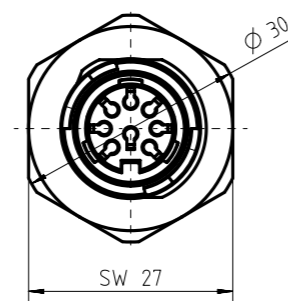


Recommended roughness sealing surface Rz6,3 (Ra0,8)

Version with ring nut



Version with hex nut



**!ATTENTION!**  
contact insert not preassembled  
he must pressed in after soldering

|                                 |                                   |                                     |      |       |          |       |      |                               |      |          |      |      |      |
|---------------------------------|-----------------------------------|-------------------------------------|------|-------|----------|-------|------|-------------------------------|------|----------|------|------|------|
| 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 |
| Rated voltage                   | IEC 60664-1                       | 150 V                               |      | 100 V | 32 V     | 100 V |      |                               | 32 V |          |      |      |      |
| Rated impulse withstand voltage | IEC 60664-1                       | 840 V                               |      | 500 V | 840 V    |       |      | 500 V                         |      |          |      |      |      |
| Pollution degree <sup>2)</sup>  | IEC 60664-1                       | 3 <sup>1)</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>2)</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     |      |       |          |       |      |                               |      |          |      |      |      |
| IP degree                       | IEC 60529                         | IP 68 (in mated condition)          |      |       |          |       |      |                               |      |          |      |      |      |
| Insertion and withdrawal force  | IEC 60512-13-2                    | 25N                                 | 30N  | 35N   | 35N      | 50N   | 55N  | 55N                           | 60N  | 50N      | 50N  | 50N  | 60N  |
| mechanical operation            | IEC 60512-9-1                     | ≥500 mating cycles                  |      |       |          |       |      |                               |      |          |      |      |      |
| housing material                |                                   | thermoplastic                       |      |       |          |       |      |                               |      |          |      |      |      |
| dielectric material             |                                   | thermoplastic                       |      |       |          |       |      |                               |      |          |      |      |      |
| sealing material                |                                   | chloroprene, silicone               |      |       |          |       |      |                               |      |          |      |      |      |
| contacts                        |                                   | silver or gold plated               |      |       |          |       |      |                               |      |          |      |      |      |
| termination technique           |                                   | solder                              |      |       |          |       |      |                               |      |          |      |      |      |
| wire gauge                      |                                   | ≤0,5mm <sup>2</sup> / 20 AWG        |      |       |          |       |      | ≤0,35mm <sup>2</sup> / 22 AWG |      |          |      |      |      |
| flamability                     |                                   | UL 94 V0                            |      |       |          |       |      |                               |      |          |      |      |      |
| locking system                  | IEC 60130-9<br>DIN EN 61076-2-106 | Quicklock system                    |      |       |          |       |      |                               |      |          |      |      |      |

|  |              |    |  |                           |
|--|--------------|----|--|---------------------------|
|  | 19<br>(19-a) | Ag | C091 31G019 100 5 U  | C091 31G019 109 5 U       |
|  |              | Au | C091 31G019 200 5 U  | C091 31G019 209 5 U       |
|  | 14<br>(14-b) | Ag | C091 31G114 100 5 U  | C091 31G114 109 5 U       |
|  |              | Au | C091 31G114 200 5 U  | C091 31G114 209 5 U       |
|  | 14<br>(14-a) | Ag | C091 31G014 100 5 U  | C091 31G014 109 5 U       |
|  |              | Au | C091 31G014 200 5 U  | C091 31G014 209 5 U       |
|  | 12<br>(12-a) | Ag | C091 31G012 100 5 U  | C091 31G012 109 5 U       |
|  |              | Au | C091 31G012 200 5 U  | C091 31G012 209 5 U       |
|  | 8<br>(08-a)  | Ag | C091 31G008 100 5 U  | C091 31G008 109 5 U       |
|  |              | Au | C091 31G008 200 5 U  | C091 31G008 209 5 U       |
|  | 7<br>(07-b)  | Ag | C091 31G107 100 5 U  | C091 31G107 109 5 U       |
|  |              | Au | C091 31G107 200 5 U  | C091 31G107 209 5 U       |
|  | 7<br>(07-a)  | Ag | C091 31G007 100 5 U  | C091 31G007 109 5 U       |
|  |              | Au | C091 31G007 200 5 U  | C091 31G007 209 5 U       |
|  | 6<br>(6-a)   | Ag | C091 31G006 100 5 U  | C091 31G006 109 5 U       |
|  |              | Au | C091 31G006 200 5 U  | C091 31G006 209 5 U       |
|  | 5<br>(05-b)  | Ag | C091 31G105 100 5 U  | C091 31G105 109 5 U       |
|  |              | Au | C091 31G105 200 5 U  | C091 31G105 209 5 U       |
|  | 5<br>(05-a)  | Ag | C091 31G005 100 5 U  | C091 31G005 109 5 U       |
|  |              | Au | C091 31G005 200 5 U  | C091 31G005 209 5 U       |
|  | 4<br>(04-a)  | Ag | C091 31G004 100 5 U  | C091 31G004 109 5 U       |
|  |              | Au | C091 31G004 200 5 U  | C091 31G004 209 5 U       |
|  | 3<br>(03-a)  | Ag | C091 31G003 100 5 U  | C091 31G003 109 5 U       |
|  |              | Au | C091 31G003 200 5 U  | C091 31G003 209 5 U       |
| <b>Contact arrangement View on mating side</b> |              |    | Number of contacts (Contact arrangement acc. DIN EN 61076-2-106) | Part number with ring nut |
|  |              |    |  | Part number with hex nut  |

|                                |                        |  |        |                             |  |
|--------------------------------|------------------------|--|--------|-----------------------------|--|
| Gewicht (errechnet) / Calc WT: |                        | Zul. Abw./Tolerances:                  |        | Maßstab / Scale:            |  |
| Prüfmaß / Testdimension        |                        | ± 0,50                                 |        | A3                          |  |
| Teileindex / Partindexnumber:  |                        | DIN / ISO 13715                        |        | CUSTOMER DRAWING            |  |
| Bagatelle change:              |                        | Gez. 11.09.2020                        |        | Gerätedose Quicklock        |  |
|                                |                        | Drawn MCARLE                           |        | Female receptacle Quicklock |  |
|                                |                        | Status Released                        |        |                             |  |
|                                |                        | Gepr. 25.06.2021                       |        |                             |  |
|                                |                        | Checked MBERTSCH                       |        |                             |  |
|                                |                        | <b>Amphenol Tuchel Industrial GmbH</b> |        | Blatt / Sheet 1             |  |
| 02                             | 201800273              | 24.06.2021                             | MCARLE | M C091 31GXXX X0X 5 U       |  |
| 01                             | 201800273              | 30.10.2020                             | MCARLE | 1 Bl.                       |  |
| Index                          | Änderung / Description | Datum / Date                           | Name   | Ers. f. / Replacement for:  |  |

<sup>1)</sup> designed acc. pollution degree 2; can be used under pollution degree 3 when the rules of IEC 60664-1 are fulfilled

<sup>2)</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 ("Beschaffungsgarantie" or "Haltbarkeitsgarantie").

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patenterteilung oder Gebrauchsmuster-Eintragung vorbehalten.

FAI2021-002818