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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 ^{b)} | yes | | no | | yes | | no | | yes | | | | |
| Rated voltage ²⁾ | IEC 60664-1 | 300 V (100 V) | | 300 V (63 V) | | 100 V (32 V) | | 300 V (63 V) | | 100 V (32 V) | | 150 V (32 V) 60 V (32 V) | | |
| Rated voltage | UL 1977 | 250V | | | | | | | | | | 60V | | |
| Rated impulse withstand voltage ²⁾ | IEC 60664-1 | 1500 V (1500 V) | | 1200 V (800 V) | | 1500 V (1500 V) | | 1200 V (800 V) | | | | | | |
| Pollution degree ²⁾ | IEC 60664-1 | 1 (3 ³⁾) | | | | | | | | | | | | |
| Installation category | IEC 60664-1 | I | | | | | | | | | | | | |
| Insulation group | IEC 60664-1 | II, 400 ≤ CTI < 600 | | | | | | | | | | | | |
| Current rating | IEC 60512-5-2 UL 1977 | 10A/+40°C | | | 7A/+40°C | | | | | | 3A/+40°C | | | |
| Insulation resistance | IEC 60512-3-1 | >10 ¹⁰ Ohm ⁴⁾ | | | | | | | | | | | | |
| 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, test Ka | 720h | | | | | | | | | | | | |
| IP degree | IEC 60529 | IP 69K / IP 67 / IP 65 (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 | 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 | | ≤0,5mm ² / 20 AWG | | | | | | ≤0,35mm ² / 22 AWG | | | | | | |
| flamability | | UL 94 V0 | | | | | | | | | | | | |
| locking system | IEC 60130-9 DIN EN 61076-2-106 | metal screw coupling; tightening torque 0,7 - 1,5 Nm | | | | | | | | | | | | |

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|--|-----------|---------------------|---------------------|
| | 19 (19-a) | C091 31D019 100 2 U | C091 31D019 200 2 U |
| | 14 (14-b) | C091 31D114 100 2 U | C091 31D114 200 2 U |
| | 14 (14-a) | C091 31D014 100 2 U | C091 31D014 200 2 U |
| | 12 (12-a) | C091 31D012 10 2 U | C091 31D012 200 2 U |
| | 8 (08-a) | C091 31D008 100 2 U | C091 31D008 200 2 U |
| | 7 (07-b) | C091 31D107 100 2 U | C091 31D107 200 2 U |
| | 7 (07-a) | C091 31D007 100 2 U | C091 31D007 200 2 U |
| | 6 (06-a) | C091 31D006 100 2 U | C091 31D006 200 2 U |
| | 5 (05-b) | C091 31D105 100 2 U | C091 31D105 200 2 U |
| | 5 (05-a) | C091 31D005 100 2 U | C091 31D005 200 2 U |
| | 4 (04-a) | C091 31D004 100 2 U | C091 31D004 200 2 U |
| | 3 (03-a) | C091 31D003 100 2 U | C091 31D003 200 2 U |

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|--|---|--|--|
| Contact arrangement View on mating side Number of contacts (Contact arrangement acc. IEC 61076-2-106) Part number-Ag Part number-Au | Gewicht (errechnet) / Calc WT: 43,442 g Zul. Abw./Tolerances: Prüfmäß / Testdimension Teileindex / Partindexnumber: Bagatelle change: 25.02.2021 MCARLE | ISO 2768-c DIN / ISO 13715 | Maßstab / Scale: 2:1 A3 CUSTOMER DRAWING |
| 07 202000083 27.10.2020 MCARLE 06 202000001 30.04.2020 MCARLE 05 202000001 23.04.2020 MCARLE 04 201700004 19.06.2017 NPFEI | Gez. 08.06.2017 Drawn AZN_NPFEIFFE Status Released Gepr. 11.01.2021 Checked MBERTSCH | Amphenol Tuchel Industrial GmbH | Female cable connector female cable connector M C091 31DXXX X00 2 U Ers. f. l. Replacement for: M-C091 31DXXX X00 2 Rev03 |

¹⁾ Edition 2000-05
²⁾ values in brackets are according to DIN EN 61076-2-106
³⁾ designed acc. pollution degree 2, can be used under pollution degree 3 when the rules of IEC 60644-1 are fulfilled
⁴⁾ under operating conditions >10⁸ 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")

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