

C 091 A Characteristics

| General Characteristics | Standard | Characteristics | | | | | | | | | | |
|---|-----------------------------------|--|---|---|---|---|---|---|---|---|---|---------------------|
| Number of contacts | | 2 ¹⁾ + 3 | 4 | 5 | 5 Stereo | 6 | 7 | 7 | 8 | 12 | 14 | |
| View on termination side of male contact insert | |  |  |  |  |  |  |  |  |  |  | |
| Contact arrangement | DIN EN 61076-2-106 | 03-a ✓ | 04-a ✓ | 05-a ✓ | 05-b ✓ | 06-a ✓ | 07-a ✓ | 07-b ✓ | 08-a ✓ | 12-a ✓ | 14-a ✓ | |
| Contact arrangement | IEC 60130-9 ²⁾ | ✓ | ✓ | | ✓ | ✓ | | ✓ | ✓ | | | |
| Electrical Characteristics | | | | | | | | | | | | |
| Rated voltage ³⁾ | 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 ≈) |
| Rated voltage | UL 1977 | 250 V | | | | | | | | | 60 V | |
| Rated impulse withstand voltage ³⁾ | IEC 60664-1 | 1500 V (840 V) | | | 1200 V (500 V) | | 1500 V (840 V) | | | 1200 V (500 V) | | |
| Pollution degree ³⁾ | IEC 60664-1 | 1 (2) | | | | | | | | | | |
| Installation category | IEC 60664-1 | I | | | | | | | | | | |
| Insulation group | IEC 60664-1 | II, 400 ≤ CTI < 600 | | | | | | | | | | |
| Current rating | IEC 60512-5-2 UL 1977 | 5 A / + 40 °C / + 104 °F please refer also to current derating curves page 59 | | | | | | | | | 3 A / + 40 °C / + 104 °F | |
| Insulation resistance | IEC 60512-3-1 | > 10 ¹⁰ Ω ⁴⁾ | | | | | | | | | | |
| Contact resistance | IEC 60512-2-1 | < 5 m Ω | | | | | | | | | | |
| Climatic Characteristics | | | | | | | | | | | | |
| Climatic category | IEC 60068-1 | 40 / 100 / 56 | | | | | | | | | | |
| Temperature range | IEC 60068-1 | - 40 °C ... + 100 °C / - 40 °F ... + 212 °F | | | | | | | | | | |
| Mechanical Characteristics | | | | | | | | | | | | |
| IP-degree | IEC 60529 | IP 40 | | | | | | | | | | |
| Insertion and withdrawal forces | IEC 60512-13-2 | 25 N 90.oz | 30 N 110.oz | 35 N 125.oz | 50 N 180.oz | 55 N 200.oz | 60 N 220.oz | 50 N 180.oz | | | | |
| Mechanical operation | IEC 60512-9-1 | Silver ≥ 500 mating cycles Gold ≥ 1000 mating cycles | | | | | | | | | | |
| Materials | | | | | | | | | | | | |
| Housing material | | coupling ring brass, strain relief, die cast, nickel plated | | | | | | | | | | |
| Dielectric material | | thermoplastic | | | | | | | | | | |
| Contact plating | | silver plated / gold plated ⁵⁾ | | | | | | | | | | |
| Further Characteristics | | | | | | | | | | | | |
| Termination technique | | solder, crimp | | | | | | | | | | |
| Wire gauge | | solder: ≤ 0,5 mm ² / 20 AWG crimp: 2 - 6 pol (excluding 5S): 0,09 - 1,00 mm ² / 28 - 18 AWG crimp: 5S, 7, 7S and 8-pol.: 0,09 - 0,75 mm ² / 28 - 20 AWG | | | | | | | | | solder: ≤ 0,25 mm ² / 24 AWG crimp: 0,09-0,25 mm ² / 28 - 24 AWG | |
| Flammability | | UL 94 V0 | | | | | | | | | | |
| Locking system | IEC 60130-9 DIN EN 61076-2-106 | metal screw coupling; tightening torque 0,7 Nm | | | | | | | | | | |

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

¹⁾ 2 contact version: contact loading 1+3

²⁾ Edition 2000-05

³⁾ values in brackets are according to DIN EN 61076-2-106

⁴⁾ under operating conditions >10⁸ Ω

⁵⁾ 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.

IEC 60 664 ≙ DIN VDE 0110; IEC 60 512-x ≙ DIN EN 60 512-x; IEC 60 130-9 ≙ DIN EN 60 130-9; IEC 61076-2-106 ≙ DIN EN 61076-2-106