

Amphenol

Amphenol-Tuchel Electronics GmbH

C 091 A/B/D Series Circular Connectors



C 091 A



Main Features

- Metal locking ring; screw locking according to DIN EN 60130-9 / IEC 60130-9
- Number of contacts: 2 – 8, 12 and 14 contacts
- Internal strain relief
- Good shielding effectiveness when mated and locked
- Male and female cable connectors
 - Straight or right angled
 - Solder connection: 2 – 8, 12 and 14 contacts
 - Crimp connection: 2 – 8 contacts
 - With cable sleeve for max. cable diameter 6 mm, or
 - With cable glands for cable diameter 4 – 6 mm or 6 – 8 mm
- Male and female receptacles
 - Panel mount types for front or rear panel mounting
 - Pcb mount types, straight or right angled
 - With dip solder contacts of various contact lengths
 - Solder connection: 2 – 8, 12 and 14 contacts
 - Crimp connection: 2 – 8 contacts
- Coloured back shells optional
- UL registered under file number E 63 093 UL













UNDERWRITERS LABORATORIES INC.

¹⁾ In general approvals refer to representative versions of the connector series. Test report upon request.

C 091 A

Characteristics

| General Characteristics | Standard | Characteristics | | | | | | | | | | |
|---|--------------------------------------|--|---|---|---|--|---|---|---|---|---|--|
| Number of contacts | | 2*+3 | 4 | 5 | 5 Stereo | 6 | 7 | 7 | 8 | 12 | 14 | |
| View on termination side of male contact insert | |  |  |  |  |  |  |  |  |  |  | |
| Contact arrangement acc. to DIN | | 41 524 | – | – | 41 524 | 45 322 | – | 45 329 | 45 326 | – | – | |
| Contact arrangement acc. to IEC | | 60130-9 | 60120-9 | – | 60130-9 | 60130-9 | – | 60130-9 | 60130-9 | – | – | |
| Electrical Characteristics | | | | | | | | | | | | |
| Rated voltage | IEC 60664-1 | 300 V = | | | 100 V = | 300 V = | | 100 V = | | 150 V = | | |
| Rated voltage | UL 1977 | 250 V | | | | | | | | | 60 V | |
| Rated impulse withstand voltage | IEC 60664-1 | 1500 V | | | 1200 V | 1500 V | | 1200 V | | | | |
| Pollution degree | IEC 60664-1 | 1 | | | | | | | | | | |
| Installation category | IEC 60664-1 | I | | | | | | | | | | |
| Insulation group | IEC 60664-1 | II, 400 ≤ CTI < 600 | | | | | | | | | | |
| Current rating | IEC 60512-5-2 Test 5 b UL 1977 | 5 A / + 40 °C / + 104 °F please refer also to current derating curves page 45 | | | | | | | | | 3 A / + 40 °C / + 104 °F | |
| Insulation resistance | IEC 60512-3-1 Test 3 a | > 10 ¹⁰ Ω | | | | | | | | | | |
| Contact resistance | IEC 60512-2-1 Test 2 a | < 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 Test 13 b | 25 N 90.oz | 30 N 110.oz | 35 N 125.oz | 50 N 180.oz | 55 N 200.oz | 60 N 220.oz | 60 N 220.oz | 50 N 180.oz | | | |
| Mechanical operation | IEC 60512 Test 9 a | 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 ** | | | | | | | | | | |
| Further Characteristics | | | | | | | | | | | | |
| Termination technique | | solder, crimp | | | | | | | | | solder | |
| 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 | | | | | | | | | ≤ 0,25 mm ² /24 AWG | |
| Flammability | | UL 94 V0 | | | | | | | | | | |
| Locking system | IEC 60130-9 | 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.

*** 2 contact version: contact loading 1+3**

**** 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

C 091 A

Female cable connector,
screw locking,
straight



Cable diameter 4-6 mm



Cable diameter 6-8 mm



Cable diameter 4-6 mm



Cable diameter 4-6 mm

| Description | Drawing | No. of cont. | Part Number solder termination | | Part Number Crimp termination ¹⁾ | | |
|---|------------|---|--------------------------------|------------------------------------|---|------------|--------------------------|
| | | | Contact plating silver | Contact plating gold ²⁾ | | | |
| Female cable connector, for cable diameter 4-6 mm, termination: solder or crimp, contact plating: silver or gold. | | 2 | T 3201 001 | T 3201 018 | – | | |
| | | 3 ³⁾ | T 3261 001 | T 3261 018 | T 3261 551 | | |
| | | 4 ³⁾ | T 3301 001 | T 3301 018 | T 3301 551 | | |
| | | 5 | T 3361 001 | T 3361 018 | T 3361 551 | | |
| | | 5 S ³⁾ | T 3361 010 | T 3357 018 ⁴⁾ | T 3357 551 | | |
| | | 6 ³⁾ | T 3401 001 | T 3401 018 | T 3401 551 | | |
| | | 7 | T 3476 001 | T 3476 018 | T 3476 551 | | |
| | | 7 ³⁾ | T 3485 001 | T 3485 018 | T 3485 551 | | |
| | | 8 ³⁾ | T 3505 001 | T 3505 018 | T 3505 551 | | |
| | | 12 | T 3636 001 | T 3636 000 | – | | |
| | | 14 | T 3651 001 | T 3651 000 | – | | |
| | | Female cable connector, for cable diameter 6-8 mm, termination: solder or crimp, with clamping ring, contact plating: silver or gold. | | 2 | T 3201 002 | T 3201 028 | – |
| | | | | 3 ³⁾ | T 3261 002 | T 3261 028 | T 3261 552 ⁴⁾ |
| | | | | 4 ³⁾ | T 3301 002 | T 3301 028 | T 3301 552 ⁴⁾ |
| 5 | T 3361 002 | | | T 3361 028 | T 3361 552 | | |
| 5 S ³⁾ | T 3361 020 | | | T 3357 028 ⁴⁾ | T 3357 552 ⁴⁾ | | |
| 6 ³⁾ | T 3401 002 | | | T 3401 028 | T 3401 552 ⁴⁾ | | |
| 7 | T 3476 002 | | | T 3476 028 | T 3476 552 | | |
| 7 ³⁾ | T 3485 002 | | | T 3485 028 | T 3485 552 ⁴⁾ | | |
| 8 ³⁾ | T 3505 002 | | | T 3505 028 | T 3505 552 | | |
| 12 | – | | | T 3636 002 | – | | |
| 14 | – | | | T 3651 002 | – | | |
| Female cable connector, for cable diameter 4-6 mm, termination: solder or crimp, contact plating: silver or gold. | | | | 2 | – | – | – |
| | | | | 3 ³⁾ | T 3261 004 | T 3261 048 | T 3261 554 ⁴⁾ |
| | | | | 4 ³⁾ | T 3301 004 | T 3301 048 | T 3301 554 |
| | | 5 | T 3361 004 | T 3361 048 ⁴⁾ | T 3361 554 ⁴⁾ | | |
| | | 5 S ³⁾ | T 3357 004 | T 3357 048 ⁴⁾ | T 3357 554 | | |
| | | 6 ³⁾ | T 3401 004 | T 3401 048 | T 3401 554 ⁴⁾ | | |
| | | 7 | T 3476 004 | T 3476 048 | T 3476 554 ⁴⁾ | | |
| | | 7 ³⁾ | T 3485 004 | T 3485 048 | T 3485 554 ⁴⁾ | | |
| | | 8 ³⁾ | T 3505 004 | T 3505 048 | T 3505 554 | | |
| | | 12 | – | T 3636 004 | – | | |
| | | 14 | – | T 3651 004 | – | | |
| | | Female cable connector, for cable diameter 4-6 mm, solder termination, plastic coated coupling ring, contact plating: silver. | | 2 | T 3201 013 | – | – |
| | | | | 3 ³⁾ | T 3261 013 | – | – |
| | | | | 4 ³⁾ | T 3301 013 | – | – |
| 5 | T 3361 013 | | | – | – | | |
| 5 S ³⁾ | T 3361 130 | | | – | – | | |
| 6 ³⁾ | T 3401 013 | | | – | – | | |
| 7 | T 3476 013 | | | T 3476 038 | – | | |
| 7 ³⁾ | T 3485 013 | | | – | – | | |
| 8 ³⁾ | T 3505 013 | | | – | – | | |
| 12 | – | | | – | – | | |
| 14 | – | | | – | – | | |

¹⁾ Please order crimp contacts separately, see page 43

²⁾ See remark page 6

³⁾ Contact order for DIN EN 60 130-9

⁴⁾ Available upon request.