



M12 Connector

TE Internal #: T4113012031-000

Standard Circular Connectors, Wire-to-Wire, 3 Position, Sealable, Wire & Cable, Signal, Nickel, Brass, A Polarization Code, M12 Connector

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Connectors > Circular Connectors > Standard Circular Connectors



Connector System: **Wire-to-Wire**  
Number of Positions: **3**  
Sealable: **Yes**  
Connector & Contact Terminates To: **Wire & Cable**  
Contact Current Rating (Max): **4 A**

Features

Product Type Features

|                                   |                      |
|-----------------------------------|----------------------|
| Prewired                          | No                   |
| Product Type                      | Connector            |
| Accessory Color                   | Black                |
| Assembly Type                     | Electrical Connector |
| Connector System                  | Wire-to-Wire         |
| Sealable                          | Yes                  |
| Connector & Contact Terminates To | Wire & Cable         |
| Circular Connector Type           | Plug                 |
| Shell Type                        | Metal                |

Configuration Features

|                                       |      |
|---------------------------------------|------|
| Keying & Polarized Position Locations | A    |
| Factory Installed Backshell           | With |
| Keying                                | A    |
| Number of Positions                   | 3    |



|                            |     |
|----------------------------|-----|
| Number of Power Positions  | 0   |
| Number of Signal Positions | 3   |
| Contacts Preloaded         | Yes |

Electrical Characteristics

|                   |          |
|-------------------|----------|
| Operating Voltage | 250 VAC  |
| Voltage           | 250 Vrms |

Body Features

|                                             |                   |
|---------------------------------------------|-------------------|
| Peripheral Seal Material                    | Silicone          |
| Environmental Protection                    | IP67              |
| O-Ring Material                             | Silicone          |
| Environmental Protection Type               | Elastomer Sealed  |
| Shell Plating Material                      | Nickel            |
| Shell Base Material                         | Brass             |
| Circular Connector Insulation Material Type | Polyamide 66 GF25 |

Contact Features

|                                 |     |
|---------------------------------|-----|
| Contact Current Rating (Max)    | 4 A |
| Reverse Gender                  | No  |
| Circular Connector Contact Type | Pin |

Mechanical Attachment

|                       |                   |
|-----------------------|-------------------|
| Mating Retention Type | Threaded Coupling |
| Mating Alignment      | With              |
| Polarization Code     | A                 |
| Mating Alignment Type | Keyed             |

Housing Features

|                               |    |
|-------------------------------|----|
| Circular Connector Shell Size | 20 |
|-------------------------------|----|

Dimensions

|           |              |
|-----------|--------------|
| Wire Size | .82 – .2 mm² |
|-----------|--------------|

Usage Conditions

|                             |                           |
|-----------------------------|---------------------------|
| IP Dust Sealing Level       | 6                         |
| IP Water Sealing Level      | IP67                      |
| Operating Temperature Range | -40 – 85 °C[-40 – 185 °F] |

Operation/Application



|                     |            |
|---------------------|------------|
| Durability Rating   | 100 Cycles |
| Circuit Application | Signal     |
| Shielded            | Yes        |

Industry Standards

|                        |         |
|------------------------|---------|
| UL Flammability Rating | UL 94HB |
|------------------------|---------|

Other

|                            |     |
|----------------------------|-----|
| Position Locations Omitted | 0   |
| Field Serviceable          | Yes |

Product Compliance

For compliance documentation, visit the product page on TE.com>

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EU RoHS Directive 2011/65/EU                  | Compliant with Exemptions                                                                                                                                                                                                                                                                                                                                                                                                    |
| EU ELV Directive 2000/53/EC                   | Compliant with Exemptions                                                                                                                                                                                                                                                                                                                                                                                                    |
| China RoHS 2 Directive MIIT Order No 32, 2016 | Restricted Materials Above Threshold                                                                                                                                                                                                                                                                                                                                                                                         |
| EU REACH Regulation (EC) No. 1907/2006        | Current ECHA Candidate List: JUNE 2022 (224)<br>Candidate List Declared Against: JAN 2020 (205)<br>SVHC > Threshold:<br>Pb (4% in Alloy in Copper)<br><b>Article Safe Usage Statements:</b><br>Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Recycle if possible and dispose of the article by following all applicable governmental regulations relevant to your geographic location. |
| Halogen Content                               | Not Yet Reviewed for halogen content                                                                                                                                                                                                                                                                                                                                                                                         |
| Solder Process Capability                     | Not applicable for solder process capability                                                                                                                                                                                                                                                                                                                                                                                 |

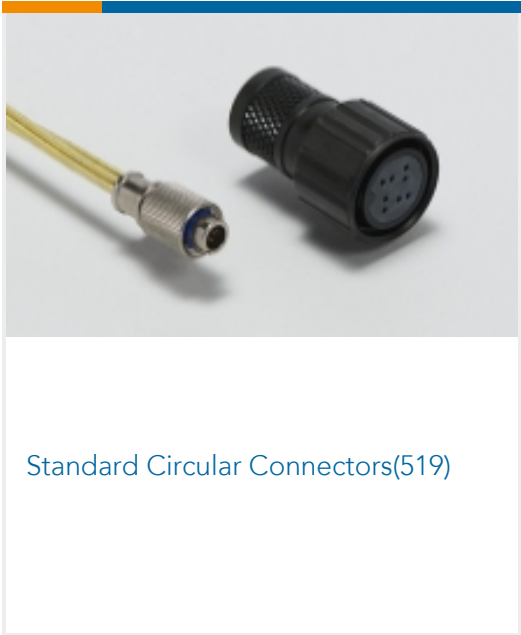
Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) ‘Guidance on requirements for substances in articles’ posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

Compatible Parts



Also in the Series | M12 Connector



Documents

Product Drawings

M12 M, 3P GOLD A\_CODE RA SHIELDED PG9

English

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_T4113012031-000\_A.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_T4113012031-000\_A.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_T4113012031-000\_A.3d\_stp.zip

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages

M8 / M12 Connector System Catalog

English

Product Specifications

Application Specification

English

