



M12 Connector

TE Internal #: 1-2823448-1  
Standard Circular Connectors, Cable-to-Cable, 8 Position, Sealable,  
Wire & Cable, Signal, Cable Mount (Free-Hanging), Reverse  
Gender, M12 Connector

[View on TE.com >](#)

Connectors > Circular Connectors > Standard Circular Connectors > M12 Straight Crimped Strain Relief



Connector System: **Cable-to-Cable**  
Connector Mounting Type: **Cable Mount (Free-Hanging)**  
Number of Positions: **8**  
Sealable: **Yes**  
Connector & Contact Terminates To: **Wire & Cable**

[All M12 Straight Crimped Strain Relief \(53\)](#)

Features

Product Type Features

|                                   |                      |
|-----------------------------------|----------------------|
| Product Type                      | Connector Assembly   |
| Accessory Color                   | Black                |
| Assembly Requirement              | Factory Assembled    |
| Assembly Type                     | Electrical Connector |
| Circular Connector Shell Type     | All Plastic          |
| Connector Product Type            | Connector Assembly   |
| Connector System                  | Cable-to-Cable       |
| Sealable                          | Yes                  |
| Connector & Contact Terminates To | Wire & Cable         |
| Circular Connector Type           | Receptacle           |
| Shell Type                        | Plastic              |

Configuration Features

|                     |   |
|---------------------|---|
| Number of Positions | 8 |
|---------------------|---|



|                            |    |
|----------------------------|----|
| Number of Power Positions  | 0  |
| Number of Signal Positions | 8  |
| Contacts Preloaded         | No |

Electrical Characteristics

|                   |        |
|-------------------|--------|
| Operating Voltage | 30 VDC |
|-------------------|--------|

Signal Characteristics

|           |        |
|-----------|--------|
| Data Rate | 1 Gb/s |
|-----------|--------|

Body Features

|                                             |                               |
|---------------------------------------------|-------------------------------|
| Environmental Protection                    | Yes                           |
| Weight                                      | 25 g[.0552 lb]                |
| Environmental Protection Type               | Elastomer Sealed              |
| Shell Plating Material                      | Unplated                      |
| Shell Base Material                         | Plastic                       |
| Circular Connector Insulation Material Type | Low Fire Hazard Thermoplastic |
| Hermetically Sealed                         | Yes                           |

Contact Features

|                                 |        |
|---------------------------------|--------|
| Contact Current Rating (Max)    | 2 A    |
| Reverse Gender                  | Yes    |
| Circular Connector Contact Type | Socket |

Mechanical Attachment

|                         |                            |
|-------------------------|----------------------------|
| Connector Mounting Type | Cable Mount (Free-Hanging) |
| Polarization Code       | A                          |
| Mating Alignment Type   | Keyed                      |

Housing Features

|                               |    |
|-------------------------------|----|
| Circular Connector Shell Size | 16 |
|-------------------------------|----|

Dimensions

|                                      |        |
|--------------------------------------|--------|
| Compatible Insulation Diameter Range | 8.4 mm |
|--------------------------------------|--------|

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   | 250 Cycles |
| Circuit Application | Signal     |
| Shielded            | Yes        |

Industry Standards

|                        |          |
|------------------------|----------|
| UL Flammability Rating | UL 94V-0 |
|------------------------|----------|

Packaging Features

|                    |   |
|--------------------|---|
| Packaging Quantity | 1 |
|--------------------|---|

Other

|                   |     |
|-------------------|-----|
| Field Serviceable | Yes |
|-------------------|-----|

Product Compliance

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

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EU RoHS Directive 2011/65/EU                  | Not Compliant                                                                                                                                                                                                                                                                                                                                                                                                              |
| EU ELV Directive 2000/53/EC                   | Compliant                                                                                                                                                                                                                                                                                                                                                                                                                  |
| China RoHS 2 Directive MIIT Order No 32, 2016 | Restricted Materials Above Threshold                                                                                                                                                                                                                                                                                                                                                                                       |
| EU REACH Regulation (EC) No. 1907/2006        | Current ECHA Candidate List: JAN 2024 (240)<br>Candidate List Declared Against: JAN 2024 (240)<br>SVHC > Threshold:<br>Pb (3% in Component Part)<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                               | Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free                                                                                                                                                                                                                                                                                                                                        |
| Solder Process Capability                     | Not reviewed 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



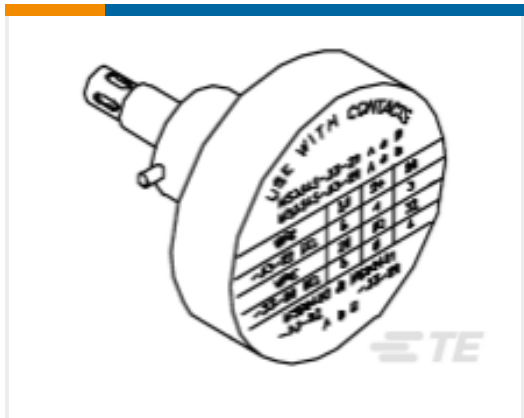
TE Part # 1-2823557-1  
CRIMP TOOL FOR CRIMP FLANGE /SLEEVE



TE Part # 1-2823560-1  
ASSEMBLY TOOL HANDLE FOR CRIMP FLANGE



TE Part # 1-2823561-1  
UNIVERSAL INSERT (ALL M12 CODES)



TE Part # CAT-M1-M1  
M12 Assembly Tooling



TE Part # CAT-R131-IN722  
Crimp Insert for Use with 1-2823557-1



TE Part # 601966-1  
CRIMPING TOOL M22520/2-01



TE Part # 601967-1  
CRIMPING TOOL M22520/1-01

Also in the Series | M12 Connector



Connector Caps & Covers(5)



Connector Hardware(12)



Connector Seals & Cavity Plugs(4)



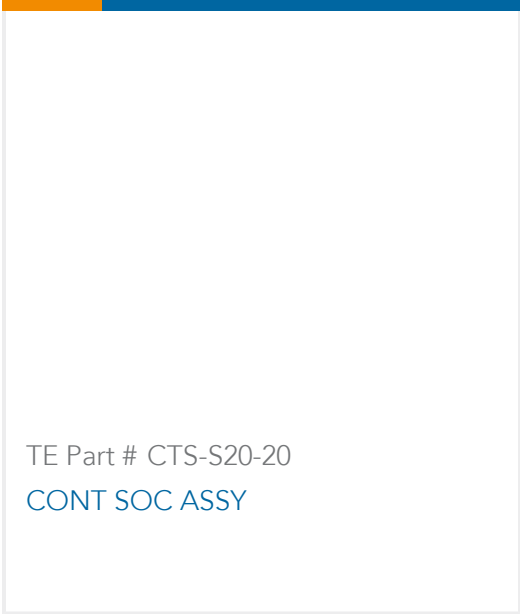
M8/M12 Cable Assemblies(230)



Standard Circular Connectors(803)

Customers Also Bought



|                                                                                                                                                          |                                                                                                                                                                     |                                                                                                                                        |                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>TE Part # 1-2314097-2<br/>M12 CRIMP CONTACT PIN 0.8MM<br/>AWG26</p> |  <p>TE Part # D369-P33-NP0<br/>369 3 WAY PLUG, NO CONTACTS,<br/>PIN</p>           |  <p>TE Part # 130230<br/>SOLIS R 12-10 6MM</p>      |  <p>TE Part # 66399-2<br/>III+ SKT,24-20,30AU&gt;10,LP</p>                    |
|  <p>TE Part # YDTS26W17-99PNV001<br/>PLUG ASSY</p>                     |  <p>TE Part # 1-2823447-6<br/>M12 A-M-8 CR ST CAT 7 RADOX 8.2<br/>MM,H&amp;S</p> |  <p>TE Part # NB12744001<br/>RNF-100-1/2-BK-SP</p> |  <p>TE Part # 5-1618398-0<br/>EV100AAANA=CONTACTOR, SPST-<br/>NO 9-36Vdc</p> |
|  <p>TE Part # CTS-S20-20<br/>CONT SOC ASSY</p>                        |  <p>TE Part # 866259N005<br/>S02-08-RCS453</p>                                  |                                                                                                                                        |                                                                                                                                                                  |

Documents

Product Drawings  
M12 A-F-8 CRIMP ST,CAT7 RADOX8.2MM,H&S  
English

CAD Files  
3D PDF  
3D  
Customer View Model  
ENG\_CVM\_CVM\_1-2823448-1\_A.2d\_dxf.zip  
English  
Customer View Model  
ENG\_CVM\_CVM\_1-2823448-1\_A.3d\_igs.zip  
English  
Customer View Model  
ENG\_CVM\_CVM\_1-2823448-1\_A.3d\_stp.zip  
English

By downloading the CAD file I accept and agree to the Terms and Conditions of use.

Datasheets & Catalog Pages



M12 RAIL CONNECTOR SERIES

English

M12 Rail Straight Connector

English

Product Specifications

Application Specification

English