



M12 Connector

TE Internal #: T4145035081-002

8 Position Circular Connector, Wire-to-Panel, Sealable, Wire & Cable, Signal, Panel Mount & Board Mount, Reverse Gender, Nickel, M12 Connector

[View on TE.com >](#)

Connectors > Circular Connectors > Standard Circular Connectors



Connector System: **Wire-to-Panel**

Connector Mounting Type: **Panel Mount & Board Mount**

Number of Positions: **8**

Sealable: **Yes**

Connector & Contact Terminates To: **Wire & Cable**

Features

Product Type Features

Assembly Requirement	Factory Assembled
Circular Connector Shell Type	Metal-Shell
Connector Product Type	Connector Assembly
Assembly Type	Electrical Connector
Connector System	Wire-to-Panel
Sealable	Yes
Connector & Contact Terminates To	Wire & Cable
Circular Connector Type	Receptacle
Shell Type	Metal

Configuration Features

Keying & Polarized Position Locations	0
Number of Positions	8
Number of Power Positions	0
Number of Signal Positions	8



Contacts Preloaded	Yes
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Electrical Characteristics

Operating Voltage	30 VDC
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Body Features

Product Weight	11.98 g[.416 oz]
O-Ring Material	Silicone
Environmental Protection	IP67
Environmental Protection Type	Elastomer Sealed
Primary Product Color	Black
Peripheral Seal Material	Silicone
Shell Plating Material	Nickel
Shell Base Material	Copper Alloy
Circular Connector Insulation Material Type	Polyamide GF
Hermetically Sealed	Yes

Contact Features

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

Termination Features

Termination Method to PCB	Through Hole - Solder
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Mechanical Attachment

Mating Retention Type	Threaded Coupling
PCB Mount Retention	With
Panel Mount Feature Type	Screw Nut
Mating Alignment	With
Connector Mounting Type	Panel Mount & Board Mount
Polarization Code	A
Mating Alignment Type	Keyed

Housing Features

Circular Connector Shell Size	18
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Dimensions

Panel Thickness (Recommended)	2 – 3 mm[.079 – .118 in]
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Usage Conditions

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

Operation/Application

Circuit Application	Signal
Shielded	No

Industry Standards

UL Flammability Rating	UL 94HB
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Packaging Features

Packaging Quantity	120
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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: JAN 2025 (247) Candidate List Declared Against: JAN 2025 (247) SVHC > Threshold: Pb (3.7% in Pb-Alloy in Copper) Article Safe Usage Statements: 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 Low Halogen - contains Br or Cl > 900 ppm.
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>

Also in the Series

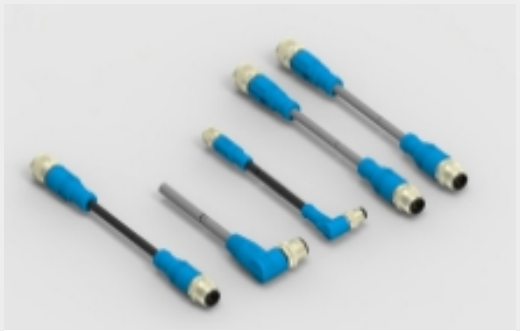
M12 Connector



Connector Hardware(11)



Connector Seals & Cavity Plugs(4)



M8/M12 Cable Assemblies(230)

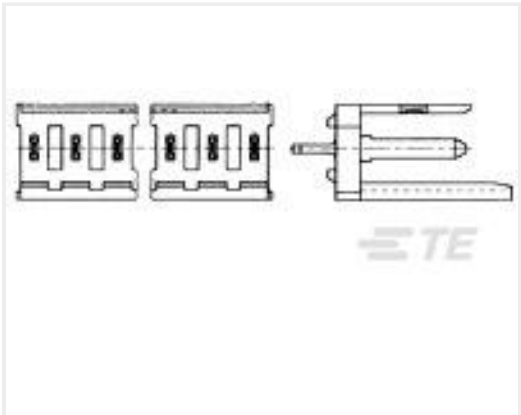


Standard Circular Connectors(792)

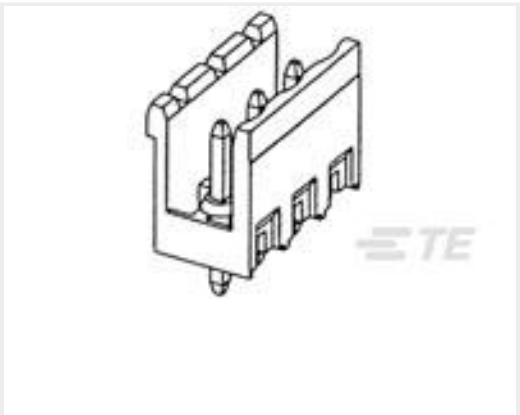
Customers Also Bought



TE Part #T4144035081-000
M12 RA PCB CONN. Male 8P SHIELD



TE Part #280609-2
2P MOD 1 SHROUDED HEADER, ST, 0.4 Au



TE Part #282825-6
TERMI-BLOK HEADER,ASSY90 6P.5,



TE Part #1-1625971-6
HSA25 1K5 5%



TE Part #2-1761607-1
IDC LOW PRO HDR 6P RA LAT B



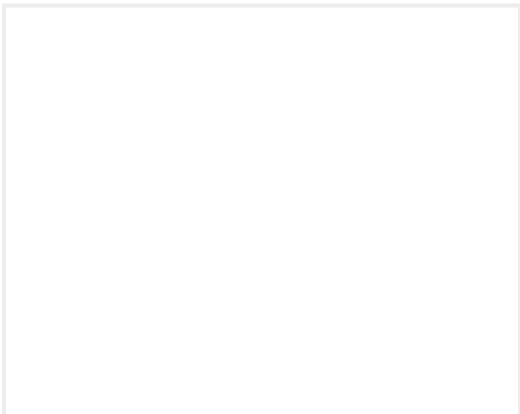
TE Part #1-2176323-5
SMV 2W 1M5 5%



TE Part #6-2176367-3
RQ 0603 20K5 0.1% 10PPM 1K RL



TE Part #7-2176367-1
RQ 0603 24K9 0.1% 10PPM 1K RL



TE Part #CS3114-005
RSTI-CC-68SA2410



TE Part #2-2176323-1
SMV 2W 4M7 5%

Documents

Product Drawings

M12 RA PCB CONN. Female 8 P SHIELD

English



CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_T4145035081-002_A.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_T4145035081-002_A.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_T4145035081-002_A.3d_stp.zip

English

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

Product Specifications

Application Specification

English