



M12 Connector

TE Internal #: 5-2172078-2

8 Position Circular Connector, Wire-to-Panel, Sealable, Wire & Cable, Signal, Panel Mount, Reverse Gender, Nickel, Zinc Alloy, A Code, M12 Connector

[View on TE.com >](#)

Connectors > Circular Connectors > Standard Circular Connectors



Number of Positions: 8

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

Sealable: **Yes**

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

Contact Current Rating (Max): **2 A**

Features

Product Type Features

Assembly Requirement	Factory Assembled
Circular Connector Shell Type	Metal-Shell
Connector Product Type	Connector Assembly
Assembly Type	Electrical Connector
Prewired	No
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	A
Factory Installed Backshell	With
Number of Positions	8



Number of Power Positions	0
Number of Signal Positions	8
Contacts Preloaded	Yes

Electrical Characteristics

EMI & RFI Protection & Suppression Type	Shielding
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Body Features

O-Ring Material	Silicone Rubber
Environmental Protection	IP67
Environmental Protection Type	Sealed
Primary Product Color	Metalized Silver
Shell Plating Material	Nickel
Shell Base Material	Zinc Alloy
Circular Connector Insulation Material Type	Polyamide
Hermetically Sealed	Yes

Contact Features

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

Termination Features

Termination Method to Wire & Cable	Solder
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Mechanical Attachment

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

Housing Features

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Circular Connector Shell Size	18
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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

Compatible With Approved Standards Products	IEC
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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	Not Yet Reviewed
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: JUNE 2024 (241) SVHC > Threshold: Pb (3% in Component Part) 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	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 # T4111012081-000
M12 M, 8P GOLD A_CODE S
SHIELDED PG9

Also in the Series

M12 Connector

Connector Hardware(11)

Connector Seals & Cavity Plugs(4)

M8/M12 Cable Assemblies(230)

Standard Circular Connectors(793)

Customers Also Bought

TE Part #CAT-AM71-CH8172
AMP SUPERSEAL 1.5MM,
CONNECTOR HOUSING

TE Part #281934-2
SINGLE WIRE SEAL

TE Part #114017-ZZ
SEALING PLUG, SIZE 12/16, WHT

TE Part #CAT-D48-ST273
DEUTSCH Solid Contacts

TE Part #CAT-D487-W416
Wedgelocks: DEUTSCH DT

TE Part #DT06-2S
PLG, 2P, GRY, N

TE Part #DT04-2P
REC, 2P, GRY, N

Documents

Product Drawings

M12.FMLE.PNLREAR.ACODE.8P.PCBSTD.SRT.SHL

English



CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_5-2172078-2_A.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_5-2172078-2_A.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_5-2172078-2_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

M8 / M12 Connector System Catalog

Japanese

Product Specifications

Application Specification

English