

1SET310509R0000 ✓ ACTIVE

ENTRELEC | M12 Connector

TE Internal #: 1SET310509R0000

Standard Circular Connectors, Wire-to-Wire, 4 Position, Sealable, Wire & Cable, Signal, Nickel, Copper Alloy, D Polarization Code, M12 Connector

[View on TE.com >](#)



Connectors > Circular Connectors > Standard Circular Connectors



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

Number of Positions: **4**

Sealable: **Yes**

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

Contact Current Rating (Max): **4 A**

Features

Product Type Features

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

Configuration Features

Keying & Polarized Position Locations	D
Factory Installed Backshell	With
Keying	D
Number of Positions	4



Number of Power Positions	0
Number of Signal Positions	4
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	Copper Alloy
Circular Connector Insulation Material Type	Polyamide 66 GF25

Contact Features

Contact Current Rating (Max)	4 A
Reverse Gender	No
Circular Connector Contact Type	Socket

Mechanical Attachment

Mating Retention Type	Threaded Coupling
Mating Alignment	With
Polarization Code	D
Mating Alignment Type	Keyed

Housing Features

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

Dimensions

Wire Size	.82 – .2 mm ²
-----------	--------------------------

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
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) Candidate List Declared Against: JUNE 2022 (224) SVHC > Threshold: Pb (4% 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	BFR/CFR/PVC Free, but Br/Cl >900 ppm in other sources.
Solder Process Capability	Not reviewed for solder process capability

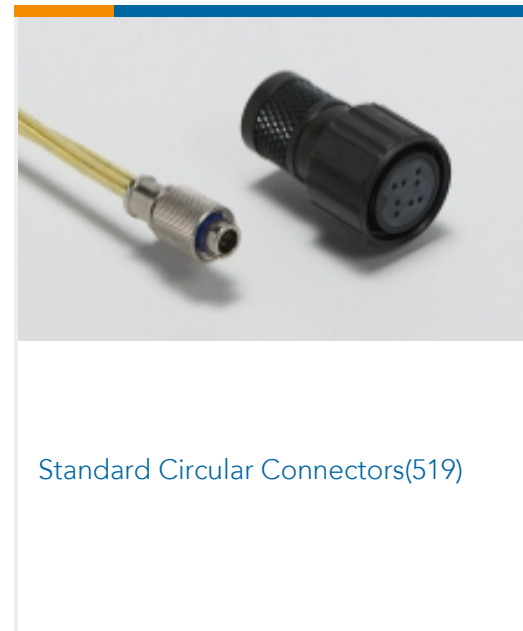
Product Compliance Disclaimer

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



Also in the Series | M12 Connector



Documents

Product Drawings

M12D-FR-4CON-PG7-SHU

English

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_1SET310509R0000_A.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_1SET310509R0000_A.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_1SET310509R0000_A.3d_stp.zip

English

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

Datasheets & Catalog Pages

Infographic - entrelec ews-linecard

English

Catalog - ENTRELEC-M8-M12-RJ45

English

Product Specifications

1SET310509R0000

Standard Circular Connectors, Wire-to-Wire, 4 Position, Sealable, Wire & Cable,
Signal, Nickel, Copper Alloy, D Polarization Code, M12 Connector



Application Specification

English