225301-E ✔ ACTIVE

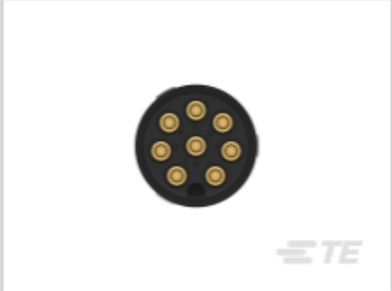
ERNI | M12 Connector

TE Internal #: 225301-E

Cable-to-Board, Circular Connector Receptacle, 8 Position, Printed Circuit Board, Power, Signal & High Speed Data, Board Mount, Code A, M12 Connector

View on TE.com >

Connectors > Circular Connectors > Standard Circular Connectors



Connector System: **Cable-to-Board**

Connector Mounting Type: **Board Mount**

Number of Positions: **8**

Sealable: **No**

Connector & Contact Terminates To: **Printed Circuit Board**

Features

Product Type Features

Connector Product Type	Connector Assembly
Connector System	Cable-to-Board
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board
Circular Connector Type	Circular Connector Receptacle

Configuration Features

Number of Positions	8
Contacts Preloaded	Yes

Contact Features

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

Termination Features

Termination Method to PCB	Through Hole - Solder

Mechanical Attachment

Connector Mounting Type	Board Mount
Polarization Code	A
Mating Alignment Type	Coding Hole
Mating Retention	Without

Usage Conditions

IP Water Sealing Level	IP67
Operating Temperature Range	-25 – 85 °C[-13 – 185 °F]

Operation/Application

Durability Rating	100 Cycles
Circuit Application	Power, Signal & High Speed Data
Shielded	Yes

Industry Standards

UL Flammability Rating	UL 94V-0

Product Compliance

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

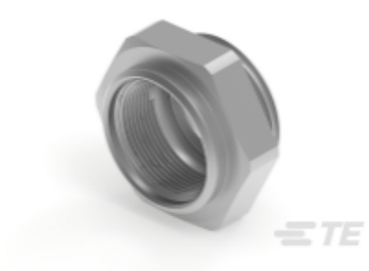
EU RoHS Directive 2011/65/EU	Compliant with Exemptions
EU ELV Directive 2000/53/EC	Compliant with Exemptions
China RoHS 2 Directive MIIT Order No 32, 2016	有害物质含量超出标准 Restricted Substance(s) Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: FEB 2026 (253) Candidate List Declared Against: JUNE 2025 (250) SVHC > Threshold: Pb (3.5% 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 < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
Solder Process Capability	Not reviewed for solder process capability

Product Compliance Disclaimer

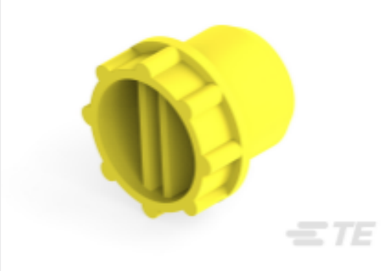
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as

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 Regulations, TE's information on SVHC in articles for this part number is still based on the European Chemical Agency (ECHA) 'Guidance on requirements for substances in articles'(Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of 'complex object', the threshold for a SVHC must be applied to both the product as a whole and simultaneously to each of the articles forming part of its composition. TE has evaluated this ruling based on the new ECHA "Guidance on requirements for substances in articles" (June 2017, version 4.0) and will be updating its statements accordingly.

Compatible Parts



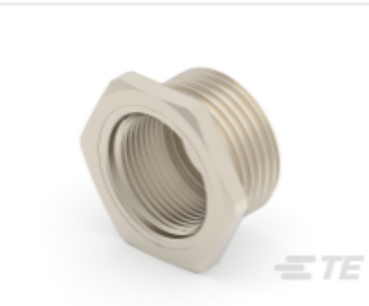
TE Part # 394828-E
M12 METAL SHELL, FEMALE, VERT, 9MM, C6A



TE Part # 374343-E
CCA PC M12 * F * * * * * * * * J 3 22553

TE Part # 225457-E
M12 FEMALE, A CODE,RA, 5P THR REAR MOUNT

TE Part # 225300-E
M12 FEMALE, A CODE,RA, 8P THR REAR MOUNT



TE Part # 394847-E
M12 METAL SHELL, FEMALE, VERT, 13MM, C6A

TE Part # T4151120008-001
RPC-M12-MS-8CON-PUR-0.5

TE Part # 225458-E
M12 FEMALE, A CODE,RA, 4P THR REAR MOUNT

TE Part # 225615-E
M12 FEMALE, A CODE,RA, 8P THR REAR MOUNT

TE Part # 225616-E
M12 FEMALE, A CODE,RA, 8P THR REAR MOUNT

TE Part # CAT-C73765-M1E
M12 Field Installable Unshielded

Also in the Series | M12 Connector

Connector Hardware(11)

Connector Seals & Cavity Plugs(4)

Standard Circular Connectors(633)

Customers Also Bought

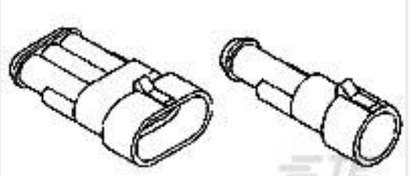
TE Part #225260-E
M12 MALE, B CODE,RA, 5P THR REAR MOUNT

TE Part #T4132012041-000
M12,FRONT MOUNT,MALE,A,4P, SOLDER WIRE

TE Part #235165-E
M12 MALE, A CODE, RA, 5P THR REAR MOUNT

TE Part #164531-4
9P.HDP20 REC.ASSY.

TE Part #166291-1
20DF COSI SOCKET



TE Part #282105-1
AMP SUPERSEAL 1.5 SERIES 3P CA

TE Part #CAT-AM71-T273
AMP SUPERSEAL 1.5MM, RECEPTACLE AND TAB

TE Part #316838-1
040-3 REC CONTACT M PRE-TIN

TE Part #2-1102631-5
HIP-K.6/16.STS.1.16

Documents

Product Drawings

M12 FEMALE, A CODE,RA, 8P THR REAR MOUNT

English

CAD Files

Customer View Model

ENG_CVM_CVM_225301-E_1.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_225301-E_1.3d_stp.zip

English

Customer View Model

ENG_CVM_CVM_225301-E_1.3d_igs.zip

English

3D PDF

3D

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

Datasheets & Catalog Pages

ERNI M8M12 Circular Connectors

English

ERNI M8M12 Circular Connectors

German

Product Specifications

Application Specification

English

Agency Approvals

UL

English