

643228-1 ✓ ACTIVE

MATE-N-LOK | Universal MATE-N-LOK

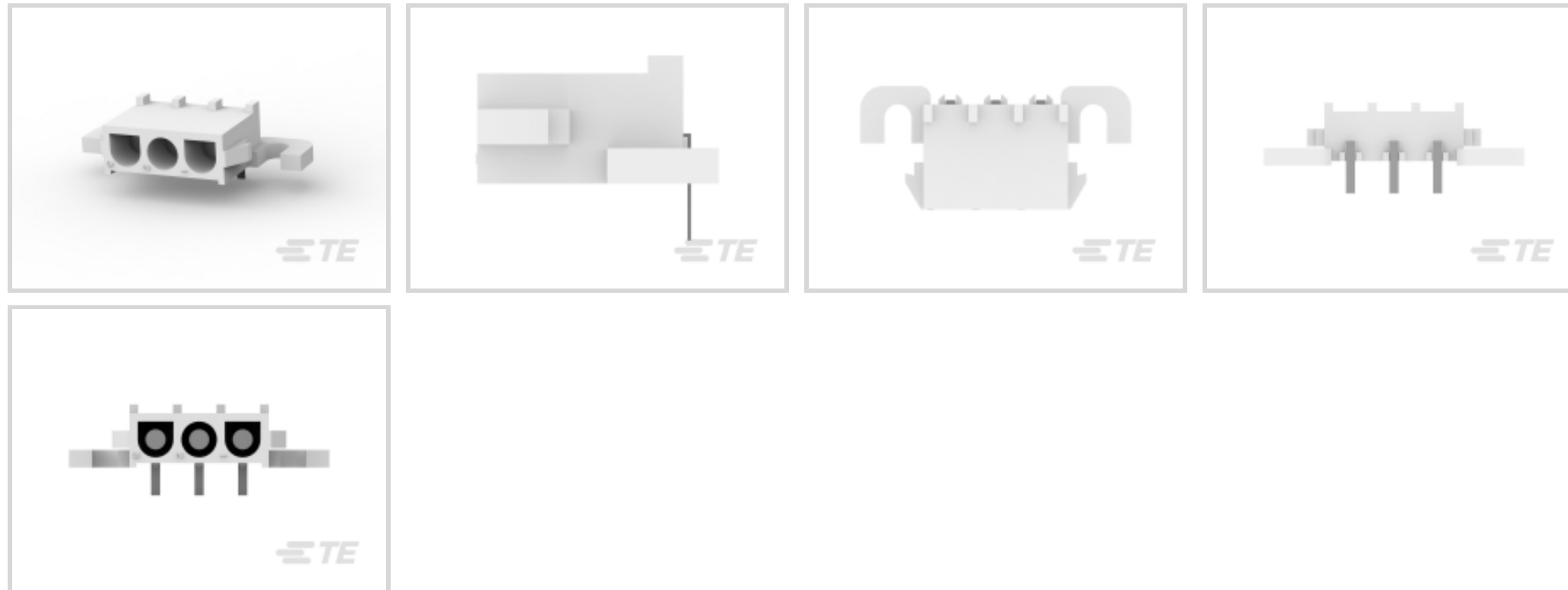
TE Internal #: 643228-1

PCB Mount Header, Right Angle, Wire-to-Board, 3 Position, 6.35 mm [.25 in] Centerline, Fully Shrouded, Pre-Tin, Universal MATE-N-LOK

[View on TE.com >](#)



Connectors > PCB Connectors > PCB Headers & Receptacles



EU RoHS Compliance: **Compliant**

EU ELV Compliance: **Compliant**

PCB Connector Assembly Type: **PCB Mount Header**

PCB Mount Orientation: **Right Angle**

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

Features

Other

EU RoHS Compliance	Compliant
EU ELV Compliance	Compliant

Product Type Features

Mixed & Hybrid Header	No
Connector Shape	Rectangular
PCB Connector Assembly Type	PCB Mount Header
Connector System	Wire-to-Board
Header Type	Fully Shrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

Configuration Features

Number of Columns	3
Number of Loaded Positions	3
Number of Power Positions	3



Connector Contact Load Condition	Fully Loaded
PCB Mount Orientation	Right Angle
Number of Positions	3
Number of Rows	1

Electrical Characteristics

Operating Voltage	600 VAC
-------------------	---------

Body Features

Primary Product Color	Natural
-----------------------	---------

Contact Features

Contact Underplating Material	Nickel
Contact Underplating Material Thickness	1.27 – 1.79 μm [50 – 70 μin]
Contact Size	2.95mm
Contact Mating Area Plating Material Thickness	3.81 – 5.08 μm [150 – 200 μin]
PCB Contact Termination Area Plating Material Thickness	3.81 – 5.08 μm [150 – 200 μin]
Contact Shape & Form	Round
Contact Layout	Inline
Contact Base Material	Phosphor Bronze
PCB Contact Termination Area Plating Material	Pre-Tin
Contact Mating Area Plating Material	Pre-Tin
Contact Type	Socket
Contact Current Rating (Max)	12 A

Termination Features

Termination Post & Tail Length	4.06 mm[.16 in]
Termination Method to PCB	Through Hole - Solder

Mechanical Attachment

Panel Mount Feature	Without
Mating Retention Type	Locking Tab
Mating Retention	With
Mating Alignment Type	Polarization
PCB Mount Retention Type	Mounting Ears
PCB Mount Retention	With
PCB Mount Alignment	Without



Connector Mounting Type	Board Mount
-------------------------	-------------

Mating Alignment	With
------------------	------

Housing Features

Mating Entry Location	Side
-----------------------	------

Housing Material	Nylon
------------------	-------

Centerline (Pitch)	6.35 mm [.25 in]
--------------------	------------------

Dimensions

Connector Width	17.27 mm [.68 in]
-----------------	-------------------

PCB Thickness (Recommended)	1.57 mm [.062 in]
-----------------------------	-------------------

Connector Height	9.14 mm [.36 in]
------------------	------------------

Connector Length	37.97 mm [1.49 in]
------------------	--------------------

Usage Conditions

Operating Temperature (Max)	105 °C [221 °F]
-----------------------------	-----------------

Operating Temperature Range	-40 – 105 °C [-40 – 221 °F]
-----------------------------	-----------------------------

Operation/Application

Circuit Application	Power
---------------------	-------

Industry Standards

Compatible With Agency/Standards Products	UL, VDE, CSA
---	--------------

UL Rating	Recognized
-----------	------------

Compatible With Approved Standards Products	UL E28476
---	-----------

Glow Wire Rating	Standard Part - Not Glow Wire
------------------	-------------------------------

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

Packaging Features

Packaging Quantity	280
--------------------	-----

Packaging Method	Box
------------------	-----

Product Compliance

[For compliance documentation, visit the product page on TE.com>](#)

EU RoHS Directive 2011/65/EU	Compliant
------------------------------	-----------

EU ELV Directive 2000/53/EC	Compliant
-----------------------------	-----------

China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
---	---

EU REACH Regulation (EC) No. 1907/2006	
--	--



Current ECHA Candidate List: JUNE 2024 (241)
 Candidate List Declared Against: JUNE 2024 (241)
 Does not contain REACH SVHC

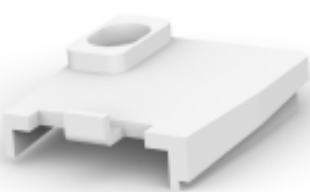





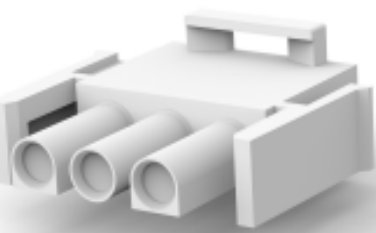
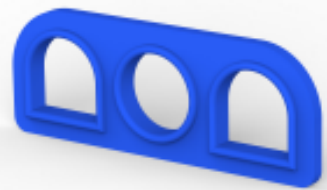
Halogen Content
 Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free

Solder Process Capability
 Wave solder capable to 265°C

Product Compliance Disclaimer

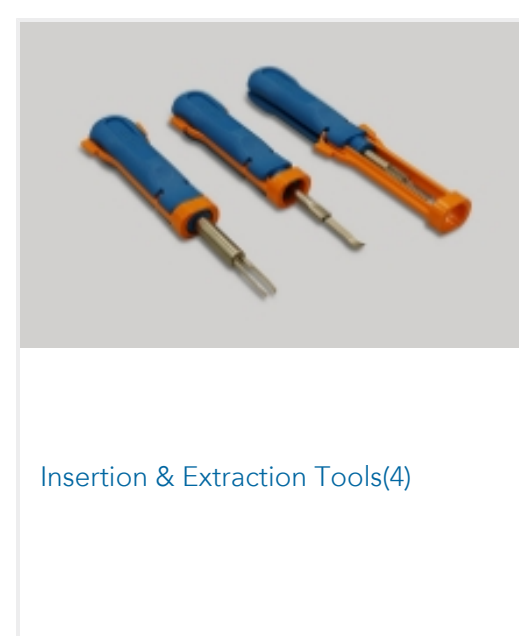
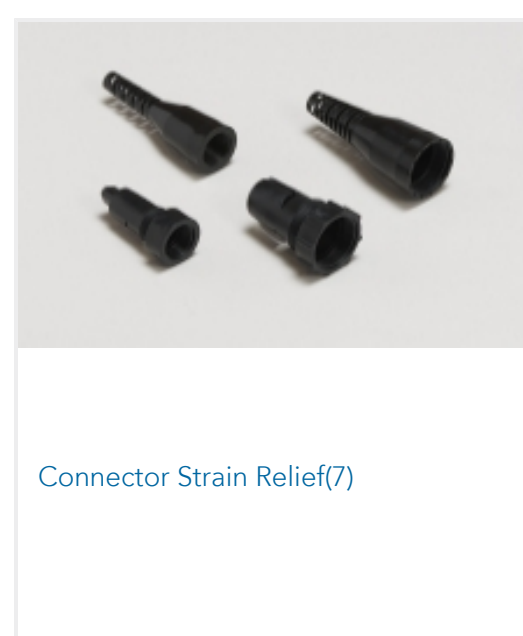
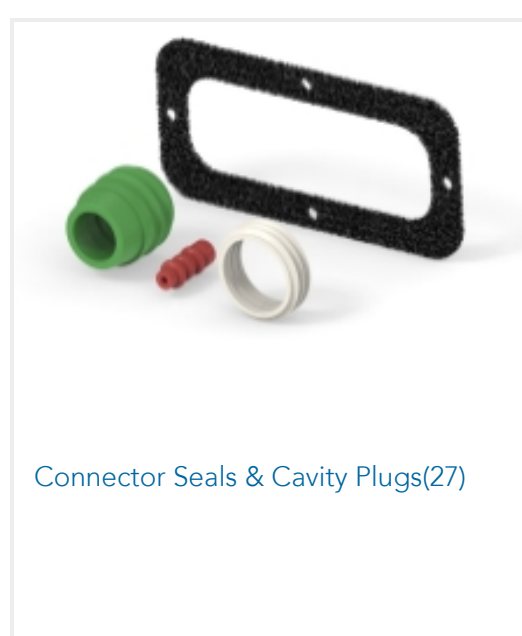
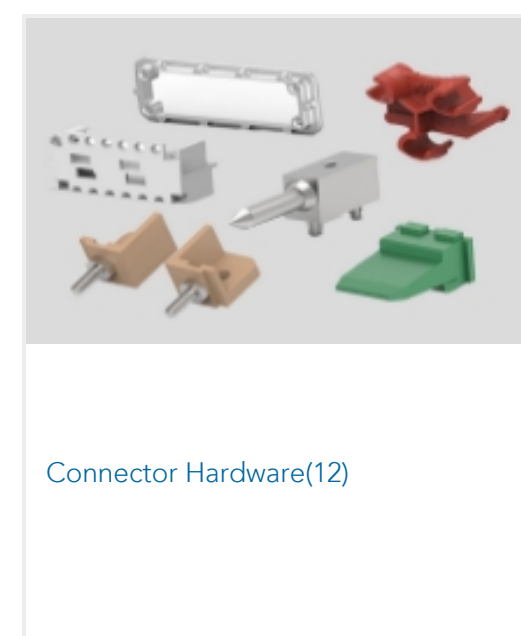
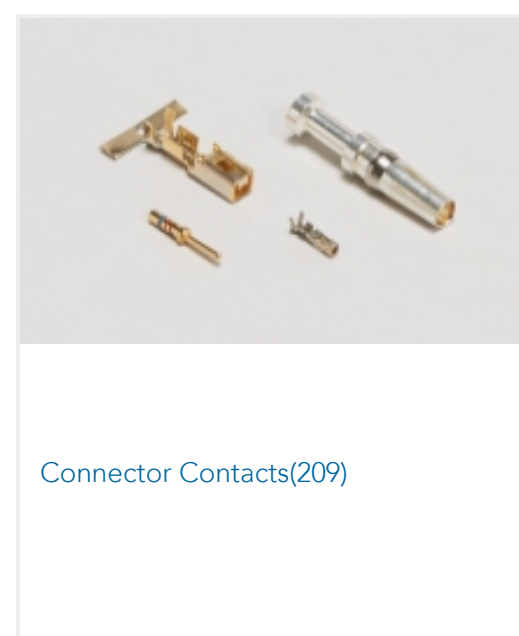
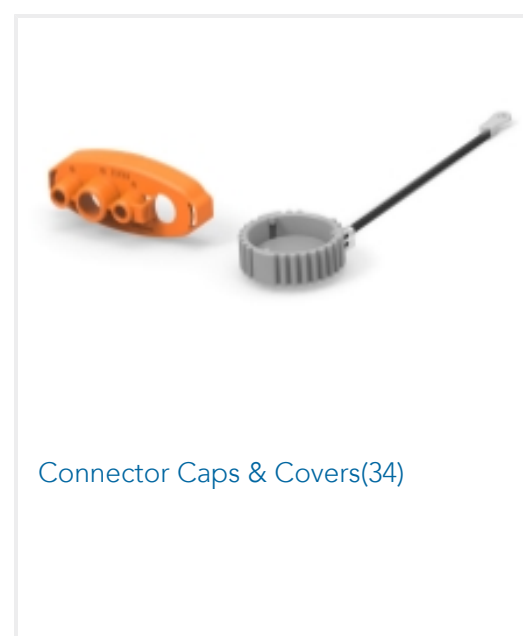
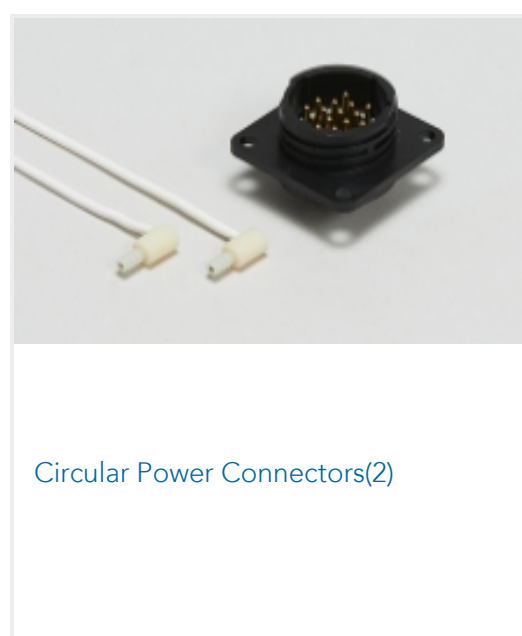
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight 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

 <p>TE Part # 641945-1 03P UMNL STR/REL</p>	 <p>TE Part # 641763-1 03P UMNL STR/REL V2 NATL</p>	 <p>TE Part # 1-350589-0 STR/REL CLAMP NATL</p>	 <p>TE Part # 350811-1 STR/REL CLAMP</p>
 <p>TE Part # 770018-1 03P UMNLII IN-LNE PLUG HSG KIT</p>	 <p>TE Part # 640714-1 03P UMNL STR/REL</p>	 <p>TE Part # 350766-1 03P UMNL PLUG HSG</p>	 <p>TE Part # 794271-1 03P UMNL INTERFACE SEAL</p>



Also in the Series | **Universal MATE-N-LOK**





Rectangular Connector Housings(1)

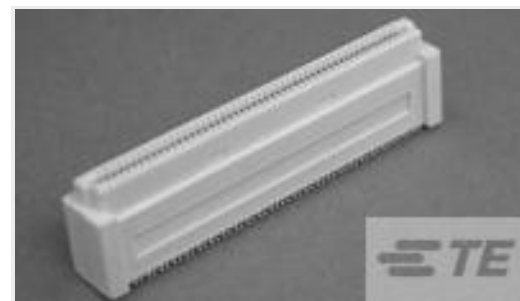
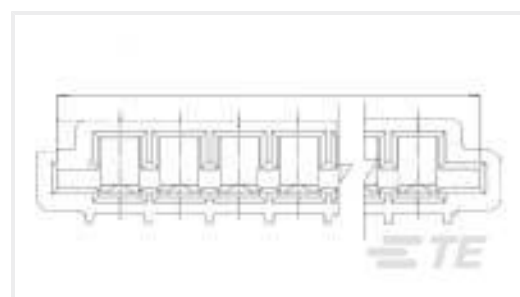


Rectangular Power Connectors(370)



Standard Circular Connectors(1)

Customers Also Bought

TE Part #5747250-6
09 MSFL PLUG RA 318 (SL,FM)TE Part #5084616-8
0.8FH,R13H.5,160,08/Sn,TR,SCTE Part #227673-1
BNC PCB VERTICAL JACK W/POSTTE Part #643230-1
04P UMNL HDR ASSY R/A 94VOTE Part #5-104362-2
03 MTE HDR SRST LATCH W/HLDWNTE Part #640445-9
09P MTA156 HDR ASSY FL/STR SNTE Part #643424-1
06P UMNL HDR ASSY POL 94VOTE Part #5-104656-5
50 50/50 HDR DRST SFMNT.320 SNTE Part #350833-4
04P UMNL HDR ASSY PC 94VO LFTE Part #6-487509-1
TRIOMATE ASY V12P L=4.064,LDFR

Documents

Product Drawings

[03P UMNL HDR ASSY R/A 94VO](#)

English

CAD Files

[3D PDF](#)

[3D](#)

[Customer View Model](#)

[ENG_CVM_CVM_643228-1_H.2d_dxf.zip](#)



English

Customer View Model

[ENG_CVM_CVM_643228-1_H.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_643228-1_H.3d_stp.zip](#)

English

[3D PDF](#)

English

Customer View Model

[ENG_CVM_643228-1_D.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_643228-1_D.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_643228-1_D.3d_stp.zip](#)

English

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

Datasheets & Catalog Pages

[SOFT_SHELL_PIN_SOCKET_CONNECTORS_STANDARD_DENSITY](#)

English

Product Specifications

[Application Specification](#)

English

Instruction Sheets

[Instruction Sheet \(U.S.\)](#)

English

Agency Approvals

[UL](#)

English