

1-770190-1 ✓ ACTIVE

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

TE Internal #: 1-770190-1

PCB Mount Header, Vertical, Wire-to-Board, 15 Position, 4.14 mm [162 in] Centerline, Fully Shrouded, Gold, Mini-Universal MATE-N-LOK

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Connectors > PCB Connectors > PCB Headers & Receptacles



EU RoHS Compliance: **Compliant**

EU ELV Compliance: **Compliant**

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

PCB Mount Orientation: **Vertical**

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	5
Number of Loaded Positions	15
Number of Power Positions	15



Connector Contact Load Condition	Fully Loaded
PCB Mount Orientation	Vertical
Number of Positions	15
Number of Rows	3

Electrical Characteristics

Operating Voltage	600 VDC
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Body Features

PCB Retention Feature Material	Nylon
Primary Product Color	White

Contact Features

Contact Underplating Material	Nickel
Mating Pin Diameter	1 mm [.039 in]
Contact Underplating Material Thickness	1.27 μ m [50 μ in]
PCB Contact Termination Area Plating Material Finish	Matte
Contact Size	1mm
Contact Mating Area Plating Material Thickness	.76 μ m [30 μ in]
PCB Contact Termination Area Plating Material Thickness	3.81 – 8.89 μ m [150 – 350 μ in]
Contact Shape & Form	Round
Contact Layout	Matrix
Contact Base Material	Brass
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Gold
Contact Type	Pin
Contact Current Rating (Max)	9.5 A

Termination Features

Termination Post & Tail Diameter	1 mm [.039 in]
Termination Post & Tail Length	3.69 mm [.145 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	Chamfered Edges
PCB Mount Retention Type	Boardlock
PCB Mount Retention	With
PCB Mount Alignment	Without
Connector Mounting Type	Board Mount
Mating Alignment	With

Housing Features

Mating Entry Location	Top
Housing Material	Nylon
Centerline (Pitch)	4.14 mm [.162 in]

Dimensions

Row-to-Row Spacing	4.14 mm [.162 in]
Connector Width	16.03 mm [.631 in]
PCB Thickness (Recommended)	1.57 mm [.062 in]
Connector Height	13.49 mm [.531 in]
Profile Height from PCB	14.25 mm [.56 in]
Connector Length	27.43 mm [1.08 in]

Usage Conditions

Operating Temperature (Max)	105 °C [221 °F]
Operating Temperature Range	-55 – 105 °C [-67 – 221 °F]

Operation/Application

Circuit Application	Power
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Industry Standards

Compatible With Agency/Standards Products	UL, 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	200
Packaging Method	Bag



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

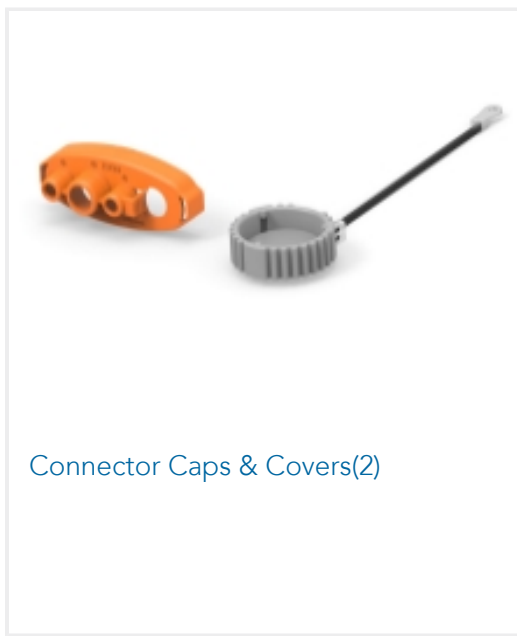


TE Part # 172171-1
15 CIR UNIV M-N-L PLUG

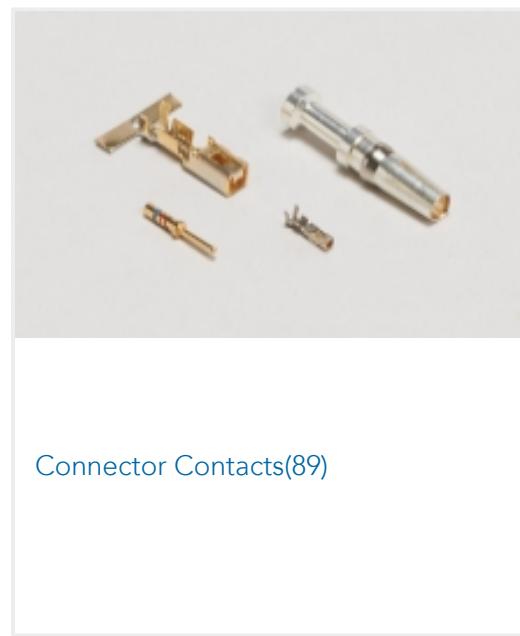


TE Part # 794204-1
15P MINI UMNL2 PLUG HSG UL94V0

Also in the Series | [Mini-Universal MATE-N-LOK](#)



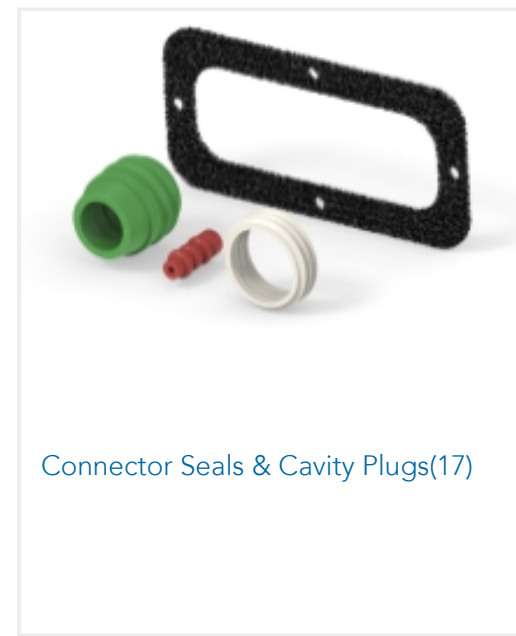
Connector Caps & Covers(2)



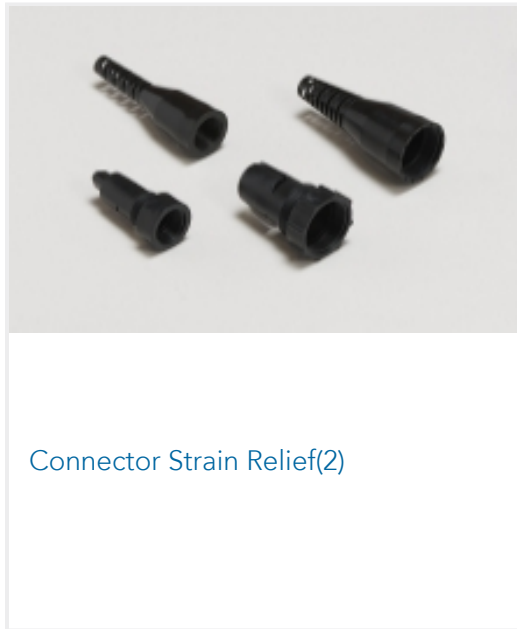
Connector Contacts(89)



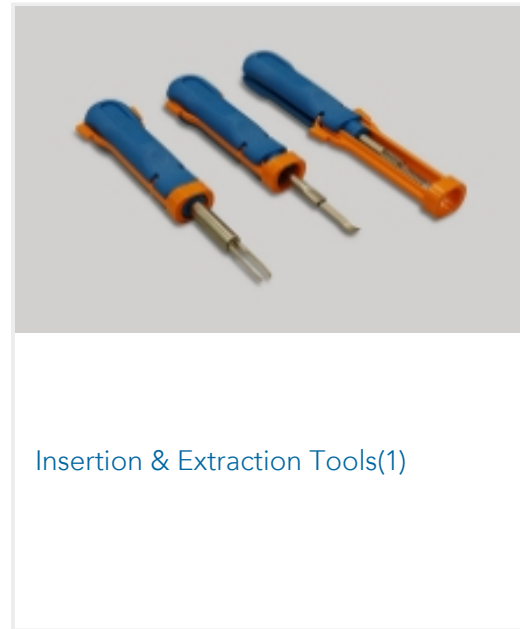
Connector Hardware(4)



Connector Seals & Cavity Plugs(17)



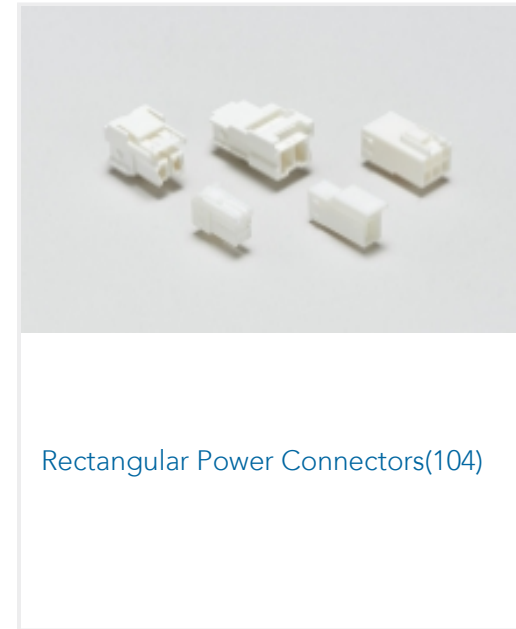
Connector Strain Relief(2)



Insertion & Extraction Tools(1)



PCB Headers & Receptacles(93)



Rectangular Power Connectors(104)

Customers Also Bought



TE Part #1-794067-1
14P MINI UMNL HDR W/DH AU



TE Part #1-770743-1
10P MINI UMNL HDR ASSY VRT LF



TE Part #2-1445093-8
MICRO MNL HDR ASSY S/ROW AU LF



TE Part #1-770166-1
02P MINI UMNL ASSY VO SNAU LF



TE Part #4-794681-2
12P MICRO MNL ASSY,VRT,THRU,LF



TE Part #5-794632-2
22P MICRO MNL ASSY,VRT,HDR,LF



TE Part #4-794632-8
18P MICRO MNL ASSY,VRT,HDR,LF

Documents

[CAD Files](#)

[3D PDF](#)

[3D](#)

[Customer View Model](#)

[ENG_CVM_CVM_1-770190-1_N.2d_dxf.zip](#)

English

[Customer View Model](#)

[ENG_CVM_CVM_1-770190-1_N.3d_igs.zip](#)



English

Customer View Model

[ENG_CVM_CVM_1-770190-1_N.3d_stp.zip](#)

English

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Datasheets & Catalog Pages

[SOFT_SHELL_PIN_AND_SOCKET_CONNECTORS_CATALOG](#)

English

Product Specifications

[Application Specification](#)

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Instruction Sheets

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

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Agency Approvals

[UL](#)

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