

641973-1 ✓ ACTIVE

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

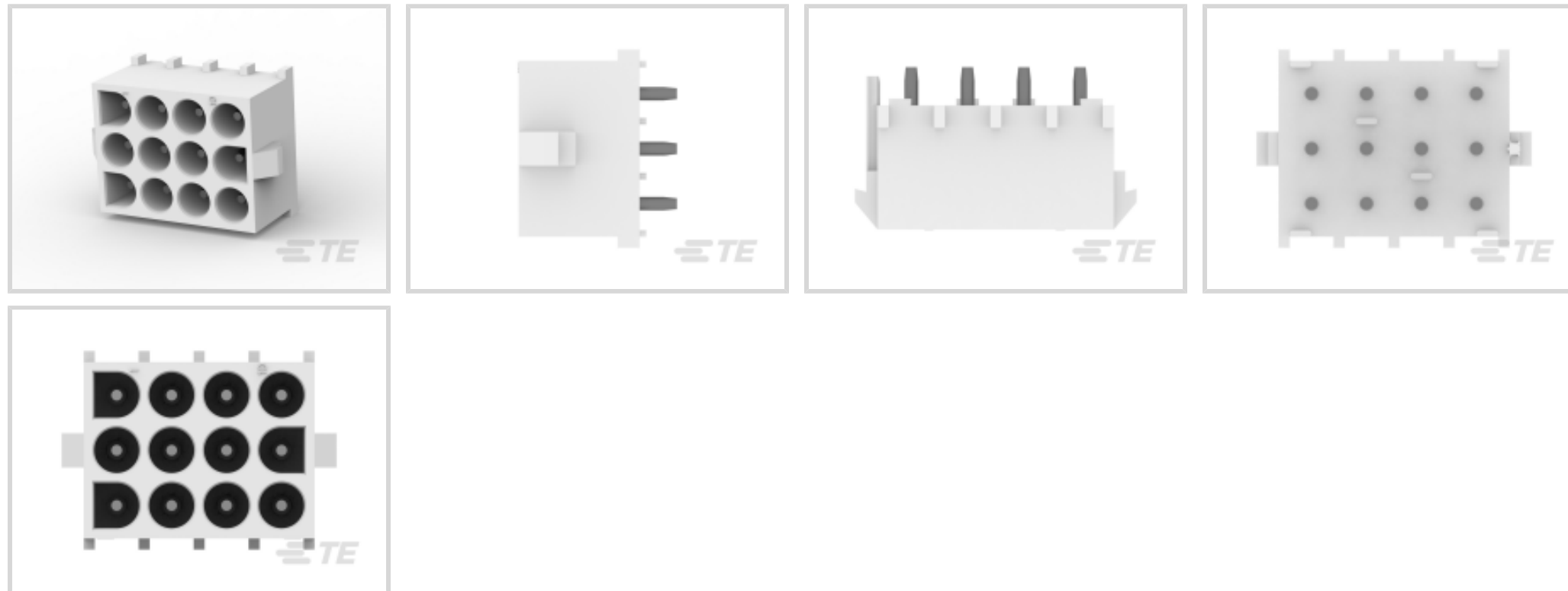
TE Internal #: 641973-1

PCB Mount Header, Vertical, Wire-to-Board, 12 Position, 6.35 mm [0.25 in] Centerline, Fully Shrouded, Pre-Tin, Universal MATE-N-LOK

[View on TE.com >](#)



Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

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

Number of Positions: **12**

Number of Rows: **3**

Features

Product Type Features

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

Configuration Features

Number of Columns	4
Number of Loaded Positions	12
Number of Power Positions	12
Connector Contact Load Condition	Fully Loaded
PCB Mount Orientation	Vertical
Number of Positions	12



Number of Rows	3
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Electrical Characteristics

Operating Voltage	600 VAC
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Body Features

Primary Product Color	Natural
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Contact Features

Contact Underplating Material	Nickel
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Mating Pin Diameter	2.2 mm[.087 in]
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Contact Underplating Material Thickness	1.27 – 1.79 μm [50 – 70 μin]
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Contact Size	2.2mm
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Contact Mating Area Plating Material Thickness	3.81 – 5.08 μm [150 – 200 μin]
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PCB Contact Termination Area Plating Material Thickness	3.81 – 5.08 μm [150 – 200 μin]
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Contact Shape & Form	Round
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Contact Layout	Matrix
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Contact Base Material	Phosphor Bronze
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PCB Contact Termination Area Plating Material	Pre-Tin
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Contact Mating Area Plating Material	Pre-Tin
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Contact Type	Pin
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Contact Current Rating (Max)	12 A
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Termination Features

Termination Post & Tail Diameter	1.57 mm[.062 in]
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Termination Post & Tail Length	3.56 mm[.14 in]
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Termination Method to PCB	Through Hole - Solder
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Mechanical Attachment

Panel Mount Feature	Without
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Mating Retention Type	Locking Tab
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Mating Retention	With
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Mating Alignment Type	Polarization
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PCB Mount Alignment Type	Standard Polarized Tail
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PCB Mount Retention	Without
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PCB Mount Alignment	With
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Connector Mounting Type	Board Mount
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Mating Alignment	With
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Housing Features

Mating Entry Location	Top
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Housing Material	Nylon
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Centerline (Pitch)	6.35 mm [.25 in]
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Dimensions

Row-to-Row Spacing	6.35 mm [.25 in]
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Connector Width	20.32 mm [.8 in]
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PCB Thickness (Recommended)	1.57 mm [.062 in]
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Connector Height	13.97 mm [.55 in]
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Profile Height from PCB	14.73 mm [.58 in]
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Connector Length	26.67 mm [1.05 in]
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Usage Conditions

Operating Temperature (Max)	105 °C [221 °F]
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Operating Temperature Range	-40 – 105 °C [-40 – 221 °F]
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Operation/Application

Circuit Application	Power
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Industry Standards

Compatible With Agency/Standards Products	CSA, UL, VDE
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UL Rating	Recognized
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Compatible With Approved Standards Products	UL E28476
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Glow Wire Rating	Standard Part - Not Glow Wire
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UL Flammability Rating	UL 94V-2
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Packaging Features

Packaging Quantity	94
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Packaging Method	Carton
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Product Compliance

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

EU RoHS Directive 2011/65/EU	Compliant
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EU ELV Directive 2000/53/EC	Compliant
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China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
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EU REACH Regulation (EC) No. 1907/2006

Current ECHA Candidate List: JAN 2025
(247)

Candidate List Declared Against: JAN 2025
(247)

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 # 350812-1
STR/REL CLAMP UMNL



TE Part # 926681-3
12P UNIV.CAP HSG.



TE Part # 794279-1
12P UMNL INTERFACE SEAL



TE Part # 926681-1
UNIV.M-N-L.CAP HSG.



TE Part # 643428-2
12P UMNL HDR ASSY POL



TE Part # 794727-1
12P UMNL CAP HSG NATL,BLACK



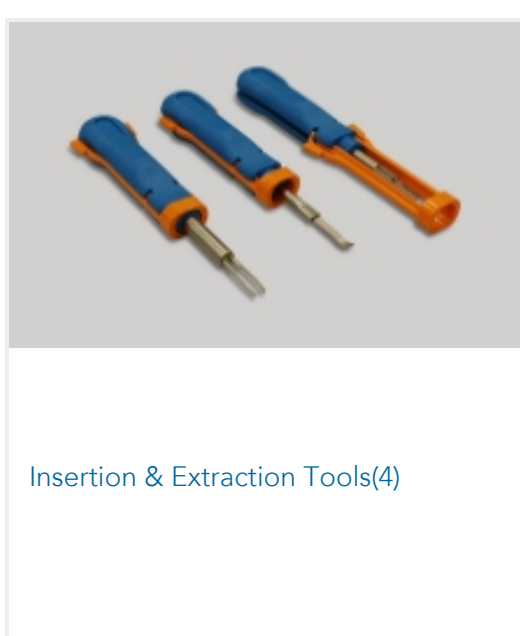
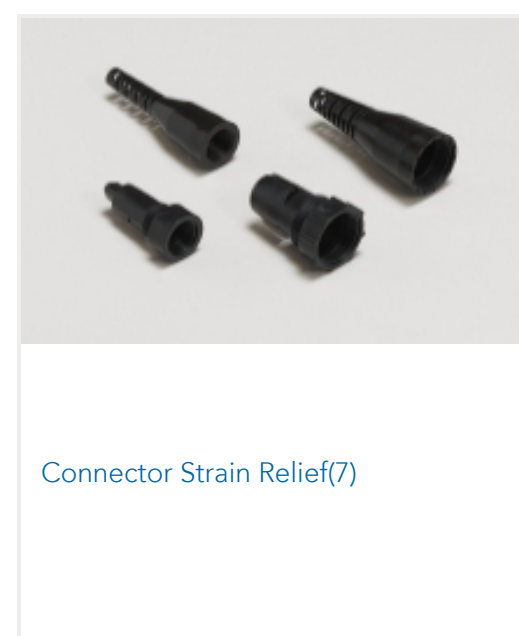
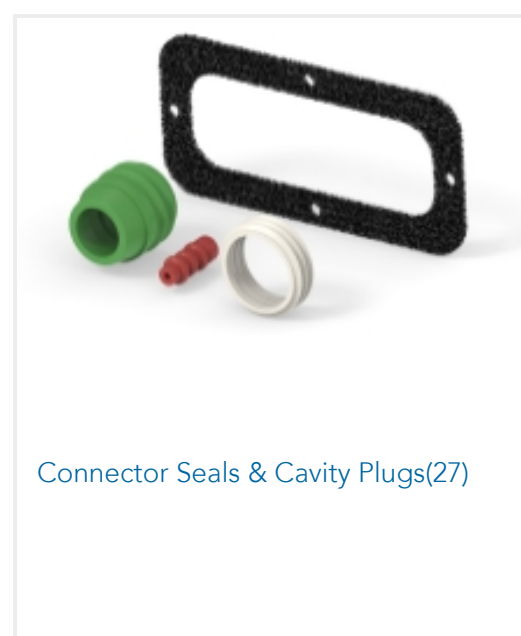
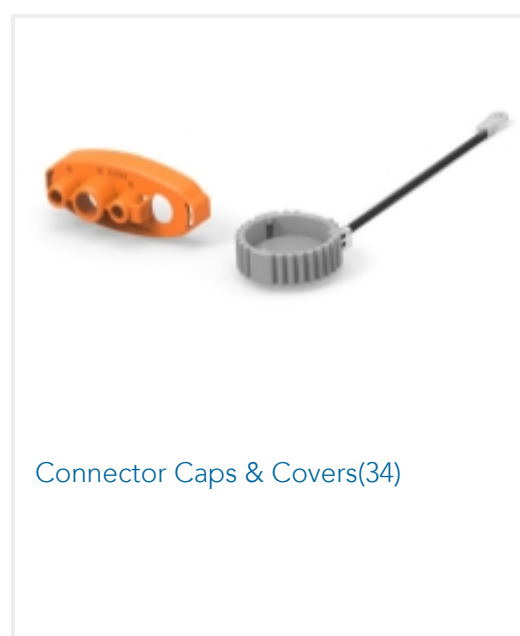
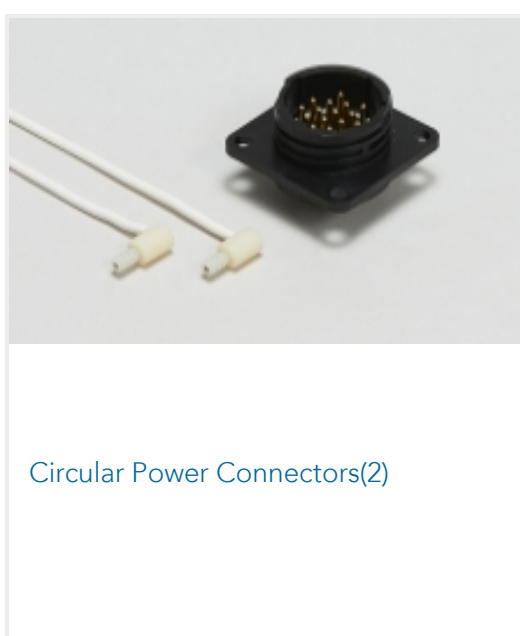
TE Part # 643255-1
12P UMNL ASSY MOD HSG VO



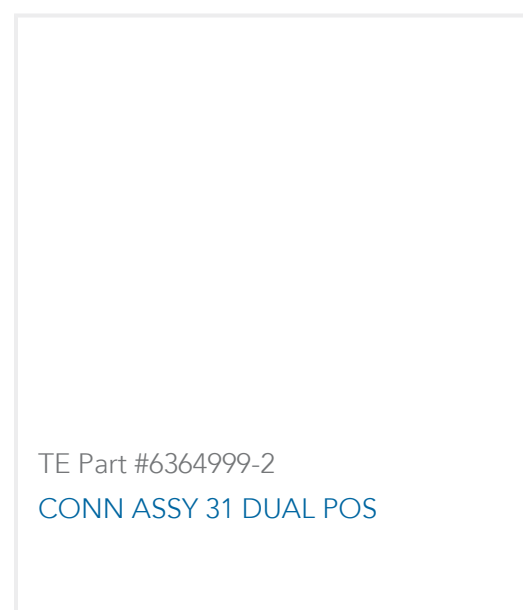
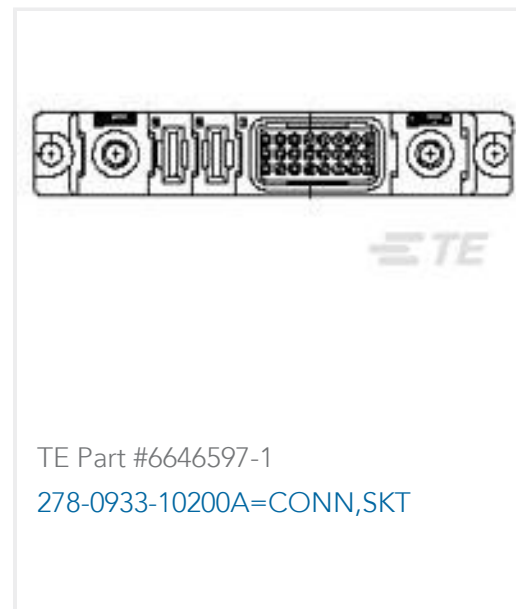
TE Part # 2178620-1
UMNL 12 WAY CAP HOUSING



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



Customers Also Bought



Documents

Product Drawings

[12P UMNL PIN HDR ASSY V2 NATL](#)

English

CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG_CVM_CVM_641973-1_L.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_641973-1_L.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_641973-1_L.3d_stp.zip](#)

English

Customer View Model

[ENG_CVM_641973-1_K.3d_igs.zip](#)

English



Customer View Model

[ENG_CVM_641973-1_K.3d_stp.zip](#)

English

Customer View Model

[ENG_CVM_641973-1_K.2d_dxf.zip](#)

English

3D PDF

English

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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