

641973-1 ✓ ACTIVE

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

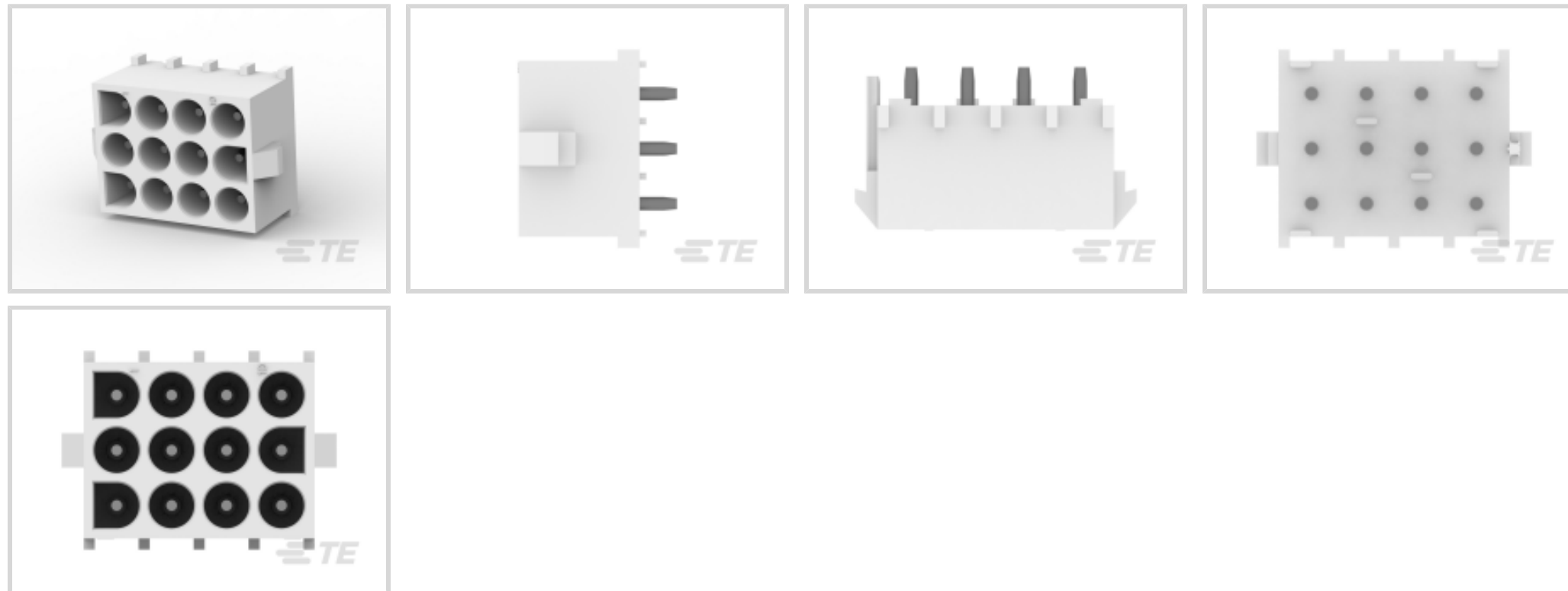
TE Internal #: 641973-1

PCB Mount Header, Vertical, Wire-to-Board, 12 Position, 6.35 mm [.25 in] Centerline, Fully Shrouded, Pre-Tin, Universal MATE-N-LOK

[View on TE.com >](#)



Connectors > PCB Connectors > PCB Headers & Receptacles



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

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

Number of Positions: **12**

Number of Rows: **3**

Centerline (Pitch): **6.35 mm [.25 in]**

## Features

### 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 Power Positions	12
Number of Columns	4
Number of Loaded Positions	12
Connector Contact Load Condition	Fully Loaded
Number of Positions	12
Number of Rows	3
PCB Mount Orientation	Vertical



### Electrical Characteristics

Operating Voltage	600 VAC
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### Body Features

Primary Product Color	Natural
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### Contact Features

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

### Termination Features

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

### Mechanical Attachment

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



### Housing Features

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

### Dimensions

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

### Usage Conditions

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

### Operation/Application

Circuit Application	Power
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### Industry Standards

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

### Packaging Features

Packaging Quantity	94
Packaging Method	Carton

### 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 # 350812-1  
STR/REL CLAMP UMNL



TE Part # 794279-1  
12P UMNL INTERFACE SEAL



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



TE Part # 640717-1  
12P UMNL STR/REL



TE Part # 1-640723-0  
12P UMNL STR/REL & INSRT NATL



TE Part # 794280-1  
12P UMNL WIRE SEAL



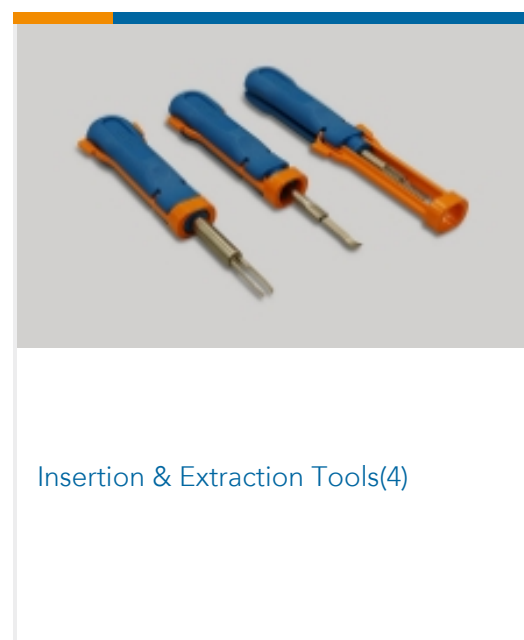
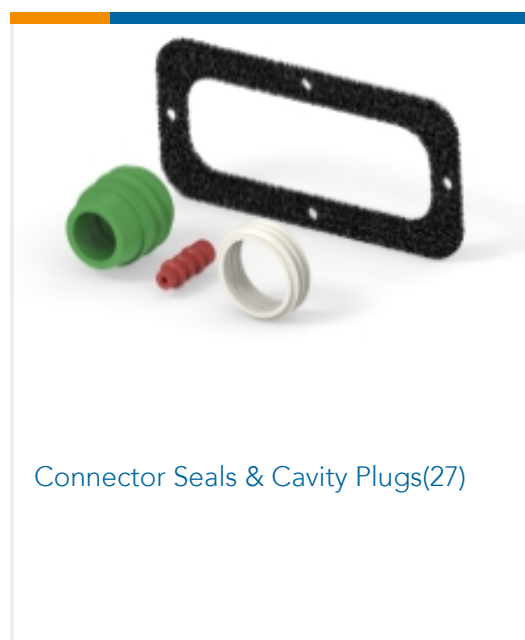
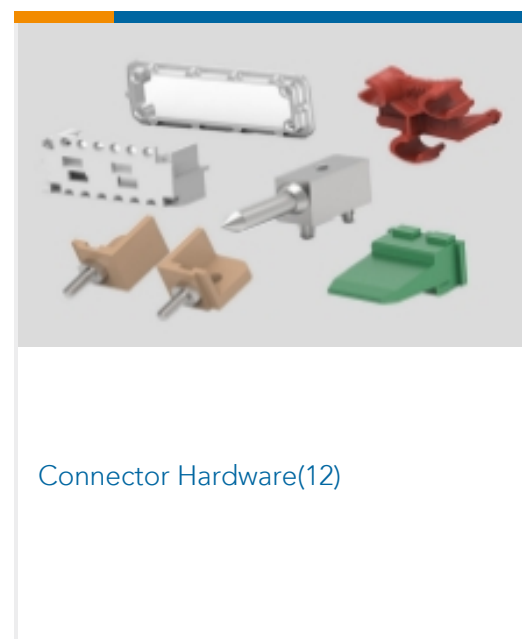
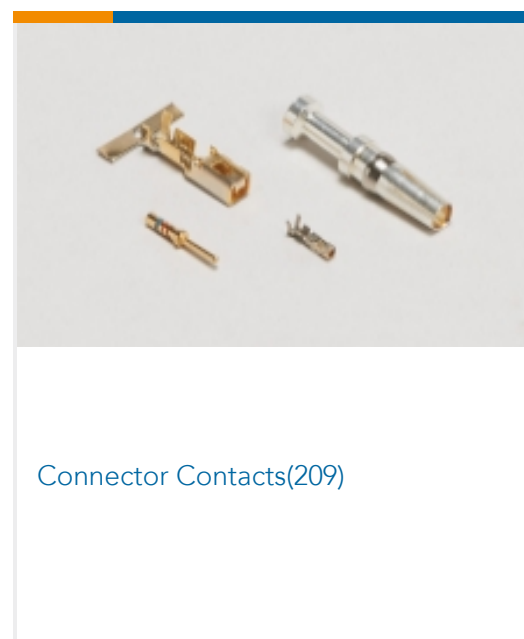
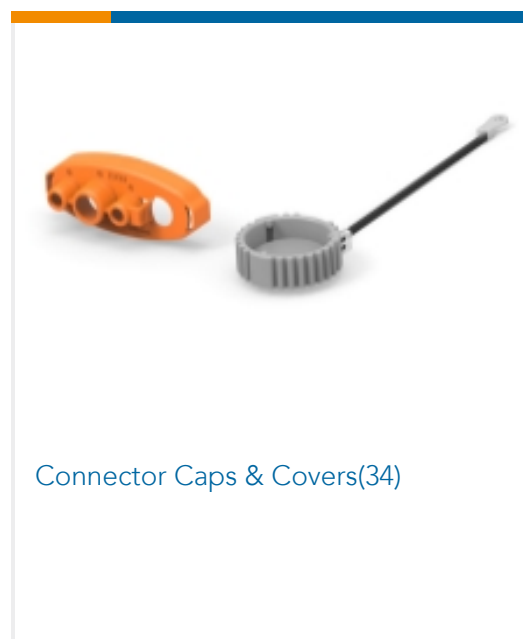
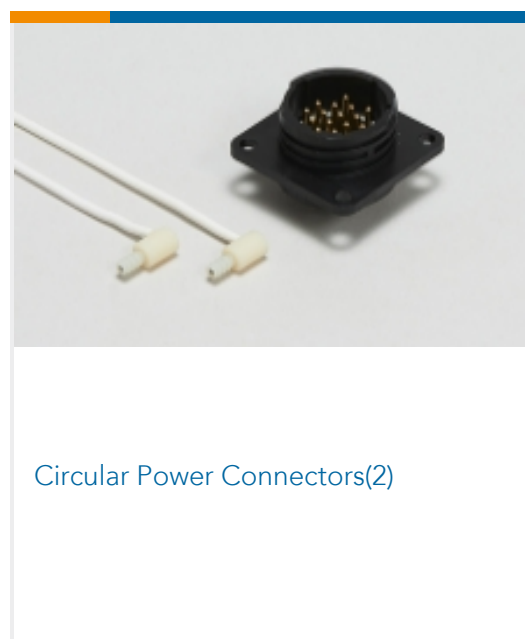
TE Part # 1-350590-0  
STR/REL CLAMP NATL



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



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







Rectangular Connector Housings(1)

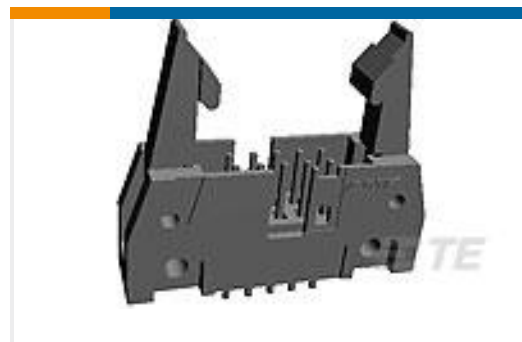
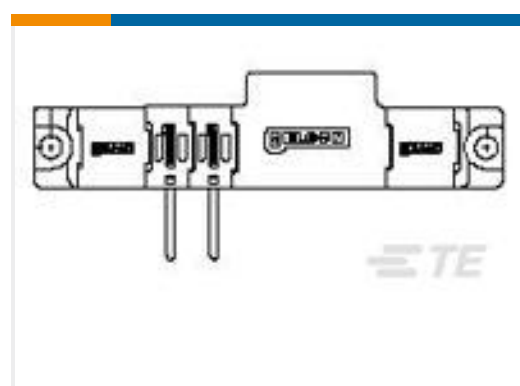
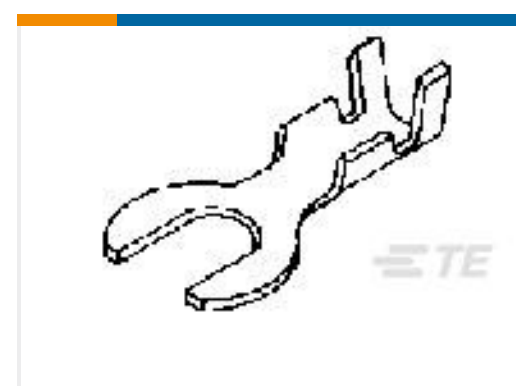
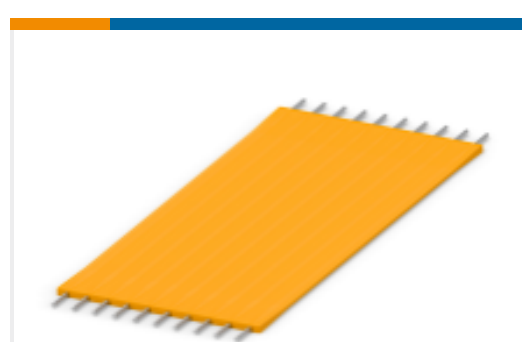


Rectangular Power Connectors(379)



Standard Circular Connectors(1)

## Customers Also Bought

TE Part #5499206-8  
A/L UNIV HDR 34P VERT LG LATTE Part #643430-1  
15P UMNL HDR ASSY POL 94VOTE Part #643407-1  
06P UMNL PIN HDR ASSY POL NATLTE Part #1825955-2  
FSM1JH=6MM TACT SWITCH, HT W /ESDTE Part #2-1546685-3  
6DBL-02-1391=6DBL ASSEMBLYTE Part #6648000-1  
279-0933-10100A=CONN,PINTE Part #1-66473-9  
SKT,.062 DIA,.045 SQ POST,LPTE Part #61238-1  
SPADE CRIMP 24-20 AWG TPBRTE Part #1474678-7  
FSK-12.5KJ-36TE Part #641922-6  
08P MTA156 HDR ASSY W/0#4,6

## 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

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

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### Datasheets & Catalog Pages

[SOFT\\_SHELL\\_PIN\\_SOCKET\\_CONNECTORS\\_STANDARD\\_DENSITY](#)

English

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### Product Specifications

[Application Specification](#)

English

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### Instruction Sheets

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

English

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### Agency Approvals

[UL](#)

English