

643425-1 ✓ ACTIVE

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

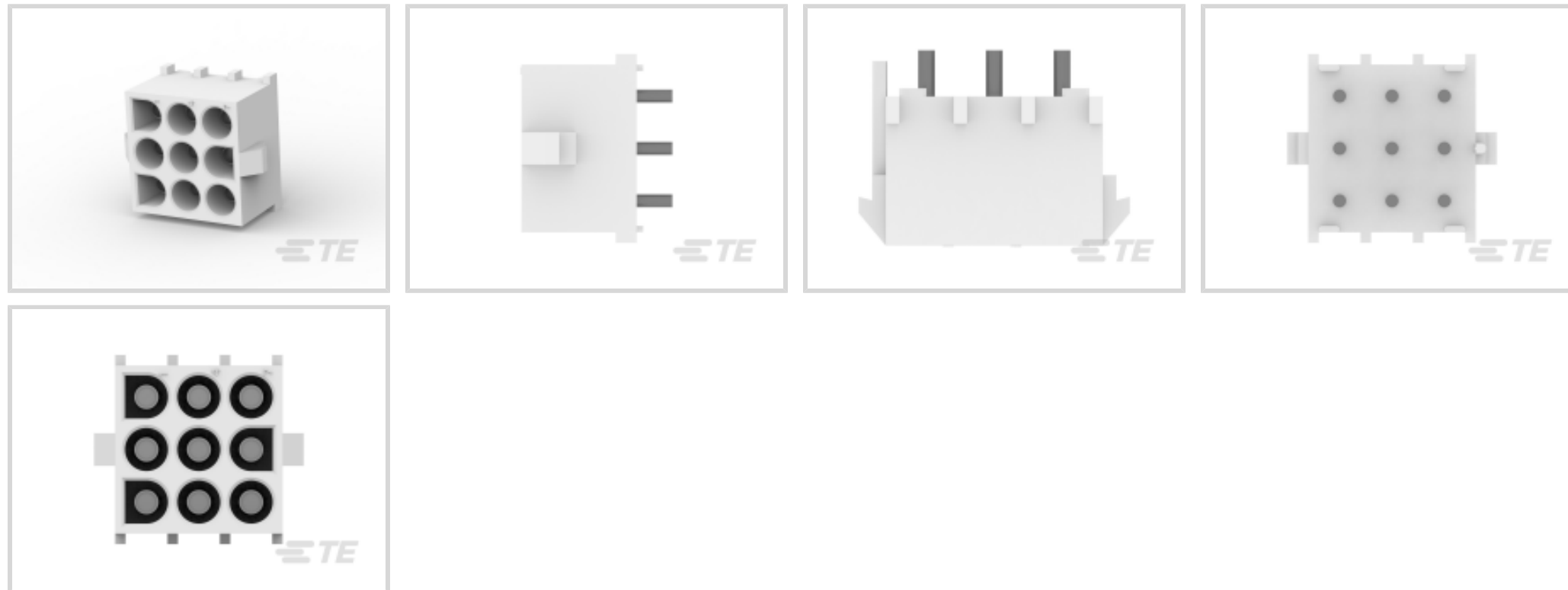
TE Internal #: 643425-1

PCB Mount Header, Vertical, Wire-to-Board, 9 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: **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	3
Number of Loaded Positions	9
Number of Power Positions	9



Connector Contact Load Condition	Fully Loaded
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PCB Mount Orientation	Vertical
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Number of Positions	9
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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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Contact Underplating Material Thickness	1.27 – 1.79 $\mu\text{m}$ [50 – 70 $\mu\text{in}$ ]
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Contact Size	2.95mm
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Contact Mating Area Plating Material Thickness	3.81 – 5.08 $\mu\text{m}$ [150 – 200 $\mu\text{in}$ ]
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PCB Contact Termination Area Plating Material Thickness	3.81 – 5.08 $\mu\text{m}$ [150 – 200 $\mu\text{in}$ ]
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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	Socket
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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
Connector Mounting Type	Board Mount
Mating Alignment	With

### Housing Features

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

### Dimensions

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

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-2

### Packaging Features

Packaging Quantity	100
Packaging Method	Bag

### 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

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 # 1-640722-0  
09P UMNL STR/REL & INSRT NATL



TE Part # 794277-1  
09P UMNL INTERFACE SEAL



TE Part # 640716-1  
09P UMNL STR/REL & INSRT



TE Part # 927231-3  
HONHUS UMNL V0 9-P



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



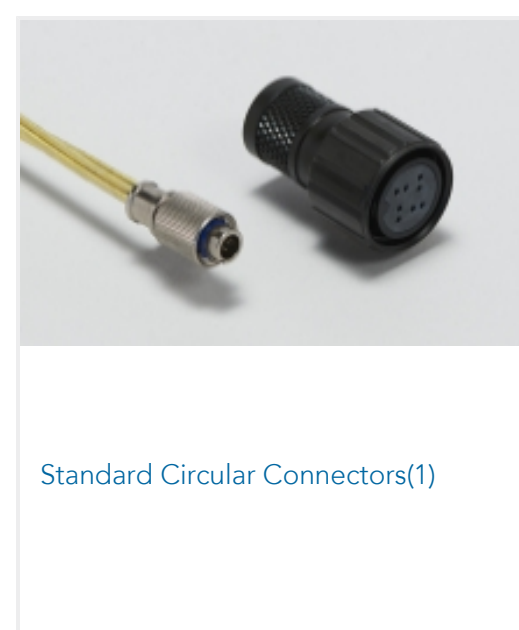
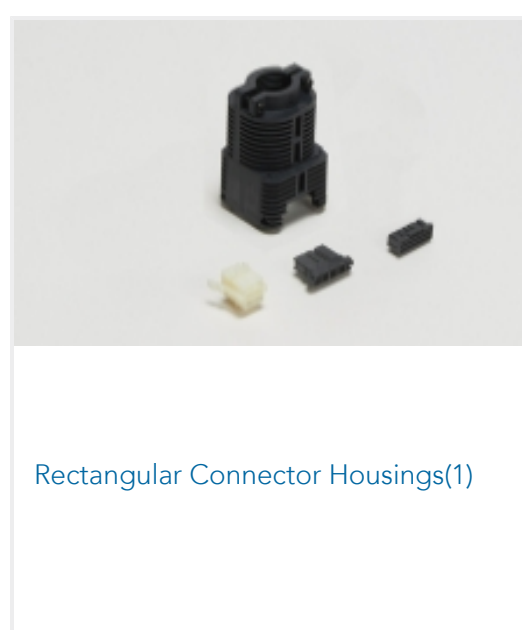
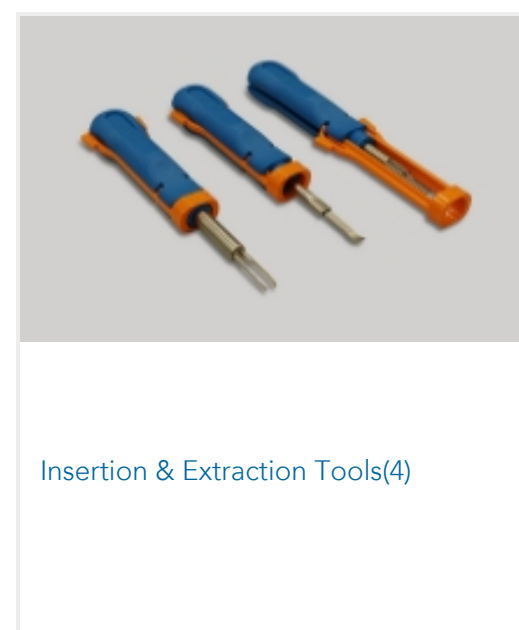
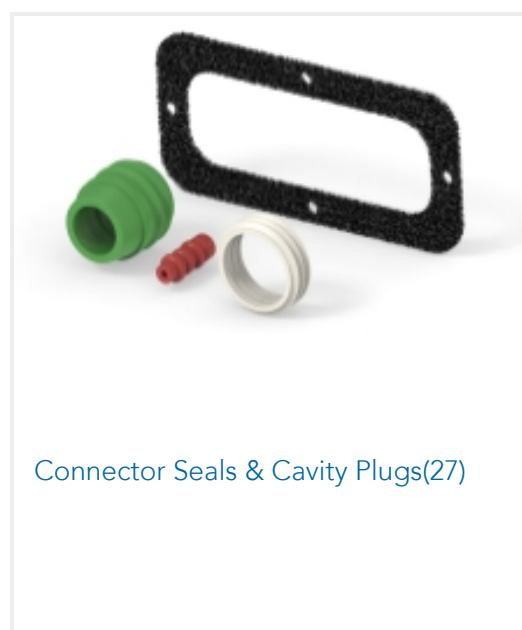
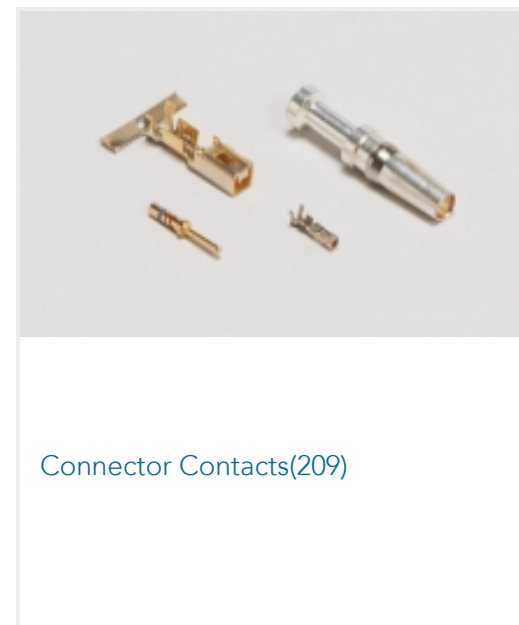
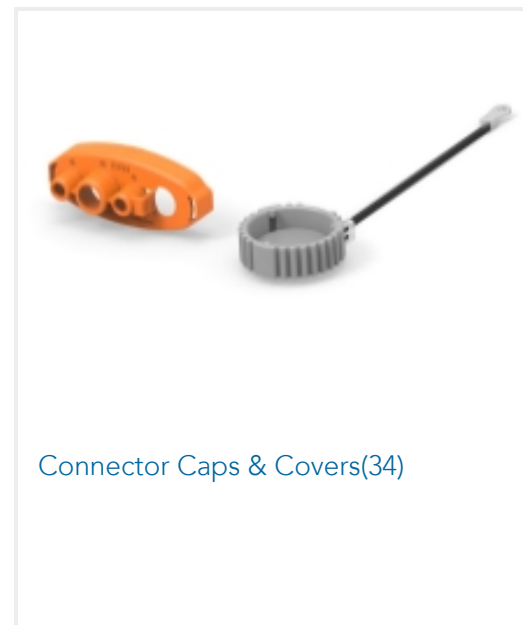
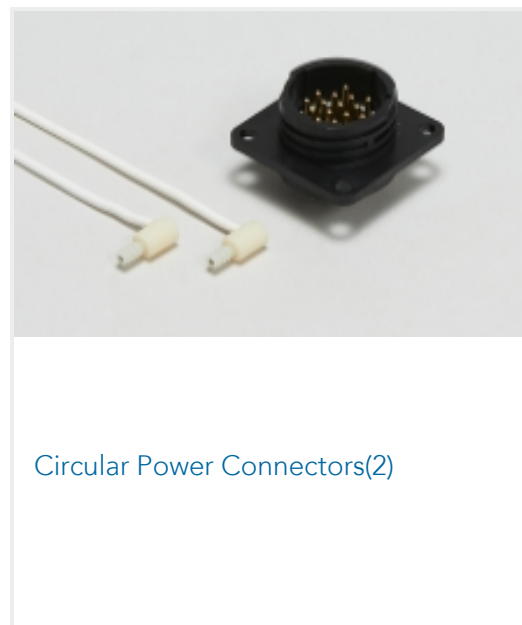
TE Part # 927231-5  
UNML CAP HSG 9WAY



TE Part # 794994-1  
09P UMNL BLACK INTERFACE SEAL



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



Customers Also Bought



TE Part #1-770178-0  
06P MINI-UMNL ASSY VO SNNI\*



TE Part #641969-1  
06P UMNL PIN HDR ASSY V2 NATL



TE Part #643415-1  
04P UMNL HDR ASSY POL



TE Part #643413-1  
03P UMNL HDR ASSY SCKT POL



TE Part #643428-1  
12P UMNL HDR ASSY POL 94VO



TE Part #641974-1  
12P UMNL PIN HDR ASSY 94VO



TE Part #794584-1  
05P UMNL SOC HDR ASSY POL SN



TE Part #1969830-1  
6P UMNL SKT ASSY GW



TE Part #794920-1  
05P UMNL SOCKER HDR ASSY POL



TE Part #2286377-1  
250 FASTON, FLAG, REC., 22-18 AWG,  
NPST

## Documents

### Product Drawings

[09P UMNL HDR ASSY POL](#)

English

### CAD Files

Customer View Model

[ENG\\_CVM\\_643425-1\\_G.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_643425-1\\_G.3d\\_stp.zip](#)

English

Customer View Model

[ENG\\_CVM\\_643425-1\\_G.2d\\_dxf.zip](#)

English

[3D PDF](#)

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

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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