

1586681-2 ✓ ACTIVE

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

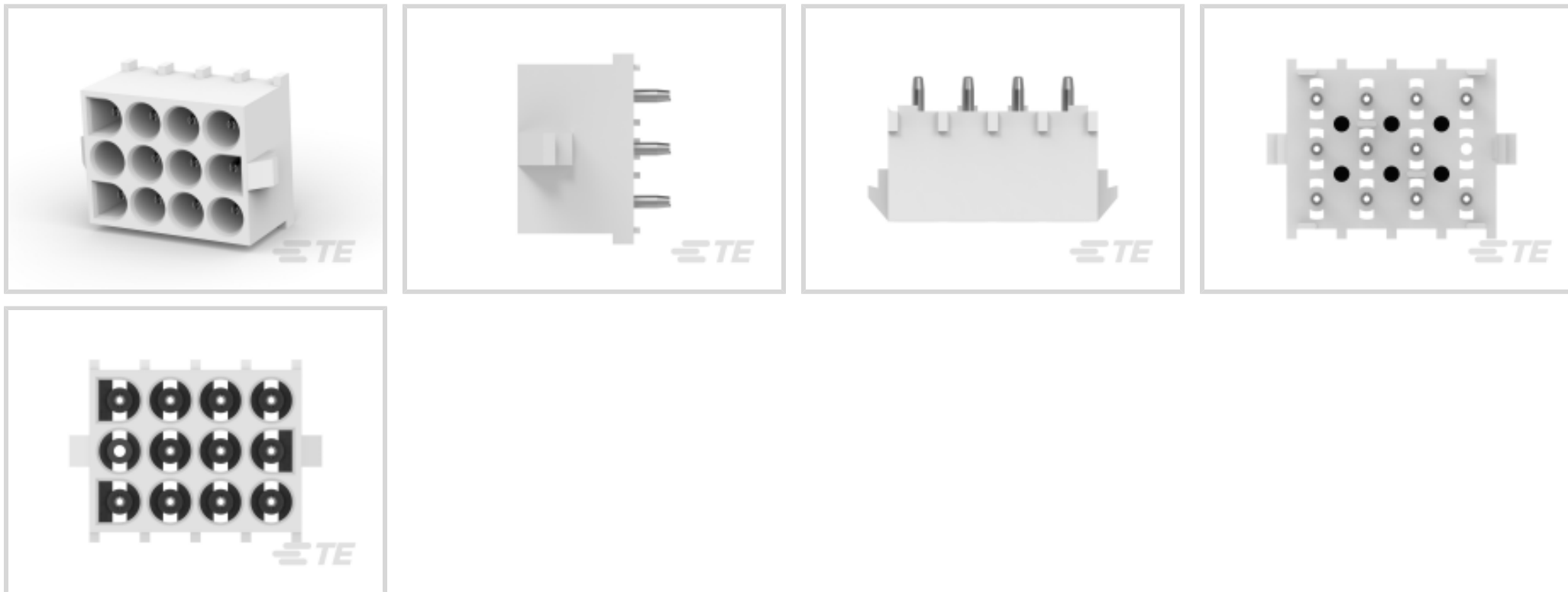
TE Internal #: 1586681-2

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



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
Position Locations Omitted	2
Number of Blocked Positions	1

### 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	4
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Number of Loaded Positions	11
Number of Power Positions	11
Connector Contact Load Condition	Selectively Loaded
PCB Mount Orientation	Vertical
Number of Positions	12
Number of Rows	3

### Electrical Characteristics

Operating Voltage	600 VAC
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### Body Features

Primary Product Color	White
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### Contact Features

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

Panel Mount Feature	Without
Mating Retention Type	Locking Tab
Mating Retention	With



Mating Alignment Type	Polarization
PCB Mount Retention	Without
PCB Mount Alignment	Without
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]
Profile Height from PCB	14.73 mm [.58 in]
Connector Length	26.67 mm [1.05 in]

### Usage Conditions

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

### Operation/Application

Shielded	No
Circuit Application	Power

### Industry Standards

Compatible With Agency/Standards Products	UL
UL Rating	Recognized
Glow Wire Rating	Standard Part - Not Glow Wire
UL Flammability Rating	UL 94V-0

### 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 # 1586174-1  
06P UMNL PIN HDR 94VO NDH



TE Part # 2029002-1  
09P UMNL HDR ASSY PC, NDH



TE Part # 1586176-1  
12P UMNL PIN HDR 94VO NDH



TE Part # 1586681-8  
12P UMNL PIN HDR ASSY 94VO omit #8



TE Part # 1586682-3  
09P UMNL HDR ASSY PC 94VO SL



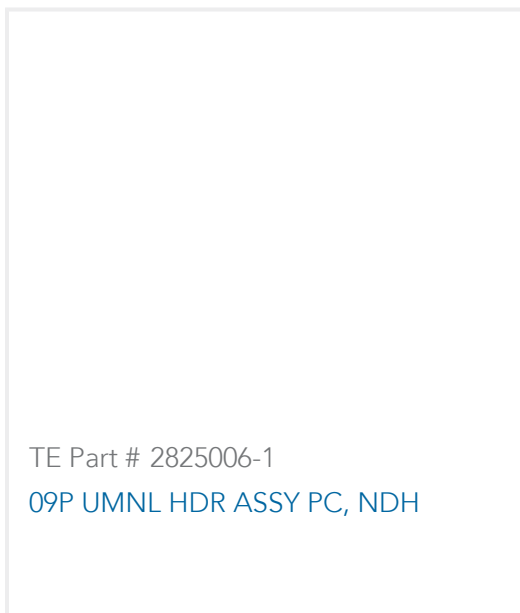
TE Part # 2029397-1  
03P UMNL PIN HDR ASY 94VO NODH



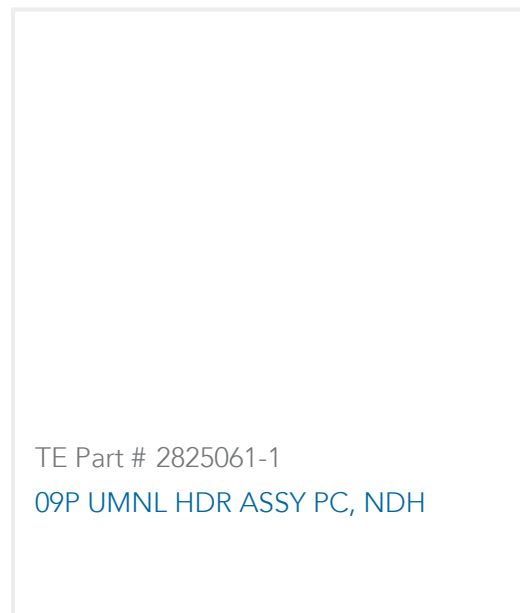
TE Part # 2029451-1  
06P UMNL SOK HDR ASSY W/O DRNS



TE Part # 6-641968-1  
4P UMNL PIN HDR ASS POL VO BLU



TE Part # 2825006-1  
09P UMNL HDR ASSY PC, NDH



TE Part # 2825061-1  
09P UMNL HDR ASSY PC, NDH

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



Circular Power Connectors(2)



Connector Caps & Covers(34)



Connector Contacts(209)



Connector Hardware(12)



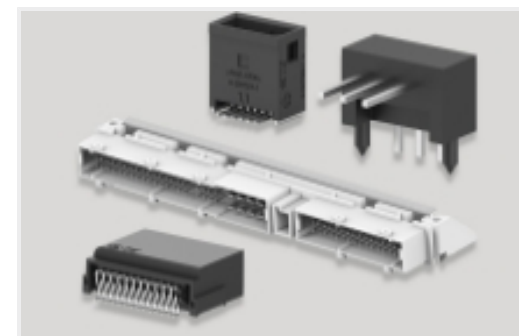
Connector Seals & Cavity Plugs(27)



Connector Strain Relief(7)



Insertion & Extraction Tools(4)



PCB Headers & Receptacles(284)



Rectangular Connector Housings(1)



Rectangular Power Connectors(370)



Standard Circular Connectors(1)

## Customers Also Bought



TE Part #DT04-2P  
REC, 2P, GRY, N



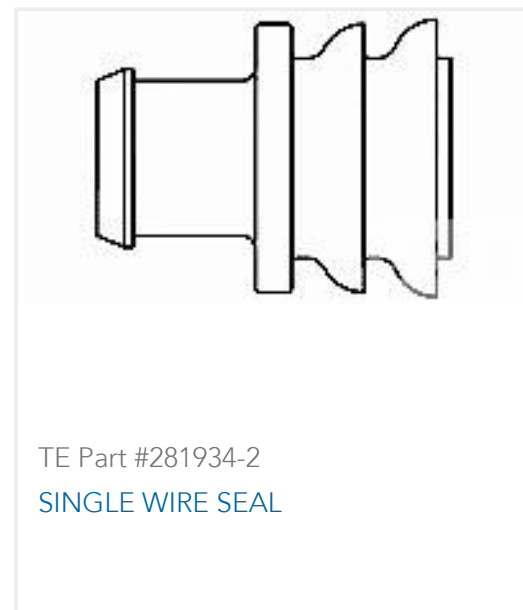
TE Part #W2S  
Wedgelocks: DEUTSCH DT



TE Part #0460-202-16141  
DEUTSCH Solid Contacts



TE Part #282104-1  
AMP SUPERSEAL 1.5MM,  
CONNECTOR HOUSING



## Documents

### Product Drawings

[12P UMNL PIN HDR ASSY 94VO omit #2](#)

English

### CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_1586681-2\\_A.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_1586681-2\\_A.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_1586681-2\\_A.3d\\_stp.zip](#)

English

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

### Product Specifications

[Application Specification](#)

English