### AMP | Multilock Connector System

TE Internal #: 174936-5

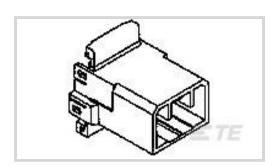
Housing for Male Terminals, Wire-to-Wire, 20 Position, .138 in [3.5]

mm] Centerline, Blue, Signal, Multilock Connector System

View on TE.com >



Connectors > Automotive Connectors > Connector Housings > MULTILOCK, CONNECTOR HOUSING



Connector & Housing Type: Housing for Male Terminals

Mating Tab Width: 1.8 mm [.071 in] Connector System: Wire-to-Wire

Number of Positions: 20

Centerline (Pitch): 3.5 mm [ .138 in ]

### All MULTILOCK, CONNECTOR HOUSING (576)

### **Features**

### **Product Type Features**

Connector & Housing Shape	Rectangular
Connector & Housing Type	Housing for Male Terminals
Connector System	Wire-to-Wire
Sealable	No
Hybrid Connector	No
Primary Locking Feature	Integrated in Housing
Configuration Features	
Number of Positions	20
Number of Rows	2
Electrical Characteristics	
Operating Voltage	12 VDC
Nominal Voltage Architecture	12 V
Body Features	

180°

PBT

Blue

### **Contact Features**

**Body Material** 

Cable Exit Angle

Primary Product Color



Contact Type		
Mating Tab Width         1.8 mm[ 071 in]           Mechanical Attachment         Without           Terminal Position Assurance         Yes           Strain Relief         Without           Mating Alignment Type         Polarized           Mating Alignment         With           Connector Mounting Type         Cable Mount (Free-Hanging)           Housing Features         Centerline (Pitch)           Centerline (Pitch)         3.5 mm[ 138 in]           Dimensions         Product Width           Product Length         31.4 mm[ 1.236 in]           Product Length         31.4 mm[ 1.236 in]           Product Height         18.8 mm[ .418 in]           Wage Conditions         Usage Conditions           Usage Conditions         Vol. 7.5 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C] 128 °F][176 °F][176 °F][178 °F][185 °F][194 °F] [212 °F][212 °F]           Operating Lemperature Range         30 105 °C] 22 221 °F]           Operating Lemperature Range         30 105 °C] 22 221 °F]           Operating Lemperature Range         30 105 °C] 22 221 °F]           Operating Lemperature Range         30 105 °C] 22 221 °F]           Operating Lemperature Range         30 105 °C] 22 221 °F]           Operating Lemperature Range         30 105 °C] 22 221 °F]           Operating Lemperature Rang		1.8mm
Mechanical Attachment         Without           Terminal Position Assurance         Yes           Strain Relief         Without           Mating Alignment Type         Polarized           Mating Alignment         With           Centertor Mounting Type         Cable Mount (Free Hanging)           Housing Features         Centerline (Pitch)           Centerline (Pitch)         3.5 mm[.138 in]           Dimensions         Product Width           Product Width         46.7 mm[1.839 in]           Product Height         31.4 mm[1.236 in]           Product Height         18.8 mm[.74 in]           Row-to-Row Specing         3 mm[.118 in]           Usage Conditions         Usage Conditions           Operating Lemperature (Max)         70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C; 158 °C; 192 °C; 105 °C; 1	Contact Type	
Mounting Feature  Ves  Strain Relief  Without  Mating Alignment Type  Mating Alignment  Connector Mounting Type  Housing Features  Centerline (Pitch)  Dimensions  Product Width  46.7 mm[1.839 in]  Product Length  Product Length  18.8 mm[.74 in]  Row-to-Row Spacing  Usage Conditions  Operating Temperature (Max)  Operating Temperature Range  Operating Temperature Range  Operating Temperature Range  UL Planmability Rating  Packaging Quantity  Other  Serviceable  Yes	Mating Tab Width	1.8 mm[.071 in]
Terminal Position Assurance  Strain Relief  Without  Mating Alignment Type Polarized  Mating Alignment Connector Mounting Type Cable Mount (Free-Hanging)  Housing Features  Conterline (Pitch) 3.5 mm[.138 in]  Dimensions  Product Width 46.7 mm[1.839 in] Product Length 31.4 mm[1.236 in] Product Height 18.8 mm[.74 in] Row-to-Row-Spacing 3 mm[.118 in]  Usage Conditions  Operating Temperature (Max) 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[.128 °F][.167 °F][.168 °F][.194 °F] [.212 °F] Operating Temperature Range 30 – 105 °C[.22 – 221 °F]  Operating Temperature Range UL Plammability Rating UL 94HB  Packaging Features  Packaging Quantity 50  Other  Serviceable Yes	Mechanical Attachment	
Strain Relief Without  Mating Alignment Type Polarized  Mating Alignment Type With  Connector Mounting Type Cable Mount (Free-Hanging)  Housing Features  Centerline (Pitch) 3.5 mml, 138 inj  Dimensions  Product Width 46.7 mml[1.839 in]  Product Length 31.4 mml[1.236 in]  Product Height 18.8 mml, 74 in]  Row-to-Row Spacing 3 mml, 118 inj  Usage Conditions  Operating Temperature (Max) 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][176 °F][185 °F][194 °F] [212 °F][221 °F]  Operating Temperature Range -30 – 105 °C[-22 – 221 °F]  Operating Temperature Range UL 94HB  Packaging Features  Packaging Quantity 50  Other  Serviceable Yes	Mounting Feature	Without
Mating Alignment Type Mating Alignment Connector Mounting Type Cable Mount (Free-Hanging)  Housing Features  Centerline (Pitch) 3.5 mm[,138 in]  Dimensions  Product Width 46.7 mm[1.839 in] Product Length 31.4 mm[1.236 in]  Product Length 18.8 mm[,74 in] Row-to-Row Spacing 3 mm[,118 in]  Usage Conditions  Operating Temperature (Max) 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 100 °C, 1005 °C[158 °F][167 °F][176 °F][185 °F][194 °F] [212 °F] [221 °F]  Operating Temperature Range 30 – 105 °C[ 122 – 221 °F]  Operating Application Circuit Application  Industry Standards  UL Flammability Rating UL 94HB  Packaging Features  Packaging Quantity 50  Other  Serviceable Yes	Terminal Position Assurance	Yes
Mating Alignment With Connector Mounting Type Cable Mount (Free Hanging)  Housing Features  Centerline (Pitch) 3.5 mm[.138 in]  Dimensions  Product Width 46.7 mm[1.839 in]  Product Length 31.4 mm[1.236 in]  Product Length 18.8 mm[.74 in]  Row to Row Spacing 3 mm[.118 in]  Usage Conditions  Operating Temperature (Max) 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][176 °F][176 °F][176 °F][178 °F][194 °F] [212 °F][22 °F]  Operating Temperature Range 30 – 105 °C[ 22 – 221 °F]  Operating Application  Circuit Application Signal  Industry Standards  UL Flammability Rating UL 94HB  Packaging Features  Packaging Quantity 50  Other  Serviceable Yes	Strain Relief	Without
Connector Mounting Type  Housing Features  Centerline (Pitch)  Dimensions  Product Width Product Length Product Height Row-to-Row Spacing  Operating Temperature (Max)  Operating Temperature Range Operation/Application  Circuit Application  Signal  Industry Standards  UL Flammability Rating  Packaging Quantity  Serviceable  Cable Mount (Free-Hanging)  Ale Mount (Free Hanging)  Ale	Mating Alignment Type	Polarized
Housing Features  Centerline (Pitch) 3.5 mm[.138 in]  Dimensions  Product Width 46.7 mm[1.839 in]  Product Length 31.4 mm[1.236 in]  Product Height 18.8 mm[.74 in]  Row-to-Row Spacing 3 mm[.118 in]  Usage Conditions  Operating Temperature (Max) 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][176 °F][176 °F][176 °F][194 °F]  Operating Temperature Range 30 – 105 °C[22 – 221 °F]  Operating Application  Circuit Application Signal  Industry Standards  UL Plammability Rating UL 94HB  Packaging Features  Packaging Quantity 50  Other  Serviceable Yes	Mating Alignment	With
Centerline (Pitch)  Dimensions  Product Width  Product Length  18.8 mm[1.236 in]  Product Height  Row-to-Row Spacing  Usage Conditions  Operating Temperature (Max)  Operating Temperature Range  Operating Temperature Range  -30 – 105 °C[158 °F][167 °F][176 °F][185 °F][194 °F]  (212 °F][221 °F]  Operating Temperature Range  Ut Planmability Rating  Ut 94HB  Packaging Features  Packaging Quantity  Serviceable  Yes	Connector Mounting Type	Cable Mount (Free-Hanging)
Dimensions  Product Width 46.7 mm[1.839 in]  Product Length 31.4 mm[1.236 in]  Product Height 18.8 mm[.74 in]  Row-to-Row Spacing 3 mm[.118 in]  Usage Conditions  Operating Temperature (Max) 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][167 °F][176 °F][185 °F][194 °F] [212 °F][221 °F]  Operating Temperature Range -30 – 105 °C[-22 – 221 °F]  Operating Application  Circuit Application Signal  Inclustry Standards  UL Flammability Rating UL 94HB  Packaging Features  Packaging Quantity 50  Other  Serviceable Yes	Housing Features	
Product Width 46.7 mm[1.839 in]  Product Length 31.4 mm[1.236 in]  Product Height 18.8 mm[.74 in]  Row-to-Row Spacing 3 mm[.118 in]  Usage Conditions  Usage Conditions  Operating Temperature (Max) 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][167 °F][176 °F][185 °F][194 °F] [212 °F][212 °F]  Operating Temperature Range -30 – 105 °C[-22 – 221 °F]  Operation/Application  Circuit Application Signal  Industry Standards  UL Flammability Rating UL 94HB  Packaging Features  Packaging Quantity 50  Other  Serviceable Yes	Centerline (Pitch)	3.5 mm[.138 in]
Product Length 31.4 mm[1.236 in]  Product Height 18.8 mm[.74 in]  Row-to-Row Spacing 3 mm[.118 in]  Usage Conditions  Operating Temperature (Max) 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][167 °F][176 °F][185 °F][194 °F] [212 °F][221 °F]  Operating Temperature Range -30 – 105 °C[-22 – 221 °F]  Operation/Application  Circuit Application Signal  Industry Standards  UL Flammability Rating UL 94HB  Packaging Features  Packaging Quantity 50  Other  Serviceable Yes	Dimensions	
Product Height  Row-to-Row Spacing  Usage Conditions  Operating Temperature (Max)  Operating Temperature (Max)  Operating Temperature Range  Operation/Application  Circuit Application  Signal  Industry Standards  UL Flammability Rating  Packaging Features  Packaging Quantity  Serviceable  18.8 mm[.74 in]  3 mm[.118 in]  70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 100 °C, 105 °C[.158 °F][.194 °F] [.212 °F][.212 °F]  70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[.198 °F][.194 °F] [.212 °F][.212 °F]  70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 100 °C, 105 °C[.198 °F][.194 °F] [.212 °F][.212 °F]  8 cylindary Feature Range  30 – 105 °C[-22 – 221 °F]  UL 94HB  Packaging Quantity  50  Other	Product Width	46.7 mm[1.839 in]
Row-to-Row Spacing  Usage Conditions  Operating Temperature (Max)  Operating Temperature (Max)  To °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][176 °F][176 °F][176 °F][194 °F] [212 °F]  Operating Temperature Range  -30 – 105 °C[-22 – 221 °F]  Operation/Application  Circuit Application  Signal  Industry Standards  UL Flammability Rating  UL 94HB  Packaging Features  Packaging Quantity  50  Other  Serviceable  Yes	Product Length	31.4 mm[1.236 in]
Usage Conditions  Operating Temperature (Max)  70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][176 °F][176 °F][194 °F] [212 °F]  Operating Temperature Range  -30 – 105 °C[-22 – 221 °F]  Operation/Application  Circuit Application  Industry Standards  UL Flammability Rating  UL 94HB  Packaging Features  Packaging Quantity  50  Other  Serviceable  Yes	Product Height	18.8 mm[.74 in]
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105 °C[158 °F][167 °F][176 °F][185 °F][194 °F] [212 °F][221 °F]  Operating Temperature Range -30 – 105 °C[-22 – 221 °F]  Operation/Application  Circuit Application Signal  Industry Standards  UL Flammability Rating UL 94HB  Packaging Features  Packaging Quantity 50  Other  Serviceable Yes	Usage Conditions	
Operation/Application Circuit Application Signal Industry Standards UL Flammability Rating UL 94HB  Packaging Features Packaging Quantity 50 Other Serviceable Yes	Operating Temperature (Max)	105 °C[158 °F][167 °F][176 °F][185 °F][194 °F]
Circuit Application Signal  Industry Standards  UL Flammability Rating UL 94HB  Packaging Features  Packaging Quantity 50  Other  Serviceable Yes	Operating Temperature Range	-30 - 105 °C[-22 - 221 °F]
Industry Standards  UL Flammability Rating  Packaging Features  Packaging Quantity  50  Other  Serviceable  Yes	Operation/Application	
UL Flammability Rating  Packaging Features  Packaging Quantity  50  Other  Serviceable  Yes	Circuit Application	Signal
Packaging Features  Packaging Quantity  50  Other  Serviceable  Yes	Industry Standards	
Packaging Quantity 50  Other  Serviceable Yes	UL Flammability Rating	UL 94HB
Other  Serviceable  Yes	Packaging Features	
Serviceable Yes	Packaging Quantity	50
	Other	
Connector Position Assurance Capable No	Serviceable	Yes
	Connector Position Assurance Capable	No



# **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 2022 (224) Candidate List Declared Against: JAN 2022 (223) SVHC > Threshold: Not Yet Reviewed
Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
Solder Process Capability	Not applicable for solder process capability

#### 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









Also in the Series | Multilock Connector System





Automotive Connector Caps & Covers (16)



Automotive Connector EMC Shielding



Automotive Connector Locks & Position Assurance(2)



Automotive Housings(575)



Automotive Seals & Cavity Plugs(2)



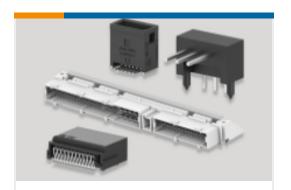
Automotive Terminals(141)



Insertion & Extraction Tools(6)



Other Automotive Connector Accessories(9)



PCB Headers & Receptacles(129)

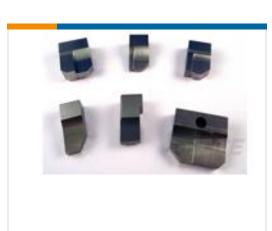
# Customers Also Bought



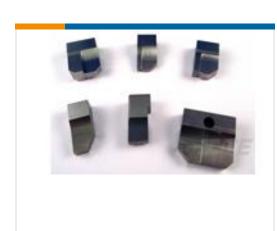
TE Part #7-1734774-3
PCI EXP 3.1L 164 POS BLK 30u"



TE Part #176119-6
MULTILOCK, CONNECTOR HOUSING



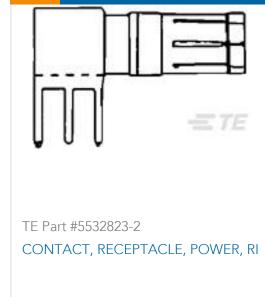
TE Part #690761-1 ANVIL



TE Part #690575-1

ANVIL-REVERSIBLE













### **Documents**

### **Product Drawings**

070 MLC W-W CAP HSG 20P BLUE

English

#### **CAD Files**

3D PDF

English

**Customer View Model** 

ENG\_CVM\_174936-5\_C.2d\_dxf.zip

English

**Customer View Model** 

ENG\_CVM\_174936-5\_C.3d\_igs.zip

English

**Customer View Model** 

ENG\_CVM\_174936-5\_C.3d\_stp.zip

English

By downloading the CAD file I accept and agree to the **Terms and Conditions** of use.

## Datasheets & Catalog Pages

MULTILOCK Connector System

English

## **Product Specifications**

**Product Specification** 

Japanese