



# MCON INTERCONNECTION SYSTEM

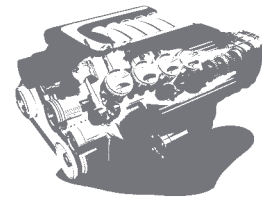
FOR THE AUTOMOTIVE INDUSTRY

# SOLUTIONS FOR FUTURE MOBILITY

The pace at which the E&E architecture of vehicles is being innovated is one of the major challenges facing the automotive industry. An increasing number of electric and electronic systems enriches modern vehicles and makes them more attractive. At the same time, reliability is one of the automotive industry's core strengths. Within this area of potential conflict, everything depends on constant innovation and proven technology. Is that a contradiction in terms? Not for us.

TE Transportation Solutions, which is part of TE Connectivity, is a company driven by technology. With this philosophy, we have become one of the world's largest manufacturers of passive components. It's part of our DNA to reconcile innovation and reliability. To do that, we have invested in modern R&D and testing infrastructure. We will show you how TE Connectivity's passive components can contribute to vehicle function enrichment, better efficiency and greater comfort.

## POWERTRAIN SYSTEMS



## SAFETY & SECURITY SYSTEMS



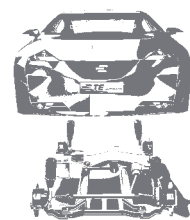
## CONVENIENCE



## DRIVER INFORMATION



## BODY & CHASSIS SYSTEMS



# TE AUTOMOTIVE ONLINE

The TE Transportation Solutions website is an innovative and interactive source for application information, product updates and technical solutions.

Please contact us at: [www.te.com/automotive](http://www.te.com/automotive)

## STAY CONNECTED

TE AUTOMOTIVE OFFERS A VARIETY OF PRODUCT SPECIFIC CATALOGS, BROCHURES AND HIGH IMPACT FLYERS TO HELP BETTER SERVE YOU!

## TE Literature

For more information on literature for TE Automotive, please contact your local organization or go to: [www.te.com/automotive](http://www.te.com/automotive)

## TE Products

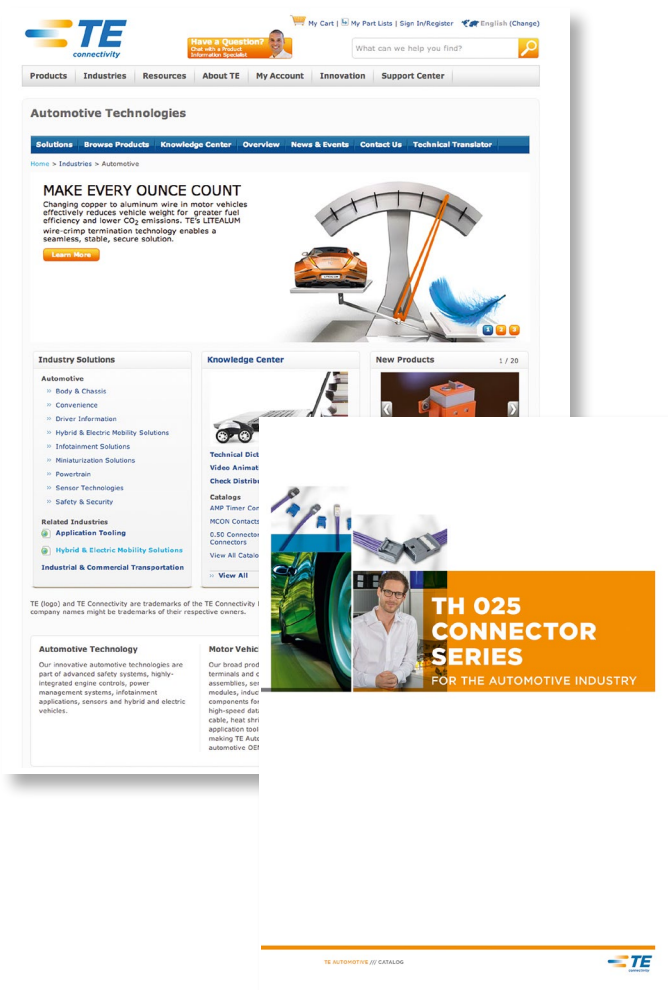
[www.te.com/en/products/product-landing.html](http://www.te.com/en/products/product-landing.html)

## Product Information Center (PIC)

You can rely on TE Connectivity's PIC Team to provide you support for answers to your general information or technical questions in an efficient and effective manner.

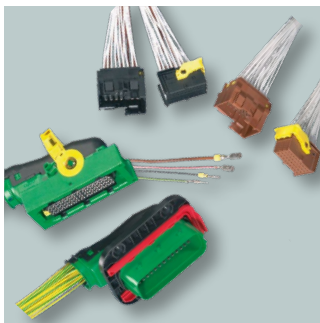
To reach our PIC staff, please contact your local organization or see our Global Contacts page.

Please contact us at [www.te.com/support-center](http://www.te.com/support-center)



# INNOVATIVE TECHNOLOGIES

TE Automotive - a business segment of TE Connectivity - follows the globalization goals of our customers, speeds up the integration of new technologies and enables our customers access to our vast product portfolio and services.



## Interconnection Systems

TE Connectivity's electrical and electronic interconnection products and solutions are used to electrically and mechanically join wires and cables, printed circuit boards, integrated circuit packages and batteries.



## Cable Assemblies

TE Connectivity is your partner for vehicle-specific cable assemblies. We offer research and development capabilities, prototypes and samples, as well as manufacturing facilities for special cable assemblies.



## Hybrid & Electric Mobility Solutions

Electric mobility is changing the way engineers think about vehicles. The way they're designed and engineered. The way they're fueled. Even the way the fuel is delivered. And we're right there with you helping complete the connections for current and next generation hybrid and electric mobility and the charging infrastructure. TE Connectivity's complete portfolio of connection and protection systems includes battery connectivity systems, connectors, cable assemblies, high-voltage relays and contactors, power distribution units and customer-specific designs.



## Sensor Solutions

TE Connectivity provides contactless and electromechanical sensor products with robust housing technologies, connection systems and temperature-resistant design for use in a variety of industrial and commercial transportation applications.





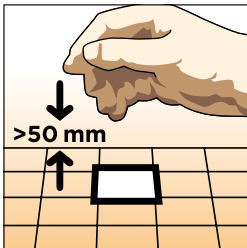

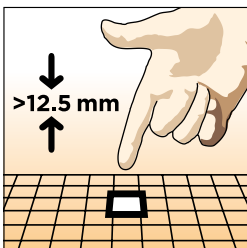
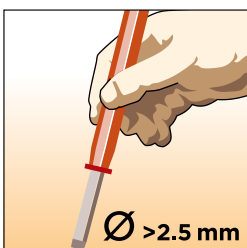
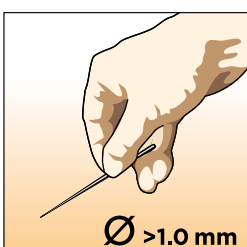
## Relays


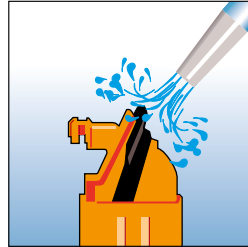
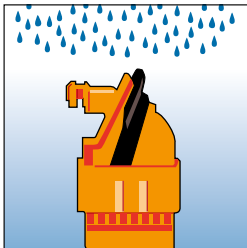

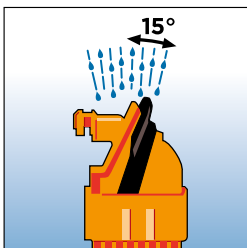

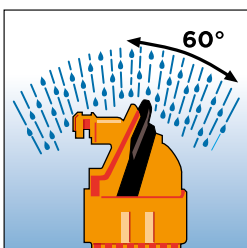
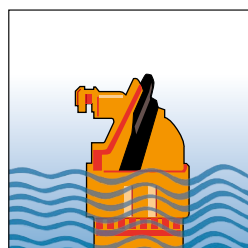
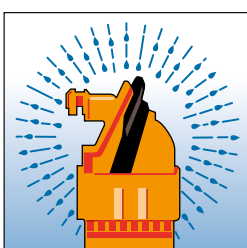
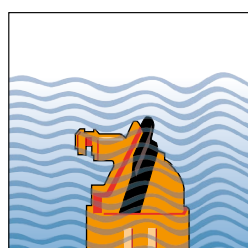
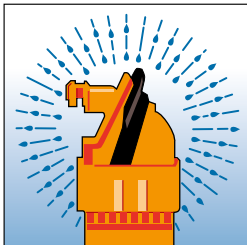

TE Connectivity's 24 V relay product line includes a broad range of robust and versatile relays for many diverse applications within trucks, buses, agricultural tractors, construction equipment and other heavy duty commercial vehicles. With increased contact gaps and other key design features, these relays are designed for use in challenging environments where they may regularly encounter extended periods of shock and vibration.



## Infotainment

TE Connectivity offers a wide variety of infotainment solutions for consumer port connections, high data rate applications, next-generation harness architecture, board-to-board connections and vehicle-to-vehicle communication.

1st Digit Against Foreign Objects (incl. Dust)	1st Digit Against Foreign Objects (incl. Dust)
<p><b>0</b></p>  <p>Not protected.</p>	<p><b>5K</b></p>  <p>Dust protected.</p>
<p><b>1</b></p>  <p>Protected against solid objects greater than 50 mm (ex. back of hand).</p>	<p><b>6K</b></p>  <p>Dust tight.</p>
<p><b>2</b></p>  <p>Protected against solid objects greater than 12.5 mm (ex. finger).</p>	
<p><b>3</b></p>  <p>Protected against solid objects greater than 2.5 mm (ex. tool).</p>	
<p><b>4</b></p>  <p>Protected against solid objects greater than 1.0 mm (ex. wire).</p>	

2nd Digit	Against Water	2nd Digit	Against Water
0	 <p>Not protected.</p>	5	 <p>Protected against jetting water.</p>
1	 <p>Protected against vertically dripping water.</p>	6	 <p>Protected against powerfully jetting water.</p>
2	 <p>Protected against dripping water when tilted up to 15°.</p>	6K	 <p>Protected against powerfully jetting water with increased pressure (Automotive).</p>
3	 <p>Protected against spraying water (up to 60° inclination).</p>	7	 <p>Protected against the temporary effects of immersion up to 1 meter.</p>
4	 <p>Protected against splashing water.</p>	8	 <p>Protected against continuous submersion agreed with customer, but more severe than code 7.</p>
4K	 <p>Protected against splashing water with increased pressure.</p>	9K	 <p>Protected against high-pressure/steam-jet cleaning (Automotive).</p>



At TE Connectivity, we support your RoHS requirements. We've assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

## Getting the information you need

Our comprehensive on-line RoHS Customer Support Center provides a forum to answer your questions and support your RoHS needs. A RoHS FAQ (Frequently Asked Questions) is available with links to more detailed information. You can also submit RoHS questions and receive a response within 24 hours during a normal work week.

The Support Center also provides:

Cross-Reference from Non-compliant to Compliant Products

Ability to browse RoHS Compliant Products in our on-line catalog:

[www.te.com/commerce/alt/RohsAltHome.do](http://www.te.com/commerce/alt/RohsAltHome.do)

Downloadable Technical Data Customer Information Presentation

More detailed information regarding the definitions used above

## RoHS Compliant

Part numbers in this catalog are RoHS Compliant, unless marked otherwise. These products comply with European Union Directive 2002/95/EC as amended 1 January 2006 that restricts the use of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE in certain electrical and electronic products sold into the EU as of 1 July 2006.

Note: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly "Out of Scope" of the RoHS Directive such as hand tools and other non-electrical accessories.

## Non-RoHS Compliant

These part numbers are identified with a "t" symbol. These products do not comply with the material restrictions of the European Union Directive 2002/95/EC.

## 5 of 6 Compliant

A "l" symbol identifies these part numbers. These products do not fully comply with the

European Union Directive 2002/95/EC because they contain lead in solderable interfaces (they do not contain any of the other five restricted substances above allowable limits). However, these products may be suitable for use in RoHS applications where there is an application-based exception for lead in solders, such as the server, storage, or networking infrastructure exemption.

Note: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced below. So whatever your questions when it comes to RoHS, we've got the answers at <http://www.te.com/customersupport/rohssupportcenter/>



**Conversion Tables**  
**AWG Conversion Table (Average Value)**

AWG Code	Diameter (Inch)	Diameter (mm)	F (mm <sup>2</sup> )
000000	0.5800	14.733	170.0
00000	0.5165	13.13	135.0
0000	0.4600	11.684	103.8
000	0.4096	10.40	79.0
00	0.3648	9.27	67.5
0	0.3249	8.25	53.4
1	0.2893	7.34	42.2
2	0.2576	6.55	33.7
3	0.2294	5.82	26.6
4	0.2043	5.18	21.0
5	0.1819	4.62	16.9
6	0.1620	4.115	13.25
7	0.1443	3.66	10.25
8	0.1285	3.26	8.34
9	0.1144	2.90	6.6
10	0.1019	2.59	5.27
11	0.0907	2.30	4.15
12	0.0808	2.05	3.3
13	0.0720	1.83	2.63
14	0.0641	1.63	2.08
15	0.0571	1.45	1.65
16	0.0508	1.29	1.305
17	0.0453	1.14	1.01
18	0.0403	1.02	0.79
19	0.0359	0.91	0.65
20	0.0320	0.81	0.51
21	0.0285	0.72	0.407
22	0.0253	0.64	0.32
23	0.0226	0.57	0.255
24	0.0201	0.51	0.205
25	0.0179	0.455	0.162
26	0.0159	0.40	0.125
27	0.0142	0.36	0.102
28	0.0126	0.320	0.08
29	0.0113	0.287	0.0646
30	0.0100	0.254	0.0516
31	0.0089	0.226	0.04
32	0.0080	0.203	0.0324
33	0.0071	0.180	0.0255
34	0.0063	0.160	0.02
35	0.0056	0.142	0.0158
36	0.0050	0.127	0.0127
37	0.0045	0.114	0.01
38	0.0040	0.101	0.008
39	0.0035	0.089	0.0062
40	0.0031	0.079	0.0049
41	0.0028	0.071	0.00395
42	0.0025	0.064	0.00321
43	0.0022	0.056	0.00246
44	0.00198	0.050	0.00196
45	0.00176	0.045	
46	0.00157	0.040	
47	0.00140	0.036	
48	0.00124	0.031	
49	0.00110	0.028	
50	0.00099	0.025	

Remark: Starting from 0.03 mm<sup>2</sup> (AWG 32) a wire can be crimped.

**MCON  
Interconnection System**

	Page	Powertrain Systems	Safety & Security Systems	Convenience	Driver Information	Body & Chassis Systems
<b>MCON Tab and Receptacle Contacts</b>						
Introduction	1					
<b>MCON 0.50mm Contact System</b>						
Receptacle Contacts	2	•	•	•	•	•
<b>MCON 1.2mm Contact System</b>						
Receptacle Contacts - Locking Lance (LL)	3	•	•	•	•	•
Tab Contacts - Locking Lance (LL)	4	•	•	•	•	•
Receptacle Contacts - Clean Body (CB)	5	•	•	•	•	•
Tab Contacts - Clean Body (CB)	6	•	•	•	•	•
<b>HPF 1.2mm Contact System</b>						
Receptacle Contacts - Locking Lance (LL)	7	•	•	•	•	•
<b>MCON 2.8mm Contact System</b>						
Receptacle Contacts - Locking Lance (LL)	8	•	•	•	•	•
<b>MCON 6.3mm Contact System</b>						
Receptacle Contacts - Locking Lance (LL)	9	•	•	•	•	•
Receptacle Contacts - Clean Body (CB)	10	•	•	•	•	•
<b>MCON 8mm Contact System</b>						
Receptacle Contacts	11	•	•	•	•	•
<b>MCON 9.5mm Contact System</b>						
Receptacle Contacts	12	•	•	•	•	•
<b>Single Wire Seals and Sealing Plugs</b>						
Single Wire Seals and Sealing Plugs	13	•	•	•	•	•

**MCON Housings and Connectors**

Introduction	15					
Sealed MCON 1.2 Receptacle Housing for Locking Lance Contacts 2 to 3 Positions	16	•	•	•	•	•
Sealed MCON 1.2 Receptacle Housing for Locking Lance Contacts 4 to 8 Positions	17	•	•	•	•	•
Sealed MCON 1.2 Tab Housing for Locking Lance Contacts 2 to 8 Positions	18	•	•	•	•	•
Sealed MCON 1.2 Gen2 Receptacle Housing for Locking Lance Contacts 2 to 5 Positions	19	•	•	•	•	•
Sealed MCON 1.2 Gen2 Tab Housing for Locking Lance Contacts 2 to 5 Positions	20	•	•	•	•	•
Sealed MCON 1.2 V4 / HPF 1.2 Series Housing 2 Positions	21	•	•	•	•	•
Sealed MCON 1.2 Receptacle Housing for Clean Body Contacts - up to 125° C	22	•	•	•	•	•

**MCON  
Interconnection System**

	Page	Powertrain Systems	Safety & Security Systems	Convenience	Driver Information	Body & Chassis Systems
<b>MCON Housings and Connectors</b>						
Sealed MCON 1.2 Receptacle Housing for Clean Body Contacts - up to 150°C	23	•	•	•	•	•
Sealed MCON 1.2 Receptacle Housing for Clean Body Contacts - Low Profile Sidelatch - up to 150°C	24	•	•	•	•	•
Sealed MCON 1.2 32 Positions Mixed Housing	25	•	•	•	•	•
MCON 1.2 Sealed Wire-to-wire or Bulkhead Housing	26	•	•	•	•	•
18 Positions MCON 1.2 + 2.8 Mixed Wire-to-wire Connector	27	•	•	•	•	•
<b>Application Tooling</b>	<b>29</b>					
<b>Numerical Index</b>	<b>31 - 33</b>					
<b>Imprint</b>	<b>34</b>					
<b>Global Contacts</b>	<b>35</b>					



POWERTRAIN SYSTEMS



SAFETY & SECURITY SYSTEMS



CONVENIENCE



DRIVER INFORMATION



BODY & CHASSIS SYSTEMS



## MCON TAB AND RECEPTACLE CONTACTS

### MCON INTERCONNECTION SYSTEM INTRODUCTION

MCON is a series of contact systems commonly used for electrical and electronic applications for passenger cars and commercial vehicles. The contact design meets standardized blade sizes and interface requirements of the automotive industry.

Except the miniaturized MCON 0.50 contact system, all contacts follow the two-piece contact design strategy to separate the electrical from the mechanical performance.

The MCON contact series is available for sealed and unsealed applications. For a fast and economic termination process, TE Application Tooling is offering a vast portfolio of application equipment.

#### The MCON advantages:

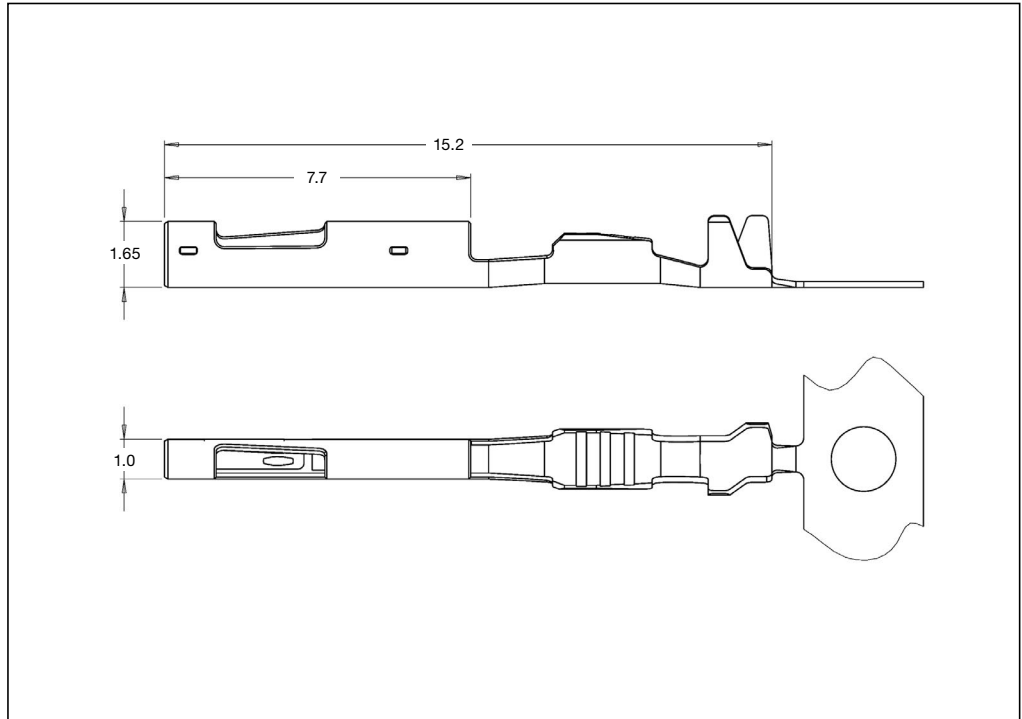
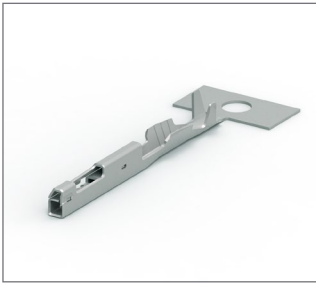
- High performance copper alloy
- Redundant contact point technology for higher reliability
- High vibration level support to meet future requirements
- Overstress protection of the contact springs
- Contact box with polarization and secondary locking feature\*
- Protected locking lance\*\*
- Sealed and unsealed version
- -40°C up to 150°C temperature range\*\*\*
- 3 directional secondary locking access

\* MCON 0.50, MCON 1.2, MCON 2.8 and MCON 6.3  
- same level for locking lance and secondary feature

\*\* Except MCON 0.50 - clean body version

\*\*\* -40°C to 180°C with innovative surface technology available

**Receptacle Contacts**



**Technical Features**

**Contact Material:**

CuNiSi/CuSn

**Wire Size Range :**

0.13 – 0.35 mm<sup>2</sup>

**Current Carrying Capacity :**

up to 3 Ampere  
(@ 80° C ambient temperature)

**Total Temperature Range :**

-40° C ... +105° C (tin plated)  
-40° C ... +150° C (gold plated)  
-40° C ... +170° C (silver plated)

**Insertion Force :**

Max 3.5 N

**Extraction Force:**

Max 3 N

**Extraction Tool\*:**

8-1579007-9

**Product Drawing:**

2208562

**Product Specification:**

108-94342

**Application Specification:**

114-94191

\* The option which extraction tool is the right tool for the application is dependent on the assembly of the contact and the connector.

**Standard Receptacle Contact (SRC)**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦)	Hand Tool complete ◇)
0.13 – 0.17	0.85 – 1.10	2177908	-1 /-2 /-3	2151332-x	
0.22 – 0.35	0.95 – 1.20	2177909	-1 /-2 /-3	2151523-x	4-1579014-1
	1.20 – 1.30		-1 /-2 /-3	2151524-x	

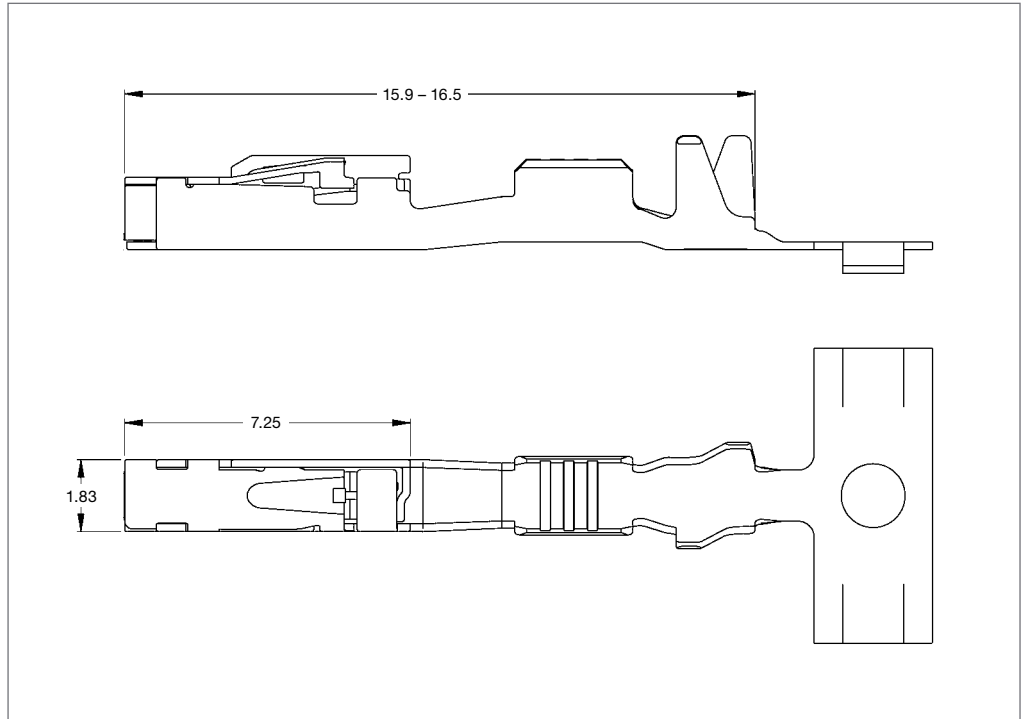
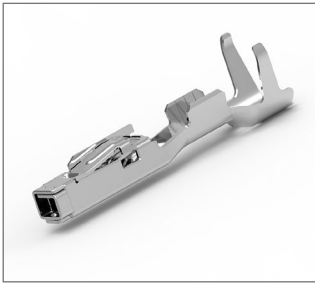
\*) **Material and Finish:** xxx-1 = CuNiSi, pre-tin plated  
xxx-2 = CuNiSi, selective gold plated  
xxx-3 = CuNiSi, selective silver plated

**Note:** All part numbers are RoHS and ELV compliant

♦) The pre- and suffix for the applicators depends on the applied termination equipment

◇) In case of Tooling query please contact your local TE Connectivity representative

**Receptacle Contacts – Locking Lance (LL)**



**Technical Features**

**Contact Material:**

CuSn / CuNiSi

**Wire Size Range:**

0.13 – 1.5mm<sup>2</sup>

**Current Carrying Capacity:**

up to 17 Ampere  
(@ 80°C ambient temperature)

**Total Temperature Range:**

-40°C ... +130°C (tin plated)  
-40°C ... +150°C (gold plated)  
-40°C ... +150°C (silver plated)

**Insertion Force:**

Max 5 N

**Extraction Force:**

Max 2.5 N

**Extraction Tool\*:**

5-1579007-3

**Product Drawing:**

1452674

**Product Specification:**

108-18782

**Application Specification:**

114-18464

\* The option which extraction tool is the right tool for the application is dependent on the assembly of the contact and the connector.

**Standard Receptacle Contact (SRC)**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦)	Hand Tool	Die Set	Mating Tab Contact
0.13 – 0.22	0.85 – 1.05	2141861	-1 /-2/ -3	x-2151333-x	On request ◇)	On request ◇)	2141864
0.25 – 0.35	1.10 – 1.75	7-1452653	-1 /-2/ -3	x-2151042-x	539635-1	4-1579001-3	5-1418758
0.50 – 0.75	1.4 – 1.9	7-1452656	-1 /-2/ -3	x-2151037-x		4-1579001-2	5-1418760
1.0 – 1.5	1.9 – 2.4	7-1452659	-1 /-2/ -3	x-2151353-x		4-1579001-1	1418762

**Receptacle Contact with Single Wire Sealing (SWS) System**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦)	Hand Tool	Die Set	Mating Tab Contact
0.13 – 0.22	0.85 – 1.05	2141970	-1 /-2/ -3	x-2151585-x	On request ◇)	On request ◇)	2141868
0.25 – 0.35	1.10 – 1.75	7-1452665	-1 /-2/ -3	x-2151041-x <sup>a)</sup> x-2266276-x <sup>b)</sup>	539635-1	4-1579001-7	1718758
0.50 – 0.75	1.4 – 1.9	7-1452668	-1 /-2/ -3	x-2151036-x		4-1579001-6	1718760
1.0 – 1.5	1.9 – 2.4	7-1452671	-1 /-2/ -3	x-2151049-x		4-1579001-5	1718762

a) Sealed Application

b) Sealed Application – Insulation crimp width 3.05mm [.120"], applies insulation diameter range of 1.10-1.75mm [.043-.069"]

\*) **Material and Finish:** xxx-1 = CuNiSi, pre-tin plated  
xxx-2 = CuNiSi, selective gold plated  
xxx-3 = CuNiSi, selective silver plated

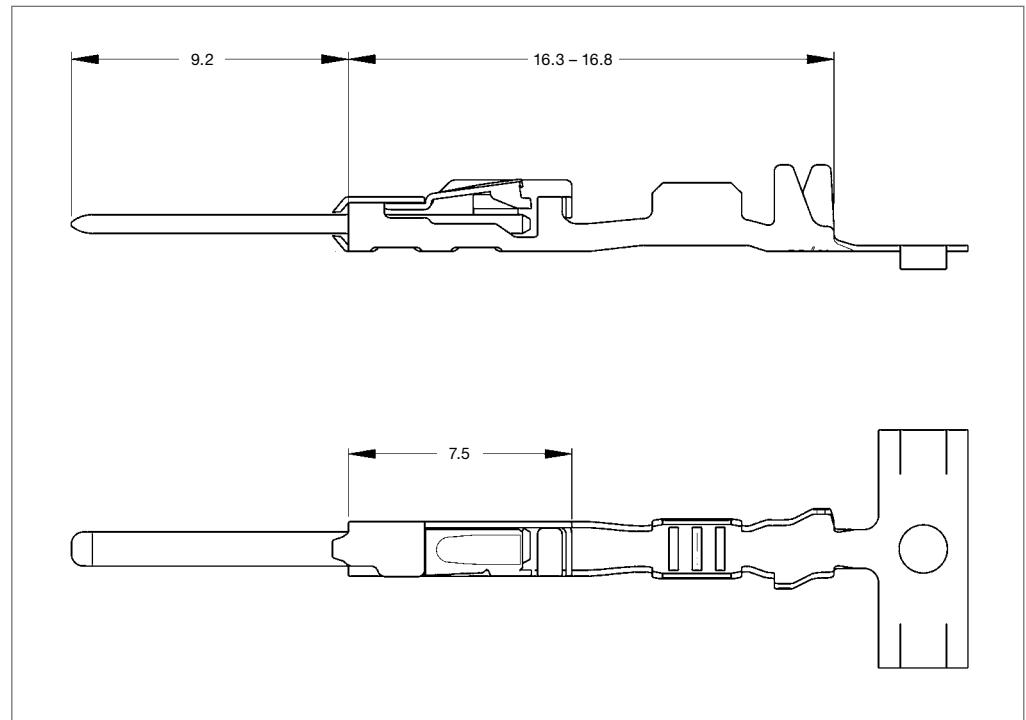
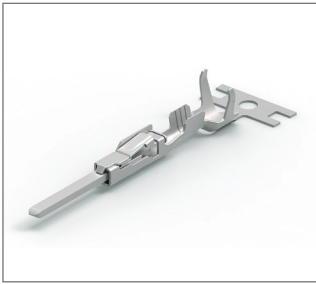
**Note:** All part numbers are RoHS and ELV compliant

♦) The pre- and suffix for the applicators depends on the applied termination equipment

◇) In case of Tooling query please contact your local TE Connectivity representative



**Tab Contacts – Locking Lance (LL)**



**Technical Features**

**Contact Material:**

CuSn/CuNiSi

**Wire Size Range:**

0.13-1.5mm<sup>2</sup>

**Current Carrying Capacity:**

up to 17 Ampere  
(@ 80° C ambient temperature)

**Total Temperature Range:**

-40° C ... +130° C (tin plated)  
-40° C ... +150° C (gold plated)  
-40° C ... +150° C (silver plated)

**Extraction Tool\*:**  
5-1579007-3

**Product Drawing:**  
1418754

**Product Specification:**  
108-18782

**Application Specification:**  
114-18464

\* The option which extraction tool is the right tool for the application is dependent on the assembly of the contact and the connector.

**Standard Tab Contact**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦	Hand Tool	Die Set	Mating Rec Contact
0.13 – 0.17	0.85 – 1.2	2141864	-1 /-2/ -3	x-2151657-x	On request ◊	On request ◊	2141861
0.25 – 0.35	1.1 – 1.75	5-1418758	-1 /-2/ -3	x-2151311-x		4-1579001-3	7-1452653
0.50 – 0.75	1.4 – 1.9	5-1418760	-1 /-2/ -3	x-2151300-x	539635-1	4-1579001-2	7-1452656
1.0 – 1.5	1.9 – 2.4	1418762	-1 /-2/ -3	x-2151479-x		4-1579001-1	7-1452659

**Tab Contact with Single Wire Sealing (SWS) System**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦	Hand Tool ◊	Die Set ◊	Mating Rec Contact
0.13 – 0.17	0.85 – 1.2	2141868	-1 /-2/ -3	x-2151658-x	On request	On request	2141970
0.25 – 0.35	1.1 – 1.6	1718758	-1 /-2/ -3	x-2151596-x		4-1579001-7	7-1452665
0.50 – 0.75	1.4 – 1.9	1718760	-1 /-2/ -3	x-2151477-x	539635-1	4-1579001-6	7-1452668
1.0 – 1.5	1.9 – 2.4	1718762	-1 /-2/ -3	x-2151480-x		4-1579001-5	7-1452671

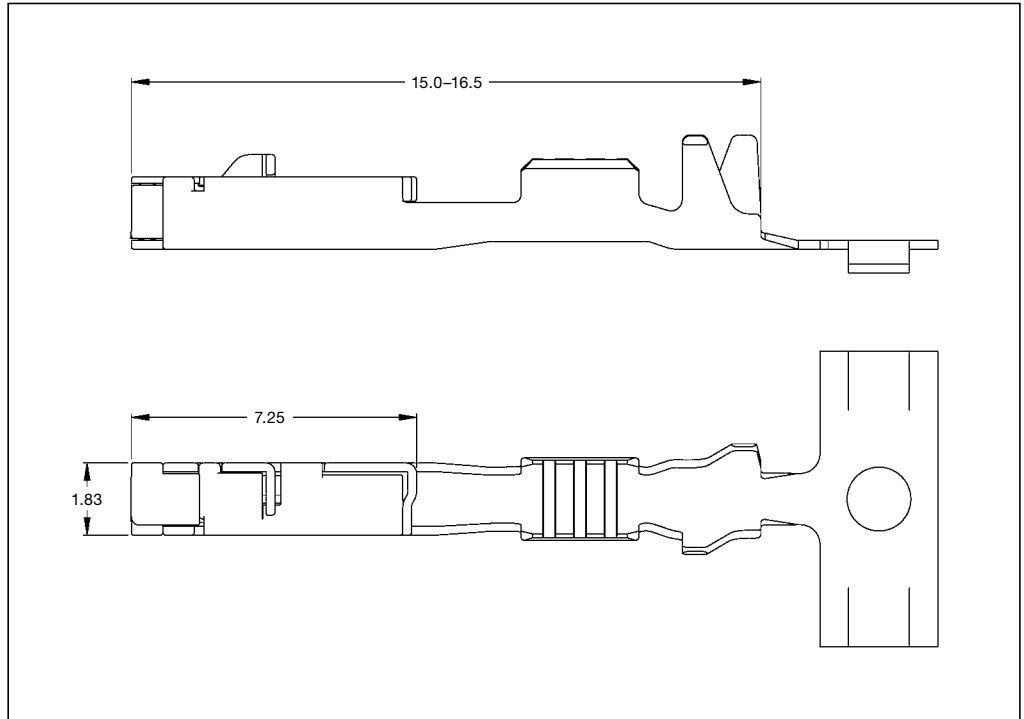
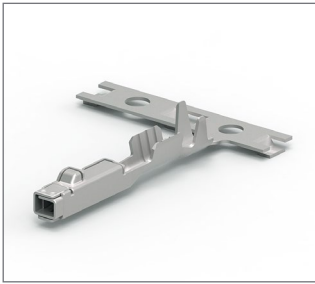
**\*) Material and Finish:** xxx-1 = CuNiSi, pre-tin plated  
xxx-2 = CuNiSi, selective gold plated  
xxx-3 = CuNiSi, selective silver plated

**Note:** All part numbers are RoHS and ELV compliant

♦ The pre- and suffix for the applicators depends on the applied termination equipment

◊ In case of Tooling query please contact your local TE Connectivity representative

**Receptacle Contacts – Clean Body (CB)**



**Technical Features**

**Contact Material:**

CuSn / CuNiSi

**Wire Size Range:**

0.25 – 1.5mm<sup>2</sup>

**Current Carrying Capacity:**

up to 17 Ampere  
(@ 80° C ambient temperature)

**Total Temperature Range:**

-40° C ... +130° C (tin plated)  
-40° C ... +150° C (gold plated)  
-40° C ... +150° C (silver plated)

**Insertion Force:**

Max 5 N

**Extraction Force:**

Max 2.5 N

**Extraction Tool\*:**

1-1579028-1

**Product Drawing:**

1534326

**Product Specification:**

108-18782

**Application Specification:**

114-18464

\* The option which extraction tool is the right tool for the application is dependent on the assembly of the contact and the connector.

**Standard Receptacle Contact (SRC)**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ◆	Hand Tool ◇	Die Set ◇	Mating Tab Contact
0.25 – 0.35	1.10 – 1.75	1534594	-1 /-2/ -3	x-2151470-x	539635-1	1579001-6	1718348-x
0.50 – 0.75	1.4 – 1.9	1670144	-1 /-2/ -3	x-2151068-x	2-1579016-1	-	1718350-x
1.0 – 1.5	1.9 – 2.4	1452503	-1 /-2/ -3	x-2151468-x	1-1579001-3	-	N/A

**Receptacle Contact with Single Wire Sealing (SWS) System**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ◆	Hand Tool ◇	Die Set ◇	Mating Tab Contact
0.25 – 0.35	1.10 – 1.75	1418844	-1 /-2/ -3	x-2266013-x	-	3-1579001-9	2121114-x
0.50 – 0.75	1.4 – 1.9	1670146	-1 /-2/ -3	x-2151981-x	539635-1	2-1579016-2	2141116-x
1.0 – 1.5	1.9 – 2.4	1418850	-1 /-2/ -3	x-2266515-x	-	3-1579001-7	2177610-x

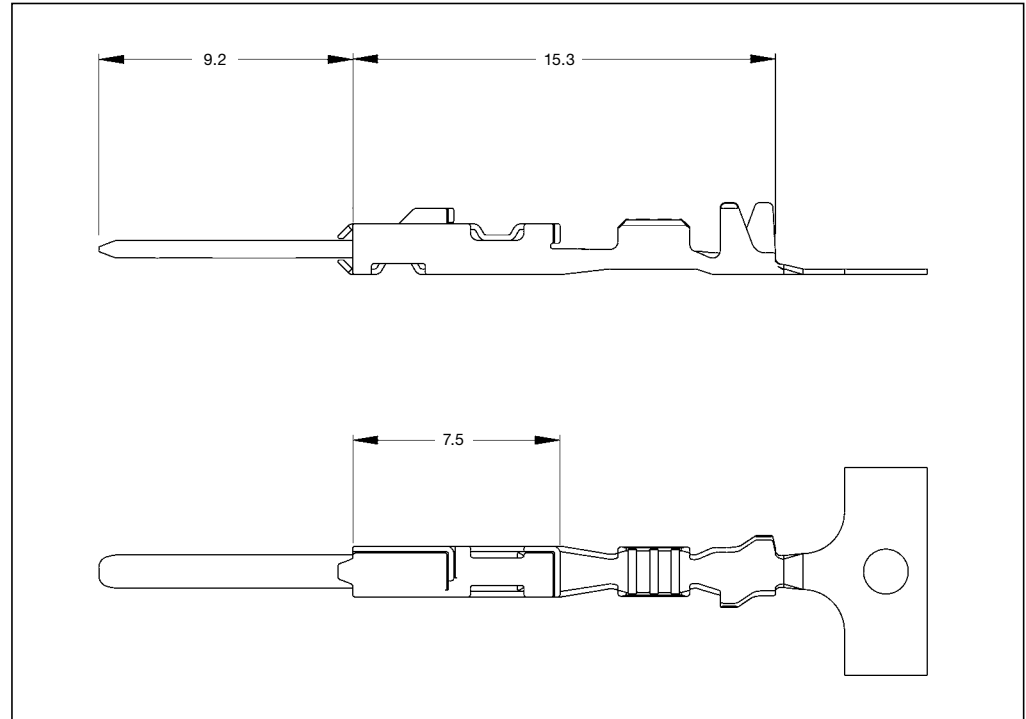
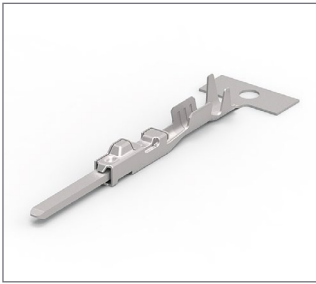
\*) **Material and Finish:** xxx-1 = CuNiSi, pre-tin plated  
xxx-2 = CuNiSi, selective gold plated  
xxx-3 = CuNiSi, selective silver plated

**Note:** All part numbers are RoHS and ELV compliant

◆ The pre- and suffix for the applicators depends on the applied termination equipment

◇ In case of Tooling query please contact your local TE Connectivity representative

**Tab Contacts – Clean Body (CB)**



**Technical Features**

**Contact Material:**

CuSn

**Wire Size Range:**

0.25 – 0.75mm<sup>2</sup>

**Current Carrying Capacity:**

up to 17 Ampere  
(@ 80° C ambient temperature)

**Total Temperature Range:**

-40° C ... +130° C (tin plated)  
-40° C ... +150° C (gold plated)  
-40° C ... +150° C (silver plated)

**Extraction Tool\*:**

8-1579008-4

**Product Drawing:**

1718398

**Product Specification:**

108-18782

**Application Specification:**

114-18464

\* The option which extraction tool is the right tool for the application is dependent on the assembly of the contact and the connector.

**Standard Tab Contact**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦)	Hand Tool	Die Set	Mating Rec Contact
0.25 – 0.35	1.1 – 1.6	1718348	-1 /-2 /-3	x-2151042-x	539635-1	4-1579001-3	1534594-x
0.50 – 0.75	1.4 – 1.9	1718350	-1 /-2 /-3	x-2151037-x		4-1579001-2	1670144-x

**Tab Contact with Single Wire Sealing (SWS) System**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦)	Hand Tool	Die Set	Mating Rec Contact
0.25 – 0.35	1.1 – 1.6	2121114	-3	x-2266516-x	539635-1	4-1579001-7	1418844-x
0.50 – 0.75	1.4 – 1.9	2141116	-3	x-2151477-x			On request ◇)
1.0 – 1.5	1.9 – 2.4	2177610	-3	x-2151480-x			

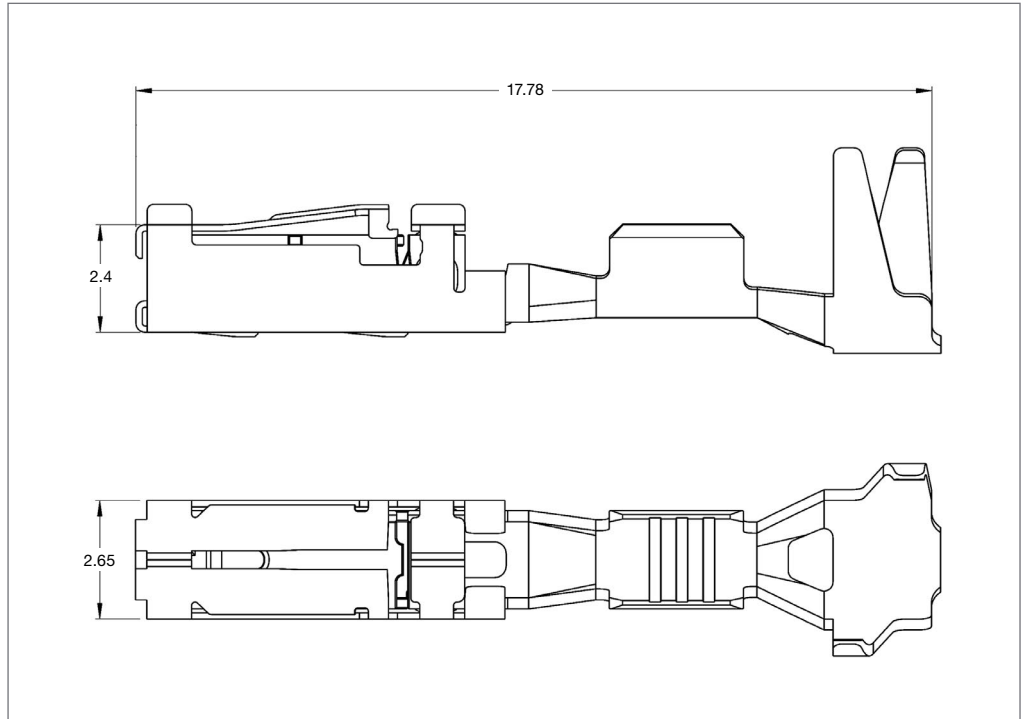
\*) **Material and Finish:** xxx-1 = CuNiSi, pre-tin plated  
xxx-2 = CuNiSi, selective gold plated  
xxx-3 = CuNiSi, selective silver plated

**Note:** All part numbers are RoHS and ELV compliant

♦) The pre- and suffix for the applicators depends on the applied termination equipment

◇) In case of Tooling query please contact your local TE Connectivity representative

**Receptacle Contacts – Locking Lance (LL)**



**Technical Features**

**Wire Size Range:**

0.25 – 1.0mm<sup>2</sup>

**Current Carrying Capacity:**

up to 17 Ampere  
(@ 80° C ambient temperature)

**Total Temperature Range:**

-40° C ... +150° C (silver plated)

**Extraction Tool\*:**  
3-1579018-4

**Product Drawing:**  
C-2282325

**Product Specification:**  
108-94432

**Application Specification:**  
114-18912

\* The option which extraction tool is the right tool for the application is dependent on the assembly of the contact and the connector.

**Receptacle Contacts with Single Wire Sealing (SWS) System**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦)	Hand Tool	Die Set
0.35	0.9 – 1.4mm	2208363	-3	x-2151518-x		
0.50	1.4 – 2.1mm	2208362	-3	x-2151519-x	6-1579016-5	On request ◇)
0.75 – 1.00	1.4 – 2.1mm	2208360	-3	x-2151520-x		

\*) **Material and Finish:** xxx-3 = CuNiSi, selective silver plated

**Note:** All part numbers are RoHS and ELV compliant

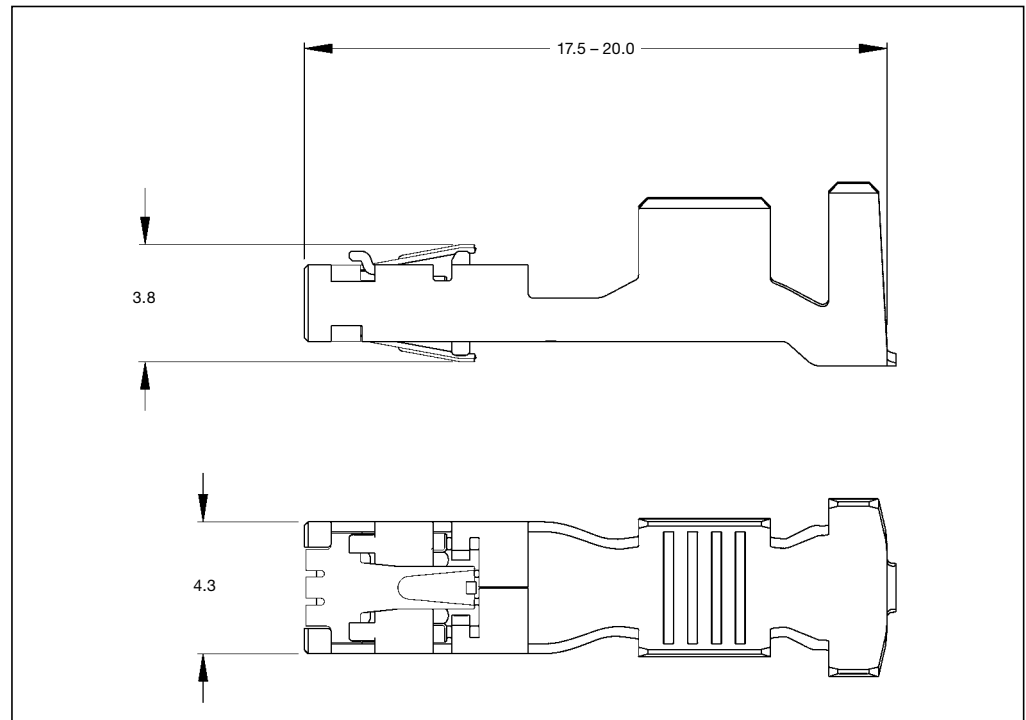
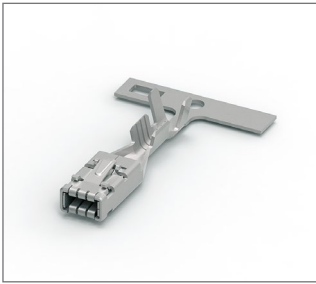
♦) The pre- and suffix for the applicators depends on the applied termination equipment

◇) In case of Tooling query please contact your local TE Connectivity representative

## MCON Interconnection System

### MCON 2.8mm Contact System

#### Receptacle Contacts – Locking Lance (LL)



#### Technical Features

**Contact Material:**

CuSn/CuNiSi

**Wire Size Range:**

0.20 – 4.0mm<sup>2</sup>

**Current Carrying Capacity:**

up to 36 Ampere  
(at 80° C ambient temperature)

**Total Temperature Range:**

-40° C ... +130° C (tin plated)  
-40° C ... +150° C (silver plated)

**Insertion Force:**

Max. 7 N

**Extraction Force:**

Max. 6 N

**Extraction Tool\*:**

5-1579008-2

**Product Drawing:**

1719797

**Product Specification:**

108-94002

**Application Specification:**

114-18718

\* The option which extraction tool is the right tool for the application is dependent on the assembly of the contact and the connector.

#### Standard Receptacle Contacts (SRC)

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Material and Finish *)	Part Numbers			
			Strip Form	Applicator ♦	Hand Tool	Die Set
0.20 – 0.35	1.15 – 1.40	-1 / -3	1719836	x-2151590-x	539635-1	9-1579004-6
0.50	1.4 – 1.6	-1 / -3	1563719	x-2151566-x		9-1579004-7
0.75 – 1.00	1.7 – 2.1	-1 / -3	1719838	x-2151390-x		9-1579004-7
>1.0 – 2.50	2.2 – 3.0	-1 / -3	1719840	x-2151509-x <sup>a)</sup> x-2151604-x <sup>b)</sup>	539635-1	9-1579004-8
>2.5 – 4.00	3.4 – 3.7	-1 / -3	1718475	x-2151389-x		9-1579004-9

a) all wire sizes except for 2.5 ACOME

b) for 2.5mm<sup>2</sup> ACOME Wire only (preliminary)

#### Receptacle Contacts with Single Wire Seal (SWS) System

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Material and Finish *)	Part Numbers			
			Strip Form	Applicator ♦	Hand Tool	Die Set
0.50	1.4 – 1.6	-1 / -3	1563935	x-2151513-x	On request ◊	6-1579014-7
0.75 – 1.00	1.7 – 2.1	-1 / -3	1670802	x-2151561-x	539635-1	6-1579014-1
>1.0 – 2.50	2.2 – 3.0	-1 / -3	1670804	x-2151570-x <sup>a)</sup> x-2151582-x <sup>b)</sup>		6-1579014-2
>2.5 – 4.00	3.4 – 3.7	-1 / -3	1670806	x-2266517-x		6-1579014-3

a) all wire sizes except for 2.5 ACOME

b) for 2.5mm<sup>2</sup> ACOME Wire only

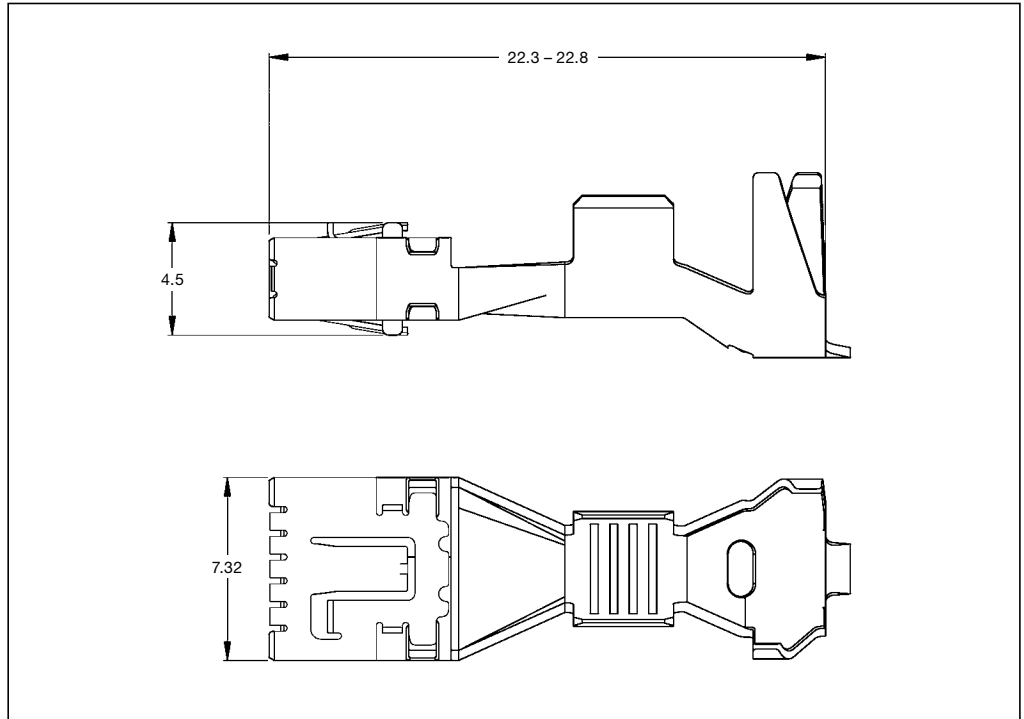
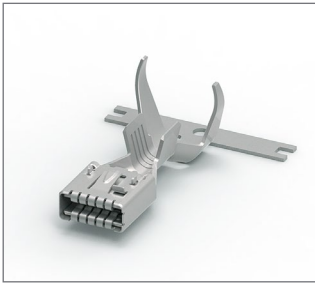
**\*) Material and Finish:** xxx-1 = CuNiSi, pre-tin plated  
xxx-3 = CuNiSi, selective silver plated

**Note:** All part numbers are RoHS and ELV compliant

♦ The pre- and suffix for the applicators depends on the applied termination equipment

◊ In case of Tooling query please contact your local TE Connectivity representative

**Receptacle Contacts – Locking Lance (LL)**



**Technical Features**

**Contact Material:**

CuSn/CuNiSi

**Wire Size Range:**

>2.5 – 6.0mm<sup>2</sup>

**Current Carrying Capacity:**

up to 54 Ampere  
(at 80° C ambient temperature)

**Total Temperature Range:**

–40° C ... +130° C (tin plated)  
–40° C ... +150° C (silver plated)

**Inserting Force:**

Max. 15 N

**Extraction Force:**

Max. 10 N

**Extraction Tool\*:**

5-1579008-1

**Product Drawing:**

1564888

**Product Specification:**

108-94149

**Application Specification:**

114-18944

\* The option which extraction tool is the right tool for the application is dependent on the assembly of the contact and the connector.

**Standard Receptacle Contacts with Single Wire System (SWS)**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Material and Finish *)	Part Numbers			
			Strip Form	Applicator ◆)	Hand Tool	Die Set
>2.5 – 4.0	3.4 – 3.7	-1 /-3	1703836	x-2266518-x	On request ◇)	On request ◇)
>4.0 – 6.0	4.0 – 4.3	-1 /-3	1703834	x-2266519-x		

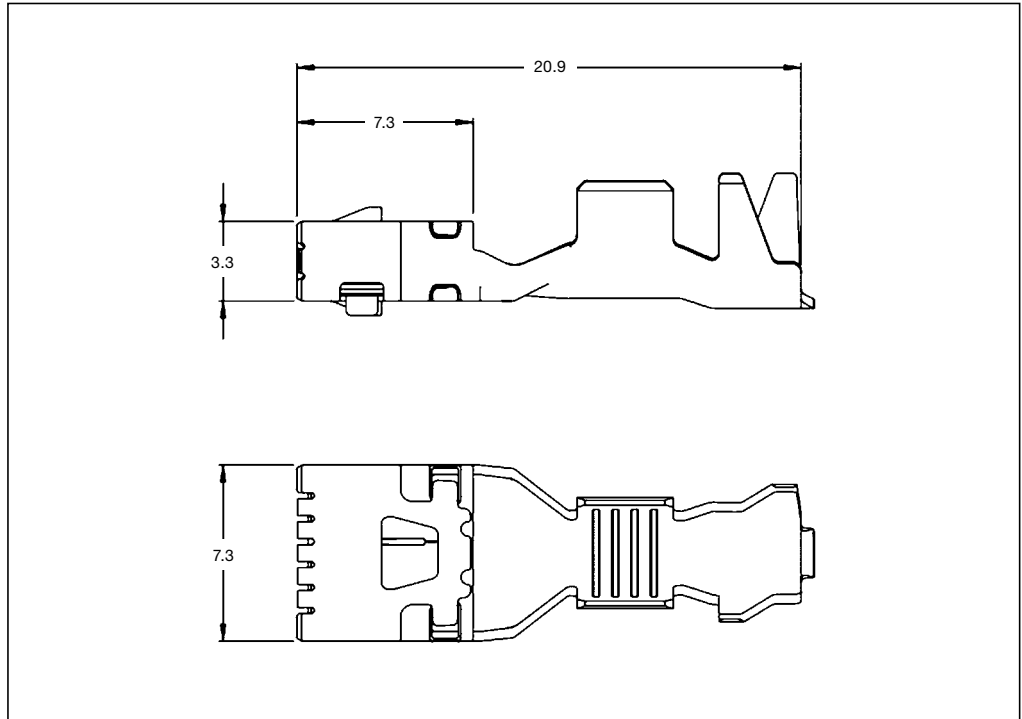
\*) **Material and Finish:** xxx-1 = CuNiSi, pre-tin plated  
xxx-3 = CuNiSi, selective silver plated

**Note:** All part numbers are RoHS and ELV compliant

◆) The pre- and suffix for the applicators depends on the applied termination equipment

◇) In case of Tooling query please contact your local TE Connectivity representative

**Receptacle Contacts – Clean Body (CB)**



**Technical Features**

**Contact Material:**

CuSn/CuNiSi

**Wire Size Range:**

>2.5 – 6.0mm<sup>2</sup>

**Current Carrying Capacity:**

up to 54 Ampere  
(at 80° C ambient temperature)

**Total Temperature Range:**

–40° C ... +130° C (tin plated)  
–40° C ... +150° C (silver plated)

**Inserting Force:**

Max. 15 N

**Extraction Force:**

Max. 10 N

**Extraction Tool\*:**

1579028-1

**Product Drawing:**

1564888

**Product Specification:**

108-94149

**Application Specification:**

114-18944

\* The option which extraction tool is the right tool for the application is dependent on the assembly of the contact and the connector.

**Standard Receptacle Contacts (SRC) in Clean Body**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Material and Finish *)	Part Numbers			
			Strip Form	Applicator ♦)	Hand Tool	Die Set
>2.5 – 4.0	3.4 – 3.7	-1 / -3	2177770	x-2266096-x	On request ◊)	On request ◊)
>4.0 – 6.0	4.0 – 4.3	-1 / -3	2177771	x-2266095-x		

\*) **Material and Finish:** xxx-1 = CuNiSi, pre-tin plated  
xxx-3 = CuNiSi, selective silver plated

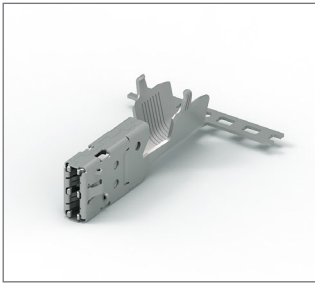
**Note:** All part numbers are RoHS and ELV compliant

♦) The pre- and suffix for the applicators depends on the applied termination equipment

◊) In case of Tooling query please contact your local TE Connectivity representative



**Receptacle Contacts**



**Technical Features**

**Wire Size Range:**

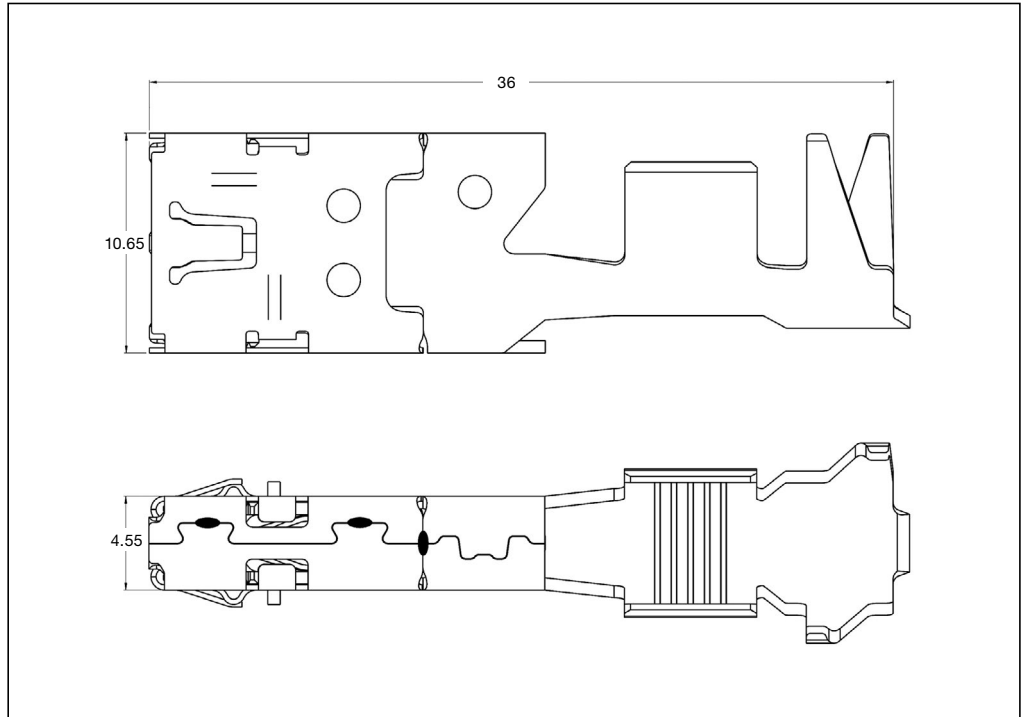
>2.5 – 16mm<sup>2</sup>

**Current Carrying Capacity:**

up to 90 Ampere  
(@ 80° C ambient temperature)

**Total Temperature Range:**

–40° C ... +150° C (tin plated)  
–40° C ... +180° C (silver plated)



**Extraction Tool\*:**  
2-1579028-2

**Product Drawing:**  
2208761

**Product Specification:**  
108-94421

**Application Specification:**  
114-94285

\* The option which extraction tool is the right tool for the application is dependent on the assembly of the contact and the connector.

**Standard Receptacle Contact (SRC)**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦	Hand Tool	Die Set
>2.5 – 4.0	2.7 – 3.7	2208762	-1 /-3	x-2266457-x		
6.0 – 10.0	4.0 – 6.5	2208763	-1 /-3	x-2266456-x	2-1579028-2	On request ◇
16	8.3 max.	2208764	-1 /-3	x-2276053-x		

**Receptacle Contacts with Single Wire Sealing (SWS) System**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦	Hand Tool	Die Set
>2.5 – 4.0	2.7 – 3.7	2208765	-1 /-3	x-2266455-x	2-1579028-2	On request ◇
6.0 – 10.0	4.0 – 6.5	2208766	-1 /-3	x-2266257-x		

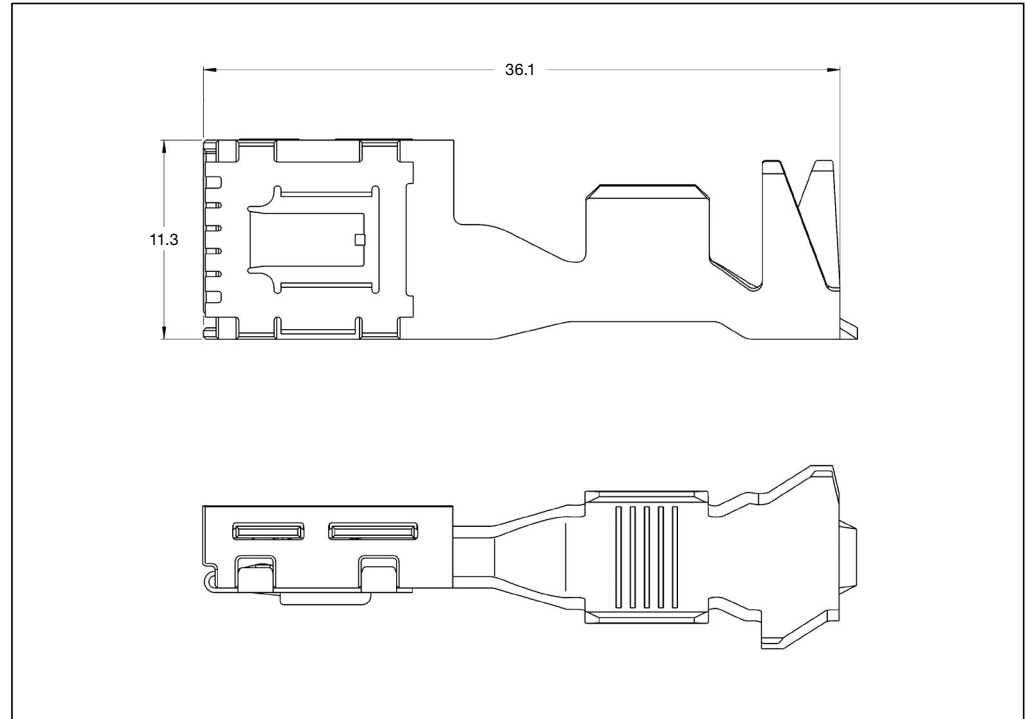
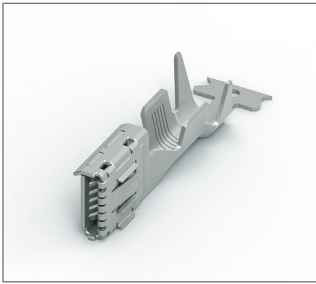
\*) **Material and Finish:** xxx-1 = CuNiSi, pre-tin plated  
xxx-3 = CuNiSi, selective silver plated

**Note:** All part numbers are RoHS and ELV compliant

♦ The pre- and suffix for the applicators depends on the applied termination equipment

◇ In case of Tooling query please contact your local TE Connectivity representative

**Receptacle Contacts**



**Technical Features**

- Contact Material:**  
CuNiSi/CuSn
- Wire Size Range:**  
>10 – 16 mm<sup>2</sup>
- Current Carrying Capacity:**  
up to 100 Ampere  
(at 80° C ambient temperature)
- Total Temperature Range:**  
–40° C ... +130° C (tin plated)  
–40° C ... +150° C (silver plated)
- Inserting Force:**  
Max. 35 N
- Extraction Force:**  
Max. 10 N

**Product Drawing:**  
1823044

**Product Specification:**  
108-94150

**Application Specification:**  
114-18945

**Standard Receptacle Contact (SRC)**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm) FLR	Part Number	Material and Finish *)	Applicator ♦)	Hand Tool	Die Set
>10	5.8 – 6.8	1-1823032	-1 /-3	x-1893256-x	On request ◇)	On request ◇)
16	7.5 – 8.1	1-1823034	-1 /-3	x-1893255-x		

\*) **Material and Finish:** xxx-1 = CuNiSi, pre-tin plated  
xxx-3 = CuNiSi, selective silver plated

**Note:** All part numbers are RoHS and ELV compliant

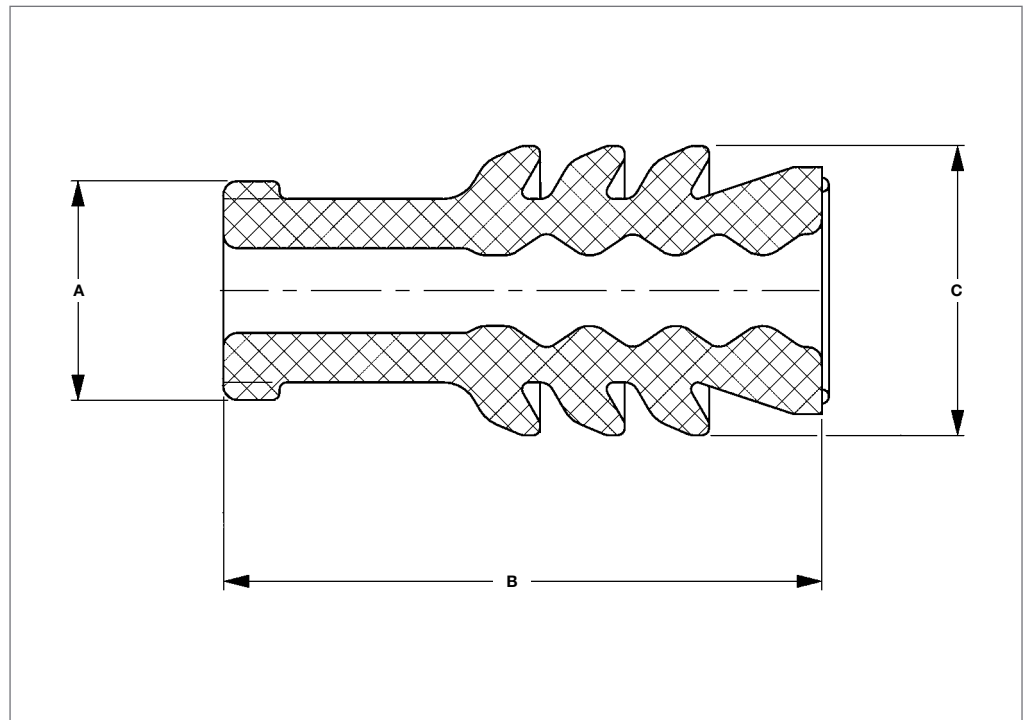
♦) The pre- and suffix for the applicators depends on the applied termination equipment

◇) In case of Tooling query please contact your local TE Connectivity representative

## MCON Interconnection System

### Single Wire Seals and Sealing Plugs for MCON Contacts

#### Single Wire Seals and Sealing Plugs for MCON Contacts



#### Single Wire Seals and Sealing Plugs for MCON Contacts

Cavity Diameter (mm)	Insulation Diameter (mm) FLR	Color	Part Number	A	Dimensions B	C	Used for
3.55	0.9-1.4	Yellow	967067-2	3.1	8.5	4.1	MCON 1.2 / HPF 1.2
	1.4-2.1	Green	967067-1				MCON 1.2 / HPF 1.2
	1.4-1.9	Red	2098582-1*				MCON 1.2
	1.9-2.1	Yellow	964972-1				MCON 1.2
	Sealing Plug	Blue	967056-1				MCON 1.2 / HPF 1.2
3.95	0.9-1.9	Gray	963142-1	3.1	8.6	4.7	MCON 1.2
	1.9-2.4	Green	967067-1				
	Sealing Plug	White	963143-1				
4.9	1.4-2.1	Blue	828904-2	3.4	7.8	5.6	MCON 2.8
	2.2-3.0	White	828905-1				
	Sealing Plug	Natural	828922-1				
6.4	3.4-3.7	Green	828985-1	3.4	7.8	7.2	MCON 2.8
	Sealing Plug	Brown	828986-1				
8.5	3.4-3.7	Green	967608-1	4.1	9.3	9.4	MCON 6.3
	4.0-4.3	Blue	1719972-1	5.5			

\*) Seals for 150° C applications. Wire used must be able to withstand 150° C for 1008 hours.



POWERTRAIN SYSTEMS



SAFETY & SECURITY SYSTEMS



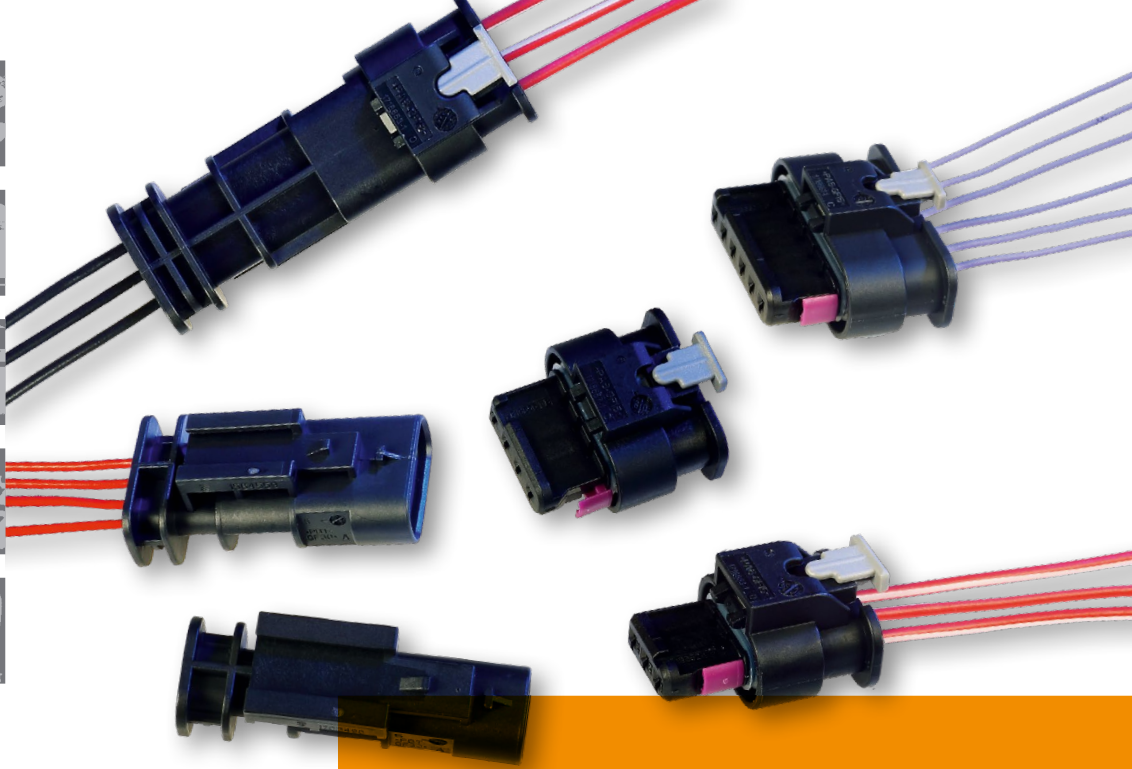
CONVENIENCE



DRIVER INFORMATION



BODY & CHASSIS SYSTEMS



## HOUSINGS AND CONNECTORS

### MCON INTERCONNECTION SYSTEM INTRODUCTION

#### MCON connectors offer high reliability for use in the automotive industry

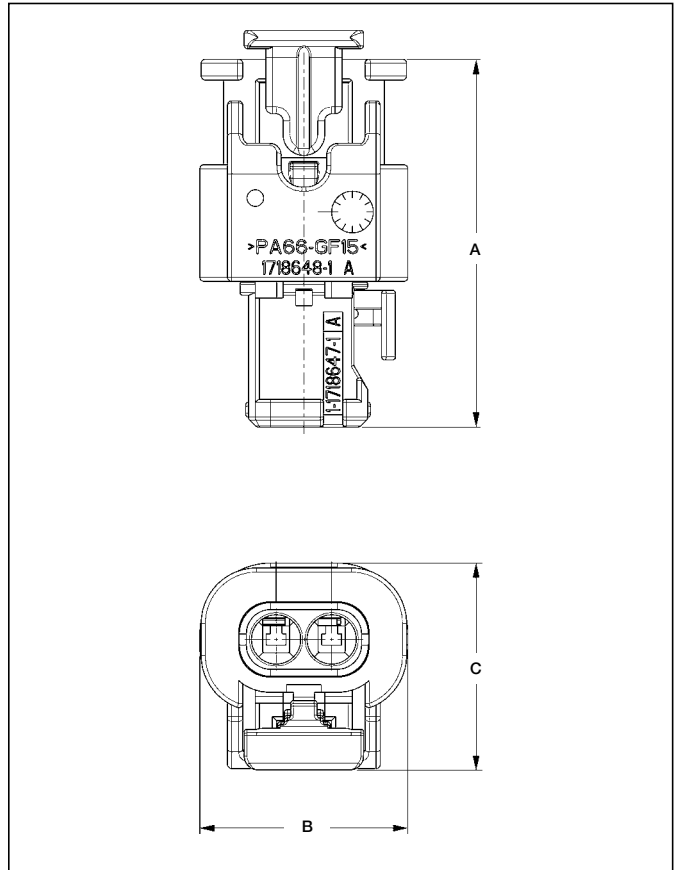
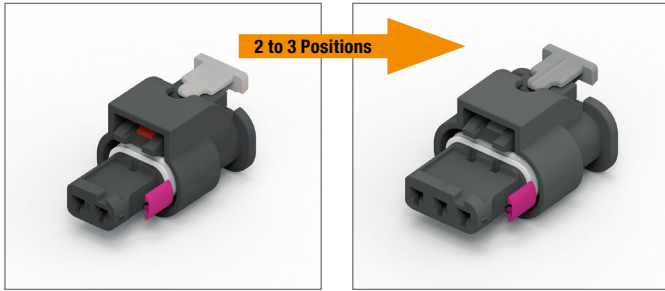
The new generation MCON connector system offers receptacle and tab housings with capability for waterproofing and resistance to conditions of extreme vibration.

The system is designed for electronic and electrical applications in motor vehicles, where vibrations and mechanical stress, in the long term, can affect the quality on the contact system.

#### Features

- CPA (Connector Position Assurance) capability
- High reliability status - supported for long term use
- High vibration level supported
- Perfect design to avoid quality problems, reduce manufacturing and service cost
- Integrated secondary locking device delivered in pre-locked position
- Wire-to-Wire sealed and un-sealed connectors (SWS)
- Polarization, several keyings
- Locking mechanism for smaller connectors/ mating aid for higher numbers of ways

**Sealed MCON 1.2 Receptacle Housing for Locking Lance Contacts - 2 to 3 Positions – up to 125° C**



**Technical Features**

**Wire Size Range:**  
max. 1.0mm<sup>2</sup>

**Total Temperature Range:**  
125° C

**Product Specification:**  
108-18969

**Application Specification:**  
114-18861

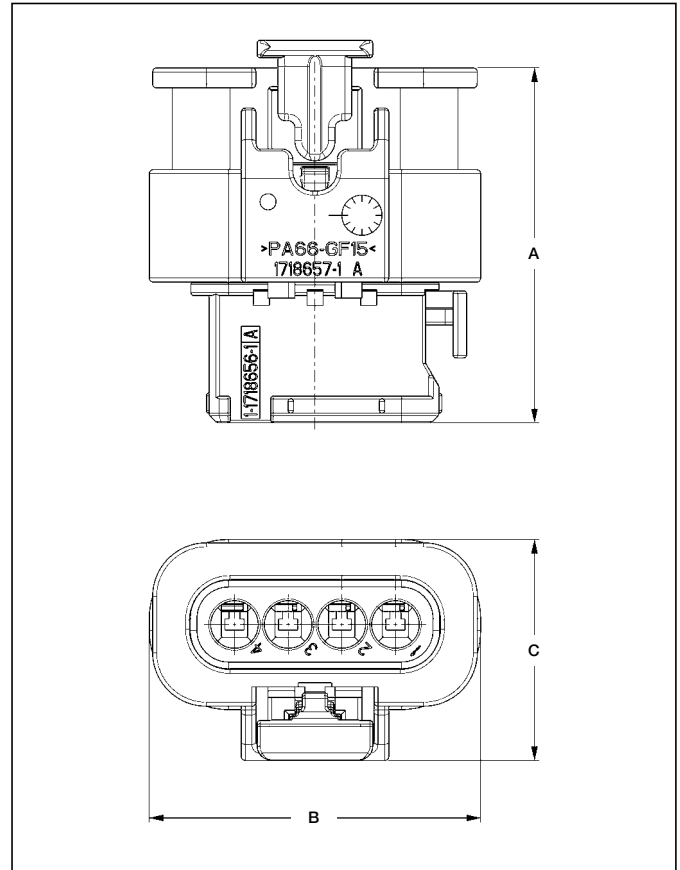
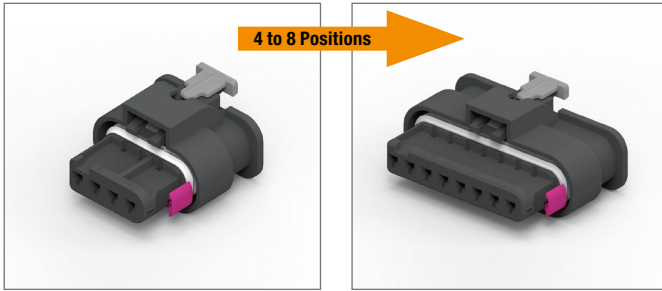
**Extraction Tool:**  
5-1579007-3

**Sealed MCON 1.2 Receptacle Housing for Locking Lance Contacts - 2 to 3 Positions**

No. of Positions	Keying Options	Housing Color	CPA Yes / No	180° turned Outer Housing	Part Number	Dimensions (mm)			Mating Tab Housing									
						A	B	C										
2	A	Black	Yes	-	1-1718643-1	26.5	15	14.8	1-1703498-x									
			No	-	1-1670916-1				1-1703498-x									
			Yes	Yes	1-1718888-1				N/A									
			No	Yes	1-1670915-1				N/A									
	B	Natural	Yes	-	2-1718643-1				26.5	15	14.8	2-1703498-x						
			No	-	2-1670916-1							2-1703498-x						
			Yes	Yes	2-1718888-1*							N/A						
			No	Yes	2-1670915-1*							N/A						
	C	Blue	Yes	-	3-1718643-1							26.5	15	14.8	N/A			
			No	-	3-1670916-1*										N/A			
			Yes	Yes	3-1718888-1*										N/A			
			No	Yes	3-1670915-1*										N/A			
3	A	Black	Yes	-	1-1718644-1	26.5	19	14.8							1-1703494-x			
			No	-	1-1670917-1										1-1703494-x			
	B	Natural	Yes	-	2-1718644-1										26.5	19	14.8	2-1703494-x
			No	-	2-1670917-1													2-1703494-x
	C	Blue	Yes	-	3-1718644-1*				26.5	19	14.8							N/A
			No	-	3-1670917-1*													N/A

\* on request

**Sealed MCON 1.2 Receptacle Housing for Locking Lance contacts - 4 to 8 Positions – up to 125° C**



**Technical Features**

**Wire Size Range:**  
max. 1.0mm<sup>2</sup>

**Total Temperature Range:**  
125° C

**Product Specification:**  
108-18969

**Application Specification:**  
114-18861

**Extraction Tool:**  
5-1579007-3

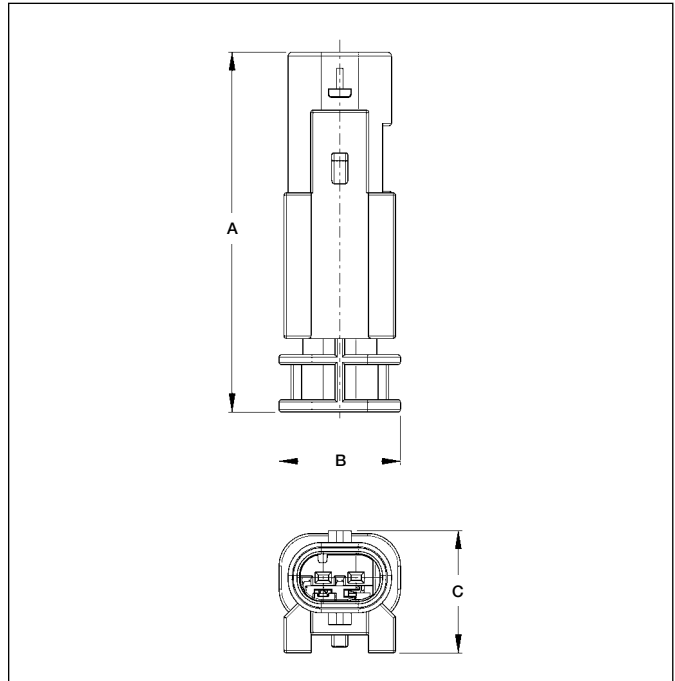
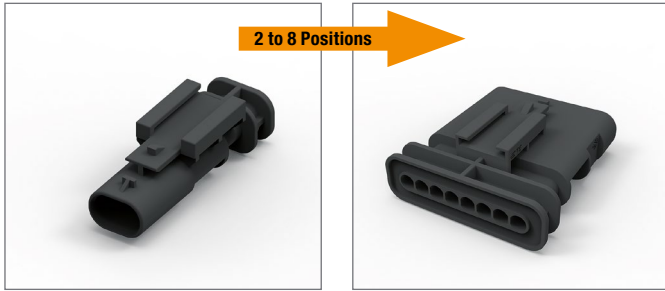
**Sealed MCON 1.2 Receptacle Housing for Locking Lance Contacts - 4 to 8 Positions**

No. of Positions	Keying Options	Housing Color	CPA Yes / No	180° turned Outer Housing	Part Number	Dimensions (mm)			Mating Tab Housing
						A	B	C	
4	A	Black	Yes	-	1-1718645-1	26.5	24.7	16.5	1-1564559-x
			No	-	1-1670918-1				1-1564559-x
			No	Yes	1-2286471-1				N/A
	B	Natural	Yes	-	2-1718645-1				2-1564559-x
			No	-	2-1670918-1				2-1564559-x
			Yes	-	3-1718645-1*				N/A
C	Blue	No	-	3-1670918-1*	N/A				
5	A	Black	Yes	-	1-1718806-1	26.5	28.7	16.5	1-2141520-x
			No	-	1-1670921-1				1-2141520-x
			Yes	-	2-1718806-1				2-2141520-x
	B	Natural	No	-	2-1670921-1				2-2141520-x
			Yes	-	3-1718806-1*				N/A
			No	-	3-1670921-1*				N/A
C	Blue	Yes	-	1-1718646-1	1-2141324-x				
		No	-	1-1670919-1	1-2141324-x				
		Yes	-	2-1718646-1*	N/A				
		No	-	2-1670919-1*	N/A				
6	A	Black	Yes	-	1-1719393-1	26.5	40.7	16.5	1-1703506-1
			No	-	1-1670920-1				1-1703506-1
			Yes	-	2-1719393-1*				N/A
	B	Natural	No	-	2-1670919-1*				N/A
			Yes	-	1-1719393-1				1-1703506-1
			No	-	1-1670920-1				1-1703506-1
8	A	Black	Yes	-	2-1719393-1*	N/A			
			No	-	2-1670920-1*	N/A			
	B	Natural	Yes	-	1-1719393-1*	N/A			
			No	-	2-1670920-1*	N/A			

\* on request



**Sealed MCON 1.2 Tab Housing for Locking Lance Contacts - 2 to 8 Positions – up to 125° C**



**Technical Features**

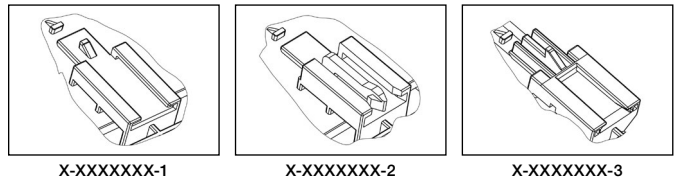
**Wire Size Range:**  
max. 1.0mm<sup>2</sup>

**Total Temperature Range:**  
125°C

**Product Specification:**  
N/A

**Application Specification:**  
114-18910-1

**Extraction Tool:**  
1-1579028-5

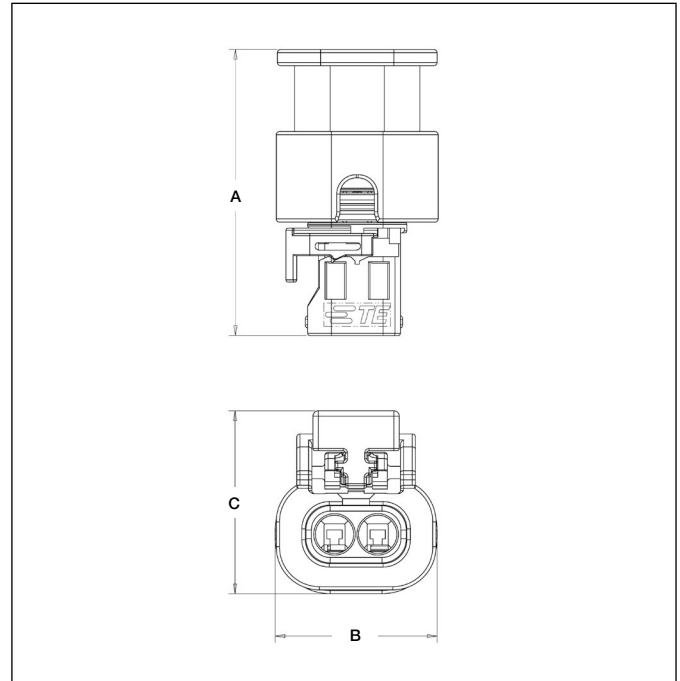
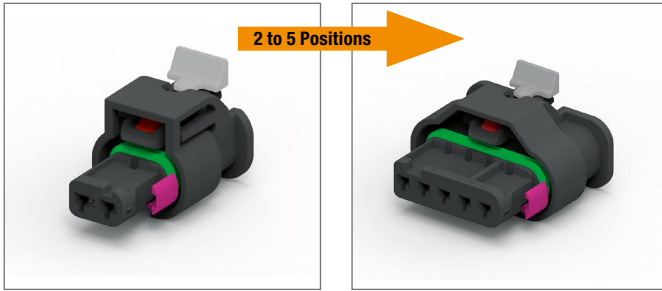


**Sealed MCON 1.2 Tab Housing for Locking Lance Contacts - 2 to 8 Positions**

No. of Positions	Keying Options	Housing Color	Part Number	Dimensions (mm)			Mating Rec Housing	
				A	B	C		
2	A	Black	1-1703498-1	44	14.8	14.95	1-1718643-1 or 1-1670916-1	
			1-1703498-2			17.05		
			1-1703498-3			17.1		
	B	Gray	2-1703498-1			14.95		
			2-1703498-2			17.05		2-1718643-1 or 2-1670916-1
			2-1703498-3			17.1		
3	A	Black	1-1703494-1	44	18.8	14.95	1-1718644-1 or 1-1670917-1	
			1-1703494-2			17.05		
			2-1703494-1			14.95		
	B	Gray	2-1703494-2			17.05		2-1718644-1 or 2-1670917-1
			2-1703494-1			17.05		
			2-1703494-2			17.05		
4	A	Black	1-1564559-1	44	24.4	16.3	1-1718645-1 or 1-1670918-1	
			1-1564559-2			18.1		
			2-1564559-1			16.3		
	B	Gray	2-1564559-2*			18.1		2-1718645-1 or 2-1670918-1
			1-2141520-1			16.3		
			1-2141520-2*			18.1		
5	A	Black	2-2141520-1	44	28.2	16.3	1-1718806-1 or 1-1670921-1	
			1-2141520-2*			18.1		
			2-2141520-1			16.3		
	B	Gray	2-2141520-1			18.1		2-1718806-1 or 2-1670921-1
			2-2141520-2*			18.1		
			1-2141324-1			16.3		
6	A	Black	1-2141324-1	44	32.2	16.3	1-1718646-1 or 1-1607919-1	
			1-2141324-2*			18.1		
			2-2141324-1*			16.3		
	B	Gray	2-2141324-1*			18.1		2-1718646-1 or 1-1607919-1
			2-2141324-2*			18.1		
			1-1703506-1			16.6		
8	A	Black	1-1703506-1	44	40.2	16.6	1-1719393-1 or 1-1670920-1	
			1-1703506-2			18.7		
			2-1703506-1			16.6		
	B	Gray	2-1703506-1			18.7		2-1719393-1 or 1-1670920-1
			2-1703506-2			16.6		
			2-1703506-2			18.7		

\* on request

**Sealed MCON 1.2 Gen2 Receptacle Housing for Locking Lance Contacts – up to 150° C**



**Technical Features**

**Wire Size Range:**  
max. 1.0mm<sup>2</sup>

**Total Temperature Range:**  
150° C

**Product Specification:**  
108-18969

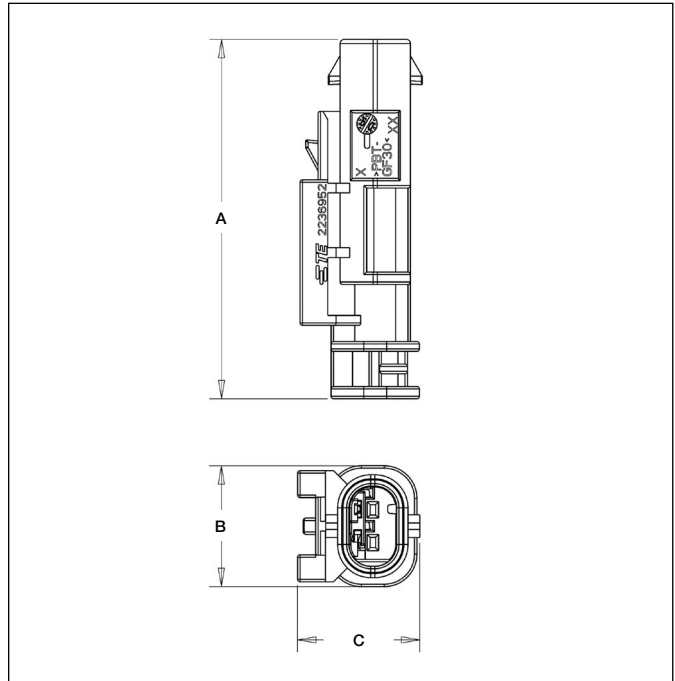
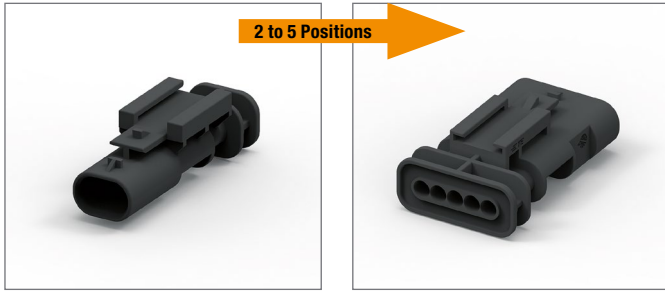
**Application Specification:**  
114-18861

**Extraction Tool:**  
5-1579007-3

**Sealed MCON 1.2 Gen2 Receptacle Housing for Locking Lance Contacts**

No. of Positions	Keying Options	Housing Color	CPA Yes / No	Part Number	Dimensions (mm)			Mating Tab Housing
					A	B	C	
2	A	Black	Yes	1-2236896-5	26.5	14.8	14.8	1-2236952-5
			No	1-2236896-1				1-2236952-5
	B	Natural	Yes	2-2236896-5				2-2236952-5
			No	2-2236896-1				2-2236952-5
	C	Blue	Yes	3-2236896-5				N/A
			No	3-2236896-1				N/A
3	A	Black	Yes	1-2236343-5	26.5	19	14.8	1-2236953-5
			No	1-2236343-1				1-2236953-5
	B	Natural	Yes	2-2236343-5				2-2236953-5
			No	2-2236343-1				2-2236953-5
	D	Violett	Yes	4-2236343-5				N/A
			No	4-2236343-1				N/A
5	A	Black	Yes	1-2236898-5	26.5	28.7	16.5	1-2236954-5
			No	1-2236898-1				1-2236954-1
	B	Natural	Yes	2-2236898-5				2-2236954-5
			No	2-2236898-1				2-2236954-1

**Sealed MCON 1.2 Gen2 Tab Housing for Locking Lance Contacts – up to 150° C**



**Technical Features**

**Wire Size Range:**  
max. 1.0mm<sup>2</sup>

**Total Temperature Range:**  
150° C

**Product Specification:**  
108-18969

**Application Specification:**  
114-18861

**Extraction Tool:**  
5-1579007-3

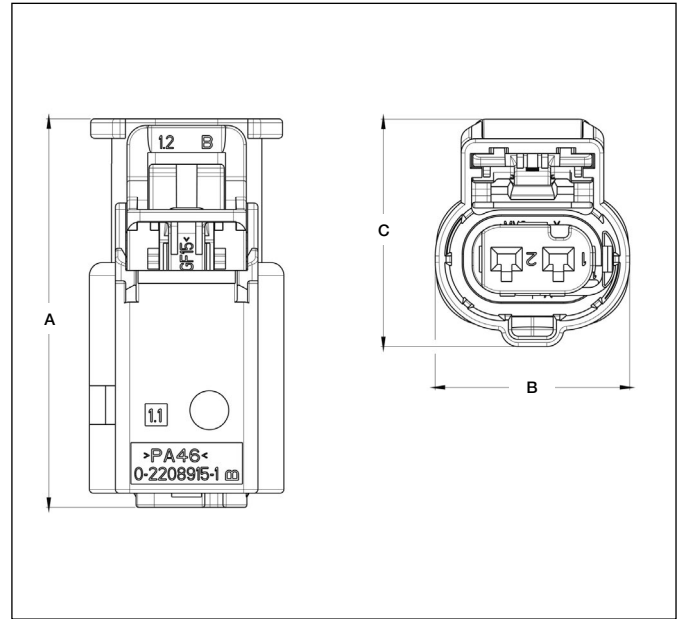
**Sealed MCON 1.2 Gen2 Tab Housing for Locking Lance Contacts**

No. of Positions	Keying Options	Housing Color	Part Number	Dimensions (mm)			Mating Rec Housing
				A	B	C	
2	A	Black	1-2236952-5	44	14.8	14.95	1-2236896-5 or 1-2236896-1
	B	Gray	2-2236952-5				2-2236896-5 or 2-2236896-1
3	A	Black	1-2236953-5	44	18.8	14.95	1-2236343-5 or 1-2236343-1
	B	Gray	2-2236953-5				2-2236343-5 or 2-2236343-1
5	A	Black	1-2236954-5	44	28.2	16.3	1-2236898-5 or 1-2236898-1
	B	Gray	2-2236954-5				2-2236898-5 or 2-2236898-1

## MCON Interconnection System

### Housings and Connectors

#### Sealed MCON 1.2 V4 Series / HPF 1.2 Series - 2 Positions – up to 150°C



#### Technical Features

**Wire Size Range:**  
max. 1.0mm<sup>2</sup>

**Total Temperature Range:**  
150°C

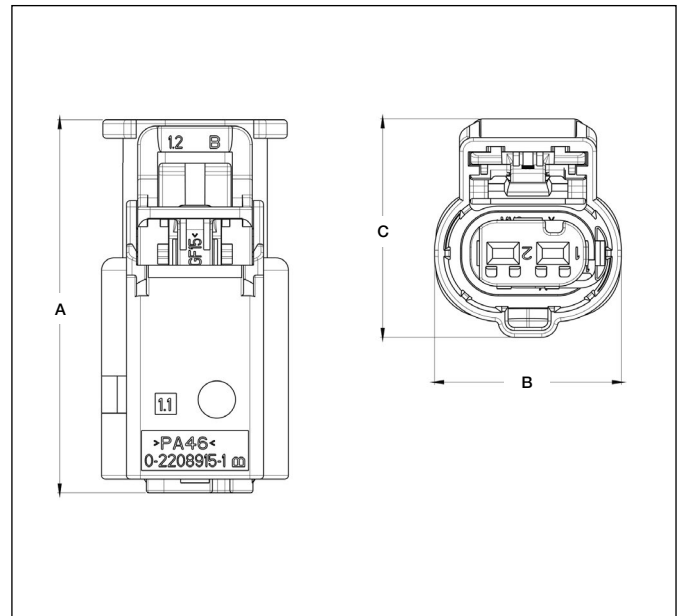
**Product Specification:**  
108-94415

**Application Specification:**  
114-94316

**Extraction Tool:**  
5-1579007-3  
1-1579007-4

#### Sealed MCON 1.2 V4 series

No. of Positions	Keying Options	Housing Color	Long / Short Shroud	Vibration Level	Part Number	Dimensions (mm)			Used Cable Fixation	Used Terminal System
						A	B	C		
2	A	Black	Long	V4	5-2208918-1	30	15.0	16.05	2208939-1	MCON 1.2 LL
			Short		5-2236115-1					
	B	Brown	Long		5-2208918-2					
			Short		5-2236115-2					



#### Technical Features

**Wire Size Range:**  
max. 1.0mm<sup>2</sup>

**Temperature Range:**  
150°C

**Product Specification:**  
108-94415

**Application Specification:**  
114-94316

**Extraction Tool:**  
5-1579007-3  
1-1579007-4

#### Sealed HPF 1.2 Series - 2 Positions

No. of Positions	Keying Options	Housing Color	Long / Short Shroud	Vibration Level	Part Number	Dimensions (mm)			Used Cable Fixation	Used Terminal System
						A	B	C		
2	A	Black	Long	V5	5-2208920-1	30	15.0	16.05	2208939-1	HPF 1.2
			Short		5-2236116-1					
	B	Brown	Long		5-2208920-2					
			Short		5-2236116-2					

**Sealed MCON 1.2 Receptacle Housing for Clean Body Contacts – up to 125° C**

**Technical Features**

**Wire Size Range:**

max. 1.0mm<sup>2</sup> (20 –16 AWG)

**Total Temperature Range:**

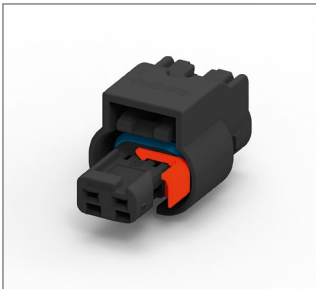
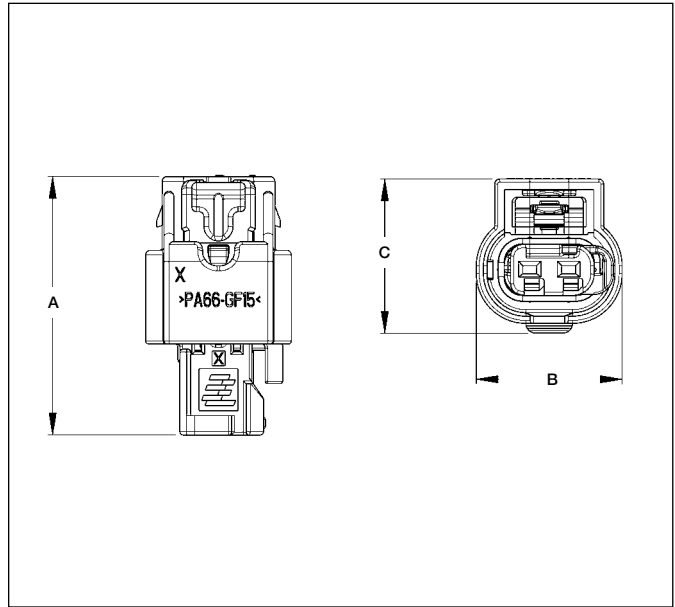
125° C

**Product Specification:**

N/A

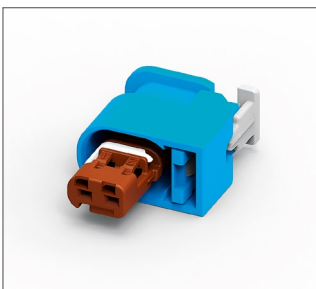
**Application Specification:**

408-8928



**Sealed MCON 1.2 Receptacle Housing for Clean Body Contacts**

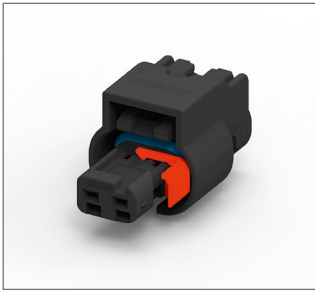
No. of Positions	Keying Options	Housing Color	CPA Yes / No	Part Number	Dimensions (mm)		
					A	B	C
2	A	Black	No	1-1924067-1	26.5	15	15.8
			Yes / Violet	1-1924067-9			
			Yes / Red	4-1924067-1			
	B	Natural	No	1-1924067-2			
			Yes / Violet	2-1924067-0			
			Yes / Red	4-1924067-2			
C	Blue	No	1-1924067-3				
		Yes / Violet	2-1924067-1				
		Yes / Red	4-1924067-3				
6	A	Black	No	1924292-1	26.5	32.7	17.5
			Yes	4-1924292-1			
	B	Natural	No	1924292-2			
			Yes	4-1924292-2			
	C	Blue	No	1924292-3			
			Yes	4-1924292-3			
D	Gray	No	1924292-4				
		Yes	4-1924292-4				



**Sealed MCON 1.2 Receptacle Housing for Clean Body Contacts - Low Profile Sidelatch**

No. of Positions	Keying Options	Housing Color	CPA Yes / No	Part Number	Dimensions (mm)		
					A	B	C
2	A	Brown	No	2138873-1	26.5	18.8	11
			Yes	2138873-4			
	B		No	2138873-2			
			Yes	2138873-5			
	C		No	2138873-3			
			Yes	2138873-6			

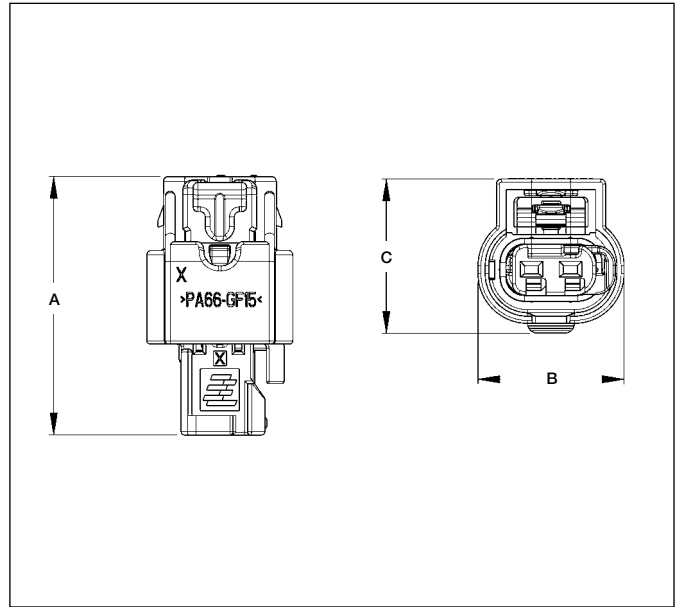
**Sealed MCON 1.2 Receptacle Housing for Clean Body Contacts – up to 150° C**



**Technical Features**

**Wire Size Range:**  
max. 1.0mm<sup>2</sup> (20–16 AWG)  
**Total Temperature Range:**  
150° C

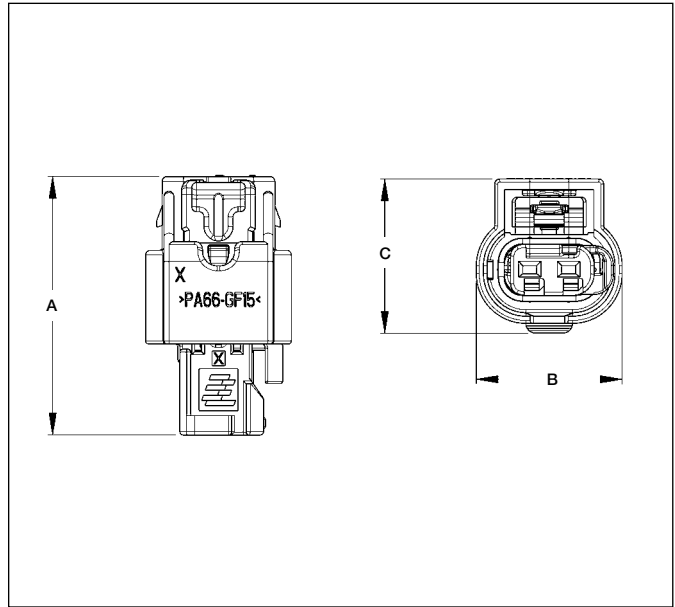
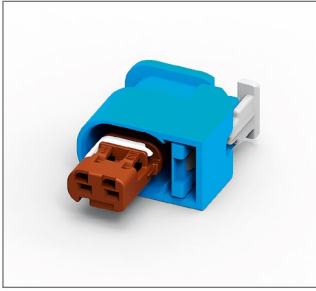
**Product Specification:**  
N/A  
**Application Specification:**  
408-8928



**Sealed MCON 1.2 Receptacle Housing for Clean Body Contacts**

No. of Positions	Keying Options	Housing Color	CPA Yes / No	Part Number	Dimensions (mm)		
					A	B	C
2	A	Brown	No	2098557-1	26.5	15	15.8
			Yes	4-2098557-1			
	B		No	2098557-2			
			Yes	4-2098557-2			
	C		No	2098557-3			
			Yes	4-2098557-3			
3	A	Brown	No	2098541-1	26.5	19	15.6
			Yes	4-2098541-1			
	B		No	2098541-2			
			Yes	4-2098541-2			
	C		No	2098541-3			
			Yes	4-2098541-3			
	D		No	2098541-4			
			Yes	4-2098541-4			
4	A	Black	No	1-1456426-1	26.5	24.7	16.1
			Yes	4-1456426-1			
	B		No	1-1456426-2			
			Yes	4-1456426-2			
	C		No	1-1456426-3			
			Yes	4-1456426-3			
	D		No	1-1456426-4			
			Yes	4-1456426-4			
6	A	Natural	No	2098559-1	26.5	32.7	17.5
			Yes	4-2098559-1			
	B		No	2098559-2			
			Yes	4-2098559-2			
	C		No	2098559-3			
			Yes	4-2098559-3			
	D		No	2098559-4			
			Yes	4-2098559-4			

**Sealed MCON 1.2 Receptacle Housing for Clean Body Contacts - Low Profile Sidelatch –up to 150°C**



**Technical Features**

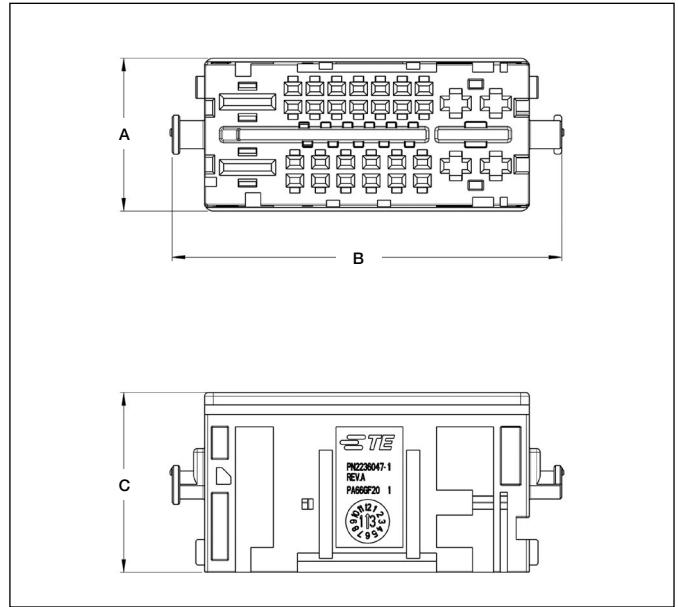
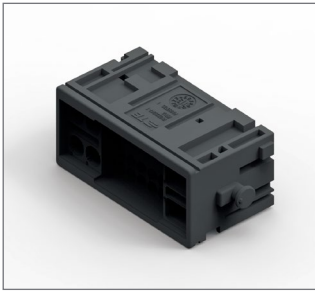
**Wire Size Range:**  
max. 1.0mm<sup>2</sup> (20 – 16 AWG)  
**Total Temperature Range:**  
150°C

**Product Specification:**  
N/A  
**Application Specification:**  
408-8928

**Sealed MCON 1.2 Receptacle Housing for Clean Body Contacts**

No. of Positions	Keying Options	Housing Color	CPA Yes / No	180° turned Outer Housing	Part Number	Dimensions (mm)		
						A	B	C
2	A	Brown	No	–	2098641-1	26.5	19.9	11.2
	B			–	2098641-2			
	C			–	2098641-3			
	A			Yes	2098641-4			
	A		Yes	2098641-5				
	A		Yes	–	2098641-6			
	B			–	2098641-7			
	C			–	2098641-8			

**Sealed MCON 1.2 32 Positions Mixed Housing**

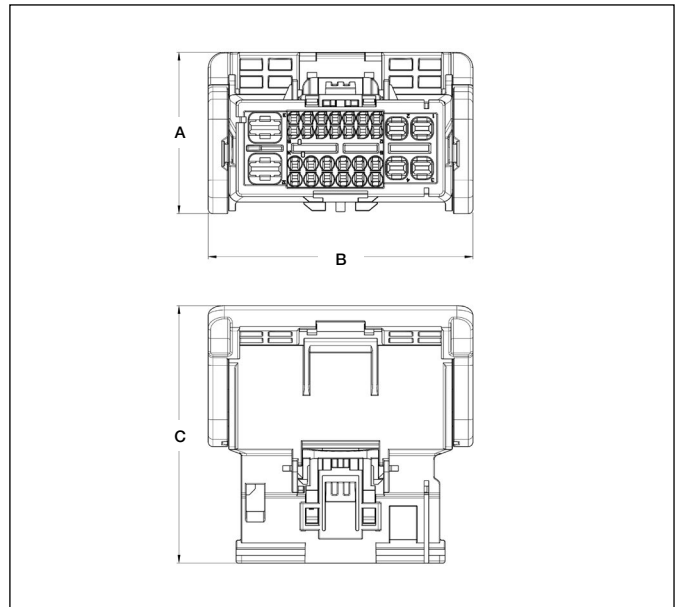


**Technical Features**

<b>No. of Positions:</b> 32	<b>Used Terminals Systems:</b> MCON 1.2 MCON 2.8 AMP MCP 6.3
<b>Wire Size Range:</b> 0.25 – 6.0mm <sup>2</sup>	<b>Extraction Tool:</b> MCON 1.2            5-1579007-3 MCON 2.8            5-1579008-2 AMP MCP 6.3        1-1579007-3
<b>Product Specification:</b> 108-20329	
<b>Application Specification:</b> 411-20134	

**32 Positions Mixed Receptacle Housing**

No. of Positions	Keying Options	Housing Color	Part Number	Dimensions			Required Secondary Lock	Mating Tab Housing
				A	B	C		
32	A	Black	2236047-1	24.7	54.1	21	2236048-1	2236046-7 or 1-2236046-0
	B	Gray	2236047-2					2236046-8 or 1-2236046-1



**Technical Features**

<b>No. of Positions:</b> 32	<b>Used Terminals Systems:</b> MCON 1.2 Tab Tab 2.8 x 0,8 Tab 5.8 x 0,8
<b>Wire Size Range:</b> 0.25 – 6.0mm <sup>2</sup>	<b>Extraction Tool:</b> MCON 1.2            5-1579007-3 Tab 2.8                1-1579007-6 Tab 5.8                1-1579007-6
<b>Product Specification:</b> 108-20329	
<b>Application Specification:</b> 411-20134	

**32 Positions Mixed Tab Housing**

No. of Positions	Keying Options	Housing Color	CPA Yes / No	Part Number	Dimensions (mm)			Required Secondary Lock	Mating Receptacle Housing
					A	B	C		
32	A	Black	–	2236046-7	56	57.5	35.1	2236048-1	2236047-1
			Yes	1-2236046-0					2236047-1
	B	Grey	–	2236046-8					2236047-2
			Yes	1-2236046-1					2236047-2



**MCON 1.2 Sealed Wire-to-wire or Bulkhead Housing**

**Technical Features**

**No. of Positions:**  
10

**Wire Size Range:**  
0.35 – 1.5mm<sup>2</sup>

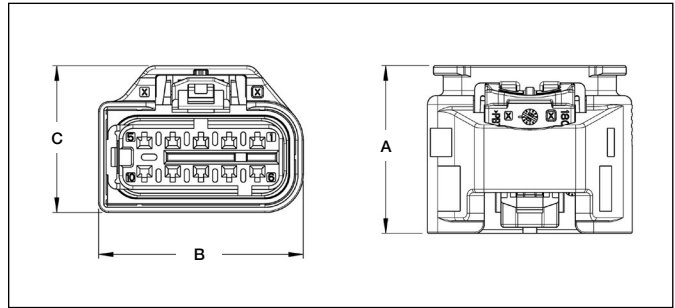
**Product Specification:**  
108-15398

**Application Specification:**  
411-15748

**Extraction Tool:**  
5-1579007-3  
8-1579018-4

**Insertion Tool:**  
5-1579018-6  
8-1579018-6

**Locking Tool:**  
8-1579018-5 or  
9-1579018-6



**10 Positions MCON 1.2 Sealed Receptacle Housing**

No. of Positions	Keying Options	Housing Color	Part Number	Dimensions (mm)			Mating Tab Housing
				A	B	C	
10	A	Black	1801600-1	26.7	32.6	23.3	1801606-1
	B	Grey	1801600-2				1801606-2
	C	Blue	1801600-3				1801606-3
	D	Green	1801600-4				1801606-4
	E	Red	1801600-5				1801606-5

**Technical Features**

**No. of Positions:**  
10

**Wire Size Range:**  
0.35 – 1.5mm<sup>2</sup>

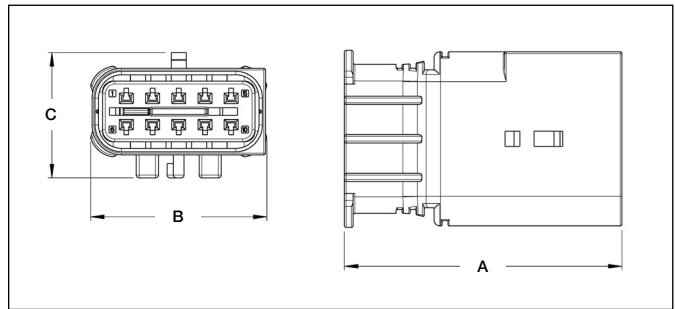
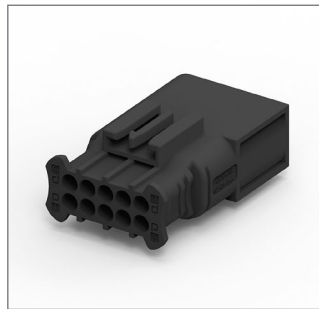
**Product Specification:**  
108-15398

**Application Specification:**  
411-15748

**Extraction Tool:**  
5-1579007-3  
8-1579018-4

**Insertion Tool:**  
5-1579018-6  
8-1579018-6

**Locking Tool:**  
8-1579018-5 or  
9-1579018-6



**10 Positions MCON 1.2 Sealed Tab Housing**

No. of Positions	Keying Options	Housing Color	Part Number	Dimensions (mm)			Mating Tab Housing
				A	B	C	
10	A	Black	1801606-1	47.7	30.3	21.5	1801600-1
	B	Grey	1801606-2				1801600-2
	C	Blue	1801606-3				1801600-3
	D	Green	1801606-4				1801600-4
	E	Red	1801606-5				1801600-5

**Technical Features**

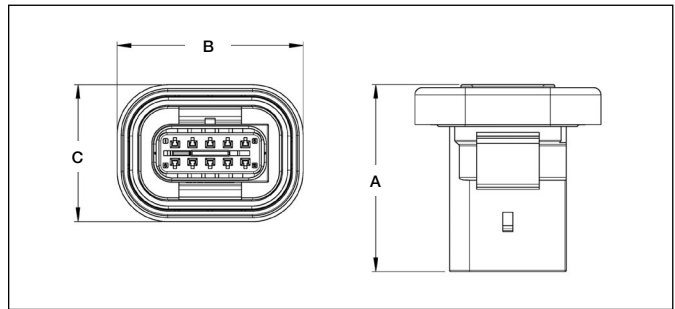
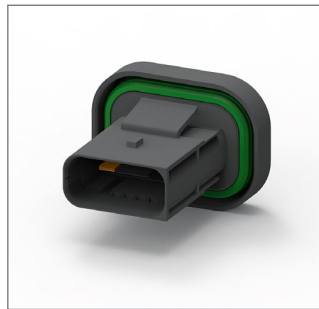
**No. of Positions:**  
10

**Wire Size Range:**  
0.35 – 1.5mm<sup>2</sup>

**Product Specification:**  
108-15405

**Application Specification:**  
N/A

**Extraction Tool:**  
5-1579007-3



**10 Positions MCON 1.2 Bulkhead**

No. of Positions	Keying Options	Housing Color	Part Number	Dimensions (mm)			Mating Rec Housing
				A	B	C	
10	A	Black	1801610-1	47.7	47.5	34.9	1801600-1
	B	Grey	1801610-2				1801600-2

**18 Positions MCON 1.2 + 2.8 Mixed Wire-to wire Connector**

**Technical Features**

**No. of Positions:**  
18

**Wire Size Range:**  
0.35 – 1.0mm<sup>2</sup>

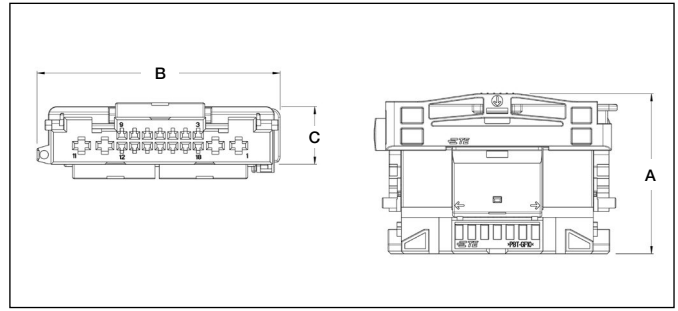
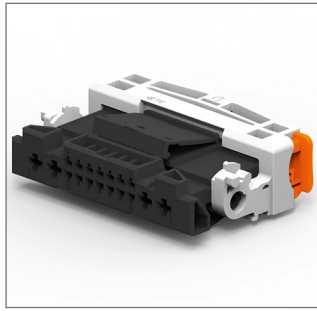
**Product Specification:**  
108-15431

**Application Specification:**  
408-15014

**Extraction Tool:**  
5-1579007-3

5-1579008-2

8-1579018-4



**18 Positions MCON 1.2 + 2.8 Mixed Receptacle Housing**

No. of Positions	Keying Options	Housing Color	Part Number	Dimensions			Mating Tab Housing
				A	B	C	
18	A	Black	1801735-1	37.5	57.2	17.8	1801739-1
	B	Gray	1801735-2				1801739-2
	C	Blue	1801735-3				1801739-3
	D	Brown	1801735-4				1801739-4
	E	Purple	1801735-5				1801739-5

**Technical Features**

**No. of Positions:**  
18

**Wire Size Range:**  
0.35 – 1.0mm<sup>2</sup>

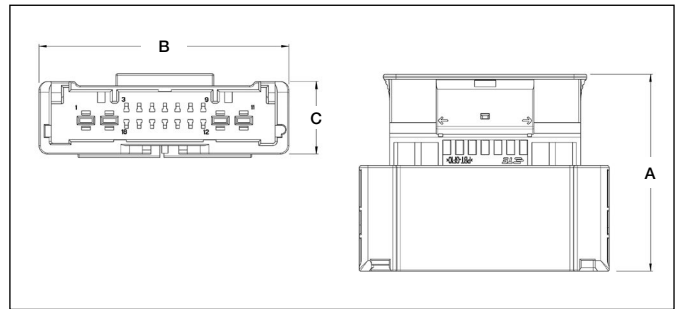
**Product Specification:**  
108-15431

**Application Specification:**  
408-15014

**Extraction Tool:**  
5-1579007-3

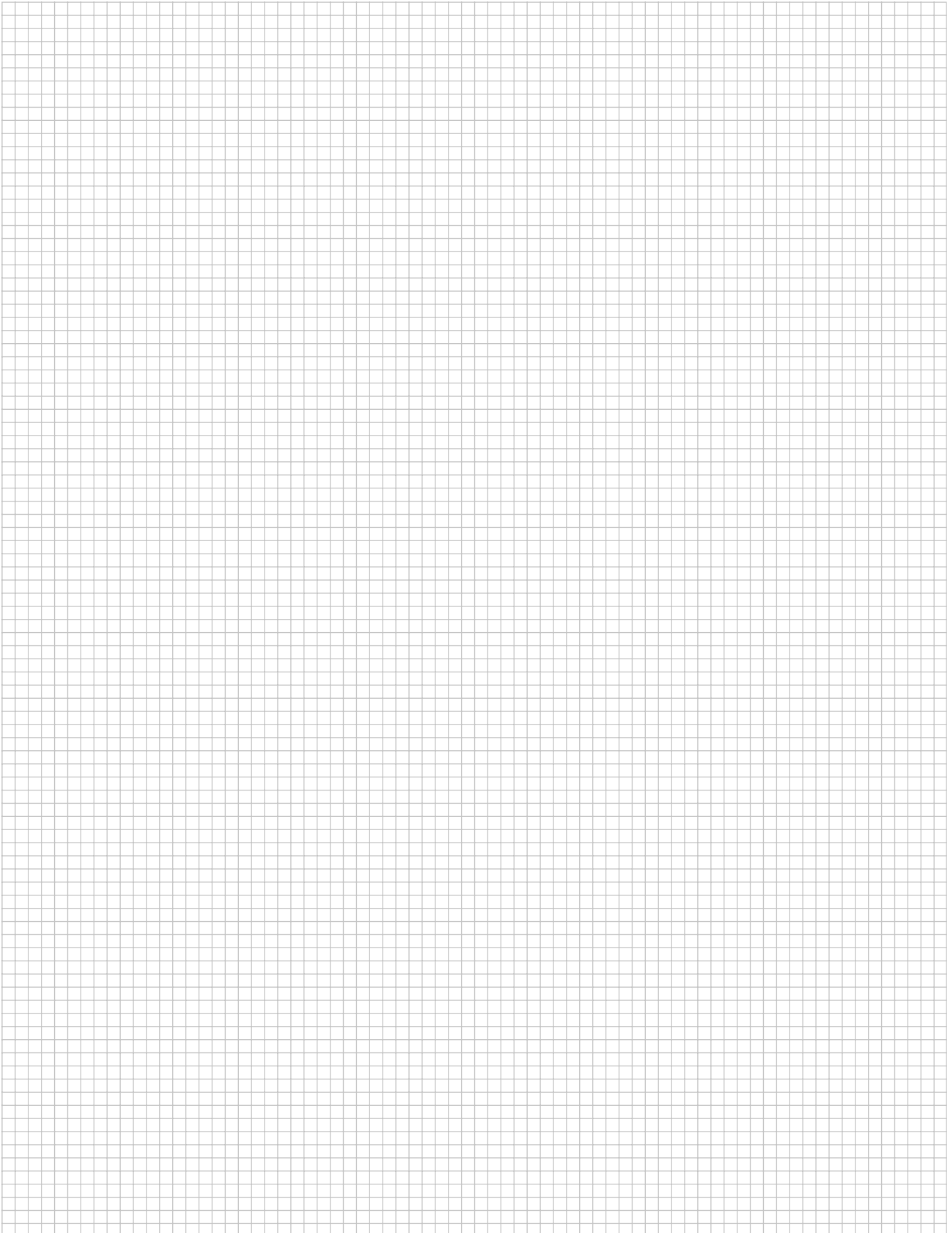
1-1579007-6

8-1579018-4

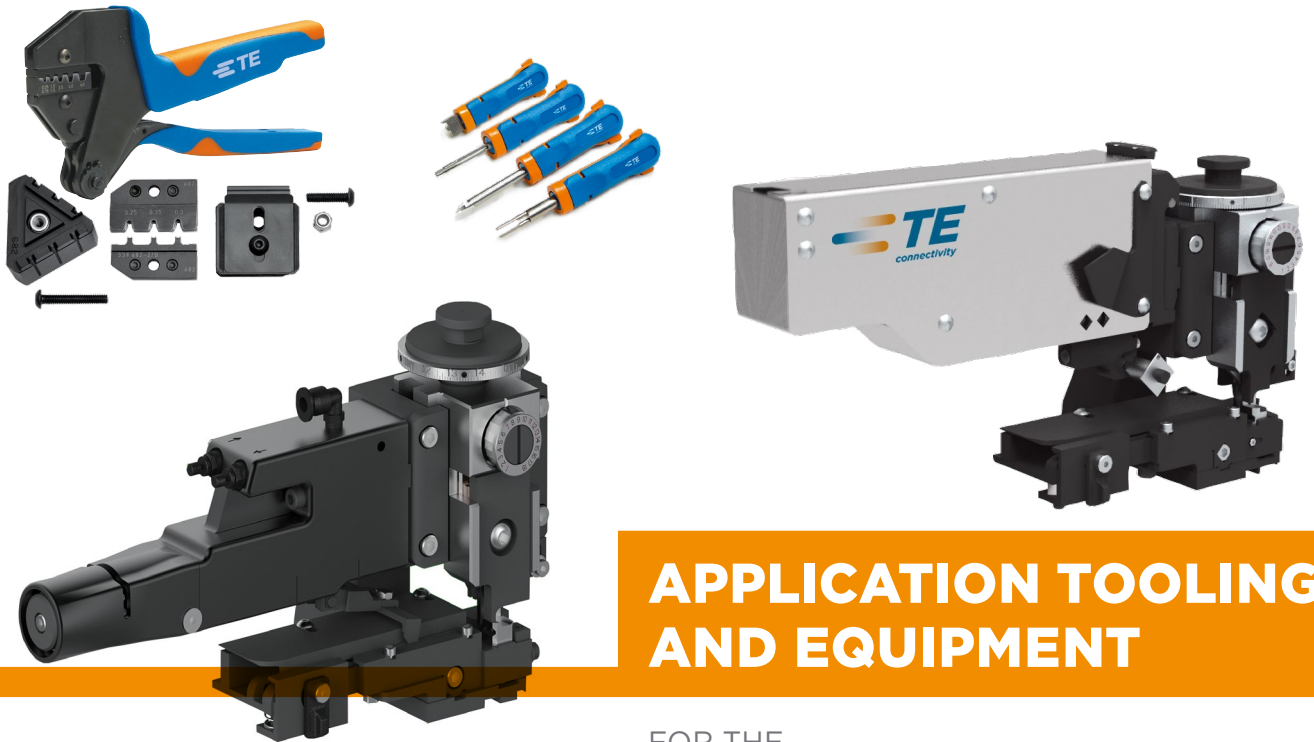


**18 Positions MCON 1.2 + 2.8 Mixed Tab Housing**

No. of Positions	Keying Options	Housing Color	Part Number	Dimensions (mm)			Mating Receptacle Housing
				A	B	C	
18	A	Black	1801739-1	46.2	58.6	19.6	1801735-1
	B	Gray	1801739-2				1801735-2
	C	Blue	1801739-3				1801735-3
	D	Brown	1801739-4				1801735-4
	E	Purple	1801739-5				1801735-5



Images representative of tool type only.



## APPLICATION TOOLING AND EQUIPMENT

FOR THE  
MCON INTERCONNECTION SYSTEM

TE Application Tooling is dedicated to providing high quality equipment options to meet all levels of our connector products specifications. We are also able to provide a broad range of equipment for other manufacturer's products.

Our equipment range is vast and almost unmatched by others operating in the same industry segments, as is our global presence and support network in the form of field service engineers and product managers. We supply everything from simple hand tools to the most complex automated systems.

Equipment is segregated into two types and managed accordingly:

### Generic equipment

Where we can supply you with sufficient information referenced by Part Number such that you can identify and order what you need yourself.

### Specialised Equipment

Where you will need help from our specialist product managers to identify what's just right for your Application.

### Finding Equipment Online

#### [www.tooling.te.com](http://www.tooling.te.com)

- Powerful searches to find generic equipment options (Hand Tools / Applicators)
- Brochures and more detailed flyers for the specialised equipment.
- It's quick, easy and more importantly the latest and most up to date information is available online.

### Regional Assistance

#### [www.te.com/support-center](http://www.te.com/support-center)



**Numerical Index**

<b>Part Number</b>	<b>Page</b>	<b>Part Number</b>	<b>Page</b>	<b>Part Number</b>	<b>Page</b>
1418762	3	1-1924067-2	22	1718350-1	6
1418762	4	1-1924067-3	22	1718350-2	6
1418844	6	1-1924067-9	22	1718350-3	6
1418850	6	1-2141324-1	18	1718475-1	8
1534594	6	1-2141324-2	18	1718475-3	8
1670144	6	1-2141520-1	18	1718758-1	4
1670146	6	1-2141520-2	18	1718758-2	4
1718348	5	1-2236046-0	25	1718758-3	4
1718350	5	1-2236046-1	25	1718760-1	4
1718758	3	1-2236343-1	19	1718760-2	4
1718760	3	1-2236343-5	19	1718760-3	4
1718762	3	1-2236896-1	19	1718762-1	4
2063537	6	1-2236896-5	19	1718762-2	4
2063573	6	1-2236898-1	19	1718762-3	4
2121114	5	1-2236898-5	19	1719836-1	8
2141116	5	1-2236952-5	20	1719836-3	8
2141861	4	1-2236953-5	20	1719838-1	8
2141861	3	1-2236954-5	20	1719838-3	8
2141864	3	1-2286417-1	17	1719840-1	8
2141864	4	1418762-1	4	1719840-3	8
2141868	3	1418762-2	4	1719972-1	13
2141868	4	1418762-3	4	1801600-1	26
2141970	4	1418844-2	5	1801600-2	26
2177610	5	1418844-3	5	1801600-3	26
1-1456426-1	23	1418850-1	5	1801600-4	26
1-1456426-2	23	1418850-2	5	1801600-5	26
1-1456426-3	23	1418850-3	5	1801606-1	26
1-1456426-4	23	1452503-1	5	1801606-2	26
1-1564559-1	18	1452503-2	5	1801606-3	26
1-1564559-2	18	1452503-3	5	1801606-4	26
1-1579001-3	5	1534594-1	5	1801606-5	26
1-1670915-1	16	1534594-2	5	1801610-1	26
1-1670916-1	16	1534594-3	5	1801610-2	26
1-1670917-1	16	1563719-1	8	1801735-1	27
1-1670918-1	17	1563719-3	8	1801735-2	27
1-1670919-1	17	1563935-1	8	1801735-3	27
1-1670920-1	17	1563935-3	8	1801735-4	27
1-1670921-1	17	1579001-6	5	1801735-5	27
1-1703494-1	18	1670144-1	5	1801739-1	27
1-1703494-2	18	1670144-2	5	1801739-2	27
1-1703498-1	18	1670144-3	5	1801739-3	27
1-1703498-2	18	1670146-1	5	1801739-4	27
1-1703498-3	18	1670146-2	5	1801739-5	27
1-1703506-1	18	1670146-3	5	1924292-1	22
1-1703506-2	18	1670802-1	8	1924292-2	22
1-1718643-1	16	1670802-3	8	1924292-3	22
1-1718644-1	16	1670804-1	8	1924292-4	22
1-1718645-1	17	1670804-3	8	2-1564559-1	18
1-1718646-1	17	1670806-1	8	2-1564559-2	18
1-1718806-1	17	1670806-3	8	2-1579016-1	5
1-1718888-1	16	1703834-1	9	2-1579016-2	5
1-1719393-1	17	1703834-3	9	2-1670915-1	16
1-1823032-1	12	1703836-1	9	2-1670916-1	16
1-1823032-3	12	1703836-3	9	2-1670917-1	16
1-1823034-1	12	1718348-1	6	2-1670918-1	17
1-1823034-3	12	1718348-2	5	2-1670919-1	17
1-1924067-1	22	1718348-3	6	2-1670920-1	17

**MCON Interconnection System**  
**Numerical Index**

**Numerical Index**

<b>Part Number</b>	<b>Page</b>	<b>Part Number</b>	<b>Page</b>	<b>Part Number</b>	<b>Page</b>
2-1670921-1	17	2141861-2	3	4-1456426-4	23
2-1703494-1	18	2141861-3	3	4-1579001-1	3
2-1703494-2	18	2141864-1	4	4-1579001-1	4
2-1703498-2	18	2141864-2	4	4-1579001-2	3
2-1703498-3	18	2141864-3	4	4-1579001-2	4
2-1703506-1	18	2141868-1	4	4-1579001-2	6
2-1703506-2	18	2141868-2	4	4-1579001-3	3
2-1718643-1	16	2141868-3	4	4-1579001-3	4
2-1718644-1	16	2141970-1	3	4-1579001-3	6
2-1718645-1	17	2141970-2	3	4-1579001-5	3
2-1718646-1	17	2141970-3	3	4-1579001-5	4
2-1718806-1	17	2177610-3	6	4-1579001-6	3
2-1718888-1	16	2177770-1	10	4-1579001-6	4
2-1719393-1	17	2177770-3	10	4-1579001-7	3
2-1924067-0	22	2177771-1	10	4-1579001-7	4
2-1924067-1	22	2177771-3	10	4-1579014-1	2
2-2141324-1	18	2177908-1	2	4-1924067-1	22
2-2141324-2	18	2177908-2	2	4-1924067-2	22
2-2141520-1	18	2177908-3	2	4-1924067-3	22
2-2141520-2	18	2177909-1	2	4-1924292-1	22
2-2236343-1	19	2177909-2	2	4-1924292-2	22
2-2236343-5	19	2177909-3	2	4-1924292-3	22
2-2236896-1	19	2208360-3	7	4-1924292-4	22
2-2236896-5	19	2208362-3	7	4-2098541-1	23
2-2236898-1	19	2208363-3	7	4-2098541-2	23
2-2236898-5	19	2208762-1	11	4-2098541-3	23
2-2236952-5	20	2208762-3	11	4-2098541-4	23
2-2236953-5	20	2208763-1	11	4-2098557-1	23
2-2236954-5	20	2208763-3	11	4-2098557-2	23
2098541-1	23	2208764-1	11	4-2098557-3	23
2098541-2	23	2208764-3	11	4-2098559-1	23
2098541-3	23	2208765-1	11	4-2098559-2	23
2098541-4	23	2208765-3	11	4-2098559-3	23
2098557-1	23	2208766-1	11	4-2098559-4	23
2098557-2	23	2208766-3	11	4-2236343-1	19
2098557-3	23	2208939-1	21	4-2236343-5	19
2098559-1	23	2236046-7	25	5-1418758-0	3
2098559-2	23	2236046-8	25	5-1418758-0	4
2098559-3	23	2236047-1	25	5-1418758-1	4
2098559-4	23	2236047-2	25	5-1418758-2	4
2098582-1	13	2236048-1	25	5-1418758-3	4
2098641-1	24	3-1579001-7	5	5-1418760-0	3
2098641-2	24	3-1579001-9	5	5-1418760-1	4
2098641-3	24	3-1670915-1	16	5-1418760-2	4
2098641-4	24	3-1670916-1	16	5-1579007-3	3
2098641-5	24	3-1670918-1	17	5-2208918-1	21
2098641-6	24	3-1670921-1	17	5-2208918-2	21
2098641-7	24	3-1718643-1	16	5-2208920-1	21
2098641-8	24	3-1718644-1	16	5-2208920-2	21
2121114-3	6	3-1718645-1	17	5-2236115-1	21
2138873-1	22	3-1718806-1	17	5-2236115-2	21
2138873-2	22	3-1718888-1	16	5-2236116-1	21
2138873-3	22	3-2236896-1	19	5-2236116-2	21
2138873-4	22	3-2236896-5	19	6-1579016-5	7
2138873-6	22	4-1456426-1	23	7-1452653-0	4
2141116-3	6	4-1456426-2	23	7-1452653-1	3
2141861-1	3	4-1456426-3	23	7-1452653-2	3

**Numerical Index**

---

<b>Part Number</b>	<b>Page</b>	<b>Part Number</b>	<b>Page</b>	<b>Part Number</b>	<b>Page</b>
7-1452653-3	3				
7-1452656-0	4				
7-1452656-1	3				
7-1452656-2	3				
7-1452656-3	3				
7-1452659-0	4				
7-1452659-1	3				
7-1452659-2	3				
7-1452659-3	3				
7-1452665-0	4				
7-1452665-1	3				
7-1452665-2	3				
7-1452665-3	3				
7-1452668-0	4				
7-1452668-1	3				
7-1452668-2	3				
7-1452668-3	3				
7-1452671-0	4				
7-1452671-1	3				
7-1452671-2	3				
7-1452671-3	3				
8-1579007-9	2				
828904-2	13				
828905-1	13				
828922-1	13				
828985-1	13				
828986-1	13				
963142-1	13				
963143-1	13				
964972-1	13				
967056-1	13				
967067-1	13				
967067-2	13				
967608-1	13				



## Disclaimer

While TE Connectivity (TE) has made every reasonable effort to ensure the accuracy of the information in this catalog, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice..

TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

## Trademarks

AMP MCP, MCON, TE, TE Connectivity, TE connectivity (logo), and EVERY CONNECTION COUNTS are trademarks.

ACOME is a trademark.

Other product names, logos, and company names mentioned herein may be trademarks of their respective owners.

## Copyright

© 2014 TE Connectivity family of companies. All rights reserved.

## AMERICAS

**Argentina** - Buenos Aires  
**(Chile, Colombia, Ecuador, Venezuela)**  
Phone: +54-11-4733-2202  
Fax: +54-11-4733-2250

**Brasil** - São Paulo  
Phone: +55-11-2103-6105  
Fax: +55-11-2103-6204

**Canada** - Toronto  
Phone: +1-905-475-6222  
Fax: +1-905-474-5520  
**Product Information Center:**  
Phone: +1-905-470-4425  
Fax: +1-905-474-5525

**Mexico** - Mexico City  
Phone: +52-55-1106-0800  
+01-800-733-8926  
Fax: +52-55-1106-0910

**United States**  
Harrisburg, PA  
Phone: +1-717-564-0100  
Fax: +1-717-986-7575  
**Product Information Center:**  
Phone: +1-800-522-6752  
Fax: +1-717-986-7575

**For South American Countries not shown**  
Phone: +54-11-4733-2015  
Fax: +54-11-4733-2083

## ASIA/PACIFIC

**Australia** - Sydney  
Phone: +61-2-9554-2600  
Fax: +61-2-9502-2556  
**Product Information Center:**  
Phone: +61-2-9840-8200  
Fax: +61-2-9634-6188

**Indonesia** - Jakarta  
Phone: +62-21-2929-3800  
Fax: +62-21-2929-3899

**Japan** - Kawasaki, Kanagawa  
Phone: +81-44-844-8111  
Fax: +81-44-812-3207

**Korea** - Seoul  
Phone: +82-2-3415-4500  
Fax: +82-2-3486-3810

**Malaysia** - Kuala Lumpur  
Phone: +60-3-7806-7688  
Fax: +60-3-7805-3066

**New Zealand** - Auckland  
Phone: +64-9-634-4580  
Fax: +64-9-634-4586

**Philippines** - Makati City  
Phone: +632-988-9400  
Fax: +632-659-7737

**People's Republic of China**  
Hong Kong  
Phone: +852-2738-8731  
Fax: +852-2735-0243

Shanghai  
Phone: +86-21-3398-0000  
Fax: +86-21-3398-1999

**Singapore** - Singapore  
Phone: +65-6482-0311  
Fax: +65-6482-1012

**Taiwan** - Taipei  
Phone: +886-2-8768-2788  
Fax: +886-2-8768-2268

**Thailand** - Bangkok  
Phone: +66-2-834-6200  
Fax: +66-2-937-1820

**Vietnam** - Ho Chi Minh City  
Phone: +84-8-3823-8473  
Fax: +84-8-3823-8533

## EUROPE/MIDDLE EAST/AFRICA

**Austria** - Vienna  
Phone: +43-1-905-60-0  
Fax: +43-1-905-60-1333  
**Product Information Center:**  
Phone: +43-1-905-60-1228  
Fax: +43-1-905-60-1333

**Belarus** - Minsk  
Phone: +375-17-237-47-94  
Fax: +375-17-237-47-94  
**Product Information Center:**  
Phone: +7-495-790-7902  
Fax: +7-495-721-1893

**Bulgaria** - Sofia  
Phone: +359-2-971-2152  
Fax: +359-2-971-2153

**Czech Republic and Slovakia**  
**Czech Republic** - Kurim, Brno  
Phone: +420-541-162-108  
Fax: +420-541-162-104  
**Product Information Center:**  
Phone: +420-541-162-113  
Fax: +420-541-162-104

**Denmark** - Glostrup  
Phone: +45-43-48-04-00  
Fax: +46-8-50-72-50-01  
**Product Information Center:**  
Phone: +46-8-50-72-50-00

**Egypt** - Cairo  
Phone: +20-2-24192334  
Fax: +20-2-24177647

**Estonia** - Tartu  
Phone: +372-5138-274  
Fax: +372-7400-779

**Finland** - Helsinki  
Phone: +358-95-12-34-20  
Fax: +46-8-50-72-50-01  
**Product Information Center:**  
Phone: +46-8-50-72-50-00

**France** - Cergy-Pontoise  
Cedex  
Phone: +33-1-3420-8888  
Fax: +33-1-3420-8800  
**Product Information Center:**  
Phone: +33-1-3420-8686  
Fax: +33-1-3420-8624

**France Export Divisions** -  
Cergy-Pontoise Cedex  
Phone: +33-1-3420-8866  
Fax: +33-1-3420-8300

**Germany** - Bensheim  
**(Switzerland)**  
Phone: +49-6251-133-0  
Fax: +49-6251-133-1600  
**Product Information Center:**  
Phone: +49-6251-133-1999  
Fax: +49-6251-133-1988

**Hungary** - Budapest  
Phone: +36-1-289-1000  
Fax: +36-1-289-1010  
**Product Information Center:**  
Phone: +36-809-874-04  
(toll free)

**India** - Bangalore  
Phone: +91-080-2854-0800  
Fax: +91-080-2854-0820/21

**Italy** - Collegno (Torino)  
Phone: +39-011-4012-111  
Fax: +39-011-4031-116  
**Product Information Center:**  
Phone: +39-011-4012-632  
Fax: +39-011-4028-7632

**Lithuania and Latvia**  
**Lithuania** - Vilnius  
Phone: +370-5-213-1402  
Fax: +370-5-213-1403

**Morocco** - Tangier  
Phone: +212-5-31-06-2700  
Fax: +212-5-31-06-2728

**Netherlands** - 's-Hertogenbosch  
**(Belgium, Luxemburg)**  
Phone: +31-73-6246-246  
Fax: +31-73-6212-365  
**Product Information Center:**  
Phone: +31-73-6246-999  
Fax: +31-73-6246-998

**Norway** - Nesbru  
Phone: +47-66-77-88-50  
Fax: +46-8-50-72-50-01  
**Product Information Center:**  
Phone: +46-8-50-72-50-00

**Poland** - Warsaw  
Phone: +48-22-4576-700  
Fax: +48-22-4576-720

**Romania** - Bucharest  
Phone: +40-21-311-3479/3596  
Fax: +40-21-312-0574

**Russia** - Moscow  
Phone: +7-495-790-7902  
Fax: +7-495-721-1893  
**Product Information Center:**  
Phone: +7-495-790-7902  
Fax: +7-495-721-1893

Nizhniy Novgorod  
Phone: +7-831-220-33-05/-06  
Fax: +7-831-220-33-39/-40

**Slovenia** - Ljubljana  
Phone: +386-1561-3270  
Fax: +386-1561-3240

**South Africa** - Port Elizabeth  
Phone: +27-41-503-4500  
Fax: +27-41-581-0440

**Spain** - Barcelona  
Phone: +34-93-291-0300  
Fax: +34-93-564-4819  
**Product Information Center:**  
Phone: +34-93-291-0366  
Fax: +34-93-209-1030

**Sweden** - Upplands Väsby  
Phone: +46-8-50-72-50-00  
Fax: +46-8-50-72-50-01  
**Product Information Center:**  
Phone: +46-8-50-72-50-00

**Turkey** - Istanbul  
Phone: +90-212-339-9200  
Fax: +90-212-339-9202

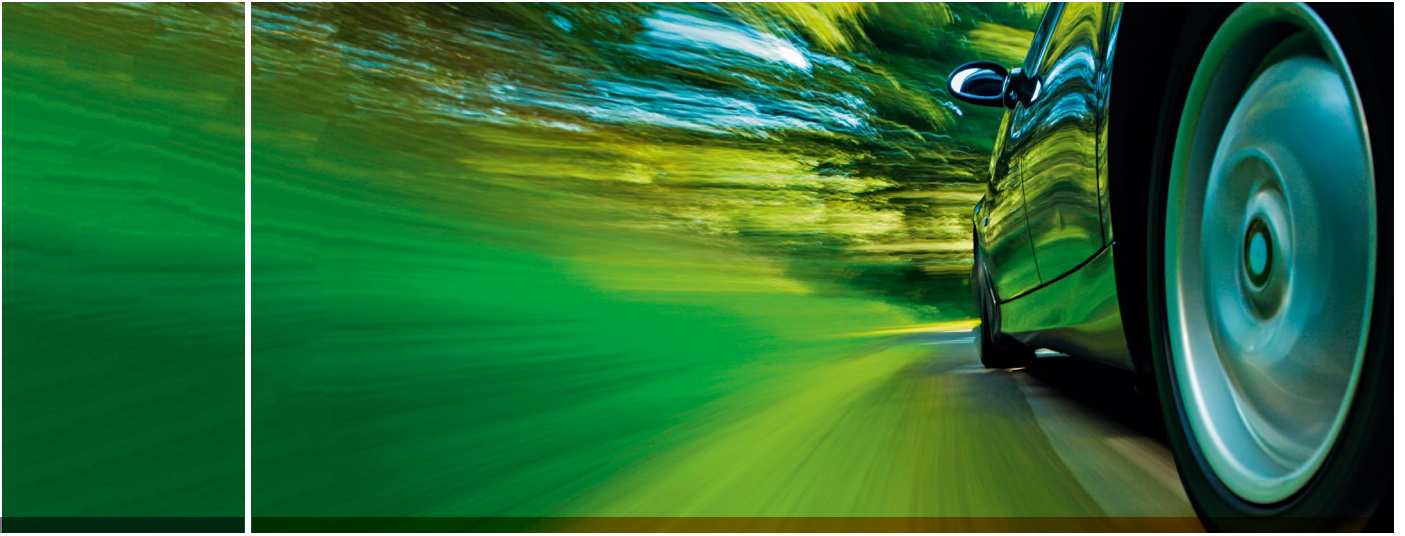
**Ukraine** - Kiev  
Phone: +380-44-206-2265  
Fax: +380-44-206-2264  
**Product Information Center:**  
Phone: +380-44-206-2265  
Fax: +380-44-206-2264

**United Kingdom and Ireland** - Swindon  
Phone: +44-8706-080208  
Fax: +44-208-954-6234  
**Product Information Center:**  
Phone: +44-800-267-666

**For further contact information or countries not shown please go to:**

[www.TE.com/support-center](http://www.TE.com/support-center)

Status 04/2013



**Tyco Electronics AMP GmbH**  
**a TE Connectivity Ltd. company**

AMPèrestrasse 12-14  
64625 Bensheim | Germany  
Phone: +49 (0)6251 133-0  
Fax: +49 (0)6251 133-1600



[www.te.com](http://www.te.com)  
[www.te.com/automotive](http://www.te.com/automotive)

Tyco Electronics AMP GmbH certified  
acc. ISO 14001 and ISO/TS 16949:2002

1308070-4 | Revised 10-2014 | 3M · EB

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[1-1670916-1](#)