

# HEAVY DUTY SEALED CONNECTOR SERIES

---

FOR INDUSTRIAL & COMMERCIAL TRANSPORTATION

TERMINALS AND CONNECTORS



## WE GO TO EXTREMES TO MAKE SURE **EVERY CONNECTION COUNTS**



TE Connectivity (TE) Industrial & Commercial Transportation (ICT) is a reliable provider of solutions for even the harshest environment. With a focus on employee expertise and durable products, we deliver the solutions and support our customers can count on.

Years ago, tractors, construction equipment, trucks, and boats had simple electrical systems that might have included electrical starting and a basic lighting package. Today, ECUs, joysticks, fuel-efficient engines, LED lights, and CAN systems are standard equipment. The need to protect sensitive electrical systems from vibration, moisture, dust, dirt, salt, and airborne particles has never been greater. TE Industrial & Commercial Transportation is a leader in supporting today's increasingly complex and sophisticated equipment and applications.

Our comprehensive line of products includes an unparalleled portfolio of rugged sensors, terminals, connectors, relays, and hybrid electric mobility solutions. These solutions are designed to withstand the harshest environmental conditions and to help vehicles operate safer, cleaner, and smarter.

Our solutions adapt to virtually any **harsh environment application**, including:



Motors and  
Gearboxes



ABS/EBS  
Brake Units



Telematics  
Units



Sensors



Wire-To-Wire  
Coupling at  
the Chassis



Infotainment  
Applications



**2,000+ EMPLOYEES**



**10,000 CUSTOMERS**



**20,000+  
DIFFERENT PARTS**



## MARKETS WE SERVE



**ON-HIGHWAY**



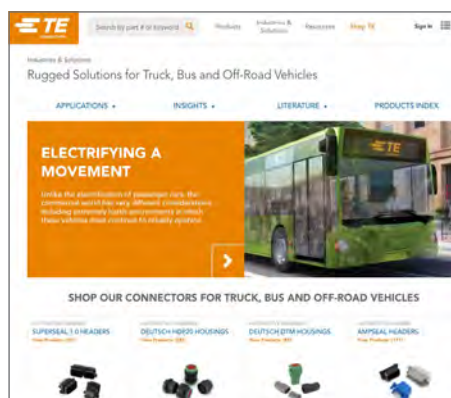
**OFF-HIGHWAY**



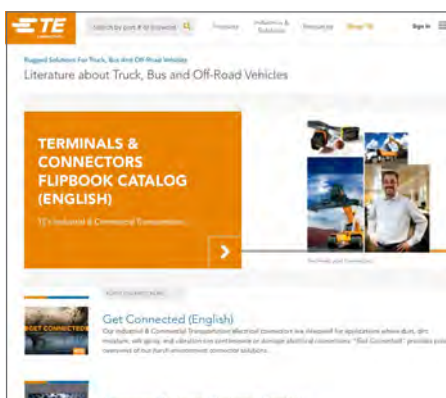
**RECREATIONAL  
TRANSPORTATION**

## ONLINE RESOURCES

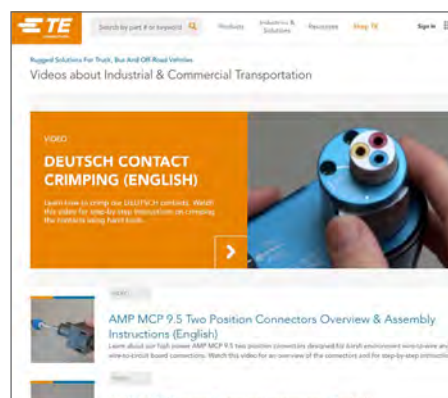
To learn more about TE Connectivity Industrial & Commercial Transportation, its products, and their corresponding documents and videos, please check out the following pages on TE.com:



**TE.COM/ICT**



**ICT LITERATURE  
ON TE.COM**



**ICT VIDEOS  
ON TE.COM**



### TE SOLUTION CENTER

You can rely on TE Connectivity's helpful Solution Center team to provide answers to your general and technical questions.

Connect with our Solution Center staff at:  
[te.com/support](https://te.com/support)





## Heavy Duty Sealed Connector Series

Our heavy duty sealed connectors are designed to meet the rigorous demands of the commercial vehicle industry and off-road applications that require the highest standards of performance. Made from a rugged UL94 V-0-rated thermoplastic, heavy duty sealed connectors have an integrated secondary lock with a poka-yoke feature that can be used for inline or flange-mounted applications in a wire-to-wire or wire-to-device configuration.

Rated to IP67 and IP6K9K (when used with a backshell), this series is available in five housing sizes with four keying options. They are offered in arrangements ranging from 2 to 18 positions. Solutions for CAN bus architecture are also available.

Accessories include backshells, protection caps, cavity plugs, and fixing slides.



|                                  |       |
|----------------------------------|-------|
| Product Benefits .....           | 6     |
| Product Applications .....       | 6     |
| Product Documentation .....      | 7     |
| Performance Specifications ..... | 7     |
| Material Specifications .....    | 7     |
|                                  |       |
| Housings .....                   | 8-15  |
| Accessories .....                | 16-19 |
| Contacts .....                   | 20-25 |
| Tooling .....                    | 26-28 |
|                                  |       |
| How To Instructions .....        | 29    |
| Index .....                      | 30-31 |

## Heavy Duty Sealed Connector Series

### BENEFITS

- Optimize applied costs with AMP MCP 1.5K, 2.8, and 6.3/4.8K contacts. The shared family supports a broad range of heavy-duty applications with high current capacity.
- Protect from dust, water, and overspray with up to IP69K rugged sealing capabilities.
- Easily insert and extract contacts and enjoy trouble-free maintenance with individual wire seals designed to crimp at the base of the terminal.
- Quickly verify terminal position with the integrated secondary locking device and poka-yoke system, using a reliable assembly process.

### KEY INDUSTRIES

The heavy duty sealed connector series can be utilized in the truck, bus, construction, agriculture, and special vehicles industries.



Truck



Bus



Construction



Agriculture



Special

### APPLICATIONS

The heavy duty sealed connector series can be utilized in the following applications:



Motors and Gearboxes



ABS/EBS Brake Units



Hydraulic Pumps



Fuel Level Sensors



Wire-to-Wire Coupling at the Chassis



Actuators



Switches



PRODUCT DOCUMENTATION

Additional product documentation is available for assistance with heavy duty sealed connector series products.

The following documentation may be helpful:

[108-94020 \(Product Specification, Heavy Duty Sealed Connector Series\)](#)

[114-18756 \(Application Specification, Heavy Duty Sealed Connector Series\)](#)

[1563709 \(Product Group Drawing\)](#)

PERFORMANCE SPECIFICATIONS

|                        |                                                                                                                                                            |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature:           | Operating at temperatures<br>-40°C to +140°C                                                                                                               |
| Mating Durability:     | Contacts: up to 10 cycles (tin), up to<br>50 cycles (silver), up to 100 cycles (gold);<br>see individual product specifications for<br>additional details. |
| Insulation Resistance: | 500 V DC, test per ISO 16750-2 (4.12)                                                                                                                      |
| Immersion:             | IP67 rating, IP69K (with cover), for<br>flanged tab housings, only by observing<br>mounting instructions.                                                  |
| Random Vibration:      | Tested at 177 m/s <sup>2</sup> , 94 hours per axis.<br>See product spec 108-94020 for full<br>specifications.                                              |
| Voltage:               | Up to 60 V DC                                                                                                                                              |
| Flammability:          | UL 94-V0-rated material                                                                                                                                    |

MATERIAL SPECIFICATIONS

|                             |                  |
|-----------------------------|------------------|
| Flange Seal:                | Silicone rubber  |
| Seal for Secondary Locking: | Silicone rubber  |
| Housing:                    | Glass-filled PBT |
| Secondary Lock:             | Glass-filled PBT |
| Slide Lock:                 | Glass-filled PBT |



## Heavy Duty Sealed Connector Series

for Industrial & Commercial Transportation

### Heavy Duty Sealed Connector Series Housings (Group A)

#### GROUP A HOUSINGS



#### GROUP A SIZE CONFIGURATIONS



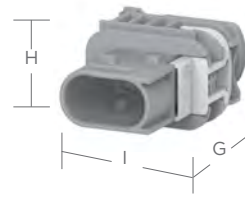
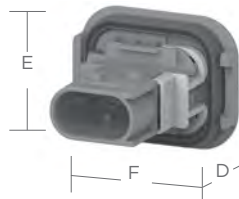
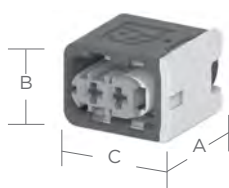
**2 Positions**  
2 size 2.8



**2 Positions**  
2 size 1.5K



**3 Positions**  
3 size 1.5K



#### DIMENSIONS

| Receptacle Housing               |                     |                    | Flanged Tab Housing            |                     |                    | Flangeless Tab Housing         |                     |                    |
|----------------------------------|---------------------|--------------------|--------------------------------|---------------------|--------------------|--------------------------------|---------------------|--------------------|
| Overall Length<br>A              | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D            | Overall Height<br>E | Overall Width<br>F | Overall Length<br>G            | Overall Height<br>H | Overall Width<br>I |
| 30.75-31.25 mm<br>(1.211-1.231") | 18.5 mm<br>(0.728") | 26.0 mm<br>(1.02") | 47.05-48.1 mm<br>(1.852-1.89") | 29.8 mm<br>(1.17")  | 37.5 mm<br>(1.48") | 47.05-48.1 mm<br>(1.852-1.89") | 19.0 mm<br>(0.748") | 27.6 mm<br>(1.09") |

#### ORDERING INFORMATION

| Positions | Contacts                | Keying Color | Receptacle Housing | Tab Housing |                |
|-----------|-------------------------|--------------|--------------------|-------------|----------------|
|           |                         |              |                    | With Flange | Without Flange |
| 2         | (2x) 2.8                | Black        | 1-1418483-1        | 1-1703841-1 | 1-1703839-1    |
|           |                         | Gray         | 2-1418483-1        | 2-1703841-1 | 2-1703839-1    |
|           |                         | Green        | 3-1418483-1        | 3-1703841-1 | 3-1703839-1    |
|           |                         | Blue         | 4-1418483-1        | 4-1703841-1 | 4-1703839-1    |
| (3) 2     | (2x) 1.5K<br>(1x) blank | Black        | 1-1418448-2        | *           | *              |
|           |                         | Gray         | 2-1418448-2        | *           | *              |
|           |                         | Green        | 3-1418448-2        | *           | *              |
|           |                         | Blue         | 4-1418448-2        | *           | *              |
| 3         | (3x) 1.5K               | Black        | 1-1418448-1        | 1-1703843-1 | 1-1670730-1    |
|           |                         | Gray         | 2-1418448-1        | 2-1703843-1 | 2-1670730-1    |
|           |                         | Green        | 3-1418448-1        | 3-1703843-1 | 3-1670730-1    |
|           |                         | Blue         | 4-1418448-1        | 4-1703843-1 | 4-1670730-1    |

\*Other configurations available upon request. Please contact TE for additional information.



Heavy Duty Sealed Connector Series Housings  
(Group B)

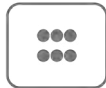
GROUP B  
HOUSINGS



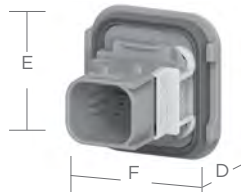
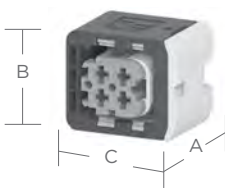
GROUP B  
SIZE CONFIGURATIONS



4 Positions  
4 size 2.8



6 Positions  
6 size 1.5K



DIMENSIONS

| Receptacle Housing  |                     |                    | Flanged Tab Housing            |                     |                    | Flangeless Tab Housing         |                     |                    |
|---------------------|---------------------|--------------------|--------------------------------|---------------------|--------------------|--------------------------------|---------------------|--------------------|
| Overall Length<br>A | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D            | Overall Height<br>E | Overall Width<br>F | Overall Length<br>G            | Overall Height<br>H | Overall Width<br>I |
| 31.3 mm<br>(1.23")  | 25.7 mm<br>(1.01")  | 30.2 mm<br>(1.19") | 47.05-48.1 mm<br>(1.852-1.89") | 39.8 mm<br>(1.57")  | 37.5 mm<br>(1.48") | 47.05-48.1 mm<br>(1.852-1.89") | 27.0 mm<br>(1.06")  | 27.6 mm<br>(1.09") |

ORDERING INFORMATION

| Positions | Contacts  | Keying Color | Receptacle Housing | Tab Housing |                |
|-----------|-----------|--------------|--------------------|-------------|----------------|
|           |           |              |                    | With Flange | Without Flange |
| 4         | (4x) 2.8  | Black        | 1-1418390-1        | 1-1703808-1 | 1-1703818-1    |
|           |           | Gray         | 2-1418390-1        | 2-1703808-1 | 2-1703818-1    |
|           |           | Green        | 3-1418390-1        | 3-1703808-1 | 3-1703818-1    |
|           |           | Blue         | 4-1418390-1        | 4-1703808-1 | 4-1703818-1    |
| 6         | (6x) 1.5K | Black        | 1-1418469-1        | 1-1703820-1 | 1-1703773-1    |
|           |           | Gray         | 2-1418469-1        | 2-1703820-1 | 2-1703773-1    |
|           |           | Green        | 3-1418469-1        | 3-1703820-1 | 3-1703773-1    |
|           |           | Blue         | 4-1418469-1        | 4-1703820-1 | 4-1703773-1    |

## Heavy Duty Sealed Connector Series Housings (Group C)

### GROUP C HOUSINGS



### GROUP C SIZE CONFIGURATIONS



**2 Positions**  
2 size 6.3/4.8K



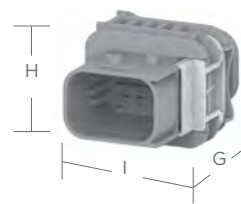
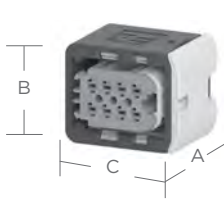
**6 Positions**  
6 size 2.8



**7 Positions**  
4 size 1.5K  
3 size 2.8



**8 Positions**  
8 size 1.5K



### DIMENSIONS

| Receptacle Housing  |                     |                    | Flanged Tab Housing            |                     |                    | Flangeless Tab Housing         |                     |                    |
|---------------------|---------------------|--------------------|--------------------------------|---------------------|--------------------|--------------------------------|---------------------|--------------------|
| Overall Length<br>A | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D            | Overall Height<br>E | Overall Width<br>F | Overall Length<br>G            | Overall Height<br>H | Overall Width<br>I |
| 31.3 mm<br>(1.23")  | 25.7 mm<br>(1.01")  | 31.2 mm<br>(1.23") | 47.05-50.6 mm<br>(1.852-1.99") | 39.8 mm<br>(1.57")  | 42.5 mm<br>(1.67") | 47.05-50.6 mm<br>(1.852-1.99") | 27.0 mm<br>(1.06")  | 32.6 mm<br>(1.28") |

### ORDERING INFORMATION

| Positions | Contacts              | Keying Color | Receptacle Housing | Tab Housing |                |
|-----------|-----------------------|--------------|--------------------|-------------|----------------|
|           |                       |              |                    | With Flange | Without Flange |
| 2         | (2x) 6.3/4.8K         | Black        | 1-1564542-1        | 1-1564546-1 | 1-1564544-1    |
|           |                       | Gray         | 2-1564542-1        | 2-1564546-1 | 2-1564544-1    |
|           |                       | Green        | 3-1564542-1        | 3-1564546-1 | 3-1564544-1    |
|           |                       | Blue         | 4-1564542-1        | 4-1564546-1 | 4-1564544-1    |
| 6         | (6x) 2.8              | Black        | 1-1418437-1        | *           | *              |
|           |                       | Gray         | 2-1418437-1        | *           | *              |
|           |                       | Green        | 3-1418437-1        | *           | *              |
|           |                       | Blue         | 4-1418437-1        | *           | *              |
| 7         | (4x) 1.5K<br>(3x) 2.8 | Black        | 1-1418480-1        | 1-1670214-1 | 1-1703648-1    |
|           |                       | Gray         | 2-1418480-1        | 2-1670214-1 | 2-1703648-1    |
|           |                       | Green        | 3-1418480-1        | 3-1670214-1 | 3-1703648-1    |
|           |                       | Blue         | 4-1418480-1        | 4-1670214-1 | 4-1703648-1    |
| 8         | (8x) 1.5K             | Black        | 1-1418479-1        | 1-1564416-1 | 1-1564512-1    |
|           |                       | Gray         | 2-1418479-1        | 2-1564416-1 | 2-1564512-1    |
|           |                       | Green        | 3-1418479-1        | 3-1564416-1 | 3-1564512-1    |
|           |                       | Blue         | 4-1418479-1        | 4-1564416-1 | 4-1564512-1    |

\*Other configurations available upon request. Please contact TE for additional information.

## Heavy Duty Sealed Connector Series Housings (Group D)

### GROUP D HOUSINGS



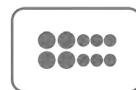
### GROUP D SIZE CONFIGURATIONS



**4 Positions**  
2 size 1.5K  
2 size 6.3/4.8K



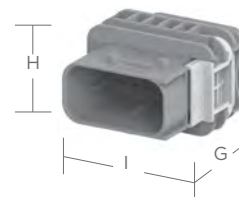
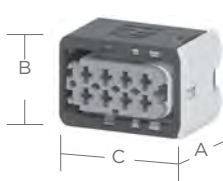
**8 Positions**  
8 size 2.8



**10 Positions**  
6 size 1.5K  
4 size 2.8



**12 Positions**  
12 size 1.5K



### DIMENSIONS

| Receptacle Housing  |                     |                    | Flanged Tab Housing            |                     |                    | Flangeless Tab Housing         |                     |                    |
|---------------------|---------------------|--------------------|--------------------------------|---------------------|--------------------|--------------------------------|---------------------|--------------------|
| Overall Length<br>A | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D            | Overall Height<br>E | Overall Width<br>F | Overall Length<br>G            | Overall Height<br>H | Overall Width<br>I |
| 31.3 mm<br>(1.23")  | 25.7 mm<br>(1.01")  | 39.2 mm<br>(1.54") | 47.05-48.1 mm<br>(1.852-1.89") | 39.8 mm<br>(1.57")  | 50.5 mm<br>(1.99") | 47.05-48.1 mm<br>(1.852-1.89") | 27.0 mm<br>(1.06")  | 40.6 mm<br>(1.60") |

### ORDERING INFORMATION

| Positions | Contacts                   | Keying Color | Receptacle Housing | Tab Housing |                |
|-----------|----------------------------|--------------|--------------------|-------------|----------------|
|           |                            |              |                    | With Flange | Without Flange |
| 4         | (2x) 1.5K<br>(2x) 6.3/4.8K | Black        | *                  | *           | *              |
|           |                            | Gray         | 2-2208157-1        | *           | *              |
|           |                            | Green        | 3-2208157-1        | *           | *              |
|           |                            | Blue         | 4-2208157-1        | *           | *              |
| 8         | (8x) 2.8                   | Black        | 1-1670894-1        | *           | 1-1564522-1    |
|           |                            | Gray         | 2-1670894-1        | *           | 2-1564522-1    |
|           |                            | Green        | 3-1670894-1        | *           | 3-1564522-1    |
|           |                            | Blue         | 4-1670894-1        | *           | 4-1564522-1    |
| 10        | (6x) 1.5K<br>(4x) 2.8      | Black        | 1-1564514-1        | 1-1564518-1 | 1-1564516-1    |
|           |                            | Gray         | 2-1564514-1        | 2-1564518-1 | 2-1564516-1    |
|           |                            | Green        | 3-1564514-1        | 3-1564518-1 | 3-1564516-1    |
|           |                            | Blue         | 4-1564514-1        | 4-1564518-1 | 4-1564516-1    |
| 12        | (12x) 1.5K                 | Black        | 1-1703639-1        | 1-1564520-1 | 1-1564414-1    |
|           |                            | Gray         | 2-1703639-1        | 2-1564520-1 | 2-1564414-1    |
|           |                            | Green        | 3-1703639-1        | 3-1564520-1 | 3-1564414-1    |
|           |                            | Blue         | 4-1703639-1        | 4-1564520-1 | 4-1564414-1    |

\*Other configurations available upon request. Please contact TE for additional information.

## Heavy Duty Sealed Connector Series Housings (Group E)

### GROUP E HOUSINGS



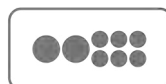
### GROUP E SIZE CONFIGURATIONS



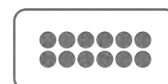
**4 Positions**  
4 size 6.3/4.8K



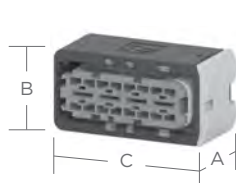
**6 Positions**  
4 size 2.8  
2 size 6.3/4.8K



**8 Positions**  
6 size 2.8  
2 size 6.3/4.8K



**12 Positions**  
12 size 2.8



### DIMENSIONS

| Receptacle Housing  |                     |                    | Flanged Tab Housing |                     |                    | Flangeless Tab Housing |                     |                    |
|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|------------------------|---------------------|--------------------|
| Overall Length<br>A | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D | Overall Height<br>E | Overall Width<br>F | Overall Length<br>G    | Overall Height<br>H | Overall Width<br>I |
| 31.3 mm<br>(1.23")  | 25.7 mm<br>(1.01")  | 51.2 mm<br>(2.02") | 50.6 mm<br>(1.99")  | 39.8 mm<br>(1.57")  | 62.5 mm<br>(1.46") | 47.1 mm<br>(1.85")     | 27.0 mm<br>(1.06")  | 52.6 mm<br>(2.07") |

### ORDERING INFORMATION

| Positions | Contacts                                | Keying Color | Receptacle Housing | Tab Housing |                |
|-----------|-----------------------------------------|--------------|--------------------|-------------|----------------|
|           |                                         |              |                    | With Flange | Without Flange |
| 4         | (4x) 6.3/4.8K                           | Black        | 1-1564330-1        | 1-1564536-1 | 1-1564534-1    |
|           |                                         | Gray         | 2-1564330-1        | 2-1564536-1 | 2-1564534-1    |
|           |                                         | Green        | 3-1564330-1        | *           | 3-1564534-1    |
|           |                                         | Blue         | 4-1564330-1        | *           | 4-1564534-1    |
| (8) 6     | (4x) 2.8<br>(2x) 6.3/4.8K<br>(2x) blank | Black        | 1-2299782-2        | *           | *              |
|           |                                         | Gray         | 2-2299782-2        | *           | *              |
|           |                                         | Green        | 3-2299782-2        | *           | *              |
|           |                                         | Blue         | 4-2299782-2        | *           | *              |
| 8         | (6x) 2.8<br>(2x) 6.3/4.8K               | Black        | 1-2299782-1        | *           | *              |
|           |                                         | Gray         | 2-2299782-1        | *           | *              |
|           |                                         | Green        | 3-2299782-1        | *           | *              |
|           |                                         | Blue         | 4-2299782-1        | *           | *              |
| 12        | (12x) 2.8                               | Black        | 1-1670901-1        | *           | *              |
|           |                                         | Gray         | 2-1670901-1        | *           | *              |
|           |                                         | Green        | 3-1670901-1        | *           | *              |
|           |                                         | Blue         | 4-1670901-1        | *           | *              |

\*Other configurations available upon request. Please contact TE for additional information.

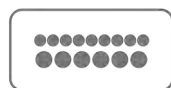


## Heavy Duty Sealed Connector Series Housings (Group E)

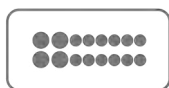
### GROUP E HOUSINGS



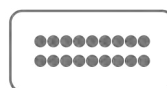
### GROUP E SIZE CONFIGURATIONS



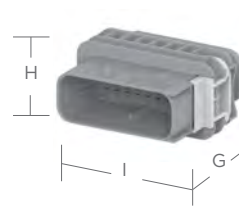
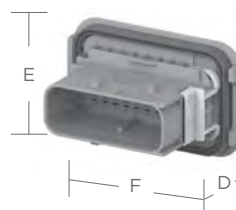
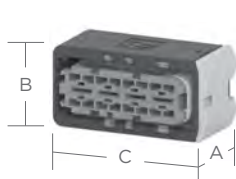
**15 Positions**  
9 size 1.5K  
6 size 2.8



**16 Positions**  
12 size 1.5K  
4 size 2.8



**18 Positions**  
18 size 1.5K



### DIMENSIONS

| Receptacle Housing  |                     |                    | Flanged Tab Housing          |                     |                    | Flangeless Tab Housing       |                     |                    |
|---------------------|---------------------|--------------------|------------------------------|---------------------|--------------------|------------------------------|---------------------|--------------------|
| Overall Length<br>A | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D          | Overall Height<br>E | Overall Width<br>F | Overall Length<br>G          | Overall Height<br>H | Overall Width<br>I |
| 31.3 mm<br>(1.23")  | 25.7 mm<br>(1.01")  | 51.2 mm<br>(2.02") | 47.1-48.1 mm<br>(1.85-1.89") | 39.8 mm<br>(1.57")  | 62.5 mm<br>(1.46") | 47.1-48.1 mm<br>(1.85-1.89") | 27.0 mm<br>(1.06")  | 52.6 mm<br>(2.07") |

### ORDERING INFORMATION

| Positions | Contacts               | Keying Color | Receptacle Housing | Tab Housing |                |
|-----------|------------------------|--------------|--------------------|-------------|----------------|
|           |                        |              |                    | With Flange | Without Flange |
| 15        | (9x) 1.5K<br>(6x) 2.8  | Black        | 1-1563878-1        | 1-1564532-1 | 1-1564530-1    |
|           |                        | Gray         | 2-1563878-1        | 2-1564532-1 | 2-1564530-1    |
|           |                        | Green        | 3-1563878-1        | 3-1564532-1 | 3-1564530-1    |
|           |                        | Blue         | 4-1563878-1        | 4-1564532-1 | 4-1564530-1    |
| 16        | (12x) 1.5K<br>(4x) 2.8 | Black        | 1-1564337-1        | 1-1564407-1 | 1-1564528-1    |
|           |                        | Gray         | 2-1564337-1        | 2-1564407-1 | 2-1564528-1    |
|           |                        | Green        | 3-1564337-1        | 3-1564407-1 | 3-1564528-1    |
|           |                        | Blue         | 4-1564337-1        | 4-1564407-1 | 4-1564528-1    |
| 18        | (18x) 1.5K             | Black        | 1-1563759-1        | 1-1564526-1 | 1-1564412-1    |
|           |                        | Gray         | 2-1563759-1        | 2-1564526-1 | 2-1564412-1    |
|           |                        | Green        | 3-1563759-1        | 3-1564526-1 | 3-1564412-1    |
|           |                        | Blue         | 4-1563759-1        | 4-1564526-1 | 4-1564412-1    |

## Heavy Duty Sealed Connector Series

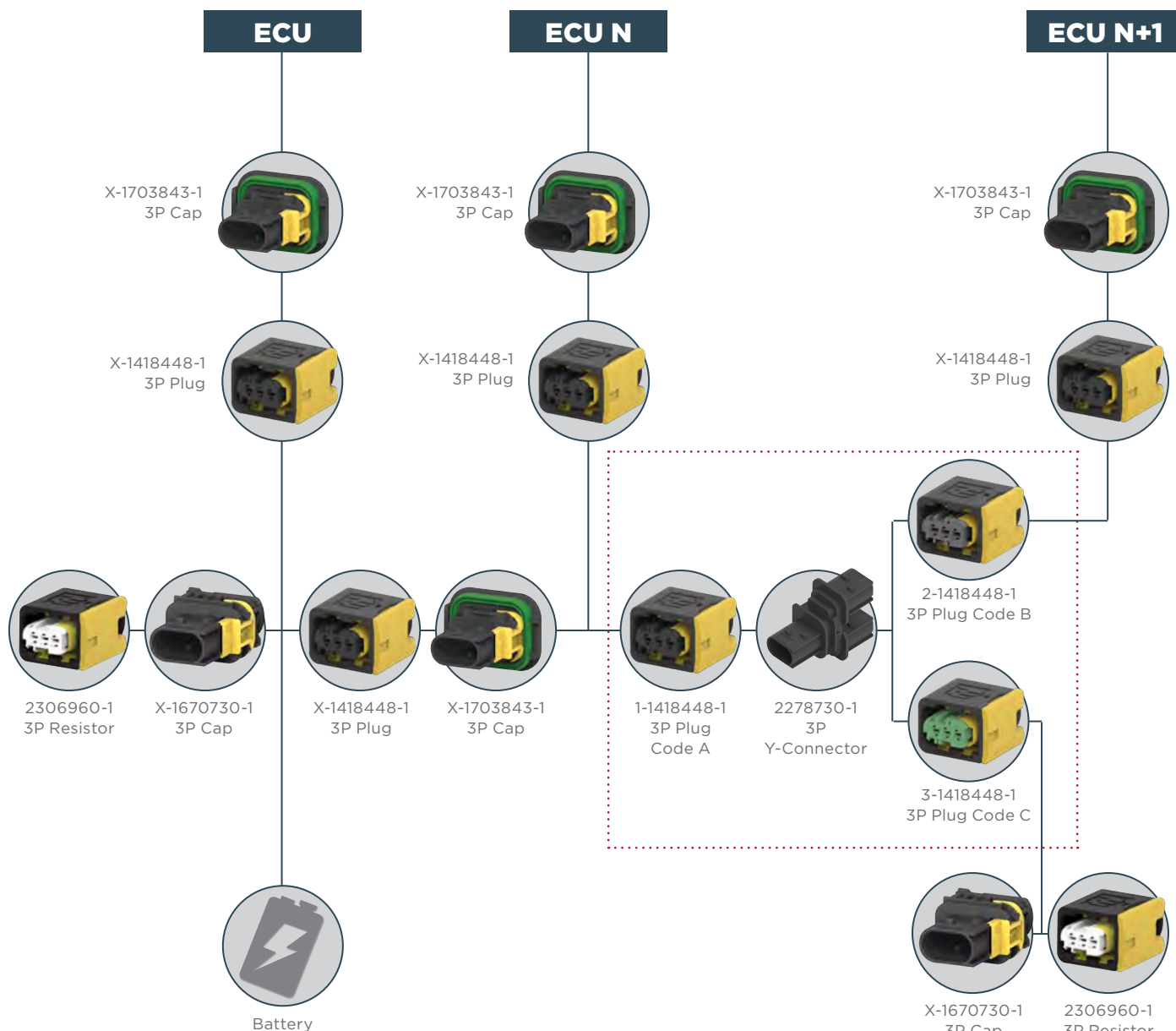
for Industrial & Commercial Transportation

### Heavy Duty Sealed Connector Series Housings

#### CAN Bus Housings

Heavy duty sealed connector series CAN bus Y-Connector and 120(ohm) Resistor connectors are key for CAN signal communication systems in vehicles or machinery on the farm, construction sites, and on-/off-road applications. They meet CAN bus protocol specifications according to SAE J1939 standard and are fully compatible with our heavy duty sealed connector series accessories and parts, including the heavy duty sealed connector series 3-position plug and backshell/dust cap.

#### SAE J 1939 CAN-BUS NETWORK ARCHITECTURE



Heavy Duty Sealed Connector Series  
CAN Bus

CAN BUS  
HOUSINGS

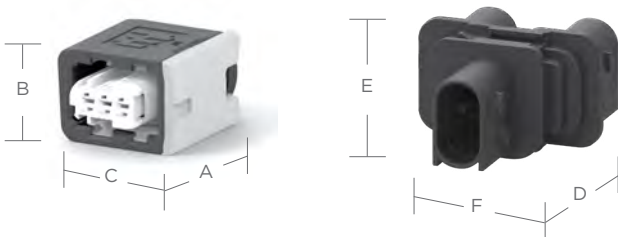


CAN BUS  
SIZE CONFIGURATIONS



3 Positions  
3 size 1.5K

DIMENSIONS



| 120Ω Resistor Receptacle Housing |                     |                    | Y-Connector Tab Housing |                     |                    |
|----------------------------------|---------------------|--------------------|-------------------------|---------------------|--------------------|
| Overall Length<br>A              | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D     | Overall Height<br>E | Overall Width<br>F |
| 30.75 mm<br>(1.211")             | 18.5 mm<br>(0.728") | 26.0 mm<br>(1.02") | 53.1 mm<br>(2.09")      | 25.9 mm<br>(1.02")  | 42.4 mm<br>(1.67") |

ORDERING INFORMATION

| Positions | Contacts                            | Keying Type | Color | Part Number |
|-----------|-------------------------------------|-------------|-------|-------------|
| 3         | (2x) 1.5K<br>(1x) 120Ω Resistor     | X           | White | 2306960-1   |
| 3 / 3 / 3 | (3x) 1.5K<br>(3x) 1.5K<br>(3x) 1.5K | A / B / C   | Black | 2278730-1   |
|           |                                     | A / A / A   |       | 2278730-2   |

## Heavy Duty Sealed Connector Series

for Industrial & Commercial Transportation

### Heavy Duty Sealed Connector Series

#### Accessories

Several accessory items are available to complement the heavy duty sealed connector series, including backshells, fixing slides, and protection caps. Accessory items cover a wide array of design requirements such as assisting with mounting, providing additional protection, and offering enhanced aesthetics.

#### BACKSHELLS

Backshells attach to the back of a connector to provide additional protection against environmental conditions as well as provide additional strain relief to the wire bundle.



| Group | Description                                                    | Part Number |
|-------|----------------------------------------------------------------|-------------|
| A     | Vertical adapter for NW 8.5 mm corrugated tubing               | 1670365-1   |
|       | Right-angle adapter for NW 8.5 mm corrugated tubing            | 1670150-1   |
| B     | Right-angle adapter with universal clamp                       | 965576-1    |
|       | Vertical adapter with universal clamp                          | 965784-1    |
|       | Right-angle adapter for NW 7.5 mm corrugated tubing            | 185793-1    |
|       | Right-angle adapter for NW 8.5 mm corrugated tubing            | 965577-1    |
|       | Right-angle adapter for NW 10 mm corrugated tubing             | 965783-1    |
|       | Vertical adapter for NW 7.5 mm corrugated tubing               | 185792-1    |
|       | Vertical adapter for NW 8.5 mm corrugated tubing               | 965785-1    |
|       | Vertical adapter for NW 10 mm corrugated tubing                | 965786-1    |
|       | Right-angle adapter 4/7 position for hose                      | 1534789-1   |
|       | Vertical adapter 4/7 position for hose                         | 1534791-1   |
|       | Vertical adapter 4/7 position for jacketed cable 5.2-6.5 mm    | 1418916-1   |
|       | Vertical adapter 4/7 position for jacketed cable 6.0-9.5 mm    | 1418917-1   |
|       | Right-angle adapter 4/7 position for jacketed cable 5.2-6.5 mm | 1418918-1   |
|       | Right-angle adapter 4/7 position for jacketed cable 6.0-9.5 mm | 1418919-1   |
| C     | Vertical adapter for NW 13 mm corrugated tubing                | 1670364-1   |
|       | Right-angle adapter for NW 13 mm corrugated tubing             | 1670057-1   |
| D     | Vertical adapter for NW 13 mm corrugated tubing                | 1563111-1   |
|       | Right-angle adapter for NW 13 mm corrugated tubing             | 1563110-1   |
| E     | Vertical adapter for NW 17 mm corrugated tubing and hose       | 1670866-1   |
|       | Right-angle adapter for NW 17 mm corrugated tubing and hose    | 1670865-1   |

## Heavy Duty Sealed Connector Series

### Accessories

#### FIXING SLIDES

Fixing slides are used to help secure heavy duty sealed connectors while mounting them. The locking slides can accommodate panel thicknesses from 1.0-3.5 mm.



| Group | Color   | Panel Thickness (mm) | Part Number |
|-------|---------|----------------------|-------------|
| A     | Red     | 2.50                 | 1703838-2   |
|       | Yellow  | 3.00                 | 1703838-1   |
|       | Gray    | 3.50                 | 1703838-6   |
| B     | Red     | 2.50                 | 1703810-2   |
|       | Yellow  | 3.00                 | 1703810-1   |
|       | Gray    | 3.50                 | 1703810-6   |
| C     | Gray    | 1.50                 | 1670720-5   |
|       | Green   | 1.60                 | 1670720-8   |
|       | Red     | 2.50                 | 1670720-2   |
|       | Yellow  | 3.00                 | 1670720-1   |
|       | Gray    | 3.50                 | 1670720-6   |
| D     | Natural | 1.00                 | 1564562-4   |
|       | Orange  | 1.20                 | 2317070-1   |
|       | Gray    | 1.50                 | 1564562-5   |
|       | Red     | 2.50                 | 1564562-2   |
|       | Yellow  | 3.00                 | 1564562-1   |
|       | Gray    | 3.50                 | 1564562-6   |
| E     | Orange  | 1.20                 | 2316939-1   |
|       | Gray    | 1.50                 | 1564411-5   |
|       | Green   | 1.60                 | 1564411-8   |
|       | Violet  | 2.00                 | 1564411-7   |
|       | Red     | 2.50                 | 1564411-2   |
|       | Yellow  | 3.00                 | 1564411-1   |
|       | Gray    | 3.50                 | 1564411-6   |

\*Other configurations available upon request. Please contact TE for additional information.



Heavy Duty Sealed Connector Series  
Accessories

PROTECTION CAPS

Heavy duty sealed connector series protection caps provide an environmental seal and are used to protect the connector interface when the two halves are not mated.



| Group | Housing    | Part Number |
|-------|------------|-------------|
| A     | Receptacle | 2112299-1   |
|       | Tab        | 2112289-1   |
| B     | Receptacle | 2112300-1   |
|       | Tab        | 2112291-1   |
| C     | Receptacle | 2112301-1   |
|       | Tab        | 2112293-1   |
| D     | Receptacle | 2112302-1   |
|       | Tab        | 2112295-1   |
| E     | Receptacle | 2112303-1   |
|       | Tab        | 2112297-1   |

## Heavy Duty Sealed Connector Series

### Contacts

Heavy duty sealed connectors utilize the common AMP MCP stamped & formed contact system.



### AMP MCP CONTACT PERFORMANCE SPECIFICATIONS

#### Durability

|                    |
|--------------------|
| 10 cycles (tin)    |
| 50 cycles (silver) |
| 100 cycles (gold)  |

#### Current Rating

| Contact Size | Max Current |
|--------------|-------------|
| 1.5K         | Up to 20 A  |
| 2.8          | Up to 40 A  |
| 6.3/4.8K     | Up to 40 A  |

#### Contact Retention

| Contact Size | Min. Load |
|--------------|-----------|
| 1.5K         | 40/60 N   |
| 2.8          | 80 N      |
| 6.3/4.8K     | 80 N      |

#### Crimp Tensile Strength

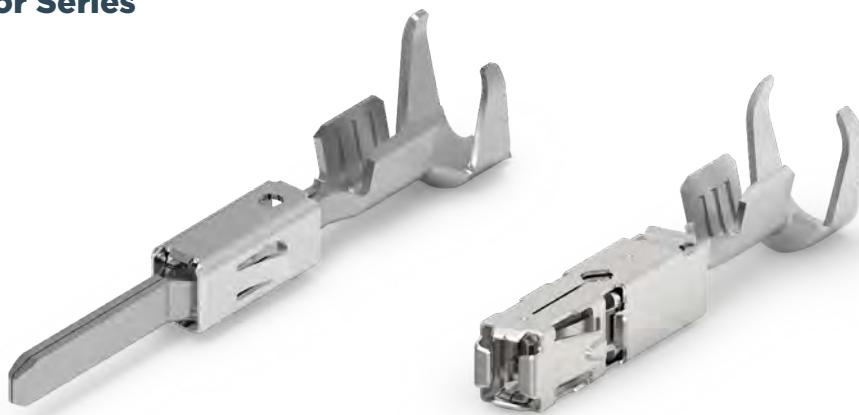
| Contact Size         | Tensile Strength |
|----------------------|------------------|
| <b>1.5K</b>          |                  |
| .22 mm <sup>2</sup>  | ≥ 32 N           |
| .35 mm <sup>2</sup>  | ≥ 50 N           |
| .50 mm <sup>2</sup>  | ≥ 60 N           |
| .75 mm <sup>2</sup>  | ≥ 85 N           |
| 1.0 mm <sup>2</sup>  | ≥ 108 N          |
| 1.25 mm <sup>2</sup> | ≥ 135 N (16 AWG) |
| 1.5 mm <sup>2</sup>  | ≥ 135 N          |
| <b>2.8</b>           |                  |
| .22 mm <sup>2</sup>  | ≥ 28 N           |
| .35 mm <sup>2</sup>  | ≥ 50 N           |
| .50 mm <sup>2</sup>  | ≥ 60 N           |
| .75 mm <sup>2</sup>  | ≥ 85 N           |
| 1.0 mm <sup>2</sup>  | ≥ 108 N          |
| 1.5 mm <sup>2</sup>  | ≥ 150 N          |
| 2.5 mm <sup>2</sup>  | ≥ 200 N          |
| <b>6.3/4.8K</b>      |                  |
| .35 mm <sup>2</sup>  | ≥ 50 N           |
| .50 mm <sup>2</sup>  | ≥ 60 N           |
| .75 mm <sup>2</sup>  | ≥ 85 N           |
| 1.0 mm <sup>2</sup>  | ≥ 108 N          |
| 1.5 mm <sup>2</sup>  | ≥ 150 N          |
| 2.5 mm <sup>2</sup>  | ≥ 200 N          |
| 4.0 mm <sup>2</sup>  | ≥ 310 N          |
| 6.0 mm <sup>2</sup>  | ≥ 450 N          |

## Heavy Duty Sealed Connector Series

for Industrial & Commercial Transportation

### Heavy Duty Sealed Connector Series

#### Contacts



#### AMP MCP 1.5K CONTACTS

Stamped & Formed Tabs and Receptacles with Single Wire Sealing System

| 1.5K                | Wire Size (mm <sup>2</sup> ) | Insulation Diameter FLR (mm) | Strip Form Part Number | Loose Piece Part Number | Finish Code        |
|---------------------|------------------------------|------------------------------|------------------------|-------------------------|--------------------|
| Receptacle Contacts | 0.2-0.35                     | 1.1-1.4                      | 1564324                | 1564325                 | -1; -2; -3         |
|                     | 0.5-1.0                      | 1.4-2.1                      | 1241380*               | 1241381                 | -1; -2; -3; 1-x-2* |
|                     | >1.0-1.5                     | 1.9-2.4                      | 1418884                | 1418885                 | -1; -3             |
| Tab Contacts        | 0.2-0.5                      | 1.15-1.6                     | 969028                 | 969029                  | -2; -3; -5         |
|                     |                              |                              | 963902                 | 963903                  | -1; -2; -3         |
|                     | 0.35                         |                              | 2141884*               | 2141885                 | -2; -3; -5; 2-x-2* |
|                     | 0.5-1.0                      | 1.4-2.1                      | 963904                 | 963905                  | -1; -2; -3         |
|                     |                              |                              | 964269*                | 964270                  | -2; -3; -5; 2-x-2* |
|                     | 1.5                          | 1.95-2.4                     | 1703278                | 1703279                 | -2; -5             |

Material and Finish Codes with "\*" are only available on their corresponding strip form or loose piece part number.

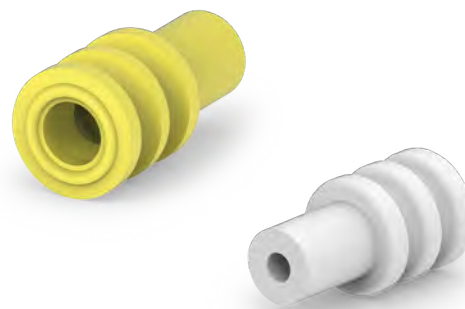
#### AMP MCP 1.5K TERMINAL MATERIAL AND FINISH CODES

|                     | Finish Code | -1      | -2          | -3            | -5            | 1-x-2              | 2-x-2         |
|---------------------|-------------|---------|-------------|---------------|---------------|--------------------|---------------|
| Receptacle Contacts | Material    | CuNiSi  | CuNiSi      | CuNiSi        | *             | CuNiSi             | *             |
|                     | Plating     | Pre-Tin | Select Gold | Select Silver | *             | 1.27um Select Gold | *             |
| Tab Contacts        | Finish Code | -2      | -3          | -5            | 1-x-1         | 1-x-2              | 1-x-3         |
|                     | Material    | CuSn4   | CuFe2       | CuSn4         | CuSn4         | CuFe2              | CuFe2         |
|                     | Plating     | Pre-Tin | Pre-Tin     | Select Gold   | Select Silver | Select Silver      | Select Silver |

\*Other configurations available upon request. Please contact TE for additional information.

## Heavy Duty Sealed Connector Series

### Wire Seals & Sealing Plugs



#### AMP MCP 1.5K WIRE SEALS

Wire Seals are required for connectors without an integrated rear seal to maintain an environmental seal.

| Insulation Diameter (mm) | Cavity Size (mm) | Color  | Part Number            |
|--------------------------|------------------|--------|------------------------|
| 0.9-1.2                  | 3.6              | Green  | 1718705-1              |
|                          |                  | Red    | 1718705-2              |
| 1.2-1.6                  |                  | Red    | 964971-1               |
|                          |                  | Blue   | 1394133-1              |
| 1.4-1.9                  |                  | Green  | 963530-1               |
| 1.9-2.4                  |                  | Yellow | 964972-1               |
| 2.2-2.4                  |                  | Orange | 2112323-1 <sup>†</sup> |
|                          |                  | Green  | 2287497-1 <sup>†</sup> |

<sup>†</sup> For cable with insulation diameter between 2.2 - 2.4mm, wire seal 2287497-1 is preferred, with improved insertion performance into housing. Reduced 120°C temperature limit. 2112323-1 has 140°C temperature limit but increased insertion forces into housing.

#### AMP MCP 1.5K SEALING PLUGS

Open cavities provide pathways for contaminants to enter the connectors. To maintain seal integrity, any unused cavity must be filled with the appropriate size sealing plug.

| Cavity Size (mm) | Color   | Part Number |
|------------------|---------|-------------|
| 3.6              | White   | 963531-1    |
|                  | Natural | 1394132-1   |

## Heavy Duty Sealed Connector Series

### Contacts



### AMP MCP 2.8 CONTACTS

Stamped & Formed Tabs and Receptacles with Single Wire Sealing System

| 2.8                 | Wire Size (mm <sup>2</sup> ) | Insulation Diameter FLR (mm) | Strip Form Part Number | Loose Piece Part Number | Material/Finish Codes                            |
|---------------------|------------------------------|------------------------------|------------------------|-------------------------|--------------------------------------------------|
| Receptacle Contacts | 0.2-0.5                      | 1.2-1.4                      | 2141859                | -                       | 1-x-1; 1-x-2; 1-x-3                              |
|                     | 0.5-1.0                      | 1.4-2.1                      | 968855                 | 968875                  | 1-x-1; 1-x-2; 1-x-3                              |
|                     | 1.5-2.5                      | 2.2-3.0                      | 968857*                | 968876                  | 1-x-1; 1-x-2*; 1-x-3; 2-x-3                      |
|                     | 12 AWG                       | 3.0-3.8                      | 1719506                | -                       | 1-x-1; 1-x-3                                     |
| Tab Contacts        | 0.2-0.5                      | max 2.1                      | 965982                 | 965983                  | 1-x-1; 1-x-3                                     |
|                     | 0.5-1.0                      | max 2.1                      | 962915*                | 963748                  | 1-x-1; 1-x-2; 1-x-3; 2-x-1; 2-x-2; 2-x-3; 6-x-6* |
|                     | >1.0-2.5                     | max 3.0                      | 962916                 | 963749                  | 1-x-1; 1-x-2; 1-x-3; 2-x-1; 2-x-2; 2-x-3         |
|                     | >2.5-4.0                     | max 3.7                      | 968947                 | 968966                  | 1-x-1; 1-x-2; 2-x-1; 2-x-2; 3-x-1                |
|                     | 12 AWG                       | max 3.0                      | 1719504                | 1719503                 | 1-x-1; 1-x-2                                     |

Material and Finish Codes with "\*" are only available on their corresponding strip form or loose piece part number.

### AMP MCP 2.8 TERMINAL MATERIAL AND FINISH CODES

|                     | Finish Code | 1-x-1   | 1-x-2         | 1-x-3         | 2-x-1   | 2-x-2         | 2-x-3         | 3-x-1     | 6-x-6       |
|---------------------|-------------|---------|---------------|---------------|---------|---------------|---------------|-----------|-------------|
| Receptacle Contacts | Material    | CuNiSi  | CuNiSi        | CuNiSi        | *       | *             | CuNiSi        | *         | *           |
|                     | Plating     | Pre-Tin | Select Gold   | Select Silver | *       | *             | Select Silver | *         | *           |
| Tab Contacts        | Material    | CuSn4   | CuSn4         | CuSn4         | CuFe    | CuFe          | CuFe          | CuSn 0.20 | CuSn4       |
|                     | Plating     | Pre-Tin | Select Silver | Select Gold   | Pre-Tin | Select Silver | Select Gold   | Pre-Tin   | Select Gold |

\*Other configurations available upon request. Please contact TE for additional information.



## Heavy Duty Sealed Connector Series

### Wire Seals & Sealing Plugs



#### AMP MCP 2.8 WIRE SEALS

Wire Seals are required for connectors without an integrated rear seal to maintain an environmental seal.

| Insulation Diameter (mm) | Cavity Size (mm) | Color      | Part Number |
|--------------------------|------------------|------------|-------------|
| 1.2-2.1                  | 5.6              | Light Blue | 828904-1    |
|                          |                  |            | 828904-2    |
|                          |                  |            | 828904-3    |
| 2.2-3.0                  |                  | White      | 828905-1    |

#### AMP MCP 2.8 SEALING PLUGS

Open cavities provide pathways for contaminants to enter the connectors. To maintain seal integrity, any unused cavity must be filled with the appropriate size sealing plug.

| Cavity Size (mm) | Color   | Part Number |
|------------------|---------|-------------|
| 5.4              | Natural | 828922-1    |
|                  | Green   | 828922-2    |

## Heavy Duty Sealed Connector Series

### Contacts



### AMP MCP 6.3/4.8K CONTACTS

Stamped & Formed Tabs and Receptacles with Single Wire Sealing System

| 6.3/4.8K            | Wire Size (mm <sup>2</sup> ) | Insulation Diameter FLR (mm) | Strip Form Part Number | Loose Piece Part Number | Material/Finish Codes      |
|---------------------|------------------------------|------------------------------|------------------------|-------------------------|----------------------------|
| Receptacle Contacts | 0.35-0.5                     | 1.2-2.3                      | 1241410*               | 1241411                 | -1; -3*; 5-x-1*; 5-x-3*    |
|                     | 0.5-1.0                      | 1.4-2.7                      | 1241412                | 1241413                 | -1; -3                     |
|                     | >1.0-2.5                     | 2.2-3.7                      | 1241414                | 1241415                 | -1; -3                     |
|                     | >2.5-4.0                     | 3.4-4.5                      | 1241416                | 1241417                 | -1; -3                     |
|                     | 4.0-6.0                      | 3.4-4.3                      | 1241418*               | 1241419                 | -4; 1-x-3; 2-x-3*          |
| Tab Contacts        | 0.5-1.0                      | 1.4-2.1                      | 962917                 | 963742                  | 1-x-1; 1-x-2; 2-x-1        |
|                     | >1.0-2.5                     | 2.2-3.0                      | 962918                 | 963743                  | 1-x-1; 1-x-2; 2-x-1; 2-x-2 |
|                     | 4.0                          | 2.7-3.7                      | 962919                 | 963744                  | 1-x-1; 1-x-2; 2-x-2        |
|                     | 6.0, 10 AWG                  | 4.0-4.3                      | 2112966                | 2112965                 | 2-x-2                      |

Material and Finish Codes with "\*" are only available on their corresponding strip form or loose piece part number.

### AMP MCP 6.3/4.8K TERMINAL MATERIAL AND FINISH CODES

|                     | Finish Code | -1      | -3            | -4      | 1-x-1   | 1-x-2         | 1-x-3         | 2-x-1   | 2-x-2         | 2-x-3         | 5-x-1   | 5-x-3         |
|---------------------|-------------|---------|---------------|---------|---------|---------------|---------------|---------|---------------|---------------|---------|---------------|
| Receptacle Contacts | Material    | CuNiSi  |               |         | *       | *             | CuNiSi        | *       | *             | CuNiSi        |         |               |
|                     | Plating     | Pre-Tin | Select Silver | Pre-Tin | *       | *             | Select Silver | *       | *             | Select Silver | Pre-Tin | Select Silver |
| Tab Contacts        | Material    | *       | *             | *       | CuSn4   |               | *             | CuFe2   |               | *             | *       | *             |
|                     | Plating     | *       | *             | *       | Pre-Tin | Select Silver | *             | Pre-Tin | Select Silver | *             | *       | *             |

\*Other configurations available upon request. Please contact TE for additional information.

## Heavy Duty Sealed Connector Series

### Wire Seals & Sealing Plugs



#### AMP MCP 6.3/4.8K WIRE SEALS

Wire Seals are required for connectors without an integrated rear seal to maintain an environmental seal.

| Insulation Diameter (mm) | Cavity Size (mm) | Color     | Part Number |
|--------------------------|------------------|-----------|-------------|
| 1.4-2.0                  | 8.5              | Yellow    | 2177018-1   |
| 2.0-2.7                  |                  | White     | 1394511-1   |
| 2.7-3.0                  |                  | Red-Brown | 1823111-1   |
| 3.4-3.7                  |                  | Blue      | 1394512-1   |
| 4.0-4.5                  |                  | Green     | 1719043-1   |

#### AMP MCP 6.3/4.8K SEALING PLUGS

Open cavities provide pathways for contaminants to enter the connectors. To maintain seal integrity, any unused cavity must be filled with the appropriate size sealing plug.

| Cavity Size (mm) | Color       | Part Number |
|------------------|-------------|-------------|
| 8.5              | Transparent | 967652-1    |

## Heavy Duty Sealed Connector Series

for Industrial & Commercial Transportation

### Heavy Duty Sealed Connector Series

#### Tooling

Tools are specific to each contact style. To create a proper crimp and achieve the highest performance specifications, contacts must be crimped with the recommended tooling.



#### HAND TOOL FOR AMP MCP CONTACTS

| Contact Size | Contact Type | Strip Form Part Number | Loose Piece Part Number | Hand Tool Part Number | Die Set Part Number |
|--------------|--------------|------------------------|-------------------------|-----------------------|---------------------|
| 1.5K         | Receptacle   | 1564324                | 1564325                 | 539635-1              | 4-1579016-0         |
|              |              | 1241380                | 1241381                 |                       | 539950-2            |
|              |              | 1418884                | 1418885                 |                       | 5-1579001-3         |
|              | Tab          | 969028                 | 969029                  |                       | 539663-2            |
|              |              | 963902                 | 963903                  |                       | 539651-2            |
|              |              | 2141884                | 2141885                 |                       | 539663-2            |
|              |              | 963904                 | 963905                  |                       | 539651-2            |
|              |              | 964269                 | 964270                  |                       | 539663-2            |
|              |              | 1703278                | 1703279                 |                       | -                   |
|              |              |                        |                         |                       | -                   |
| 2.8          | Receptacle   | 2141859                | -                       | -                     | -                   |
|              |              | 968855                 | 968875                  | 539635-1              | 539726-2            |
|              |              | 968857                 | 968876                  |                       | 539727-2            |
|              |              | 1719506                | -                       | -                     | -                   |
|              | Tab          | 965982                 | 965983                  | 539635-1              | 539737-2            |
|              |              | 962915                 | 963748                  |                       | 539758-2            |
|              |              | 962916                 | 963749                  |                       | 539758-2            |
|              |              | 968947                 | 968966                  |                       | 539727-2            |
|              |              | 1719504                | 1719503                 |                       | -                   |
|              |              |                        |                         | -                     | -                   |
| 6.3 / 4.8K   | Receptacle   | 1241410                | 1241411                 | 539635-1              | 539955-2            |
|              |              | 1241412                | 1241413                 |                       | 539955-2            |
|              |              | 1241414                | 1241415                 |                       | 539956-2            |
|              |              | 1241416                | 1241417                 |                       | 539956-2            |
|              |              | 1241418                | 1241419                 |                       | 3-1579021-7         |
|              | Tab          | 962917                 | 963742                  |                       | 539757-2            |
|              |              | 962918                 | 963743                  |                       | 539757-2            |
|              |              | 962919                 | 963744                  |                       | 539757-2            |
|              |              | 2112966                | 2112965                 |                       | -                   |
|              |              |                        |                         | -                     | -                   |

Other tooling configurations available upon request. Please contact TE for additional information.

**Heavy Duty Sealed Connector Series**  
**Automated for AMP MCP Contacts**



OCEAN 2.0 Applicator

| Contact Size | Contact Type | Strip Form Part Number | Feed | Type       | Applicator Part Number |
|--------------|--------------|------------------------|------|------------|------------------------|
| 1.5K         | Receptacle   | 1564324                | Side | Mechanical | 2151469-1              |
|              |              |                        |      | Pneumatic  | 2151469-2              |
|              |              | 1241380                |      | Mechanical | 2151064-1              |
|              | Tab          |                        |      | Pneumatic  | 2151064-2              |
|              |              | 1418884                |      | Mechanical | 2151424-1              |
|              |              |                        |      | Pneumatic  | 2151424-2              |
|              |              | 969028                 |      | Mechanical | 2151056-1              |
|              |              |                        |      | Pneumatic  | 2151056-2              |
|              |              | 963902                 |      | Mechanical | 2151167-1              |
|              |              |                        |      | Pneumatic  | 2151167-2              |
|              |              | 2141884                |      | Mechanical | 2151056-1              |
|              |              |                        |      | Pneumatic  | 2151056-2              |
|              |              | 963904                 |      | Mechanical | 2151170-1              |
|              |              |                        |      | Pneumatic  | 2151170-2              |
|              |              | 964269                 |      | Mechanical | 2151057-1              |
|              |              |                        |      | Pneumatic  | 2151057-2              |
|              |              | 1703278                |      | Mechanical | 2151701-1              |
|              |              |                        |      | Pneumatic  | 2151701-2              |
| 2.8          | Receptacle   | 2141859                | Side | -          | -                      |
|              |              |                        |      | Mechanical | 2151227-1              |
|              |              | 968855                 |      | Pneumatic  | 2151227-2              |
|              |              |                        |      | Mechanical | 2151346-1              |
|              |              | 968857                 |      | Pneumatic  | 2151346-2              |
|              | Tab          |                        |      | Mechanical | 2836789-1              |
|              |              | 1719506                |      | Pneumatic  | 2836789-2              |
|              |              | 965982                 |      | Mechanical | 2151840-1              |
|              |              |                        |      | Pneumatic  | 2151840-2              |
|              |              | 962915                 |      | Mechanical | 2151181-1              |
|              |              |                        |      | Pneumatic  | 2151181-2              |
|              |              | 962916                 |      | Mechanical | 2151260-1              |
|              |              |                        |      | Pneumatic  | 2151260-2              |
|              |              | 968947                 |      | Mechanical | 2151173-1              |
|              |              |                        |      | Pneumatic  | 2151173-2              |
|              |              | 1719504                |      | Mechanical | 2836092-1              |
|              |              |                        |      | Pneumatic  | 2836092-2              |

Other tooling configurations available upon request. Please contact TE for additional information.

## Heavy Duty Sealed Connector Series

for Industrial & Commercial Transportation

### Heavy Duty Sealed Connector Series

#### Automated for AMP MCP Contacts (continued)



OCEAN 2.0 Applicator

| Contact Size | Contact Type | Strip Form Part Number | Feed | Type       | Applicator Part Number |
|--------------|--------------|------------------------|------|------------|------------------------|
| 6.3 / 4.8K   | Receptacle   | 1241410                | Side | Pneumatic  | 2151695-2              |
|              |              | 1241412                |      | Pneumatic  | 2151234-2              |
|              |              | 1241414                |      | Pneumatic  | 2151177-2              |
|              |              | 1241416                |      | Pneumatic  | 2151151-2              |
|              |              | 1241418                |      | Mechanical | 2151466-1              |
|              | Tab          | 962917                 |      | Pneumatic  | 2151466-2              |
|              |              | 962918                 |      | Pneumatic  | 2266535-2              |
|              |              | 962919                 |      | Pneumatic  | 2151783-2              |
|              |              | 2112966                |      | Pneumatic  | 2151782-2              |
|              |              |                        |      | Pneumatic  | 2151841-2              |

Other tooling configurations available upon request. Please contact TE for additional information.

#### EXTRACTION AND INSERTION TOOLS FOR AMP MCP CONTACTS

| Contact Size | Contact Type | Tool Type  | Part Number |
|--------------|--------------|------------|-------------|
| 1.5K         | Receptacle   | Insertion  | 5-1579018-6 |
|              |              | Extraction | 1-1579007-1 |
|              | Tab          | Extraction | 539960-1    |
| 2.8          | Receptacle   | Insertion  | 519609-1    |
|              |              | Extraction | 1579007-1   |
|              | Tab          | Extraction | 1-1579007-6 |
| 6.3 / 4.8K   | Receptacle   | Insertion  | 6-1579018-3 |
|              |              | Extraction | 1-1579007-3 |
|              | Tab          | Extraction | 1-1579007-6 |





## Heavy Duty Sealed Connector Series

### How-To Instructions

#### CONTACT INSERTION



**Step 1:**  
Grasp crimped contact approximately one inch behind the contact barrel.



**Step 2:**  
Make sure the contact is in the correct orientation. Verify the integrated secondary lock is in the unlocked position.

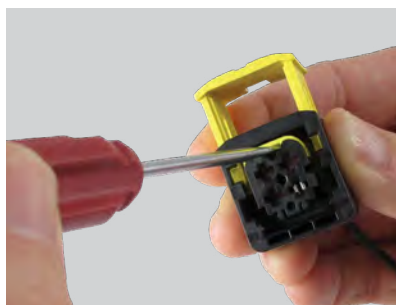


**Step 3:**  
Push contact straight into connector grommet until a click is felt. A slight tug will confirm that it is properly locked in place.

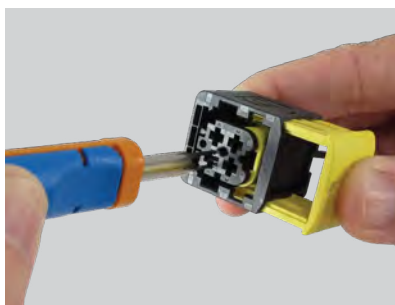


**Step 4:**  
Push the integrated secondary lock into the locked position with a DT-RT1 or a screwdriver.

#### CONTACT REMOVAL



**Step 1:**  
Using a DT-RT1 or a screwdriver, unlock the integrated secondary lock.



**Step 2:**  
Using the appropriate extraction tool, insert the blades into the contact cavity until they stop.



**Step 3:**  
Pull contact wire assembly out of connector.

## Heavy Duty Sealed Connector Series Index

### BACKSHELLS

|              |    |
|--------------|----|
| 185792.....  | 16 |
| 185793.....  | 16 |
| 965576.....  | 16 |
| 965577.....  | 16 |
| 965783.....  | 16 |
| 965784.....  | 16 |
| 965785.....  | 16 |
| 965786.....  | 16 |
| 1418916..... | 16 |
| 1418917..... | 16 |
| 1418918..... | 16 |
| 1418919..... | 16 |
| 1534789..... | 16 |
| 1534791..... | 16 |
| 1563110..... | 16 |
| 1563111..... | 16 |
| 1670057..... | 16 |
| 1670150..... | 16 |
| 1670364..... | 16 |
| 1670365..... | 16 |
| 1670865..... | 16 |
| 1670866..... | 16 |

### CONTACTS

|              |            |
|--------------|------------|
| 962915.....  | 22, 26, 27 |
| 962916.....  | 22, 26, 27 |
| 962917.....  | 24, 26, 28 |
| 962918.....  | 24, 26, 28 |
| 962919.....  | 24, 26, 28 |
| 963742.....  | 24, 26     |
| 963743.....  | 24, 26     |
| 963744.....  | 24, 26     |
| 963748.....  | 22, 26     |
| 963749.....  | 22, 26     |
| 963902.....  | 20, 26, 27 |
| 963903.....  | 20, 26     |
| 963904.....  | 20, 26, 27 |
| 963905.....  | 20, 26     |
| 964269.....  | 20, 26, 27 |
| 964270.....  | 20, 26     |
| 965982.....  | 22, 26, 27 |
| 965983.....  | 22, 26     |
| 968855.....  | 22, 26, 27 |
| 968857.....  | 22, 26, 27 |
| 968875.....  | 22, 26     |
| 968876.....  | 22, 26     |
| 968877.....  | 22, 26     |
| 968947.....  | 22, 26, 27 |
| 968966.....  | 22, 26     |
| 969028.....  | 20, 26, 27 |
| 969029.....  | 20, 26     |
| 1241380..... | 20, 26, 27 |
| 1241381..... | 20, 26     |
| 1241410..... | 24, 26, 28 |
| 1241411..... | 24, 26     |
| 1241412..... | 24, 26, 28 |
| 1241413..... | 24, 26     |
| 1241414..... | 24, 26, 28 |
| 1241415..... | 24, 26     |
| 1241416..... | 24, 26, 28 |
| 1241417..... | 24, 26     |
| 1241418..... | 24, 26, 28 |
| 1241419..... | 24, 26     |
| 1418884..... | 20, 26, 27 |
| 1418885..... | 20, 26     |
| 1564324..... | 20, 26, 27 |
| 1564325..... | 20, 26     |
| 1703278..... | 20, 26, 27 |
| 1703279..... | 20, 26     |
| 1719503..... | 22, 26     |
| 1719504..... | 22, 26, 27 |
| 1719506..... | 22, 26, 27 |
| 2112965..... | 24, 26     |
| 2112966..... | 24, 26, 28 |
| 2141859..... | 22, 26, 27 |
| 2141884..... | 20, 26, 27 |
| 2141885..... | 20, 26     |

### FIXING SLIDES

|              |    |
|--------------|----|
| 1564411..... | 17 |
| 1564562..... | 17 |
| 1670720..... | 17 |
| 1703810..... | 17 |
| 1703838..... | 17 |
| 2316939..... | 17 |
| 2317070..... | 17 |

### HOUSINGS

|              |        |
|--------------|--------|
| 1418390..... | 9      |
| 1418437..... | 10     |
| 1418448..... | 8, 14  |
| 1418469..... | 9      |
| 1418479..... | 10     |
| 1418480..... | 10     |
| 1418483..... | 8      |
| 1563759..... | 13     |
| 1563878..... | 13     |
| 1564330..... | 12     |
| 1564337..... | 13     |
| 1564407..... | 13     |
| 1564412..... | 13     |
| 1564414..... | 11     |
| 1564416..... | 10     |
| 1564512..... | 10     |
| 1564514..... | 11     |
| 1564516..... | 11     |
| 1564518..... | 11     |
| 1564520..... | 11     |
| 1564522..... | 11     |
| 1564526..... | 13     |
| 1564528..... | 13     |
| 1564530..... | 13     |
| 1564532..... | 13     |
| 1564534..... | 12     |
| 1564536..... | 12     |
| 1564542..... | 10     |
| 1564544..... | 10     |
| 1564546..... | 10     |
| 1670214..... | 10     |
| 1670730..... | 8, 14  |
| 1670894..... | 11     |
| 1670901..... | 12     |
| 1703639..... | 11     |
| 1703648..... | 10     |
| 1703773..... | 9      |
| 1703808..... | 9      |
| 1703818..... | 9      |
| 1703820..... | 9      |
| 1703839..... | 8      |
| 1703841..... | 8      |
| 1703843..... | 8, 14  |
| 2208157..... | 11     |
| 2278730..... | 14, 15 |
| 2299782..... | 12     |
| 2306960..... | 14, 15 |

## Heavy Duty Sealed Connector Series

### Index

#### PROTECTION CAPS

|         |    |
|---------|----|
| 2112289 | 18 |
| 2112291 | 18 |
| 2112293 | 18 |
| 2112295 | 18 |
| 2112297 | 18 |
| 2112299 | 18 |
| 2112300 | 18 |
| 2112301 | 18 |
| 2112302 | 18 |
| 2112303 | 18 |

#### SEALING PLUGS

|         |    |
|---------|----|
| 828922  | 23 |
| 963531  | 21 |
| 967652  | 25 |
| 1394132 | 21 |
| TOOLING |    |
| 519609  | 28 |
| 539635  | 26 |
| 539651  | 26 |
| 539663  | 26 |
| 539726  | 26 |
| 539727  | 26 |
| 539737  | 26 |
| 539757  | 26 |
| 539758  | 26 |
| 539950  | 26 |
| 539955  | 26 |
| 539956  | 26 |
| 539960  | 28 |
| 1579001 | 26 |
| 1579007 | 28 |
| 1579016 | 26 |
| 1579018 | 28 |
| 1579021 | 26 |
| 2151056 | 27 |
| 2151057 | 27 |
| 2151064 | 27 |
| 2151151 | 28 |
| 2151167 | 27 |
| 2151170 | 27 |
| 2151173 | 27 |
| 2151177 | 28 |
| 2151181 | 27 |
| 2151227 | 27 |
| 2151234 | 28 |
| 2151260 | 27 |
| 2151346 | 27 |
| 2151424 | 27 |
| 2151466 | 28 |
| 2151469 | 27 |
| 2151695 | 28 |
| 2151701 | 27 |
| 2151782 | 28 |
| 2151783 | 28 |
| 2151840 | 27 |
| 2151841 | 28 |
| 2266535 | 28 |
| 2836092 | 27 |
| 2836789 | 27 |

#### WIRE SEALS

|         |    |
|---------|----|
| 828904  | 23 |
| 828905  | 23 |
| 963530  | 21 |
| 964971  | 21 |
| 964972  | 21 |
| 1394133 | 21 |
| 1394511 | 25 |
| 1394512 | 25 |
| 1718705 | 21 |
| 1719043 | 25 |
| 1823111 | 25 |
| 2112323 | 21 |
| 2177018 | 25 |
| 2287497 | 21 |

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United States . . . . +1 800 522 6752

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### TE Connectivity

4849 Hempstead Station Drive  
Kettering, OH 45429  
USA