

Introduction



TE Connectivity has developed the AMP SUPERSEAL 1.5 SERIES Connector family to meet the increasing requirements for reliability and water proofness.

AMP SUPERSEAL 1.5 SERIES Connector exceed the requirements prescribed by IP 67 according IEC 60529 and DIN 40050-9 standards and has its application in the automotive, agriculture and industrial machinery.

For sensor application the AMP SUPERSEAL 1.5 SERIES Connector system is qualified as well.

Advantages

- Compact system minimizes packaging requirements
- Sealing reliability proven under harsh conditions
- Designed for ease of manual harness assembly, engine mounting and under hood environments

Applications

- Wire-to-Wire (1.5 mm) and ECU applications, under hood or any location where sealing is required
- Suitable for automotive, truck, bus, or off-road vehicles

Receptacle Contacts

Technical Features

Contact Material:

CuZn (Tab)
CuSn (Receptacle)

Contact Finish:

tin plated

Current Carrying Capacity:

14 A max.

Wire Size Range:

0.35–2.5 mm²

Insulation Diameter:

1.2–3.3 mm FLR

Extraction Tool:

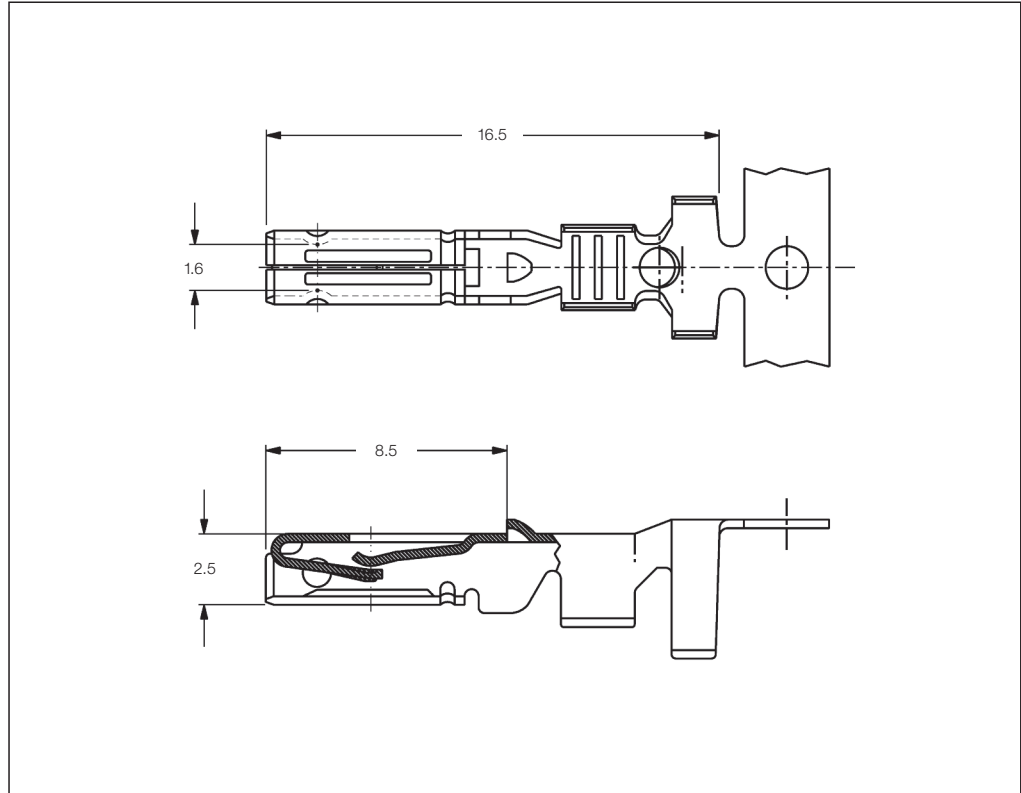
Part No. **9-1579007-1**

Product Specification:

108-20090

Application Specification:

114-20045



1.5 mm Receptacle Contacts

| Wire Size Range (mm ²) | Insulation Diameter (mm) | | Material and Finish | Part Numbers | | | | Applicator ♦ | Hand Tool |
|---------------------------------------|--------------------------|---------|---------------------|--------------|------------------|-------------|------------------|--------------|-----------|
| | FLK | FLR | | Strip Form | Package Quantity | Loose-Piece | Package Quantity | | |
| 0.35–0.50 | 1.45–2.20 | 1.2–1.6 | CuSn, tin plated | 282403-1 | 14,000 | 183035-1 | 5,000 | x-1528347-x | 2031676-1 |
| 0.75–1.50 | 2.40–3.35 | 1.7–2.4 | CuSn, tin plated | 282110-1 | 14,000 | 183025-1 | 5,000 | x-1528018-x | 2031676-1 |
| 1.5–2.5 | 3.15–3.80 | 2.2–3.3 | CuSn, tin plated | 282466-1 | 14,000 | – | – | x-1426361-x | – |

Note: All part numbers are RoHS and ELV compliant.

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

Tab Contacts

Technical Features

Contact Material:

CuZn (Tab)
 CuSn (Receptacle)

Contact Finish:

tin plated, gold plated

Current Carrying Capacity:

14 A max.

Wire Size Range:

0.35–2.5 mm²

Insulation Diameter:

1.2–3.3 mm FLR

Extraction Tool:

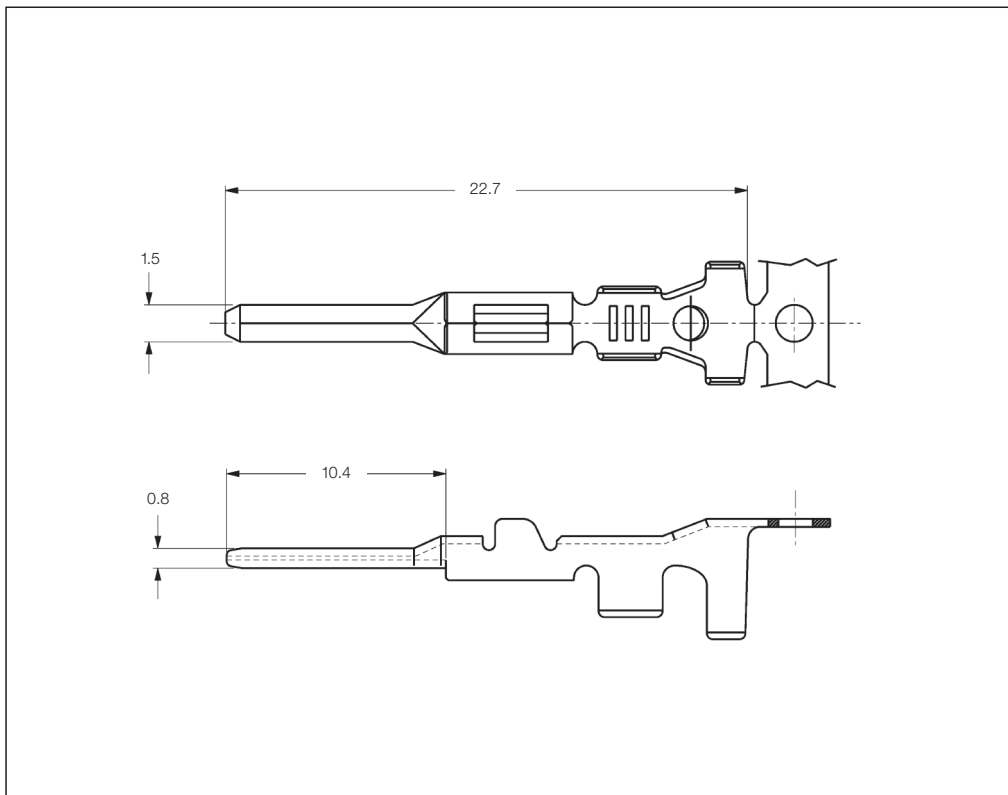
Part No. 9-1579007-1

Product Specification:

108-20090

Application Specification:

114-20045



1.5 mm Tab Contacts

| Wire Size Range (mm ²) | Insulation Diameter (mm) | | Material and Finish | Part Numbers | | | | Applicator ♦ | Hand Tool |
|---------------------------------------|--------------------------|---------|---------------------|--------------|------------------|-------------|------------------|--------------|-----------|
| | FLK | FLR | | Strip Form | Package Quantity | Loose-Piece | Package Quantity | | |
| 0.35–0.50 | 1.45–2.20 | 1.2–1.6 | CuZn, tin plated | 282404-1 | 16,000 | 183036-1 | 5,000 | x-1528199-x | 2031676-1 |
| | | | CuZn, gold plated | 282404-3 | 16,000 | – | – | | |
| 0.75–1.50 | 2.40–3.35 | 1.7–2.4 | CuZn, tin plated | 282109-1 | 16,000 | 183024-1 | 5,000 | x-1528463-x | 2031676-1 |
| | | | CuZn, gold plated | 282109-3 | 16,000 | – | – | | |
| 1.5–2.5 | 3.15–3.80 | 2.2–3.3 | CuZn, tin plated | 282465-1 | 16,000 | – | – | x-1528200-x | – |

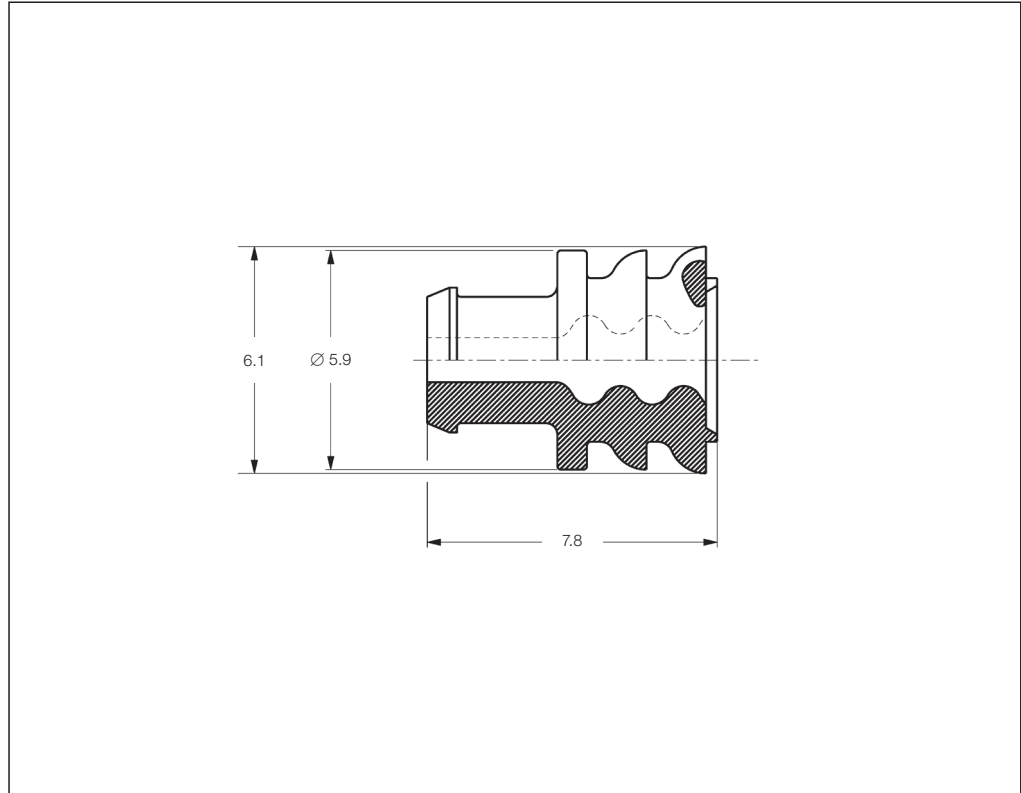
Note: All part numbers are RoHS and ELV compliant.

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

Single Wire Seals and Cavity Plugs

Technical Features

- Made from silicon rubber material
- For insulation diameters of 1.2–3.3 mm
- Loose-piece wire seals are crimped simultaneously with the contacts



Single Wire Seals and Cavity Plugs

| Insulation Diameter (mm) | | Color | Part Number | Package Quantity |
|--------------------------|---------|--------|-------------|------------------|
| FLK | FLR | | | |
| – | 1.2–1.6 | Green | 281934-4 | 50,000 |
| – | 1.7–2.4 | Yellow | 281934-2 | 50,000 |
| – | 2.5–3.3 | Red | 281934-3 | 50,000 |
| Cavity Plugs | | Red | 282081-1 | 50,000 |

Plug Housings

Plug Housings

Utilizes Receptacle Contacts

Technical Features

Housing Material:

Polyamide 6.6 glass-filled

Color:

Black (other colors available)
Orange (closed cavities)

Secondary Lock:

Polyamide 6.6 glass-filled

Color:

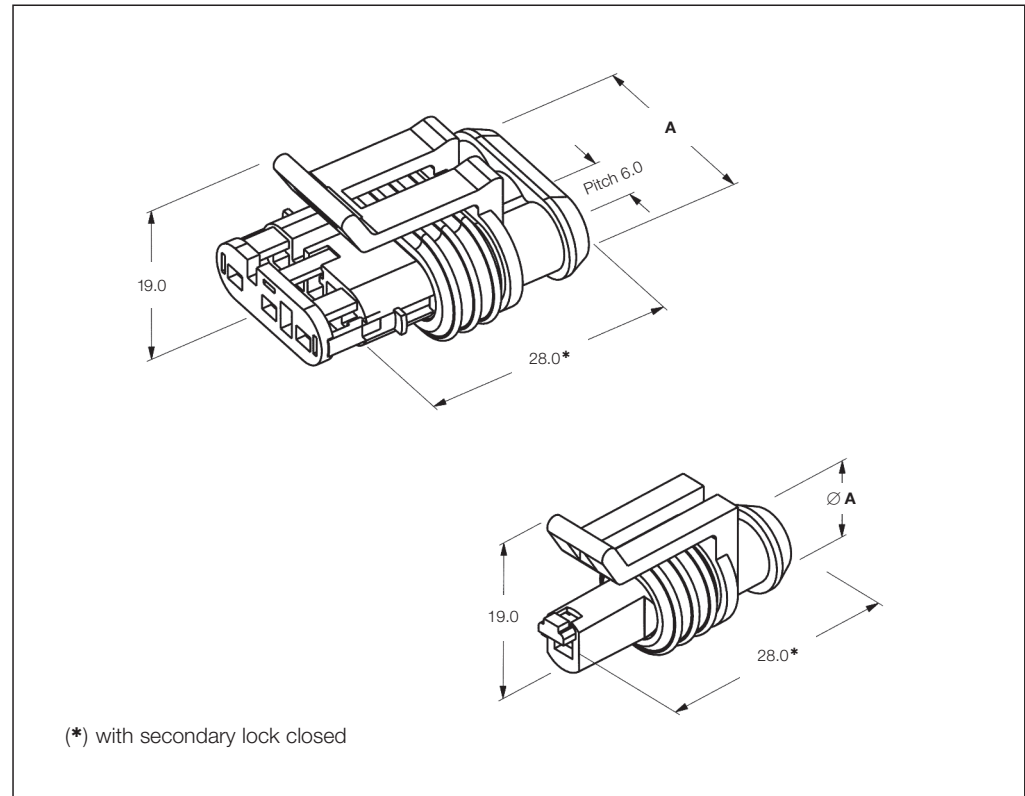
Red

Sealing:

Silicon Rubber

Color:

Yellow



Plug Housings

| No. of Positions | Dimension A (mm) | Part Number | Package Quantity |
|------------------|------------------|-------------|------------------|
| 1 | 9.3 | 282079-2 | 3,000 |
| 2 | 15.3 | 282080-1 | 1,600 |
| 3 | 21.3 | 282087-1 | 1,300 |
| 4 | 27.3 | 282088-1 | 1,000 |
| 5 | 33.3 | 282089-1 | 500 |
| 6 | 39.3 | 282090-1 | 400 |

Plug Housings with Closed Cavities

| No. of Positions | Dimension A (mm) | Part Number | Package Quantity |
|------------------|------------------|-------------|------------------|
| 2 | 15.3 | 1745025-1 | 1,600 |
| 4 | 27.3 | 1745101-1 | 1,000 |
| 5 | 33.3 | 1745103-1 | 500 |

Cap Housings

Cap Housings

Utilizes Tab Contacts

Also suitable for panel mount application (see detail "X").

Locking clip not manufactured by TE Connectivity.

Technical Features

Housing Material:

Polyamide 6.6 glass-filled

Color:

Black (other colors available)
Orange (closed cavities)

Secondary Lock:

Polyamide 6.6 glass-filled

Color:

Red

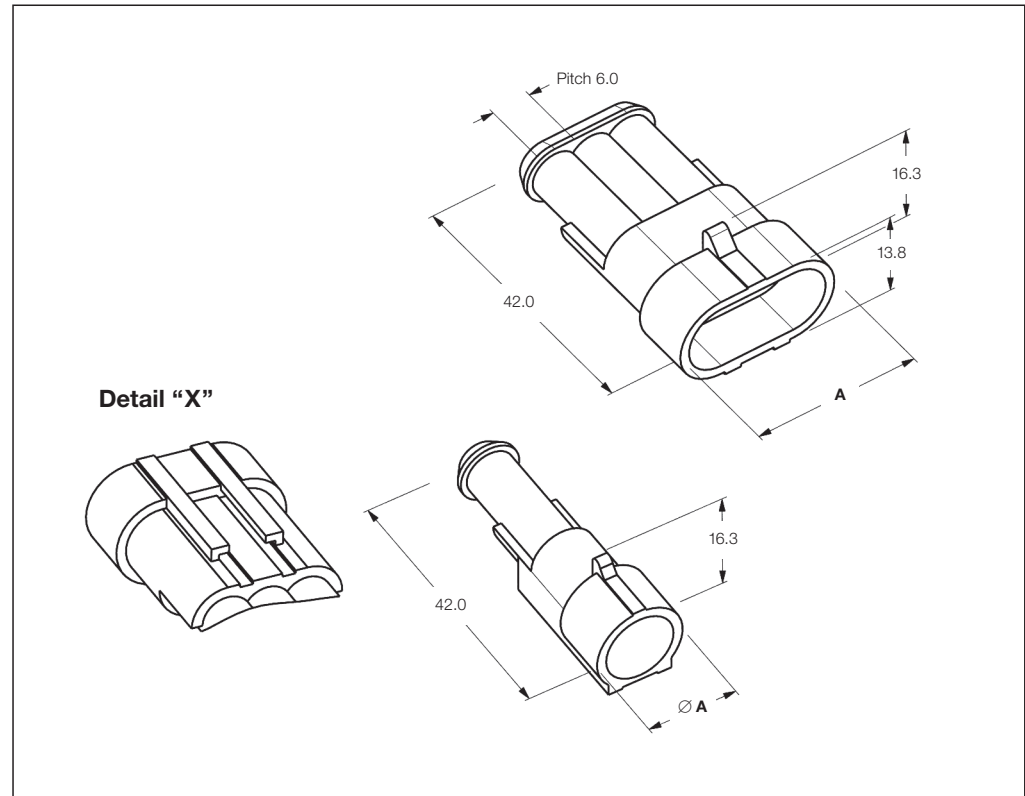
Extraction Tool for Secondary Lock of Cap Housing:

Part No. **785084-1**

Insertion Tool for Secondary Lock of Cap Housing:

Part No. **785061-1**
for 1 and 2 positions

Part No. **785061-2**
for 3–6 positions



Cap Housings

| No. of Positions | Dimension A (mm) | Part Number | Package Quantity |
|------------------|------------------|-------------|------------------|
| 1 | 13.8 | 282103-1 | 2,200 |
| 2 | 19.8 | 282104-1 | 1,500 |
| 3 | 25.8 | 282105-1 | 1,200 |
| 4 | 31.8 | 282106-1 | 500 |
| 5 | 37.8 | 282107-1 | 700 |
| 6 | 43.8 | 282108-1 | 550 |

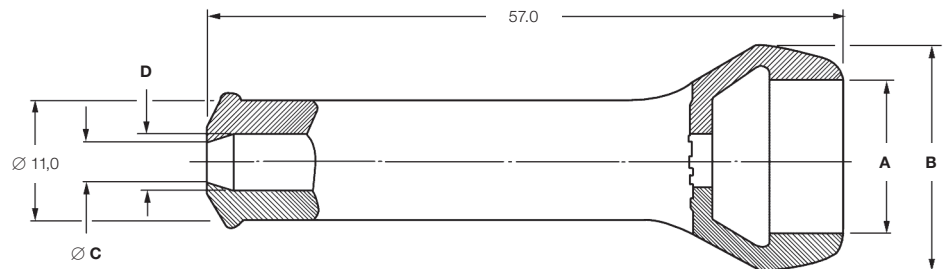
Cap Housings with Closed Cavities

| No. of Positions | Dimension A (mm) | Part Number | Package Quantity |
|------------------|------------------|-------------|------------------|
| 2 | 19.8 | 1745022-1 | 1,500 |
| 3 | 25.8 | 1745020-1 | 1,200 |
| 5 | 37.8 | 1745018-1 | 700 |

Rubber Boots

Rubber Boots

| Connector Housing Part Number | Description | No. of Positions | Rubber Boot Part Number | Color | Package Quantity |
|-------------------------------|--------------|------------------|-------------------------|-------|------------------|
| 282080-1 | Plug Housing | 2 | 880810-1 | Black | 1,500 |
| 282104-1 | Cap Housing | | | | |
| 282087-1 | Plug Housing | 3 | 880811-2 | Black | 1,000 |
| 282105-1 | Cap Housing | | | | |



Dimensional Data

| Boot Part Number | No. of Wires | Dimensions (mm) | | | |
|------------------|--------------|-----------------|------|-----|-----|
| | | A | B | C | D |
| 880810-1 | 2 | 12.5 | 20.5 | 4.6 | 5.0 |
| 880811-2 | 3 | 17.5 | 25.5 | 4.6 | 5.0 |
| 493581-1* | 4 | 21.0 | 34.5 | – | 7.0 |

*) Different Style, see customer drawing.

Engineering Notes

A large grid area for engineering notes, consisting of a uniform grid of small squares. The grid is empty and occupies the majority of the page's vertical space.