AMP SUPERSEAL 1.5 SERIES Connectors

Introduction

Tyco Electronics 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**

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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AMP SUPERSEAL 1.5 SERIES Connectors

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 mm^2

Insulation Diameter:
1.2 – 3.3 mm FLR
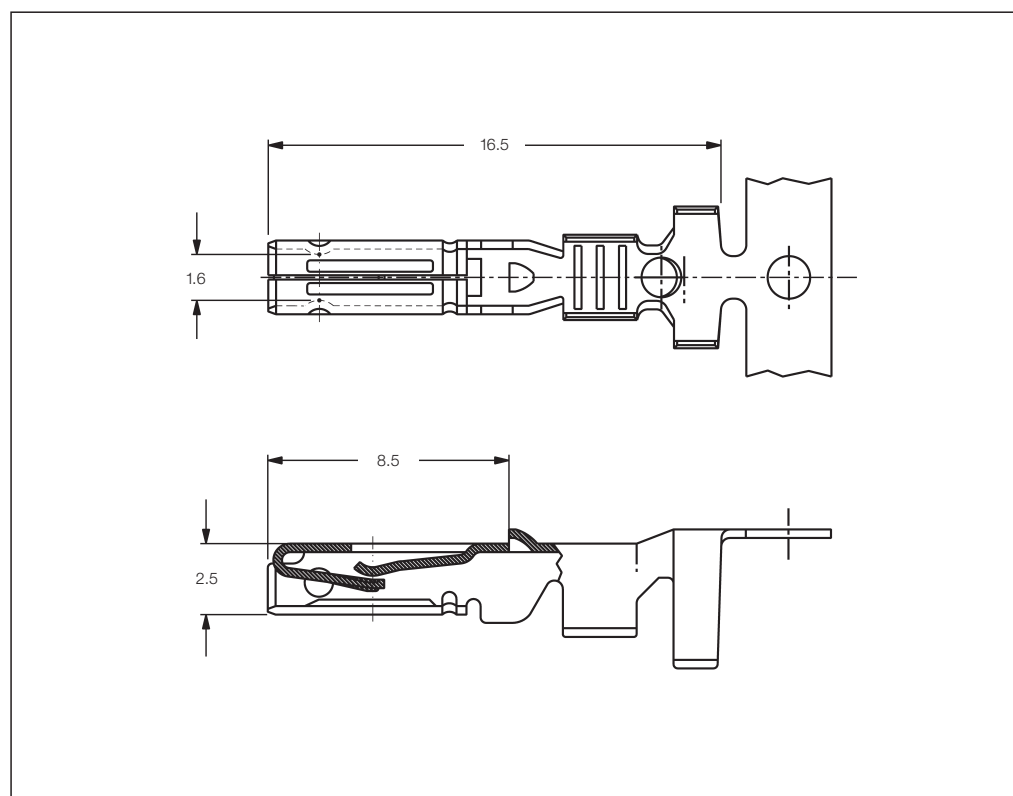
Extraction Tool:
Part No. **9-1579007-1**

Product Specification:
108-20090

Application Specification:
114-20045

1.5 mm Receptacle Contacts

Wire Size Range	Insulation Diameter (mm)		Material and Finish	Part Numbers					
(mm^2)	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator ◆	Hand Tool
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.

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AMP SUPERSEAL 1.5 SERIES Connectors

Section Catalog 1654292-3
Revised 12-2009
Main Catalog 1654400-1
Chapter 28 – Issued 3-2010

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:
$0.35 - 2.5$ mm^2

Insulation Diameter:
$1.2 - 3.3$ mm FLR
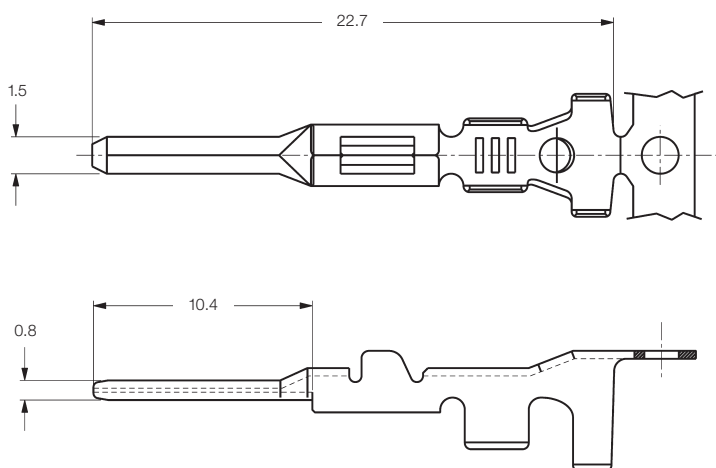
Extraction Tool:
Part No. **9-1579007-1**

Product Specification:
108-20090

Application Specification:
114-20045

1.5 mm Tab Contacts

| Wire Size Range	Insulation Diameter (mm)		Material and Finish	Part Numbers					
(mm^2)	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator ◆	Hand Tool
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.

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AMP SUPERSEAL 1.5 SERIES Connectors

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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
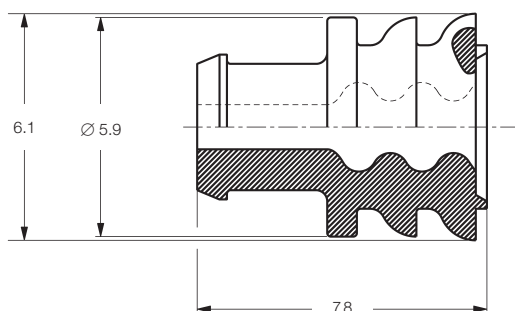
Single Wire Seals and Cavity Plugs

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

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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:
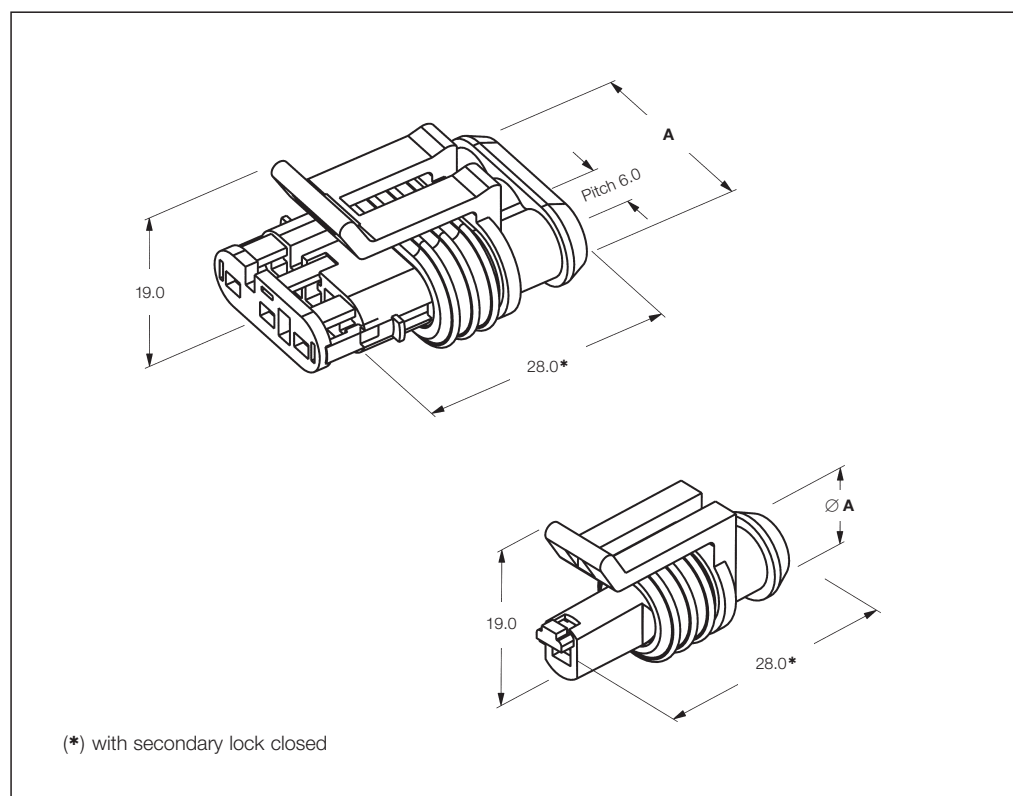Polyamide 6.6 glass-filled

Color:
Red

Sealing:
Silicon Rubber

Color:
Yellow

(*****) with secondary lock closed

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

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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AMP SUPERSEAL 1.5 SERIES Connectors

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Cap Housings

Cap Housings
Utilizes Tab Contacts

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

Locking clip not manufactured by Tyco Electronics.

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

Detail "X"
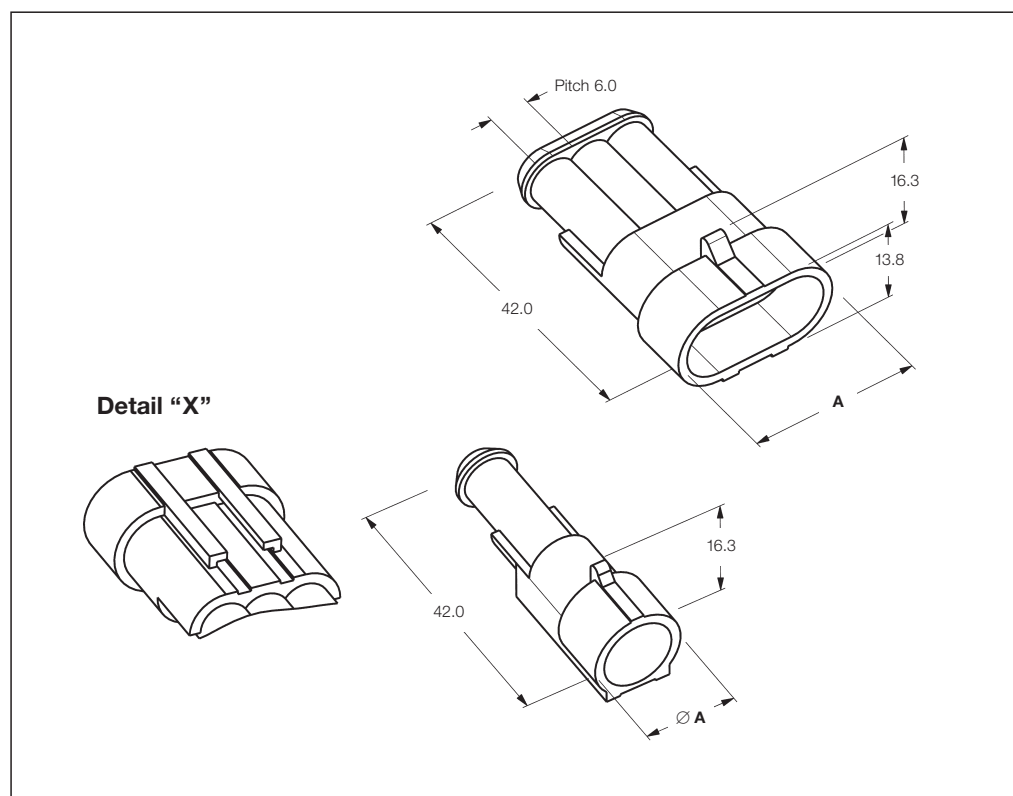
Cap Housings

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

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AMP SUPERSEAL 1.5 SERIES Connectors

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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				
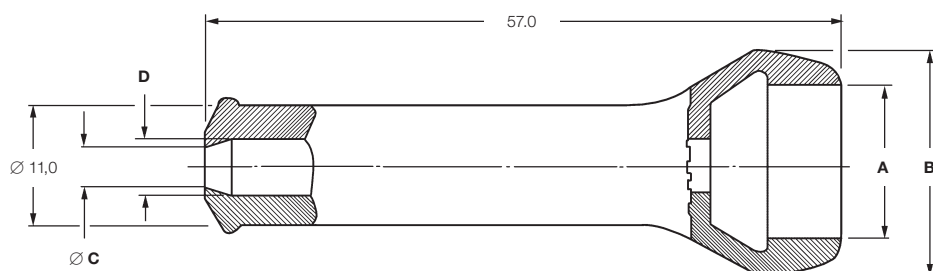
Dimensional Data

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.

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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Disclaimer

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