

Introduction



MCON Interconnection System offers High Reliability for Long Term Use



The New Generation MCON Connector System is designed for electronic and electrical applications in motor vehicles.

It fulfills all requirements for a connector system for use in automobiles and covers a wide range of applications.

MCON Contact System

- Base material with high current capacity
- 8 defined contact points for increased reliability
- Improved vibration resistance
- Good guiding inside the cavity
- Protected contact spring due to the closed box
- Overstress protection of the contact springs
- Box with polarization and secondary locking feature
- Protected locking lance

MCON Connectors

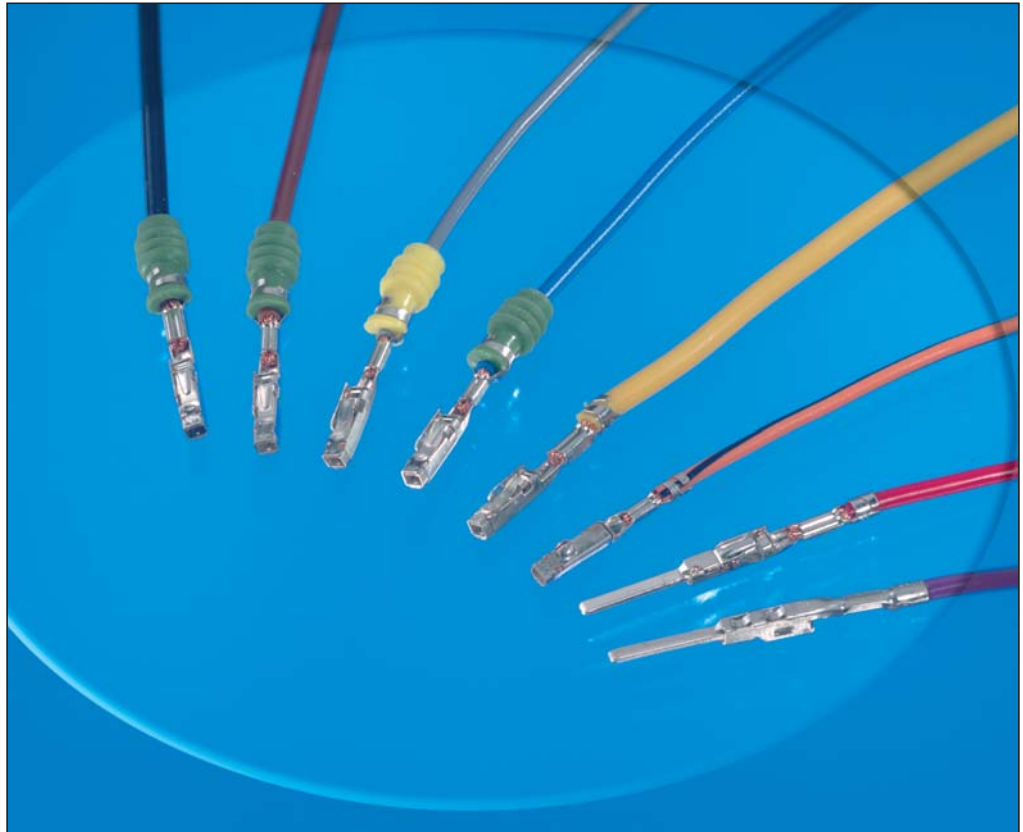
- High reliability status supported for long term use
- High vibration level supported
- Perfect design to avoid quality problems, reduce manufacturing and service cost
- Integrated secondary locking device delivered in pre-locked position
- Wire-to-wire sealed and unsealed connectors (SWS)
- Wire-to-board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

OBSOLETE
 NOT the LATEST
 REVISION

Engineering Notes



Introduction


MCON Tabs and Receptacles for Fast and Economical Application


The MCON New Generation Contact System is mainly used in the automotive industry. Each contact consists of a flat receptacle, which mates with a flat tab. Base material of contact spring and body is copper alloy.

The two-piece contact design means that the electrical and mechanical properties are separated. One end of the contact body is crimped to wire and the other end mates with the matching tab.

- Protection of the contact springs
- No over elongation of the contact springs possible under normal circumstances
- No possibility to connect from the rear side
- Protection against mechanical damage
- Good guiding in the cavity
- Secondary locking possible (from 3 directions)
- Assembly into housing fully-automatically

The Main Advantages of the MCON Contact System are:

- Base material with high current capacity
- 8 or more defined contact points for increased reliability
- Improved vibration resistance
- Good guiding inside the cavity
- Protected contact spring due to the closed box
- Overstress protection of the contact springs
- Box with secondary locking feature
- Protected locking lance

Tabs and receptacles can be applied in both sealed and unsealed connectors.

MCON contacts can be fast and economically arranged to the lead using Tyco Electronics application tooling.

Receptacle Contacts – Locking Lance (LL)

Technical Features

Contact Material:

CuSn0.15/0.2;
Insert Spring: CuNiSi

Contact Finish:

Tin-silver plated, selective silver plated, selective gold plated

Wire Size Range:

0.14–0.22 mm²,
0.25–0.35 mm²,
0.50–0.75 mm²,
1.00–1.50 mm²

Current Carrying Capacity:

up to 20 Ampere
(at 20 °C ambient temperature)

Temperature Range:

–40 °C ... +140 °C (tin-silver plated)
–40 °C ... +140 °C (silver plated)
–40 °C ... +150 °C (gold plated)

Contact Resistance:

New State ≤ 2 mΩ

Mating Cycles: ●

up to 20 cycles (tin-silver plated)
up to 50 cycles (silver plated)
up to 100 cycles (gold plated)

Dimension of Male Contacts:

(1.2 ±0.1 x 0.6 ±0.03 mm)

Extraction Tool:

Part No. **5-1579007-3**

Mating Force:

Max. 5 N

Unmating Force:

Max. 2.5 N

Product Group Drawing:

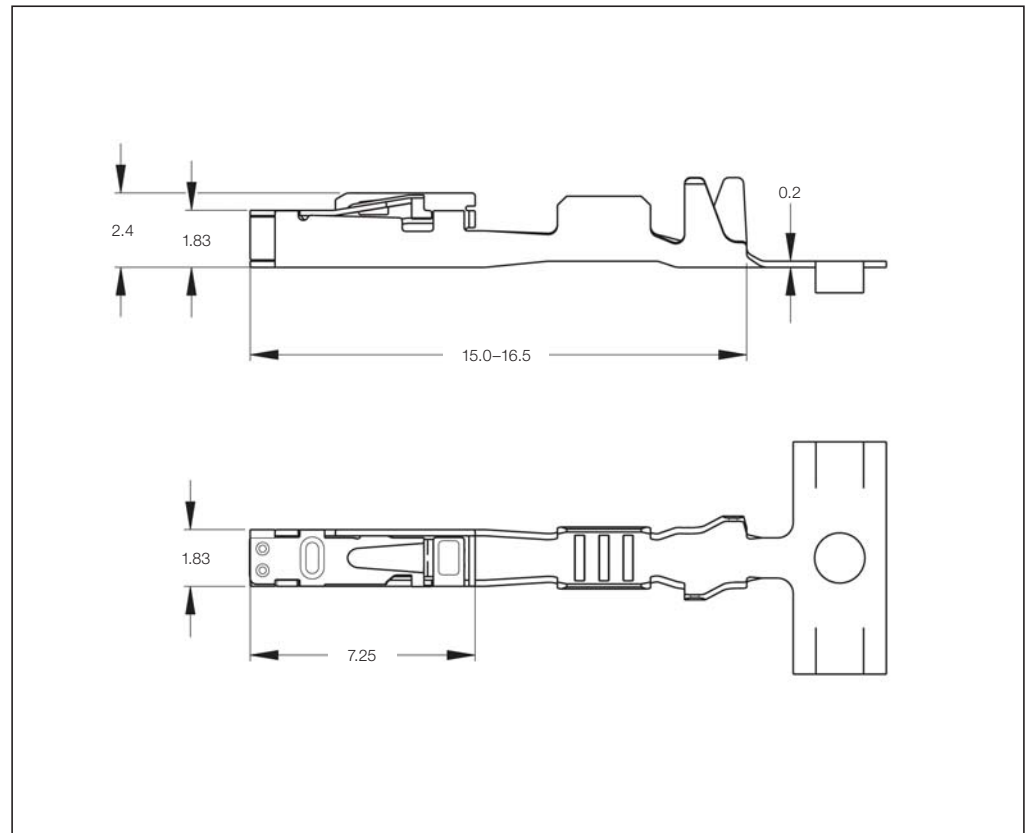
1452674

Product Specification:

108-18782

Application Specification:

114-18464



Modular Dimensions (Centerline):

max. 0.75 mm ²	2.5 x 2.5 mm	
max. 1.0 mm ²	2.5 x 3.0 mm	sealed 4.0 x 4.0 mm; sealed staggered 3.5 x 4.0 mm, cavity 3.55 mm diameter
max. 1.5 mm ²	2.5 x 3.5 mm	sealed 4.5 x 4.5 mm;
	3.0 x 3.5 mm	sealed staggered 4.0 x 4.5 mm, cavity 3.95 mm diameter

●) Mating Cycles are depending on various technical influences and must be clarified in each individual case.

Receptacle Contacts – Locking Lance (LL) (continued)

Standard Receptacle Contacts (SRC)

Wire Size Range (mm ²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator ♦	Hand Tool
0.25–0.35	–	1.10–1.75	-1 / -2 / -3	1452653	10,000	1452654	500	x-1528156-x	2063574-x◇
0.50–0.75	–	1.4–1.9	-1 / -2 / -3	1452656	8,000	1452657	500	x-1528157-x	2063570-x◇
1.0–1.5	–	1.9–2.4	-1 / -2 / -3	1452659	8,000	1452660	500	x-1528159-x	2063575-x◇

Receptacle Contacts with Single Wire Sealing System (SWS)

Wire Size Range (mm ²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator ♦	Hand Tool
0.25–0.35	–	1.10–1.75	-1 / -2 / -3	1452665	6,500	1452666	500	x-1528161-x	2063573-x◇
0.50–0.75	–	1.4–1.9	-1 / -2 / -3	1452668	6,500	1452669	500	x-1528162-x	2063537-1
1.0–1.5	–	1.9–2.4	-1 / -2 / -3	1452671	6,500	1452672	500	x-1528163-x	2119104-1

***) Material and Finish:**

xxx-1 = CuNiSi, pre-tin/silver 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.

◇) On request.

Receptacle Contacts with Short Circuit Area

Wire Size Range (mm ²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator ♦	Hand Tool
0.5	–	1.4–1.7	-1	1563888	8,000	1563889	500	x-1528944-x	2119105-1

***) Material and Finish:**

xxx-1 = CuNiSi, selective gold plated

Note: All part numbers are RoHS and ELV compliant.

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

Receptacle Contacts – Clean Body (CB)

Technical Features

Contact Material:
CuSn0.15/0.2; Insert Spring: CuNiSi

Contact Finish:
Tin-silver plated, selective silver plated, selective gold plated

Wire Size Range:
0.14–0.22 mm², 0.25–0.35 mm²,
0.50–0.75 mm², 1.00–1.50 mm²

Current Carrying Capacity:
up to 20 Ampere
(at 20 °C ambient temperature)

Temperature Range:
–40 °C ... +140 °C (tin-silver plated)
–40 °C ... +140 °C (silver plated)
–40 °C ... +150 °C (gold plated)

Contact Resistance:
New State ≤ 2 mΩ

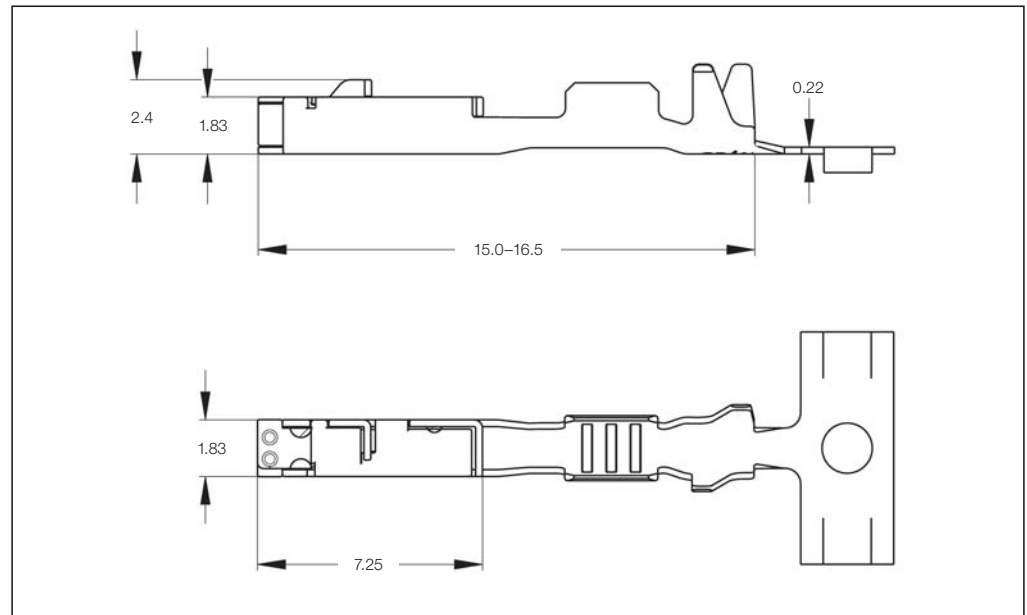
Mating Cycles:●
up to 20 cycles (tin-silver plated)
up to 50 cycles (silver plated)
up to 100 cycles (gold plated)

Dimension of Male Contacts:
(1.2 ±0.1 x 0.6 ±0.03 mm)

Extraction Tools depend on the Terminal/Housing Combination – Typically:
Part Nos. **1579007-8** and **1-1579007-0** (Secondary Lock)

Mating Force: Max. 5 N

Unmating Force: Max. 2.5 N



Modular Dimensions (Centerline):

max. 0.75 mm² 2.5 x 2.5 mm
max. 1.0 mm² 2.5 x 3.0 mm

max. 1.5 mm² 2.5 x 3.5 mm
3.0 x 3.5 mm

sealed 4.0 x 4.0 mm;
sealed staggered 3.5 x 4.0 mm,
cavity 3.55 mm diameter
sealed 4.5 x 4.5 mm;
sealed staggered 4.0 x 4.5 mm,
cavity 3.95 mm diameter

Product Group Drawing:
1534326

Product Specification:
108-18782

Application Specification:
114-18464

●) Mating Cycles are depending on various technical influences and must be clarified in each individual case.

Standard Receptacle Contacts (SRC)

Wire Size Range (mm ²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator ♦	Hand Tool
0.25–0.35	–	1.10–1.75	-1 / -2 / -3	1534594	10,000	1534595	500	x-1528147-x	2119107-x◇
0.50–0.75	–	1.4–1.9	-1 / -2 / -3	1670144#	8,000	1670145#	500	x-1528673-x	2119108-x◇
				1394897	8,000	1534063	500	x-1528148-x	2063676-x◇
1.0–1.5	–	1.9–2.4	-1 / -2 / -3	1452503	8,000	1452504	500	x-1528150-x	2063565-x◇

Receptacle Contacts with Single Wire Sealing System (SWS)

Wire Size Range (mm ²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator ♦	Hand Tool
0.14–0.22	–	1.05–1.20	-1 / -2 / -3	1418841	6,500	–	–	x-1528151-x	2119109-x◇
0.25–0.35	–	1.10–1.75	-1 / -2 / -3	1418844	6,500	1418845	500	x-1528152-x	2119110-x◇
				1670146#	6,500	1670147#	500	x-1528674-x	2119111-x◇
0.50–0.75	–	1.4–1.9	-1 / -2 / -3	1418847	6,500	1418848	500	x-1528153-x	2119112-x◇
				1418850	6,500	1418851	500	x-1528154-x	2119113-x◇

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

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

◇) On request.

#) CAUTION: Future Strip Form Orders will be replaced.
Because of change of the wire crimp at the new Part Nos. 1670144 and 1670146 they will be processed with new crimp heights. See latest Application Specification 114-18464.

Tab Contacts – Locking Lance (LL)

Technical Features

Contact Material:

CuNiSi;
Insert Tab: CuSn0.15/0.2

Contact Finish:

Tin-silver plated,
selective silver plated,
selective gold plated

Wire Size Range:

0.14–0.22 mm²,
0.25–0.35 mm²,
0.50–0.75 mm²,
1.00–1.50 mm²

Extraction Tool:

Part No. **5-1579007-3**

Product Group Drawing:

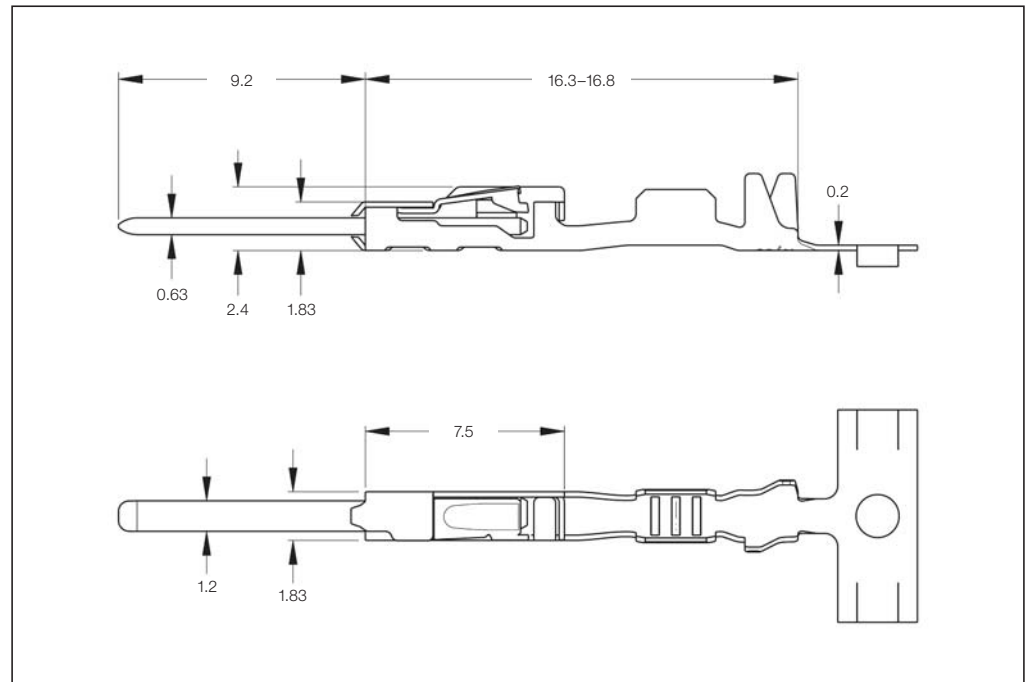
1418754

Product Specification:

108-18782

Application Specification:

114-18464



Modular Dimensions (Centerline):

max. 0.75 mm ²	2.5 x 2.5 mm	
max. 1.0 mm ²	2.5 x 3.0 mm	sealed 4.0 x 4.0 mm; sealed staggered 3.5 x 4.0 mm, cavity 3.55 mm diameter
max. 1.5 mm ²	2.5 x 3.5 mm 3.0 x 3.5 mm	sealed 4.5 x 4.5 mm; sealed staggered 4.0 x 4.5 mm, cavity 3.95 mm diameter

Standard Tab Contacts

Wire Size Range (mm ²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator*	Hand Tool
0.14–0.22	–	1.05–1.20	-1 / -2 / -3	1418756	9,000	1418757	500	x-1528427-x	2119102-x [◇]
0.25–0.35	–	1.10–1.75	-1 / -2 / -3	1418758	9,000	1418759	500	x-1528428-x	2063574-x [◇]
0.50–0.75	–	1.4–1.9	-1 / -2 / -3	1418760	8,000	1418761	500	x-1528506-x	2063570-x [◇]
1.0–1.5	–	1.9–2.4	-1 / -2 / -3	1418762	7,000	1418763	500	x-1528507-x	2063575-x [◇]

Tab Contacts with Single Wire Sealing System (SWS)

Wire Size Range (mm ²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator*	Hand Tool
0.14–0.22	–	1.05–1.20	-1 / -2 / -3	1718756	6,500	–	–	x-1528508-x	2119103-1
0.25–0.35	–	1.10–1.75	-1 / -2 / -3	1718758	6,500	1718759	500	x-1528509-x	2063573-x [◇]
0.50–0.75	–	1.4–1.9	-1 / -2 / -3	1718760	6,000	1718761	500	x-1528510-x	2063537-1
1.0–1.5	–	1.9–2.4	-1 / -2 / -3	1718762	6,000	1718763	500	x-1528511-x	2119104-1

***) Material and Finish:**

xxx-1 = CuNiSi, pre-tin
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.

◇) On request.

Tab Contacts – Clean Body (CB)

Technical Features

Contact Material:

CuSn0.15/0.2;
Insert Tab: CuSn0.15/0.2

Contact Finish:

Tin-silver plated,
selective silver plated,
selective gold plated

Wire Size Range:

0.25–0.35 mm²,
0.50–0.75 mm²

**Modular Dimensions
(Centerline):**

max. 0.75 mm² 2.5 x 2.5 mm
max. 1.0 mm² 2.5 x 3.0 mm
max. 1.5 mm² 2.5 x 3.5 mm
3.0 x 3.5 mm

Product Group Drawing:

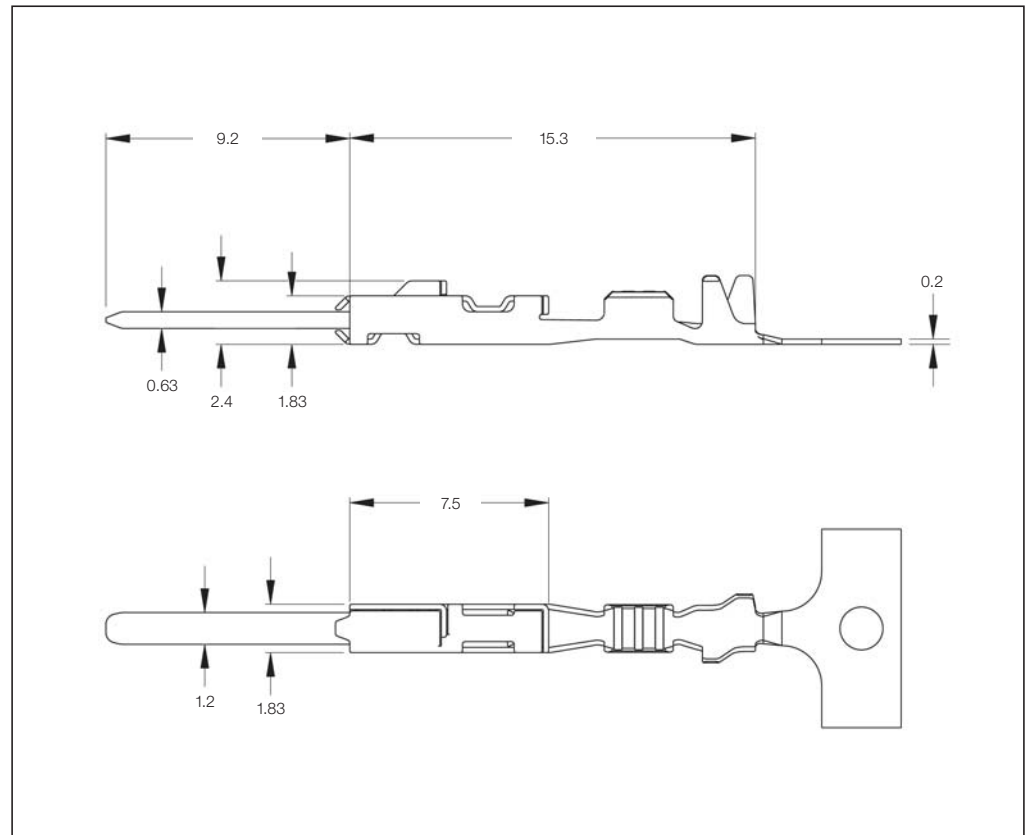
1718398

Product Specification:

108-18782

Application Specification:

114-18464



Standard Tab Contacts

Wire Size Range (mm ²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator [♦]	Hand Tool
0.25–0.35	–	1.10–1.75	-1 / -2 / -3	1718348	9,000	1703698	500	x-1528156-x	2063574-x [◇]
0.50–0.75	–	1.4–1.9	-1 / -2 / -3	1718350	8,000	1718390	500	x-1528157-x	2063570-x [◇]

***) Material and Finish:**

xxx-1 = CuNiSi, pre-tin
xxx-2 = CuNiSi, selective gold plated
xxx-3 = CuNiSi, selective silver plated

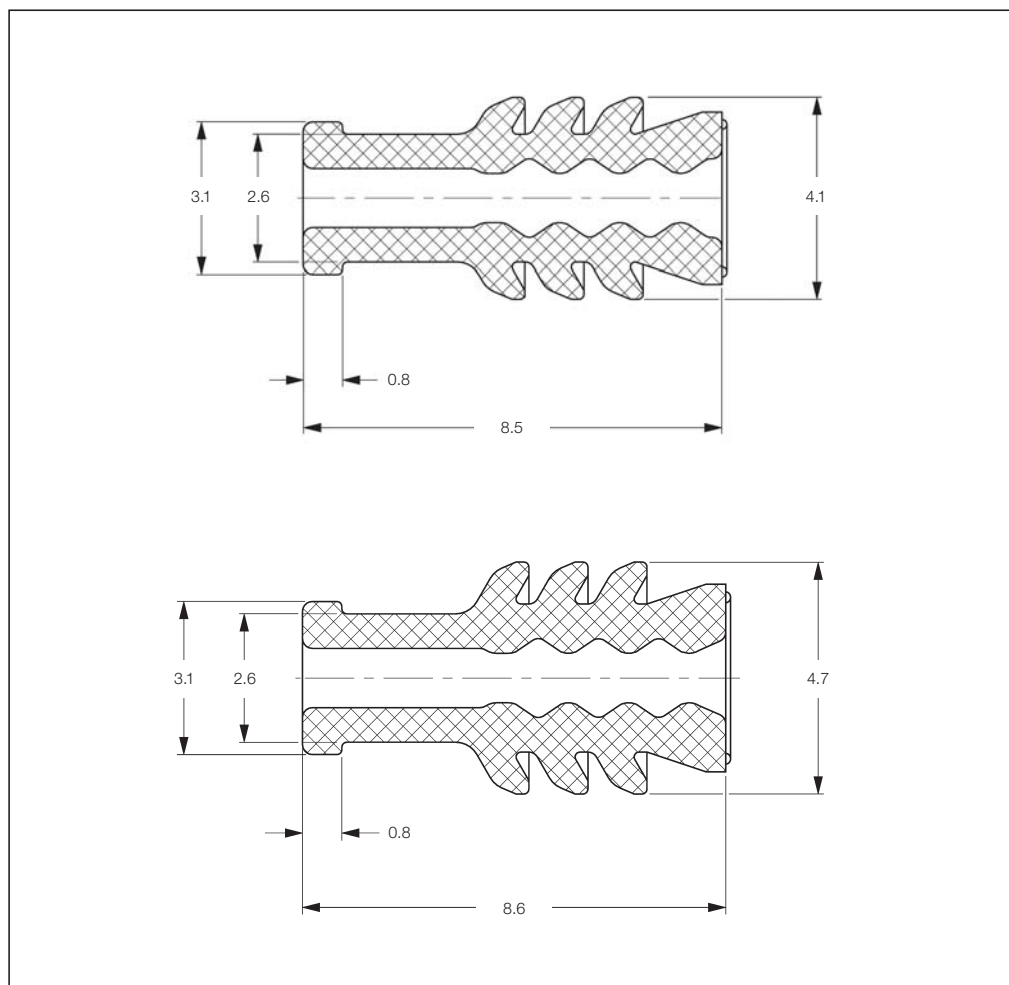
Note: All part numbers are RoHS and ELV compliant.

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

[◇]) On request.

Single Wire Seals and Sealing Plugs

Single Wire Seals and Sealing Plugs for MCON Contact System (Cavity Diameter 3.55 mm and 3.95 mm)



Cavity Diameter 3.55 mm

Insulation Diameter		Color	Part Number	Package Quantity
FLK (mm)	FLR (mm)			
–	0.9–1.4	Yellow	967067-2	20,000
–	1.4–2.1	Green	967067-1	20,000
Sealing Plug		Blue	967056-1	5,000

Cavity Diameter 3.95 mm

Insulation Diameter		Color	Part Number	Package Quantity
FLK (mm)	FLR (mm)			
–	0.9–1.9	Gray	963142-2	20,000
–	1.9–2.4	Green	967067-1	20,000
Sealing Plug		White	963143-1	20,000

Receptacle Contacts

Technical Features

Contact Material:

CuSn0.15/0.2;
Insertion Spring: CuNiSi

Contact Finish:

Tin-silver plated,
selective silver plated

Wire Size Range:

0.20–0.35 mm²,
0.50 mm²,
0.75–1.00 mm²,
>1.0–2.5 mm²
>2.5–4.0 mm²

Extraction Tool:

Part No. **5-1579008-2**

Product Group Drawing:

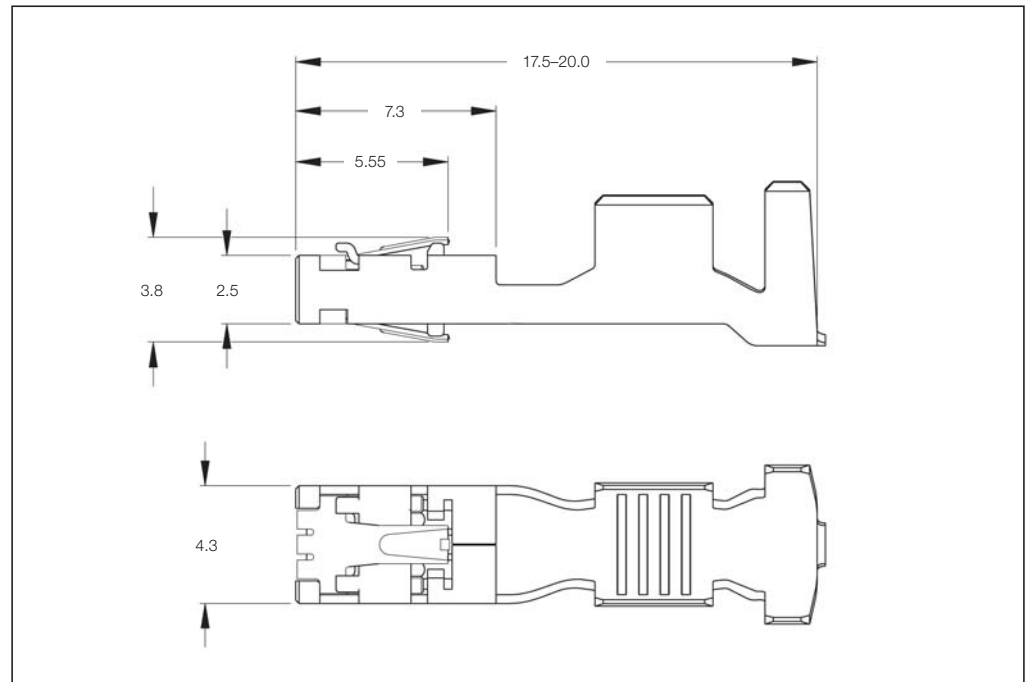
1719797

Product Specification:

108-94002

Application Specification:

114-18718



Modular Dimensions (Centerline):

max. 2.5 mm ²	5.0 x 5.5 mm	sealed 5.5 x 5.5 mm
	staggered 4.5 x 5.5 mm	sealed staggered 5.0 x 5.5 mm
		cavity diameter 4.9 mm
max. 4.0 mm ²	5.5 x 5.5 mm	sealed 7.2 x 7.2 mm
	staggered 5.0 x 5.5 mm	sealed staggered 6.0 x 7.2 mm
		cavity diameter 6.4 mm

Standard Receptacle Contacts

Wire Size Range (mm ²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator [♦]	Hand Tool
0.20–0.35	–	1.15–1.40	-1 / -3	1719836	2,500	1719837	500	x-1528691-x	2119119-x [◇]
0.50	–	1.4–1.6	-1 / -3	1563719	2,500	1563720	500	x-1528899-x	2119120-x [◇]
0.75–1.00	–	1.7–2.1	-1 / -3	1719838	2,500	1719839	500	x-1528632-x	2119121-x [◇]
>1.0–2.5	–	2.2–3.0	-1 / -3	1719840	2,500	1719841	500	x-1528633-x	2119121-x [◇]
>2.5–4.0	–	3.4–3.7	-1 / -3	1718475	2,500	1718477	500	x-1528585-x	2119122-x [◇]

Receptacle Contacts with Single Wire Sealing System (SWS)

Wire Size Range (mm ²)	Insulation Diameter (mm)		Material and Finish*	Part Numbers					
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity	Applicator [♦]	Hand Tool
0.50	–	1.4–1.6	-1 / -3	1563935	2,500	1563936	500	–	–
0.75–1.00	–	1.7–2.1	-1 / -3	1670802	2,500	1670803	500	x-1528773-x	2119123-x [◇]
>1.0–2.5	–	2.2–3.0	-1 / -3	1670804	2,500	1670805	500	x-1528774-x	2119124-x [◇]
>2.5–4.0	–	3.4–3.7	-1 / -3	1670806	2,500	1670807	500	x-1528775-x	2119125-x [◇]

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

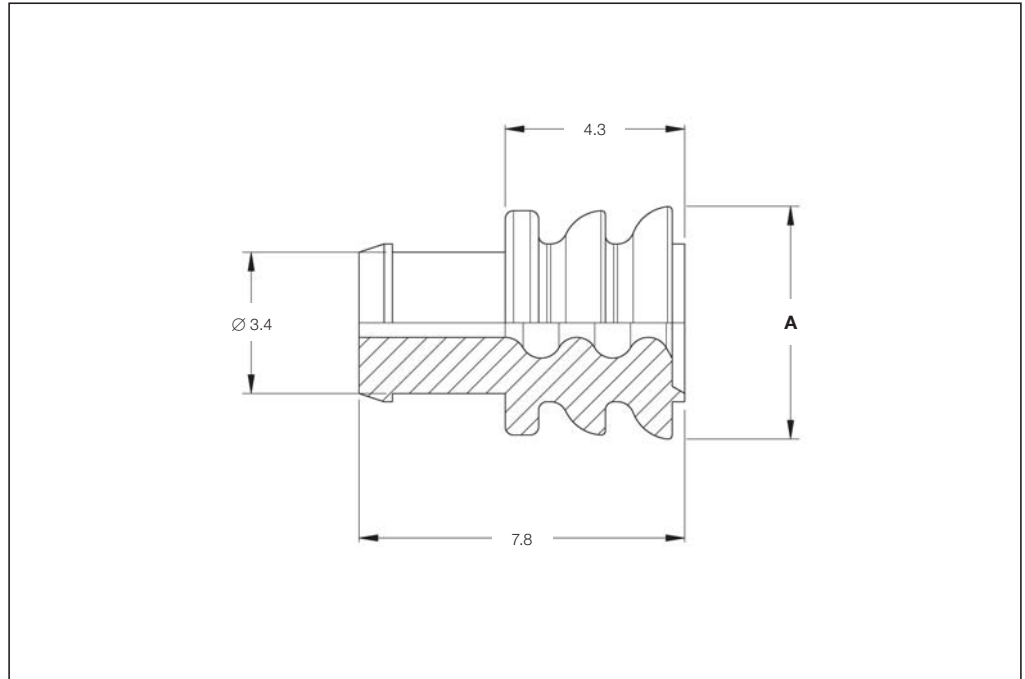
Note: All part numbers are RoHS and ELV compliant.

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

◇) On request.

Single Wire Seals and Sealing Plugs

Single Wire Seals and Sealing Plugs for MCON Contact System (Cavity Diameter 4.9 mm and 6.4 mm)



Cavity Diameter 4.9 mm

Wire Size Range (mm)	Insulation Diameter (mm)	Color	Diameter A (mm)	Part Number	Package Quantity
0.75–1.00	1.4–2.1	Blue	5.6	828904-1	1,000
				828904-2	10,000
>1.5–2.5	2.2–3.0	White	5.6	828905-1	10,000
	Sealing Plug	Natural	5.6	828922-1	10,000

Cavity Diameter 6.4 mm

Wire Size Range (mm)	Insulation Diameter (mm)	Color	Diameter A (mm)	Part Number	Package Quantity
>2.5–4.0	3.4–3.7	Green	7.2	828985-1	5,000
	Sealing Plug	Brown	7.2	828986-1	5,000

Engineering Notes



Introduction


**MCON Connectors offer
 Highest 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 unsealed connectors (SWS)
- Wire-to-Board sealed and unsealed connectors (SWS)
- Polarization, several keyings
- Locking mechanism for smaller connectors/mating aid for higher numbers of ways

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

2 Positions

Housing Material:

PA66-GF15

Wire Size Range:

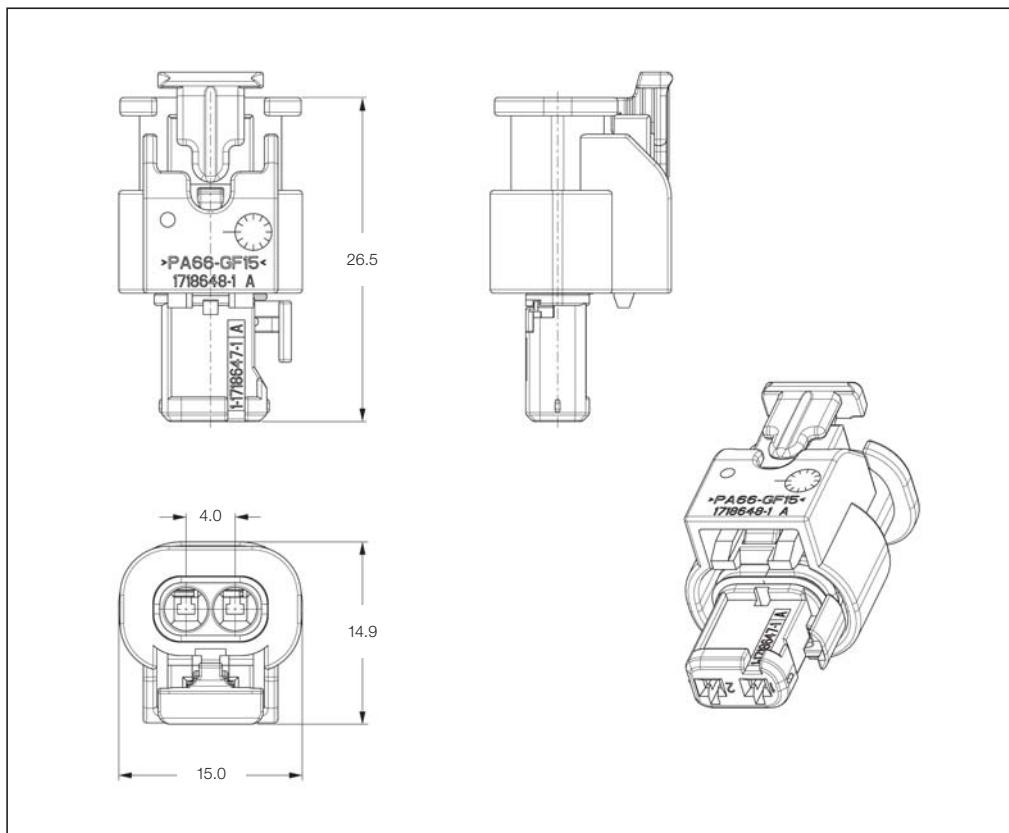
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	A	Black	1-1718643-1	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

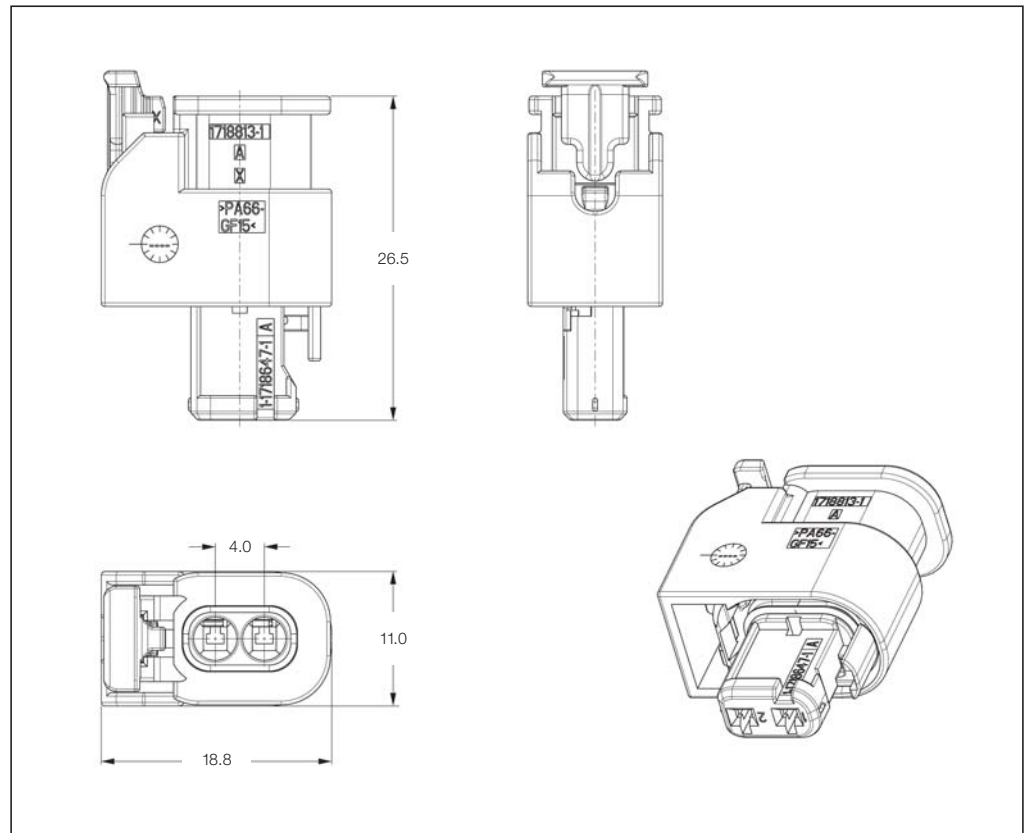
No. of Positions:
2 Positions

Housing Material:
PA66 GF15

Wire Size Range:
1.0 mm²

Product Specification:
108-18969

Application Specification:
114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	A	Black	1-1718811-1	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

2 Positions

Housing Material:

PA66-GF30/PA6-GF15

Wire Size Range:

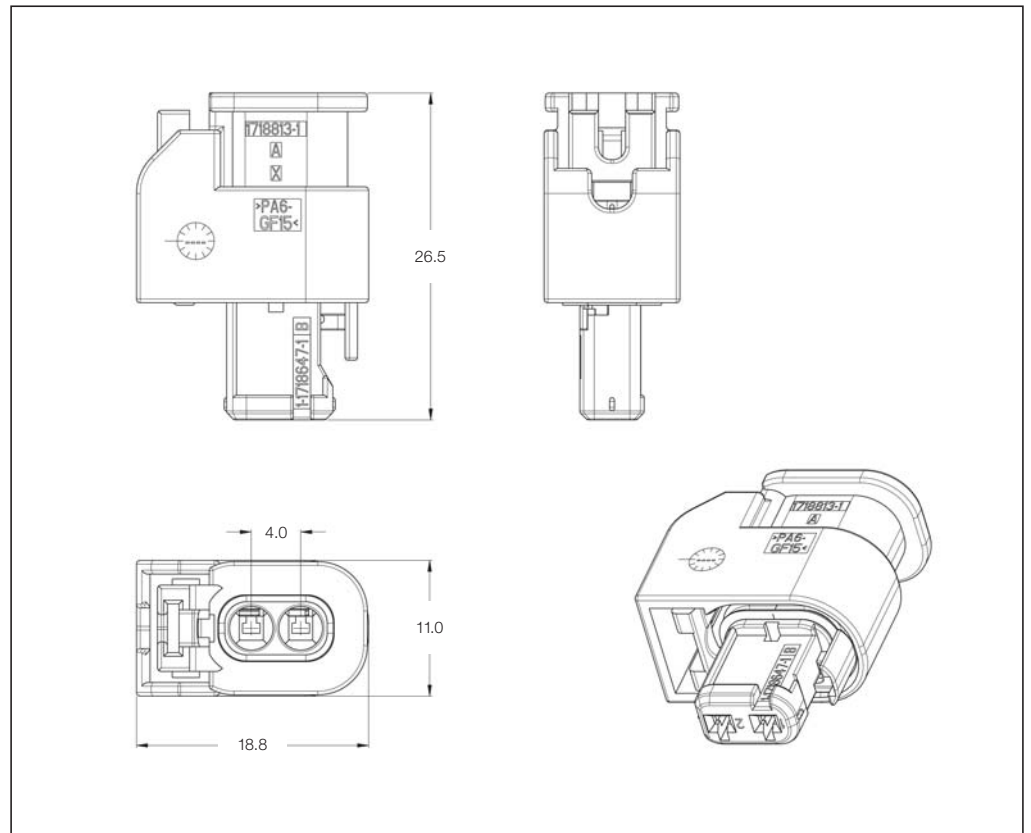
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	A	Black	1-1564440-1	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

2 Positions

Housing Material:

PA66-GF30/PA6-GF15

Wire Size Range:

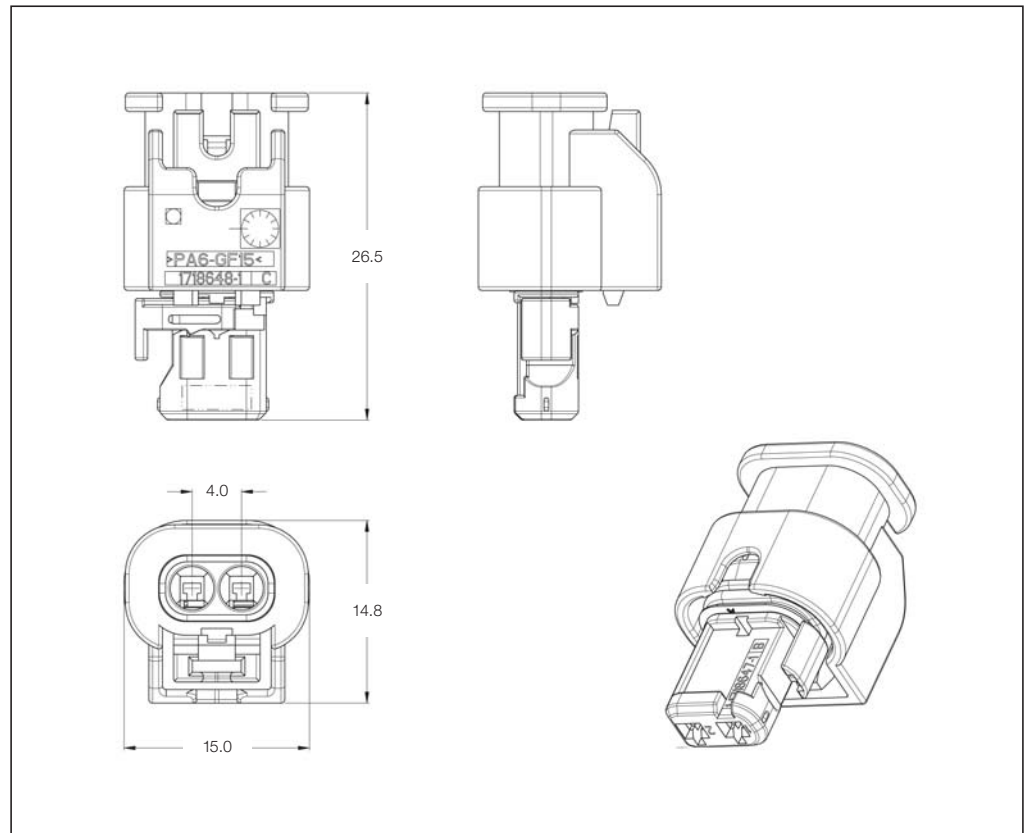
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	A	Black	1-1670915-1	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

2 Positions

Housing Material:

PA66-GF30/PA6-GF15

Wire Size Range:

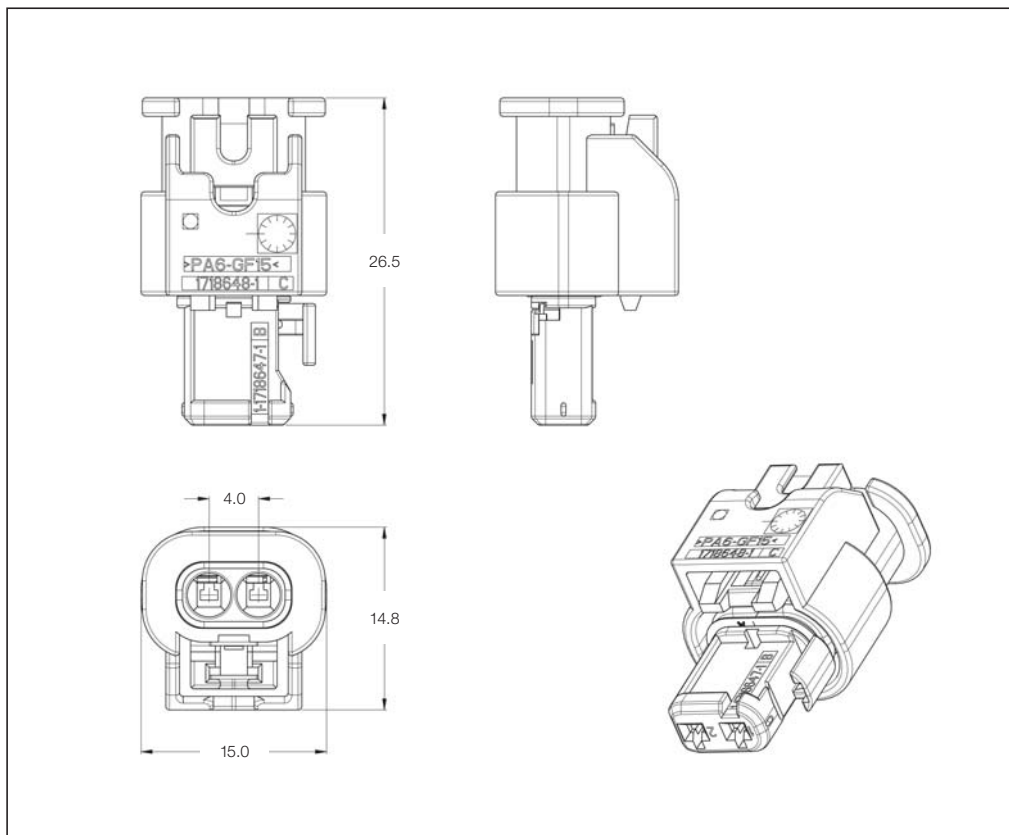
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	A	Black	1-1670916-1	–	1-1703498-1	–	–
	B	Natural	2-1670916-1	–	–	–	–

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

No. of Positions:

2 Positions

Housing Material:

PBT-GF30

Wire Size Range:

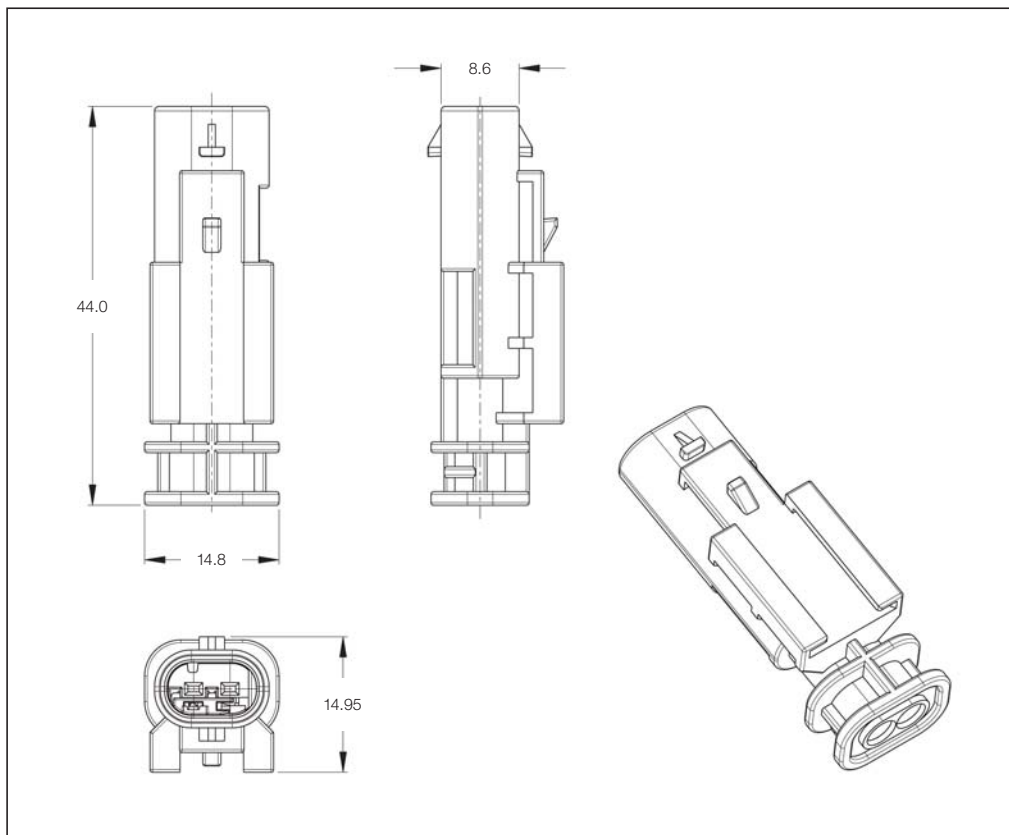
1.0 mm²

Product Specification:

—

Application Specification:

114-18910-1



Sealed 1.2 mm Tab Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	A	Black	1-1703498-1	—	1-1670916-1	—	—

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

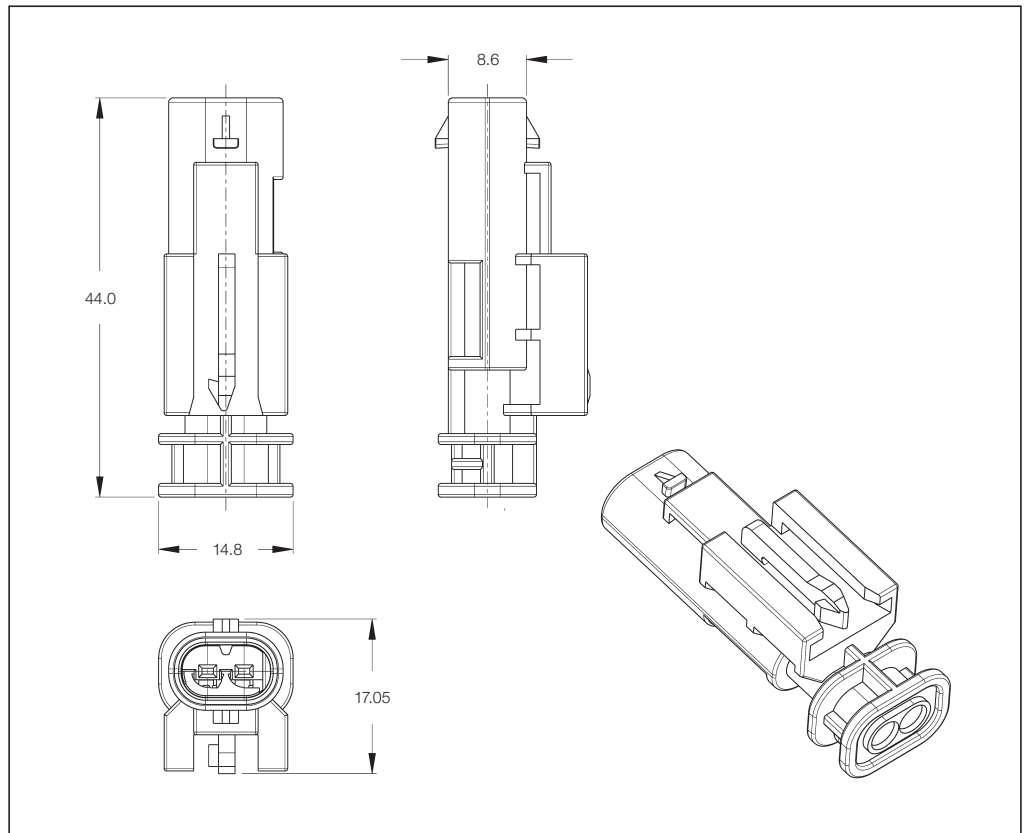
No. of Positions:
2 Positions

Housing Material:
PBT-GF30

Wire Size Range:
1.0 mm²

Product Specification:
—

Application Specification:
114-18910-1



Sealed 1.2 mm Tab Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	A	Black	1-1703498-2	—	1-1670916-1	—	—

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

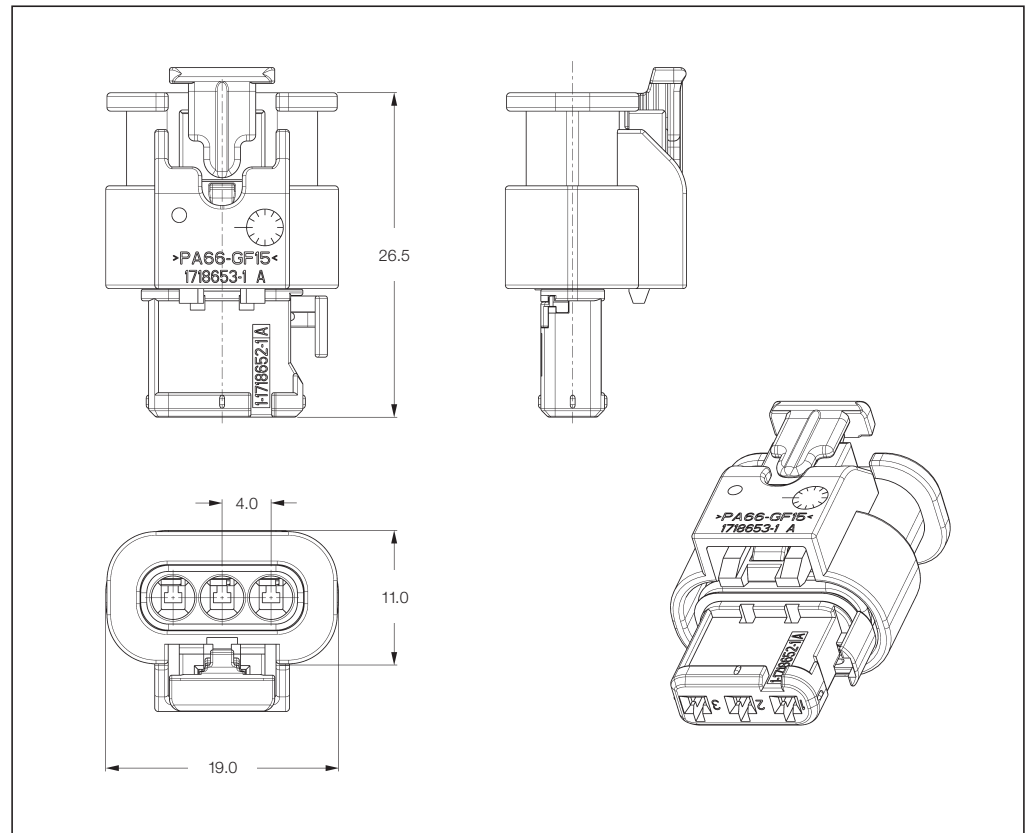
No. of Positions:
3 Positions

Housing Material:
PA66-GF15

Wire Size Range:
1.0 mm²

Product Specification:
108-18969

Application Specification:
114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	A	Black	1-1718644-1	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

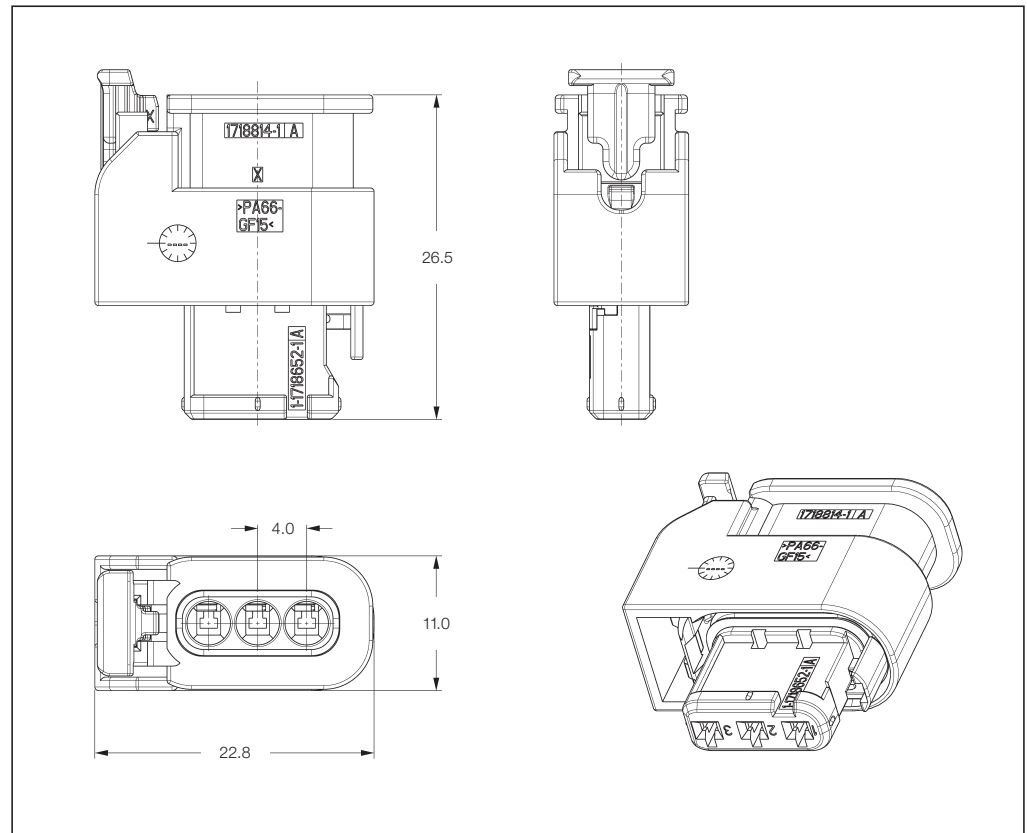
No. of Positions:
3 Positions

Housing Material:
PA66-GF15

Wire Size Range:
1.0 mm²

Product Specification:
108-18969

Application Specification:
114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	A	Black	1-1718812-2	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

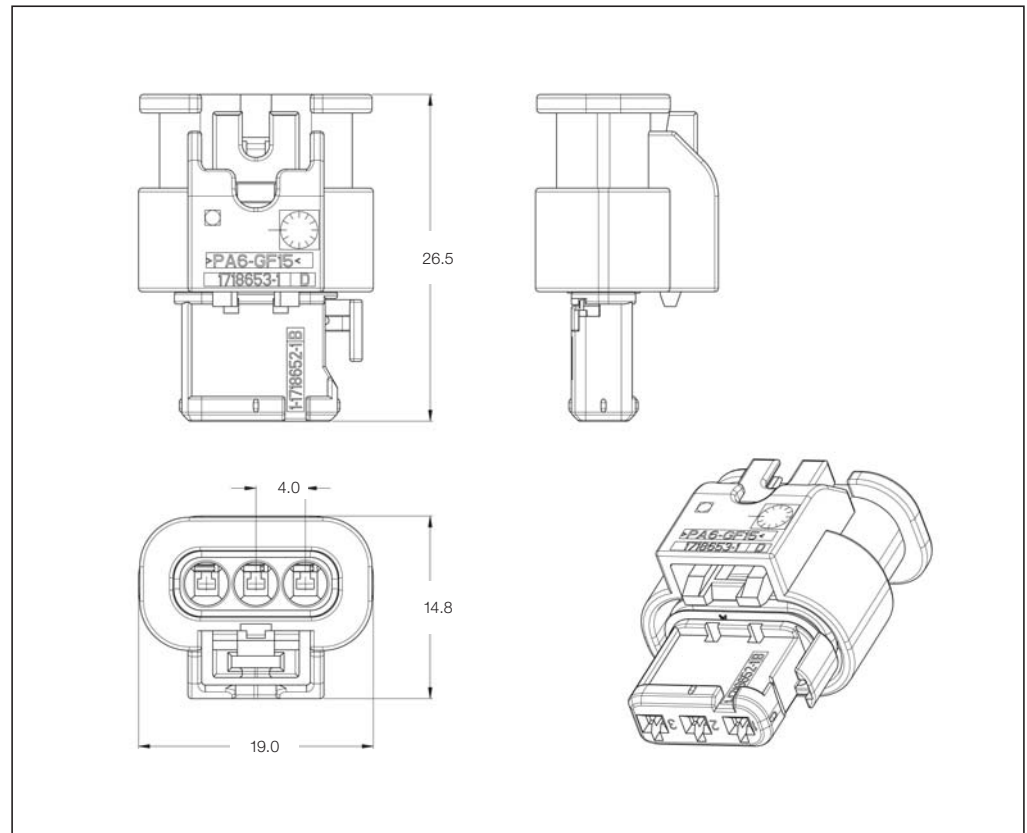
No. of Positions:
3 Positions

Housing Material:
PA66-GF30/PA6-GF15

Wire Size Range:
1.0 mm²

Product Specification:
108-18969

Application Specification:
114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	A	Black	1-1670917-1	–	1-1703494-1	–	–
	B	Natural	2-1670917-1	–	–	–	–

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

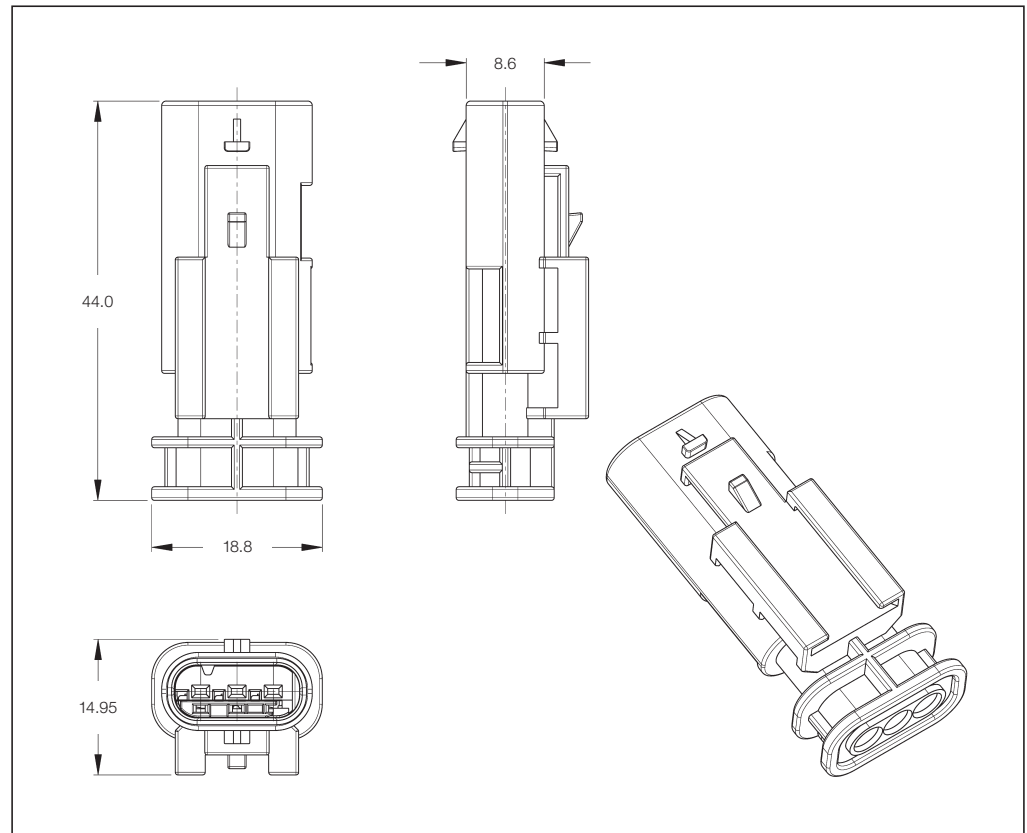
No. of Positions:
3 Positions

Housing Material:
PBT-GF30

Wire Size Range:
1.0 mm²

Product Specification:
—

Application Specification:
114-18910-1



Sealed 1.2 mm Tab Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	A	Black	1-1703494-1	—	1-1670917-1	—	—

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

No. of Positions:

3 Positions

Housing Material:

PBT-GF30

Wire Size Range:

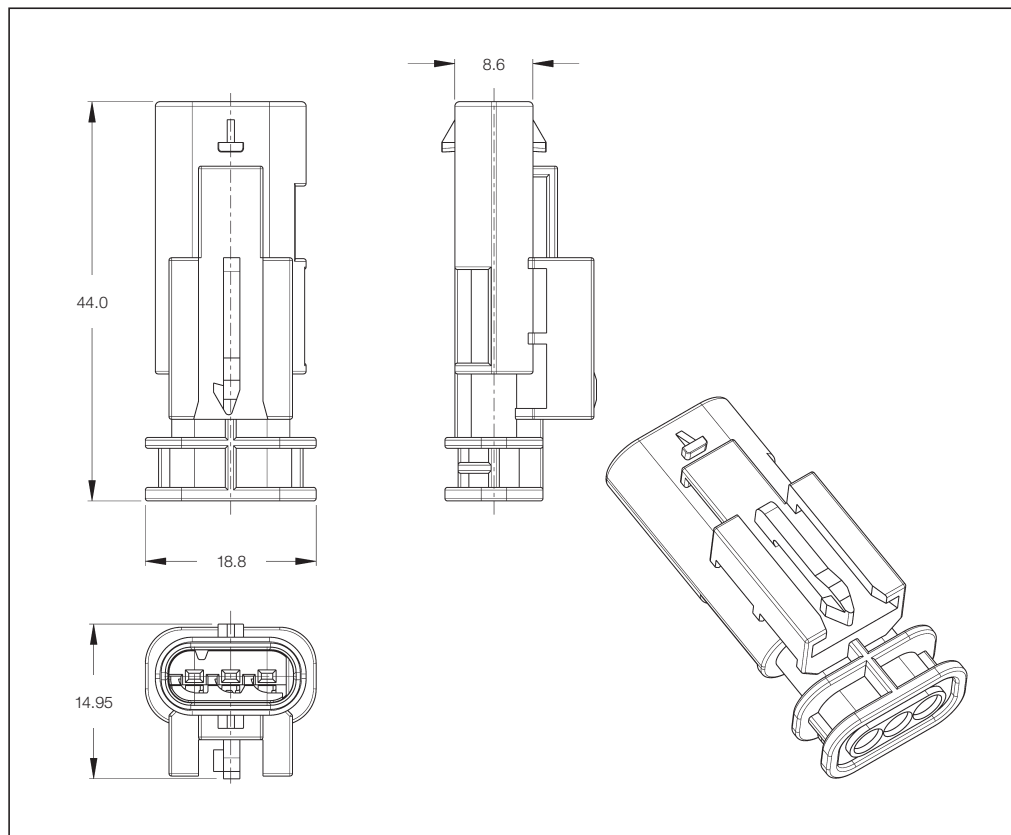
1.0 mm²

Product Specification:

—

Application Specification:

114-18910-1



Sealed 1.2 mm Tab Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	A	Black	1-1703494-2	—	1-1670917-1	—	—

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

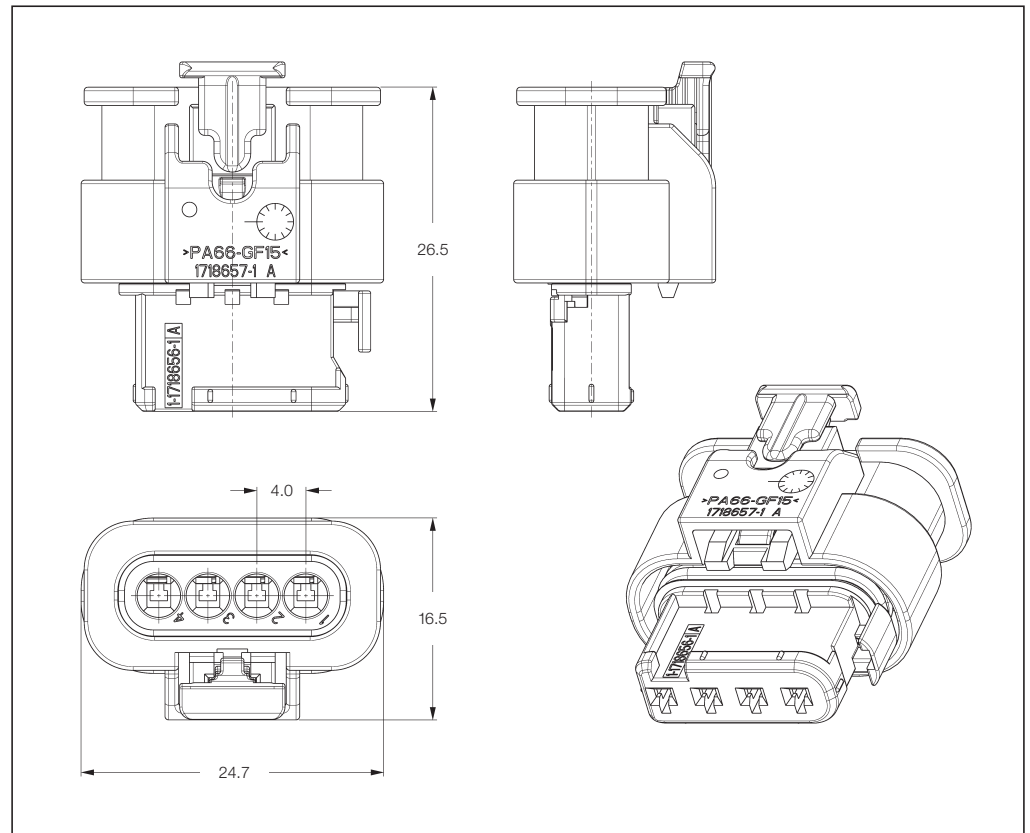
No. of Positions:
4 Positions

Housing Material:
PA66-GF15

Wire Size Range:
1.0 mm²

Product Specification:
108-18969

Application Specification:
114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	A	Black	1-1718645-1	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

4 Positions

Housing Material:

PA66-GF30/PA6-GF15

Wire Size Range:

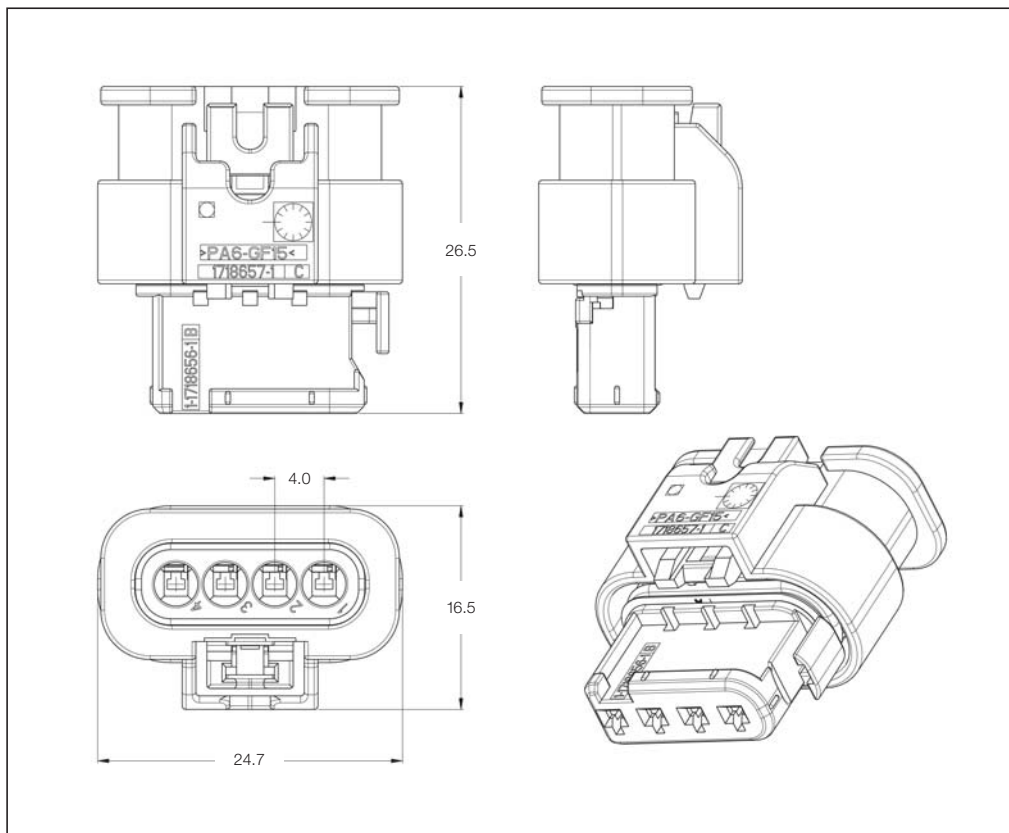
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	A	Black	1-1670918-1	–	1-1564559-1	–	–
	B	Natural	2-1670918-1	–	–	–	–

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

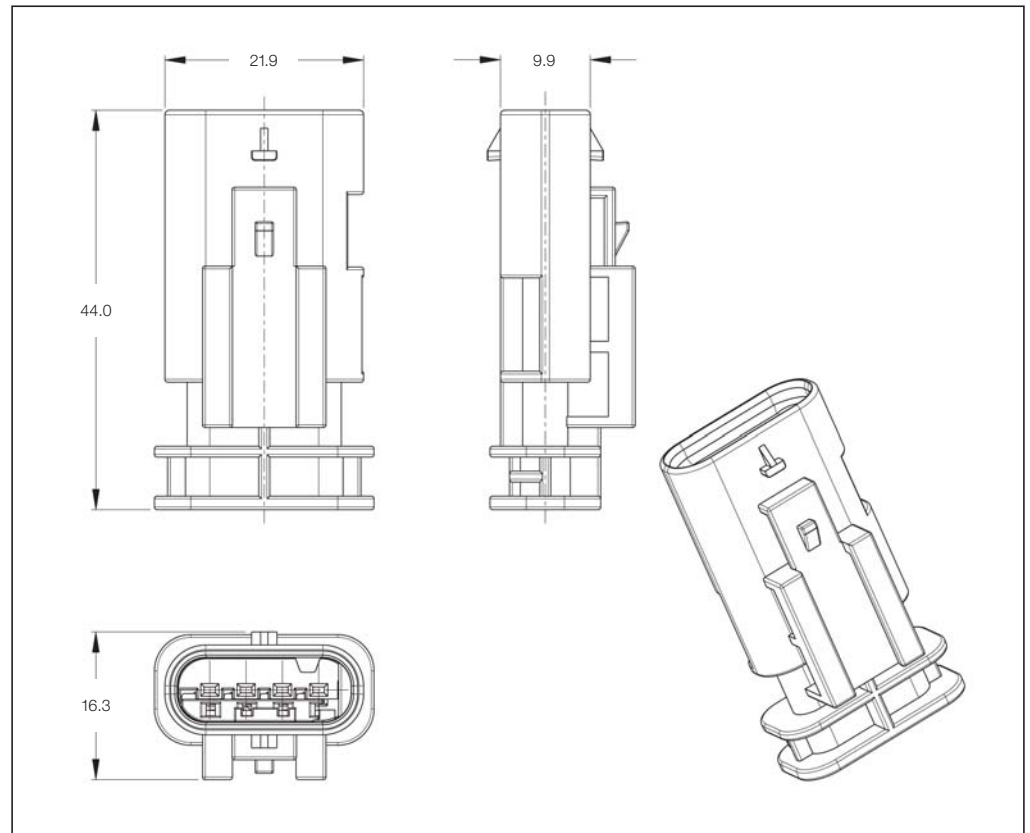
No. of Positions:
4 Positions

Housing Material:
PBT-GF30

Wire Size Range:
1.0 mm²

Product Specification:
—

Application Specification:
114-18910-1



Sealed 1.2 mm Tab Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	A	Black	1-1564559-1	—	1-1670918-1	—	—

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

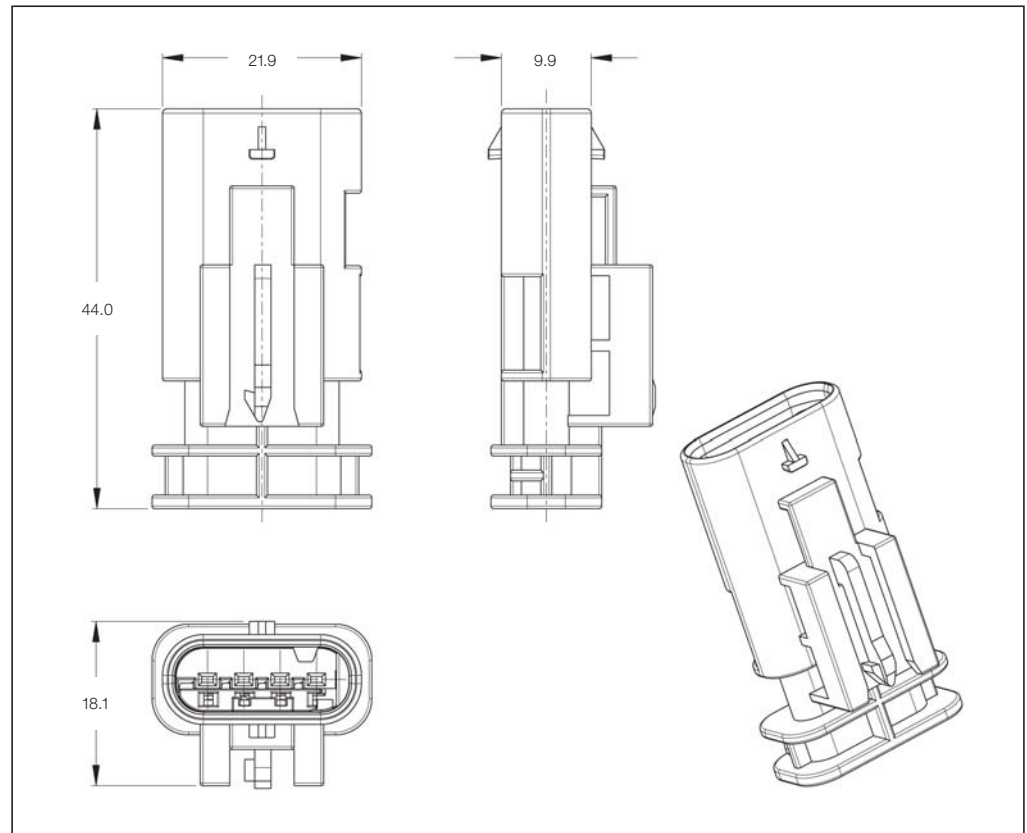
No. of Positions:
4 Positions

Housing Material:
PBT-GF30

Wire Size Range:
1.0 mm²

Product Specification:
—

Application Specification:
114-18910-1



Sealed 1.2 mm Tab Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	A	Black	1-1564559-2	—	1-1670918-1	—	—

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

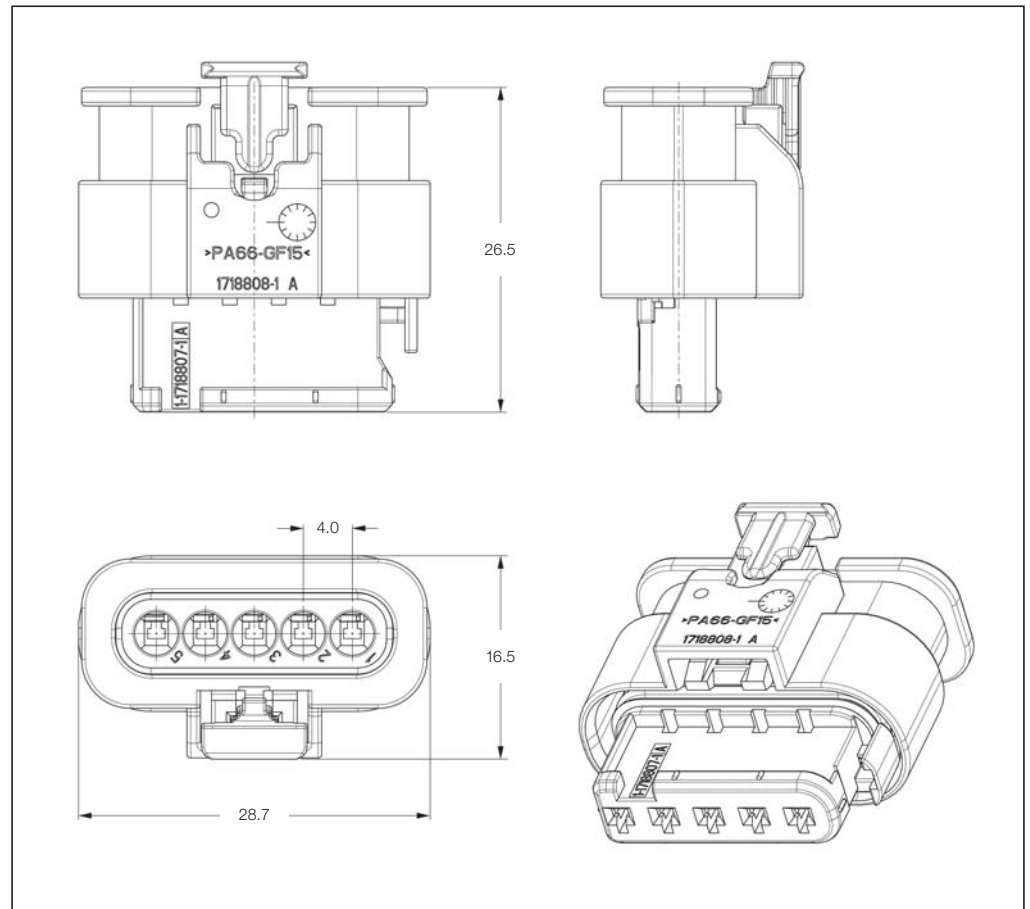
No. of Positions:
5 Positions

Housing Material:
PA66-GF15

Wire Size Range:
1.0 mm²

Product Specification:
108-18969

Application Specification:
114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
5	A	Black	1-1718806-1	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

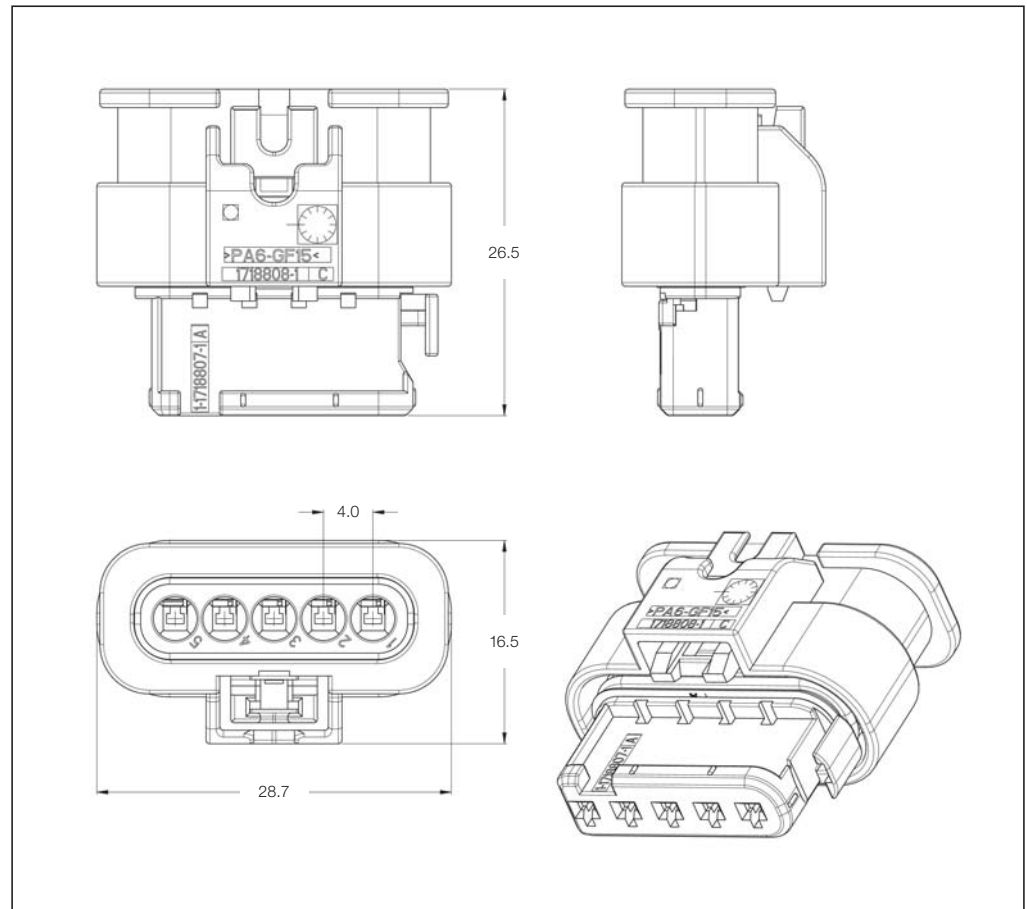
No. of Positions:
5 Positions

Housing Material:
PA66-GF30/PA6-GF15

Wire Size Range:
1.0 mm²

Product Specification:
108-18969

Application Specification:
114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
5	A	Black	1-1670921-1	-	-	-	-
	B	Natural	2-1670921-1	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

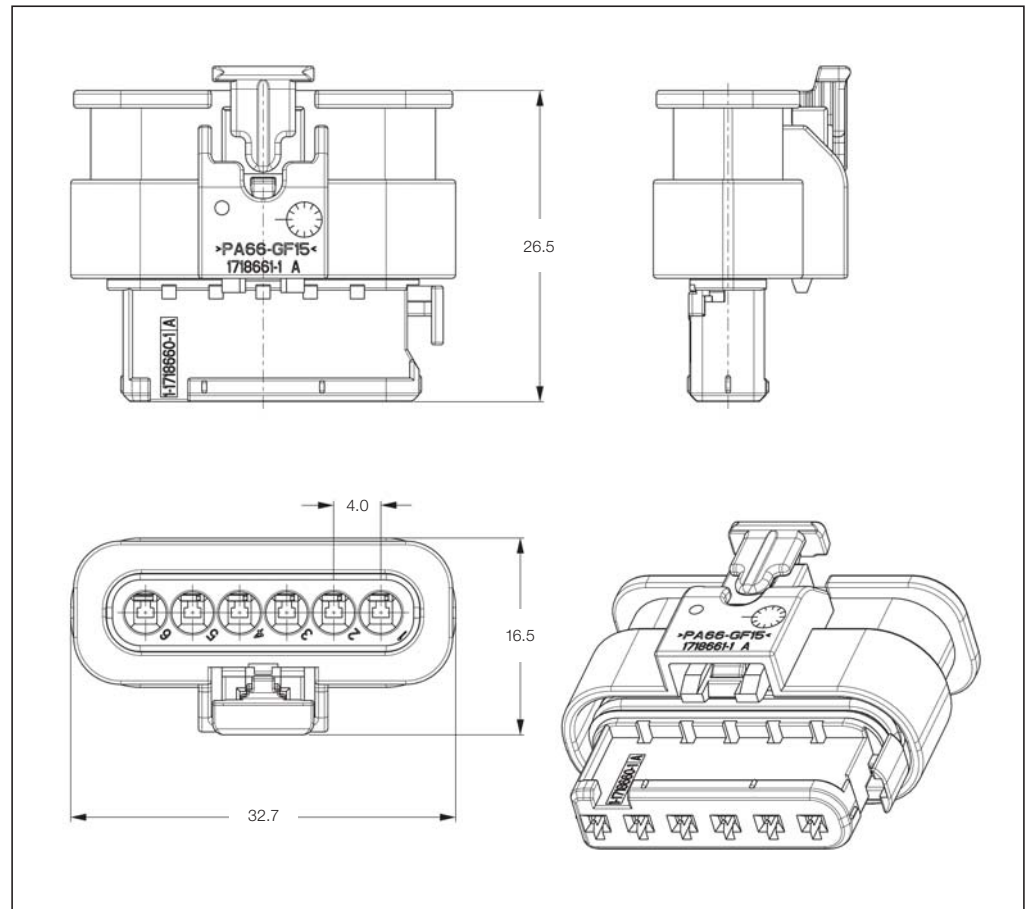
No. of Positions:
6 Positions

Housing Material:
PA66-GF15

Wire Size Range:
1.0 mm²

Product Specification:
108-18969

Application Specification:
114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
6	A	Black	1-1718646-1	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

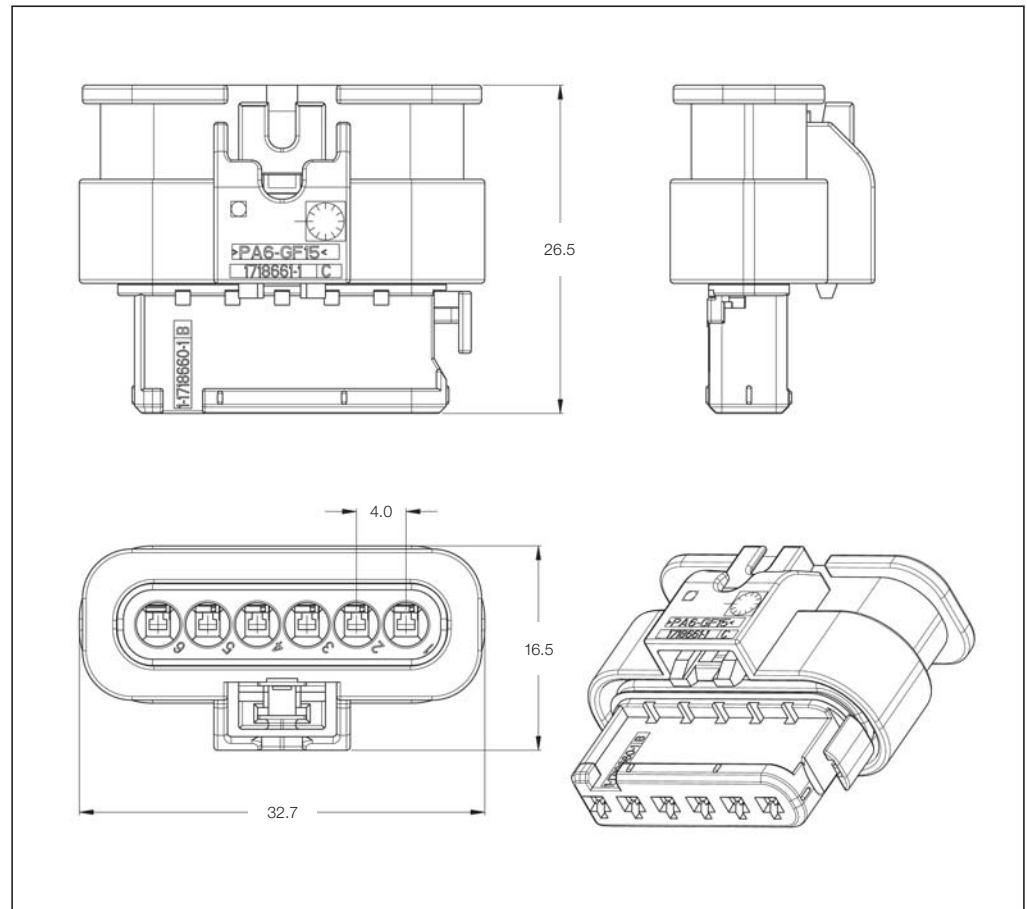
No. of Positions:
6 Positions

Housing Material:
PA66-GF30/PA6-GF15

Wire Size Range:
1.0 mm²

Product Specification:
108-18969

Application Specification:
114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
6	A	Black	1-1670919-1	-	-	-	-

Sealed 1.2 mm Receptacle Housings for Clean Body Contacts

Technical Features

No. of Positions:
2 Positions

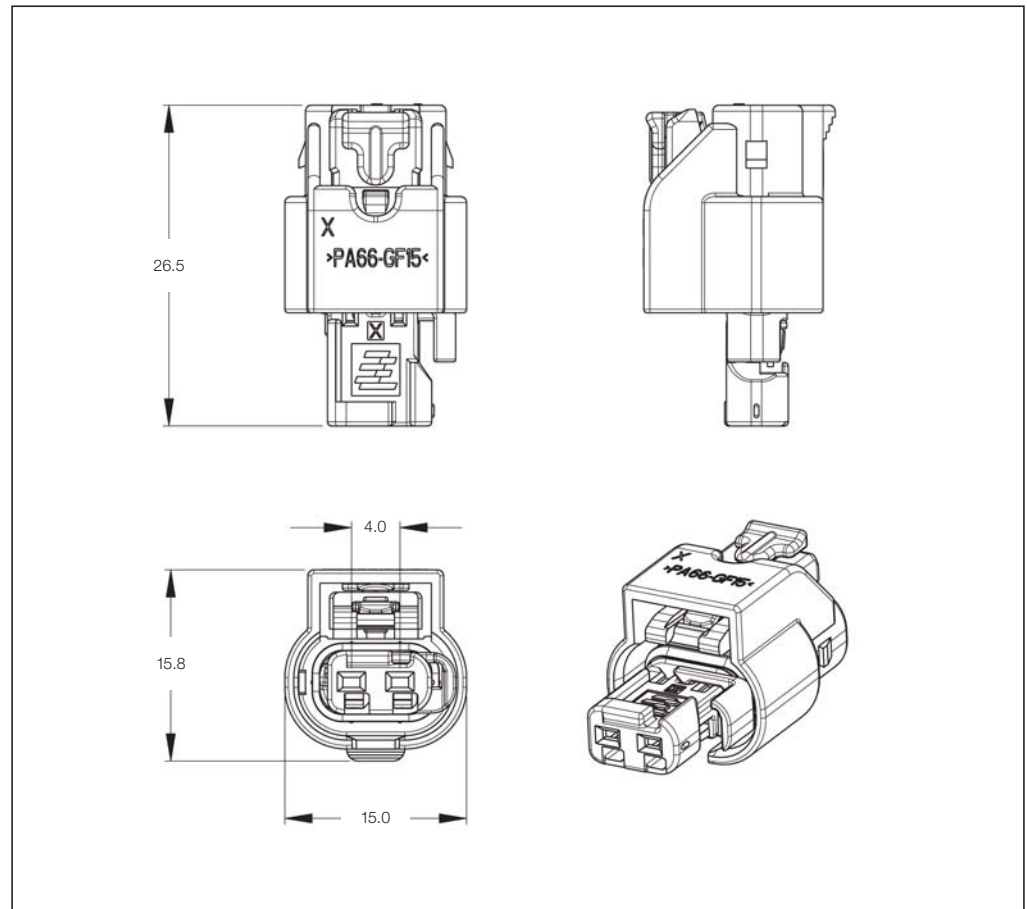
Housing Material:
PA66-GF15 for outer housing,
PA66-GF35 for inner housing

Wire Size Range:
0.5–1.5 mm²

Product Specification:
—

Application Specification:
408-8928

- For use with Clean Body Contacts Numbers **1418847** and **1418850**.
- Can be used with or without CPA (Connector Position Assurance).



Sealed 1.2 mm Receptacle Housings – Standard Latch without CPA

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	A	Black	1-1924067-1				
	B	Natural	1-1924067-2	–	–	–	–
	C	Blue	1-1924067-3				

Sealed 1.2 mm Receptacle Housings – Standard Latch with CPA

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	A	Black	1-1924067-4				
	B	Natural	1-1924067-5	–	–	–	–
	C	Blue	1-1924067-6				

Sealed 1.2 mm Receptacle Housings for Clean Body Contacts

Technical Features

No. of Positions:
3 Positions

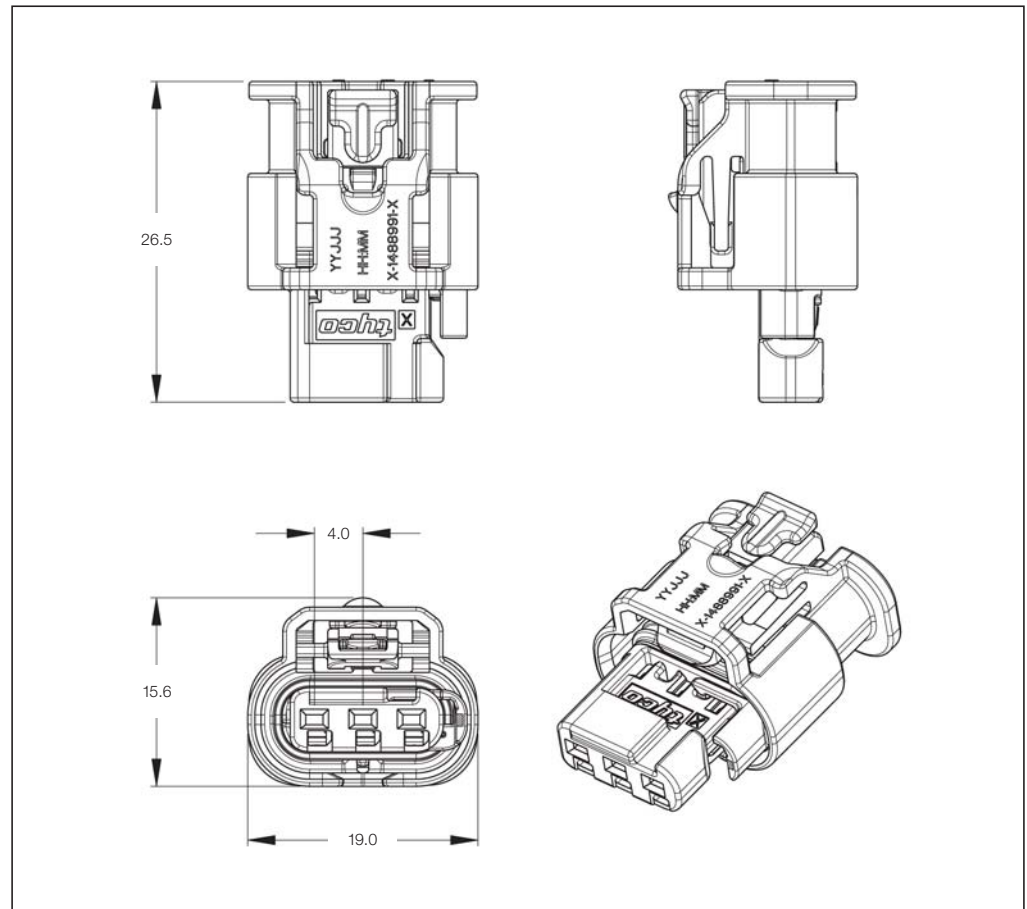
Housing Material:
PA66-GF35

Wire Size Range:
0.5–1.5 mm²

Product Specification:
—

Application Specification:
408-8928

- For use with Clean Body Contacts Numbers **1418847** and **1418850**.
- Can be used with or without CPA (Connector Position Assurance).
- Blocked circuits versions are available (see customer drawing for released options).



Sealed 1.2 mm Receptacle Housings – Standard Latch without CPA

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	A	Black	1488991-1				
	B	Natural	1488991-2				
	C	Blue	1488991-3				
	D	Gray	1488991-4				

Sealed 1.2 mm Receptacle Housings – Standard Latch with CPA

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	A	Black	1488991-5				
	B	Natural	1488991-6				
	C	Blue	1488991-7				
	D	Gray	1488991-8				

Sealed 1.2 mm Receptacle Housings for Clean Body Contacts

Technical Features

No. of Positions:
3 Positions

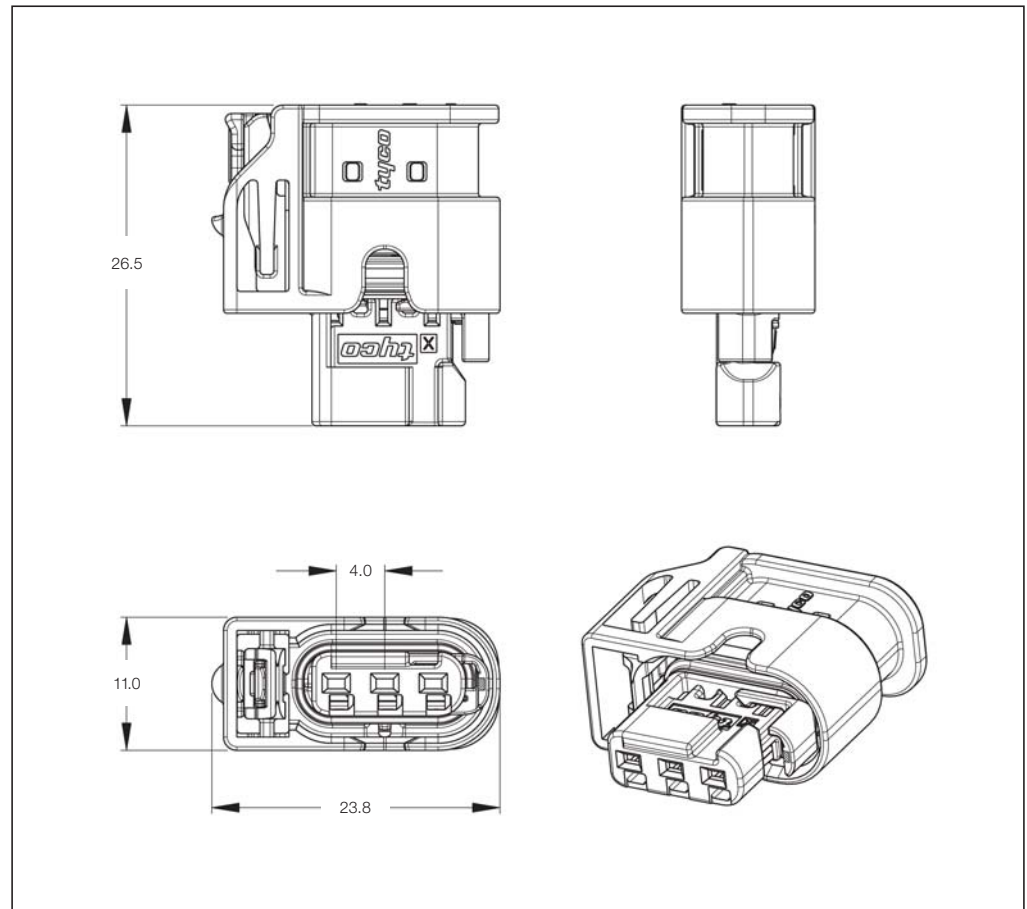
Housing Material:
PA66-GF35

Wire Size Range:
0.5–1.5 mm²

Product Specification:
—

Application Specification:
408-8928

- For use with Clean Body Contacts Numbers **1418847** and **1418850**.
- Can be used with or without CPA (Connector Position Assurance).
- Blocked circuits versions are available (see customer drawing for released options).



Sealed 1.2 mm Receptacle Housings – Low Profile Latch without CPA

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	A	Black	1488992-1				
	B	Natural	1488992-2				
	C	Blue	1488992-3				
	D	Gray	1488992-4				

Sealed 1.2 mm Receptacle Housings – Low Profile Latch with CPA

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
3	A	Black	1488992-5				
	B	Natural	1488992-6				
	C	Blue	1488992-7				
	D	Gray	1488992-8				

Sealed 1.2 mm Receptacle Housings for Clean Body Contacts

Technical Features

No. of Positions:
4 Positions

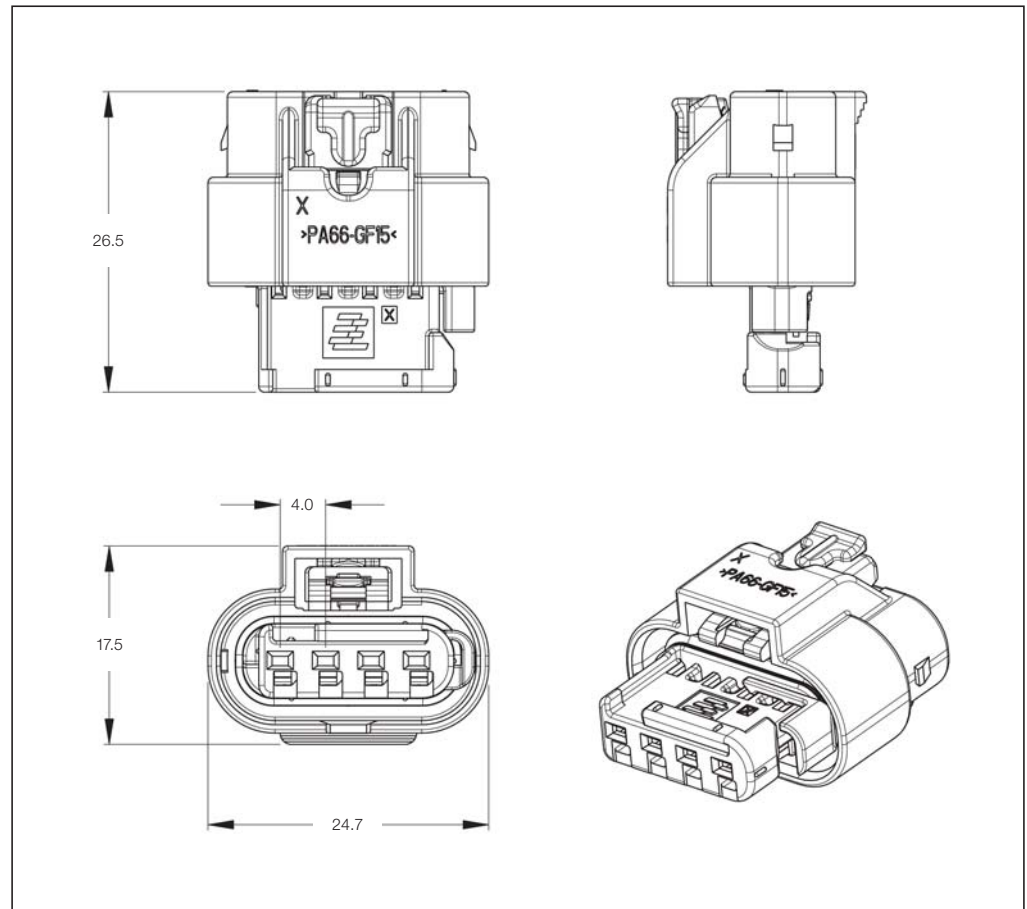
Housing Material:
PA66-GF15 for outer housing,
PA66-GF35 for inner housing

Wire Size Range:
0.5–1.5 mm²

Product Specification:
—

Application Specification:
408-8928

- For use with Clean Body Contacts Numbers **1418847** and **1418850**.
- Can be used with or without CPA (Connector Position Assurance).
- Blocked circuits versions are available (see customer drawing for released options).



Sealed 1.2 mm Receptacle Housings – Standard Latch without CPA

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	A	Black	1-1456426-1				
	B	Natural	1-1456426-2				
	C	Blue	1-1456426-3				
	D	Gray	1-1456426-4				

Sealed 1.2 mm Receptacle Housings – Standard Latch with CPA

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	A	Black	1-1456426-5				
	B	Natural	1-1456426-6				
	C	Blue	1-1456426-7				
	D	Gray	1-1456426-8				

Sealed 1.2 mm Receptacle Housings for Clean Body Contacts

Technical Features

No. of Positions:
6 Positions

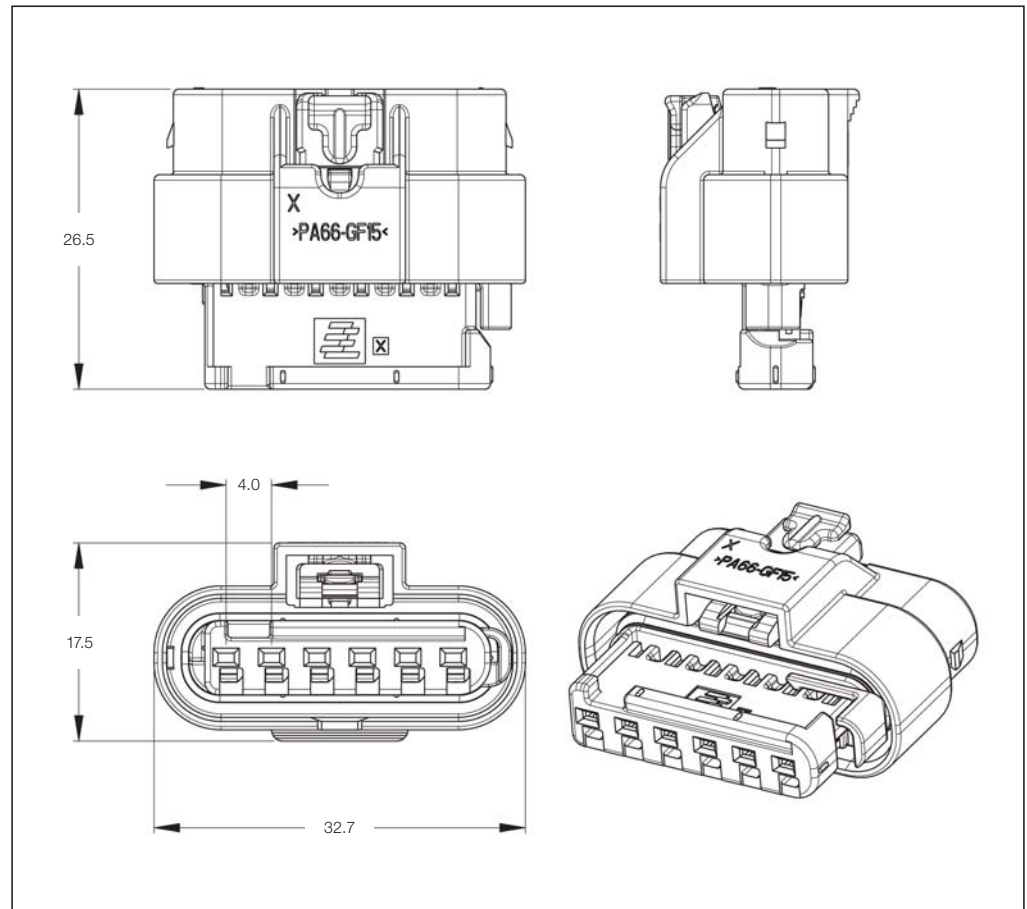
Housing Material:
PA66-GF15 for outer housing,
PA66-GF35 for inner housing

Wire Size Range:
0.5–1.5 mm²

Product Specification:
—

Application Specification:
408-8928

- For use with Clean Body Contacts Numbers **1418847** and **1418850**.
- Can be used with or without CPA (Connector Position Assurance).
- Blocked circuits versions are available (see customer drawing for released options).



Sealed 1.2 mm Receptacle Housings – Standard Latch without CPA

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
6	A	Black	1924292-1				
	B	Natural	1924292-2				
	C	Blue	1924292-3				
	D	Gray	1924292-4				

Sealed 1.2 mm Receptacle Housings – Standard Latch with CPA

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
6	A	Black	1924292-5				
	B	Natural	1924292-6				
	C	Blue	1924292-7				
	D	Gray	1924292-8				

Numerical Index

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
828904-1	4-11	1418847-3	4-6	1452672-1	4-5	1579007-8	4-6
828904-2	4-11	1418848-1	4-6	1452672-2	4-5	1-1579007-0	4-6
828905-1	4-11	1418848-2	4-6	1452672-3	4-5	5-1579007-3	4-4, 4-7
828922-1	4-11	1418848-3	4-6	1-1456426-1	4-37	5-1579008-2	4-10
828985-1	4-11	1418850-1	4-6	1-1456426-2	4-37	1670144-1	4-6
828986-1	4-11	1418850-2	4-6	1-1456426-3	4-37	1670144-2	4-6
963142-2	4-9	1418850-3	4-6	1-1456426-4	4-37	1670144-3	4-6
963143-1	4-9	1418851-1	4-6	1-1456426-5	4-37	1670145-1	4-6
967056-1	4-9	1418851-2	4-6	1-1456426-6	4-37	1670145-2	4-6
967067-1	4-9	1418851-3	4-6	1-1456426-7	4-37	1670145-3	4-6
967067-2	4-9	1452503-1	4-6	1-1456426-8	4-37	1670146-1	4-6
1394897-1	4-6	1452503-2	4-6	1488991-1	4-35	1670146-2	4-6
1394897-2	4-6	1452503-3	4-6	1488991-2	4-35	1670146-3	4-6
1394897-3	4-6	1452504-1	4-6	1488991-3	4-35	1670147-1	4-6
1418756-1	4-7	1452504-2	4-6	1488991-4	4-35	1670147-2	4-6
1418756-2	4-7	1452504-3	4-6	1488991-5	4-35	1670147-3	4-6
1418756-3	4-7	1452653-1	4-5	1488991-6	4-35	1670802-1	4-10
1418757-1	4-7	1452653-2	4-5	1488991-7	4-35	1670802-3	4-10
1418757-2	4-7	1452653-3	4-5	1488991-8	4-35	1670803-1	4-10
1418757-3	4-7	1452654-1	4-5	1488992-1	4-36	1670803-3	4-10
1418758-1	4-7	1452654-2	4-5	1488992-2	4-36	1670804-1	4-10
1418758-2	4-7	1452654-3	4-5	1488992-3	4-36	1670804-3	4-10
1418758-3	4-7	1452656-1	4-5	1488992-4	4-36	1670805-1	4-10
1418759-1	4-7	1452656-2	4-5	1488992-5	4-36	1670805-3	4-10
1418759-2	4-7	1452656-3	4-5	1488992-6	4-36	1670806-1	4-10
1418759-3	4-7	1452657-1	4-5	1488992-7	4-36	1670806-3	4-10
1418760-1	4-7	1452657-2	4-5	1488992-8	4-36	1670807-1	4-10
1418760-2	4-7	1452657-3	4-5	1534063-1	4-6	1670807-3	4-10
1418760-3	4-7	1452659-1	4-5	1534063-2	4-6	1-1670915-1	4-17
1418761-1	4-7	1452659-2	4-5	1534063-3	4-6	1-1670916-1	4-18, 4-19, 4-20
1418761-2	4-7	1452659-3	4-5	1534594-1	4-6	2-1670916-1	4-18
1418761-3	4-7	1452660-1	4-5	1534594-2	4-6	1-1670917-1	4-23, 4-24, 4-25
1418762-1	4-7	1452660-2	4-5	1534594-3	4-6	2-1670917-1	4-23
1418762-2	4-7	1452660-3	4-5	1534595-1	4-6	1-1670918-1	4-27, 4-29
1418762-3	4-7	1452665-1	4-5	1534595-2	4-6	2-1670918-1	4-27
1418763-1	4-7	1452665-2	4-5	1534595-3	4-6	1-1670919-1	4-33
1418763-2	4-7	1452665-3	4-5	1563719-1	4-10	1-1670921-1	4-31
1418763-3	4-7	1452666-1	4-5	1563719-3	4-10	2-1670921-1	4-31
1418841-1	4-6	1452666-2	4-5	1563720-1	4-10	1-1703494-1	4-23, 4-24
1418841-2	4-6	1452666-3	4-5	1563720-3	4-10	1-1703494-2	4-25
1418841-3	4-6	1452668-1	4-5	1563888-1	4-5	1-1703498-1	4-18, 4-19
1418844-1	4-6	1452668-2	4-5	1563889-1	4-5	1-1703498-2	4-20
1418844-2	4-6	1452668-3	4-5	1563935-1	4-10	1703698-1	4-8
1418844-3	4-6	1452669-1	4-5	1563935-3	4-10	1703698-2	4-8
1418845-1	4-6	1452669-2	4-5	1563936-1	4-10	1703698-3	4-8
1418845-2	4-6	1452669-3	4-5	1563936-3	4-10	1718348-1	4-8
1418845-3	4-6	1452671-1	4-5	1-1564440-1	4-16	1718348-2	4-8
1418847-1	4-6	1452671-2	4-5	1-1564559-1	4-27, 4-28		
1418847-2	4-6	1452671-3	4-5	1-1564559-2	4-29		

Numerical Index

Part Number	Page	Part Number	Page	Part Number	Page
1718348-3	4-8	1718759-3	4-7	1719839-3	4-10
1718350-1	4-8	1718760-1	4-7	1719840-1	4-10
1718350-2	4-8	1718760-2	4-7	1719840-3	4-10
1718350-3	4-8	1718760-3	4-7	1719841-1	4-10
1718390-1	4-8	1718761-1	4-7	1719841-3	4-10
1718390-2	4-8	1718761-2	4-7	1-1924067-1	4-34
1718390-3	4-8	1718761-3	4-7	1-1924067-2	4-34
1718475-1	4-10	1718762-1	4-7	1-1924067-3	4-34
1718475-3	4-10	1718762-2	4-7	1-1924067-4	4-34
1718477-1	4-10	1718762-3	4-7	1-1924067-5	4-34
1718477-3	4-10	1718763-1	4-7	1-1924067-6	4-34
1-1718643-1	4-14	1718763-2	4-7	1924292-1	4-38
1-1718644-1	4-21	1718763-3	4-7	1924292-2	4-38
1-1718645-1	4-26	1-1718806-1	4-30	1924292-3	4-38
1-1718646-1	4-32	1-1718811-1	4-15	1924292-4	4-38
1718756-1	4-7	1-1718812-2	4-22	1924292-5	4-38
1718756-2	4-7	1719836-1	4-10	1924292-6	4-38
1718756-3	4-7	1719836-3	4-10	1924292-7	4-38
1718758-1	4-7	1719837-1	4-10	1924292-8	4-38
1718758-2	4-7	1719837-3	4-10	2063537-1	4-5, 4-7
1718758-3	4-7	1719838-1	4-10	2119103-1	4-7
1718759-1	4-7	1719838-3	4-10	2119104-1	4-5, 4-7
1718759-2	4-7	1719839-1	4-10	2119105-1	4-5

Disclaimer

While Tyco Electronics and its affiliates referenced herein have made every reasonable effort to ensure the accuracy of the information contained in this catalog, Tyco Electronics cannot assure that this information is error free. For this reason, Tyco Electronics does not make any representation or offer any guarantee that such information is accurate, correct, reliable or current. Tyco Electronics reserves the right to make any adjustments to the information at any time. Tyco Electronics expressly disclaims any implied warranty regarding the information contained herein, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose. Tyco Electronics' only obligations are those stated in Tyco Electronics' Standard Terms and Conditions of Sale. Tyco Electronics will in no case be liable for any incidental, indirect or consequential damages arising from or in connection with, including, but not limited to, the sale, resale, use or misuse of its products. Users should rely on their own judgment to evaluate the suitability of a product for a certain purpose and test each product for its intended application.

In case of any potential ambiguities or questions, please don't hesitate to contact us for clarification.

www.tycoelectronics.com

www.tycoelectronics.com/automotive

AMP, TE (Logo) and Tyco Electronics are trademarks of the Tyco Electronics Group of Companies and its Licensors.