

#### Introduction



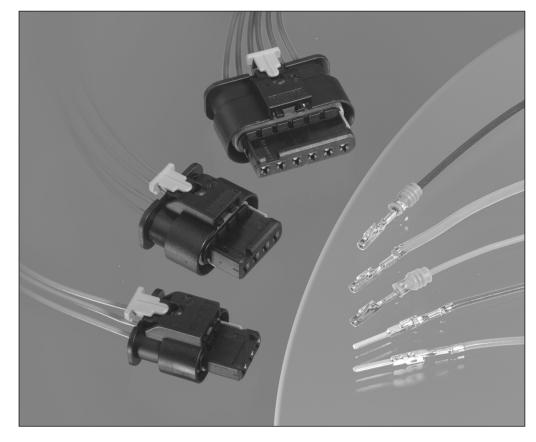








MCON Interconnection System offers High Reliability for Long Term Use



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

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

### **MCON Contact System**

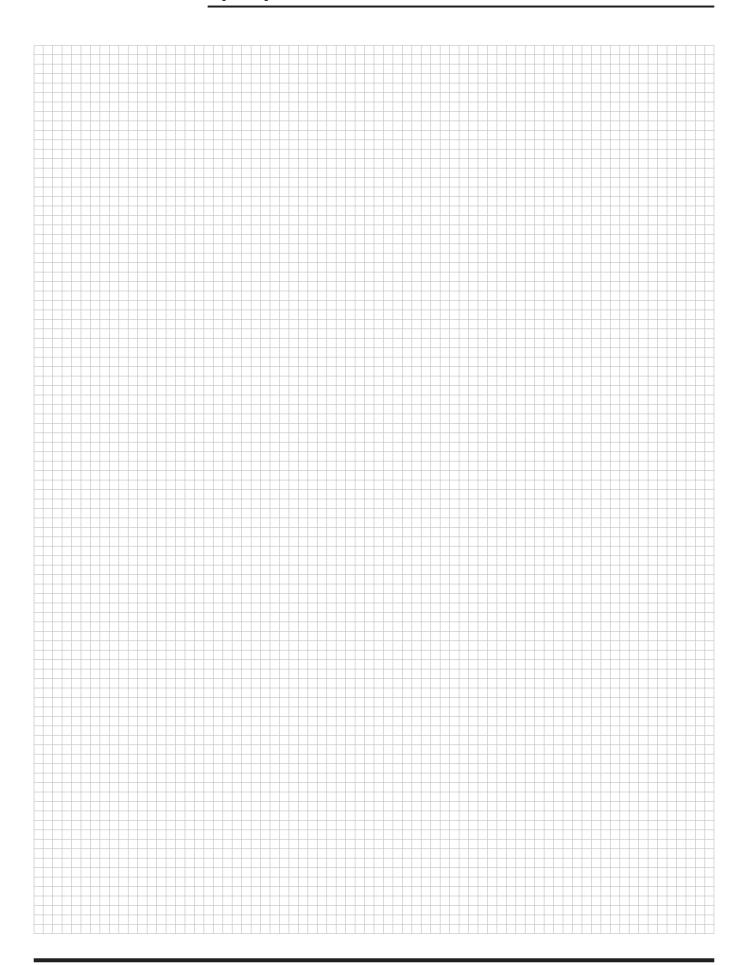
- Base material with high current capacity
- 8 defined contact points for increased reliability
- Improved vibration resistance
- Good guiding inside the cavity
- Protected contact spring due to the closed box
- Overstress protection of the contact springs
- Box with polarization and secondary locking 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)
- Polarization, several keyings
- Locking mechanism for smaller connectors/mating aid for higher numbers of ways



**Engineering Notes** 



# MCON Interconnection System Contact System

#### Introduction



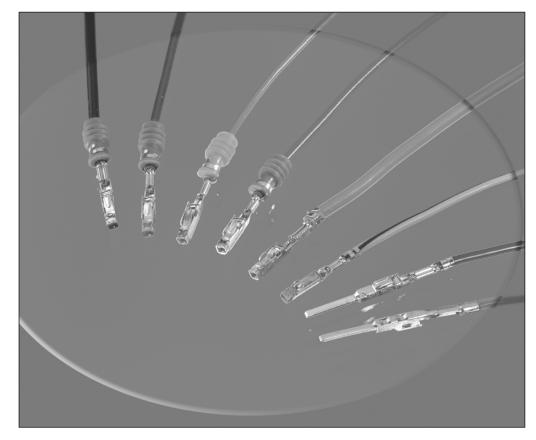








# MCON Tabs and Receptacles for Fast and Economical Application



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 TE Connectivity application tooling.



Receptacle Contacts – Locking Lance (LL)

#### **Technical Features**

**Contact Material:** CuSn 0.15/0.2; Insert Spring: CuNiSi

#### **Contact Finish:**

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

### Wire Size Range: 0.14-0.22 mm<sup>2</sup>,

0.25-0.35 mm<sup>2</sup> 0.50-0.75 mm<sup>2</sup>,

1.00-1.50 mm<sup>2</sup>

### **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  $\leq 2 \text{ m}\Omega$ 

#### 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:**

 $(1.2 \pm 0.1 \times 0.6 \pm 0.03 \text{ mm})$ 

# **Extraction Tool:**

Part No. 5-1579007-3

### **Mating Force:**

Max. 5 N

#### **Unmating Force:**

Max. 2.5 N

#### **Product Group Drawing:**

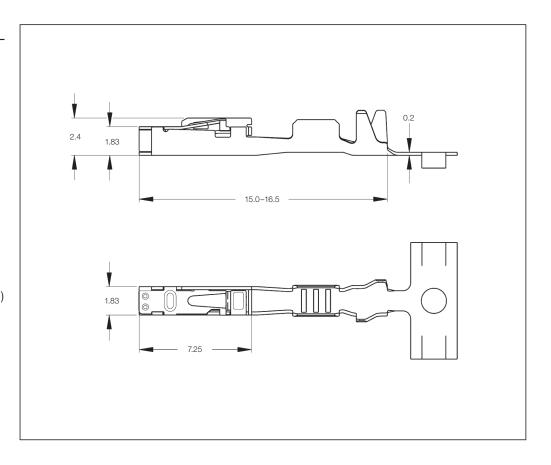
1452674

### **Product Specification:**

108-18782

#### **Application Specification:**

114-18464



# Modular Dimensions (Centerline):

max. 0.75 mm<sup>2</sup> 2.5 x 2.5 mm

max. 1.0 mm<sup>2</sup> 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

2.5 x 3.5 mm sealed 4.5 x 4.5 mm; max. 1.5 mm<sup>2</sup>

3.0 x 3.5 mm sealed staggered 4.0 x 4.5 mm,

cavity 3.95 mm diameter

<sup>•)</sup> Mating Cycles are depending on various technical influences and must be clarified in each individual case.



# **MCON Interconnection System** MCON-1.2 mm Contact System

Receptacle Contacts - Locking Lance (LL) (continued)

### Standard Receptacle Contacts (SRC)

Wire Size Range (mm²)	Insulatio	n Diameter		Part Numbers						
	(mm)		Material and Finish*	Strip	Package	Loose-	Package			
	FLK	FLR	and i mon	Form	Quantity	Piece	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		n Diameter		Part Numbers							
Range (mm²)	(mm)		Material and Finish*	Strip	Package	Loose-	Package	A 1: 4 4	Hand Tool		
	FLK	FLR		Form	Quantity	Piece	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	Insulation Diameter					Par	t Numbers		
Range (mm²) FLK	(mm) Mat		Strip	Package	Loose-	Package			
	FLK	FLR		Form	Quantity	Piece	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:** 

CuSn 0.15/0.2; Insert Spring: CuNiSi

**Contact Finish:** 

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

Wire Size Range:

0.14-0.22 mm<sup>2</sup>, 0.25-0.35 mm<sup>2</sup>, 0.50-0.75 mm<sup>2</sup>, 1.00-1.50 mm<sup>2</sup>

**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  $\leq 2 \text{ m}\Omega$ 

Mating Cycles:●

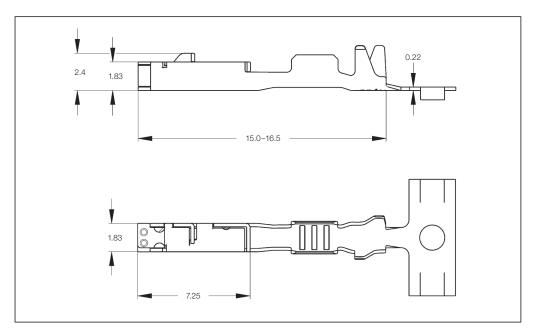
up to 20 cycles (tin-silver plated) up to 50 cycles (silver plated) up to 100 cycles (gold plated)

**Dimension of Male Contacts:**  $(1.2^{\pm0.1} \times 0.6^{\pm0.03} \text{ mm})$ 

**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 mm<sup>2</sup> 2.5 x 2.5 mm max. 1.0 mm<sup>2</sup> 2.5 x 3.0 mm

2.5 x 3.5 mm max. 1.5 mm<sup>2</sup> 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:** 

Catalog 1308070-3 Revised 9-2010

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 (mm²)	Insulation Diameter (mm)			Part Numbers						
			Material and Finish*	Strip	Package	Loose-	Package			
	FLK	FLR		Form	Quantity	Piece	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 <b>#</b>	8,000	1670145 <b>#</b>	500	x-1528673-x	2119108-x	
0.30-0.73		1.4-1.9	-17-27-3	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	Insulation Diameter (mm)			Part Numbers						
Range			Material and Finish*	Strip	Package	Loose-	Package			
(mm²)	FLK	FLR		Form	Form Quantity	Piece	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◊	
0.50-0.75		1410	1/0/0	1670146#	6,500	1670147 <b>#</b>	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	
1.0–1.5	-	1.9–2.4	-1 / -2 / -3	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.

# MCON Interconnection System MCON-1.2 mm Contact System

Tab Contacts - Locking Lance (LL)

#### **Technical Features**

**Contact Material:** 

CuNiSi;

Insert Tab: CuSn 0.15/0.2

**Contact Finish:** 

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

Wire Size Range:

0.14-0.22 mm<sup>2</sup>,

0.25-0.35 mm<sup>2</sup>,

0.50-0.75 mm<sup>2</sup>,

1.00-1.50 mm<sup>2</sup>

Extraction Tool: Part No. 5-1579007-3

**Product Group Drawing:** 

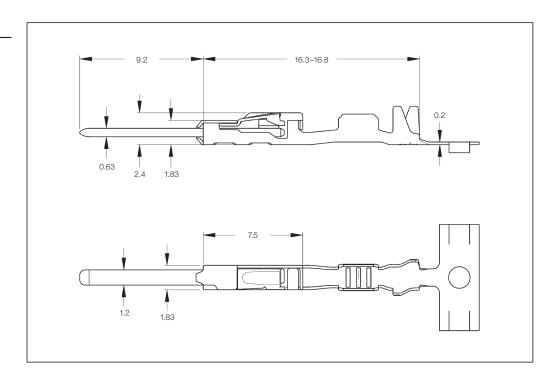
1418754

**Product Specification:** 

108-18782

**Application Specification:** 

114-18464



### **Modular Dimensions (Centerline):**

max. 0.75 mm<sup>2</sup> 2.5 x 2.5 mm

max. 1.0 mm<sup>2</sup> 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<sup>2</sup> 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

#### **Standard Tab Contacts**

Wire Size Range	Insulation Diameter (mm)			Part Numbers						
			Material and Finish*	Strip	Package	Loose-	Package	A 1: 4 4	Hand Tool	
(mm²)	FLK	FLR		Form	m Quantity	Piece	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 (mm²)	Insulation Diameter (mm)			Part Numbers						
			Material and Finish*	Strip	Package	Loose-	Package		Hand Tool	
	FLK	FLR		Form	Quantity	Piece	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.  $^{\diamond}$ ) On request.



# MCON Interconnection System MCON-1.2 mm Contact System

Tab Contacts – Clean Body (CB)

#### **Technical Features**

**Contact Material:** 

CuSn 0.15/0.2;

Insert Tab: CuSn 0.15/0.2

#### **Contact Finish:**

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

### Wire Size Range:

0.25-0.35 mm<sup>2</sup>,

0.50-0.75 mm<sup>2</sup>

# Modular Dimensions (Centerline):

3.0 x 3.5 mm

# **Product Group Drawing:**

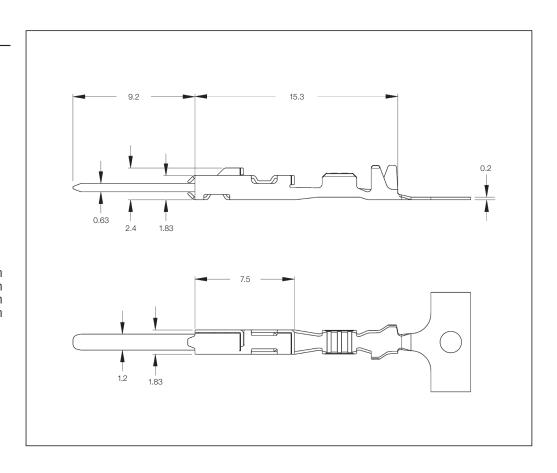
1718398

**Product Specification:** 

108-18782

**Application Specification:** 

114-18464



### **Standard Tab Contacts**

Wire Size		n Diameter	B.d A - vit - I		Part Numbers						
Range	Range (mm)	nm) 	Material and Finish*	Strip	Package Quantity	Loose- Piece	Package Quantity	Annlineter •	Hand Tool		
(mm²)	FLK	FLR		Form				Applicator •	manu 1001		
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

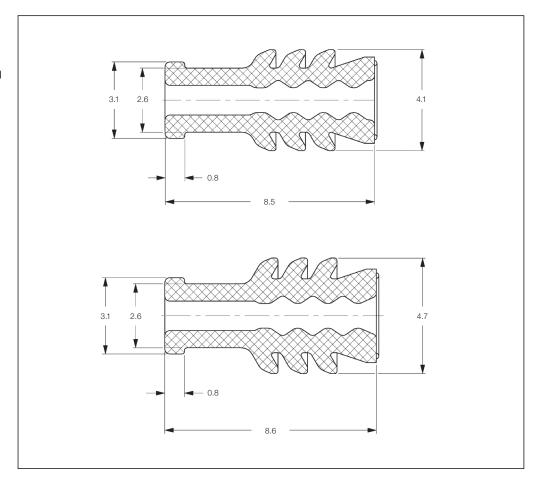
**Note:** All part numbers are RoHS and ELV compliant.

 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	n Diameter			Daalaaaa	
FLK (mm)	FLR (mm)	Color	Part Number	Package Quantity	
-	0.9–1.4	Yellow	967067-2	20,000	
-	1.4–2.1	Green	967067-1	20,000	
-	1.4–1.9	Red	2098582-1*	20,000	
-	1.9–2.1	Yellow	964972-1	20,000	
Sealir	ng Plug	Blue	967056-1	5,000	

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

# Cavity Diameter 3.95 mm

Insulation	n Diameter			Package Quantity	
FLK (mm)	FLR (mm)	Color	Part Number		
-	0.9–1.9	Gray	963142-2	20,000	
-	1.9–2.4	Green	967067-1	20,000	
Sealir	ng Plug	White	963143-1	20,000	
Sealli	ig riug	VVIIILE	903143-1		

# **MCON Interconnection System** MCON-2.8 mm Contact System

### Receptacle Contacts

#### **Technical Features**

**Contact Material:** CuSn 0.15/0.2;

Insertion Spring: CuNiSi

**Contact Finish:** 

Tin-silver plated, selective silver plated

Wire Size Range: 0.20-0.35 mm<sup>2</sup>, 0.50 mm<sup>2</sup>.

0.75-1.00 mm<sup>2</sup>,  $>1.0-2.5 \text{ mm}^2$ 

 $>2.5-4.0 \text{ mm}^2$ 

**Extraction Tool:** Part No. 5-1579008-2

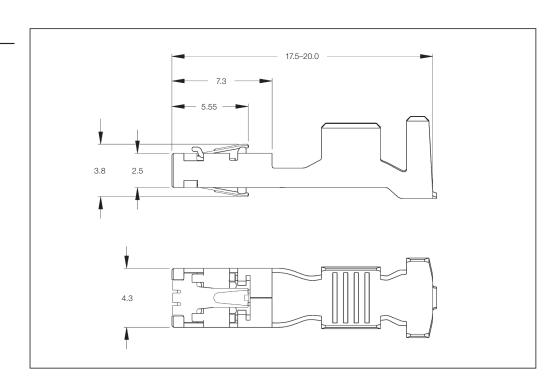
**Product Group Drawing:** 

1719797

**Product Specification:** 108-94002

**Application Specification:** 

114-18718



#### Modular Dimensions (Centerline):

max. 2.5 mm<sup>2</sup> 5.0 x 5.5 mm

staggered 4.5 x 5.5 mm

sealed 5.5 x 5.5 mm sealed staggered 5.0 x 5.5 mm

cavity diameter 4.9 mm

max. 4.0 mm<sup>2</sup> 5.5 x 5.5 mm

staggered 5.0 x 5.5 mm

sealed 7.2 x 7.2 mm sealed staggered 6.0 x 7.2 mm cavity diameter 6.4 mm

### **Standard Receptacle Contacts**

Wire Size	Insulation Diameter				Part Numbers				
Range	(	mm)	Material and Finish*	Strip	Package	Loose-	Package		
(mm²)	FLK	FLR		Form	Quantity	Piece	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	2119120-8
>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	Insulation Diameter (mm)			Part Numbers						
Range (mm²)			Material and Finish*	Strip	Package	Loose-	Package			
	FLK	FLR		Form	Quantity	Piece	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◊	

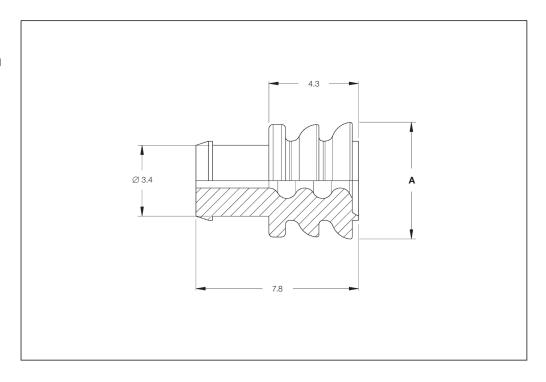
\*) Material and Finish:

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

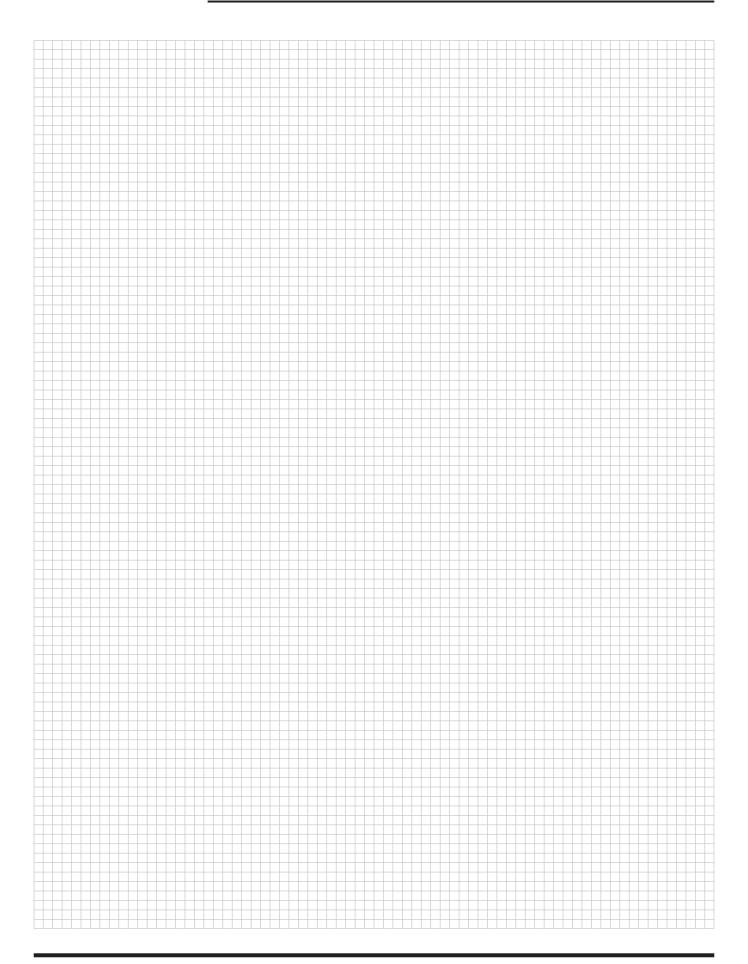
Wire Size Range (mm)	Insulation Diameter (mm)	Color	Diameter A (mm)	Part Number	Package Quantity	
0.75-1.00	1 4–2 1	Blue	5.6	828904-1	1,000	
0.75-1.00	1.4-2.1	blue	5.0	828904-2	10,000	
>1.5–2.5	2.2-3.0	White	5.6	828905-1	10,000	
Sealin	g Plug	Natural	5.6	828922-1	10,000	

### 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	
Sealir	ng Plug	Brown	7.2	828986-1	5,000	



**Engineering Notes** 





#### Introduction



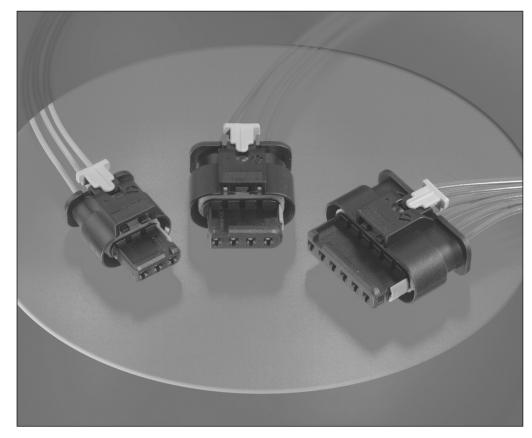








MCON Connectors offer Highest Reliability for Use in the Automotive Industry



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)
- 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**

 $\label{eq:No. of Positions:} \textbf{No. of Positions:}$ 

2 Positions

**Housing Material:** 

PA66-GF15

Wire Size Range:

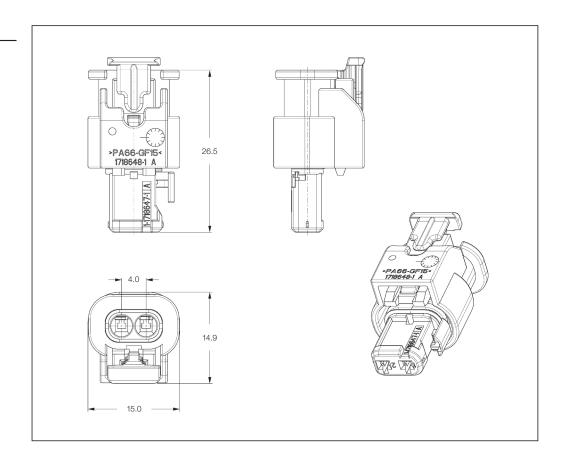
 $1.0 \text{ mm}^2$ 

**Product Specification:** 

108-18969

**Application Specification:** 

114-18861



N.	-4	Kardina Harrian		Part Numbers						
No Posi		Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical		
- 2	)	А	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:

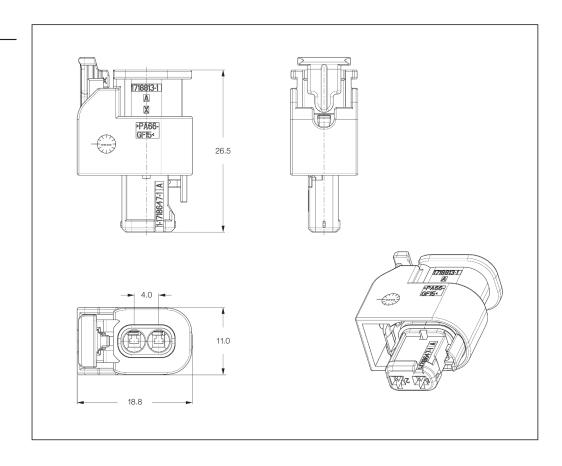
1.0 mm<sup>2</sup>

**Product Specification:** 

108-18969

**Application Specification:** 

114-18861



No. of	Varian	Harris a	Part Numbers						
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	Header Vertical		
2	А	Black	1-1718811-1	-	-	-	_		



# Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

#### **Technical Features**

 $\label{eq:No. of Positions:} \textbf{No. of Positions:}$ 

2 Positions

**Housing Material:** PA66-GF30/PA6-GF15

Wire Size Range:

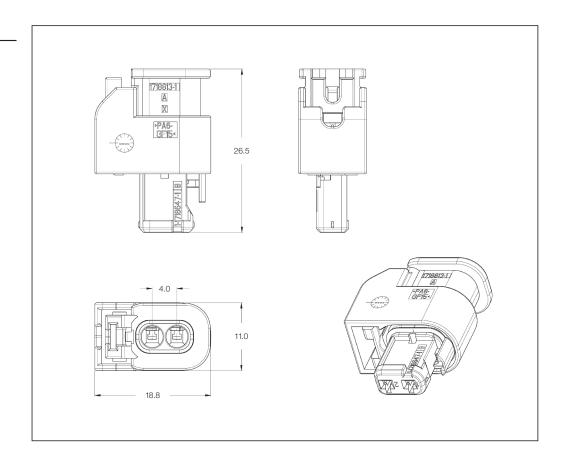
 $1.0 \text{ mm}^2$ 

 $\label{lem:product Specification:} \textbf{Product Specification:}$ 

108-18969

**Application Specification:** 

114-18861



No. of	Kardin a	Harris a	Part Numbers					
Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	B Header Vertical	
2	А	Black	1-1564440-1	-	-	-	-	



Housings and Connectors

# Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

#### **Technical Features**

 $\label{eq:No. of Positions:} \textbf{No. of Positions:}$ 

2 Positions

**Housing Material:** PA66-GF30/PA6-GF15

Wire Size Range:

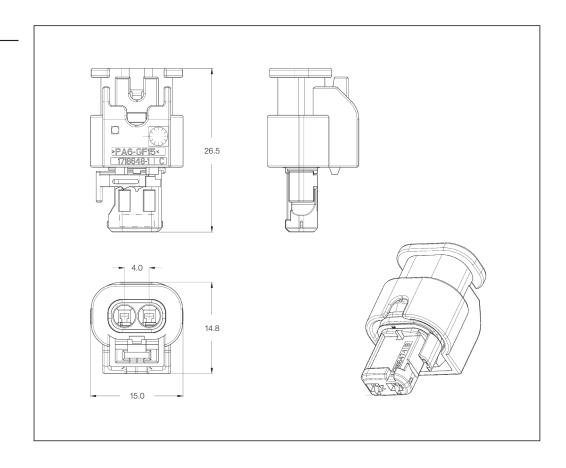
1.0 mm<sup>2</sup>

**Product Specification:** 

108-18969

**Application Specification:** 

114-18861



No. of	V av din m	Voying Haveing	Part Numbers						
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical		
2	А	Black	1-1670915-1	-	-	-	-		



# Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

#### **Technical Features**

 $\label{eq:No. of Positions:} \textbf{No. of Positions:}$ 

2 Positions

**Housing Material:** PA66-GF30/PA6-GF15

Wire Size Range:

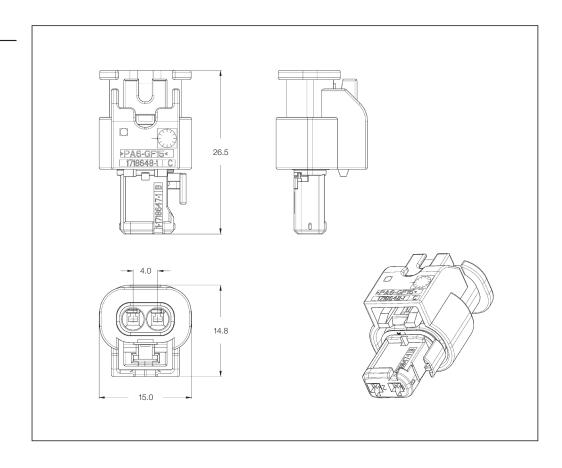
 $1.0 \text{ mm}^2$ 

 $\label{lem:product Specification:} \textbf{Product Specification:}$ 

108-18969

**Application Specification:** 

114-18861



No. of	Keying Options	Housing Color		Part Numbers						
Positions			Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	Header Vertical			
	А	Black	1-1670916-1	-	1-1703498-1	-	_			
2	В	Natural	2-1670916-1	-	-	-	_			



Housings and Connectors

# Sealed 1.2 mm Tab Housings for Locking Lance Contacts

#### **Technical Features**

 $\label{eq:No. of Positions:} \textbf{No. of Positions:}$ 

2 Positions

**Housing Material:** 

PBT-GF30

Wire Size Range:

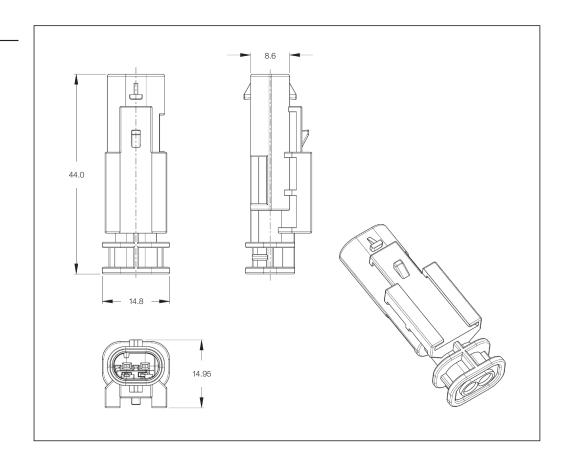
1.0 mm<sup>2</sup>

**Product Specification:** 

-

 ${\bf Application\ Specification:}$ 

114-18910-1



# Sealed 1.2 mm Tab Housings

N	V avina	Harrison.	Part Numbers						
No. of Positions	Keying Options	Housing Color	Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Right-Angle	Header Vertical		
2	А	Black	1-1703498-1	-	1-1670916-1	-	-		



Housings and Connectors

# Sealed 1.2 mm Tab Housings for Locking Lance Contacts

#### **Technical Features**

No. of Positions:

2 Positions

**Housing Material:** 

PBT-GF30

Wire Size Range:

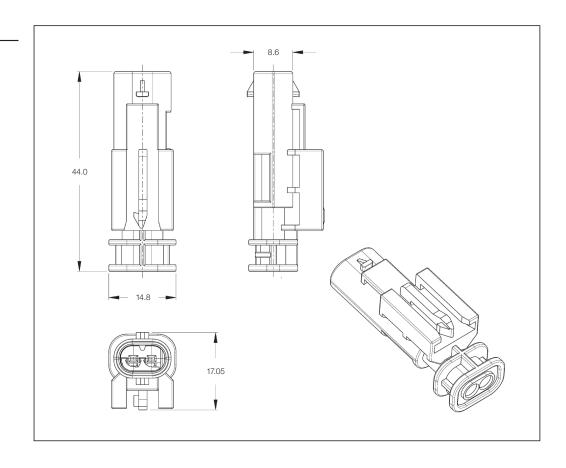
 $1.0 \text{ mm}^2$ 

**Product Specification:** 

-

 ${\bf Application\ Specification:}$ 

114-18910-1



# Sealed 1.2 mm Tab Housings

No. of	Varian.	Ususias	Part Numbers					
Positions	Keying Options	Housing Color	Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Right-Angle	Header Vertical	
2	А	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:

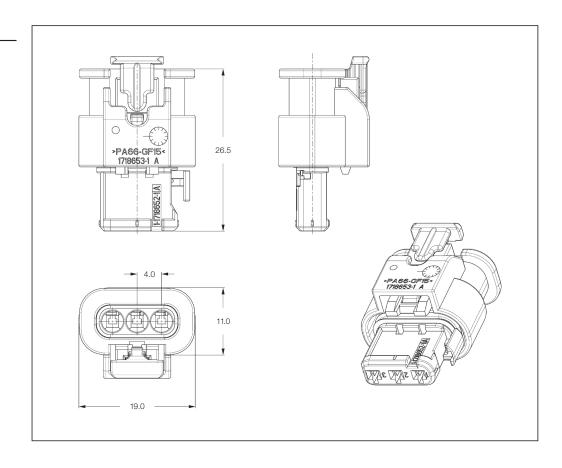
1.0 mm<sup>2</sup>

**Product Specification:** 

108-18969

**Application Specification:** 

114-18861



No of	Varian	Harrison.	Part Numbers						
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	Header Vertical		
3	А	Black	1-1718644-1	-	-	-	_		



# Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

#### **Technical Features**

 $\label{eq:No. of Positions:} \textbf{No. of Positions:}$ 

3 Positions

**Housing Material:** 

PA66-GF15

Wire Size Range:

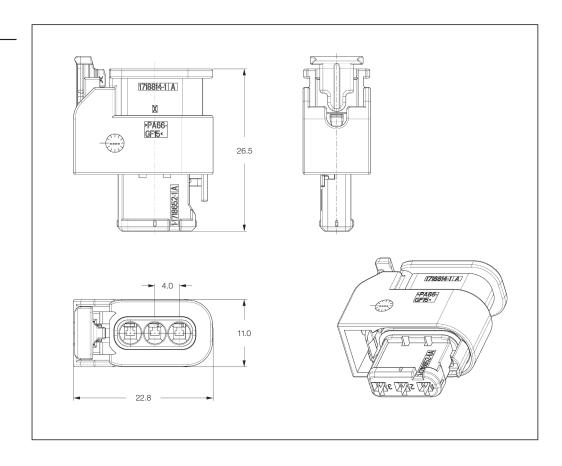
1.0 mm<sup>2</sup>

**Product Specification:** 

108-18969

**Application Specification:** 

114-18861



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



Housings and Connectors

### Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

#### **Technical Features**

 $\label{eq:No. of Positions:} \textbf{No. of Positions:}$ 

3 Positions

**Housing Material:** PA66-GF30/PA6-GF15

Wire Size Range:

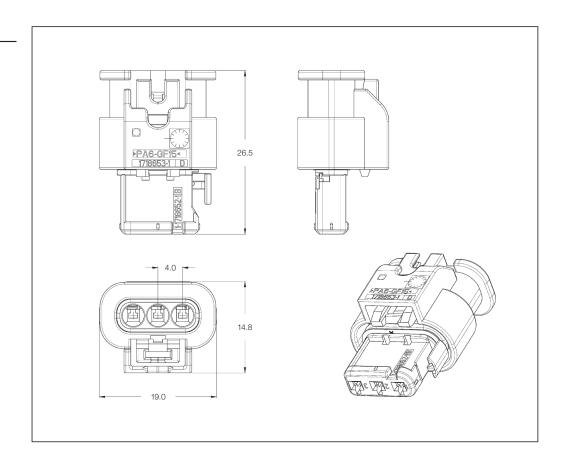
1.0 mm<sup>2</sup>

**Product Specification:** 

108-18969

**Application Specification:** 

114-18861



No. of	Keying Options	Housing Color		Part Numbers						
Positions			Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	Header Vertical			
-	А	Black	1-1670917-1	-	1-1703494-1	-	_			
3	В	Natural	2-1670917-1	-	-	-	_			



Housings and Connectors

# Sealed 1.2 mm Tab Housings for Locking Lance Contacts

#### **Technical Features**

 $\label{eq:No. of Positions:} \textbf{No. of Positions:}$ 

3 Positions

**Housing Material:** 

PBT-GF30

Wire Size Range:

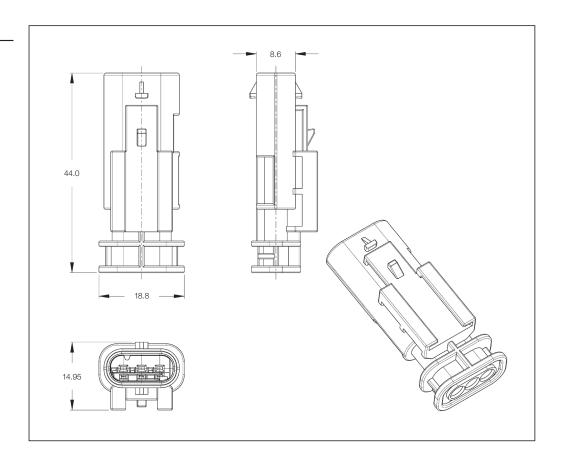
1.0 mm<sup>2</sup>

**Product Specification:** 

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 ${\bf Application\ Specification:}$ 

114-18910-1



# Sealed 1.2 mm Tab Housings

No. of	V avina	ying Housing ions Color		Part Numbers						
No. of Positions	Options		Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Right-Angle	Header Vertical			
3	А	Black	1-1703494-1	-	1-1670917-1	-	_			



Housings and Connectors

# Sealed 1.2 mm Tab Housings for Locking Lance Contacts

#### **Technical Features**

No. of Positions:

3 Positions

**Housing Material:** 

PBT-GF30

Wire Size Range:

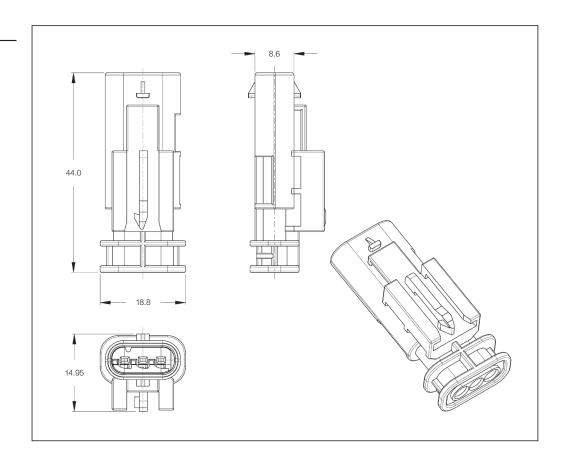
1.0 mm<sup>2</sup>

**Product Specification:** 

-

 ${\bf Application\ Specification:}$ 

114-18910-1



# Sealed 1.2 mm Tab Housings

No. of	Varian			Part Numbers						
No. of Positions	Keying Options		Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Right-Angle	Header Vertical			
3	А	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:

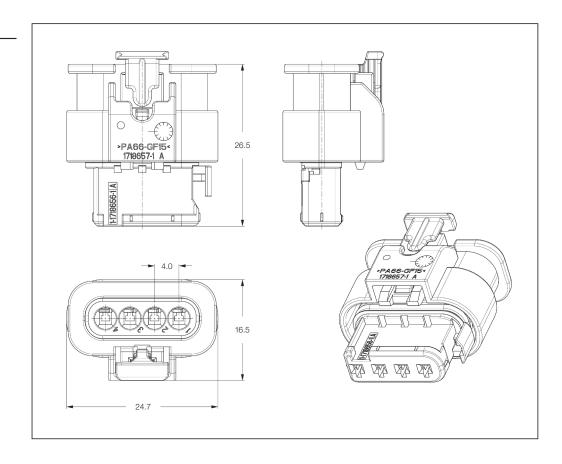
1.0 mm<sup>2</sup>

**Product Specification:** 

108-18969

**Application Specification:** 

114-18861



No. of	Kovina	ying Housing ions Color	Part Numbers						
No. of Positions	Options		Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical		
4	А	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:

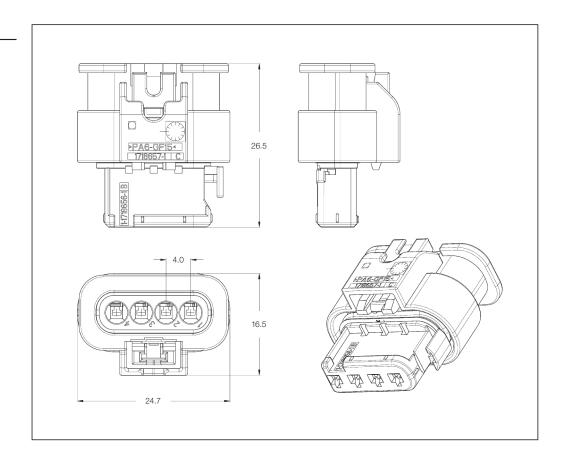
1.0 mm<sup>2</sup>

**Product Specification:** 

108-18969

**Application Specification:** 

114-18861



No. of	V av din m	Housing Color		Part Numbers						
No. of Positions	Keying Options		Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	Header Vertical			
	Α	Black	1-1670918-1	-	1-1564559-1	-	_			
4	В	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:

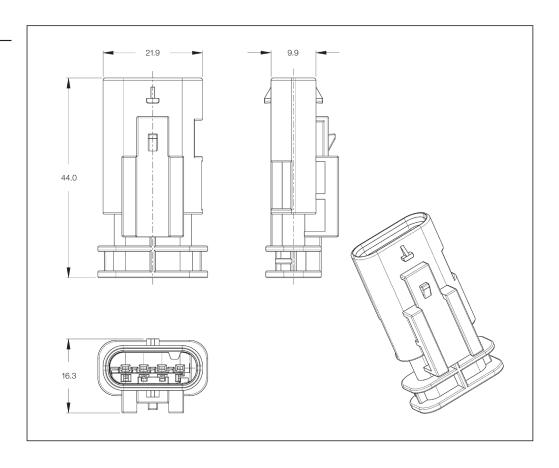
1.0 mm<sup>2</sup>

**Product Specification:** 

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 ${\bf Application\ Specification:}$ 

114-18910-1



# Sealed 1.2 mm Tab Housings

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



Housings and Connectors

# Sealed 1.2 mm Tab Housings for Locking Lance Contacts

#### **Technical Features**

No. of Positions:

4 Positions

**Housing Material:** 

PBT-GF30

Wire Size Range:

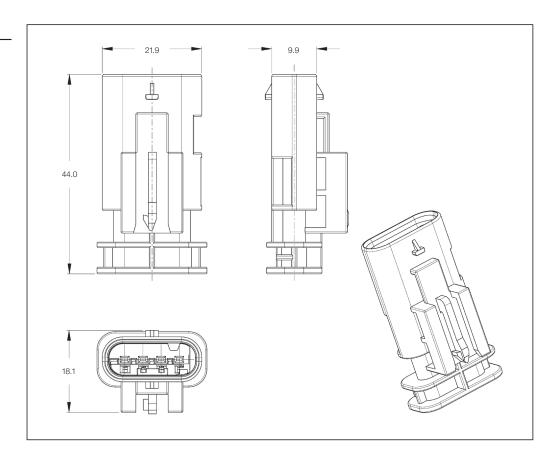
1.0 mm<sup>2</sup>

**Product Specification:** 

-

 ${\bf Application\ Specification:}$ 

114-18910-1



# Sealed 1.2 mm Tab Housings

	No. of	Varian			Part Numbers						
	No. of Positions	Keying Options		Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Right-Angle	Header Vertical			
_	4	А	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

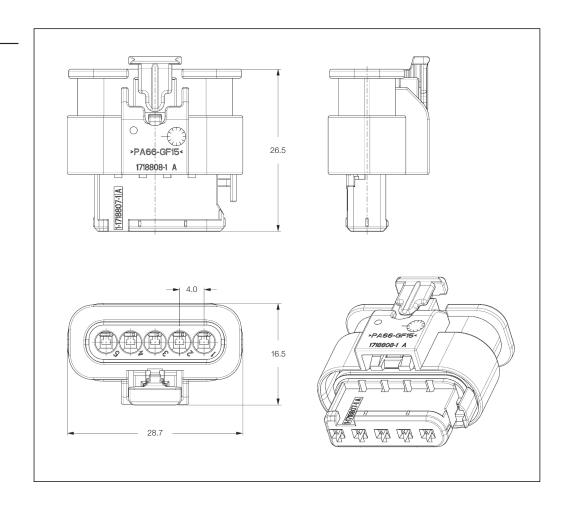
Wire Size Range:

 $1.0 \text{ mm}^2$ 

**Product Specification:** 

108-18969

**Application Specification:** 



Sealed 1.2 mm Receptacle Housings

No. of	V in			Part Numbers						
No. of Positions	Keying Options		Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical			
5	А	Black	1-1718806-1	-	_	-	_			



Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

# Technical Features

 $\label{eq:No. of Positions:} \textbf{No. of Positions:}$ 

5 Positions

**Housing Material:** PA66-GF30/PA6-GF15

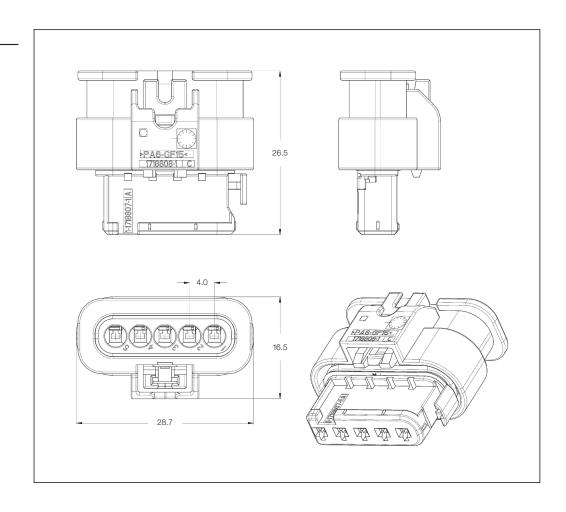
Wire Size Range:

 $1.0 \text{ mm}^2$ 

**Product Specification:** 

108-18969

**Application Specification:** 



Sealed 1.2 mm Receptacle Housings

No. of	Kasina			Part Numbers						
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	B Header Vertical			
-	А	Black	1-1670921-1			_				
5	В	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

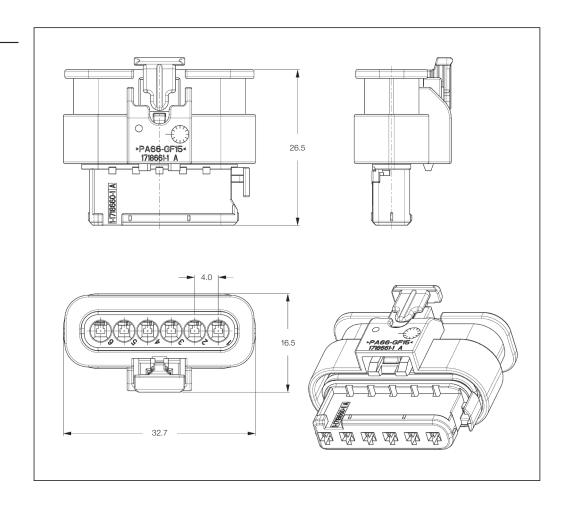
Wire Size Range:

 $1.0 \text{ mm}^2$ 

**Product Specification:** 

108-18969

**Application Specification:** 



Sealed 1.2 mm Receptacle Housings

No. of	V in			Part Numbers					
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	Header Vertical		
6	А	Black	1-1718646-1	-	-	-	_		



Housings and Connectors

### Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

#### **Technical Features**

 $\label{eq:No. of Positions:} \textbf{No. of Positions:}$ 

6 Positions

**Housing Material:** PA66-GF30/PA6-GF15

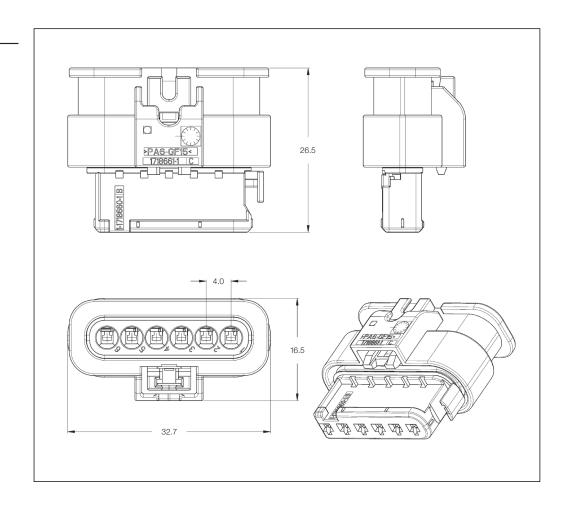
Wire Size Range:

 $1.0 \text{ mm}^2$ 

 $\label{lem:product Specification:} \textbf{Product Specification:}$ 

108-18969

**Application Specification:** 



Sealed 1.2 mm Receptacle Housings

No. of	Vi			Part Numbers						
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical			
6	А	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:

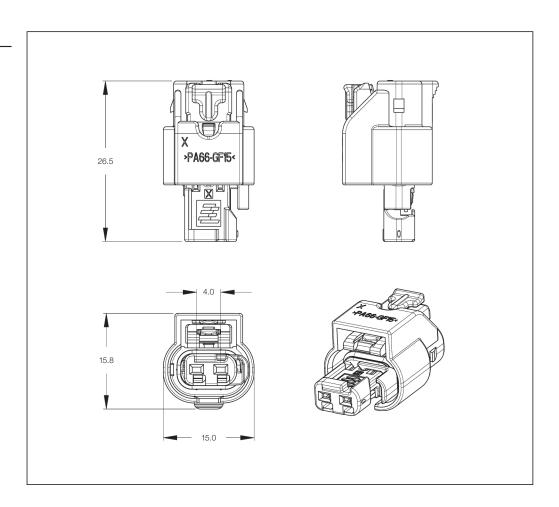
0.5-1.5 mm<sup>2</sup> (20-16 AWG)

**Product Specification:** 

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**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	V i		T			Part Numbers		
No. of Positions	Keying Options	Housing Color	Temperature Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCI Right-Angle	3 Header Vertical
	Α	Black	125 °C	1-1924067-1				
	В	Natural	125 °C	1-1924067-2	-	-	_	-
2	С	Blue	125 °C	1-1924067-3				
2	A	Brown	150 °C	2098557-1				
	В	Brown	150 °C	2098557-2	-	-	_	-
	С	Brown	150 °C	2098557-3				

Sealed 1.2 mm Receptacle Housings for Clean Body Contacts (continued)

#### **Technical Features**

No. of Positions:

2 Positions

**Housing Material:** 

PA66-GF15 for outer housing, PA66-GF35 for inner housing

Wire Size Range:

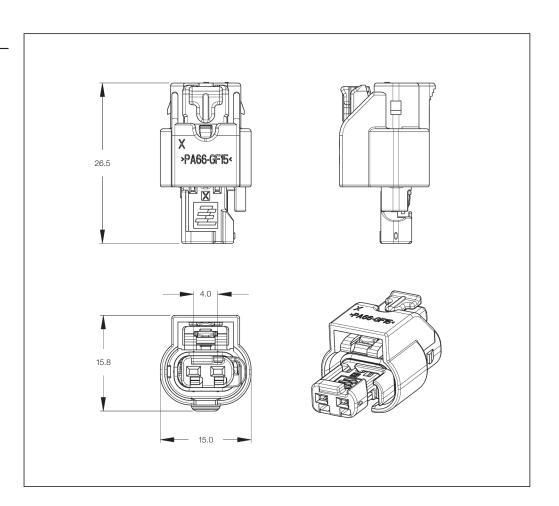
0.5-1.5 mm<sup>2</sup> (20-16 AWG)

**Product Specification:** 

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**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 with CPA

No. of	V i	Harrain a	Temperature			Part Numbers		
No. of Positions	Keying Options	Housing Color	Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCI Right-Angle	3 Header Vertical
	А	Black	125 °C	1-1924067-4				
	В	Natural	125 °C	1-1924067-5	-	-	_	_
2	С	Blue	125 °C	1-1924067-6				
2	A	Brown	150 °C	2098557-4				
	В	Brown	150 °C	2098557-5	-	-	_	_
	С	Brown	150 °C	2098557-6				

Sealed 1.2 mm Receptacle Housings - Side Latch without CPA

No. of	Karina		Townsuctives		Part Numbers				
Positions	Keying Options	Housing Color	Temperature Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCI Right-Angle	3 Header Vertical	
	А	Brown	150 °C	2098641-1					
2	В	Brown	150 °C	2098641-2	-	-	-	-	
	С	Brown	150 °C	2098641-3					



### Sealed 1.2 mm Receptacle Housings for Clean Body Contacts

#### **Technical Features**

No. of Positions:

3 Positions

**Housing Material:** 

PA66-GF35

Wire Size Range:

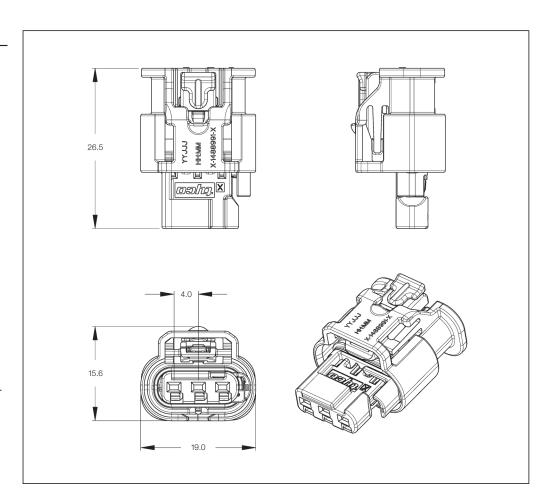
0.5-1.5 mm<sup>2</sup> (20-16 AWG)

**Product Specification:** 

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**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

N4			T		Part Numbers				
No. of Positions	Keying Options	Housing Color	Temperature Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	3 Header Vertical	
	А	Black	125 °C	1488991-1					
0	В	Natural	125 °C	1488991-2					
3	С	Blue	125 °C	1488991-3	_	-	_	_	
	D	Gray	125 °C	1488991-4					

Sealed 1.2 mm Receptacle Housings – Standard Latch with CPA

No. of	Keying Options	Housing Color	Tamanawatuwa		Part Numbers				
No. of Positions			Temperature Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	B Header Vertical	
	А	Black	125 °C	1488991-5	-	-	-		
0	В	Natural	125 °C	1488991-6					
3	С	Blue	125 °C	1488991-7				_	
	D	Gray	125 °C	1488991-8					



Housings and Connectors

### Sealed 1.2 mm Receptacle Housings for Clean Body Contacts

#### **Technical Features**

No. of Positions:

3 Positions

**Housing Material:** 

PA66-GF35

Wire Size Range:

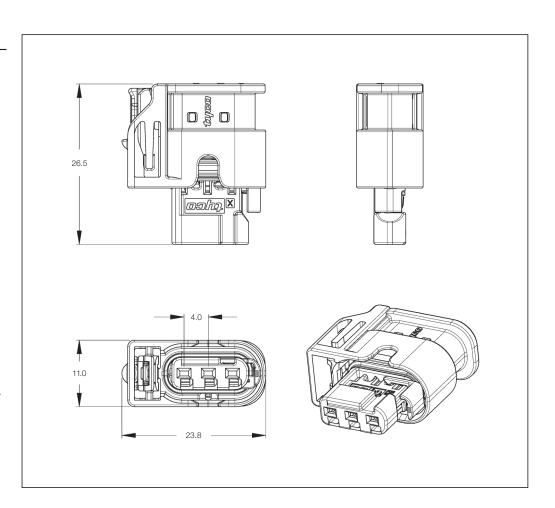
0.5-1.5 mm<sup>2</sup> (20-16 AWG)

**Product Specification:** 

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**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

N4			T		Part Numbers				
No. of Positions	Keying Options	Housing Color	Temperature Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	B Header Vertical	
	А	Black	125 °C	1488992-1					
0	В	Natural	125 °C	1488992-2					
3	С	Blue	125 °C	1488992-3	_	_	_	_	
	D	Gray	125 °C	1488992-4					

Sealed 1.2 mm Receptacle Housings – Low Profile Latch with CPA

No. of	Keying Options	Housing Color	Tamanawatuwa					
Positions			Temperature Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	B Header Vertical
	А	Black	125 °C	1488992-5				
0	В	Natural	125 °C	1488992-6				
3	С	Blue	125 °C	1488992-7	_	_	_	_
	D	Gray	125 °C	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:

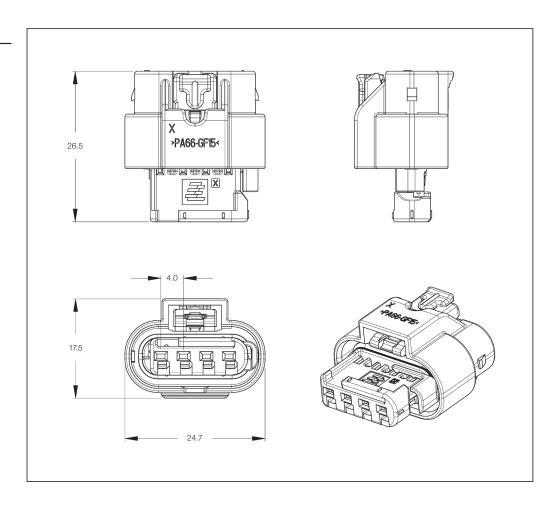
0.5-1.5 mm<sup>2</sup> (20-16 AWG)

**Product Specification:** 

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**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			T		Part Numbers				
No. of Positions	Keying Options	Housing Color	Temperature Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	B Header Vertical	
	А	Brown	150°C	1-1456426-1					
3	В	Brown	150°C	1-1456426-2					
3	С	Brown	150°C	1-1456426-3	_	_	_	-	
	D	Brown	150°C	1-1456426-4					

Sealed 1.2 mm Receptacle Housings – Standard Latch with CPA

No. of	Keying Options	Housing Color	Town over true		Part Numbers				
Positions			Temperature Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	B Header Vertical	
	А	Brown	150 °C	1-1456426-5	-	-	-		
0	В	Brown	150 °C	1-1456426-6					
3	С	Brown	150 °C	1-1456426-7				-	
	D	Brown	150 °C	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:

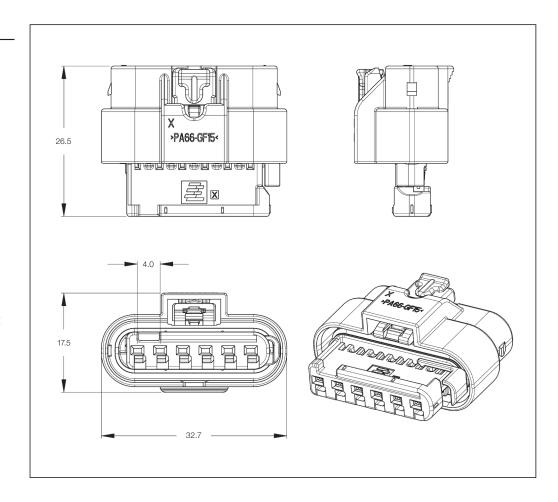
0.5-1.5 mm<sup>2</sup> (20-16 AWG)

**Product Specification:** 

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**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	Keying Options	Housing Color	T	Part Numbers				
No. of Positions			Temperature Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	B Header Vertical
	A	Black	125 °C	1924292-1	-	-	-	
	В	Natural	125 °C	1924292-2				-
	С	Blue	125 °C	1924292-3				
6	D	Gray	125 °C	1924292-4				
0	А	Brown	150 °C	2098559-1				
	В	Brown	150 °C	2098559-2				
	С	Brown	150 °C	2098559-3	_	_	_	_
	D	Brown	150 °C	2098559-4				



Sealed 1.2 mm Receptacle Housings for Clean Body Contacts (continued)

#### **Technical Features**

No. of Positions: 6 Positions

**Housing Material:** 

PA66-GF15 for outer housing, PA66-GF35 for inner housing

Wire Size Range:

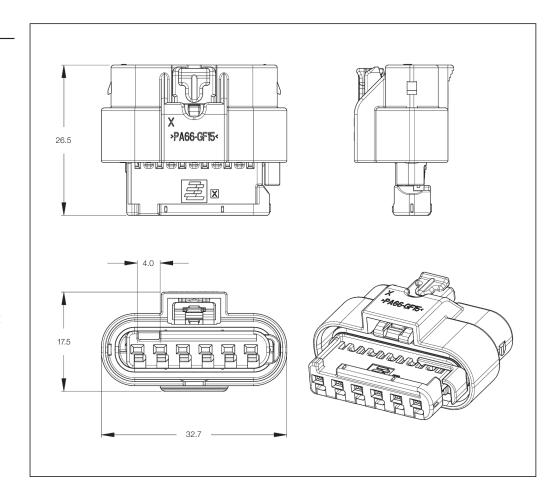
0.5-1.5 mm<sup>2</sup> (20-16 AWG)

**Product Specification:** 

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**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 with CPA

No. of	Keying Options		T	Part Numbers				
No. of Positions		Housing Color	Temperature Rating	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	B Header Vertical
	А	Black	125 °C	1924292-5			-	
	В	Natural	125 °C	1924292-6	-	-		-
	С	Blue	125 °C	1924292-7				
6	D	Gray	125 °C	1924292-8				
O	А	Brown	150 °C	2098559-5				-
	В	Brown	150 °C	2098559-6				
	С	Brown	150 °C	2098559-7	-	_	_	
	D	Brown	150 °C	2098559-8				