

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 fullfils 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

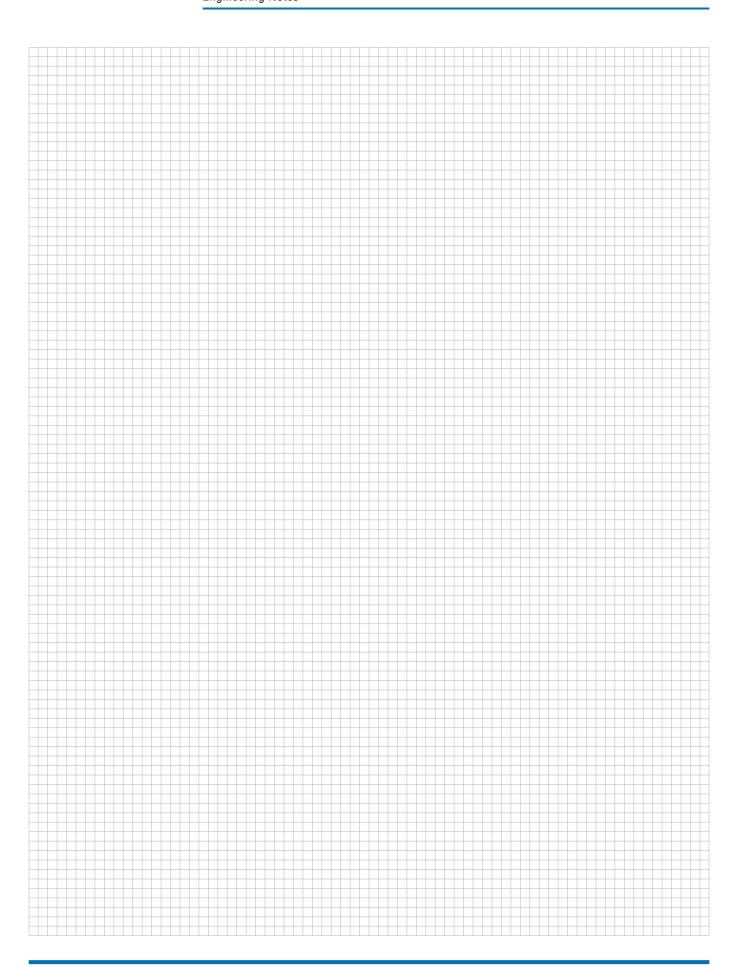
MCON Connectors

- High reliability status supported for long term use
- High vibration level supported
- Perfect design to avoid quality problems, reduce manufacturing and service
- 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

NOT th



Engineering Notes



Introduction



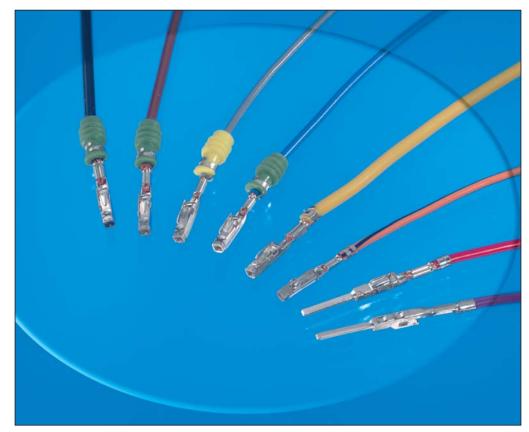








MCON Tabs and Receptacles for Fast and Economical Application



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: 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 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 \leq 2 m Ω

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 Tool:

Part No. 5-1579007-3

Mating Force:

Max. 5 N

Unmating Force:

Max. 2.5 N

Product Group Drawing:

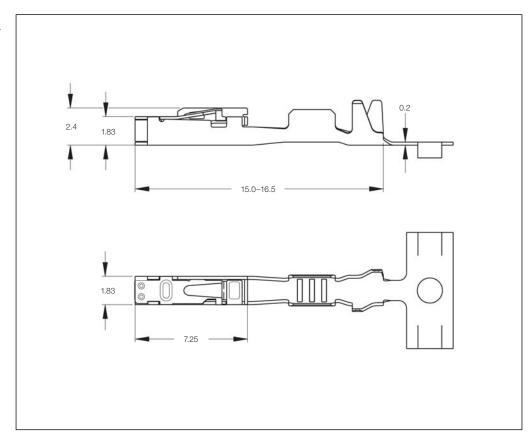
1452674

Product Specification:

108-18782

Application Specification:

114-18464



Modular Dimensions (Centerline):

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

18X. 1.0 111111 2.3 X 3.0 11111

sealed staggered 3.5 x 4.0 mm, cavity 3.55 mm diameter

max. 1.5 mm² 2.5 x 3.5 mm

2.5 x 3.5 mm sealed 4.5 x 4.5 mm; sealed staggered 4.0 s

nm sealed staggered 4.0 x 4.5 mm, cavity 3.95 mm diameter

sealed 4.0 x 4.0 mm;

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

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Receptacle Contacts - Locking Lance (LL) (continued)

Standard Receptacle Contacts (SRC)

Wire Size	Insulation Diameter (mm)			Part Numbers						
Range (mm²)			Material and Finish*	Strip	Package	e Loose-	Package	A U		
	FLK	FLR		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 II			
	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	Insulatio	n Diameter				Par	t Numbers		
Range	Range (mm)	(mm) Material and Finish		Strip	Package	Loose-	Package		
(mm²)	FLK	FLR	<u></u>	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 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 $\leq 2 \text{ m}\Omega$

Mating Cycles:●

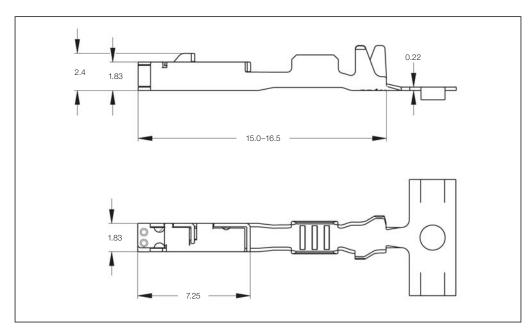
up to 20 cycles (tin-silver plated) up to 50 cycles (silver plated) up to 100 cycles (gold plated)

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

2.5 x 3.5 mm max. 1.5 mm² 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	Insulatio	n Diameter		Part Numbers						
Range (mm²)	(mm)		Material and Finish*	Strip	Package	Loose-	Package			
	FLK	FLR	u	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 #	8,000	1670145 #	500	x-1528673-x	2119108-x	
0.50-0.75	0.50-0.75 -	1.4–1.9	-1 / -2 / -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	Insulatio	n Diameter		Part Numbers						
Range	(mm)		Material and Finish*	Strip	Package	Loose-	Package			
(mm²)	FLK	FLR		Form Quantity F	Piece	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	_	1.4–1.9	-1 / -2 / -3	1670146 #	6,500	1670147 #	500	x-1528674-x	2119111-x	
0.30-0.73	_	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.

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 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:

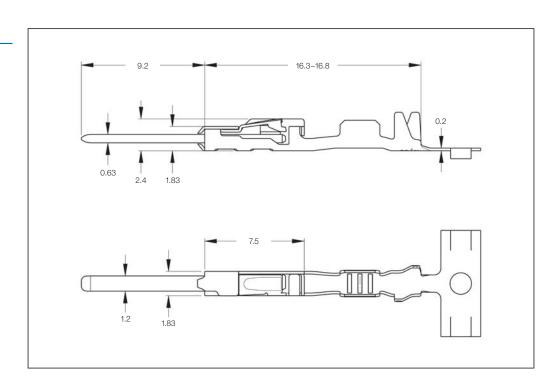
1418754

Product Specification:

108-18782

Application Specification:

114-18464



Modular Dimensions (Centerline):

max. 0.75 mm²

2.5 x 2.5 mm

max. 1.0 mm² 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

sealed 4.5 x 4.5 mm; max. 1.5 mm² 2.5 x 3.5 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		n Diameter		Part Numbers						
Range (mm²)	(mm)		Material and Finish*	Strip	Package	Loose-	Package	A		
	FLK	FLR		Form	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	Insulatio	n Diameter			Part Numbers						
Range	(mm)		Material and Finish*	Strip	Package	Loose-	Package				
(mm²)	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. ♦) On request.

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 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

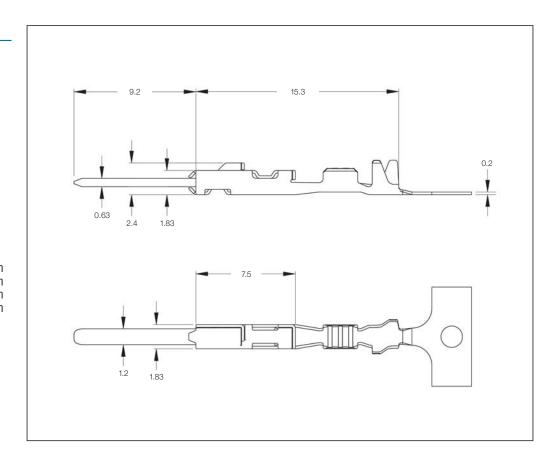
Product Group Drawing: 1718398

Product Specification:

108-18782

Application Specification:

114-18464



Standard Tab Contacts

Wire Size		n Diameter							
Range (mm) FLK	(mm) 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	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

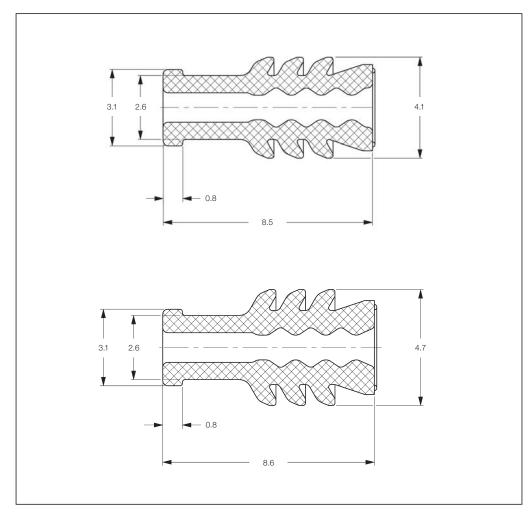
Note: All part numbers are RoHS and ELV compliant.

 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			Deelsere
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
Sealin	ng Plug	Blue	967056-1	5,000

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	
Sealing Plug		White	963143-1	20,000	

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 mm²,

 0.50 mm^2 ,

0.75-1.00 mm², >1.0-2.5 mm²

>2.5-4.0 mm 2

Extraction Tool:

Part No. 5-1579008-2

Product Group Drawing:

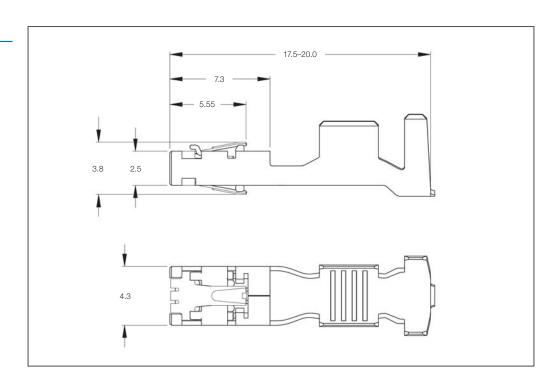
1719797

Product Specification:

108-94002

Application Specification:

114-18718



Modular Dimensions (Centerline):

max. 2.5 mm²

5.0 x 5.5 mm sea

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 mm²

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	Insulatio	n 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-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	Insulatio	n Diameter			Part Numbers						
Range	(mm)		Material and Finish*	Strip	Package	Loose-	Package				
(mm²)	FLK	FLR		Form	orm 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.

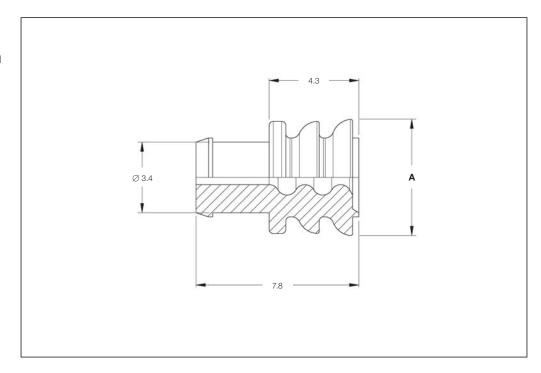
 The pre- and suffix for the applicators depends on the applied termination equipment. $^{\diamond}$) On request.



MCON Interconnection System MCON-2.8 mm Contact System

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)



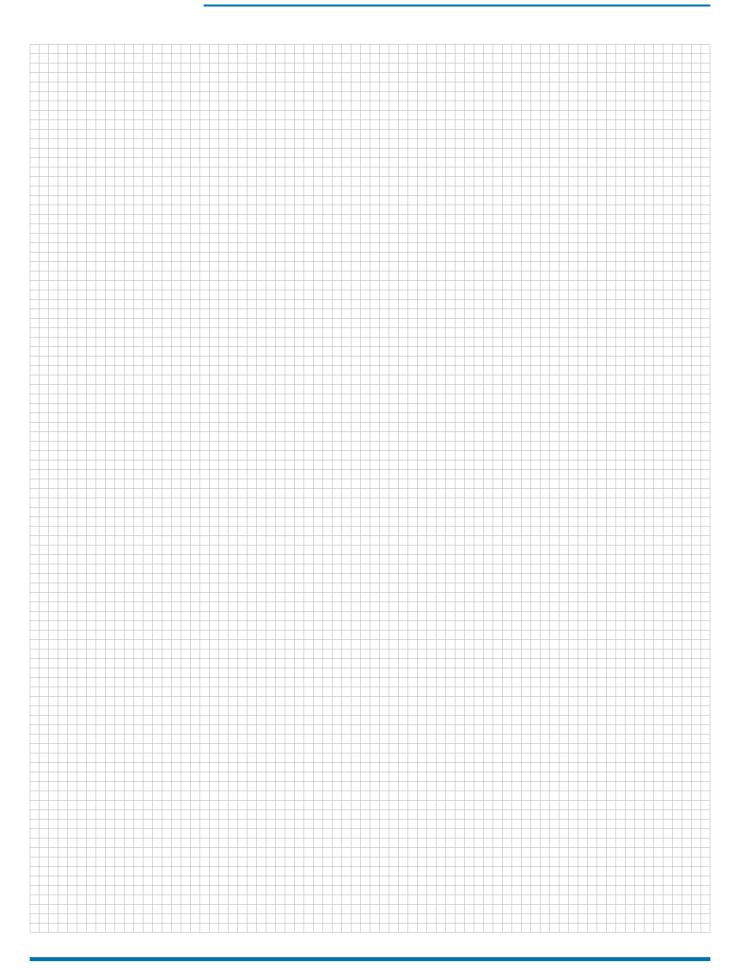
Cavity Diameter 4.9 mm

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	
	1.4-2.1	Dide	5.0	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	
Sealir	ng Plug	Brown	7.2	828986-1	5,000	

Engineering Notes



Housing and Connectors

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

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

Housing and Connectors

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

2 Positions

Housing Material:

PA66-GF15

Wire Size Range:

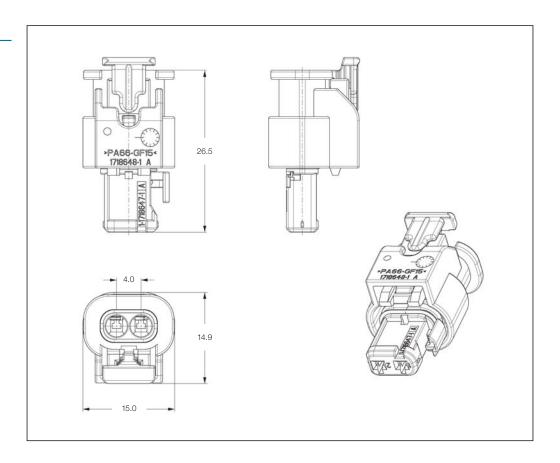
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



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

Housing and Connectors

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

2 Positions

Housing Material:

PA66 GF15

Wire Size Range:

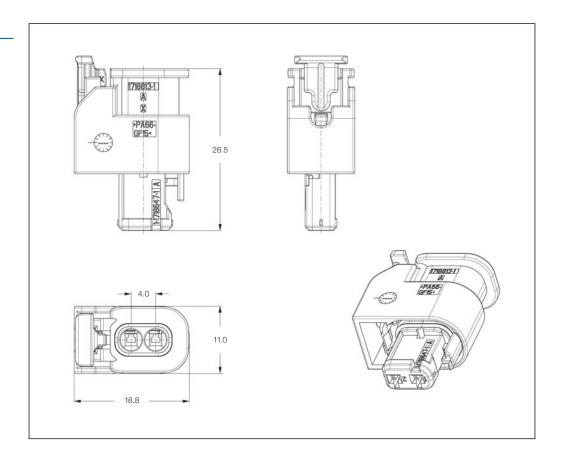
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



No. of	Varian	(avina IIi		Part Numbers					
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	B Header Vertical		
2	A	Black	1-1718811-1	-	-	-	-		

Housing and Connectors

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

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:

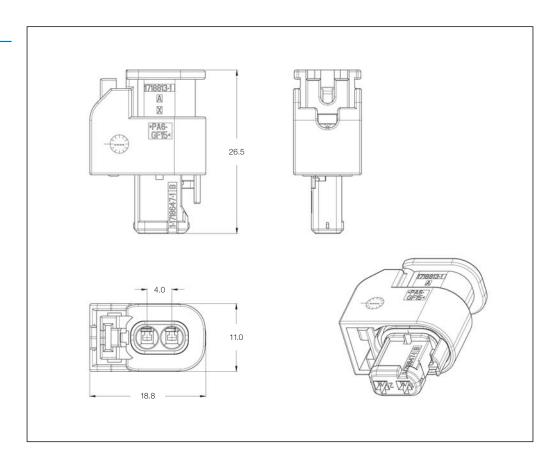
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



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

Housing and Connectors

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

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:

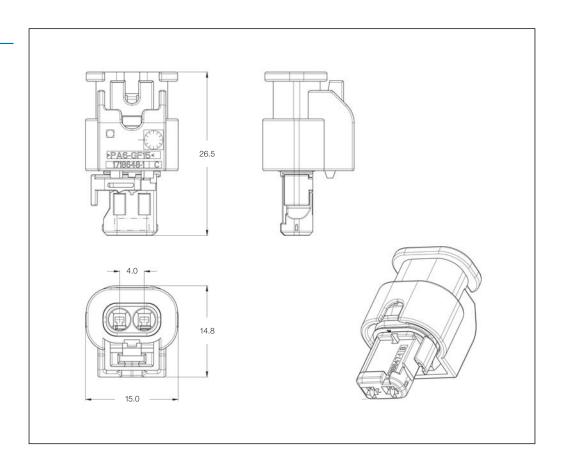
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



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

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

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:

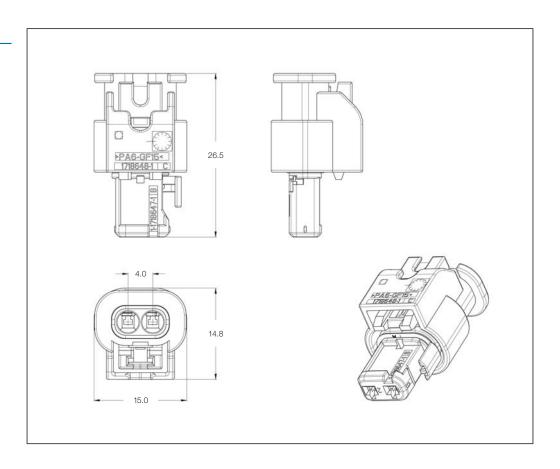
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



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

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

No. of Positions:

2 Positions

Housing Material:

PBT-GF30

Wire Size Range:

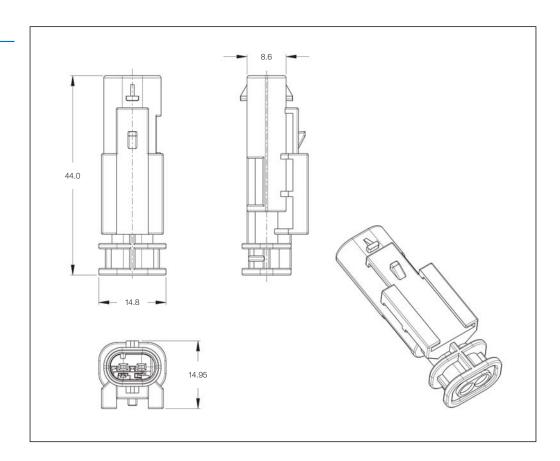
1.0 mm²

Product Specification:

-

Application Specification:

114-18910-1



Sealed 1.2 mm Tab Housings

No. of	V avrime			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	-	-		

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

No. of Positions:

2 Positions

Housing Material:

PBT-GF30

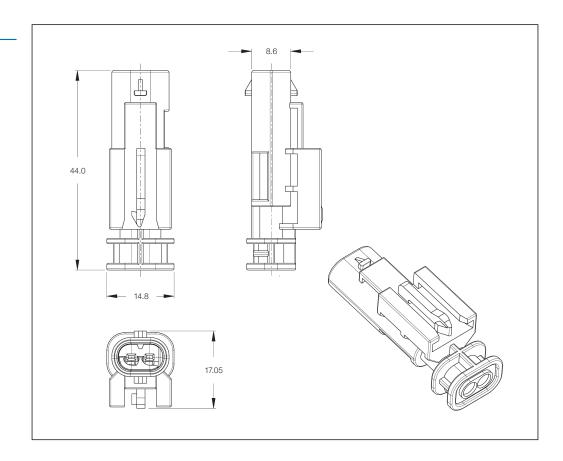
Wire Size Range:

1.0 mm²

Product Specification:

Application Specification:

114-18910-1



Sealed 1.2 mm Tab Housings

No. of	Varian	Varian Harris		Part Numbers					
No. of Positions	Keying Options	Housing Color	Tab Housing	Cover	Mating Receptacle Housing	Mating PCB Right-Angle	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:

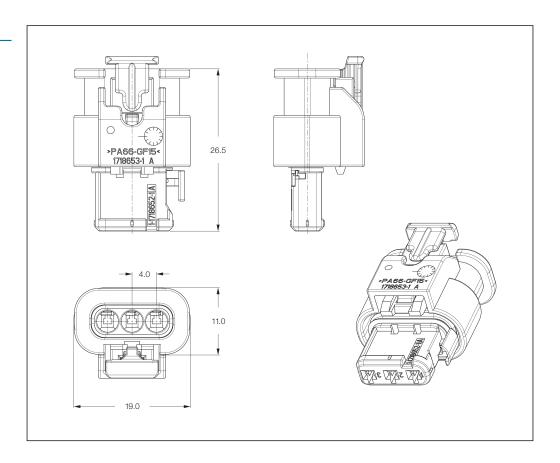
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



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

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

3 Positions

Housing Material:

PA66-GF15

Wire Size Range:

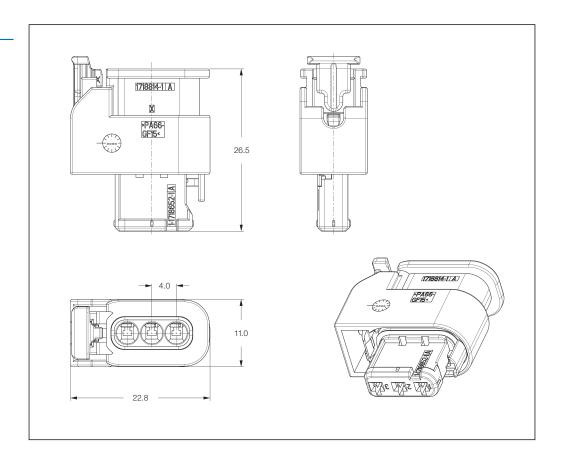
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



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

Housing and Connectors

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

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:

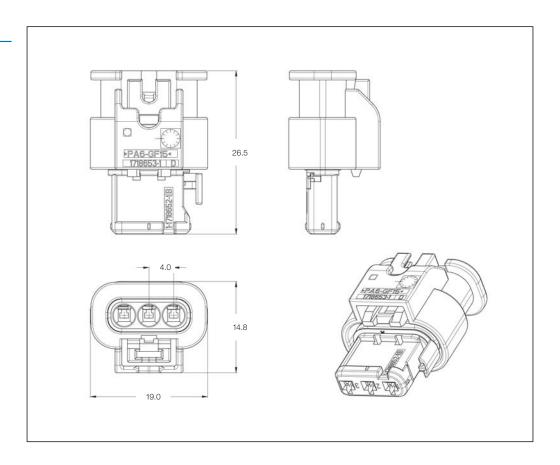
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



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

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

No. of Positions:

3 Positions

Housing Material:

PBT-GF30

Wire Size Range:

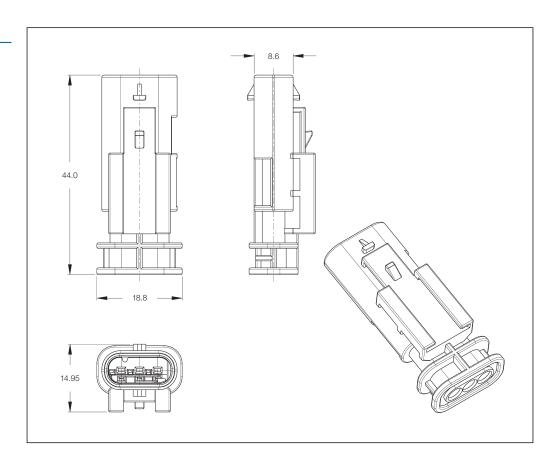
1.0 mm²

Product Specification:

-

Application Specification:

114-18910-1



Sealed 1.2 mm Tab Housings

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

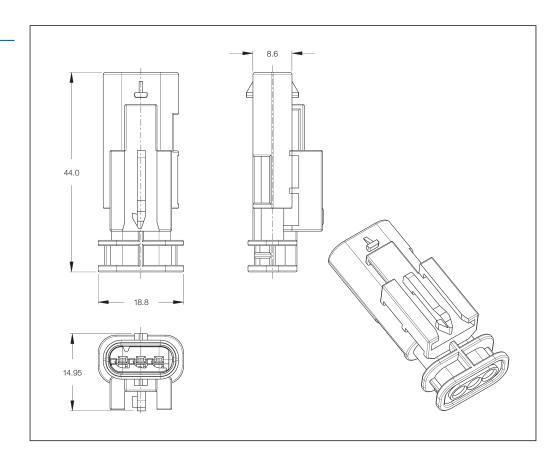
1.0 mm²

Product Specification:

-

 ${\bf Application\ Specification:}$

114-18910-1



Sealed 1.2 mm Tab Housings

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

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

4 Positions

Housing Material:

PA66-GF15

Wire Size Range:

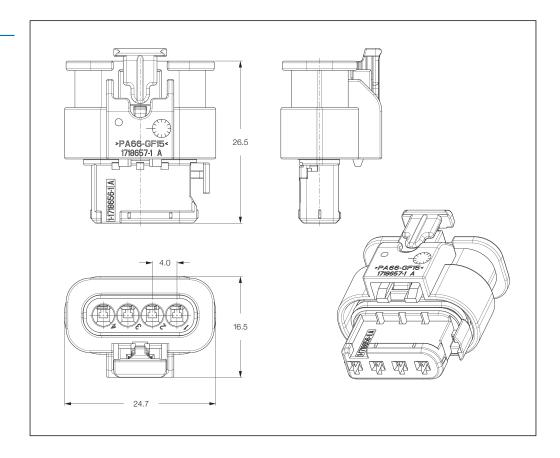
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



Na	-4	Varian	. Havataa		Part Numbers					
No. Posit		Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical		
		А	Black	1-1718645-1	-	-	-	_		

Housing and Connectors

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

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:

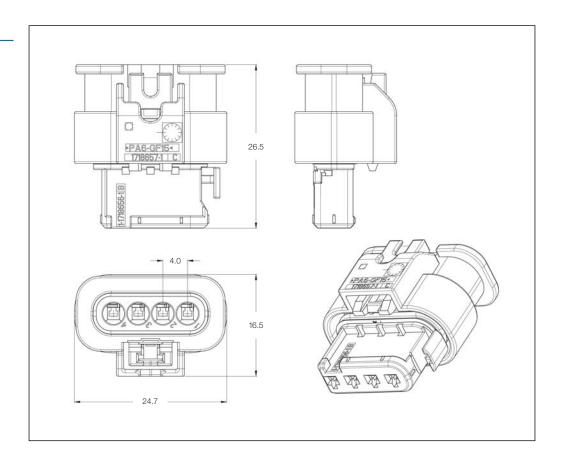
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



No. of	Kovina	Hausina		Part Numbers					
Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	Header Vertical		
4	Α	Black	1-1670918-1	-	1-1564559-1	-	-		
4	В	Natural	2-1670918-1	_	-	-	-		

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

No. of Positions:

4 Positions

Housing Material:

PBT-GF30

Wire Size Range:

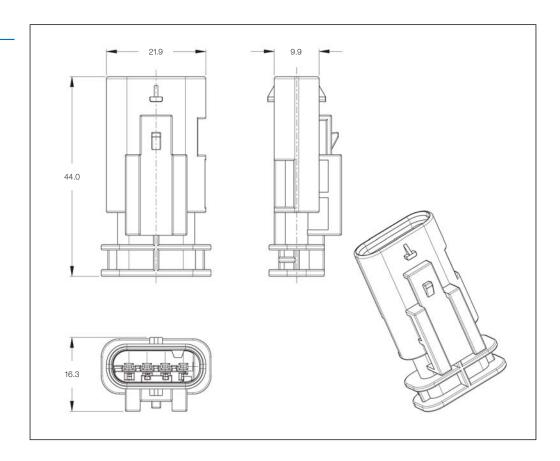
1.0 mm²

Product Specification:

_

Application Specification:

114-18910-1



Sealed 1.2 mm Tab Housings

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

Housing and Connectors

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Tab Housings for Locking Lance Contacts

Technical Features

No. of Positions:

4 Positions

Housing Material:

PBT-GF30

Wire Size Range:

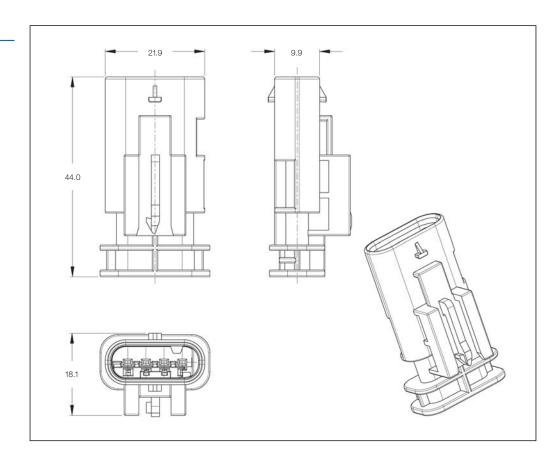
1.0 mm²

Product Specification:

-

 ${\bf Application\ Specification:}$

114-18910-1



Sealed 1.2 mm Tab Housings

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

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

5 Positions

Housing Material:

PA66-GF15

Wire Size Range:

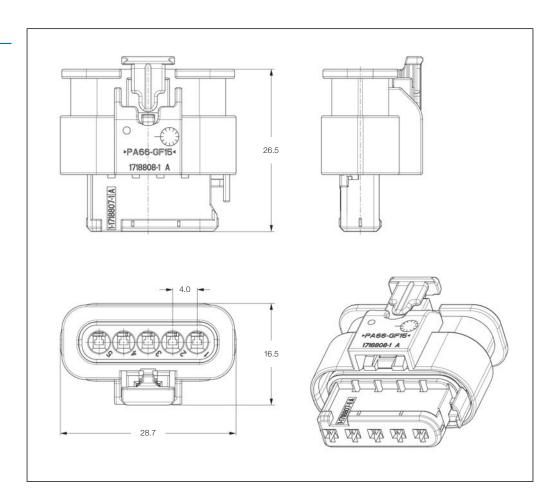
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



Sealed 1.2 mm Receptacle Housings

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

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions: 5 Positions

0 1 031110113

Housing Material: PA66-GF30/PA6-GF15

Wire Size Range:

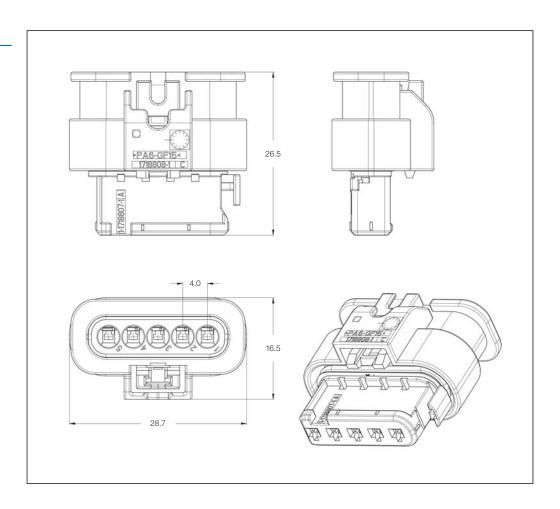
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



Sealed 1.2 mm Receptacle Housings

No. of Positions	V as sings			Part Numbers						
	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical			
	А	Black	1-1670921-1	_	_	_	_			
3	В	Natural	2-1670921-1	_	_	_	_			

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Housing and Connectors

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

No. of Positions:

6 Positions

Housing Material:

PA66-GF15

Wire Size Range:

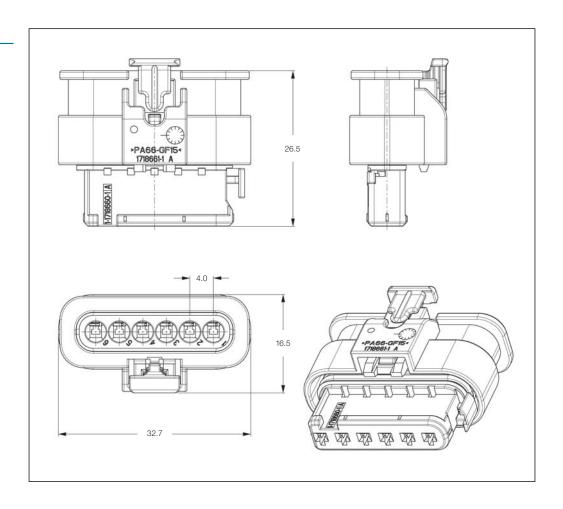
1.0 mm²

Product Specification:

108-18969

Application Specification:

114-18861



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

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

Sealed 1.2 mm Receptacle Housings for Locking Lance Contacts

Technical Features

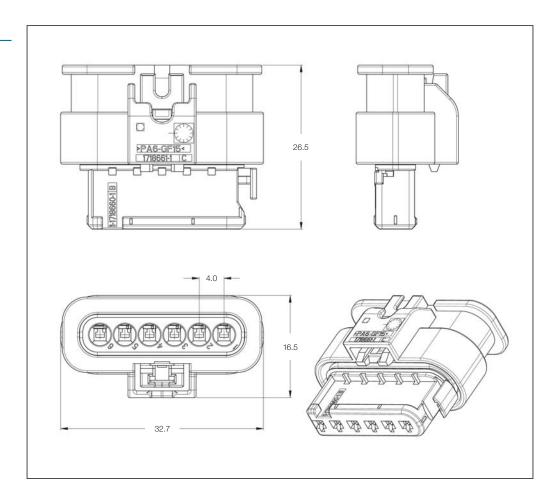
No. of Positions: 6 Positions

Housing Material: PA66-GF30/PA6-GF15

Wire Size Range: 1.0 mm²

Product Specification: 108-18969

Application Specification: 114-18861



	No. of Keyin Positions Option	V		Part Numbers						
_		Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical		
	6	А	Black	1-1670919-1	-	-	-	_		

Housing and Connectors

Section Catalog 1308070-2 Revised 12-2009 Main Catalog 1654400-1 Chapter 4 – Issued 3-2010

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

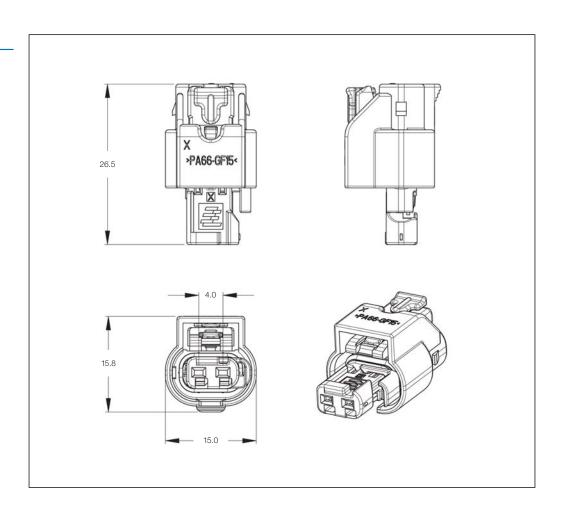
Wire Size Range: 0.5-1.5 mm²

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	Manda a			Part Numbers				
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	Header Vertical	
	А	Black	1-1924067-1					
2	В	Natural	1-1924067-2	-	-	-	-	
	С	Blue	1-1924067-3					

Sealed 1.2 mm Receptacle Housings – Standard Latch with CPA

No. of	V arian	Housing Color	Part Numbers						
No. of Positions	Keying Options		Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical		
	А	Black	1-1924067-4						
2	В	Natural	1-1924067-5	_	-	-	-		
	С	Blue	1-1924067-6						

Technical Features

No. of Positions:

3 Positions

Housing Material:

PA66-GF35

Wire Size Range:

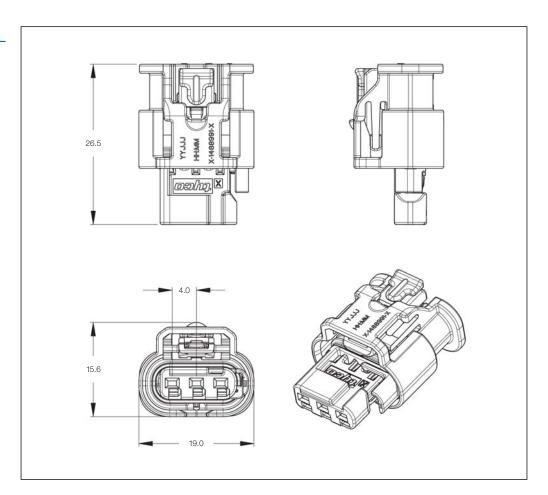
0.5-1.5 mm²

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	Manda a				Part Numbers		
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	Header Vertical
	А	Black	1488991-1				
3	В	Natural	1488991-2				
3	С	Blue	1488991-3	-	-	_	_
	D	Gray	1488991-4				

Sealed 1.2 mm Receptacle Housings - Standard Latch with CPA

No. of	V i				Part Numbers		
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical
	А	Black	1488991-5				
0	В	Natural	1488991-6				
3	С	Blue	1488991-7	_	_	-	_
	D	Gray	1488991-8				

Technical Features

No. of Positions:

3 Positions

Housing Material:

PA66-GF35

Wire Size Range:

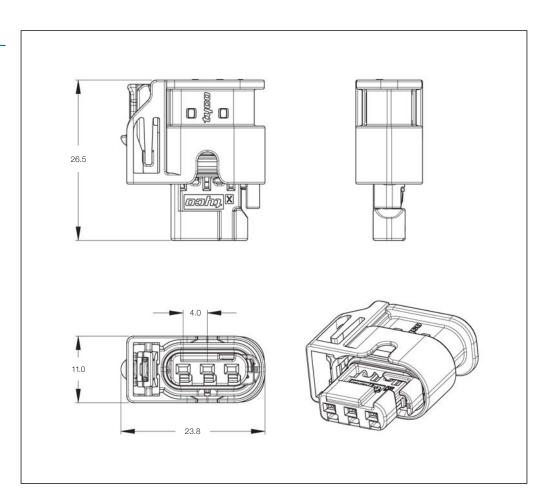
0.5-1.5 mm²

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	Marrian.				Part Numbers		
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical
	А	Black	1488992-1				
3	В	Natural	1488992-2	_			
3	С	Blue	1488992-3	_	-	-	_
	D	Gray	1488992-4				

Sealed 1.2 mm Receptacle Housings - Low Profile Latch with CPA

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

Technical Features

No. of Positions:

4 Positions

Housing Material:

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

Wire Size Range:

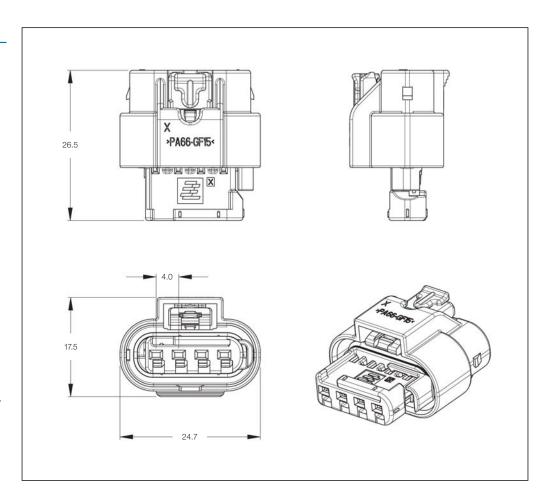
0.5-1.5 mm²

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	Manda a				Part Numbers		
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCE Right-Angle	Header Vertical
	А	Black	1-1456426-1				
4	В	Natural	1-1456426-2				
4	С	Blue	1-1456426-3	_	-	_	_
	D	Gray	1-1456426-4				

Sealed 1.2 mm Receptacle Housings - Standard Latch with CPA

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

Technical Features

No. of Positions: 6 Positions

Housing Material:

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

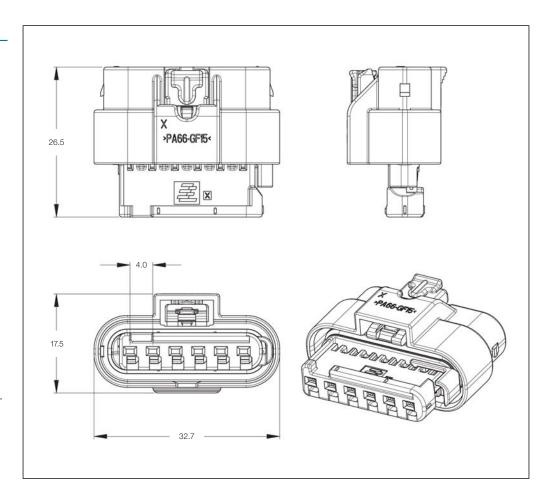
Wire Size Range: 0.5-1.5 mm²

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	Manda a				Part Numbers		
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	B Header Vertical
	А	Black	1924292-1				
6	В	Natural	1924292-2				
O	С	Blue	1924292-3	-	-	-	_
	D	Gray	1924292-4				

Sealed 1.2 mm Receptacle Housings - Standard Latch with CPA

No. of	V andra a				Part Numbers		
No. of Positions	Keying Options	Housing Color	Receptacle Housing	Cover	Mating Tab Housing	Mating PCB Right-Angle	Header Vertical
	А	Black	1924292-5				
6	В	Natural	1924292-6				
6	С	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	1452657-1	4-5	1488992-8	4-36	1670807-1	4-10
1418760-2	4-7	1452657-3	4-5	1534063-1	4-30	1670807-1	4-10 4-10
1418760-3	4-7	1452659-1	4-5	1534063-1	4-6	1-1670915-1	4-10 4-17
1418761-1	4-7	1452659-1	4-5 4-5	1534063-2	4-6	1-1670916-1	4-17 4-18, 4-19,
						1-10/0910-1	
1418761-2 1418761-3	4-7 4-7	1452659-3	4-5	1534594-1 1534594-2	4-6 4-6	2-1670916-1	4-20 4-18
	I	1452660-1	4-5	I			
1418762-1	4-7	1452660-2	4-5	1534594-3	4-6	1-1670917-1	4-23, 4-24,
1418762-2	4-7	1452660-3	4-5	1534595-1	4-6	0.1070017.1	4-25
1418762-3	4-7	1452665-1	4-5	1534595-2	4-6	2-1670917-1	4-23
1418763-1	4-7	1452665-2	4-5	1534595-3	4-6	1-1670918-1	4-27, 4-29
1418763-2	4-7	1452665-3	4-5	1563719-1	4-10	2-1670918-1	4-27
1418763-3	4-7	1452666-1	4-5	1563719-3	4-10	1-1670919-1	4-33
1418841-1	4-6	1452666-2	4-5	1563720-1	4-10	1-1670921-1	4-31
1418841-2	4-6	1452666-3	4-5	1563720-3	4-10	2-1670921-1	4-31
1418841-3	4-6	1452668-1	4-5	1563888-1	4-5	1-1703494-1	4-23, 4-24
1418844-1	4-6	1452668-2	4-5	1563889-1	4-5	1-1703494-2	4-25
1418844-2	4-6	1452668-3	4-5	1563935-1	4-10	1-1703498-1	4-18, 4-19
1418844-3	4-6	1452669-1	4-5	1563935-3	4-10	1-1703498-2	4-20
1418845-1	4-6	1452669-2	4-5	1563936-1	4-10	1703698-1	4-8
1418845-2	4-6	1452669-3	4-5	1563936-3	4-10	1703698-2	4-8
1418845-3	4-6	1452671-1	4-5	1-1564440-1	4-16	1703698-3	4-8
1418847-1	4-6	1452671-2	4-5	1-1564559-1	4-27, 4-28	1718348-1	4-8
1418847-2	4-6	1452671-3	4-5	1-1564559-2	4-29	1718348-2	4-8



Numerical Index

Part Number	Page
1718348-3	4-8
1718350-1	4-8
1718350-2	4-8
1718350-3	4-8
1718390-1	4-8
1718390-2	4-8
1718390-3	4-8
1718475-1	4-10
1718475-3	4-10
1718477-1	4-10
1718477-3	4-10
1-1718643-1	4-14
1-1718644-1	4-21
1-1718645-1	4-26
1-1718646-1	4-32
1718756-1	4-7
1718756-2	4-7
1718756-3	4-7
1718758-1	4-7
1718758-2	4-7
1718758-3	4-7
1718759-1	4-7
1718759-2	4-7
I .	

Part Number	Page
1718759-3	4-7
1718760-1	4-7
1718760-2	4-7
1718760-3	4-7
1718761-1	4-7
1718761-2	4-7
1718761-3	4-7
1718762-1	4-7
1718762-2	4-7
1718762-3	4-7
1718763-1	4-7
1718763-2	4-7
1718763-3	4-7
1-1718806-1	4-30
1-1718811-1	4-15
1-1718812-2	4-22
1719836-1	4-10
1719836-3	4-10
1719837-1	4-10
1719837-3	4-10
1719838-1	4-10
1719838-3	4-10
1719839-1	4-10
17100001	7 10

Part Number		Page
1719839-3		4-10
1719840-1		4-10
1719840-3		4-10
1719841-1		4-10
1719841-3		4-10
1-1924067-1		4-34
1-1924067-2		4-34
1-1924067-3		4-34
1-1924067-4		4-34
1-1924067-5		4-34
1-1924067-6		4-34
1924292-1		4-38
1924292-2		4-38
1924292-3		4-38
1924292-4		4-38
1924292-5		4-38
1924292-6		4-38
1924292-7		4-38
1924292-8		4-38
2063537-1	4-5,	4-7
2119103-1		4-7
2119104-1	4-5,	4-7
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.