

## Introduction



The diameter 1.5 mm and diameter 2.5 mm Connector System is designed for electronic and electrical applications in motor vehicles.

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

**Contacts**

- Basic material (CuNiSi) with high current capacity
- Rugged two-piece construction with stainless steel jacket
- Six points of contact (2.5 mm System) and five points of contact (1.5 mm System)
- 2.5 mm System wire range 0.2–4.0 mm<sup>2</sup>
- 1.5 mm System wire range 0.2–2.5 mm<sup>2</sup>

**Connectors**

- High reliability status supported for long term use
- High vibration level supported
- Perfect design to avoid quality problems, reduce manufacturing and service cost
- Integrated secondary locking device delivered in pre-locked position
- Wire-to-Wire sealed and unsealed connectors (SWS)
- Wire-to-Board sealed and unsealed connectors (SWS)
- Polarisation, several keyings
- Locking mechanism for smaller connectors/mating aid for higher numbers of ways
- Sealed Circular Connector Series (SCCS)
- Injector Connectors
- Miscellaneous Sealed Connectors for Circular Contacts

Engineering Notes



## Introduction



The diameter 1.5 mm and diameter 2.5 mm round contact systems developed by Tyco Electronics is mainly used in the automotive industry. Due to its wide range of performance possibilities, this contact system is in use in the engine compartment for aggregate or sensor connections.

Every contact has got a steel cantilever spring and a copper alloy body.

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 pin.

The closed cantilever spring has got several functions and also different advantages for the complete contact system.

In addition there are several lances on the steel to spring. These serve to lock the contact securely in the housing.

Sockets and pins can be applied on both sealed and unsealed connectors.

The diameter 1.5 mm and diameter 2.5 mm contact system can be fast and economically arranged to the lead using Tyco Electronics application tooling.

**Technical Features**

- 100 % quality assurance for the contact socket
- Resistant against fretting corrosion
- Vibration resistant
- Excellent longevity
- Low contact resistance
- High position configurations
- Contact design accepts secondary locking device
- Several contact points
- Sturdy contact design
- Guarantees constant insertion and extraction forces

Socket and Pin Contacts

**Technical Features**

**Wire Size Range:**  
0.2–2.5 mm<sup>2</sup>

**Insulation Diameter:**  
1.2–3.0 mm

**Contact Material:**  
CuNiSi,  
CuNi18Zn20,  
CuFe2

**Contact Finish:**  
Tin plated, silver plated,  
gold plated, plain

**Temperature Range**  
–40 °C to +130 °C (tin plated)  
–40 °C to +140 °C (silver plated)  
–40 °C to +150 °C (gold plated)  
–40 °C to +150 °C (plain)

**Current Carrying Capacity:**  
Up to 30 A max.

**Product Specification:**  
108-18028

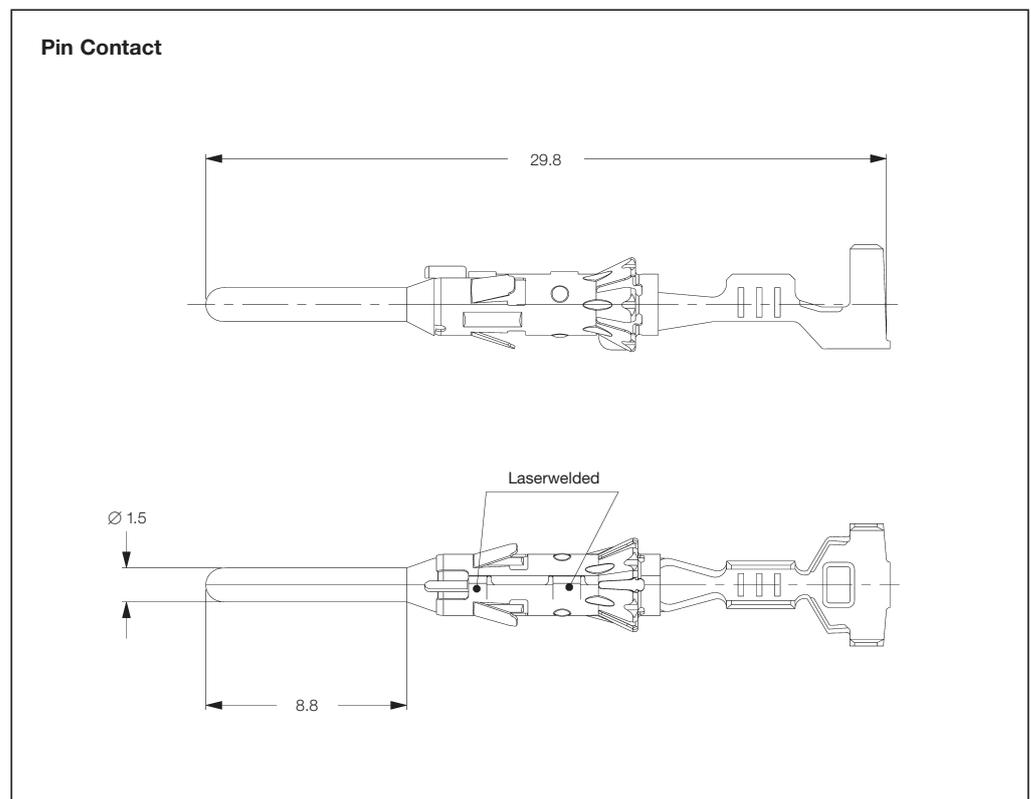
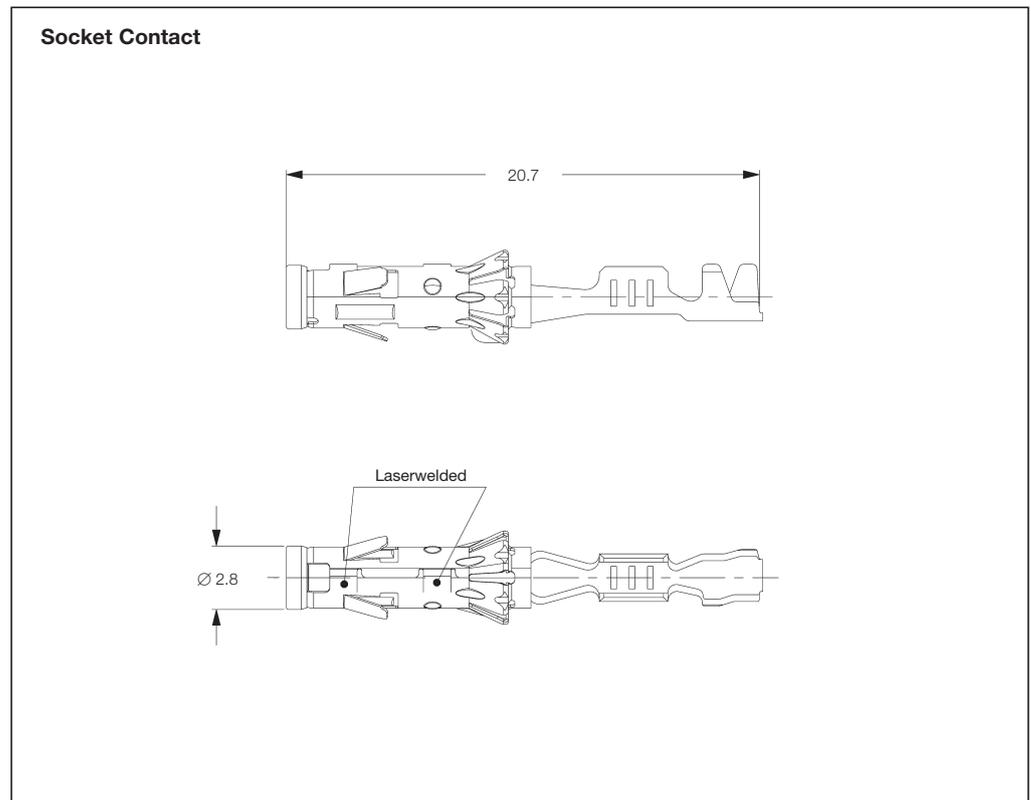
**Application Specification:**  
114-18040

**Extraction Tool:**  
Part No. **539972-1**  
(Socket Contact)  
Part No. **3-1579007-7**  
(Pin Contact)

**Spare Tube:**  
Part No. **5-1579007-0**  
(Socket Contact)

Part No. **3-1579007-8**  
(Pin Contact)

**Terminal Mounting Tool:**  
(for 0.2–1.0 mm<sup>2</sup>)  
Part No. **965702-1**



Socket Contacts

**Diameter 1.5 mm Socket Contacts**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm)		Material and Finish	Part Numbers				Applicator ♦	Hand Tool ♦
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.2–0.4	–	1.15–1.6	tin plated	929985-1	5,000	962994-1	500	878480	734285-1
0.5–1.0	–	1.4–2.1	tin plated	929986-1	4,500	962995-1	500	878481	734285-1
				929986-4	5,000	962995-4	500		
≥1.0–2.5	–	1.9–3.0	tin plated	929987-1	3,800	962996-1	500	878482	734285-2

**\*) Contact Material:**

xxx-1 = CuNiSi  
xxx-4 = CuFe2

♦) This Applicator and Hand Tool Part Number is only one of a part number selection.  
Please call your local Tyco Electronics representative for personal assistance or visit our website.

**Note:** All Part Numbers are RoHS and ELV compliant.

**Diameter 1.5 mm Socket Contacts with Single Wire Sealing System**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm)		Material and Finish	Part Numbers				Applicator ♦	Hand Tool ♦
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.2–0.4	–	1.2–2.1	tin plated	929988-1	4,000	962997-1	500	878484	734289-1
			silver plated	929988-2	4,000	962997-2	500		
0.5–1.0	–	1.2–2.1	tin plated	929989-1	4,000	962998-1	500	878485	734289-1
			silver plated	929989-7	4,000	962998-7	500		
			gold plated	929989-8	4,000	–	–		
			plain	1-929989-0	4,000	1-962998-0	500		
			tin plated	929989-4	4,000	962998-4	500		
≥1.0–2.5	–	2.2–3.0	tin plated	929990-1	3,800	962999-1	500	878486	734289-2
			tin plated	929990-4	3,800	962999-4	500		
			silver plated	929990-7	3,800	962999-7	500		
			plain	1-929990-0	3,800	1-962999-0	500		

**\*) Contact Material:**

xxx-1 = CuNiSi  
xxx-2 = CuNiSi  
xxx-4 = CuFe2  
xxx-7 = CuNiSi  
xxx-8 = CuNiSi  
1-xxx-0 = CuNi18Zn20

♦) This Applicator and Hand Tool Part Number is only one of a part number selection.  
Please call your local Tyco Electronics representative for personal assistance or visit our website.

**Note:** All Part Numbers are RoHS and ELV compliant.

Pin Contacts

**Diameter 1.5 mm Pin Contacts with Single Wire Sealing System**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm)		Material and Finish	Part Numbers				Applicator ♦	Hand Tool ♦
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.2–0.4	–	1.2–2.1	tin plated	1703012-1	4,000	1703016-1	500	878484	734289-1
				1703012-4	4,000	1703016-4	500		
0.5–1.0	–	1.2–2.1	tin plated	1703013-1	3,500	1703017-1	500	878485	734289-1
			silver plated	1703013-2	3,500	1703017-2	500		
			gold plated	1703013-8	3,500	–	–		
			tin plated	1703013-4	3,500	1703017-4	500		
≥1.0–2.5	–	2.2–3.0	tin plated	1703014-1	3,500	1703018-1	500	878486	734289-2
				1703014-4	3,500	1703018-4	500		

**\*) Contact Material:**

- xxx-1 = CuNiSi
- xxx-2 = CuNiSi
- xxx-4 = CuFe2
- xxx-8 = CuNiSi

♦) This Applicator and Hand Tool Part Number is only one of a part number selection.  
Please call your local Tyco Electronics representative for personal assistance or visit our website.

**Note:** All Part Numbers are RoHS and ELV compliant.

Socket and Pin Contacts

**Technical Features**

**Wire Size Range:**  
0.2–4.0 mm<sup>2</sup>

**Insulation Diameter:**  
1.15–3.6 mm

**Contact Material:**  
CuNiSi,  
CuFe2

**Contact Finish:**  
Tin plated,  
silver plated,  
gold plated

**Temperature Range**  
–40 °C to +130 °C (tin plated)  
–40 °C to +140 °C (silver plated)  
–40 °C to +150 °C (gold plated)

**Current Carrying Capacity:**  
Up to 40 A max.

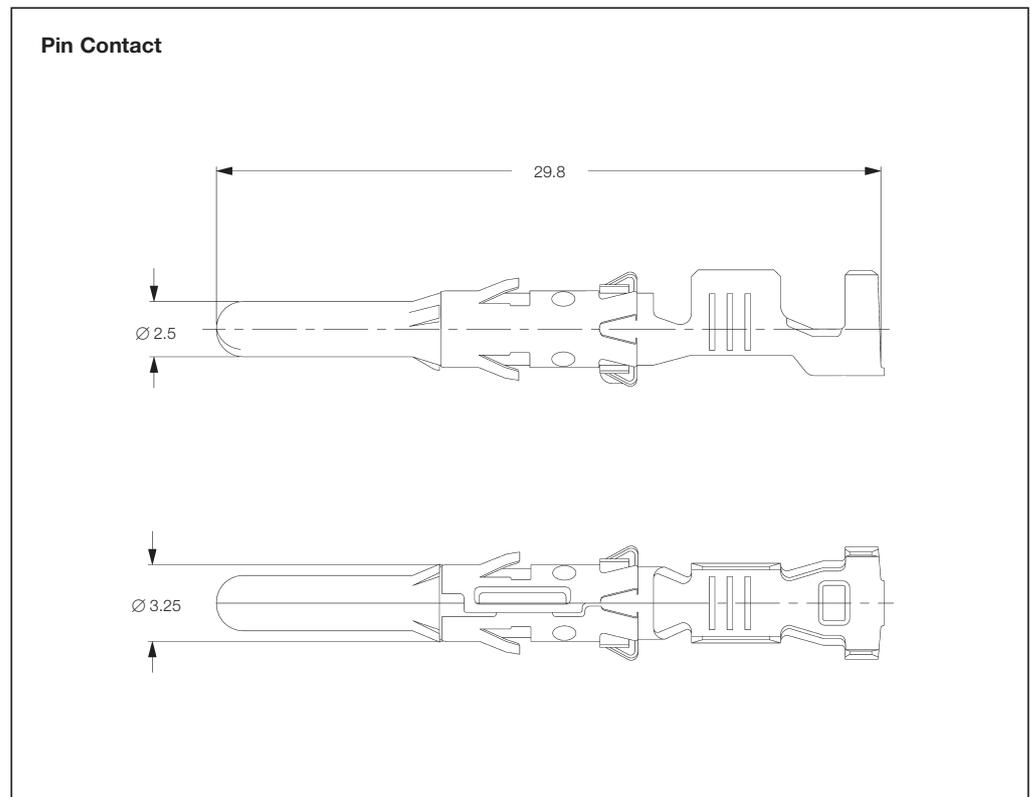
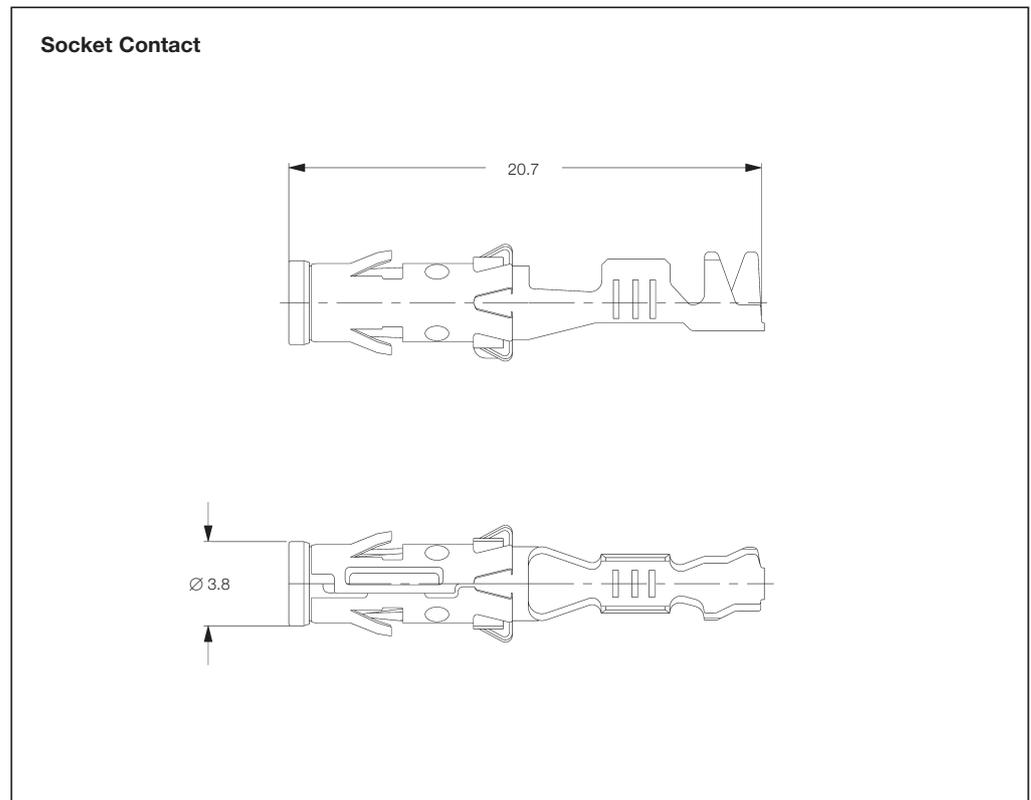
**Product Specification:**  
108-18027

**Application Specification:**  
114-18020

**Extraction Tool:**  
Part No. **1-1579007-8**

**Spare Tube:**  
Part No. **4-1579007-7**

**Terminal Mounting Tool:**  
(for 0.2–1.0 mm<sup>2</sup>)  
Part No. **3-1579007-2**



Socket Contacts

**Diameter 2.5 mm Socket Contacts**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm)		Material and Finish	Part Numbers				Applicator ♦	Hand Tool ♦
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.2–0.4	–	1.15–1.6	tin plated	929969-1	3,000	962976-1	500	878480	734285-1
			tin plated	929970-1	3,000	962977-1	500		
0.5–1.0	–	1.4–2.1	silver plated	929970-7	3,000	962977-7	500	878481	734285-1
			gold plated	929970-8	3,000	962977-8	500		
			tin plated	929971-1	3,000	962978-1	500		
≥1.0–2.5	–	1.9–3.0	silver plated	929971-7	3,000	962978-7	500	878482	734285-2
			gold plated	929971-8	3,000	962978-8	500		
≥2.5–4.0	–	2.7–3.0	tin plated	929972-1	3,000	962979-1	500	878483	734285-3

**\*) Contact Material:**

xxx-1 = CuNiSi  
xxx-7 = CuNiSi  
xxx-8 = CuNiSi

♦) This Applicator and Hand Tool Part Number is only one of a part number selection.  
Please call your local Tyco Electronics representative for personal assistance or visit our website.

**Note:** All Part Numbers are RoHS and ELV compliant.

**Diameter 2.5 mm Socket Contacts with Single Wire Sealing System**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm)		Material and Finish	Part Numbers				Applicator ♦	Hand Tool ♦
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.2–0.4	–	1.2–2.1	tin plated	929973-1	3,000	962980-1	500	878484	734289-1
			tin plated	929974-1	3,000	962981-1	500		
			gold plated	929974-8	3,000	962981-8	500		
0.5–1.0	–	1.2–2.1	silver plated	929974-7	3,000	962981-7	500	878485	734289-1
			1-929974-4	3,000	1-962981-4	500			
			tin plated	929974-4	3,000	962981-4	500		
			tin plated	929975-1	3,000	962982-1	500		
≥1.0–2.5	–	2.2–3.0	gold plated	929975-8	3,000	962982-8	500	878486	734289-2
			silver plated	929975-7	3,000	962982-7	500		
			tin plated	929975-4	3,000	962982-4	500		

**\*) Contact Material:**

xxx-1 = CuNiSi  
xxx-4 = CuFe2  
xxx-7 = CuNiSi  
xxx-8 = CuNiSi  
1-xxx-4 = CuNiSi

♦) This Applicator and Hand Tool Part Number is only one of a part number selection.  
Please call your local Tyco Electronics representative for personal assistance or visit our website.

**Note:** All Part Numbers are RoHS and ELV compliant.

Pin Contacts

**Diameter 2.5 mm Pin Contacts**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm)		Material and Finish	Part Numbers				Applicator ♦	Hand Tool ♦
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.2–0.4	–	1.15–1.6	tin plated	929962-1	3,500	962966-1	500	878480	734285-1
			tin plated	929963-1	3,500	962967-1	500		
0.5–1.0	–	1.4–2.1	gold plated	929963-8	3,500	962967-8	500	878481	734285-1
				1-929963-0	3,500	1-962967-0	500		
≥1.0–2.5	–	1.9–3.0	tin plated	929964-1	3,500	962968-1	500	878482	734285-2
			gold plated	1-929964-0	3,500	1-962968-0	500		
≥2.5–4.0	–	2.7–3.6	tin plated	929965-1	2,500	962969-1	500	878483	734285-3

**\*) Contact Material:**

- xxx-1 = CuNiSi
- xxx-4 = CuFe2
- xxx-8 = CuNiSi
- 1-xxx-0 = CuFe2

♦) This Applicator and Hand Tool Part Number is only one of a part number selection.  
Please call your local Tyco Electronics representative for personal assistance or visit our website.

**Note:** All Part Numbers are RoHS and ELV compliant.

**Diameter 2.5 mm Pin Contacts with Single Wire Sealing System**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm)		Material and Finish	Part Numbers				Applicator ♦	Hand Tool ♦
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.2–0.4	–	1.2–2.1	tin plated	929966-1	3,500	962970-1	500	878484	734289-1
			silver plated	929966-7	3,500	962970-7	500		
0.5–1.0	–	1.2–2.1	tin plated	929967-1	3,000	962971-1	500	878485	734289-1
			silver plated	929967-7	3,000	962971-7	500		
			gold plated	1-929967-4	3,000	1-962971-4	500		
			gold plated	929967-8	3,000	962971-8	500		
≥1.0–2.5	–	2.2–3.0	tin plated	1-929967-0	3,000	1-962971-0	500	878486	734289-2
			tin plated	929967-4	3,000	962971-4	500		
			tin plated	929968-1	3,000	962972-1	500		
			silver plated	929968-7	3,000	962972-7	500		
			gold plated	929968-8	3,000	962972-8	500		
			tin plated	929968-4	3,000	962972-4	500		

**\*) Contact Material:**

- xxx-1 = CuNiSi
- xxx-4 = CuFe2
- xxx-7 = CuNiSi
- xxx-8 = CuNiSi
- 1-xxx-0 = CuFe2
- 1-xxx-4 = CuNiSi

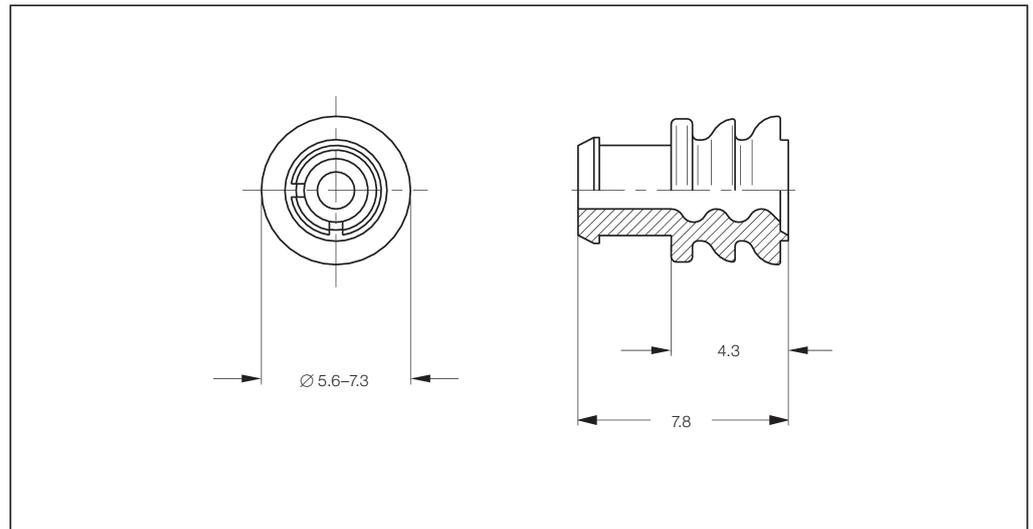
♦) This Applicator and Hand Tool Part Number is only one of a part number selection.  
Please call your local Tyco Electronics representative for personal assistance or visit our website.

**Note:** All Part Numbers are RoHS and ELV compliant.

Single Wire Seals and Sealing Plugs

**Technical Features**

- 1.5 mm and 2.5 mm system accommodates insulation diameters of 1.2–3.7 mm
- Made from silicon rubber material
- Wire seal is crimped simultaneously with the contact



**Diameter 1.5 mm Pin and Socket Contact**

Insulation Diameter (mm)		Color	Part Number	Package Quantity
FLK	FLR			
–	1.2–2.1	Light Blue	828904-1	1,000
			828904-2	10,000
			828904-3	5,000
–	2.2–3.0	White	828905-1	10,000
			Sealing Plug	Natural
		Green	828922-2	10,000

**Diameter 2.5 mm Pin and Socket Contact**

Insulation Diameter (mm)		Color	Part Number	Package Quantity	
FLK	FLR				
–	1.2–2.1	Gray	828920-1	5,000	
		Violet	828921-1	5,000	
–	2.2–3.0	Yellow	828921-2	5,000	
		Sealing Plug for cavities up to diameter 3.0 mm wire	Natural	828922-1	10,000
		Green	828922-2	10,000	
		Sealing Plug for cavities up to diameter 3.7 mm wire	Natural	828986-1	5,000

## Introduction



The diameter 1.5 mm and diameter 2.5 mm Connector System offers receptacle and pin 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 contacts system.

**Features**

- 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)
- Polarisation, several keyings
- Locking mechanism for smaller connectors/mating aid for higher numbers of ways

Diameter 2.5 mm Connector Housings according ISO 15170 (DIN 72585)

**Technical Features**

**No. of Positions:**  
2–4 Positions

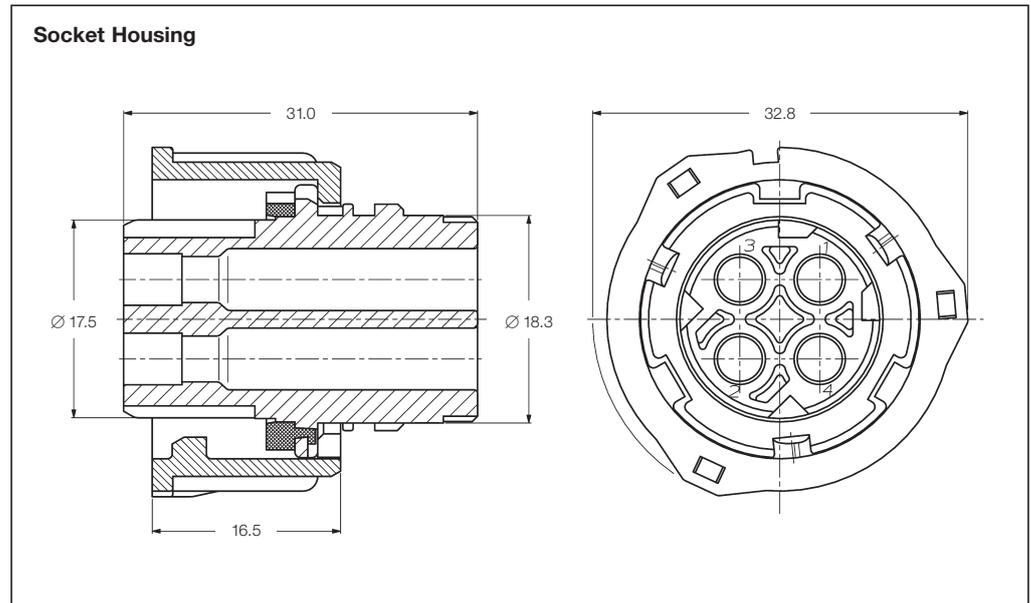
**Housing Material:**  
PBT GF 30 / PA 46-GF 30

**Wire Size Range:**  
2.5 mm<sup>2</sup> Max.

**Product Specification:**  
108-18621

**Application Specification:**  
114-18255-0

**Product Group Drawing:**  
1355392



**Socket Housings**

No. of Positions	Keying Options	Housing Color	Part Numbers			
			Socket Housing	Cover	Mating Pin Housing	Mating PCB Header Right-Angle Vertical
2			1-967325-3	*	1-967402-3	
3	1	Black	1-967325-2	*	1-967402-2	–
4			1-967325-1	*	1-967402-1	
2			2-967325-3	*	2-967402-3	
3	2	Gray	2-967325-2	*	2-967402-2	–
4			2-967325-1	*	2-967402-1	
2			3-967325-3			
3	3	Green	3-967325-2	*	–	–
4			3-967325-1			
2			4-967325-3			
3	4	Blue	4-967325-2	*	–	–
4			4-967325-1			

\*) Suitable Covers/Adapters see Accessories.

Diameter 2.5 mm Connector Housings according ISO 15170 (DIN 72585)

**Technical Features**

**No. of Positions:**  
2–4 Positions

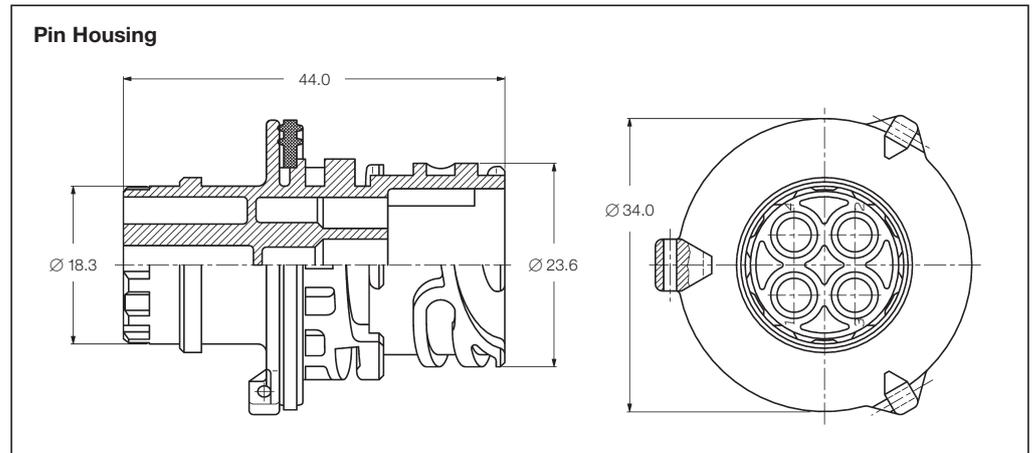
**Housing Material:**  
PBT GF 20

**Wire Size Range:**  
2.5 mm<sup>2</sup> Max.

**Product Specification:**  
108-18621

**Application Specification:**  
114-18255-0

**Product Group Drawing:**  
1355392



**Pin Housings**

No. of Positions	Keying Options	Housing Color	Part Numbers			
			Pin Housing	Cover	Mating Socket Housing	Mating PCB Header Right-Angle      Vertical
					1-967325-3	
2			1-967402-3		1-967325-2	
3	1	Black	1-967402-2	*	1-967325-1	-
4			1-967402-1		6-968968-3	
					6-968968-2	
					6-968968-1	
2			2-967402-3		2-967325-3	
3	2	Gray	2-967402-2	*	2-967325-2	-
4			2-967402-1		2-967325-1	

\*) Suitable Covers/Adapters see Accessories.

**Technical Features**

**No. of Positions:**  
4 Positions

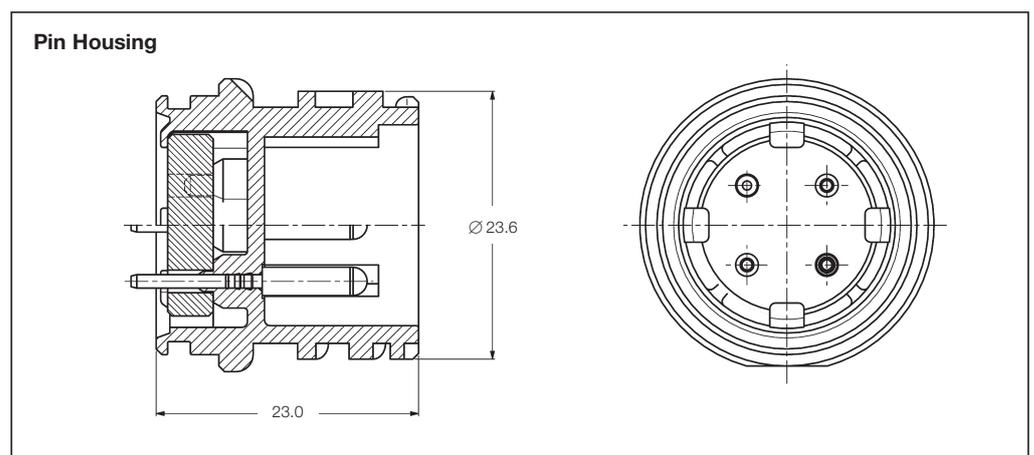
**Housing Material:**  
PBT GF 20

**Material and Finish:**  
CuZn, tin plated

**Wire Size Range:**  
2.5 mm<sup>2</sup> Max.

**Product Specification:**  
108-18621

**Application Specification:**  
—



**Pin Housings**

No. of Positions	Keying Options	Housing Color	Part Numbers			
			Pin Housing with Ferrite Disc	Cover	Mating Socket Housing	Mating PCB Header Right-Angle      Vertical
4	1	Black	1703780-1	-	1-967325-1 or 1-968968-1	-

Diameter 2.5 mm Connector Housings according ISO 15170 (DIN 72585)

**Technical Features**

**No. of Positions:**

2–4 Positions

**Housing Material:**

PBT GF 30 / PA 46-GF 30

**Wire Size Range:**

2.5 mm<sup>2</sup> Max.

**Product Specification:**

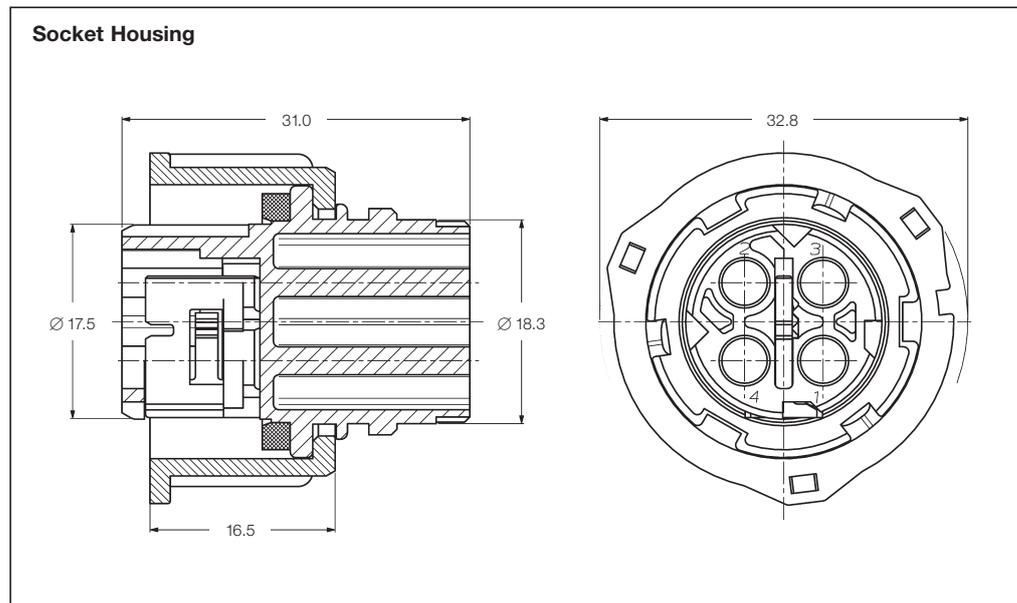
108-18621

**Application Specification:**

114-18255-0

**Product Group Drawing:**

1355392



**Socket Housings with Secondary Locking**

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Socket Housing	Cover	Mating Pin Housing	Mating PCB Header Right-Angle Vertical	
2			1-968968-3	*	1-967402-3		
3	1	Black	1-968968-2	*	1-967402-2	–	–
4			1-968968-1	*	1-967402-1		
2	2	Gray	2-968968-3	*	2-967402-3		

\*) Suitable Covers/Adapters see Accessories.

Pin Housings, Solder Type according ISO 15170 (DIN 72585)

**Technical Features**

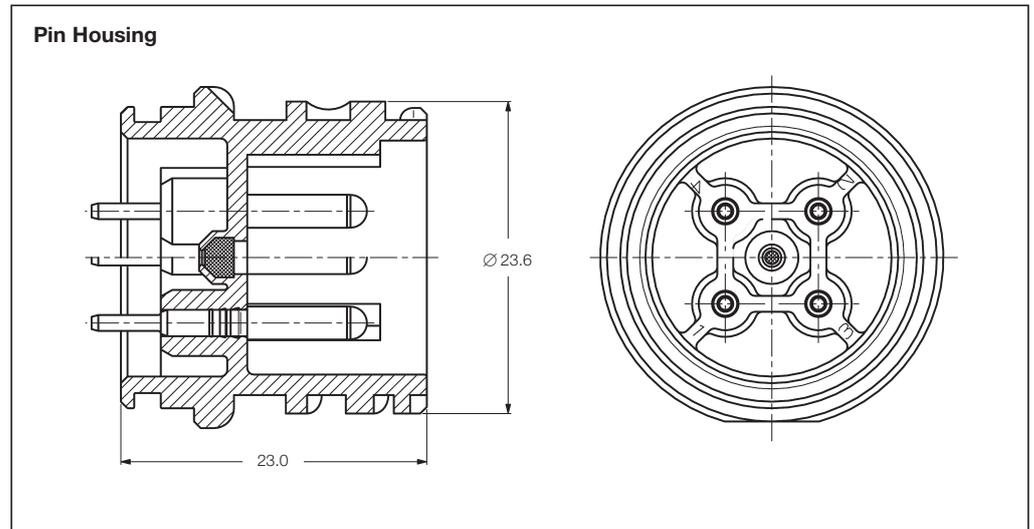
**No. of Positions:**  
2/4 Positions

**Housing Material:**  
PBT GF 20

**Material and Finish:**  
CuZn, tin plated  
CuZn, gold plated

**Product Specification:**  
108-18621

**Application Specification:**  
—



**Pin Housing**

No. of Positions	Keying Options	Housing Color	Part Numbers			
			Right-Angle Pin Housing	Vertical Pin Housing with Ventilation Disk	Contact Plating	Mating Socket Housing
2/4	1	Black	—	1394324-1	Tin	967325 or
				1394324-2	Tin	968968
				1394324-3	Gold	—
3	2	Gray	—	1394324-4	Gold	—

**Note:** All Part Numbers are RoHS and ELV compliant.

**Technical Features**

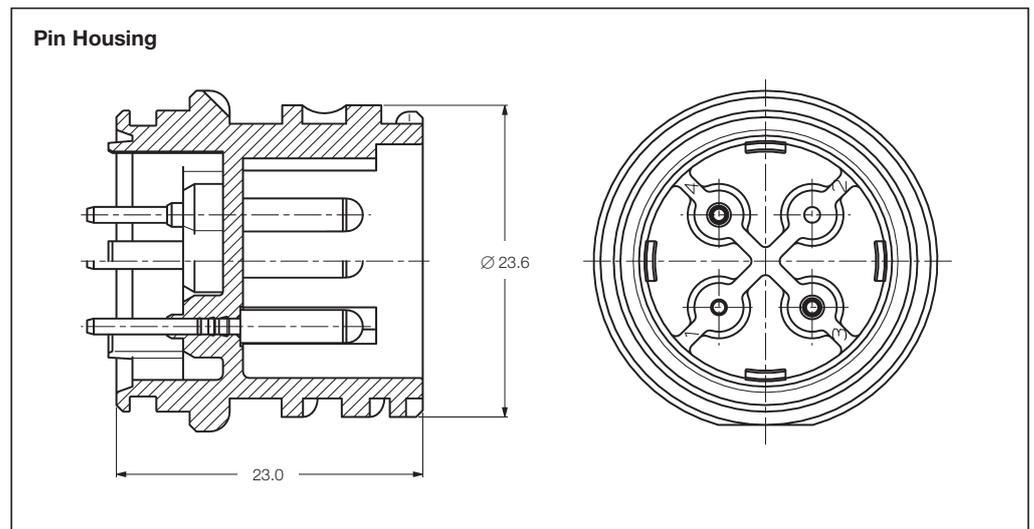
**No. of Positions:**  
4 Positions

**Housing Material:**  
PBT GF 20

**Material and Finish:**  
CuZn, gold plated

**Product Specification:**  
108-18621

**Application Specification:**  
—



**Pin Housing**

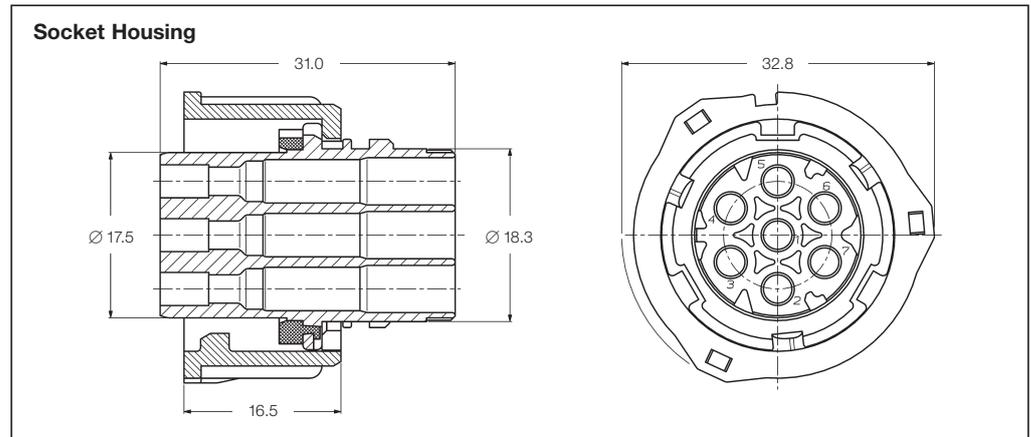
No. of Positions	Keying Options	Housing Color	Part Numbers		
			Right-Angle Pin Housing	Vertical Pin Housing	Mating Socket Housing
4	1	Black	—	1241598-1	967325 or 968968

**Note:** All Part Numbers are RoHS and ELV compliant.

Diameter 1.5 mm Connector Housings

**Technical Features**

**No. of Positions:**  
5–7 Positions  
**Housing Material:**  
PBT GF 30 / PA 46-GF 30  
**Wire Size Range:**  
2.5 mm<sup>2</sup> Max.  
**Product Specification:**  
108-18622  
**Application Specification:**  
114-18255-0  
**Product Group Drawing:**  
1355392



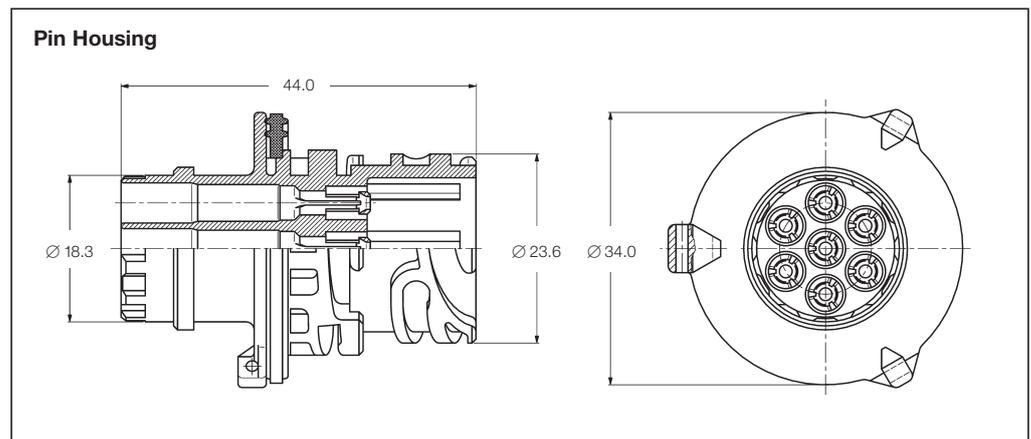
**Socket Housings**

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Socket Housing	Cover	Mating Pin Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
5	A	Black	967650-3	*	1718230-3	–	–
6	A	Black	967650-2	*	1718230-2	–	–
			967650-4	*	–	–	–
7	A	Black	967650-1	*	1718230-1	–	–
		Blue	1-967650-1	*	1-1718230-1	–	–
		Gray	2-967650-1	*	2-1718230-1	–	–
		Green	3-967650-1	*	3-1718230-1	–	–

\*) Suitable Covers/Adapters see Accessories.

**Technical Features**

**No. of Positions:**  
5–7 Positions  
**Housing Material:**  
PBT GF 20  
**Wire Size Range:**  
2.5 mm<sup>2</sup> Max.  
**Product Specification:**  
108-18622  
**Application Specification:**  
114-18255-0  
**Product Group Drawing:**  
1355392



**Pin Housings**

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Pin Housing	Cover	Mating Socket Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
5	A	Black	1718230-3	*	967650-3	–	–
6	A	Black	1718230-2	*	967650-2	–	–
			1718230-1	*	967650-1	–	–
7	A	Black	1-1718230-1	*	1-967650-1	–	–
		Blue	1-1718230-1	*	1-967650-1	–	–
		Gray	2-1718230-1	*	2-967650-1	–	–
		Green	3-1718230-1	*	3-967650-1	–	–

\*) Suitable Covers/Adapters see Accessories.

Accessories

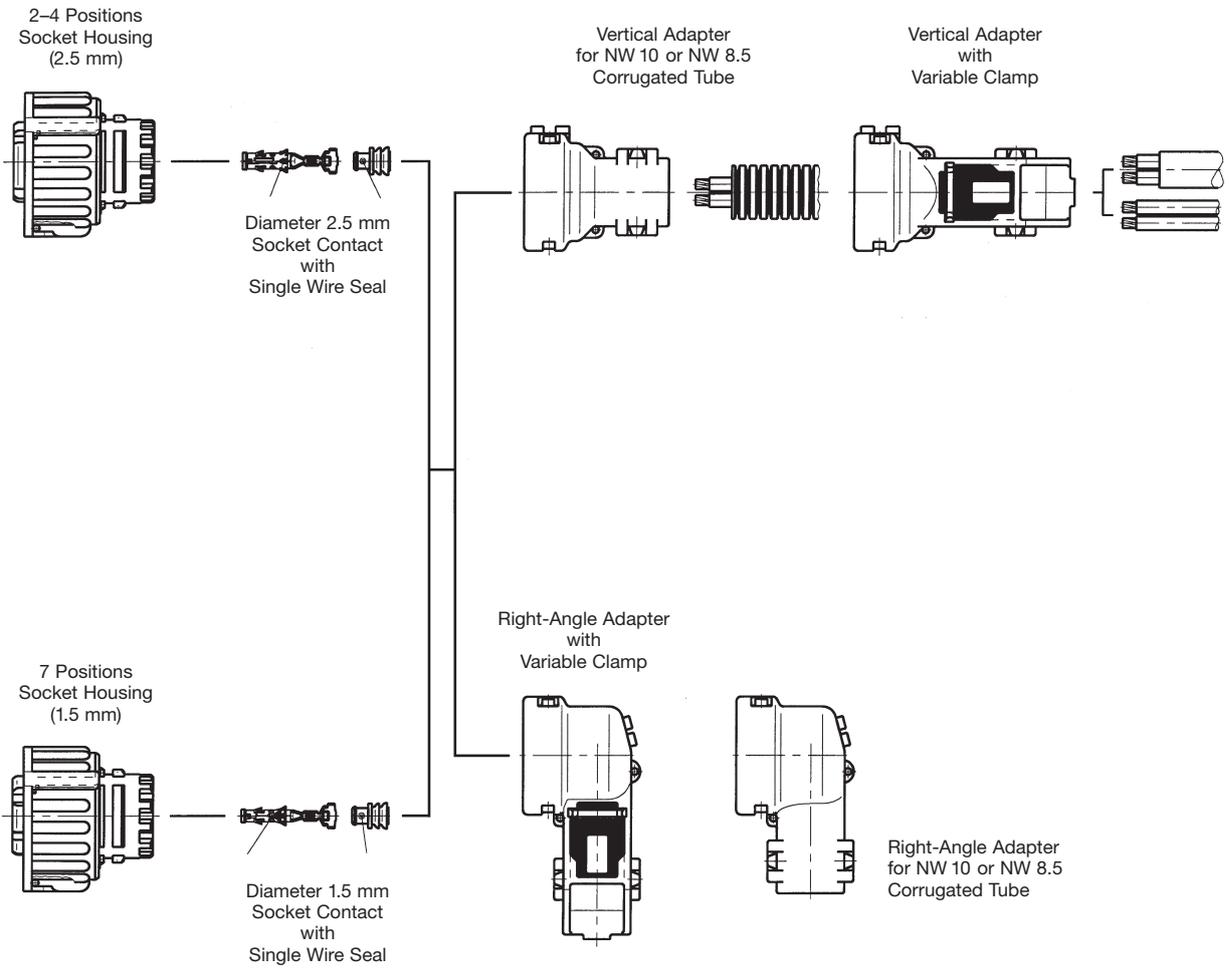
Accessories



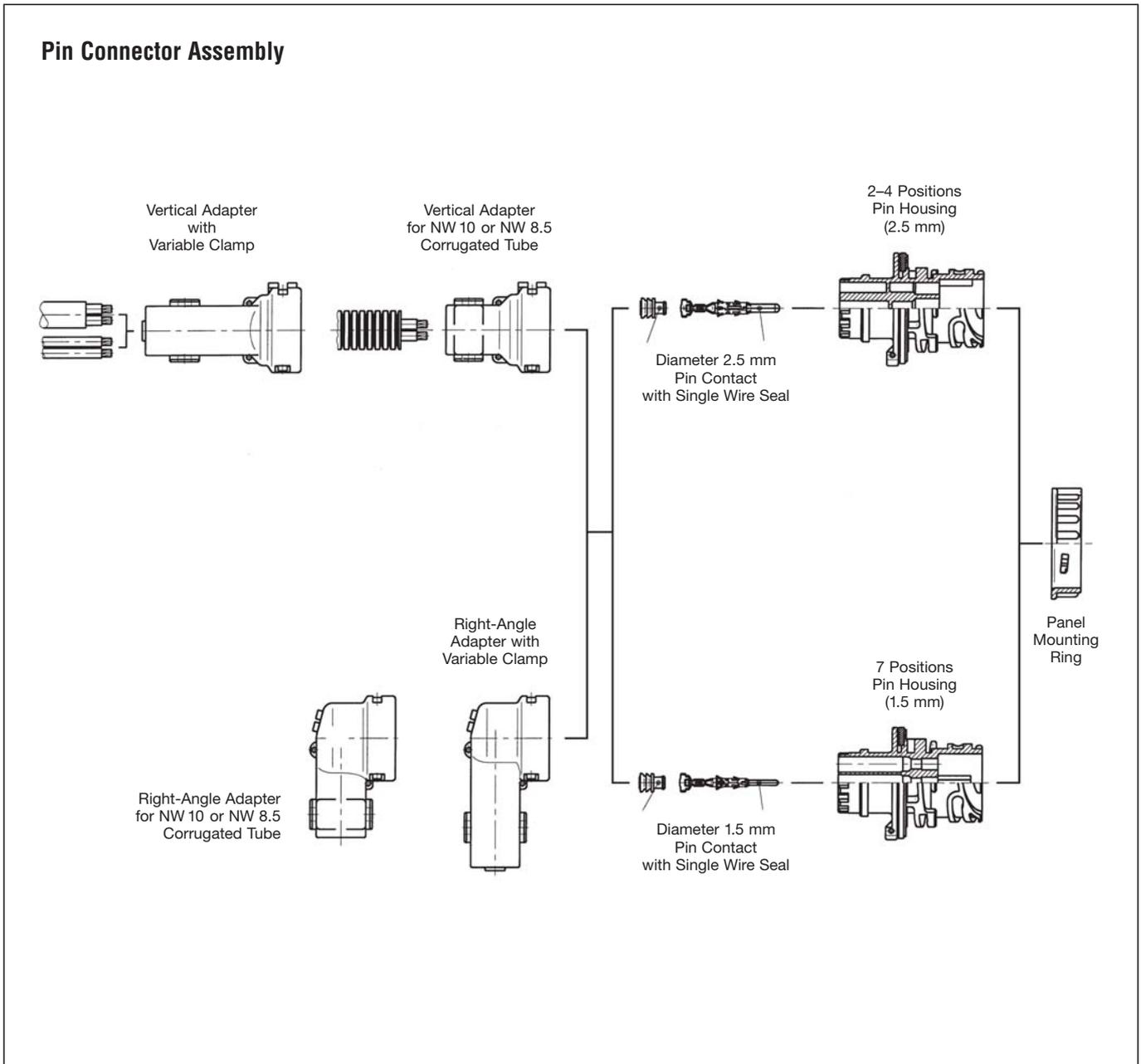
Description	Color	Part No.
Mounting ring for pin housing	Black	965687-1
Front cover for 2–4 pos. socket housing 967325	Black	185636-1
Front cover for 2–4 pos. and 5–7 pos. pin housing 967402 and 1718230	Black	1394277-1
		1394277-2
Right-angle adapter with universal clamp	Black	965576-1
Vertical adapter with universal clamp	Black	965784-1
Right-angle adapter for NW 7.5 mm diameter corrugated tubing	Black	185793-1
Right-angle adapter for NW 8.5 mm diameter corrugated tubing	Black	965577-1
Right-angle adapter for NW 10 mm diameter corrugated tubing	Black	965783-1
Vertical adapter for NW 7.5 mm diameter corrugated tubing	Black	185792-1
Vertical adapter for NW 8.5 mm diameter corrugated tubing	Black	965785-1
Vertical adapter for NW 10 mm diameter corrugated tubing	Black	965786-1
Right-angle adapter 4/7 position for hose	Black	1534789-1
Vertical adapter 4/7 position for hose	Black	1534791-1
Vertical adapter 4/7 position for jacketed cable 5.2–6.5 mm	Black	1418916-1
Vertical adapter 4/7 position for jacketed cable 6.0–9.5 mm	Black	1418917-1
Right-angle adapter 4/7 position for jacketed cable 5.2–6.5 mm	Black	1418918-1
Right-angle adapter 4/7 position for jacketed cable 6.0–9.5 mm	Black	1418919-1

Sealed Socket Connector Assembly

**Socket Connector Assembly**



Sealed Pin Connector Assembly



Sealed Diameter 1.5 mm/Diameter 2.5 mm Pin and Socket Housings

**Technical Features**

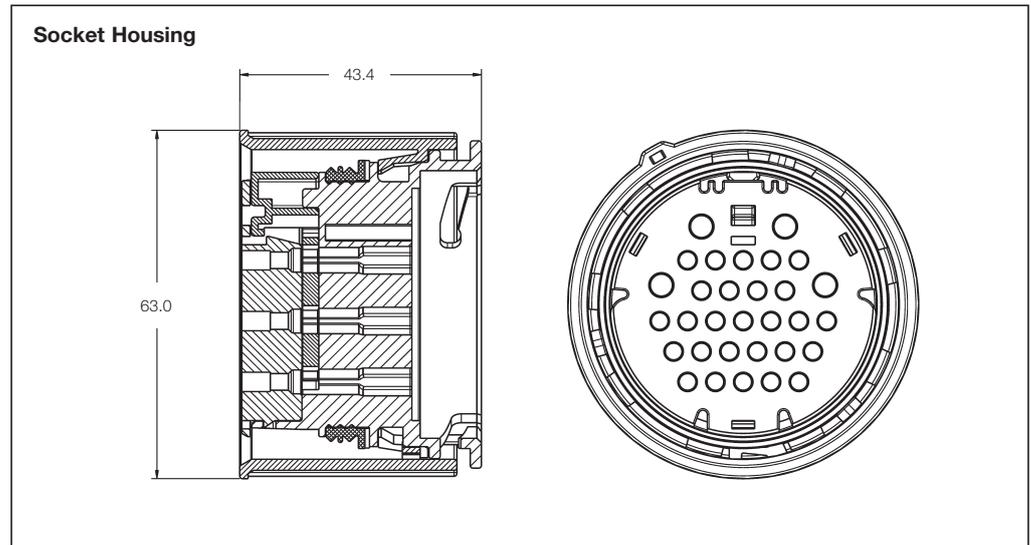
**No. of Positions:**  
31 Positions

**Housing Material:**  
PBT GF 20

**Wire Size Range:**  
• up to 2.5 mm<sup>2</sup> FLR Max.  
(diameter 1.5 mm)  
• up to 4.0 mm<sup>2</sup> FLR Max.  
(diameter 2.5 mm)

**Product Specification:**  
108-18742

**Application Specification:**  
114-18449



**Sealed Mixed Socket Housing**

No. of Positions	Housing Color	Part Numbers			
		Socket Housing	Adapter Cap*	Mating Pin Housing	Mating PCB Header Right-Angle Vertical
31	Black	1394081-1	1394089-1 (Vertical)	-	-
		-	1394816-1 (45° Angle)	-	-

\* For adaption to corrugated tubes NW 22.

**Technical Features**

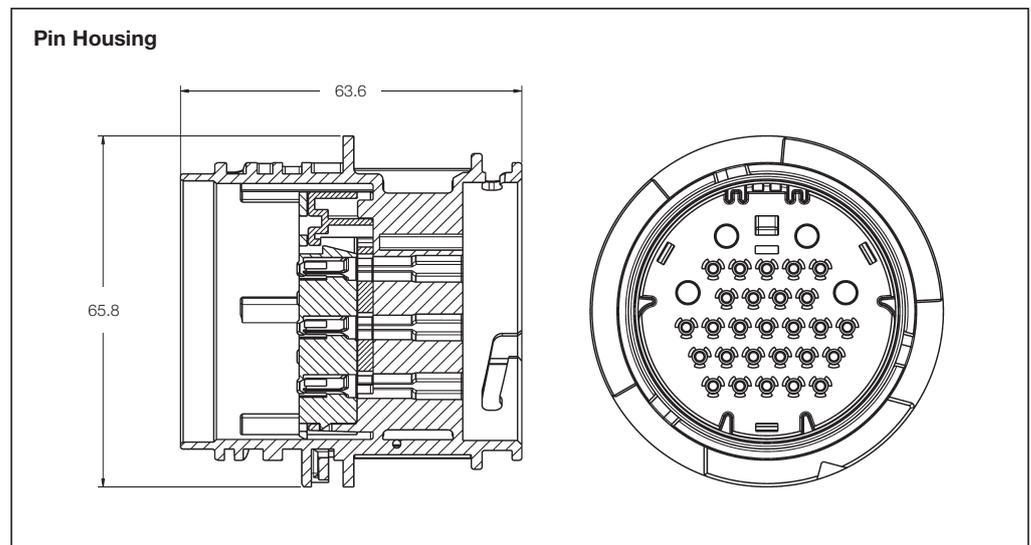
**No. of Positions:**  
31 Positions

**Housing Material:**  
PBT GF 20

**Wire Size Range:**  
• up to 2.5 mm<sup>2</sup> FLR Max.  
(diameter 1.5 mm)  
• up to 4.0 mm<sup>2</sup> FLR Max.  
(diameter 2.5 mm)

**Product Specification:**  
108-18742

**Application Specification:**  
114-18449



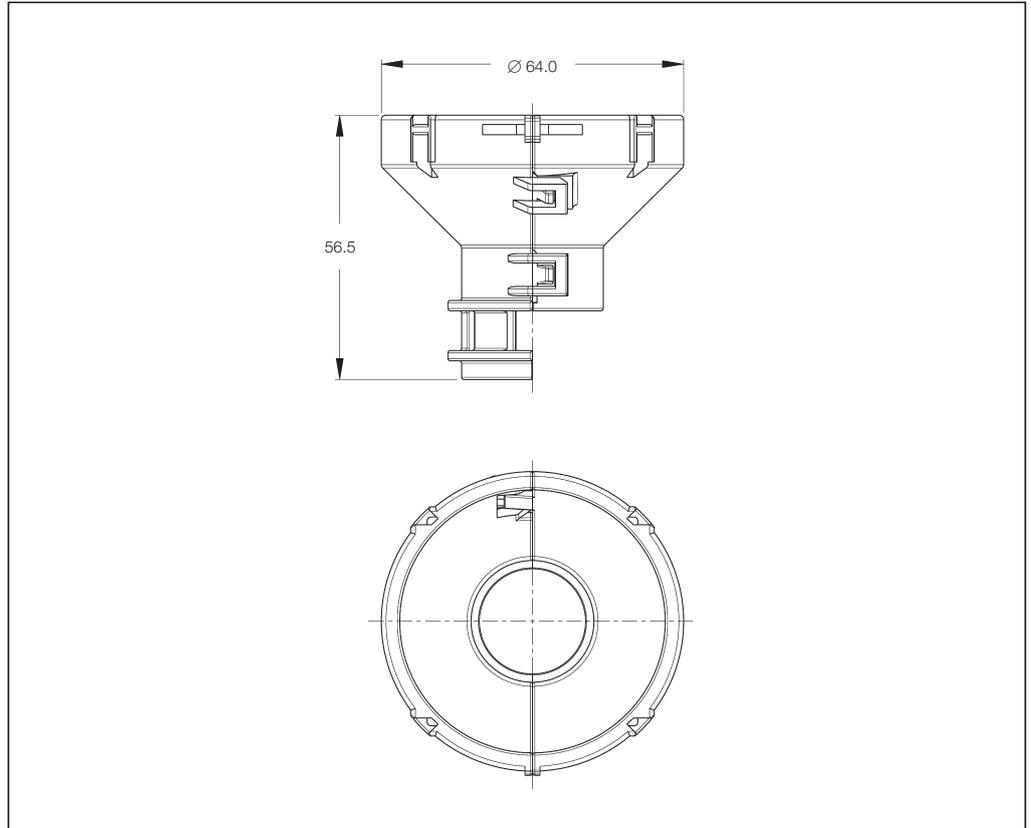
**Sealed Mixed Pin Housing**

No. of Positions	Housing Color	Part Numbers			
		Pin Housing	Adapter Cap*	Mating Socket Housing	Mating PCB Header Right-Angle Vertical
31	Black	1718232-1	1394089-1 (Vertical)	-	-
		-	1394816-1 (45° Angle)	-	-

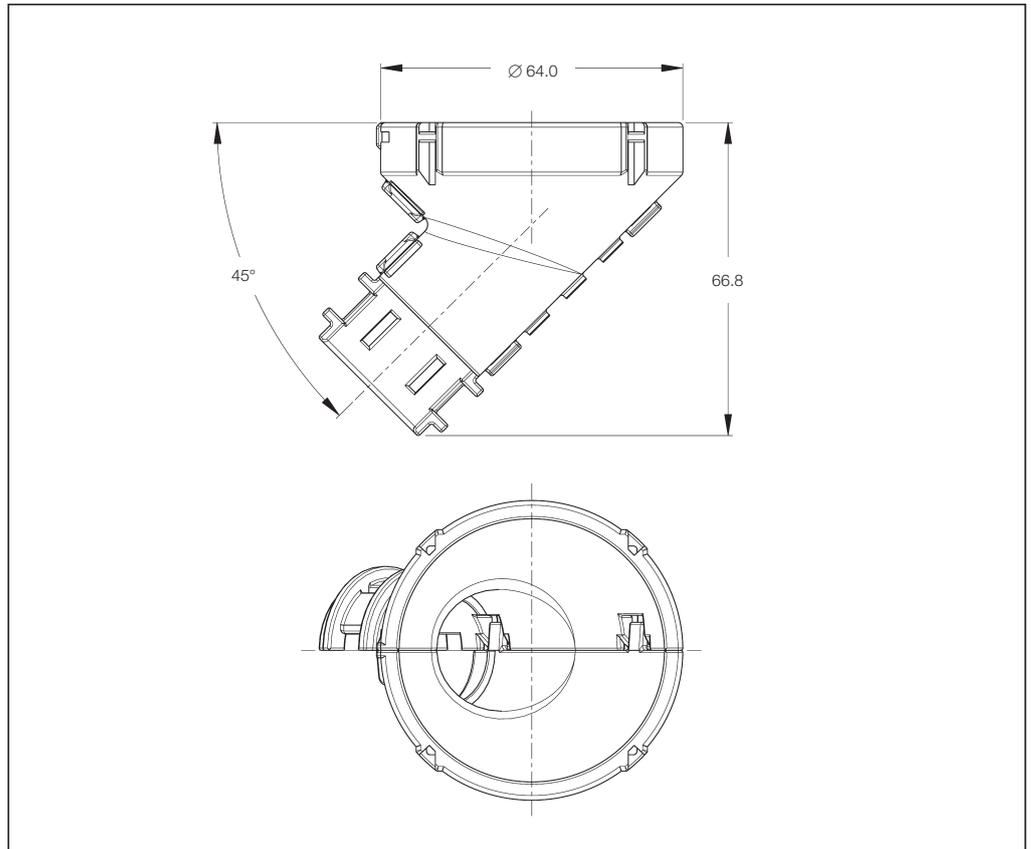
\* For adaption to corrugated tubes NW 22.

Sealed Diameter 1.5 mm/Diameter 2.5 mm Pin and Socket Housings

**Cap for 31 Positions**  
**Pin and Socket Housing**  
**for Corrugated Tubes**  
**nominal Width 22.0 mm**



**Cap 45° for 31 Positions**  
**Pin and Socket Housing**  
**for Corrugated Tubes**  
**nominal Width 22.0 mm**



Connectors for Diesel Fuel Injector

**Technical Features**

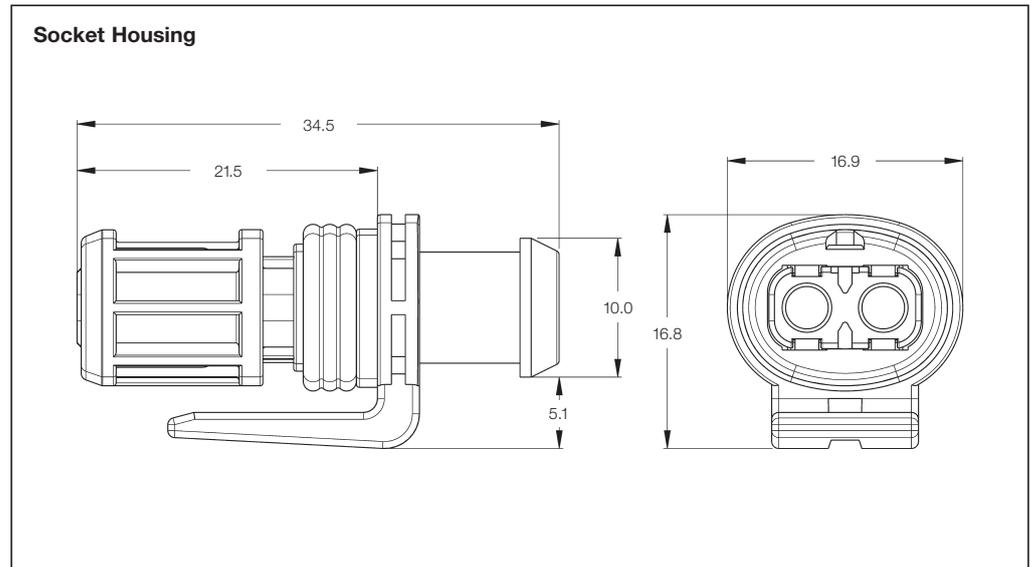
**No. of Positions:**  
2 Positions

**Housing Material:**  
Nylon 6.6 GF

**Wire Size Range:**  
0.2–2.5 mm<sup>2</sup>

**Product Specification:**  
108-3428-1

**Application Specification:**  
114-3219



**Socket Housing**

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Socket Housing	Cover	Mating Pin Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
2	–	Black	1337245-3	–	–	–	–

**Technical Features**

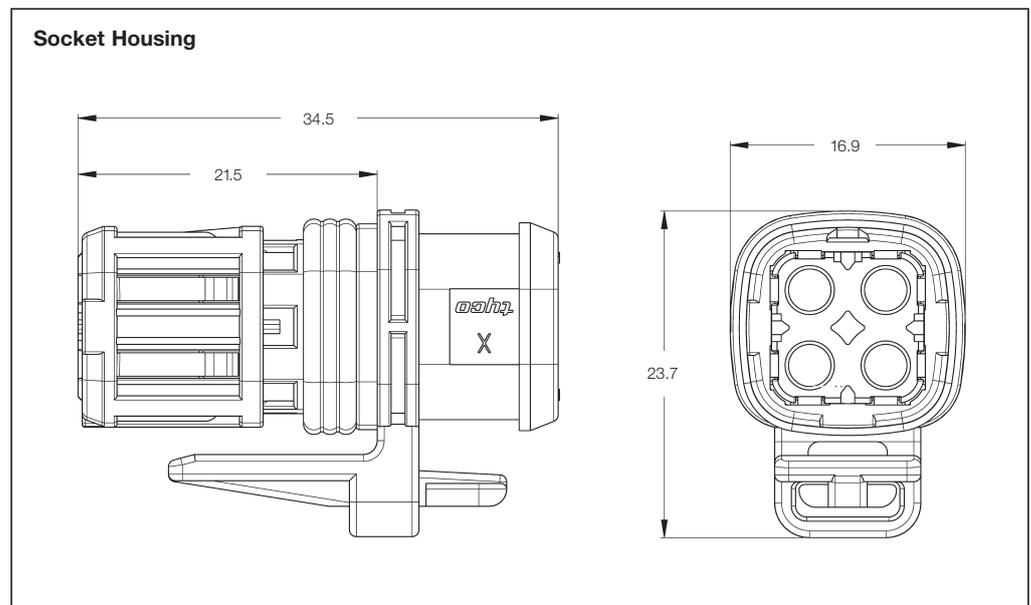
**No. of Positions:**  
4 Positions

**Housing Material:**  
Nylon 6.6 GF

**Wire Size Range:**  
0.2–2.5 mm<sup>2</sup>

**Product Specification:**  
108-3442

**Application Specification:**  
114-3219



**Socket Housing**

No. of Positions	Keying Options	Housing Color	Part Numbers				
			Socket Housing	Cover	Mating Pin Housing	Mating PCB Header Right-Angle	Mating PCB Header Vertical
4	–	Black	1337352-1	–	–	–	–

For Special Socket Contacts see Page 26-5.

Socket Contacts for Diesel Fuel Injector Connector

**Technical Features**

**Wire Size Range:**  
0.5–2.5 mm<sup>2</sup>

**Insulation Diameter:**  
1.2–3.0 mm

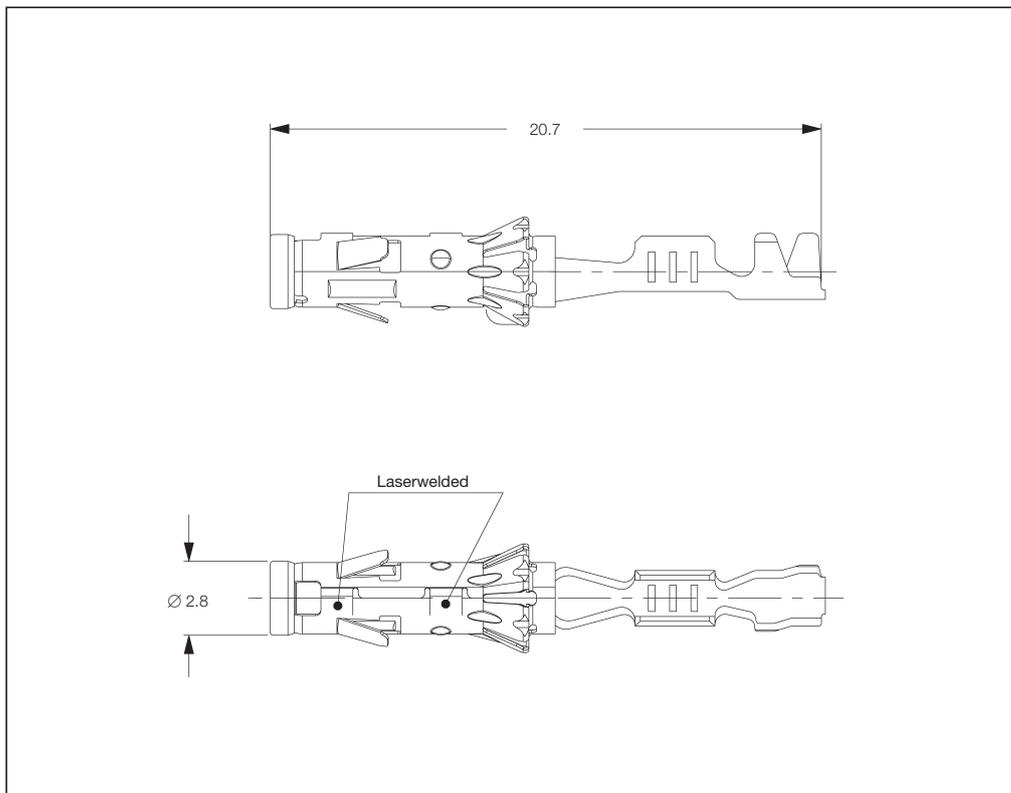
**Contact Material:**  
CuNi18Zn20

**Contact Finish:**  
Blank

**Current Carrying Capacity:**  
12 A max.

**Product Specification:**  
108-18028

**Application Specification:**  
114-18040



**Socket Contacts for Diesel Fuel Injector Connector**

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm)		Material and Finish	Part Numbers				Applicator*	Hand Tool
	FLK	FLR		Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.5–1.0	–	1.2–2.1	CuNi18Zn20, blank	1-929989-0	4,000	1-962998-0	500	2-878485-2	734289-1
1.0–2.5	–	2.2–3.0	CuNi18Zn20, blank	1-929990-0	3,800	1-962999-0	500	2-878486-2	734289-2

\* This Applicator Part Number is only one of a part number selection.  
Please call your local Tyco Electronics representative for personal assistance or visit our website.

**Note:** All Part Numbers are RoHS and ELV compliant.

Sealed Socket Housing with Secondary Locking Device

**Technical Features**

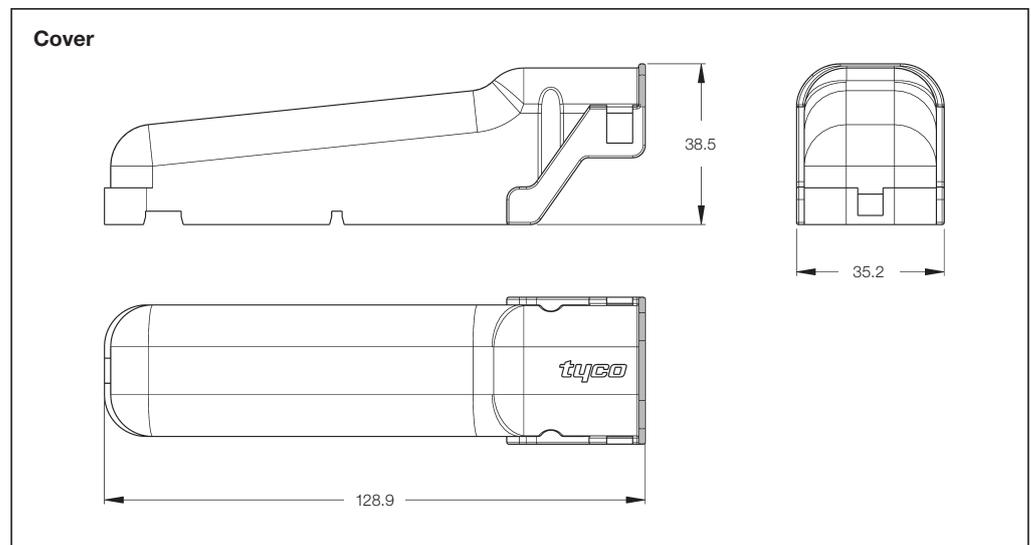
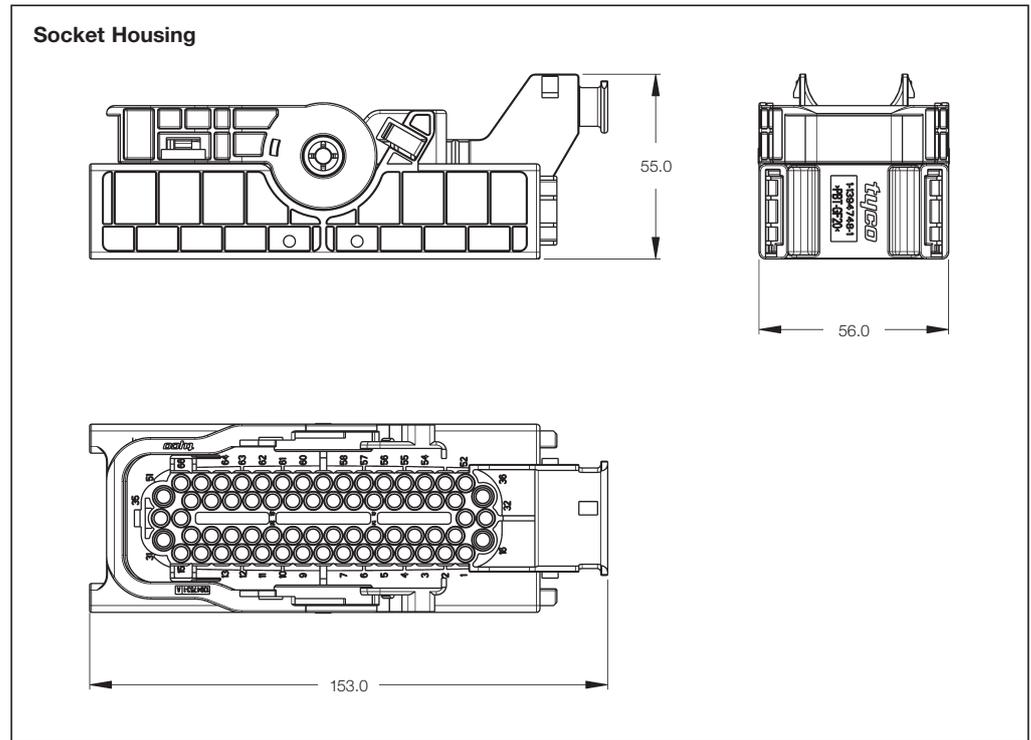
**No. of Positions:**  
66 Positions

**Housing Material:**  
PBT GF 20

**Wire Size Range:**  
4.0 mm<sup>2</sup> FLR Max.

**Product Specification:**  
108-18734

**Application Specification:**  
114-18424



**Sealed Socket Housings with Secondary Locking Device**

No. of Positions	Keying Options	Housing Color	Part Numbers			
			Socket Housing	Cover	Mating Pin Housing	Mating PCB Header Right-Angle      Vertical
66	A	Natural	1-1394748-1	1718010-1	1-1394750-1	
			1-1394748-2	1718010-1	1-1394750-1	
	B	Gray	2-1394748-1	1718010-1	2-1394750-1	
	C	Blue	3-1394748-1	1718010-1	3-1394750-1	
	D	Green	4-1394748-1	1718010-1	4-1394750-1	
	Spare Part F	Black	8-1394748-2	1718010-1	8-1394750-1	

Sealed Pin Housing with Secondary Locking Device

**Technical Features**

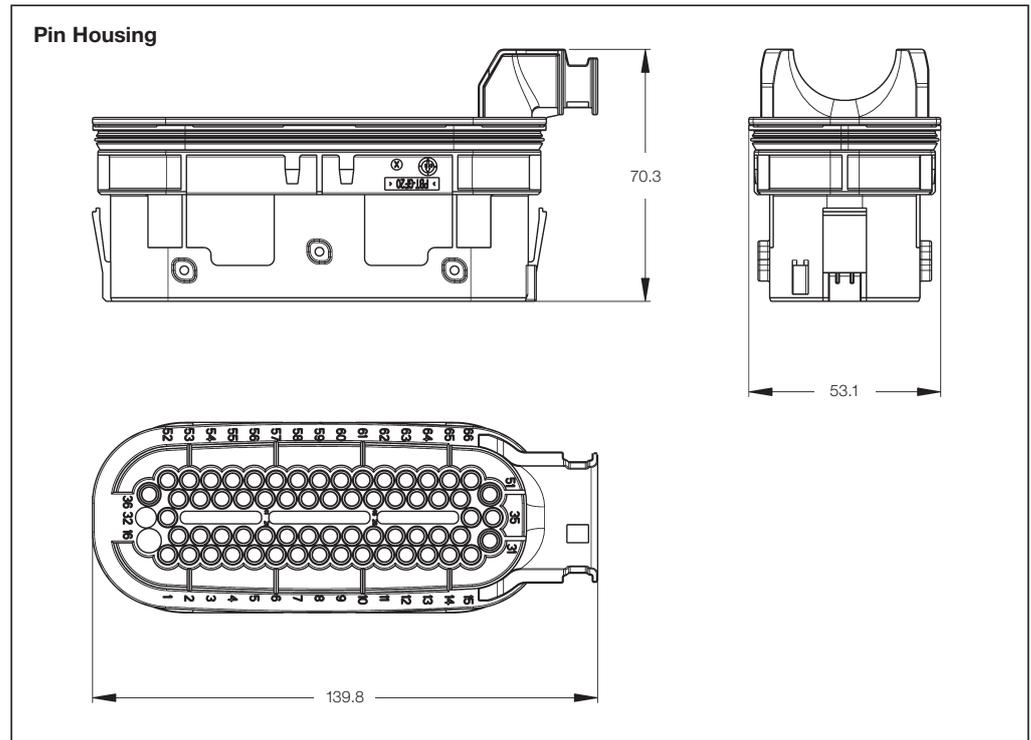
**No. of Positions:**  
66 Positions

**Housing Material:**  
PBT GF 20

**Wire Size Range:**  
4.0 mm<sup>2</sup> FLR Max.

**Product Specification:**  
108-18734

**Application Specification:**  
114-18424



**Sealed Pin Housings with Secondary Locking Device**

No. of Positions	Keying Options	Housing Color	Part Numbers			
			Pin Housing	Adapter	Mating Socket Housing	Mating PCB Header Right-Angle Vertical
66	A	Natural	1-1394750-1	1534407-1	1-1394748-1 / -2	
	B	Gray	2-1394750-1	1534407-1	2-1394748-1	
	C	Blue	3-1394750-1	1534407-1	3-1394748-1	-
	D	Green	4-1394750-1	1534407-1	4-1394748-1	
	Spare Part F	Black	8-1394750-1	1534407-1	8-1394748-2	

## Numerical Index

Part Number	Page	Part Number	Page	Part Number	Page
185636-1	26-17	929971-1	26-8	962977-7	26-8
185792-1	26-17	929971-7	26-8	962977-8	26-8
185793-1	26-17	929971-8	26-8	962978-1	26-8
539972-1	26-4	929972-1	26-8	962978-7	26-8
734285-1	26-5, 26-8 , 26-9	929973-1	26-8	962978-8	26-8
734285-2	26-5, 26-8 , 26-9	929974-1	26-8	962979-1	26-8
734285-3	26-8, 26-9 ,	929974-4	26-8	962980-1	26-8
734289-1	26-5, 26-6 , 26-8, 26-9 , 26-23	929974-7	26-8	962981-1	26-8
734289-2	26-5, 26-6 , 26-8, 26-9 , 26-23	929974-8	26-8	962981-4	26-8
828904-1	26-10	1-929974-4	26-8	962981-7	26-8
828904-2	26-10	929975-1	26-8	962981-8	26-8
828904-3	26-10	929975-4	26-8	1-962981-4	26-8
828905-1	26-10	929975-7	26-8	962982-1	26-8
828920-1	26-10	929975-8	26-8	962982-4	26-8
828921-1	26-10	929985-1	26-5	962982-7	26-8
828921-2	26-10	929986-1	26-5	962982-8	26-8
828922-1	26-10	929986-4	26-5	962994-1	26-5
828922-2	26-10	929987-1	26-5	962995-1	26-5
828986-1	26-10	929988-1	26-5	962995-4	26-5
2-878485-2	26-23	929988-2	26-5	962996-1	26-5
2-878486-2	26-23	929988-9	26-5	962997-1	26-5
929962-1	26-9	929989-1	26-5	962997-2	26-5
929963-1	26-9	929989-4	26-5	962998-1	26-5
929963-8	26-9	929989-7	26-5	962998-4	26-5
1-929963-0	26-9	929989-8	26-5	962998-7	26-5
929964-1	26-9	1-929989-0	26-5, 26-23	962998-0	26-5, 26-23
1-929964-0	26-9	929990-1	26-5	962999-1	26-5
929965-1	26-9	929990-4	26-5	962999-4	26-5
929966-1	26-9	929990-7	26-5	962999-7	26-5
929966-7	26-9	1-929990-0	26-5, 26-23	1-962999-0	26-5, 26-23
929967-1	26-9	962966-1	26-9	965576-1	26-17
929967-4	26-9	962967-1	26-9	965577-1	26-17
929967-7	26-9	962967-8	26-9	965687-1	26-17
929967-8	26-9	1-962967-0	26-9	965702-1	26-4
1-929967-0	26-9	962968-1	26-9	965783-1	26-17
1-929967-4	26-9	1-962968-0	26-9	965784-1	26-17
929968-1	26-9	962969-1	26-9	965785-1	26-17
929968-4	26-9	962970-1	26-9	965786-1	26-17
929968-7	26-9	962970-7	26-9	1-967325-1	26-12, 26-13
929968-8	26-9	962971-1	26-9	1-967325-2	26-12, 26-13
929969-1	26-8	962971-4	26-9	1-967325-3	26-12, 26-13
929970-1	26-8	962971-7	26-9	2-967325-1	26-12, 26-13
929970-7	26-8	962971-8	26-9	2-967325-2	26-12, 26-13
929970-8	26-8	962971-0	26-9	2-967325-3	26-12, 26-13
		1-962971-4	26-9	3-967325-1	26-12
		962972-1	26-9	3-967325-2	26-12
		962972-4	26-9	3-967325-3	26-12
		962972-7	26-9	4-967325-1	26-12
		962972-8	26-9	4-967325-2	26-12
		962976-1	26-8	4-967325-3	26-12
		962977-1	26-8		

## Numerical Index

Part Number	Page	Part Number	Page	Part Number	Page
1-967402-1	26-12, 26-13, 26-14	1394089-1	26-20	3-1579007-8	26-4
1-967402-2	26-12, 26-13, 26-14	1394277-1	26-17	4-1579007-7	26-7
1-967402-3	26-12, 26-13, 26-14	1394277-2	26-17	5-1579007-0	26-4
2-967402-1	26-12, 26-13	1394324-1	26-15	1703012-1	26-6
2-967402-2	26-12, 26-13	1394324-2	26-15	1703012-4	26-6
2-967402-3	26-12, 26-13, 26-14	1394324-3	26-15	1703013-1	26-6
967650-1	26-16	1394324-4	26-15	1703013-2	26-6
967650-2	26-16	1-1394748-1	26-24, 26-25	1703013-4	26-6
967650-3	26-16	1-1394748-2	26-24, 26-25	1703013-8	26-6
967650-4	26-16	2-1394748-1	26-24, 26-25	1703014-1	26-6
1-967650-1	26-16	3-1394748-1	26-24, 26-25	1703014-4	26-6
2-967650-1	26-16	4-1394748-1	26-24, 26-25	1703016-1	26-6
3-967650-1	26-16	8-1394748-2	26-24, 26-25	1703016-4	26-6
1-968968-1	26-13, 26-14	1-1394750-1	26-24, 26-25	1703017-1	26-6
1-968968-2	26-14	2-1394750-1	26-24, 26-25	1703017-2	26-6
1-968968-3	26-14	3-1394750-1	26-24, 26-25	1703017-4	26-6
2-968968-3	26-14	4-1394750-1	26-24, 26-25	1703018-1	26-6
6-968968-1	26-13	8-1394750-1	26-24, 26-25	1703018-4	26-6
6-968968-2	26-13	1394816-1	26-20	1703780-1	26-13
6-968968-3	26-13	1418916-1	26-17	1718010-1	26-24
1241598-1	26-15	1418917-1	26-17	1718230-1	26-16
1337245-3	26-22	1418918-1	26-17	1718230-2	26-16
1337352-1	26-22	1418919-1	26-17	1718230-3	26-16
1394081-1	26-20	1534789-1	26-17	1-1718230-1	26-16
		1534791-1	26-17	2-1718230-1	26-16
		1-1579007-8	26-7	3-1718230-1	26-16
		3-1579007-2	26-7	1718232-1	26-20
		3-1579007-7	26-4		

### 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](http://www.tycoelectronics.com)

[www.tycoelectronics.com/automotive](http://www.tycoelectronics.com/automotive)

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

---

Engineering Notes

---



## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9