

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 mm²

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.

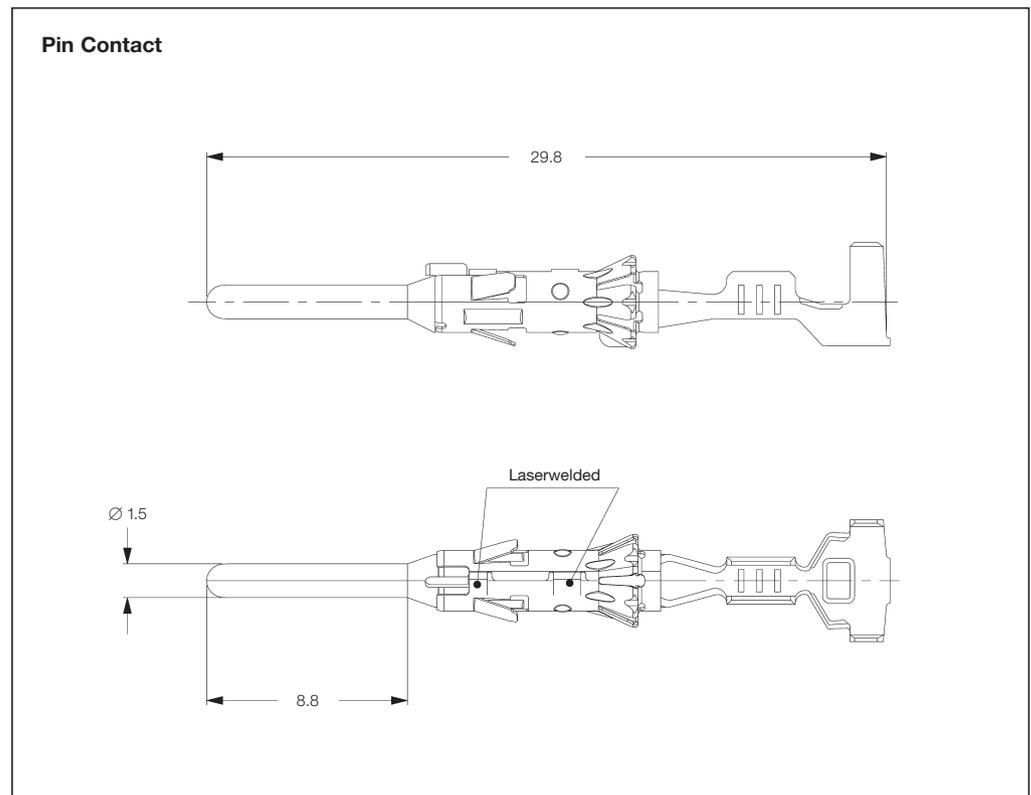
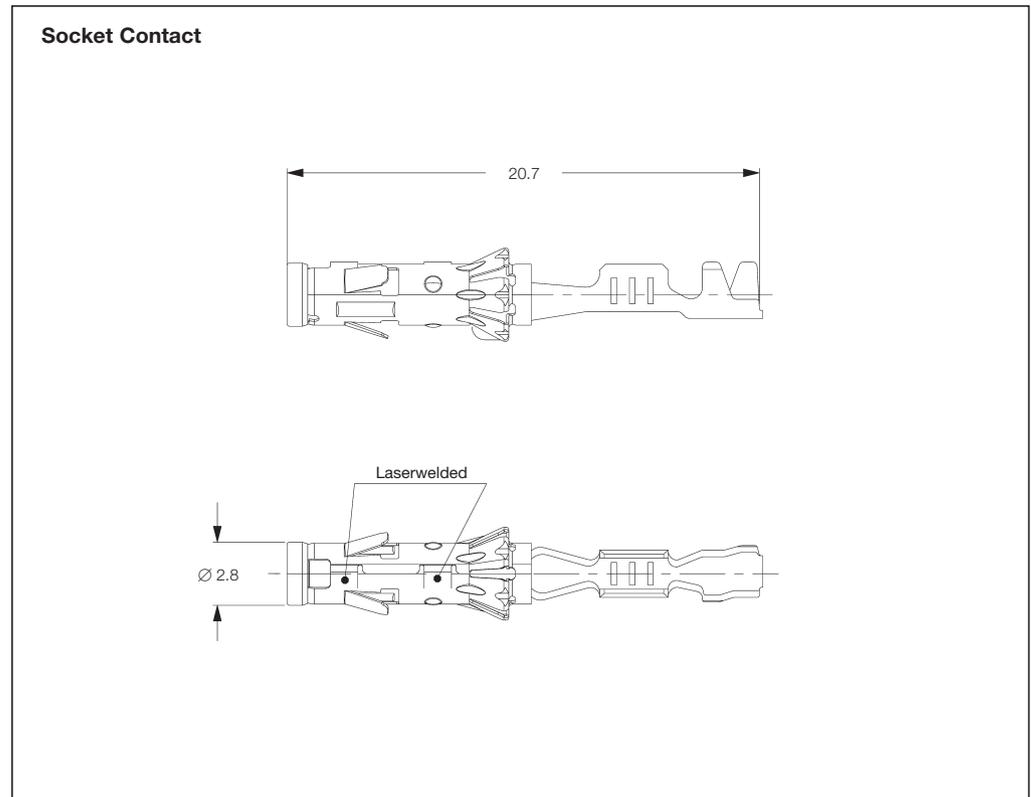
Product Specification:
108-18028

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 mm²)
Part No. **965702-1**



Socket Contacts

Diameter 1.5 mm Socket Contacts

Wire Size Range (mm ²)	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
			tin plated	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 ²)	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 ²)	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
			tin plated	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
			tin plated	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 mm²

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.

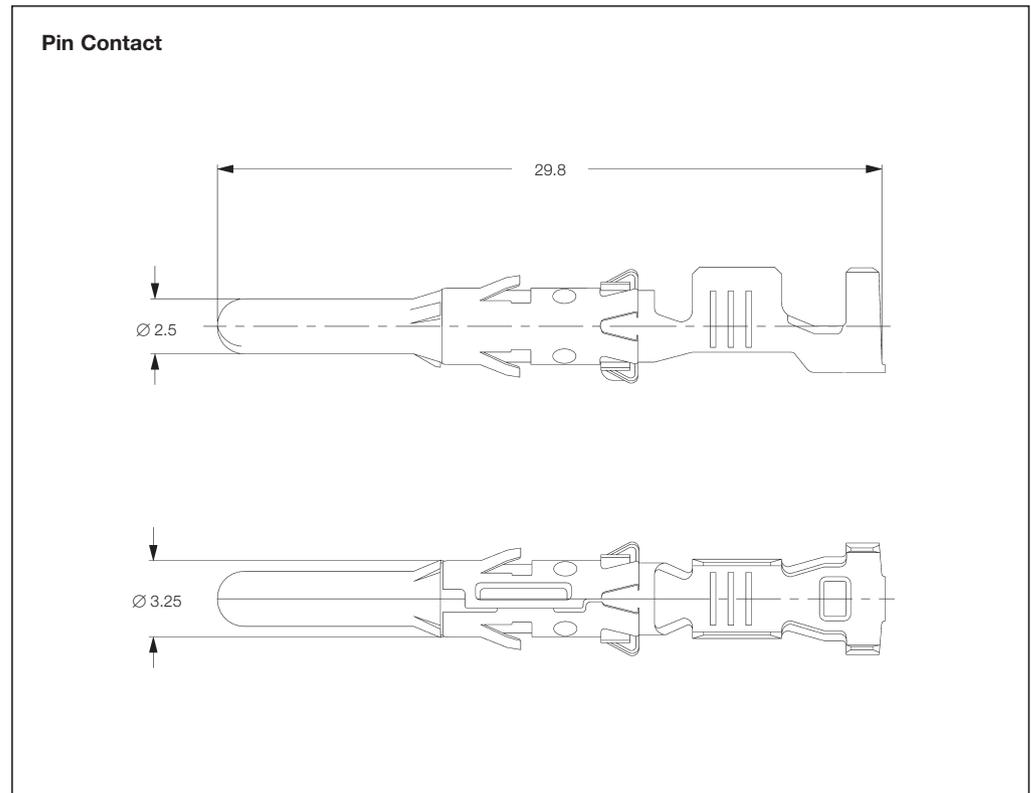
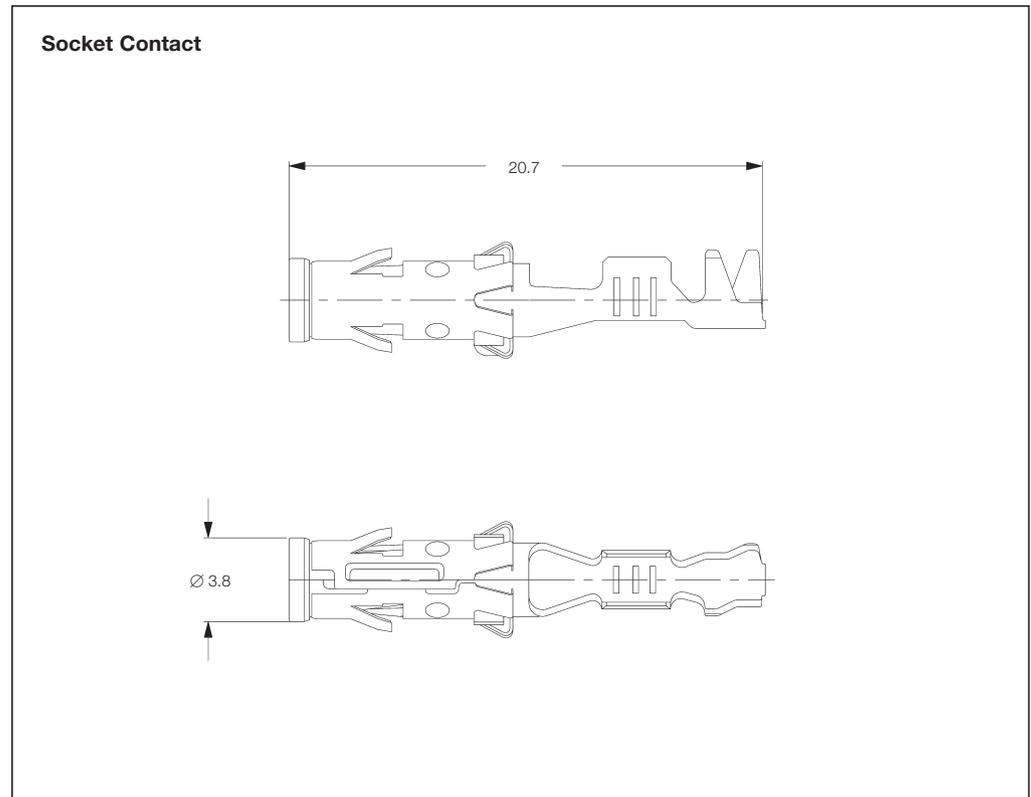
Product Specification:
 108-18027

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 mm²)
 Part No. **3-1579007-2**



Socket Contacts

Diameter 2.5 mm Socket Contacts

Wire Size Range (mm ²)	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 ²)	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	58606-1
			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 ²)	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
			gold plated	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	58606-1
			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 ²)	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		
			tin plated	1-929967-4	3,000	1-962971-4	500		
			gold plated	929967-8	3,000	962971-8	500		
			tin plated	1-929967-0	3,000	1-962971-0	500		
≥1.0–2.5	–	2.2–3.0	tin plated	929967-4	3,000	962971-4	500	878486	58606-1
			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

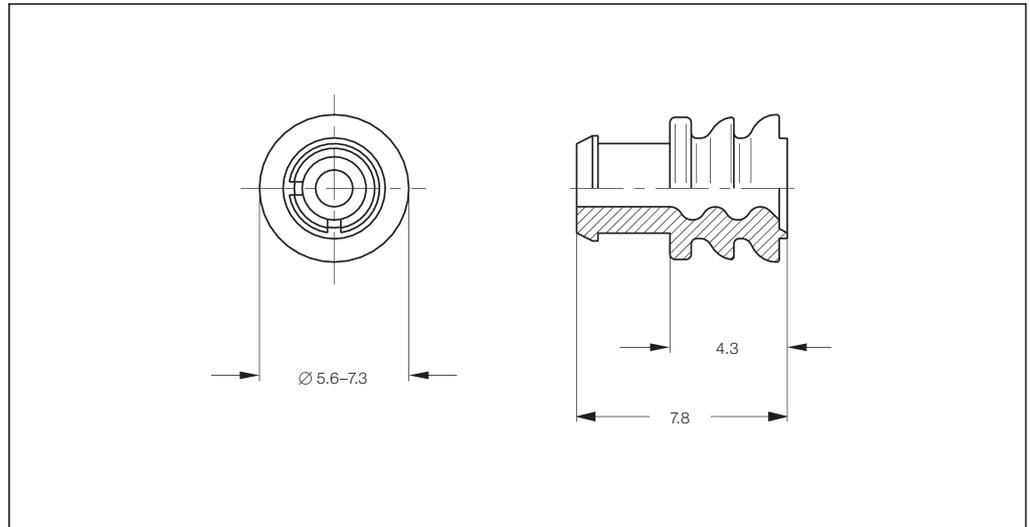
♦) This Applicator and Hand Tool Part Number is only one of a part number selection.
Please call your local Tyco Electronics representative for personal assistance or visit our website.

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	Grey	828920-1	5,000
-	2.2-3.0	Violet	828921-1	5,000
		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