AMP Sealed Connectors

Sealed Circular Connectors . . . 2.5mm and 1.5mm Systems

Contacts

- Available in 1.5 mm [.059 in.] and 2.5 mm [.098 in.] pin diameters.
- Available with either tin, silver or gold plating.
- Rugged two piece construction with stainless steel jacket allows the use of optimized (CuNiSi) contact material.
- 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 - 2.5 mm² [#24 - #14] AWG.
- 1.5 mm System wire range 0.2 - 2.5 mm² [#24 - #14] AWG.

Wire Seals

- Made from silicon rubber material.
- Wire seal is crimped simultaneously with the contact.
- **■** 2.5 mm System accomodates insulation diameters of 1.2 - 3.0 mm [.047 - .118 in.].
- 1.5 mm System accomodates insulation diameters of 1.2 - 3.0 mm [.047 - .118 in.]

Connector Housings

- Made from glass filled PBT material
- 2.5 mm System will mate to customer interfaces made per DIN 72585.
- Pre-assembled interface and panel mounting seal.
- The 2.5 mm System is available in 4 position or in 2 and 3 positions with blocked cavities. Four keying options are available per position size.
- The 1.5 mm System is available only in a 7 position version.



AMP in conjunction with major European truck manufacturers has developed a standard system of circular sealed connectors to meet the demand for superior performance under environments of extreme vibration, physical shock and temperature change. Typical applications include magnetic valves, sensors for ABS and powertrain management (including direct engine mounting) and lighting.

The 2.5 mm System uses a standard outer shell which can be supplied in either 2 or 3 position versions with the extra cavities blocked or in a 4 position version. Each position size is available with four different keying options that are designated by color code. The 1.5 mm System uses the same outer shell but is available only in a 7 position version.

The shell standardization allows the use of the same back shells for all parts.

Back shells are available in 90° and 180° wire exit versions with the options for mounting 8.5 mm or 10 mm convoluted tubing or the use of our adjustable strain relief feature on the free wire version.

The housings are available as free hanging male and female connectors or for mating to a customer supplied pin interface according to DIN 72585, Part 1 (ISO 15170 pending). The free hanging pin housing is also suitable for through panel mounting and is supplied with a preassembled seal for panel sealing. The actual mounting is achieved with the use of a separately available locking ring.

Terminal construction is of a two piece design to allow optimization of electrical and mechanical performance. An outer stainless steel jacket provide protection against handling damage.

Product Performance

Temperature Rating For tin plating -40° to 130° C

For silver plating -40° to 140° C For gold plating -40° to 150° C

Dielectric Strength

1.0 kVAC between adjacent contact or to shell

Contact Termination Resistance

 $5 \text{ m}\Omega$ Max. (Initial) 10 m Ω Max. (Final)

Current Guidelines (Map Wire Size)

2.5 mm . . . 30 amps Max. 1.5 mm . . . 25 amps Max. (Using the maximum wire size at 23°C)

Product Documentation Product Specification

108-18621 108-18027, DIN 72585 (2.5 mm) 108-18028 (1.5 mm)

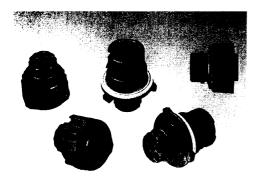
Application Specification

114-18255 114-18020 (2.5 mm) 114-18040 (1.5 mm)



Sealed Circular Connectors . . . 2.5mm and 1.5mm Systems (Continued)

Connector Housings

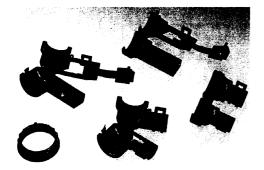


2.5 mm housings require 2.5 mm contacts. 1.5 mm housings require 1.5 mm contacts. Use cavity plug part number 828922-1 to seal unused connector cavities.

Connector Type	Positions	Pin Housing Part Number	Socket Housing Part Number	
2.5 mm	2	1-967402-3	1-967325-3	
	3	1-967402-2	1-967325-2	
	4	1-967402-1	1-967325-1	
1.5 mm	7	967447-1	967650-1	

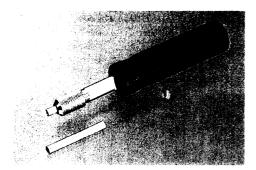
Keyed versions of the 2.5 mm housings are available, call AMP Incorporated for additional information

Accessories



Description	Part Number	
Mounting Ring for Pin Housing	965687-1	
Right Angle Cover with Universal Clamp	965576-1	
Straight Cover with Universal Clamp	965784-1	
Right Angle Cover for NW 8.5 mm Diameter Corrugated Tubing	965577-1	
Right Angle Cover for NW 10 mm Diameter Corrugated Tubing	965783-1	
Straight Cover for NW 8.5 mm Diameter Corrugated Tubing	965785-1	
Straight Cover for NW 10 mm Diameter Corrugated Tubing	965786-1	

Tools



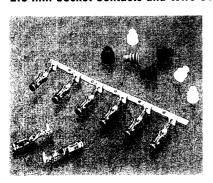
Description	Part Number		
Extraction Tool for 1.5 mm Contacts	518082-1		
Spare Tube for 1.5 mm Contacts	548551-1		
Extraction Tool for 2.5 mm Contacts	872070-1		
Spare Tube for 2.5 mm Contacts	872992-1		
Terminal Mounting Tool (for 0.2-1.0 mm ²)	965702-1		



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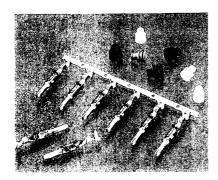
All contacts listed below are tin plated. Please refer to the customer drawing for additional plating options or call 1-800-522-6752 for more information.

2.5 mm Socket Contacts and Wire Seals



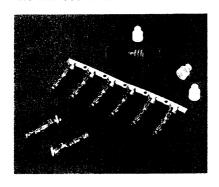
Wire Size		Insulation Diameter		Contact Part Number		Wire
mm ²	AWG	mm	in.	On Strip	Loose Piece	Seal
0.2-0.4	24-22	1.2-2.1	.047083	929973-1	962980-1	828920-1
0.5-1.0	20-18	1.2-2.1	.047083	929974-1	962981-1	828920-1
>1.0-2.5	16-14	2.2-3.0	.087118	929975-1	962982-1	828921-1

2.5 mm Pin Contacts and Wire Seals



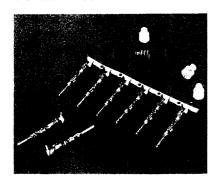
Wire	Size	Insulatio	n Diameter	Contact Part Number		er Wire	
mm²	AWG	mm	in.	On Strip	Loose Piece	Seal	
0.2-0.4	24-22	1.2-2.1	.047083	929966-1	962970-1	828920-1	
0.5-1.0	20-18	1.2-2.1	.047083	929967-1	962971-1	828920-1	
>1.0-2.5	16-14	2.2-3.0	.087118	929968-1	962972-1	828921-1	

1.5 mm Socket Contacts and Wire Seals



Wire	Size	Insulatio	n Diameter	Contact Part Number		Wire	
mm ²	AWG	mm	in.	On Strip	Loose Piece	Seal	
0.2-0.4	24-22	1.2-2.1	.047083	929988-1	962997-1	828904-1	
0.5-1.0	20-18	1.2-2.1	.047083	929989-1	962998-1	828904-1	
>1.0-2.5	16-14	2.2-3.0	.087118	929990-1	962999-1	828905-1	

1.5 mm Pin Contacts and Wire Seals



Wire Size		Insulatio	Insulation Diameter		Contact Part Number	
mm²	AWG	mm	in.	On Strip	Loose Piece	Wire Seal
0.2-0.4	24-22	1.2-2.1	.047083	929982-1	962991-1	828904-1
0.5-1.0	20-18	1.2-2.1	.047083	929983-1	962992-1	828904-1
>1.0-2.5	16-14	2.2-3.0	.087118	929984-1	962993-1	828905-1