

Amphenol Pcd

ENVIRONMENTALLY SEALED IN-LINE JUNCTIONS

Amphenol Pcd expands the SJS family with a line of environmentally sealed In-Line Junction Splices developed to bring higher reliability, improved installation ease, and greater flexibility to wiring applications.

These In-Line Junctions consist of compact, cylindrical plug and receptacle housings, which lock firmly together with a straight push and unlock with either a simple “twist and pull” (single contact) or “squeeze and pull” (triple contact) motion.

FEATURES & BENEFITS

Developed to meet MIL-T-81714 criteria

Interfacial seal and triple barrier rear seal provide complete environmental sealing

Quick disconnect capability streamlines wire maintenance

Rugged polyamide housings

Single wire styles offered in two colors per size allowing for immediate wire recognition

Triple wire styles offer three color-coded keying options

Protective dust cover available

Polarization feature enables blind, fool-proof mating

Uses standard Military Specification MIL-C-39029 contacts

Low profile wire bundling

In-Line Junctions



Single Wire Junction

Single wire junctions have a housing diameter of .390” and .430” and are available in two colors per size. These junctions feature an environmental sealing that meets EIA-364D-03B to 12,000ft, Altitude Immersion Test standards. To mate plug and receptacle push both sides together and “twist and pull” to release.



Triple Wire Junction

Triple wire junctions are environmentally sealed and have a .700” diameter housing. These housings feature molded-in polarizing keys providing three distinct configuration choices and offer color coding in red, white and blue. To mate plug and receptacle push together to lock and “squeeze and pull” finger grips on plug to release.



Customer Specific Customization

Amphenol Pcd welcomes inquiries for application specific modifications to the standard In-Line Junction series. The Environmentally Sealed In-Line Junction product series is continuously expanding to meet current and future customer needs. Application specific customization includes:

- Varied Wire Gauges
 - Custom Colors
 - Unique Markings
- High Power
 - Electronic Packaging
 - Increased Pin Count
- Alternate Contacts
 - Distinct Configurations
 - Other Needed Alterations

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In-Line Junction Plugs

Single Wire	Size	Part No.	Length		Diameter		Mated Length		Weight Grams	Key	Color
			Inch	cm	Inch	cm	Inch	cm			
	16	SJS716100	1.13	2.87	0.39	0.99	1.65	4.20	1.70	N/A	Blue
		SJS716110									Red
	20	SJS720100	1.11	2.81	0.39	0.99	1.70	4.30	1.40	N/A	Green
		SJS720110									Yellow
Triple Wire	16	SJS816100								A	Red
		SJS816110	1.12	2.84	0.70	1.78	1.60	4.10	5.30	B	White
		SJS816120								C	Blue
	20	SJS820100								A	Red
		SJS820110	1.08	2.74	0.70	1.78	1.68	4.30	4.30	B	White
		SJS820120								C	Blue

In-Line Junction Receptacles

Single Wire	Size	Part No.	Length		Diameter		Mated Length		Weight Grams	Key	Color
			Inch	cm	Inch	cm	Inch	cm			
	16	SJS716200	1.06	2.69	0.43	1.09	1.65	4.20	1.50	N/A	Blue
		SJS716210									Red
	20	SJS720200	1.03	2.61	0.39	0.99	1.70	4.30	1.20	N/A	Green
		SJS720210									Yellow
Triple Wire	16	SJS816200								A	Red
		SJS816210	1.03	2.61	0.70	1.78	1.60	4.10	4.60	B	White
		SJS816220								C	Blue
	20	SJS820200								A	Red
		SJS820210	0.99	2.51	0.70	1.78	1.68	4.30	3.70	B	White
		SJS820220								C	Blue

TECHNICAL SPECIFICATIONS

MATERIALS

Insulator Body:	Polyamide (Nylon)
Grommet:	Silicone Rubber
Contacts:	Plugs - M39029/56 Receptacles - M39029/58
Contact Retainers :	Stainless Steel

PERFORMANCE

Temperature Range:	-65°C to 160°C
Insulation Resistance:	> 5000 Megohms
Dielectric Withstanding Voltage:	1500Vrms @ Sea Level 600Vrms @ 45,000 ft. Altitude
Current Ratings:	Contact Size 20 - 7.5 Amps Contact Size 16 - 13 Amps
Sealing:	EIA-364D-03B (12,000 ft.)
Vibration:	EIA-364D-28D (Test Condition V, E)
Flammability Rating:	UL94, V0.
CTI Rating:	UL746B, 600V
Contact Retention:	EIA-364D-29B (20 lb.)

Contacts

Contacts are not provided with the In-Line Junctions and must be ordered separately. Three pin and socket sets are required per triple wire junction and one pair per single.

Size 16 Plugs	M39029/56-352 (socket)
Size 20 Plugs	M39029/56-351 (socket)
Size 16 Receptacles	M39029/58-364 (pin)
Size 20 Receptacles	M39029/58-363 (pin)

Termination Accessories

Crimp Tool for contacts and Insertion/Removal tool details

Wire Gauge	Crimp Tool		Installation
	Basic Tool	Positioner	
Size 16	M22520/1-01	M22520/1-04 BLUE	M81969/14-03
Size 20	M22520/1-01	M22520/1-04 RED	M81969/14-02

Related Amphenol Products

Junction Modules MIL-T-81714 Series I



Track-mounted Terminal Junction Modules with multiple bussing and electronic package options.

MIL-T-81714 Series II



High density, low weight, environmentally sealed Socket Junction Modules with light weight composite track.

Wire Splices In-Line Wire Splices



Single and multi-contact In-Line Wire Splices to MIL-T-81714 Series I and II, and 1119 splices to NSA936830.

Electronic Splices



Electronic Component Splices available with a variety of diodes, fuses, capacitors or resistors. Designed to meet MIL-T-81714 environmental requirements.