Amphenol

Amphenol Pcd

NEW PRODUCT BULLETIN

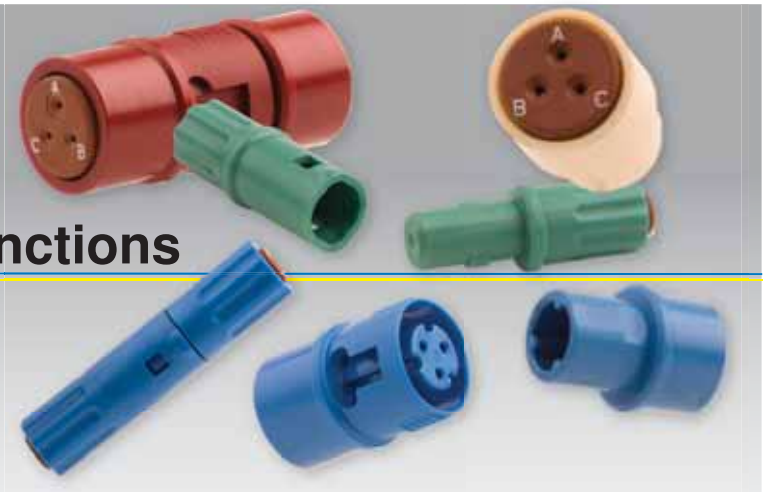
ENVIRONMENTALLY SEALED IN-LINE JUNCTIONS

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

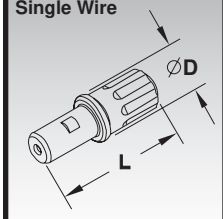
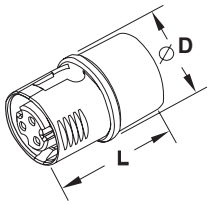
Amphenol Pcd welcomes inquiries for application specific modifications to the standard In-Line Junction series. The Environmentally Sealed In-Line Junction product series is continuously expanding to meet current and future customer needs. Application specific customization includes:

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

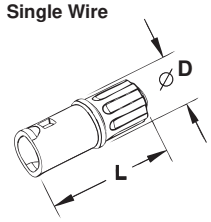
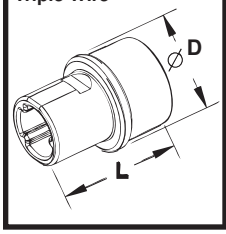
Amphenol Pcd

ENVIRONMENTALLY SEALED IN-LINE JUNCTIONS

In-Line Junction Plugs

	Size	Part No.	Length Inch	Length cm	Diameter Inch	Diameter cm	Mated Length Inch	Mated Length cm	Weight Grams	Key	Color
Single Wire 	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	1.12	2.84	0.70	1.78	1.60	4.10	5.30	A	Red
		SJS816110								B	White
		SJS816120								C	Blue
	20	SJS820100	1.08	2.74	0.70	1.78	1.68	4.30	4.30	A	Red
		SJS820110								B	White
		SJS820120								C	Blue

In-Line Junction Receptacles

	Size	Part No.	Length Inch	Length cm	Diameter Inch	Diameter cm	Mated Length Inch	Mated Length cm	Weight Grams	Key	Color
Single Wire 	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	1.03	2.61	0.70	1.78	1.60	4.10	4.60	A	Red
		SJS816210								B	White
		SJS816220								C	Blue
	20	SJS820200	0.99	2.51	0.70	1.78	1.68	4.30	3.70	A	Red
		SJS820210								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	Insertion / Removal Tool
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.

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	Mated Pair Images
1-Pin	
3-Pin	
8-Pin	

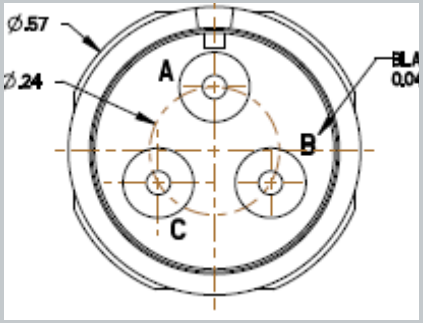
Amphenol Pcd

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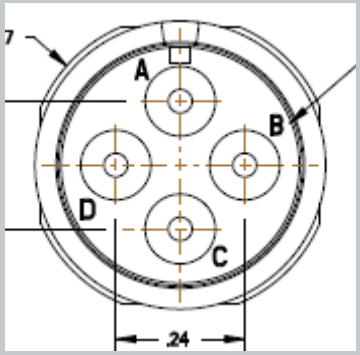
Amphenol PCD
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Beverly, MA 01945
www.amphenolpcd.com

Interface Examples

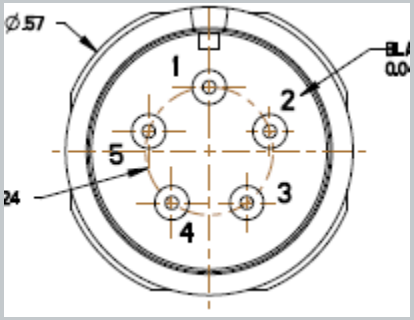
3-Pin



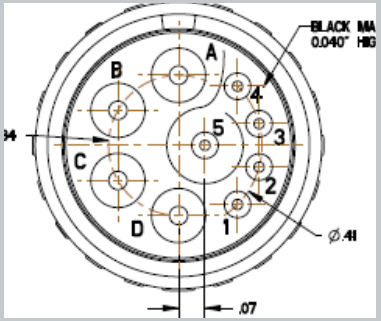
4-Pin



5-Pin



9-Pin



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New from Amphenol Pcd

Introducing the NEW 8-Pin QuickConnect™



Designed for lean manufacturing, the 8-Pin QuickConnect™ is the latest addition to the SJS QuickConnect series from Amphenol Pcd. It was developed to bring higher reliability and flexibility to wiring applications and to make installation and maintenance easier.

Benefits at a Glance
(entire SJS QuickConnect™ series)

MIL-T-81714
Developed to meet MIL-T-81714 criteria.

Quick, Simple Connection
Makes wire installation and maintenance simple and efficient.

Environmental Sealing
Interfacial and triple-barrier rear seal provide complete environmental sealing.

MIL-C-39029
Uses standard MIL-C-39029 contacts.

Durability
Rugged polyamide housings.

Blind-Mate Connection
Polarization feature enables blind, foolproof mating.



(Actual Size)

MORE **NEW** QUICKCONNECTS



Single-Pin QuickConnect™

More details inside



Triple-Pin QuickConnect™

More details inside



QuickConnect™ accessories

Contact us for more information

Amphenol Pcd www.amphenolpcd.com email: quickconnect@amphenolpcd.com 978-624-3400

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TECHNICAL SPECIFICATIONS

MATERIALS	
Insulator Body	Polyamide 6/6 (Nylon)
Grommet	Silicone Rubber
Contact Retainers	Stainless Steel
PERFORMANCE	
Temperature Range	- 65°C to + 125°C
Insulation Resistance	5000 Megaohms Min. @ 500 VDC
Dielectric Withstanding	1000 VRMS, 60 Hz @ Sea Level
	300 VRMS, 60 Hz @ 70,000 ft.
	300 VRMS, 60 Hz @ 100,000 ft.
Current Ratings	Size 22: 5 Amps
Durability	500 Mating Cycles
Temperature Cycling	5 (1) Hour Cycles: - 65°C to + 125°C
Shock	100G Sawtooth, 6MS
Vibration	10-2000 Hz, 15G Peak
Salt Spray	5% Salt Spray @ 95°F for 48 Hours
Humidity	10 Days @ 25°C to 65°C, 80-90% RH

CONTACTS

Plug	Size 22	M39029/57-354 (socket)
Receptacle	Size 22	M39029/58-360 (pin)

(Contacts must be ordered separately.)





For new contact arrangements, contact us.

8-Pin QuickConnect™

Product Description

8-Pin QuickConnect™:
The new 8-Pin QuickConnect, the latest product in the SJS QuickConnect series, was developed to bring higher reliability and flexibility to wiring applications. Designed to meet MIL-T-81714 criteria, the product, with no tools necessary, is simple to install and easy to maintain. It features a locking mechanism that ensures mating stability and a high density contact area that allows for a variety of power and data applications—all within a small, lightweight envelope.

To Connect:

1. On plug, line up circle and triangle.
2. Align circles on plug and receptacle.
3. Gently push together and "twist" to lock.

Receptacle



Plug

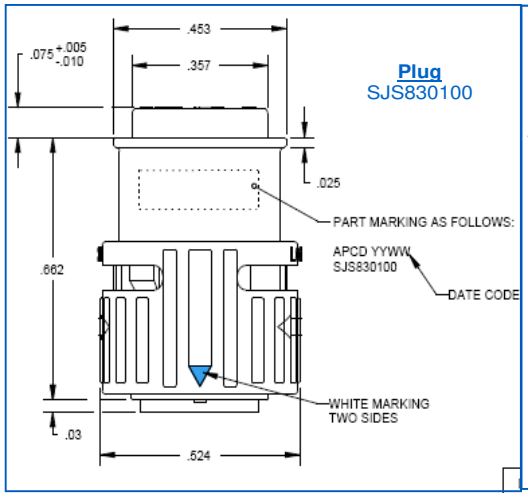


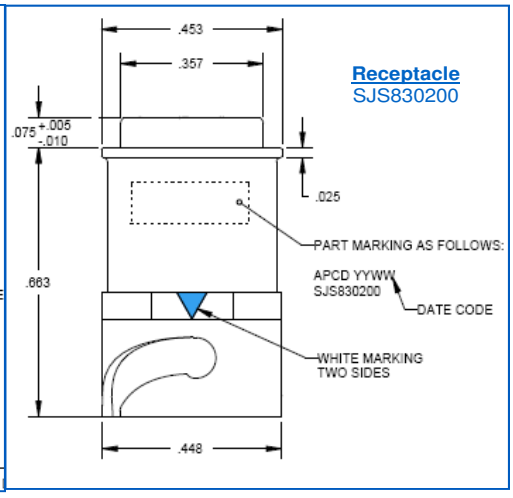
Plug description

8 Wire	Size	Part No.	Length Inch	Length cm	Diameter Inch	Diameter cm	Mated Length Inch	Mated Length cm	Weight Grams	Key	Color
	22	SJS830100	0.77	1.95	0.52	1.32	1.25	3.18	1.72	N/A	Black

Receptacle description

8 Wire	Size	Part No.	Length Inch	Length cm	Diameter Inch	Diameter cm	Mated Length Inch	Mated Length cm	Weight Grams	Key	Color
	22	SJS830200	0.74	1.88	0.45	1.14	1.25	3.18	1.37	N/A	Black





Dimensions: Inches

Single-Pin & Triple-Pin QuickConnect™

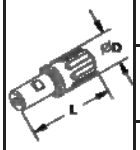
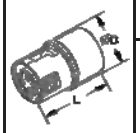
Product Description

Single-Pin QuickConnect™:
Developed to meet MIL-T-81714 criteria and available in two colors per size, these products feature an environmental sealing that meets EIA-364D-03B to 12,000 ft. Altitude Immersion Test standard. Mating and releasing the plug and receptacle is made simple to do. Simply push the part together to mate, and "twist and pull" to release.

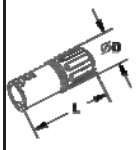
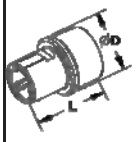
Triple-Pin QuickConnect™:
Developed to meet MIL-T-81714 criteria and available in three colors, these products feature molded-in polarizing keys to enable blind-mate connections. Simply push the part together to mate and lock, and "squeeze and pull" to release.



Plug descriptions

Single Wire	Size	Part No.	Length Inch	Length cm	Diameter Inch	Diameter cm	Mated Length Inch	Mated Length cm	Weight Grams	Key	Color
	12	SJS512100	1.21	3.07	0.45	1.14	1.78	4.52	2.19	N/A	Blue
		SJS512110									Red
	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	2.82	0.39	0.99	1.70	4.32	1.40	N/A	Green
		SJS720110									Yellow
Triple Wire	16	SJS816100	1.12	2.84	0.70	1.78	1.60	4.10	5.30	A	Red
		SJS816110								B	White
		SJS816120								C	Blue
	20	SJS820100	1.08	2.74	0.70	1.78	1.68	4.27	4.30	A	Red
		SJS820110								B	White
		SJS820120								C	Blue

Receptacle descriptions

Single Wire	Size	Part No.	Length Inch	Length cm	Diameter Inch	Diameter cm	Mated Length Inch	Mated Length cm	Weight Grams	Key	Color
	12	SJS512200	1.12	2.84	0.49	1.24	1.78	4.52	1.80	N/A	Blue
		SJS512210									Red
	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	4.32	1.20	N/A	Green
		SJS720210									Yellow
Triple Wire	16	SJS816200	1.03	2.61	0.70	1.78	1.60	4.10	4.60	A	Red
		SJS816210								B	White
		SJS816220								C	Blue
	20	SJS820200	0.99	2.51	0.70	1.78	1.68	4.27	3.70	A	Red
		SJS820210								B	White
		SJS820220								C	Blue

TECHNICAL SPECIFICATIONS

MATERIALS	
Insulator Body	Polyamide 6/6 (Nylon)
Grommet	Silicone Rubber
Contact Retainers	Stainless Steel
PERFORMANCE	
Temperature Range	- 65°C to + 125°C
Insulation Resistance	> 5000 Megaohms Min.
Dielectric Withstanding	1500Vrms @ Sea Level
Voltage	600Vrms @ 45,000 Ft. Altitude
Current Ratings	Size 20: 7.5 Amps Size 16: 13 Amps
Sealing	Size 16 & 20: EIA-364-03B (12,000 Ft.) Size 12: EIA-364-D, Method 3
Vibration	Size 16 & 20: EIA-364-28D (Test Condition V, E) Size 12: EIA-364-D (Method 28, Test Condition V)
Flammability	UL94, V0.
CTI Rating	UL746B, 600V
Contact Retention	Size 16 & 20: EIA-364-29B (20 lb) Size 12: 30 lbs

CONTACTS

Plug	Size 12	M39029/56-353 (socket)
	Size 16	M39029/56-352 (socket)
	Size 20	M39029/56-351 (socket)
Receptacle	Size 12	M39029/58-365 (pin)
	Size 16	M39029/58-364 (pin)
	Size 20	M39029/58-363 (pin)

(Contacts must be ordered separately. Three pin and socket sets are required per triple QuickConnect and one pair per single.)

TERMINATION ACCESSORIES

Wire Size	Crimp Tool		Installation/ Removal Tool
	Basic Tool	Positioner	
12	M22520/1-01	M22520/1-04	M81969/14-04
16	M22520/1-01	M22520/1-04	M81969/14-03
20	M22520/1-01	M22520/1-04	M81969/14-02
22D	M22520/2-01	M22520/2-09 (P) M22520/2-07 (S)	M81969/14-01

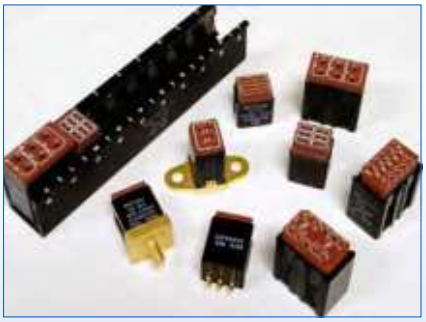
Related Products from Amphenol Pcd

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 Module with lightweight composite track.

Wire Splices



Inline Splices

Single and Multi-Contact Inline Wire Splices to MIL-T-817814 Series I and II.



Electronic Splices

Electronic Component Splices available with a variety of diodes, fuses, capacitors, and resistors. Designed to meet 1119 to NSA specifications.

Product Customization

Amphenol Pcd welcomes inquiries for application-specific modifications to the standard SJS QuickConnect series. The environmentally-sealed series is continuously expanding to meet current and future customer needs. Application-specific customization include:

Varied Wire Gauges Custom Colors Unique Markings	High Power Electronic Packaging Increased Channel Sizes	Alternate Contacts Distinct Configurations Alternative Alterations

Other Products from Amphenol Pcd



High Performance P-Clamps

- Victrex PEEK polymer
- Non-corrosive; Non-conductive
- Overmolded silicone cushions

Contact us or more information



Backshells for Circular Connectors

- QPL certified to AS85049 standard
- Complete range of products
- Short lead-time

Contact us for more information

CONTACT INFORMATION

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Beverly, MA 01915 USA
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Tel: 978-624-3400

CONNECTING PEOPLE + TECHNOLOGY

Rev. A (09-15)

Amphenol

	Plug	Receptacle	Misc	Misc 2	Contact	Plug Length (in)	Receptacle Length (in)	Plug Diameter (in)	Receptacle Diameter (in)	Mated Weight (grams)
1-Pin	 SJSXXX1X0	 SJSXXX2X0			12 16 20	1.21 1.13 1.11	1.12 1.06 1.03	0.45 0.39 0.39	0.49 0.43 0.39	3.99 3.20 2.60
2-Pin	 SJS830250	 SJS830270			22	0.77	1.43	0.39	0.32	2.60
3-Pin	 SJSXXX1X0	 SJSXXX2X0			16 20	1.12 1.08	1.03 0.99	0.70 0.70	0.70 0.70	9.90 8.00
3-Pin	 SJS840310	 SJS840300	 SJS840330	 SJS840320	16	0.78	0.74	0.60	0.55	4.50 (6.00; panel mount)
4-Pin	 SJS840410	 SJS840400			16	0.78	0.74	0.60	0.55	4.60
5-Pin	 SJS840510	 SJS840500	 SJS840520	 SJS445000	22	0.78	0.74	0.60	0.55	5.00 (6.40; panel mount)
8-Pin	 SJS830100	 SJS830200			22	0.77	0.74	0.52	0.47	3.09
9-Pin	 SJS840910	 SJS840900		 SJS991000	4—16 5– 22	0.78	0.74	0.71	0.65	6.4