



LUMINUS

Luminus: Small, lightweight, low-cost circular solutions



Overview

Luminus are lightweight, cost-effective connectors that are highly reliable and simple to use. With multiple configurations and arrangements available, a solution can be tailored to suite your application's exact requirements. Proven solutions can be found in single engine general aviation, multiple-engine business and passenger jets, and high performance rotary aircraft.

Ideal where space is limited, these innovative, "scoop-proof" connectors feature a locking mechanism that ensures stability, are suitable for blind-mating, and are RoHS compliant.

Features & Benefits

1/4 turn bayonet style connection; push and snap connection	Makes wire installation/maintenance easy and efficient; positive "click" when locked
Interfacial and Triple-Barrier Seal	Enables environmental sealing (IP 67 rating)
Multiple Keying Positions	Ensures proper connectivity
Multiple Configurations and Accessories	Tailored solutions to meet application needs
Contacts	AS39029 MIL Spec contacts for broad application compatibility. Stamped & Formed available as lower cost option
Visual markings	Visual aid for easy assembly
Rugged Polyamide Housings; 500 mating cycles	Durability
Blind-Mate Connection	Enables simple, blind mating; easy assembly
D160, M81714, FAR25 Compliance	Meets demanding military-aerospace environmental conditions

Materials & Specifications

Materials	Insulator Body: Polyamide 6/6 (Nylon)
	Grommet & Face Seal: Silicone Rubber
	Contact Retainer: Stainless Steel
Temperature Range	-65°C to 125°C
Temperature Life	500 hours @ 85°C
Insulation Resistance	5000 MΩ Min. @ 500 VDC
Dielectric Withstanding	1500 VAC, 60 Hz @ Sea Level, 1ma
	300 VAC, 60 Hz @ 70,000 ft, 2ma
Durability	500 mating cycles
Temperature Cycling	5(1) Hour Cycles: -65°C to 125°C
Thermal Shock	-65°C to 200°C
Vibration	30G Sinusoidal; 43.96G Random
Shock	300G, 3msec, Half-Sine
Salt Spray	5% Salt Spray @ 95°C for 48 Hours
Humidity	10 Days @ 25°C to 65°C, 90% - 95% RH
Seal Rating	IP67
RoHS & REACH Compliance	Yes

Fluid Immersion	Lubricating Oil per Mil-Prf-7808	
	Cleaning Compound per Mil-Prf-87937, Alkaline Base	
	Isopropyl Alcohol & Mineral Spirit Solution	
	Skydrol Hydraulic Fluid	
	Hydraulic Fluids per MIL-PRF-83282 MIL-PRF-87257	
	Ethylene Glycol	
	Propylene Glycol	
	Aviation Jet A	
Flammability	UL94, V0.	
	DOTG section 26.6.2 & 26.6.3	
	FAR Part 25 App F Part I	
Contact Insertion & Removal Force (not to exceed)	size 22	10 lbs
	size 20	10 lbs
	size 16	13 lbs
	size 12	15 lbs
Contact Retention (minimum)	size 22	10 lbs
	size 20	15 lbs
	size 16	25 lbs
	size 12	30 lbs

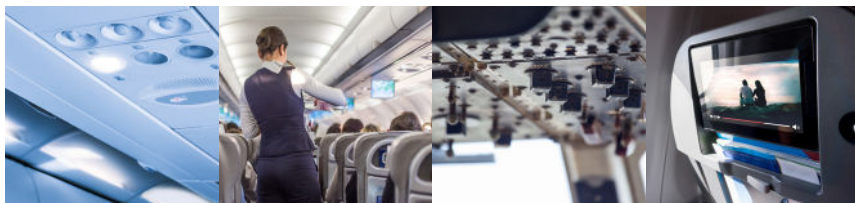
Part Numbering-Twist & Lock

											
# of Positions	Contact Size	Shell Size	Key	Color	Plug P/N	Inline Receptacle P/N	Circular Receptacle P/N	Square Receptacle P/N	Jamnut PCB Mount P/N	Oval Receptacle P/N	Jam Nut Rear Mount Receptacle P/N
1	Quadrax	8	-	-	SJS801110	SJS801120	-	SJS801130*	SJS801160*	SJS801170*	SJS801190*
2	22D	5	-	Black	SJS830250	SJS830270	-	-	SJS502160	SJS502170	SJS502190
3	12	10	-	-	SJS003110	SJS003120*	-	-	-	-	-
3	12	11	-	Black	SJS103110*	SJS103120*	-	-	-	-	-
3	16	8	A	White	SJS840310	SJS840300	SJS840320	SJS803730	-	-	-
3	16	8	B	Black	SJS840340	SJS840350	SJS840330	SJS803130	-	-	-
3	20	7	-	White	SJS862300	SJS862400	-	SJS862450	-	-	-
3	22D	5	-	Black	SJS830210	SJS830230	-	-	SJS503160	SJS503170	SJS503190
4	16	8	A	White	SJS840410	SJS840400	SJS840420*	SJS804730	SJS840760	-	SJS804790
4	16	8	B	White	SJS840440	SJS840450	SJS840430	-	-	-	-
4	20	7	-	Black	SJS704110	SJS704120	-	-	-	-	-
5	22D	8	-	White	SJS860510	SJS860500	SJS860520	SJS805730	-	-	-
5	22D	8	-	White	SJS870510	-	SJS870520	-	-	-	-
6	22D	7	-	Black	SJS861700	SJS861800	-	-	SJS706160	-	-
8	22D	7	A	Black	SJS830100	SJS830200	-	SJS830220	SJS708160	SJS708170	SJS708190
8	22D	7	B	Green	SJS830101	SJS830201	-	SJS830221	-	-	-
8	22D	7	C	Yellow	SJS830102	SJS830202	-	SJS830222	-	-	-
9	22D	8	-	Black	SJS862100	SJS862200	-	SJS809130	-	-	-
12	20	14	-	Black	SJS412110	SJS412120	-	-	-	-	-
12	22D	8	-	White	SJS861300	SJS861400	-	SJS812730	SJS812760*	-	-
12	22D	11	A	Black	SJS112110	SJS112120	-	-	SJS112160	-	-
12	22D	11	B	Green	SJS112210	SJS112220	-	-	SJS112260	-	-
12	22D	11	C	White	SJS112310	SJS112320	-	-	SJS112360	-	-
12	22D	11	D	Yellow	SJS112410	SJS112420	-	-	SJS112460	-	-
25	22D	14	A	Black	SJS425110	SJS425120	-	-	SJS425160	-	-
25	22D	14	B	Green	SJS425210	SJS425220	-	-	SJS425260	-	-
25	22D	14	C	White	SJS425310	SJS425320	-	-	SJS425360	-	-
25	22D	14	D	Yellow	SJS425410	SJS425420	-	-	SJS425460	-	-
5	12 (3)	11	-	Black	SJS1AE110*	SJ1AE120*	-	-	-	-	-
	22 (2)										
9	16	8	-	White	SJS860100	SJS860200	-	SJS8AC730	-	-	-
	22D										
9	16	10	-	White	SJS860910	SJS860900	-	SJS0AA730	-	-	-
	22D										
10	16	10	-	White	SJS861100	SJS861200	-	SJS0A8730*	SJS0BB760*	-	-
	22D										

* Available at extended lead times

Applications

- Aerospace Lighting
- Power & Signal Distribution
- Cabin Service Systems
- Actuation & Sensors
- In-Flight Entertainment



Shell Sizes

05 (max dia: 0.318)



2, size 22, Twist & Lock



3, size 22, Twist & Lock

06 (max dia: 0.390)



1, size 16 & 20, Push & Pull

07 (max dia: 0.448)



6, size 22, Twist & Lock



8, size 22, Twist & Lock



1, size 12, Push & Pull

08 (max dia: 0.528)



4, size 16, Twist & Lock



5, size 22, Twist & Lock



9: 1, size 16; 8 size 22 Twist & Lock

08 (max dia: 0.528)- Continued



9, size 22 Twist & Lock



3, size 16 Twist & Lock



3, size 20 Push & Pull

10 (max dia: 0.630)



9: 4, size 16; 5 size 22 Twist & Lock



10: 4, size 16; 6 size 22 Twist & Lock

11 (max dia: 0.700)



3, size 12, Twist & Lock



3, size 16, Push & Pull

14 (max dia: 0.875)



25, size 22, Twist & Lock

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More from Amphenol Pcd's Luminus Series

Luminus High Speed

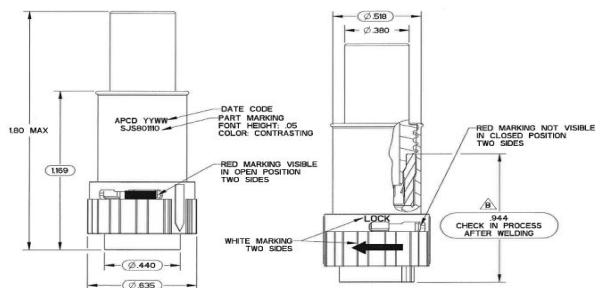
Amphenol Pcd has expanded the capability of Luminus to support industry standard TWINAX and QUADRAX style contacts. Luminus High Speed provides exceptional performance in tight spaces, with a svelte shell size 8 (0.512") outer diameter. With the explosive growth in ethernet enabled devices (IOT), this size and configuration is particularly suited for end point applications, such as individual avionics sensors, panel mounted units, seat back and wall mounted displays and monuments. Unlike many of the competitive connectors, which are multipiece assemblies, Luminus High Speed shells are a single piece housing, impervious to humidity and dust, further enhancing clean, crack free operations over the full operating temperature and environmental conditions.

Ask about New Luminus Accessories Concepts

- Two stage Latch Connector
- 3-Way H Splice
- 3-Way T Splice
- 3-Way Y Splice
- 3-Way Vertical Distribution

1 Position, Quadrax Inline Plug

APCD P/N	Contact Type	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS801110	None		8	-	Black	SJS801110P	SJS801120
SJS801110-1	Power	CNS808100					SJS801120-1
SJS80111P-2	Differential Twinax	CNS882100					SJS801120-2
SJS801110-3		CNS882110					SJS801120-3
SJS801110-4		CNS882120					SJS801120-4
SJS801110-5		CNS882130					SJS801120-5
SJS801110-6		CNS882140					SJS801120-6
SJS801110-7		CNS882150					SJS801120-7
SJS801110-8	Quadrax	CNS882200					SJS801120-8
SJS801110-9		CNS882210					SJS801120-9
SJS801110-10		CNS882220					SJS801120-10
SJS801110-11		CNS882230					SJS801120-11
SJS801110-12		CNS882240					SJS801120-12
SJS801110-13		CNS882250					SJS801120-13



Inline Plug

Type	Part Number	Position	Size	Page
	SJS830250	2	22	
	SJS840310	3	16	
	SJS862300	3	20	
	SJS830210	3	22	
	SJS840410	4	16	
	SJS704110	4	20	
	SJS860510	5	22	
	SJS406110	6	12	
	SJS861700	6	22	
	SJS830100	8	22	
	SJS860100	9	16 & 22	
	SJS860910	9	16 & 22	
	SJS862100	9	22	
	SJS861100	10	16 & 22	
	SJS412110	12	16	
	SJS861300	12	22	
	SJS112110	12	22	
	SJS425110	25	22	

Technical drawing of a 10-pin D-sub connector. The drawing includes a side view with dimensions and a top view.

Side View Dimensions:

- Overall length: $.769 \pm .020$
- Pin pitch: $.079 \pm .015$
- Top flange diameter: $\phi .322$
- Body diameter: $\phi .242$
- Bottom flange diameter: $\phi .392$
- Pin diameter: $.024$
- Pin length: $.035 \pm .010$

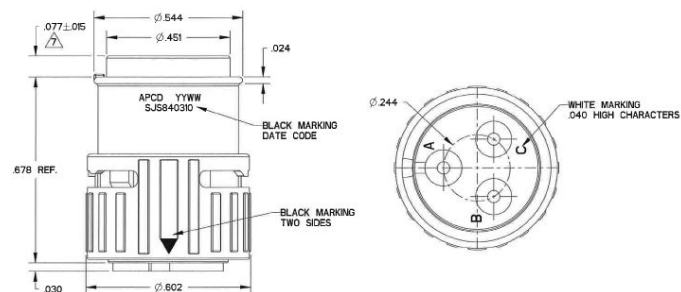
Top View Dimensions:

- Reference dimension: $.02 \text{ REF}$

Markings and Labels:

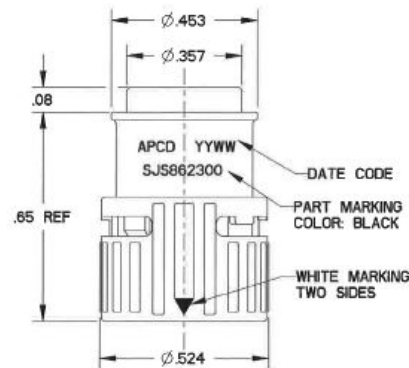
- Date code: APCD YYWW SJS830250
- White marking on pins: WHITE MARKING TWO SIDES
- White marking area: WHITE MARKING .040 HIGH CHARACTERS COLOR: CONTRASTING
- Marking characters: A, B

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating	
SJS840310	None			8	A	White	SJS840310	SJS840300 SJS803730 SJS840320	
SJS840311	3	16	M39029/57-358						
SJS840340	None				B	Black	SJS840340	SJS840350 SJS840330 SJS803130	
SJS840341	3	16	M39029/57-358						



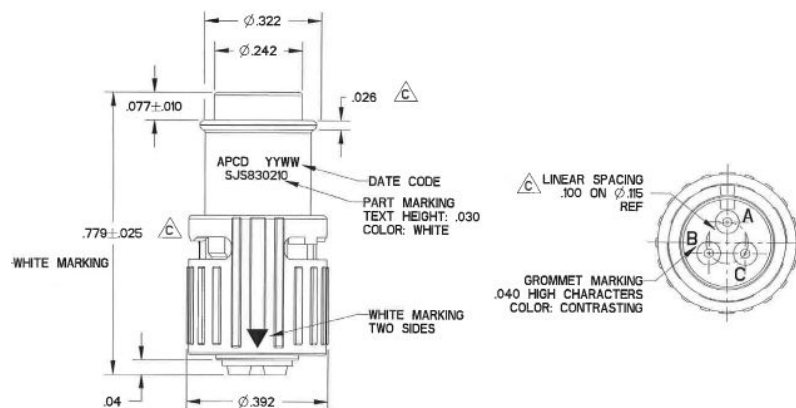
3 Position, Size 20 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS862300	None			7	-	White	SJS862300	SJS862400 SJS862450
SJS862301	12	22	455862300					



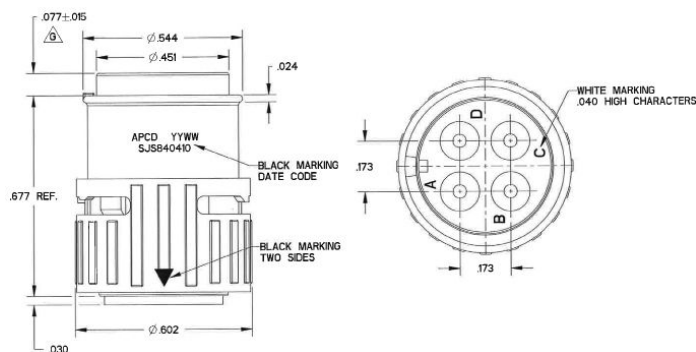
3 Position, Size 22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS830210	None			5	-	Black	SJS830210	SJS830230 SJS503170 SJS503190
SJS830211	25	22	M39029/57-354					



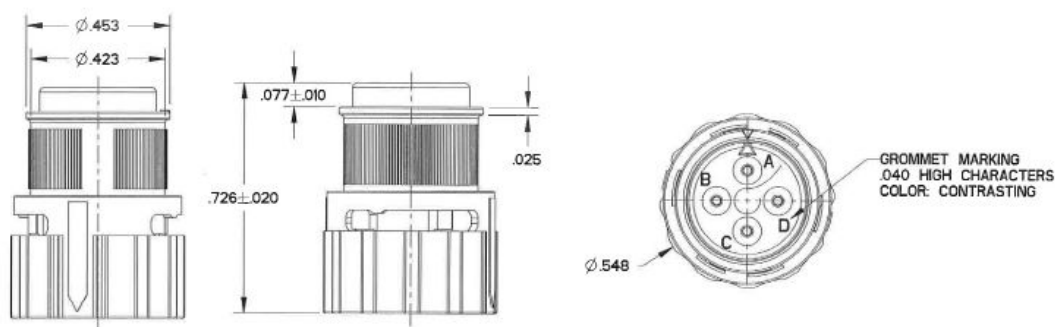
4 Position, Size 16 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS840410	None			8	A	White	SJS840410	SJS840400 SJS804730 SJS840420 SJS804760 SJS804790
SJS840411	4	16	M39029/57-358					
SJS840440	None			8	B	White	SJS840440	SJS840450 SJS840430
SJS840441	4	16	M39029/57-358					



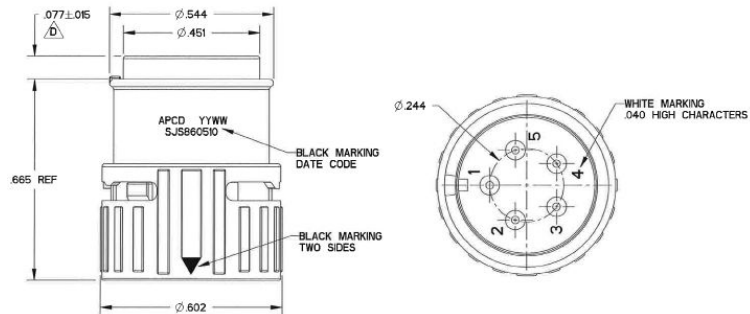
4 Position, Size 20 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS704110	None			7	-	Black	SJS704110	SJS704120
SJS704111	4	20	M39029/57-357					



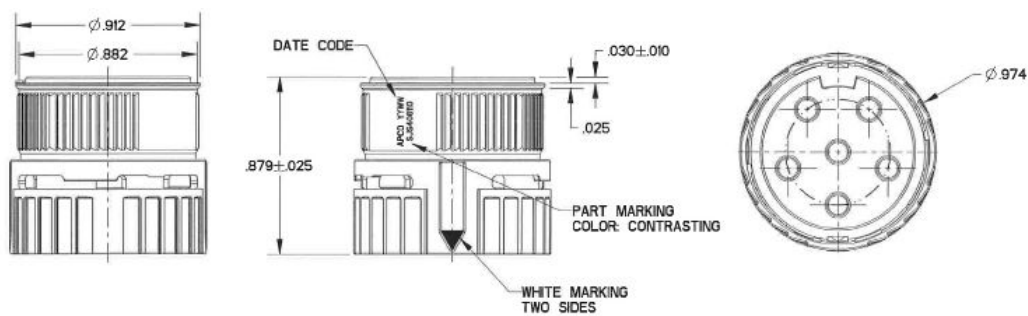
5 Position, Size 22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS860510	None			8	-	White	SJS860510	SJS860500 SJS860520 SJS805730
SJS860511	5	22	M39029/57-354					
SJS870510	None			8	-	White	SJS870510	SJS870520
SJS870511	5	22	M39029/58-360					



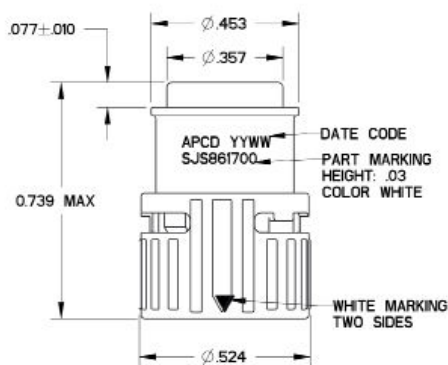
6 Position, Size 12 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS406110	None			14	-	Black	SJS406110	SJS406120
SJS406111	6	12	M39029/57-359					



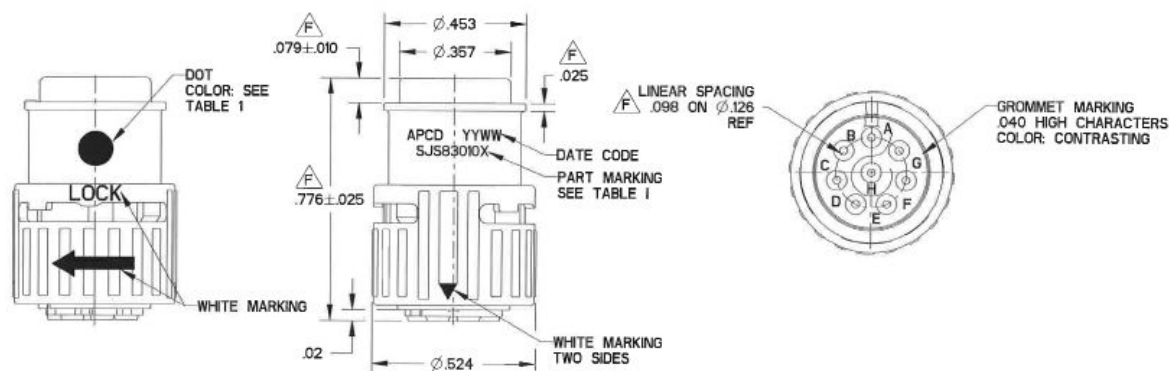
6 Position, Size 22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS861700	None			7	-	Black	SJS861700	SJS861800 SJS706160
SJS861701	6	22	M39029/57-354					



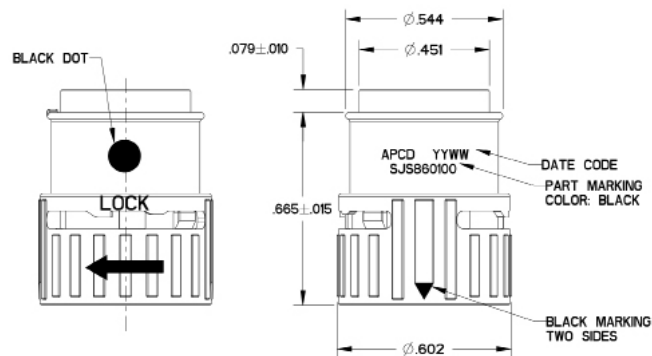
8 Position, Size 22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS830100	None			7	A	Black	SJS830100	SJS830200 SJS830220 SJS708160 SJS708170 SJS708190
SJS831100	8	22	M39029/57-357					
SJS830101	None				B	Green	SJS830101	SJS830201 SJS830221
SJS831101	8	22	M39029/57-357					
SJS830102	None				C	Yellow	SJS830102	SJS830202 SJS830222
SJS831102	8	22	M39029/57-357					



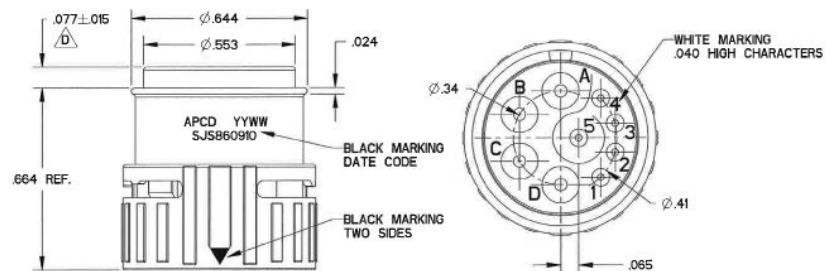
9 Position, Size 16/22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS860100	8	22	M39029/57-354	8	-	White	SJS860100	SJS860200 SJS8AC730
SJS860101		16	M39029/57-358					



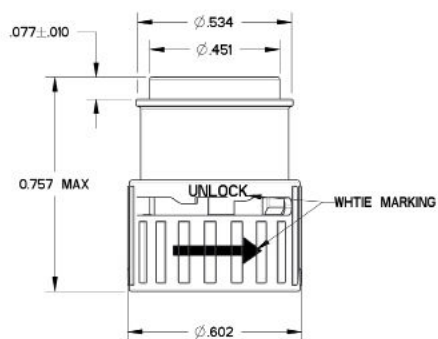
9 Position, Size 16/22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS860910	None			10	-	White	SJS860910	SJS860900 SJS0AC730
SJS860911	5	22	M39029/57-354					
	4	16	M39029/57-358					



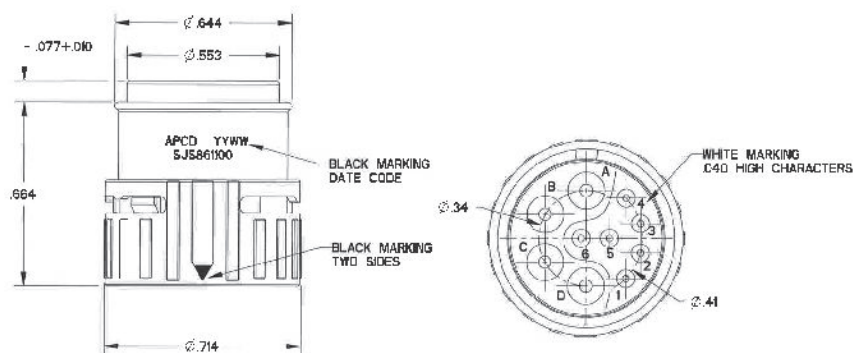
9 Position, Size 22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS862100	None			8	-	Black	SJS862100	SJS862200 SJS809130
SJS862101	9	22	M39029/57-354					



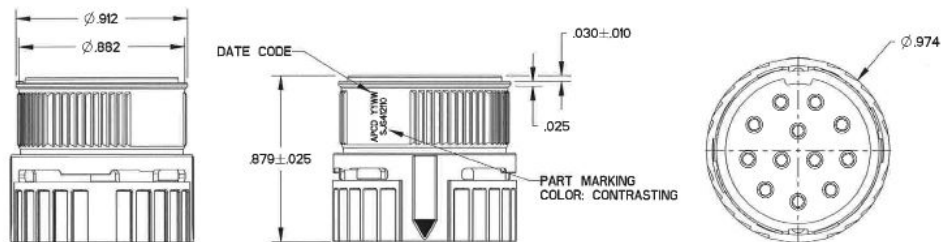
10 Position, Size 16/22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS861100	None			10	-	White	SJS861100	SJS861200
SJS861101	6	22	M39029/57-354					
	4	16	M39029/57-358					



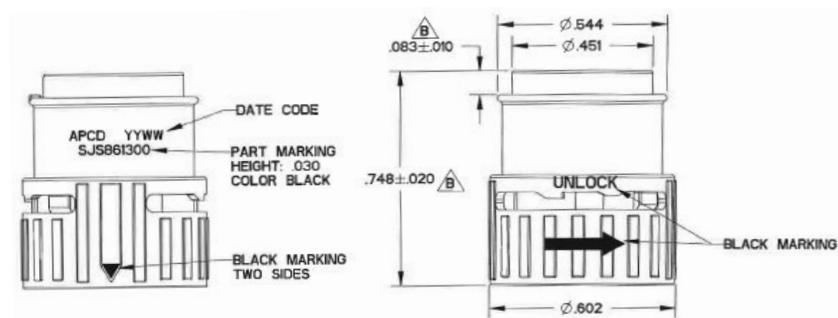
12 Position, Size 16 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS412110	None			14	-	Black	SJS412110	SJS412120
SJS412111	12	16	M39029/57-358					



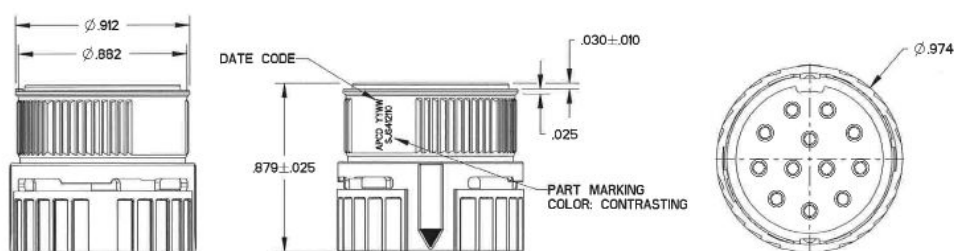
12 Position, Size 22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS861300				8	-	White	SJS861300	SJS861400
SJS861301	12	22	M39029/57-354					



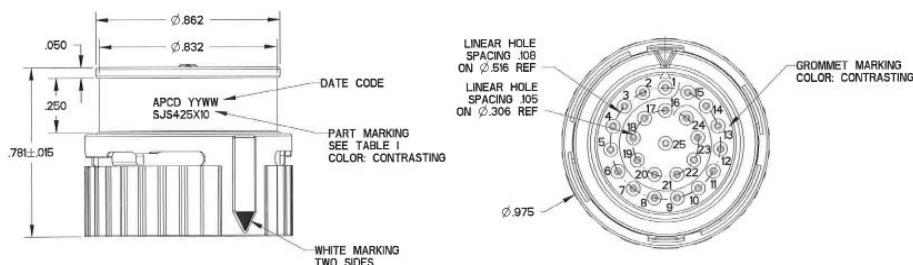
12 Position, Size 22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS112110	None			11	A	Black	SJS112110	SJS112120 SJS112160
SJS112111	12	22	M39029/57-354					
SJS112210	None				B	Green	SJS112210	SJS112220 SJS112260
SJS112211	12	22	M39029/57-354					
SJS112310	None				C	White	SJS112310	SJS112320 SJS112360
SJS112311	12	22	M39029/57-354					
SJS112410	None				D	Yellow	SJS112410	SJS112420 SJS112460
SJS112411	12	22	M39029/57-354					



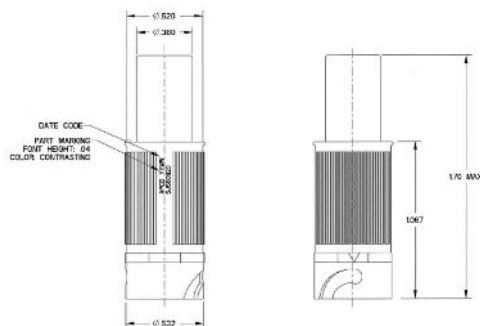
25 Position, Size 22 Inline Plug

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS425110	None			14	A	Black	SJS425110	SJS425120 SJS425160
SJS425111	25	22	M39029/57-354					
SJS425210	None				B	Green	SJS425210	SJS425220 SJS425260
SJS425211	25	22	M39029/57-354					
SJS425310	None				C	White	SJS425310	SJS425320 SJS425360
SJS425311	25	22	M39029/57-354					
SJS425410	None				D	Yellow	SJS425410	SJS425420 SJS425460
SJS425411	25	22	M39029/57-354					



1 Position, Quadrax Inline Receptacle

APCD P/N	Contact Type	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS801120	None		8	-	Black	SJS801110P	SJS801110
SJS801120-1	Power	CNS808100					SJS801110-1
SJS801120-2	Differential Twinax	CNS882100					SJS801110-2
SJS801120-3		CNS882110					SJS801110-3
SJS801120-4		CNS882120					SJS801110-4
SJS801120-5		CNS882130					SJS801110-5
SJS801120-6		CNS882140					SJS801110-6
SJS801120-7		CNS882150					SJS801110-7
SJS801120-8	Quadrax	CNS882200					SJS801110-8
SJS80112P-9		CNS882210					SJS801110-9
SJS801120-10		CNS882220					SJS801110-10
SJS801120-11		CNS882230					SJS801110-11
SJS801120-12		CNS882240					SJS801110-12
SJS801120-13		CNS882250					SJS801110-13

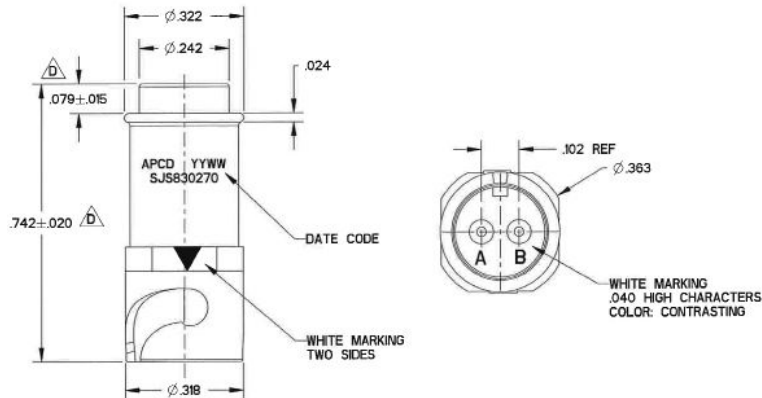


Inline Receptacle

Type	Part Number	Position	Size	Page
	SJS830270	2	22	
	SJS840300	3	16	
	SJS862400	3	20	
	SJS830230	3	22	
	SJS840400	4	16	
	SJS104120	4	16	
	SJS704120	4	20	
	SJS860500	5	22	
	SJS406120	6	12	
	SJS861800	6	22	
	SJS830200	8	22	
	SJS860200	9	16 & 22	
	SJS860900	9	16 & 22	
	SJS862200	9	22	
	SJS861200	10	16 & 22	
	SJS412120	12	16	
	SJS861400	12	22	
	SJS112120	12	22	
	SJS425120	25	22	

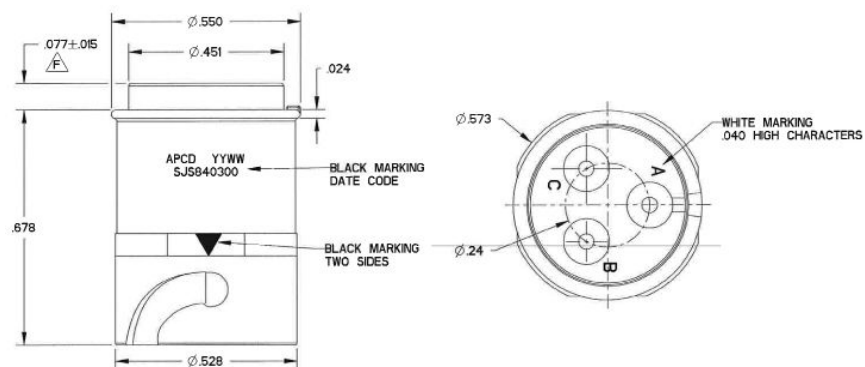
2 Position, Size 22 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS830270	None			5	-	Black	SJS830270	SJS830250
SJSB30271	2	22	M39029/58-360					



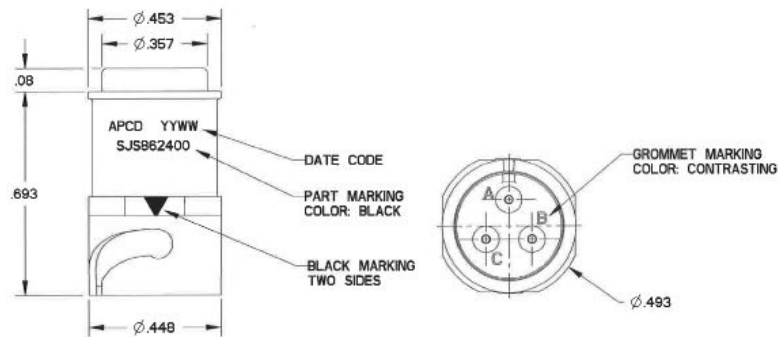
3 Position, Size 16 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS840300	None			8	A	White	SJS840300	SJS840310
SJS840301	3	16	M39029/58-364					
SJS840350	None			8	B	Black	SJS840350	SJS840340
SJS840351	3	16	M39029/58-364					



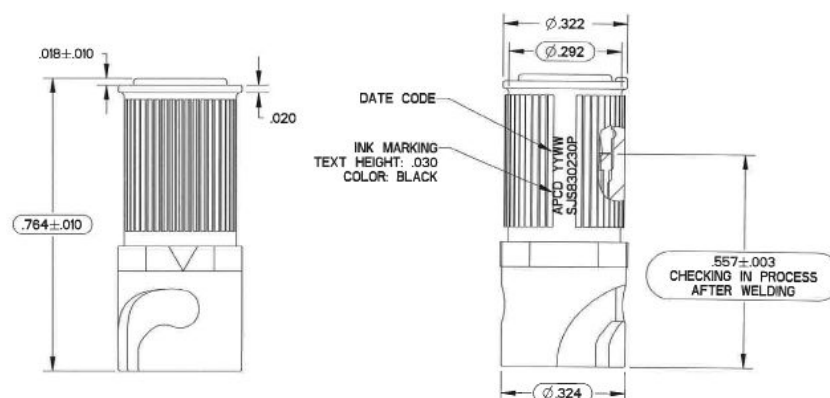
3 Position, Size 20 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS862400	None			7	-	White	SJS862400	SJS862300
SJS862401	3	20	M39029/58-36					



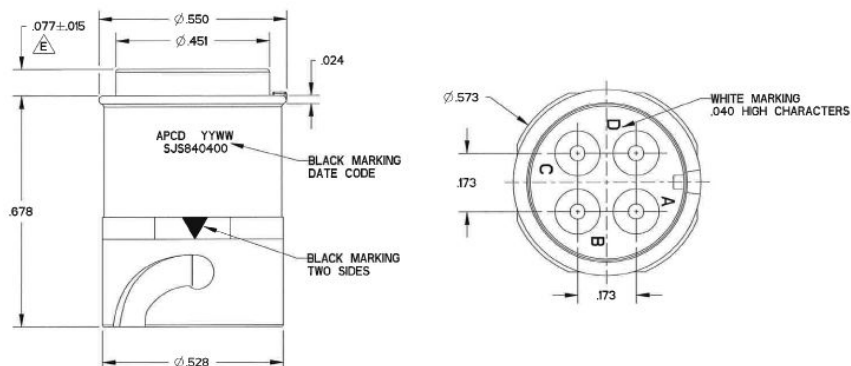
3 Position, Size 22 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS830230	None			5	-	Black	SJS830230	SJS830210
SJS830230	3	22	M39029/58-360					



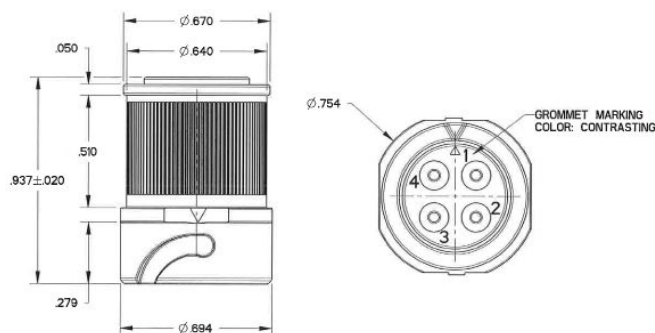
4 Position, Size 16 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS840400	None			8	A	White	SJS840400	SJS840410
SJS840401	4		M39029/58-364					
SJS840450	None			8	B	White	SJS840450	SJS840440
SJS840451	4	16						



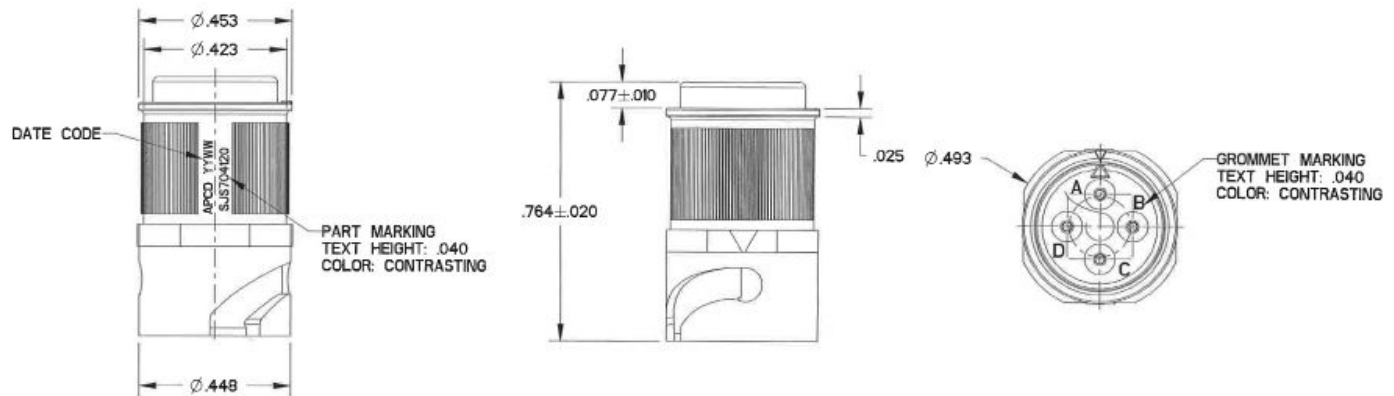
4 Position, Size 16 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS104120	None			11	-	Black	SJS104120	SJSB104110
SJS104121	4	16	M39029/58-364					



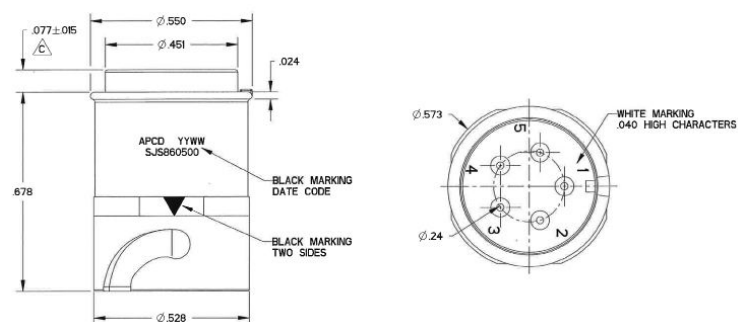
4 Position, Size 20 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS704120	None			7	-	Black	SJS704120	SJS704110
SJS704121	4	20	M39029/58-360					



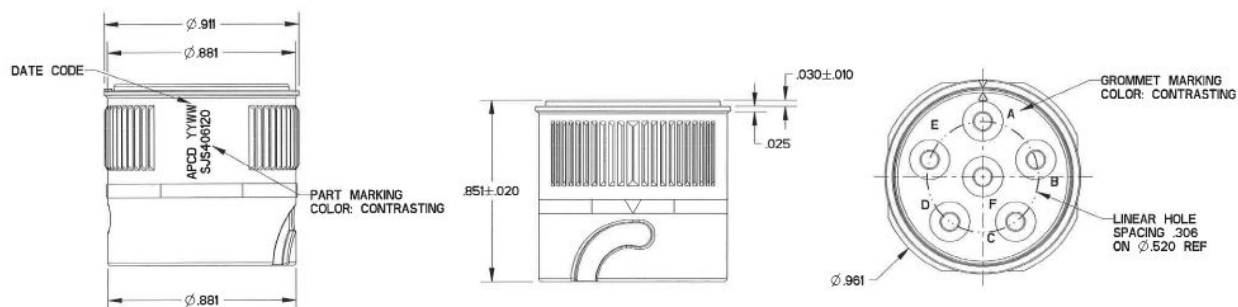
5 Position, Size 22 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS860500	None			8	-	White	SJS860500	SJS860510
SJS860501	5	22	M39029/58-360					



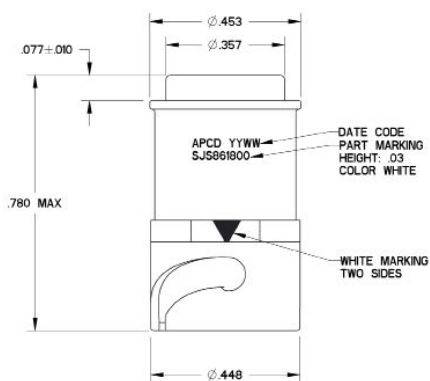
6 Position, Size 12 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS406120	None			14	-	Black	SJS406120	SJS406110
SJS406121	6	12	M39029/58-365					



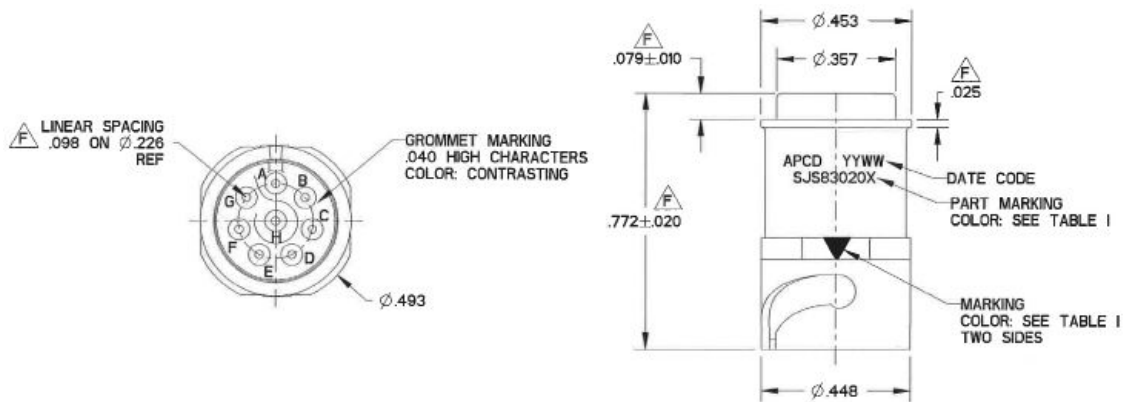
6 Position, Size 22 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS861800	None			7	-	Black	SJS861800	SJS861700
SJS861801	6	22	M39029/58-360					



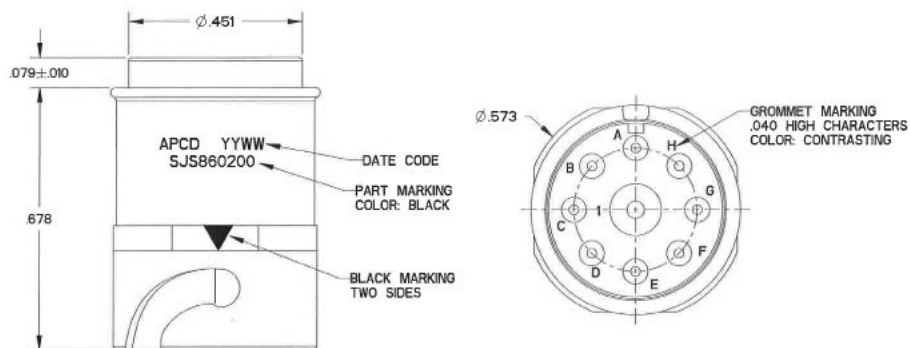
8 Position, Size 22 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS830200	None			7	A	Black	SJS830200	SJS830100
SJS831200	8	22	M39029/58-360					
SJS830201	None				B	Green	SJS830201	SJS830101
SJS831201	8	22	M39029/58-360					
SJS830202	None				C	Yellow	SJS830202	SJS830102
SJS831202	8	22	M39029/58-360					



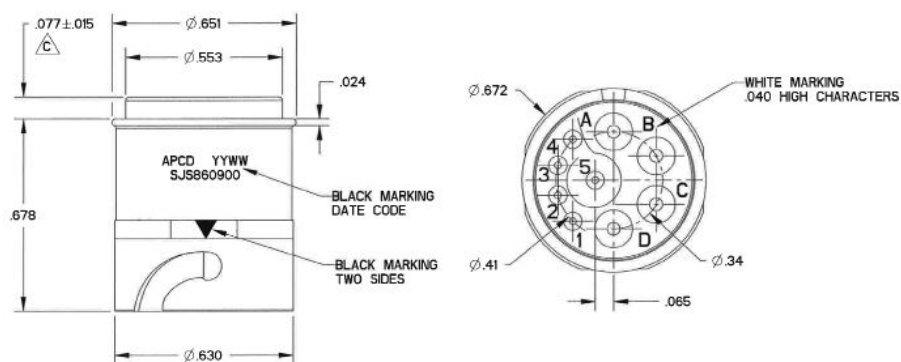
9 Position, Size 16/22 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS860200	None			8	-	White	SJS860200	SJS860100
SJS860201	8	22	M39029/58-360					
	1	16	M39029/58-364					



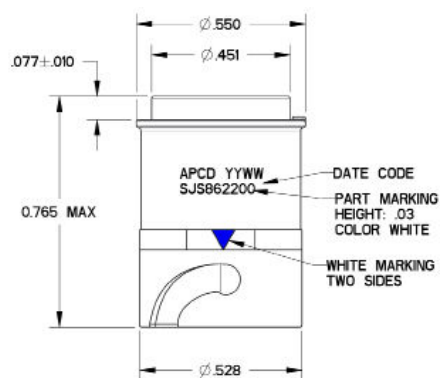
9 Position, Size 16/22 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS860900	None			10	-	White	SJS860900	SJS860910
SJS860901	5	22	M39029/58-360					
	4	16	M39029/58-364					



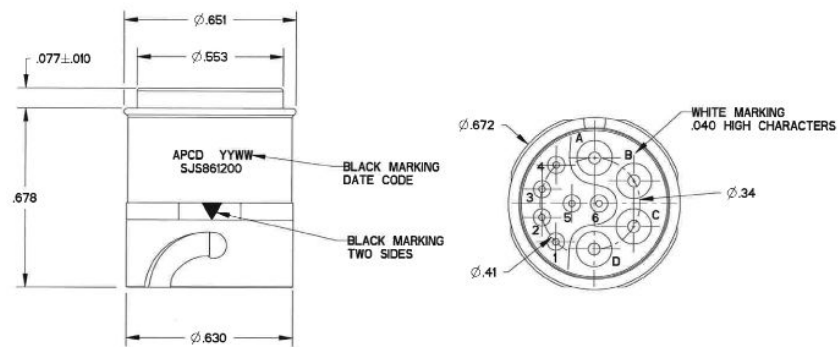
9 Position, Size 22 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS862200	None			8	-	Black	SJS862200	SJS862100
SJS862201	9	22	M39029/58-360					



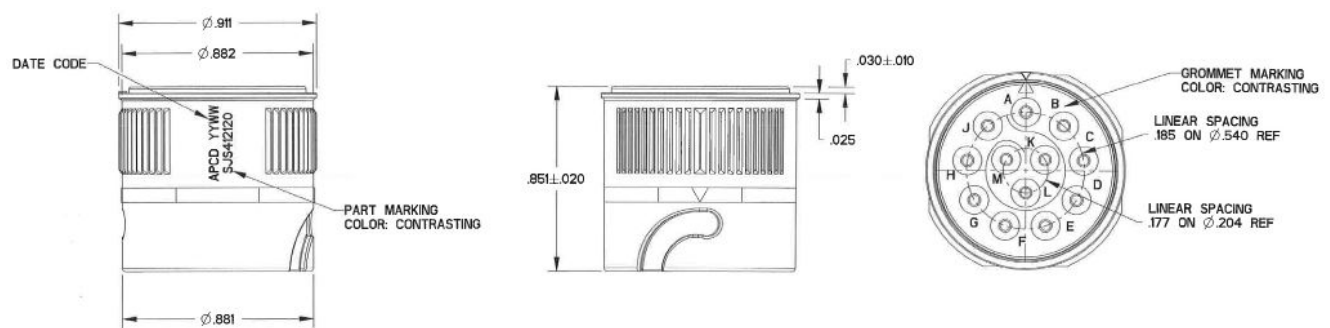
10 Position, Size 16/22 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS861200	None			10	-	White	SJS861200	SJS861100
SJS861201	6	22	M39029/58-360					
	4	16	M39029/58-364					



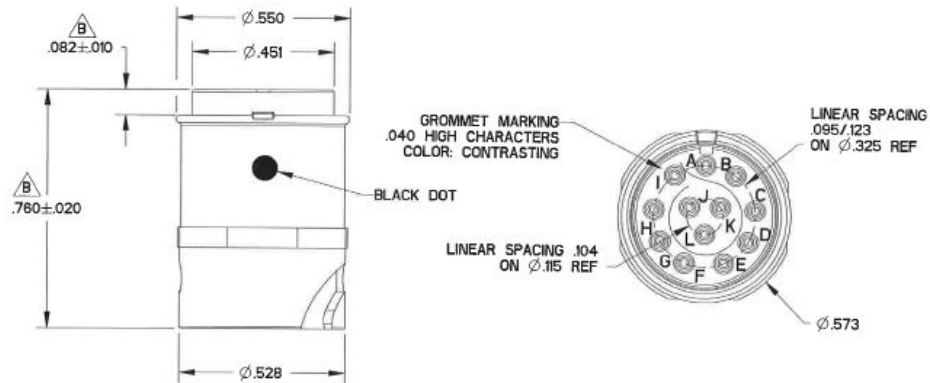
12 Position, Size 16 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS412120	None			14	-	Black	SJS412120	SJS412110
SJS412121	8	16	M39029/58-364					



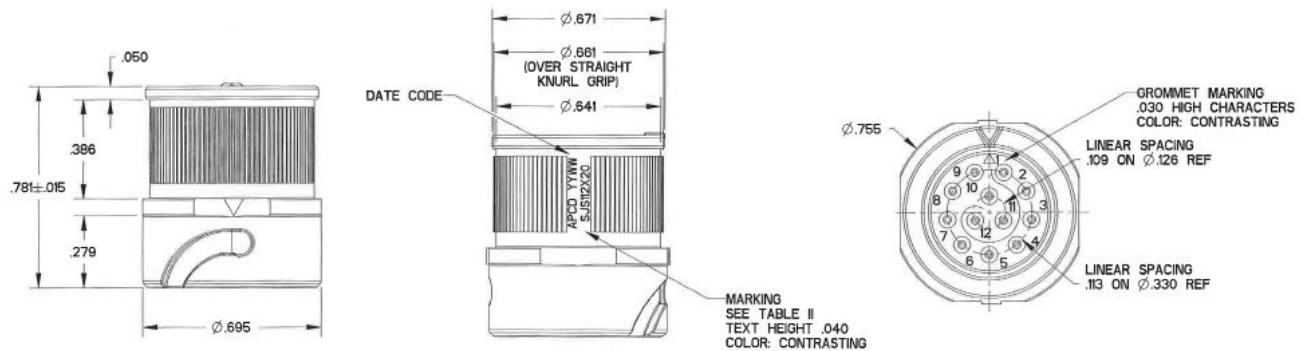
12 Position, Size 22 Inline Receptacle

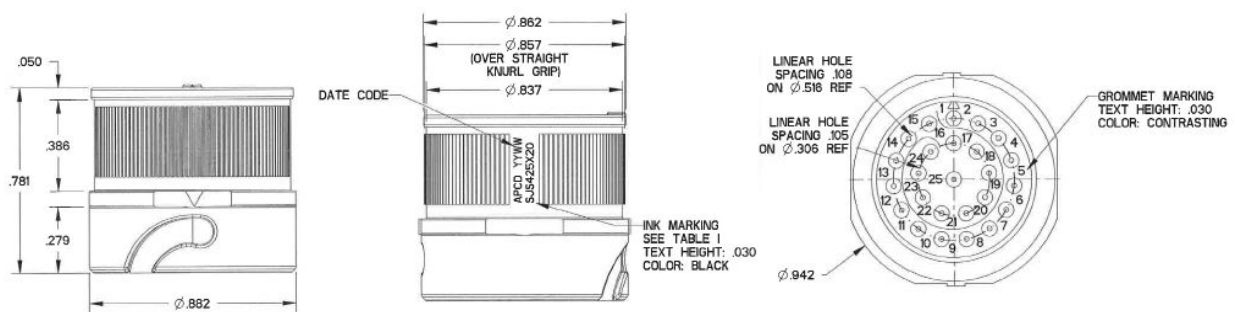
APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS861400	None			8	-	White	SJS861400	SJS861300
SJS861400	12	22	M39029/58-360					



12 Position, Size 22 Inline Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS112120	None			11	A	Black	SJS112120	SJS112110
SJS112121	6	22	M39029/58-365					
SJS112220	None				B	Green	SJS112220	SJS112210
SJS112221	6	22	M39029/58-360					
SJS112320	None				C	White	SJS112320	SJS112310
SJS112321	6	22	M39029/58-360					
SJS112420	None				D	Yellow	SJS112420	SJS112410
SJS112421	6	22	M39029/58-360					





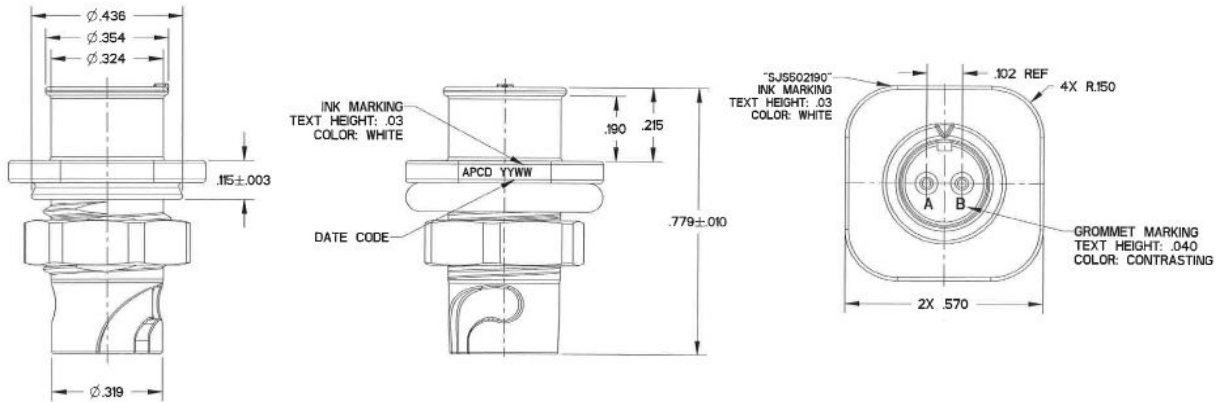
Jamnut Rear Receptacle

Type	Part Number	Position	Size	Page
	SJS502190	2	22	
	SJS503190	3	22	
	SJS804790	4	16	
	SJS708190	8	22/22D	

JAMNUT REAR MOUNT RECEPTACLE

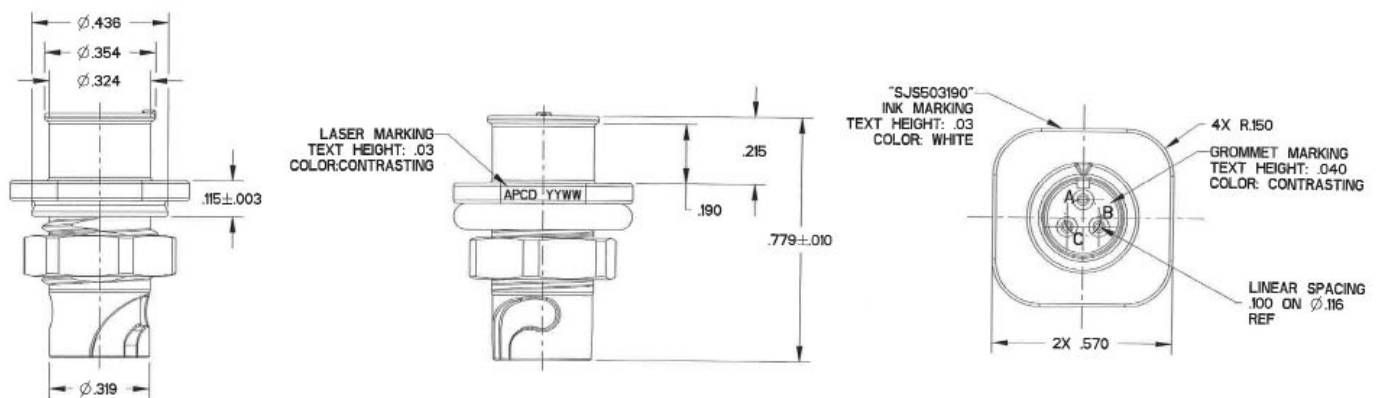
2 Position, Size 22 Jamnut Rear Mount Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS502190	None			5	-	Black	SJS502190	SJS830250
SJS502191	2	22	M39029/58-360					



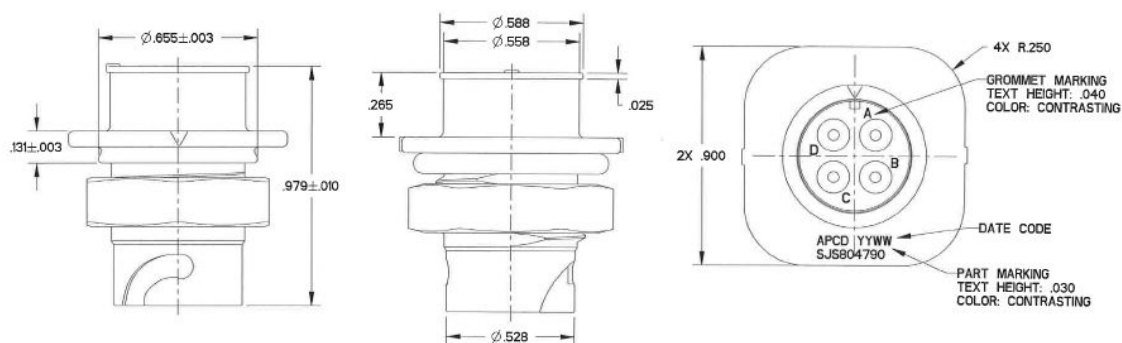
3 Position, Size 22 Jamnut Rear Mount Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS503190	None			5	-	Black	SJS503190	SJS830210
SJS503191	3	22	M39029/58-360					



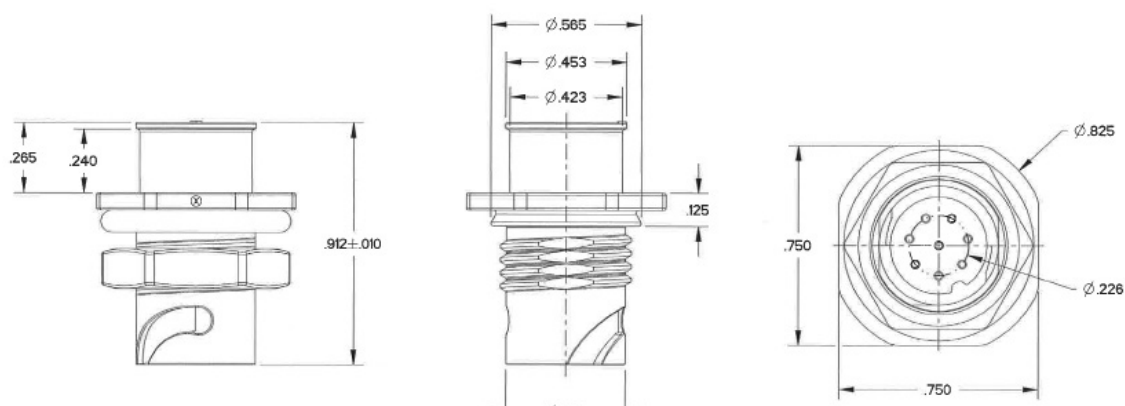
4 Position, Size 16 Jamnut Rear Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS804790	None			8	A	White	SJ5804790	SJS840410
SJ5804791	4	16	M39029/58-364					



8 Position, Size 22/22D Jamnut Rear Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS708190	None			7	A	Black	SJ5708190	SJS830100
SJS708191	8	22/22D	M39029/58-360					

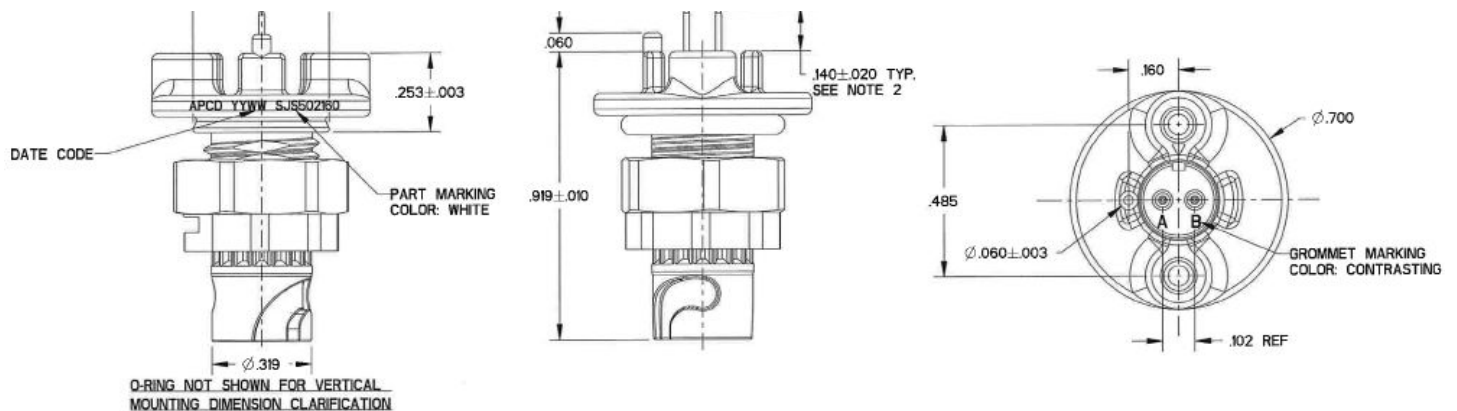


Jamnut Receptacle

Type	Part Number	Position	Size	Page
	SJS502160	2	22	
	SJS503160	3	22	
	SJS804760	4	16	
	SJS706160	6	22	
	SJS708160	8	22	
	SJS112160	12	22	
	SJS425160	25	22	

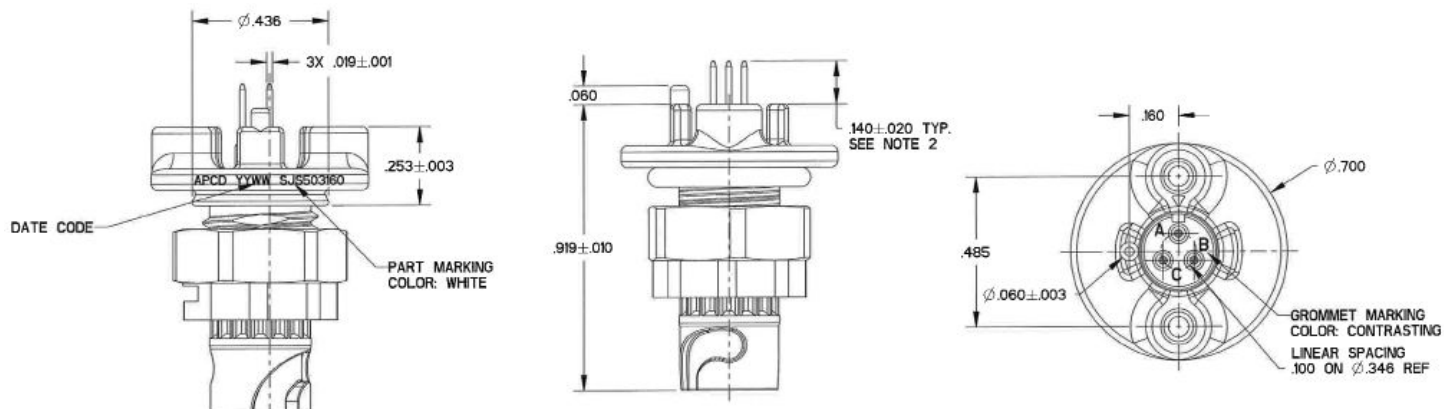
2 Position, Size 22 Jamnut Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS502160	None			5	-	Black	SJS502160	SJS830250
SJS502161	2	22	M39029/58-360					
SJS502162	2	22	CNP831033					



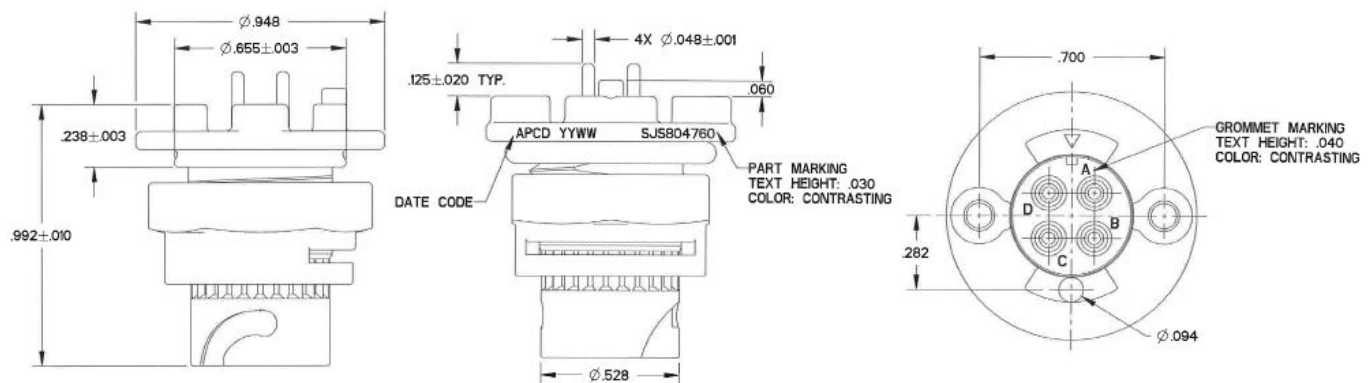
3 Position, Size 22 Jamnut Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS503160				5	-	Black	SJS503160	SJS830210
SJS503161	3	22	M39029/58-360					
SJS503162	3	22	CNP831033					



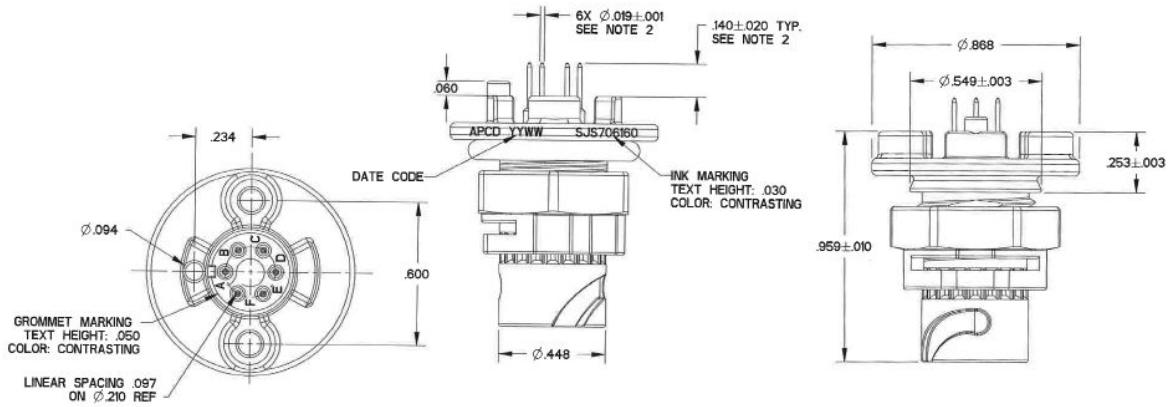
4 Position, Size 16 Jamnut Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS804760	None			8	A	White	SJS804760	SJS840410
SJS804761	4	16	M39029/58-364					
SJS804762	4	16	CNP8310160					



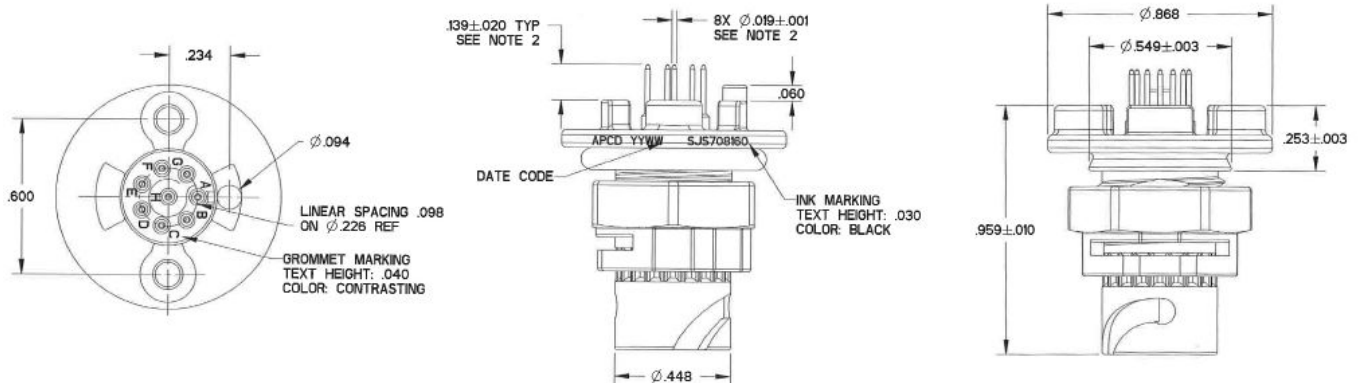
6 Position, Size 22 Jamnut Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS706160	None			7	-	White	SJS706160	SJS861700
SJS706161	6	22	M39029/58-360					
SJS706162	6	22	CNP831033					



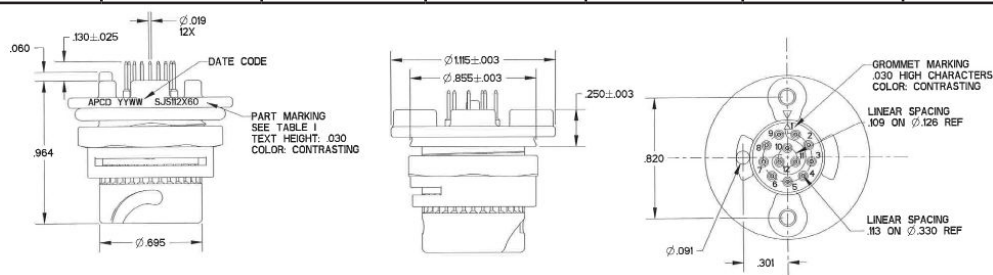
8 Position, Size 22 Jamnut Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS708160	None			7	A	Black	SJS708160	SJS830100
SJS708161	8	22	M39029/58-360					
SJS708162	8	22	CNP831033					



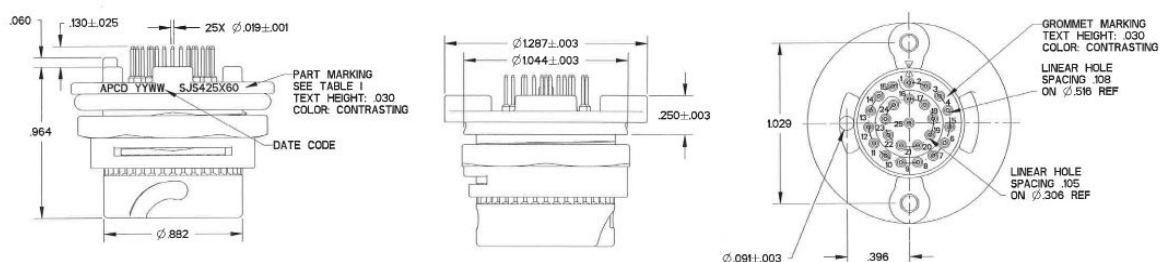
12 Position, Size 22 Jamnut Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS112160	None			11	A	Black	SJS112160	SJS112110
SJS112161	12	22	M39029/58-360					
SJS112162	12	22	CNP831033					
SJS112260	None				B	Green	SJS112260	SJS112210
SJS112260	12	22	M39029/58-360					
SJS112262	12	22	CNP831033					
SJS112360	None				C	White	SJS112360	SJS112310
SJS112361	12	22	M39029/58-360					
SJS112362	12	22	CNP831033					
SJS112460	None				D	Yellow	SJS112460	SJS112410
SJS112461	12	22	M39029/58-360					
SJS112462	12	22	CNP831033					



25 Position, Size 22 Jamnut Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS425160	None			14	A	Black	SJS425160	SJS425110
SJS425161	25	22	M39029/58-360					
SJS425162	25	22	CNP831033					
SJS425260	None				B	Green	SJS425260	SJS425210
SJS425261	25	22	M39029/58-360					
SJS425262	25	22	CNP831033					
SJS425360	None				C	White	SJS425360	SJS425310
SJS425361	25	22	M39029/58-360					
SJS425362	25	22	CNP831033					
SJS425460	None				D	Yellow	SJS425460	SJS425410
SJS425461	25	22	M39029/58-360					
SJS425462	25	22	CNP831033					

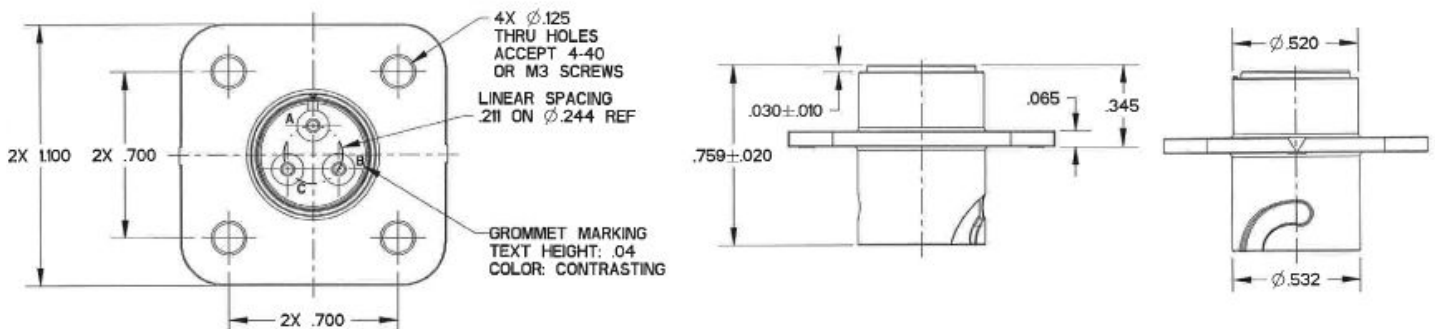


Square Receptacle

Type	Part Number	Position	Size	Page
	SJS803730	3	16	
	SJS862450	3	20	
	SJS804730	4	16	
	SJS805730	5	22	
	SJS830220	8	22	
	SJS8AC730	9	16 & 22	
	SJS0AA730	9	16 & 22	
	SJS809130	9	22	
	SJS812730	12	22	

3 Position, Size 16 Square Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS803730	None			8	A	White	SJS803730	SJS840310
SJS903731	3	16	M39029/58-364					
SJS803130	None				B	Black	SJS803130	SJS840340
SJS503131	3	16	M39029/58-364					



Technical drawing of the 1000 Series Locking Bolt, showing side and top views with dimensions.

Side View Dimensions:

- Total Length: 6.93
- Head Diameter: $\varnothing 0.448$
- Head Height: 0.08
- Head Groove Depth: 0.357
- Head Groove Width: 0.448

Top View Dimensions:

- Head Diameter: $\varnothing 0.448$
- Head Groove Depth: 0.357
- Head Groove Width: 0.448
- Head Groove Height: 0.625
- Head Groove Width: 0.448
- Head Groove Height: 0.625
- Head Groove Width: 0.448
- Head Groove Height: 0.625

Notes:

- 4X $\varnothing 0.125$ ACCEPTS 4-40 OR M3 HARDWARE
- GROMMET MARKING 0.040 HIGH CHARACTERS COLOR: CONTRASTING

Technical drawing of the APCD Y1YW SJS804730 component, showing four views: front, side, top, and bottom.

Front View: Shows a diameter of $\phi .520$ and a width of $\phi .532$.

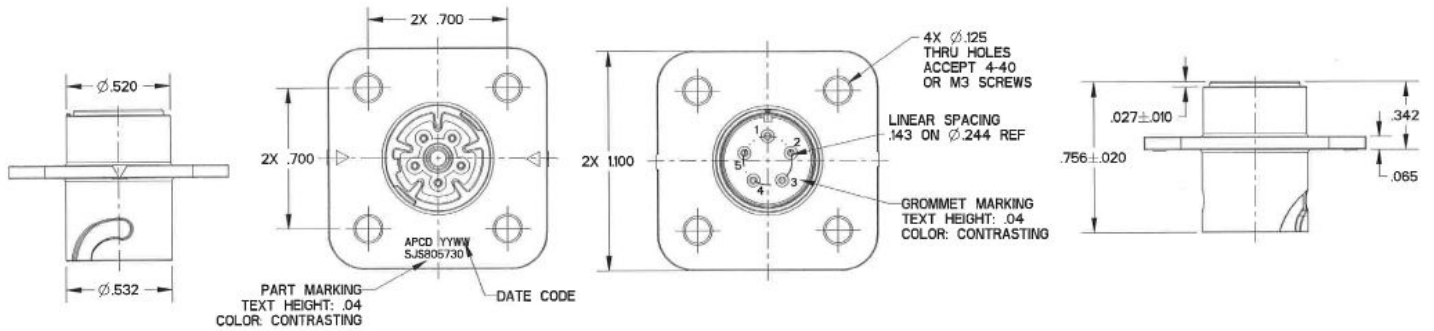
Side View: Shows a height of $.759 \pm .020$ and a thickness of $.030 \pm .010$. A chamfer dimension of $.345$ and a radius of $.065$ are indicated.

Top View: Shows a square shape with rounded corners. The central feature has a diameter of $2X .700$ and a chamfer of 10° . The outer holes have a diameter of $4X \phi .125$ and are spaced linearly at $.173$ on a $\phi .244$ reference circle. The part marking is **APCD Y1YW SJS804730** and the date code is **10**.

Bottom View: Shows a square shape with rounded corners. The central feature has a diameter of $2X 100$. The outer holes have a diameter of $4X \phi .125$ and are spaced linearly at $.173$ on a $\phi .244$ reference circle. The part marking is **APCD Y1YW SJS804730** and the date code is **10**.

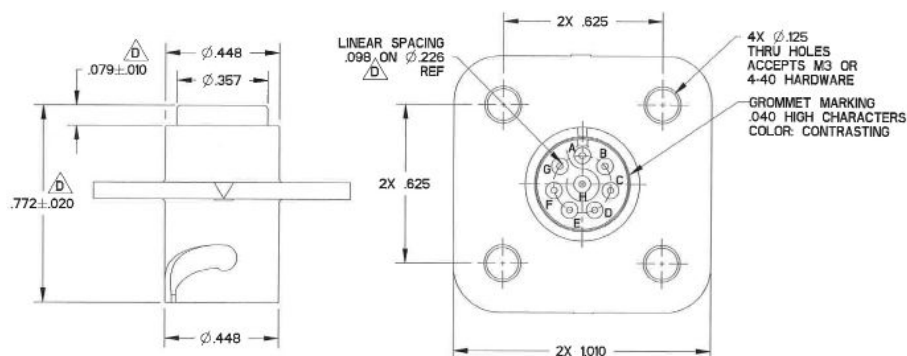
5 Position, Size 22 Square Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS805730	None			8	-	White	SJS805730	SJS860510
SJS805731	5	22	M39029/58-360					



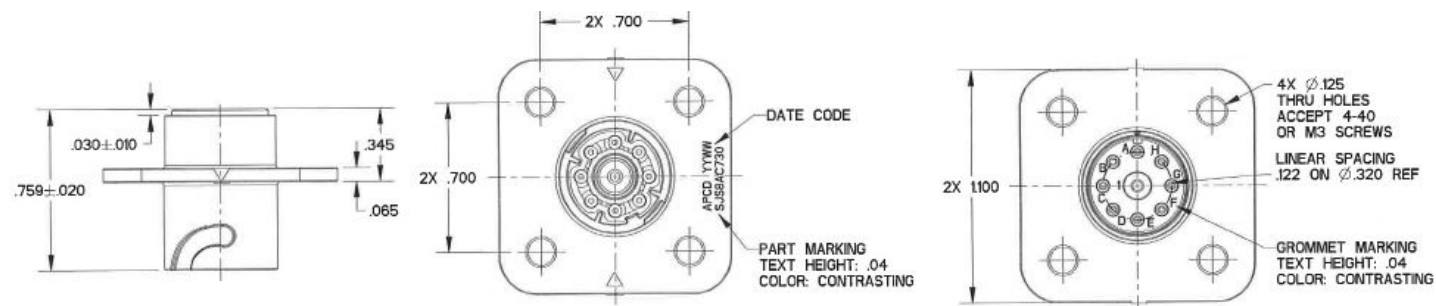
8 Position, Size 22 Square Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS830220	None			7	A	Black	SJS830220	SJS830100
SJS831220	8	22	M39029/58-360					
SJS830221	None				B	Green	SJS830221	SJS830101
SJS831221	8	22	M39029/58-360					
SJS830222	None				C	Yellow	SJS830222	SJS830102
SJS831222	8	22	M39029/58-360					



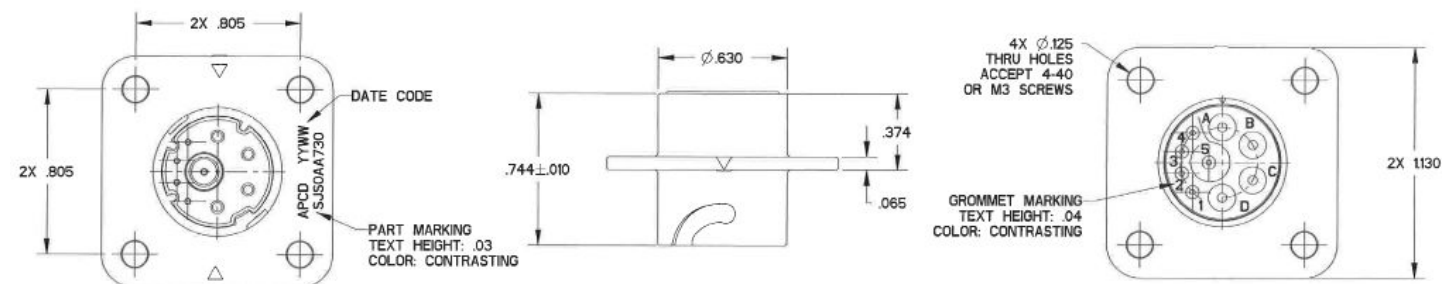
9 Position, Size 16/22 Square Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS8AC730	None			8	-	White	SJS8AC730	SJS860100
SJS8AC731	8	22/22D	M39029/58-360					
	1	16	M39029/58-364					



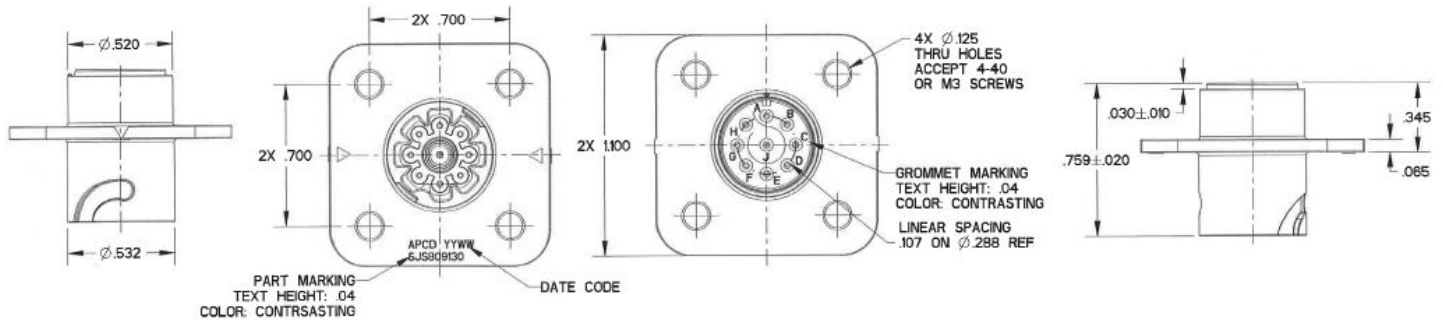
9 Position, Size 16/22 Square Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS0AA730	None			10	-	White	SJS0AA730	SJS860910
SJS0AA731	5	22/22D	M39029/58-360					
	4	16	M39029/58-364					



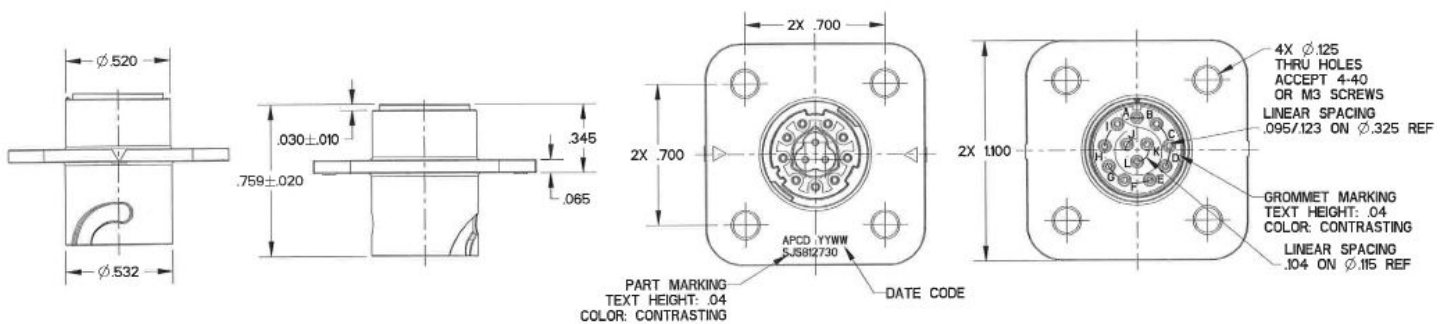
9 Position, Size 22 Square Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS809130	None			8	-	Black	SJS809130	SJS862100
SJS809131	9	22	M39029/58-360					



12 Position, Size 22 Square Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS812730	None			8	-	White	SJS812730	SJS861300
SJS812731	12	22	M39029/58-360					

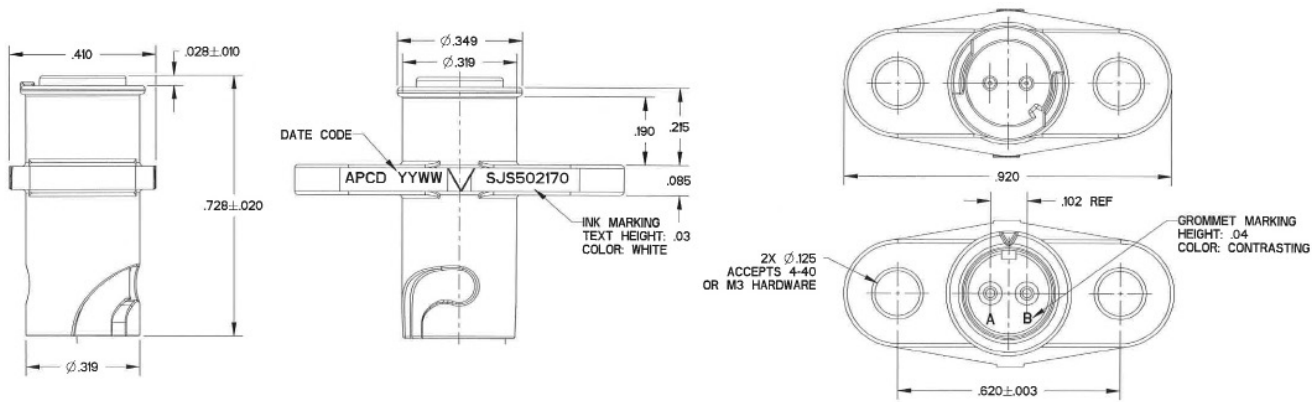


Oval Receptacle

Type	Part Number	Position	Size	Page
	SJS502170	2	22	
	SJS503170	3	22	
	SJS708170	8	22	

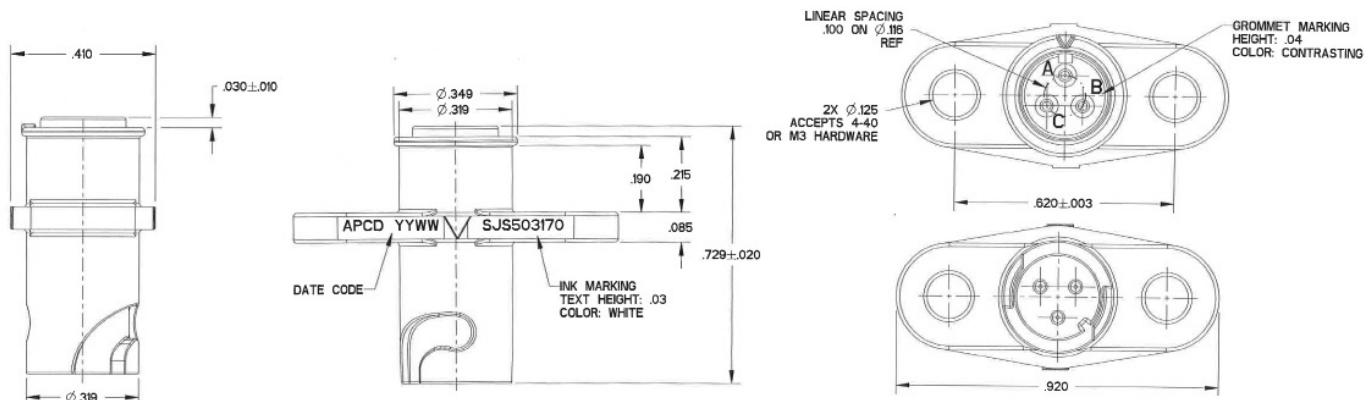
2 Position, Size 22 Oval Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS502170	None			5	-	Black	SJS502170	SJS830250
SJS502171	2	22	M39029/58-360					



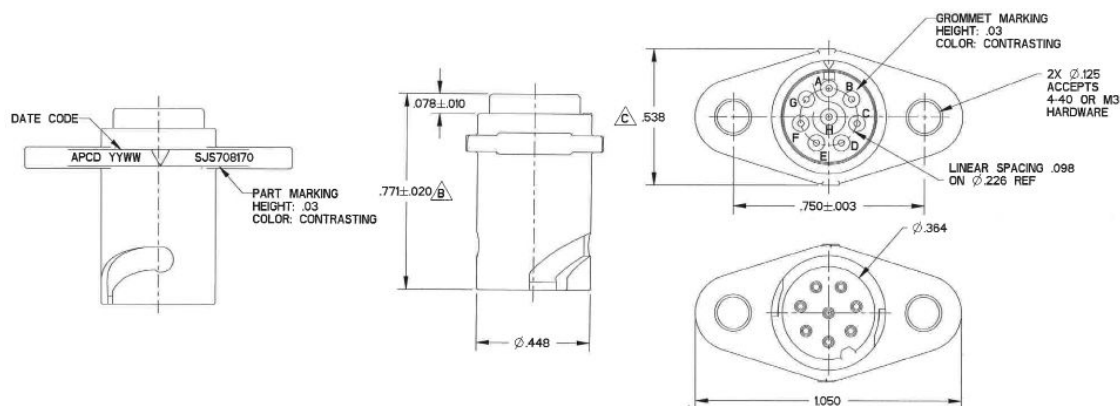
3 Position, Size 22 Oval Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS503170	None			5	-	Black	SJS503170	SJS830210
SJS503171	3	22	M39029/58-360					



8 Position, Size 22 Oval Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS708170	None			7	A	Black	SJS708170	SJS830100
SJS708171	8	22	455830200					

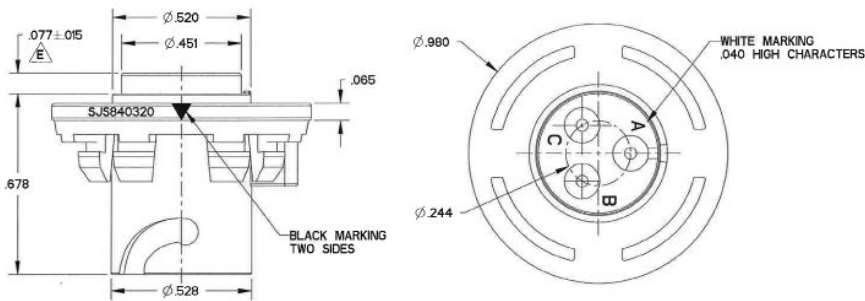


Circular Receptacle

Type	Part Number	Position	Size	Page
	SJS840320	3	16	
	SJS860520	5	22	

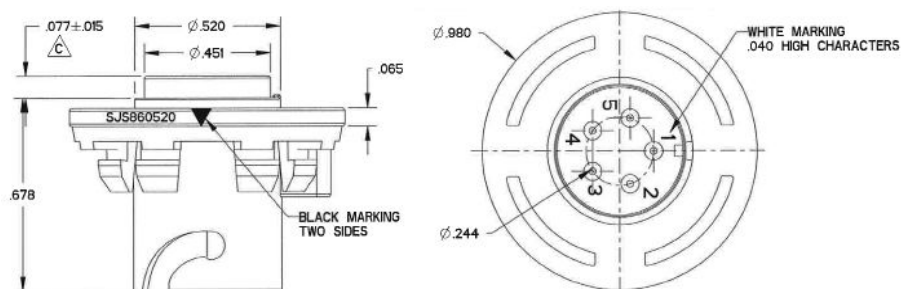
3 Position, Size 16 Circular Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS840320	None			8	A	White	SJS840320	SJS840310
SJS840321	3	16	M39029/58-364					
SJS840330	None			8	B	Black	SJS840330	SJS840340
SJS840331	3	16	M39029/58-364					



5 Position, Size 22 Circular Receptacle

APCD P/N	# of Contacts	Contact Size	Contact P/N	Shell Size	Key	Color	P/N Marking	Mating
SJS860520	None			8	A	White	SJS860520	SJS860510
SJS860521	5	22						
SJS870520	None				B	White	SJS870520	SJS870510
SJS870521	5	22						



Part Numbering-Push & Pull

						
Contact Size	Contact Qty	Shell Size	Key	Color	Plug P/N	Receptacle P/N
12	1	7	n/a	blue	SJS512100	SJS512200
12	1	7	n/a	red	SJS512110	SJS512210
16	1	6	n/a	blue	SJS716100	SJS716200
16	1	6	n/a	red	SJS716110	SJS716210
20	1	6	n/a	green	SJS720100	SJS720200
20	1	6	n/a	yellow	SJS720110	SJS720210
16	3	11	A	red	SJS816100	SJS816200
16	3	11	B	white	SJS816110	SJS816210
16	3	11	C	blue	SJS816120	SJS816220
20	3	8	A	red	SJS820100	SJS820200
20	3	8	B	white	SJS820110	SJS820210
20	3	8	C	blue	SJS820120	SJS820220

Part Numbering-Accessories

											
Shell Size	Strain Relief Single	Strain Relief Single 90°	Strain Relief Single 45°	Double Strain Relief	Double Side Tape Mount Cradle	Screw Mount Cradle	Tube Mount Cradle	Single Side Tape Tube Mount Cradle	Double Side Tape Tube Mount Cradle	Dummy Flanges	Hard Protective Caps
5	SJSA55000	SJSA55100	SJSA55200	SJSA56000	SJS257000	SJS257100	SJSA5V000	SJS5AV010	SJS5AV020	-	SJSA5B000
7	SJS450350	SJSA75100	SJSA75200	SJSA76000	SJS883000	SJS450250	SJSA7V000	SJSA7V010	SJSA7V020	SJS830220D	SJSA7B000
8	SJSA85000	SJSA85100	SJSA85200	SJSA86000	SJS445000	SJS450100	SJSA8V000	SJSA8V010	SJSA8V020	-	SJSA8B000
10	SJSA05000	SJSA05100	SJSA05200	SJSA06000	SJS991000	-	SJSA0V000	SJSA0V010	SJSA0V020	SJS0AA730D	SJSA0B000

ACCESSORIES, CONTACTS & TOOLING

Contact Information: Machined and Stamped & Formed

Now with Quadrax & Fiber Optic (M29504) capability

Shipping Format	Loose (Tape & reel not included)
Mating Cycles	500
Materials	Contact Body: Copper Alloy
	Hood: Stainless Steel
	Sleeve: Stainless Steel

Dimensions	AS39029 Compatible
Plating Options	Machined Gold plate 50 micro-inches min over
	Stamped & Formed Selective gold plate over engagement area 3-5 micro-inches thick over nickel under plate

Contact Matrix

Contact Size	Contact Style	Available		Contact P/N		QPL Part No. (Machined Only)	Contact Retention	Crimp Tensile Strength
		Push-Pull	Twist-Lock	Machined	Stamped & Formed			
12	Pin	Yes	Yes	CNP058365	SCP058365	M39029/58-365	.012" [0,30mm] @ 30lbf [133N]	100lbf [445N]
	Socket	No	Yes	CNS057359	SCS057359	M39029/57-359		
	Socket-L	Yes	No	CNS056353	n/a	M39029/56-353		
16	Pin	Yes	Yes	CNP058364	SCP058364	M39029/58-364	.012" [0,30mm] @ 25lbf [111N]	40lbf [180N]
	Socket	No	Yes	CNS057358	SCS057358	M39029/57-358		
	Socket-L	Yes	No	CNS056352	n/a	M39029/56-352		
20	Pin	Yes	Yes	CNP058363	SCP058363	M39029/58-363	.012" [0,30mm] @ 20lbf [90N]	20lbf [90N]
	Socket	No	Yes	CNS057357	SCS057357	M39029/57-357		
	Socket-L	Yes	No	CNS056351	n/a	M39029/56-351		
22D	Pin	No	Yes	CNP058360	n/a	M39029/58-360	.012" [0,30mm] @ 10lbf [44N]	10 lbf [45N]
	Socket	No	Yes	CNS057354	n/a	M39029/57-354		

Contact Size	Wire Accommodations			
	Size (AWG)	Max Current Rating (A)	ØD Range	Strip Length
12	12	23	.097 - .142" [2,46 - 3,61mm]	.209 - .240" [5,31 - 6,10mm]
	14	17		
16	16	13	.065 - .109" [1,65 - 2,77mm]	.209 - .240" [5,31 - 6,10mm]
	18	10		
	20	7.5		
20	20	7.5	.040 - .083" [1,02 - 2,11mm]	.209 - .240" [5,31 - 6,10mm]
	22	5		
	24	3		
22D	22	5	.030 - .054" [0,76 - 1,37mm]	.141 - .172" [3,58 - 4,37mm]
	24	3		
	26	2		
	28	1.5		

Tooling Part Numbers



Contact P/N	Mating End Size	Wire Barrel Size	Wire Gage Range	Test Current Per Wire Gage (A)	Crimp Tool	Positioner	Installation Tool	Extraction Tool		
M39029/22-191	22	22	22	5	M22520/7-01	M22520/7-11	M81960/14-01			
			24	3						
			26	2						
M39029/22-192	20	20	20	7.5	M22520/7-01	M22520/7-12	M81969/14-10			
			22	5						
			24	3						
M39029/22-193	16	16	16	13	M22520/7-01	M22520/7-13	M81969/14-03			
			18	10						
			20	7.5						
M39029/22-605	12	12	12	23	M22520/1-01	M22520/1-16	M81969/16-03			
			14	17						
M39029/56-351	20	20	20	7.5	M22520/1-01	M22520/1-04 (Red)	M81969/8-05	M81969/8-06		
			22	5	M22520/2-01	M22520/2-10	M81969/14-10			
			24	3	M22520/7-01	M22520/7-08				
M39029/56-352	16	16	16	13	M22520/1-01	M22520/1-04 (Blue)	M81969/8-07	M81969/8-08		
			18	10	M22520/7-01	M22520/7-04	M81969/14-03			
			20	7.5						
M39029/56-353	12	12	12	23	M22520/1-01	M22520/1-04 (Yellow)	M81969/8-09	M81969/8-10		
			14	17			M81969/14-04			
M39029/57-354	22	22D	22	5	M22520/2-01	M22520/2-06	M81969/8-01	M81969/8-02		
			24	3			M81960/14-01			
			26	2	M22520/7-01	M22520/7-06				
			28	1.5						
M39029/57-357	20	20	20	7.5	M22520/1-01	M22520/1-04 (Red)	M81969/8-05	M81969/8-06		
			22	5	M22520/2-01	M22520/2-10	M81969/14-10			
			24	3	M22520/7-01	M22520/7-08				
M39029/57-358	16	16	16	13	M22520/1-01	M22520/1-04 (Blue)	M81969/8-07	M81969/8-08		
			18	10	M22520/7-01	M22520/7-04	M81969/14-03			
			20	7.5						
M39029/57-359	12	12	12	23	M22520/1-01	M22520/1-04 (Yellow)	M81969/8-09	M81969/8-10		
			14	17			M81969/14-04			
M39029/58-360	22	22D	22	5	M22520/2-01	M22520/2-09	M81969/8-01	M81969/8-02		
			24	3			M81969/14-01			
			26	2	M22520/7-01	M22520/7-07				
			28	1.5						
M39029/58-363	20	20	20	7.5	M22520/1-01	M22520/1-04 (Red)	M81969/8-05	M81969/8-06		
			22	5	M22520/2-01	M22520/2-10	M81969/14-10			
			24	3	M22520/7-01	M22520/7-08				
M39029/58-364	16	16	16	13	M22520/1-01	M22520/1-04 (Blue)	M81969/8-07	M81969/8-08		
			18	10	M22520/7-01	M22520/7-04	M81969/14-03			
			20	7.5						
M39029/58-365	12	12	12	23	M22520/1-01	M22520/1-04 (Yellow)	M81969/8-09	M81969/8-10		
			14	17			M81969/14-04			

ACCESSORIES, CONTACTS & TOOLING

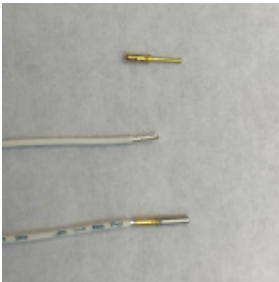
Contact Size	Wire Size	Insulation O.D	Stripping Length "A"
8	8-10 AWG	.124-.155 IN	.470 IN
12	12-14 AWG	.097-.142 in	.188 in
16	16-20 AWG	.065-.109 in	.188 in
20	20-24 AWG	.040-.083 IN	.188 IN
22D	22-28 AWG	.030-.055 in	.125 IN

Crimp Tool Setup

1. Select proper crimp tool and positioner based on contact size from the tables
2. Assemble positioner on crimp tool and turn to lock it in place.
3. Use instructions on the positioner to set the dial on the crimp tool.

Crimp Wire To Contacts

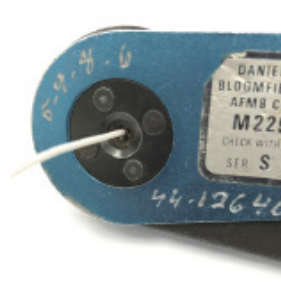
1. Place the wire into the contact. All wire strands should be in crimp barrel and wire must be visible through inspection hole.
2. Place the contact fully into the crimp tool so the contact shoulder is against the crimp tool shoulder.
3. Squeeze the handles on the crimp tool together firmly until the ratchet disengages. The tool will not release until the crimp cycle is complete.
4. Check that the wire is still visible through the inspection hole in the contact.



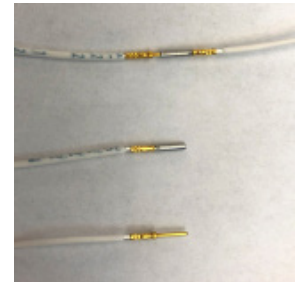
Step One



Step One



Step Three



Step Four

Wire Preparation

Strip wire to length shown in chart. Do not cut or nick wire strands. Twist wire strands back to form a firm bundle.

Contact Size	Wire Size	Insulation O.D	Stripping Length "A"
22D	22-28 AWG	.030-.055 in	.118-.157 in

Crimp Tool

Part Number: 10-745003-22D or DMC GMT220





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