MISSION-CRITICAL

INTERCONNECT SOLUTIONS

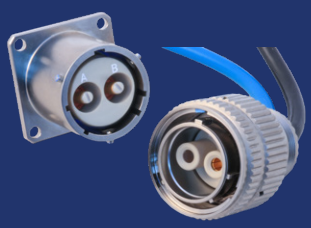
Glenair®



PowerPlay™ Glenair Signature High-Power Connectors and Cables



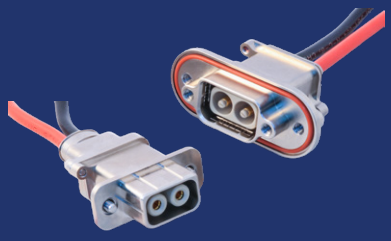
SuperNine Series III
PowerPlay Triple-Start



SuperNine Series I
PowerPlay Bayonet



Series 806 Mil-Aero
PowerPlay High Density



Micro-Crimp
PowerPlay Rectangular

AUGUST 2024

SERIES 973
POWERPLAY
HIGH-POWER
CONNECTORS AND
CABLES

PowerPlay™

A complete ecosystem of lightweight vibration- and shock-resistant connectors, contacts, and cables



PowerPlay is a high-power, single-pole and multi-pole connector series—with four different circular and rectangular packaging options: SuperNine Series III triple-start, SuperNine Series I bayonet, Series 806 micro-miniature, and Micro-Crimp precision rectangular. The connector series combines Glenair signature raised tower insert architecture, Crown Ring contacts, and TurboFlex cable compatibility into the interconnect industry's most innovative power solution. PowerPlay's high-conductivity Crown Ring contact and dielectric insert technology delivers 5,000 VAC dielectric withstanding voltage. Raised safe-touch socket tower and available safe-touch pin meets industry protection requirements for high power distribution applications.

- **5000 VAC dielectric withstanding voltage**
- **High current, low-resistance, and superior vibration performance**
- **Safe-touch finger-proofing**
- **Integrated band platform cable shield termination**
- **Compatible with TurboFlex high-flexibility cable**
- **Support for bus-bar and other wire terminations**
- **Multi-pin arrangements for size 8 and 4 AWG contacts. Single-pole arrangements for 2, 1/0, 2/0, and 4/0 contacts. Options for 20 AWG interlock contacts on all sizes**

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SERIES 973

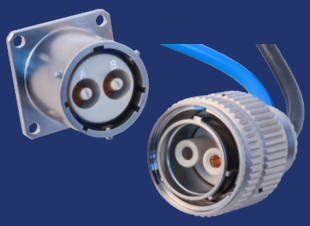
PowerPlay™ High-Power Connectors and Cables

Rugged, life-of-system durability

POWERPLAY SIGNATURE HIGH-POWER CONNECTOR SELECTION GUIDE



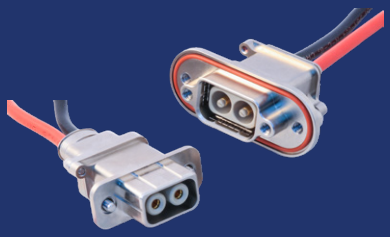
SuperNine Series III
PowerPlay Triple-Start



SuperNine Series I
PowerPlay Bayonet

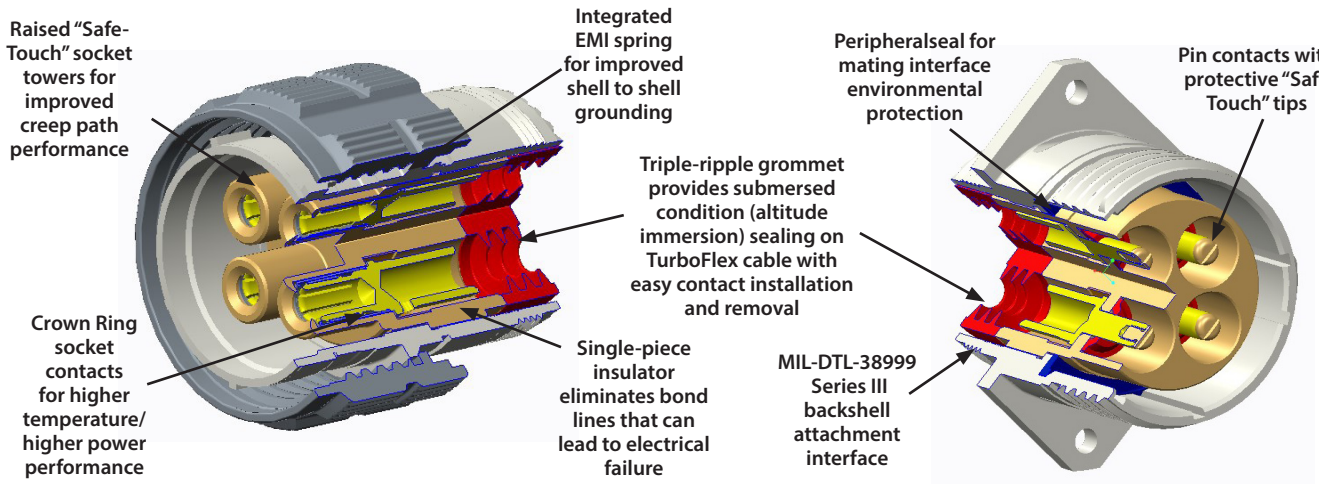


Series 806 Mil-Aero
PowerPlay High Density

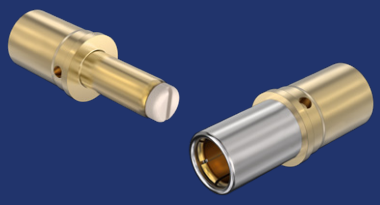


Micro-Crimp
PowerPlay Rectangular

PowerPlay™: KEY CONNECTOR AND CONTACT DESIGN FEATURES, PLUG AND RECEPTACLE CUTAWAY VIEWS



GLENAIR SIGNATURE CROWN RING CONTACTS



- High vibration-resistant, high-conductivity gold-plated copper alloy. Socket contact adds stainless steel Crown Ring; pin contact adds thermoplastic finger-safe tip
- Up to 60% lower contact resistance than equivalent AS39029 contacts
- High operating temperature resistance compared to other specialized high-power contacts

TURBOFLEX® ULTRA FLEXIBLE / RUGGED POWER CABLES WITH DURALECTRIC JACKETING

TurboFlex high-flexibility power cabling is optimized for use with PowerPlay connectors and is supplied with Glenair signature Duralectric jacketing material for rugged fluid immersion, caustic chemical exposure, temperature extremes, and UV radiation. Duralectric is available in a broad range of colors including safety orange. Two cable core constructions are supplied: TurboFlex M with AS22759-type conductors, and TurboFlex R with ultra-flexible rope-lay conductors.



Available with cable gauge selections from 8 AWG to 4/0, to provide suitable margins for DWV, frequency derating, and peak-load electrical performance.

DURALECTRIC JACKETING	
Abrasion Resistance	Good
Wear Resistance	Good
Flame Resistance	Excellent
Sunlight Resistance	Excellent
Flex Resistance	Excellent

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POWERPLAY HIGH-POWER CONNECTORS
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Crown Ring contact resistance and temperature rise performance

INTRODUCTION

CROWN RING CONTACTS MAXIMIZE CURRENT CARRYING CAPACITY

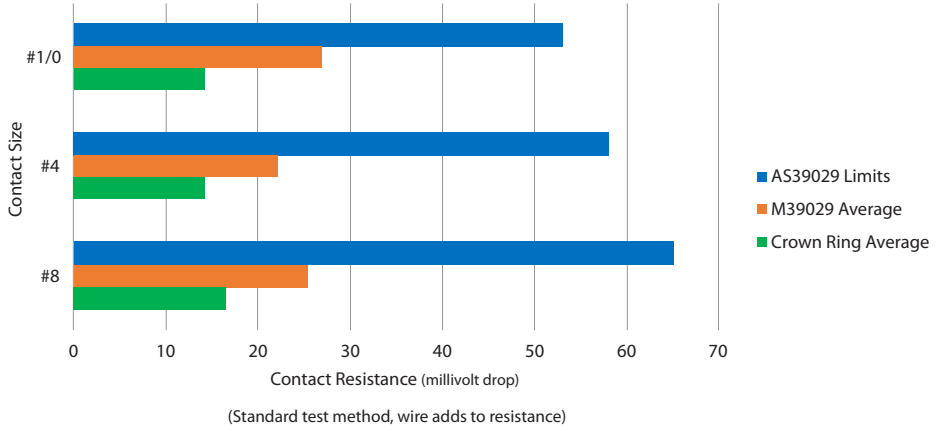
Current carrying capacity can be defined as the maximum level of current that a connector can handle, while keeping all the components of the connector at or below their temperature limits. Temperature rise is caused by the heat generated from current flowing against the resistance of the conductive path. The two main sources of resistance in a cable system are the bulk resistance of the wire and the contact junction within a pair of connectors.

CROWN RING CONTACTS MINIMIZE CONTACT RESISTANCE

To keep temperature rise to a minimum, Glenair developed its signature Crown Ring contacts for use in PowerPlay connectors. Crown Ring contacts are designed to minimize contact resistance by using high conductivity copper alloy and a stainless steel ring for contact normal force. The results are contact resistance values 75% less than AS39029 required limits and as much as 60% less than average M39029 contact performance. (see graphs here). Crown Ring contacts, with extremely low contact resistance, also exhibit lower temperature rise when compared to standard M39029 contacts and specialized high-power contacts from other manufacturers.

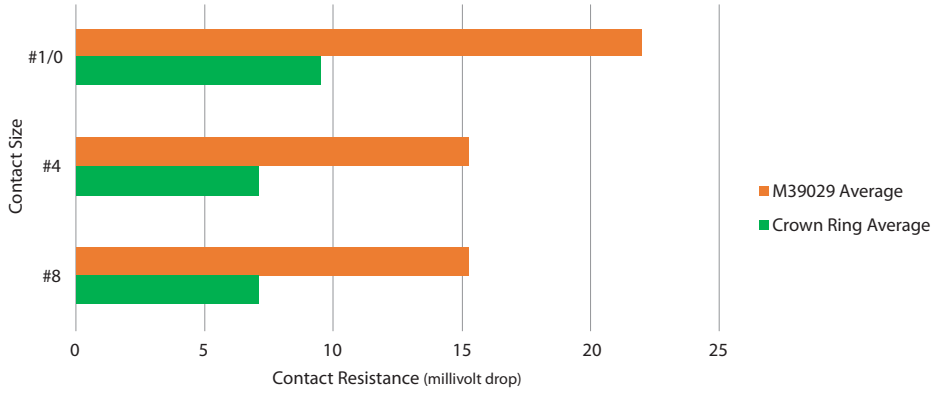
NOTE: Lower temperature rise reduces heat aging of surrounding insulation, leading to longer life and higher reliability of the connector.

STANDARD CONTACT RESISTANCE (PER AS39029 TABLE 6)



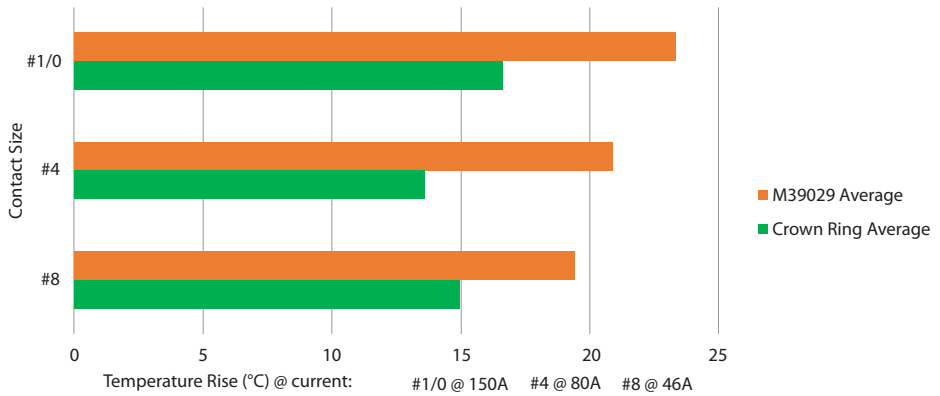
(Standard test method, wire adds to resistance)

CONTACT RESISTANCE AFTER SUBTRACTING RESISTANCE OF WIRE



(Normalized, subtracting wire resistance)

TEMPERATURE RISE



(contacts terminated to 3 feet of same gauge wire)

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High current-carrying capacity contacts and connectors

POWERPLAY CONNECTOR MATERIALS AND DESIGN MAXIMIZE CURRENT CARRYING CAPACITY

PowerPlay connectors employ high-performance, high-temperature materials throughout. This means that the interconnect system can withstand higher temperature rise than the typical Mil-Aero connector. In the case where the application can allow wire and connector temperatures to run at or near their rated temperatures (up to 230°C), PowerPlay connectors can handle even higher current levels than already afforded by the low-resistance Crown Ring contacts.

Current carrying capacity is an application-specific rating, requiring many system level inputs. Some of these inputs are: maximum ambient temperature(s), operating altitudes, physical environment (operating in enclosure or open air), cable construction/insulation and others.

For most aerospace applications, Glenair suggests using SAE AS50881 as a baseline for current carrying capacity for PowerPlay connectors. These baseline current levels are shown in the graphs here for single pin connectors. Glenair welcomes the opportunity to work with your team to provide performance estimates and product suggestions, maximizing the power delivered by PowerPlay connectors for your specific application.

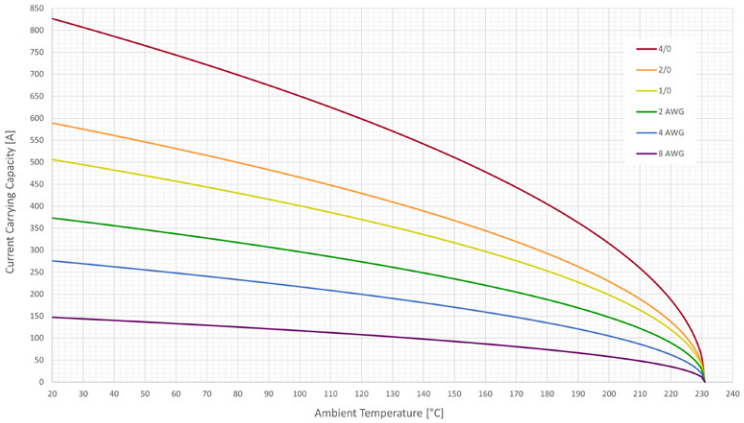
HIGH CURRENT-CARRYING CONTACTS: PARTIAL DISCHARGE, HOT-SIDE CONNECTORS, AND "SAFE-TOUCH" DESIGN

Glenair Series 973 PowerPlay connectors may be specified with pin or socket contact genders in plugs and receptacles. The raised socket contact towers serve to prevent partial discharge (surface tracking) and arcing events. The design has the additional benefit of functioning as a "safe-touch" system on hot-side components, protecting the user from exposed live contacts.

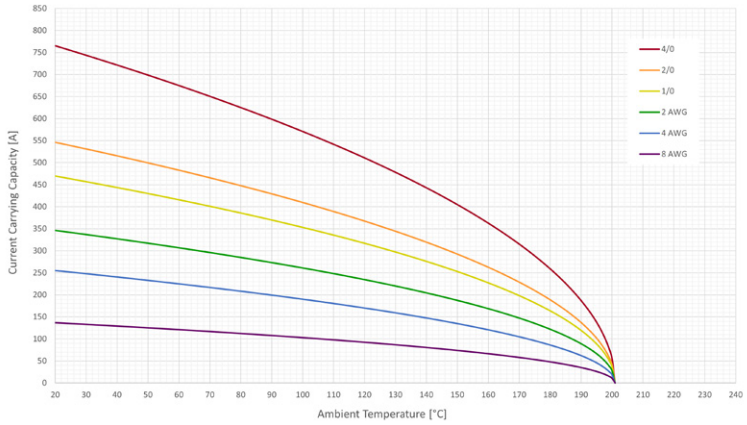


PowerPlay with "safe-touch"

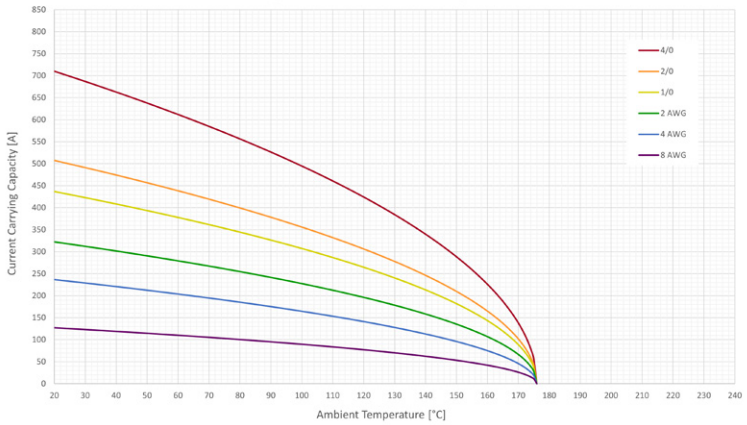
MAX CURRENT CARRYING CAPACITY VS. AMBIENT TEMPERATURE: CROWN RING CONTACTS IN 230°C RATED SST POWERPLAY CONNECTORS



MAX CURRENT CARRYING CAPACITY VS. AMBIENT TEMPERATURE: CROWN RING CONTACTS IN 200°C RATED AL POWERPLAY CONNECTORS



MAX CURRENT CARRYING CAPACITY VS. AMBIENT TEMPERATURE: CROWN RING CONTACTS IN 175°C RATED AL POWERPLAY CONNECTORS



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INTRODUCTION

Performance specifications summary

POWERPLAY™ PERFORMANCE SPECIFICATION

Test Description	Requirement	Procedure
Dielectric withstanding voltage (DWV)	PowerPlay DWV Levels (VAC) Test Points: 760 torr (SeaLevel) / 282 torr (25K ft) / 87 torr (50K ft) / 25 torr (75K ft) / 8 torr (100K ft) Pin-Pin: 5,000V / 5,000V / 3,500V / 1,400V / 700V Pin-Grnd: 5,000V / 5,000V / 3,000V / 800V / 400V	EIA-364-20, Method A, 2 seconds dwell 2 mA maximum leakage current Mated pairs
Partial discharge, typical values	Insert Arrangement: Sea Level TYP PDIV (VAC) / TYP PDEV (VAC); 15000 feet TYP PDIV (VAC) / TYP PDEV (VAC); 35000 feet TYP PDIV (VAC) / TYP PDEV (VAC) 17-2: 2100 / 1900 / 1600 / 1500 / 1200 / 1000 Insert Arrangement: 50000 feet TYP PDIV (VAC) / TYP PDEV (VAC); 70000 feet TYP PDIV (VAC) / TYP PDEV (VAC) 17-2: 900 / 800 / 800 / 600 All values are typical and are not meant for performance specifications, test limits, etc.	IEC 60270 (ed 3.1)
Insulation resistance at ambient	5000 megohms minimum	EIA-364-21, at 500 VDC
Contact resistance at 25°C, crimp contacts	Contact / Wire Size: Test Current Amperes: Voltage Drop (millivolts) Initial Max / Crown Ring Typical 0000: 225: 53 / 13 00: 185: 48 / 11 0: 150: 53 / 14 2: 100: 43 / 12 4: 80: 58 / 14 8: 46: 65 / 17	AS39029 Para. 3.5.4 (Table 6), EIA-364-06
Shell-to-shell conductivity	Finish Code: Shell Mat'l/Finish: Millivolt Drop (mV) ME: Al / EN: 1.0 MT: Al / Ni-PTFE: 2.5 NF: Al / OD Cad: 2.5 ZR: Al / Zn-Ni: 2.5 Z1: SST / pass.: 10.0 ZL: SST / Ni: 1.0	EIA-364-83
Contact engaging / separation force	Contact forces shall meet AS39029 Table 9 requirements	AS39029 Para. 3.5.5, EIA-364-37
Temperature cycling (thermal shock)	No evidence of damage detrimental to the function of the connector	EIA-364-32, Method A, Duration A, Mated connectors, max/min temps in accodance with temperature rating of connector
Random vibration, 43.92 grms	No discontinuities of 1 microsecond or longer	EIA-364-28, Test Condition VI, Letter J, Ambient, 8 Hrs, 2 Axis, 200°C
Mechanical shock, 50g	No discontinuities of 1 microsecond or longer	EIA-364-27, Test Condition A
Fluid immersion	No damage to plastic, elastomeric or bonding materials detrimental to the function of the connector. Connector shall mate and unmate properly and meet coupling torque and DWV requirements after immersion.	EIA-364-10 Various aviation fluids, fuels, and oils (See GT-21-155)

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Performance specifications and test summary

POWERPLAY™ PERFORMANCE SPECIFICATION		
Test Description	**Requirement**	**Procedure**
Salt spray, dynamic	Finish Code / Shell Mat'l/Finish / Hours: ME / Al / EN / 96 MT / Al / Ni-PTFE / 500 NF / Al / OD Cad / 500 ZR / Al / Zn-Ni / 500 Z1 / SST / pass. / 1000 ZL / SST / Ni / 1000	MIL-DTL-38999 Para. 4.5.13.2 EIA-364-26 150 mating cycles total

POWERPLAY™ TEST SUMMARY					
Test Description	**Test Specification**	**Result**	**Test Description**	**Test Specification**	**Result**
Backshell and Connector Durability	EIA-364-83	Pass	Dielectric Withstanding Voltage at Sea Level	EIA-364-20	Pass
Backshell Coupling Strength	–	Pass	Insert Retention	EIA-364-35	Pass
Backshell-to-Connector Shell Conductivity	EIA-364-83	Pass	Insulation Resistance at Ambient Temperature	EIA-364-21	Pass
Contact Insertion and Removal Force	EIA-364-05	Pass	Post Test Examination	–	Pass
Contact Resistance	EIA-364-06	Pass	Shell-to-Shell Conductivity	EIA-364-83	Pass
Contact Retention (100%)	EIA-364-29	Pass	Temperature Cycling (thermal shock)	EIA-364-32	Pass
Corrosion (Dynamic)	EIA-364-26	Pass	Visual, Mechanical, and Workmanship Inspection	ASTM B 571	Pass
Coupling and Uncoupling Torque	EIA-364-114	Pass			

POWERPLAY RECOMMENDED TORQUE VALUES (IN-LBS)								
	Mating Plug to Receptacle		**Backshell**				**Jam Nut**	
	Aluminum, Stainless and Composite		**Aluminum**		**Composite**	**Stainless Steel**	**Aluminum, Composite and Stainless**	**Aluminum and Stainless**
Shell Size	**High Vibe**	**Low Vibe**	**Low Vibe**	**High Vibe**	**Low Vibe**	**High Vibe**	**Low Vibe**	**High Vibe**
9	18-22	8-12	51-61	66-77	20-25	91-101	30-36	80-85
11	28-32	12-16	71-81	103-113	20-30	115-125	40-46	105-115
13	38-42	16-20	103-113	115-125	25-35	115-125	55-60	140-150
15	48-52	20-24	111-121	139-149	25-35	139-149	70-75	175-185
17	57-63	24-28	111-121	139-149	30-40	139-149	80-85	200-210
19	67-73	28-32	111-121	139-149	30-40	175-185	90-95	225-235
21	77-83	32-36	131-141	175-185	35-45	199-209	100-110	260-270
23	87-93	36-40	131-141	175-185	35-45	223-233	110-120	285-295
25	97-103	40-44	131-141	175-185	35-45	259-269	120-130	310-320

High Vibe: All aerospace and other high vibration applications. This level is recommended as a default.
Low Vibe: Static ground applications and other low vibe systems. Plug may be torqued up to High Vibe levels.

POWERPLAY STANDARD SHELL MATERIAL AND FINISH CODES							
Code	**Material**	**Finish**	**Finish Specification**	**Hrs Salt Spray**	**Electrical Conductivity**	**Operating Temp Range**	**RoHS Compliance (1)**
ME	Aluminum	Electroless Nickel	AMS-C-26074	48	Conductive	-65 to +200C	Yes
MT	Aluminum	Nickel-PTFE	AMS2454	500	Conductive	-65 to +200C	Yes
NF	Aluminum	Cadmium, Olive Drab	ASTM B 840	500	Conductive	-65 to +175C	No
TZ	Aluminum	Tin Zinc, Green-Gold	AMS 2434, Type 2	500	Conductive	-65 to +175C	Yes
MN	Aluminum	Mega Nickel	ASTM B733	1000	Conductive	-65 to +200C	Yes
ZL	Stainless Steel	Electrodeposited Nickel	AMS-QQ-N-290	500	Conductive	-65 to +230C	Yes
Z1	Stainless Steel	Passivate	AMS2700	500	Conductive	-65 to +230C	Yes

(1) Does not contain cadmium or hexavlent chromium. Meets EU requirements.

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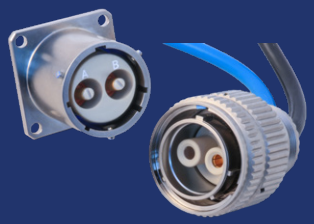
SUPERNINE MIL-DTL-38999 SERIES I & III POWERPLAY

PowerPlay™

- SuperNine Series I & III Raised Tower Architecture
- High-Temperature Crown Ring Contacts
- Compatible TurboFlex Cabling



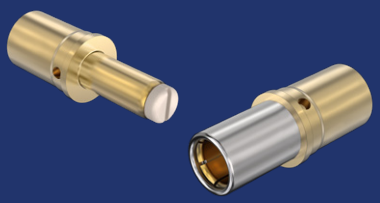
SuperNine Series III
PowerPlay Triple-Start



SuperNine Series I
PowerPlay Bayonet

- **MIL-DTL-38999 Series III triple-start stub ACME high vibration and shock mating**
- **MIL-DTL-38999 Series I rapid mate and demate bayonet-lock design**
- **Raised tower "safe-touch" architecture**
- **Industry-standard D38999 mounting and package envelope dimensions**

HIGH-TEMPERATURE TOLERANT CROWN RING CONTACTS



Glenair Signature Crown Ring contact series

provides reduced contact resistance, superior conductivity, and higher temperature-tolerance than conventional AS39029 contacts and specialized high-power contacts from other manufacturers

- Maximum operating temperature 260°C
- Superior conductivity performance compared to beryllium copper contacts, across full temperature range
- Up to 60% lower contact resistance than AS39029 contacts (normalized, less wire)
- Contact bodies made from high conductivity copper alloy (approximately 95% IACS)
- Pin contact equipped with thermoplastic safe-touch tip
- Stainless steel Crown Ring
  - Provides socket forces without stress relaxation at High-Temperatures
  - Moves socket spring function from socket body to ring, allowing use of high-conductivity copper
- Gold over nickel plating
  - Thicker plating than industry standards for reduced contact fretting and higher temperature endurance
  - Gold over nickel is "gold standard" for high-reliability aerospace contacts
- Crimp versions use standard industry tooling, including crimp die/locator and insertion/extraction tools (2AWG Crown Ring contacts require custom tooling)

ABOUT TURBOFLEX "M" AND TURBOFLEX "R" CABLE CONSTRUCTION

TurboFlex cables are jacketed with Duralectric insulation, which contributes to the flexibility of the product. TurboFlex R (rope-lay core) provides maxiumum flexibility. TurboFlex M (M22759 core) has a slightly larger bend radius but far superior flexibility compared to standard M22759 cable.





TurboFlex R with rope-lay cable construction





TurboFlex M with M22759 cable construction

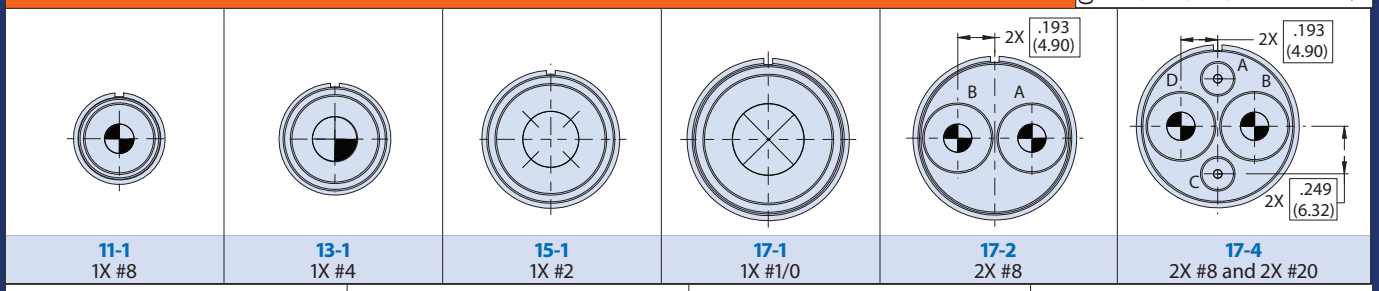
TURBOFLEX AND SUPERNINE SR. I AND III POWERPLAY CONNECTOR, CONTACT, AND CABLE ECOSYSTEM									
		TurboFlex M with M22759 cable construction					TurboFlex R with Rope-Lay cable construction		
Cable Type		Single-Wall TurboFlex M Cable	Dual-Wall Turboflex M Shielded Cable	Single-Wall TurboFlex M, Shield + Fabric Overbraid	Single-Wall TurboFlex M Cable	Dual-Wall Turboflex M Shielded Cable	Single-Wall TurboFlex R Cable	Dual-Wall TurboFlex R Cable	Single-Wall TurboFlex R Cable
Part No.		967-600	967-601	967-602	967-022	967-024	961-106-2000	961-107-2000	961-108-2000
Insulation / Jacket / Shield Type		Duralectric D Insulation	Duralectric D Insulation / Jacket, EMI Shield	Duralectric D Insulation EMI Shield Fabric Overbraid	Duralectric L Insulation	Duralectric L Insulation / Jacket, EMI Shield	Duralectric D Insulation	Duralectric D Insulation / Jacket	Duralectric L Insulation
VAC Rating		725–2875	725–2875	725–2875	2000	2000	2000	2000	2000
Gauge AWG	Typical Current (A)	✓ = Available Gauges					✓ = Available Gauges		
20	10–25	✓	✓	✓					
16	15–35	✓	✓	✓					
8	55–135	✓	✓	✓	✓	✓	✓	✓	✓
4	105–250	✓	✓	✓	✓	✓	✓	✓	✓
2	145–345	✓	✓	✓	✓	✓	✓	✓	✓
0	195–465	✓	✓	✓	✓	✓	✓	✓	✓

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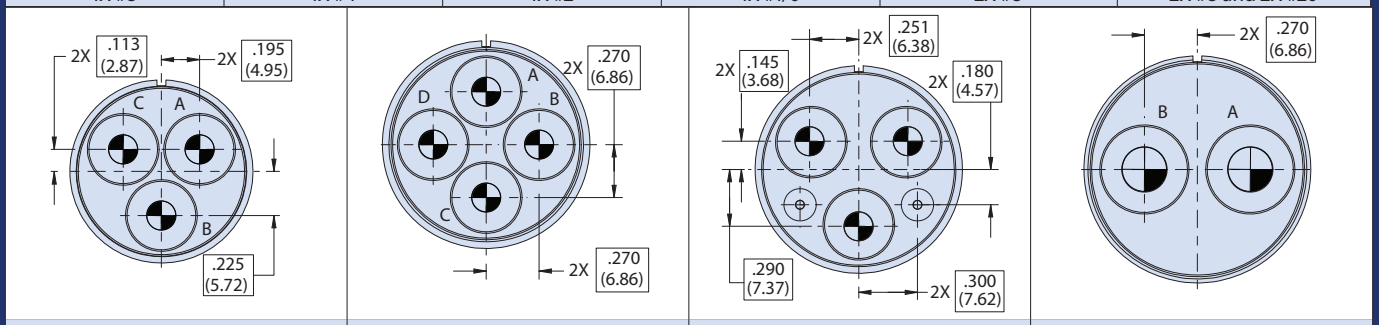
SuperNine® SuperNine Series I and III PowerPlay Detailed Contact Arrangements

SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)

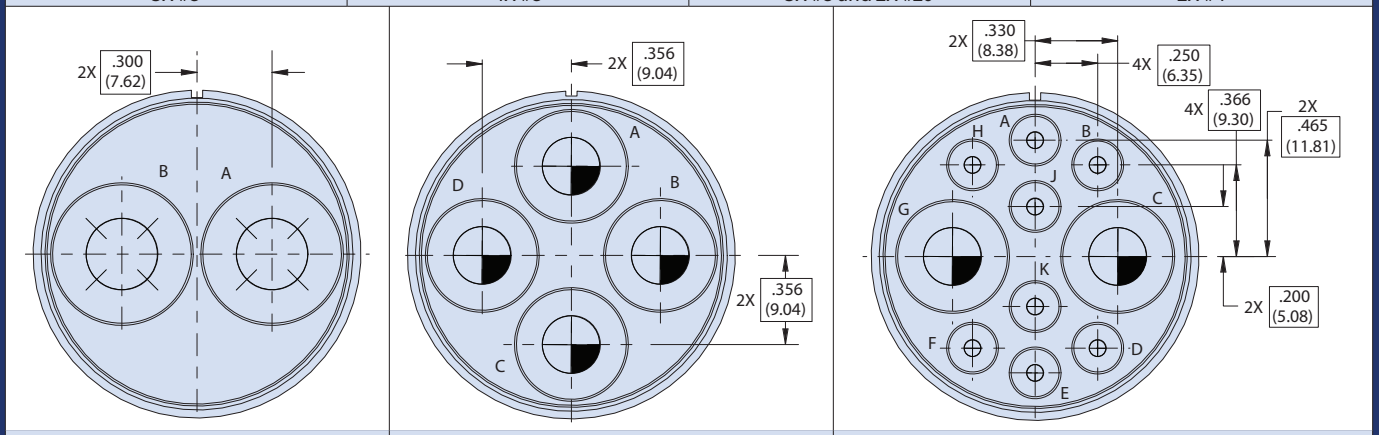
CONTACT KEY: #20 · #16 · #8 · #4 · #2 · #1/0



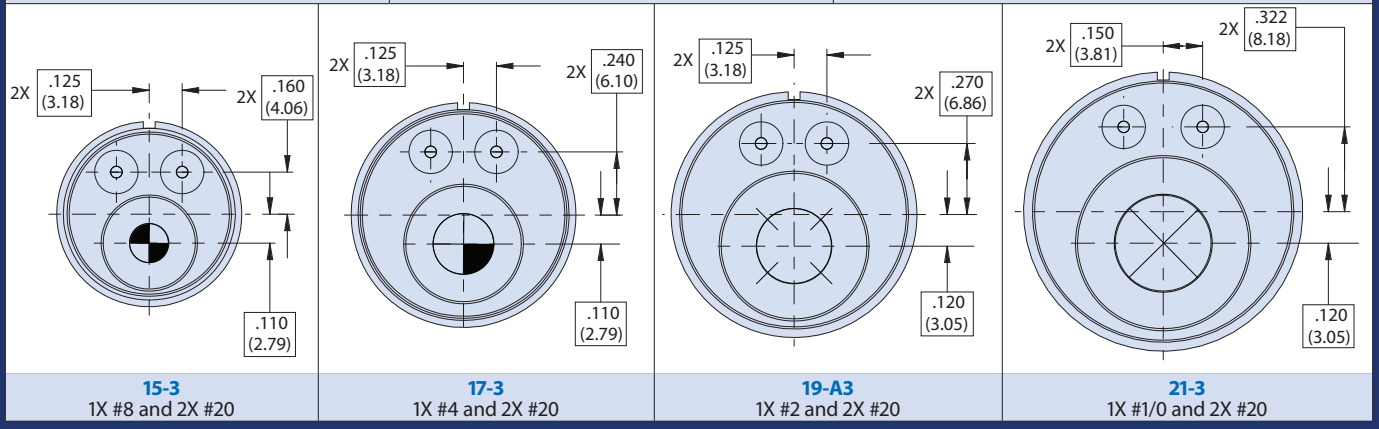
11-1	13-1	15-1	17-1	17-2	17-4
1X #8	1X #4	1X #2	1X #1/0	2X #8	2X #8 and 2X #20



19-3	21-4	21-5	23-2
3X #8	4X #8	3X #8 and 2X #20	2X #4



25-2	25-4	25-10
2X #2	4X #4	2X #4 and 8X #16



15-3	17-3	19-A3	21-3
1X #8 and 2X #20	1X #4 and 2X #20	1X #2 and 2X #20	1X #1/0 and 2X #20

973-001 SuperNine Series III PowerPlay Triple-Start Connector weights

ALUMINUM CONNECTOR WITH ACCESSORY THREADS

	Socket Insulators				Pin Insulators			
Layout	Plug Mass (grams)	Wall Mount Mass (grams)	Jam Nut Mass (grams)	In Line Mass (grams)	Plug Mass (grams)	Wall Mount Mass (grams)	Jam Nut Mass (grams)	In Line Mass (grams)
11-1	23	20	27	18	23	19	26	17
13-1	34	26	36	24	35	27	37	25
15-1	52	44	54	43	52	45	54	43
15-3	40	31	44	30	41	32	45	30
17-1	61	60	70	58	61	60	70	58
17-2	46	44	56	43	47	45	57	44
17-3	44	42	54	41	47	45	57	44
17-4	46	44	56	43	46	45	56	43
19-1	98	88	103	86	89	79	95	77
19-3	61	51	68	49	61	51	68	49
19-A3	65	55	72	59	68	58	75	61
21-3	85	75	88	71	88	78	91	75
21-4	73	63	81	60	72	63	81	59
21-5	70	60	78	57	71	61	79	58
23-2	78	69	89	65	84	75	95	71
23-3	128	117	136	113	119	108	127	104
25-2	109	100	122	98	116	107	129	105
25-4	94	85	107	83	99	90	112	88

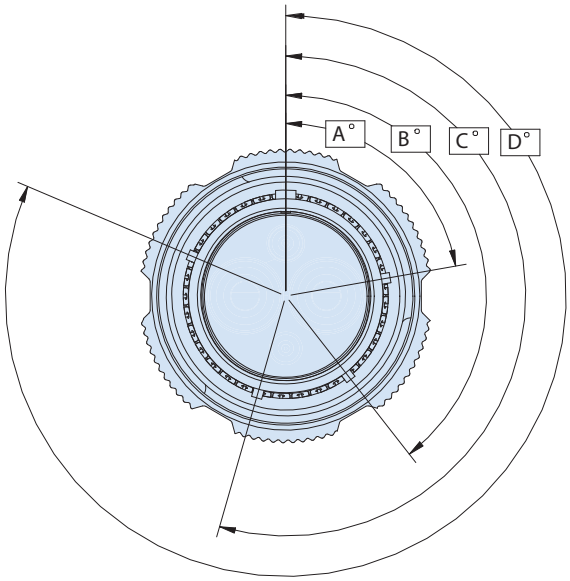
ALUMINUM CONNECTORS WITH BANDING PLATFORM

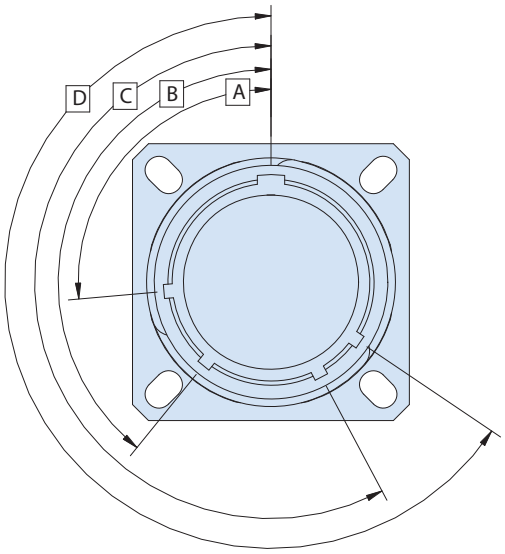
	Socket Insulators				Pin Insulators			
Layout	Plug Mass (grams)	Wall Mount Mass (grams)	Jam Nut Mass (grams)	In Line Mass (grams)	Plug Mass (grams)	Wall Mount Mass (grams)	Jam Nut Mass (grams)	In Line Mass (grams)
11-1	25	18	26	16	24	17	26	15
13-1	36	24	35	22	36	24	36	23
15-1	55	46	55	45	55	47	55	45
15-3	43	31	43	30	43	32	43	30
17-1	61	58	70	57	61	58	69	56
17-2	46	41	54	39	46	42	55	40
17-3	44	39	52	37	46	42	55	40
17-4	46	41	54	39	46	41	55	40
19-1	97	84	100	82	88	76	91	74
19-3	60	47	64	45	60	47	64	45
19-A3	69	58	73	56	71	61	76	58
21-3	84	73	89	70	87	77	92	73
21-4	72	59	76	55	72	58	76	55
21-5	74	61	78	57	70	57	74	53
23-2	76	64	84	60	82	70	90	66
23-3	127	113	132	109	118	104	123	100
25-2	107	98	117	95	114	105	124	102
25-4	98	79	101	77	103	84	106	81

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SuperNine Series I and III PowerPlay Connector polarizations

POLARIZATION KEYS AND KEYWAYS





Shell Size	Polarization Code	Minor Key/Keyway Rotation			
		A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

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973-001 SuperNine Series III PowerPlay Triple-Start G6 Plug

SUPERNINE SERIES III POWERPLAY TRIPLE-START



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table
- Seal/grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: High-Temp composite

NOTES

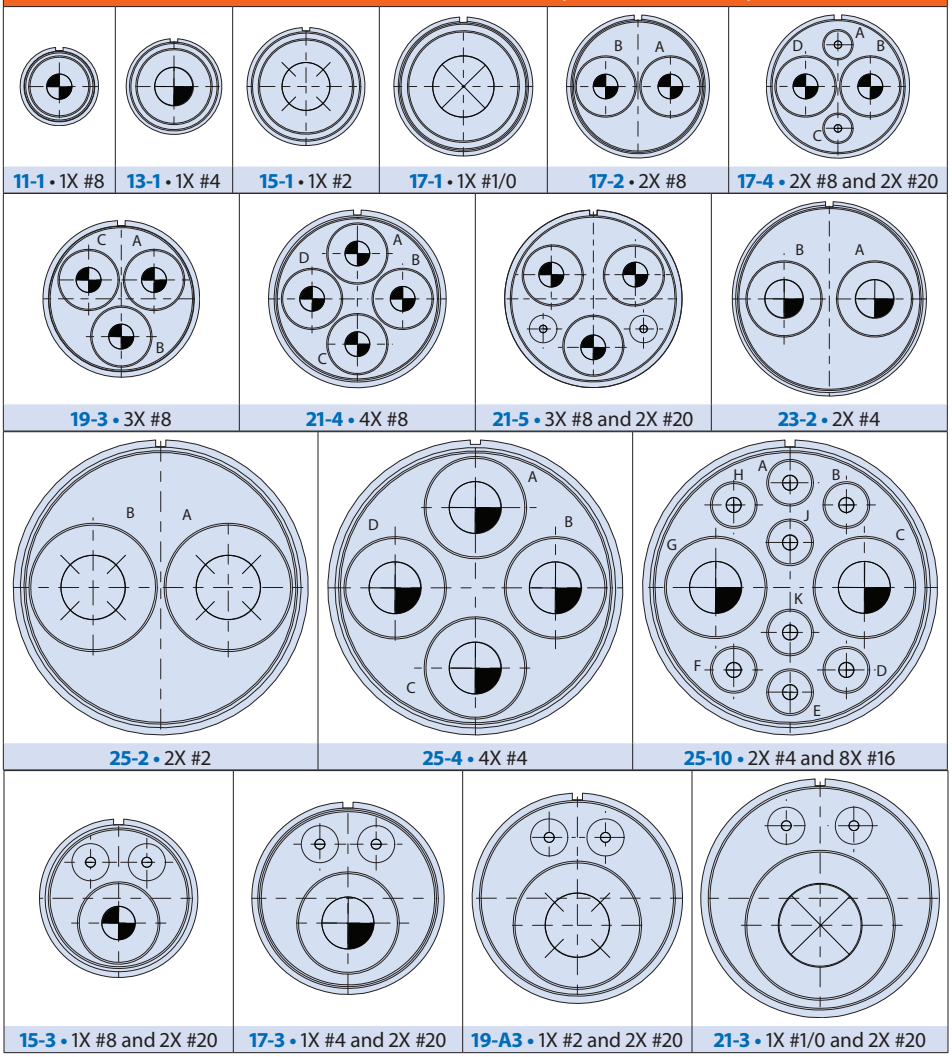
- 973-001 mates with 973-001 of the same size layout, polarization and opposite gender. Plugs are designed to also mate with 973-002, 973-003, 973-005, and 973-006.
- Standard mounting cutouts and accessory threads / teeth per MIL-DTL-38999 Series III.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

HOW TO ORDER

Sample Part Number	973-001	-	G6	ME	13-1	P	N

Basic Part Number	**973-001** SuperNine PowerPlay Connector
Rear Accessory Option	**-** = Accessory Thread and Teeth **B** = Banding Porch with Shrink Boot Groove
Connector Style	**G6** = Plug With EMI Spring
Connector Material / Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc **Z1** = Stainless Steel, Passivate
Size and Layout	See Shell Size / Contact Arrangements Table
Contact Style	See Contact Style Table
Polarization	**A, B, C, D, E, F, G, N** (see Polarization Keys and Keyways table)

SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



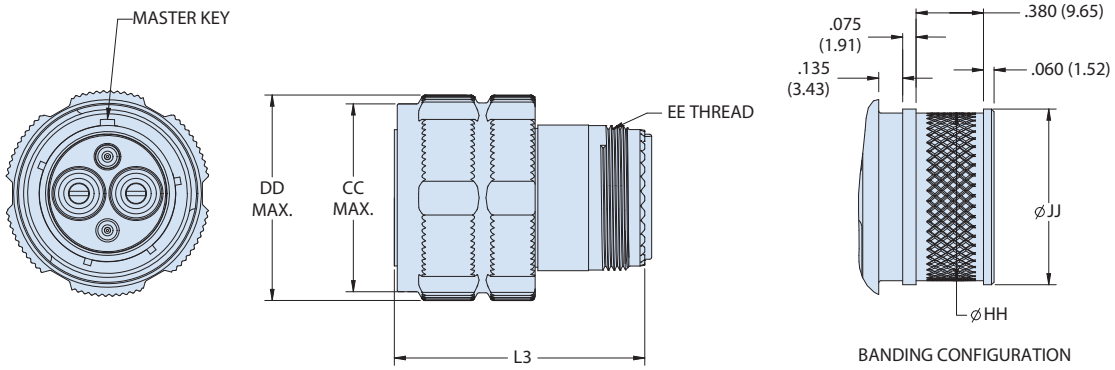
POLARIZATION KEYS AND KEYWAYS

Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

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973-001 SuperNine Series III PowerPlay Triple-Start G6 Plug

G6 PLUG WITH EMI SPRING DIMENSIONS



Shell Size-Contact Arrangement	CC Max	DD Max	EE Thread	L3 Max	ØHH	ØJJ
11-1	0.839 (21.31)	0.984 (24.99)	M15 X 1.0-6g 0.100R	1.720 (43.69)	0.550 (13.97)	0.595 (15.11)
13-1	1.008 (25.60)	1.157 (29.39)	M18 X 1.0-6g 0.100R	1.720 (43.69)	0.670 (17.02)	0.715 (18.16)
15-1	1.138 (28.91)	1.280 (32.51)	M22 X 1.0-6g 0.100R	2.100 (53.34)	0.815 (20.70)	0.860 (21.84)
15-3				1.720 (43.69)		
17-1	1.276 (32.41)	1.406 (35.71)	M25 X 1.0-6g 0.100R	2.100 (53.34)	0.945 (24.00)	0.990 (25.15)
17-2				1.720 (43.69)		
17-3				1.720 (43.69)		
17-4				1.720 (43.69)		
19-3	1.382 (35.10)	1.516 (38.51)	M28 X 1.0-6g 0.100R	1.720 (43.69)	1.050 (26.67)	1.100 (27.94)
19-A3				2.100 (53.34)		
21-3	1.508 (38.30)	1.642 (41.71)	M31 X 1.0-6g 0.100R	2.100 (53.34)	1.170 (29.72)	1.220 (30.99)
21-4				1.720 (43.69)		
23-2	1.626 (41.30)	1.768 (44.91)	M34 X 1.0-6g 0.100R	1.720 (43.69)	1.290 (32.77)	1.340 (34.04)
25-2	1.752 (44.50)	1.890 (48.01)	M37 X 1.0-6g 0.100R	2.100 (53.34)	1.400 (35.56)	1.450 (36.83)
25-4				1.720 (43.69)		
25-10				1.720 (43.69)		

WIRE SEALING

Contact Size	Wire Diameter
20	.040-.083 (1.02-2.11)
16	.065-.109 (1.65-2.77)
8	.209-.277 (5.31-7.04)
4	.323-.391 (8.20-9.93)
2	.400-.477 (10.16-12.12)
0	.486-.572 (12.34-14.53)

FINGER-PROOF CONTACTS

Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

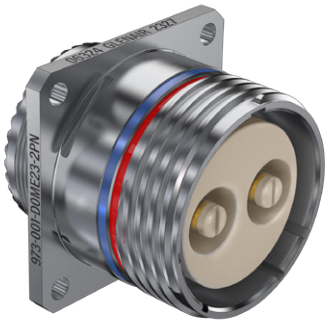
CONTACT STYLE

Contact Code	Description	Contact P/N
A	Pin Connector, No Contacts	
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Size #4 Crown Ring Pin Contacts and 39029 type Size #16 Pin Contacts (insert arrangement 25-10 only)	850-325 and 850-344-16
	Pin Connector, Size #8 or #4 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arrangements 17-4, 21-5, 15-3, 17-3)	850-325 and 850-202-20
	Pin Connector, Size #2 or #0 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arrangements 19-A3, 21-3)	850-325 and 850-346-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Size #4 Crown Ring Socket Contacts and 39029 type Size #16 Socket Contacts (arrangement 25-10 only)	850-326 850-309
	Socket Connector, Size #8 or #4 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arrangements 17-4, 21-5, 15-3, 17-3)	850-326 and AS39029/56-351
	Socket Connector, Size #2 or #0 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arrangements 19-A3, 21-3)	850-326 and 850-347-20
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

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973-001 SuperNine Series III PowerPlay Triple-Start 00, D0, CS Panel-Mount Receptacles

SUPERNINE SERIES III POWERPLAY TRIPLE-START



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table
- Seal/grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: High-Temp composite

NOTES

- 973-001 mates with 973-001 of the same size layout, polarization, and opposite gender. Plugs are designed to also mate with 973-002, 973-003, 973-005, and 973-006.
- Standard mounting cutouts and accessory threads / teeth per MIL-DTL-38999 Series III.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

POLARIZATION KEYS AND KEYWAYS

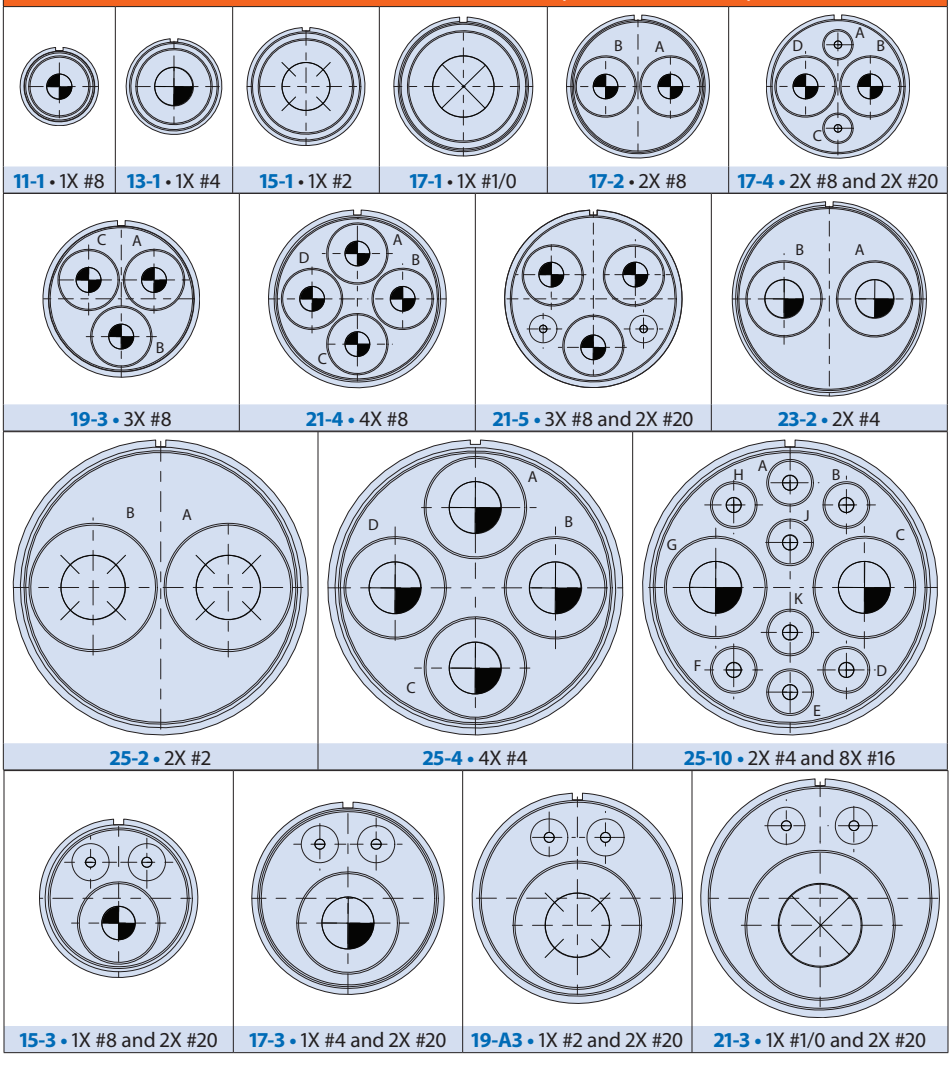
Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

HOW TO ORDER

Sample Part Number	973-001	-	00	ME	13-1	P	N

Basic Part Number	**973-001** SuperNine PowerPlay Connector
Rear Accessory Option	**-** = Accessory Thread and Teeth **B** = Banding Porch with Shrink Boot Groove
Connector Style	**00** = Receptacle, Panel-Mount, Slotted Holes **D0** = Receptacle, Panel-Mount, Round Holes **CS** = Receptacle, Panel-Mount, Standard Clinch Nuts
Connector Material / Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc **Z1** = Stainless Steel, Passivate
Size and Layout	See Shell Size / Contact Arrangements Table
Contact Style	See Contact Style Table
Polarization	**A, B, C, D, E, F, G, N** (see Polarization Keys and Keyways table)

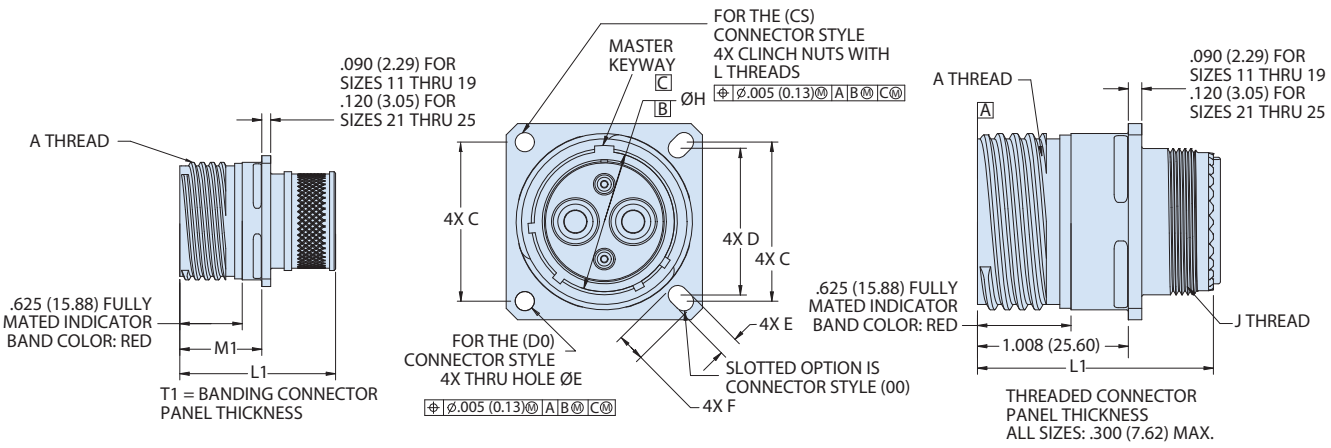
SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



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973-001 SuperNine Series III PowerPlay Triple-Start 00, D0, CS Panel-Mount Receptacles

00, D0, AND CS PANEL-MOUNT RECEPTACLES



Shell Size-Contact Arr.	A Thread	B Sq.	C Bsc	D Bsc	E	F	ØH	J Thread	L Thread	Ø M Max	L1 Max	T1 Max
11-1	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	0.812 (20.62)	0.719 (18.26)	0.136 (3.45) 0.120 (3.05)	0.202 (5.13) 0.186 (4.72)	0.575 (14.60) 0.569 (14.45)	M15 X 1.0-6g 0.100R	.112-40 UNC-3B	0.984 (24.99)	1.600 (40.64)	.150 (3.81)
13-1	.8750-.1P-.3L-TS-2A	1.138 (28.91) 1.114 (28.30)	0.906 (23.01)	0.812 (20.62)			0.687 (17.45) 0.681 (17.30)	M18 X 1.0-6g 0.100R		1.157 (29.39)	1.600 (40.64)	.150 (3.81)
15-1	1.0000-.1P-.3L-TS-2A	1.232 (31.29) 1.208 (30.68)	0.969 (24.61)	0.906 (23.01)		0.181 (4.60) 0.165 (4.19)	0.812 (20.62) 0.804 (20.42)	M22 X 1.0-6g 0.100R		1.280 (32.51)	2.000 (50.80)	.300 (7.62)
15-3											1.600 (40.64)	.150 (3.81)
17-1	1.1875-.1P-.3L-TS-2A	1.323 (33.60) 1.299 (32.99)	1.062 (26.97)	0.969 (24.61)		0.202 (5.13) 0.186 (4.72)	0.937 (23.80) 0.930 (23.62)	M25 X 1.0-6g 0.100R		1.406 (35.71)	2.000 (50.80)	.300 (7.62)
17-2											1.600 (40.64)	.150 (3.81)
17-3											1.600 (40.64)	.150 (3.81)
17-4											1.600 (40.64)	.150 (3.81)
19-3	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.156 (29.36)	1.062 (26.97)			1.042 (26.47) 1.035 (26.29)	M28 X 1.0-6g 0.100R		1.516 (38.51)	1.600 (40.64)	.150 (3.81)
19-A3											2.000 (50.80)	.300 (7.62)
21-3	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.250 (31.75)	1.156 (29.36)			1.167 (29.64) 1.161 (29.49)	M31 X 1.0-6g 0.100R		1.642 (41.71)	2.000 (50.80)	.300 (7.62)
21-4											1.600 (40.64)	.125 (3.18)
23-2	1.5000-.1P-.3L-TS-2A	1.701 (43.21) 1.677 (42.60)	1.375 (34.92)	1.250 (31.75)	0.162 (4.11) 0.146 (3.71)	0.250 (6.35) 0.234 (5.94)	1.292 (32.82) 1.285 (32.64)	M34 X 1.0-6g 0.100R	.138-32 UNC-3B	1.768 (44.91)	1.600 (40.64)	.125 (3.18)
25-2	1.6250-.1P-.3L-TS-2A	1.823 (46.30) 1.799 (45.69)	1.500 (38.10)	1.375 (34.92)			1.417 (35.99) 1.411 (35.84)	M37 X 1.0-6g 0.100R		1.890 (48.01)	2.000 (50.80)	.300 (7.62)
25-4											1.600 (40.64)	.125 (3.18)
25-10											1.600 (40.64)	.125 (3.18)

WIRE SEALING

Contact Size	Wire Diameter
20	.040-.083 (1.02-2.11)
16	.065-.109 (1.65-2.77)
8	.209-.277 (5.31-7.04)
4	.323-.391 (8.20-9.93)
2	.400-.477 (10.16-12.12)
0	.486-.572 (12.34-14.53)

FINGER-PROOF CONTACTS

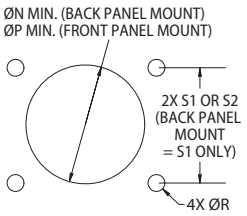
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

CONTACT STYLE

Code	Description	P/N
A	Pin Connector, No Contacts	
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Size #4 Crown Ring Pin Contacts and 39029 type Size #16 Pin Contacts (ins. arr. 25-10 only)	850-325 and 850-344-16
	Pin Connector, Size #8 or #4 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arr. 17-4, 21-5, 15-3, 17-3)	850-325 and 850-202-20
	Pin Connector, Size #2 or #0 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arr. 19-A3, 21-3)	850-325 and 850-346-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Size #4 Crown Ring Socket Contacts and 39029 type Size #16 Socket Contacts (arr. 25-10 only)	850-326 850-309
	Socket Connector, Size #8 or #4 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arr. 17-4, 21-5, 15-3, 17-3)	850-326 and AS39029/56-351
	Socket Connector, Size #2 or #0 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arr. 19-A3, 21-3)	850-326 and 850-347-20
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

PANEL CUT OUT FOR PANEL-MOUNT RECEPTACLE



Shell Size	Ø N Min	Ø P Min	Ø R Holes	S1 Bsc	S2 Bsc
11	0.796 (20.22)	0.625 (15.88)	0.133 (3.38) 0.123 (3.12)	0.812 (20.62)	0.719 (18.26)
13	0.922 (23.42)	0.750 (19.05)		0.906 (23.01)	0.812 (20.62)
15	1.047 (26.59)	0.906 (23.01)		1.062 (26.97)	0.969 (24.61)
17	1.219 (30.96)	1.016 (25.81)		1.062 (26.97)	0.969 (24.61)
19	1.297 (32.94)	1.141 (28.98)		1.156 (29.36)	1.062 (26.97)
21	1.422 (36.12)	1.266 (32.16)		1.250 (31.75)	1.156 (29.36)
23	1.547 (39.29)	1.375 (34.92)	0.159 (4.04) 0.149 (3.78)	1.375 (34.92)	1.250 (31.75)
25	1.672 (42.47)	1.484 (37.69)		1.500 (38.10)	1.375 (34.92)

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973-001 SuperNine Series III PowerPlay Triple-Start 07 Jam-Nut Receptacle

SUPERNINE SERIES III POWERPLAY TRIPLE-START



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table
- Seal/grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: High-Temp composite

NOTES

- 973-001 mates with 973-001 of the same size layout, polarization, and opposite gender. Plugs are designed to also mate with 973-002, 973-003, 973-005, and 973-006.
- Standard mounting cutouts and accessory threads / teeth per MIL-DTL-38999 Series III.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

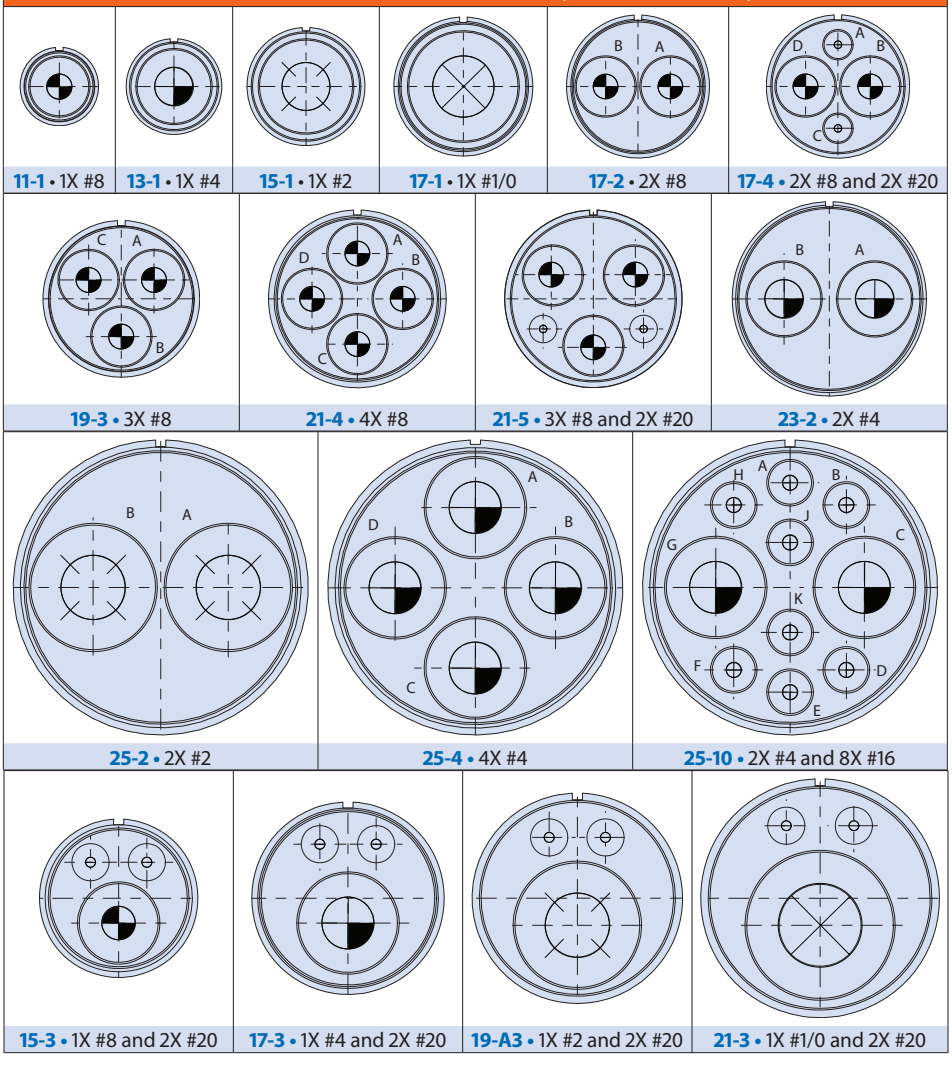
POLARIZATION KEYS AND KEYWAYS

Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

HOW TO ORDER

Sample Part Number	973-001	-	07	ME	13-1	P	N
Basic Part Number	**973-001** SuperNine PowerPlay Connector						
Rear Accessory Option	**-** = Accessory Thread and Teeth **B** = Banding Porch with Shrink Boot Groove						
Connector Style	**07** = Receptacle, Jam Nut						
Connector Material / Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc **Z1** = Stainless Steel, Passivate						
Size and Layout	See Shell Size / Contact Arrangements Table						
Contact Style	See Contact Style Table						
Polarization	**A, B, C, D, E, F, G, N** (see Polarization Keys and Keyways table)						

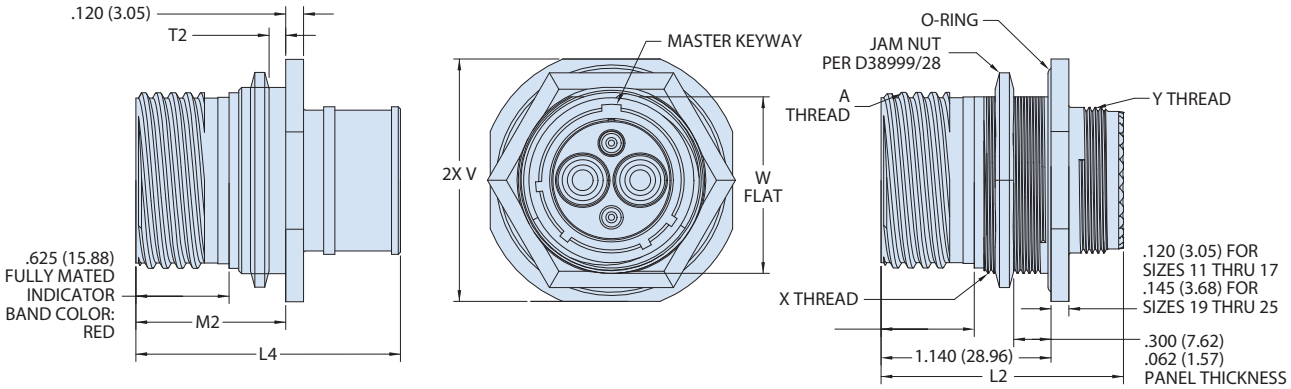
SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



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973-001 SuperNine Series III PowerPlay Triple-Start 07 Jam-Nut Receptacle

07 JAM NUT MOUNT RECEPTACLE



Shell Size-Contact Arr.	A Thread	U	V	W Flat	X Thread	Y Thread	L2 Max	L4 Max	M1	M2	T2
11-1	.7500-.1P-.3L-TS-2A	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	0.755 (19.18) 0.745 (18.92)	M20 X 1.0-6g 0.100R	M15 X 1.0-6g 0.100R	1.650 (41.91)	1.800 (45.72)	0.821 (20.85)	1.005 (25.53)	.125-.062 (3.18-1.57)
13-1	.8750-.1P-.3L-TS-2A	1.512 (38.40) 1.488 (37.80)	1.390 (35.31) 1.358 (34.49)	0.942 (23.93) 0.932 (23.67)	M25 X 1.0-6g 0.100R	M18 X 1.0-6g 0.100R	1.650 (41.91)	1.800 (45.72)	0.821 (20.85)	1.005 (25.53)	.125-.062 (3.18-1.57)
15-1	1.0000-.1P-.3L-TS-2A	1.638 (41.61) 1.614 (41.00)	1.516 (38.51) 1.484 (37.69)	1.066 (27.08) 1.056 (26.82)	M28 X 1.0-6g 0.100R	M22 X 1.0-6g 0.100R	2.000 (50.80)	2.000 (50.80)	0.821 (20.85)	1.140 (28.96)	.300-.062 (7.62-1.57)
15-3							1.650 (41.91)	1.800 (45.72)	0.821 (20.85)	1.005 (25.53)	.125-.062 (3.18-1.57)
17-1	1.1875-.1P-.3L-TS-2A	1.764 (44.81) 1.740 (44.20)	1.642 (41.71) 1.610 (40.89)	1.191 (30.25) 1.181 (30.00)	M32 X 1.0-6g 0.100R	M25 X 1.0-6g 0.100R	2.000 (50.80)	2.000 (50.80)	0.821 (20.85)	1.140 (28.96)	.300-.062 (7.62-1.57)
17-2							1.650 (41.91)	1.800 (45.72)	0.821 (20.85)	1.005 (25.53)	.125-.062 (3.18-1.57)
17-3							1.650 (41.91)	1.800 (45.72)	0.821 (20.85)	1.005 (25.53)	.125-.062 (3.18-1.57)
17-4							1.650 (41.91)	1.800 (45.72)	0.821 (20.85)	1.005 (25.53)	.125-.062 (3.18-1.57)
19-3	1.2500-.1P-.3L-TS-2A	1.949 (49.50) 1.925 (48.90)	1.827 (46.41) 1.795 (45.59)	1.316 (33.43) 1.306 (33.17)	M35 X 1.0-6g 0.100R	M28 X 1.0-6g 0.100R	1.650 (41.91)	1.800 (45.72)	0.821 (20.85)	1.005 (25.53)	.125-.062 (3.18-1.57)
19-A3							2.000 (50.80)	2.000 (50.80)	0.821 (20.85)	1.140 (28.96)	.300-.062 (7.62-1.57)
21-3	1.3750-.1P-.3L-TS-2A	2.075 (52.71) 2.051 (52.10)	1.953 (49.61) 1.921 (48.79)	1.441 (36.60) 1.431 (36.35)	M38 X 1.0-6g 0.100R	M31 X 1.0-6g 0.100R	2.000 (50.80)	2.000 (50.80)	0.791 (20.09)	1.140 (28.96)	.300-.062 (7.62-1.57)
21-4							1.650 (41.91)	1.800 (45.72)	0.791 (20.09)	1.005 (25.53)	.125-.062 (3.18-1.57)
23-2	1.5000-.1P-.3L-TS-2A	2.201 (55.91) 2.177 (55.30)	2.079 (52.81) 2.047 (51.99)	1.566 (39.78) 1.556 (39.52)	M41 X 1.0-6g 0.100R	M34 X 1.0-6g 0.100R	1.650 (41.91)	1.800 (45.72)	0.791 (20.09)	1.005 (25.53)	.125-.062 (3.18-1.57)
25-2	1.6250-.1P-.3L-TS-2A	2.323 (59.00) 2.299 (58.39)	2.205 (56.01) 2.173 (55.19)	1.691 (42.95) 1.681 (42.70)	M44 X 1.0-6g 0.100R	M37 X 1.0-6g 0.100R	2.000 (50.80)	2.000 (50.80)	0.791 (20.09)	1.140 (28.96)	.300-.062 (7.62-1.57)
25-4							1.650 (41.91)	1.800 (45.72)	0.791 (20.09)	1.005 (25.53)	.125-.062 (3.18-1.57)
25-10							1.650 (41.91)	1.800 (45.72)	0.791 (20.09)	1.005 (25.53)	.125-.062 (3.18-1.57)

WIRE SEALING

Contact Size	Wire Diameter
20	.040-.083 (1.02-2.11)
16	.065-.109 (1.65-2.77)
8	.209-.277 (5.31-7.04)
4	.323-.391 (8.20-9.93)
2	.400-.477 (10.16-12.12)
0	.486-.572 (12.34-14.53)

FINGER-PROOF CONTACTS

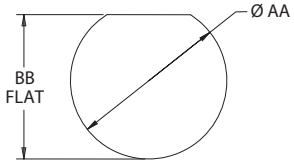
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

CONTACT STYLE

Code	Description	P/N
A	Pin Connector, No Contacts	
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Size #4 Crown Ring Pin Contacts and 39029 type Size #16 Pin Contacts (ins. arr. 25-10 only)	850-325 and 850-344-16
	Pin Connector, Size #8 or #4 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arr. 17-4, 21-5, 15-3, 17-3)	850-325 and 850-202-20
	Pin Connector, Size #2 or #0 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arr. 19-A3, 21-3)	850-325 and 850-346-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Size #4 Crown Ring Socket Contacts and 39029 type Size #16 Socket Contacts (arr. 25-10 only)	850-326 850-309
	Socket Connector, Size #8 or #4 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arr. 17-4, 21-5, 15-3, 17-3)	850-326 and AS39029/56-351
	Socket Connector, Size #2 or #0 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arr. 19-A3, 21-3)	850-326 and 850-347-20
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

PANEL CUT OUT FOR JAM NUT RECEPTACLE



Shell Size	Ø AA	BB Flat
11	0.835 (21.21); 0.825 (20.96)	0.771 (19.58); 0.761 (19.33)
13	1.020 (25.91); 1.010 (25.65)	0.955 (24.26); 0.945 (24.00)
15	1.145 (29.08); 1.135 (28.83)	1.085 (27.56); 1.075 (27.30)
17	1.270 (32.26); 1.260 (32.00)	1.210 (30.73); 1.200 (30.48)
19	1.395 (35.43); 1.385 (35.18)	1.335 (33.91); 1.325 (33.65)
21	1.520 (38.61); 1.510 (38.35)	1.460 (37.08); 1.450 (36.83)
23	1.645 (41.78); 1.635 (41.53)	1.585 (40.26); 1.575 (40.00)
25	1.770 (44.96); 1.760 (44.70)	1.710 (43.43); 1.700 (43.18)

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973-001 SuperNine Series III PowerPlay Triple-Start 05 In-Line Receptacle

SUPERNINE SERIES III POWERPLAY TRIPLE-START



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table
- Seal/grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: High-Temp composite

NOTES

- 973-001 mates with 973-001 of the same size layout, polarization, and opposite gender. Plugs are designed to also mate with 973-002, 973-003, 973-005, and 973-006.
- Standard mounting cutouts and accessory threads / teeth per MIL-DTL-38999 Series III.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

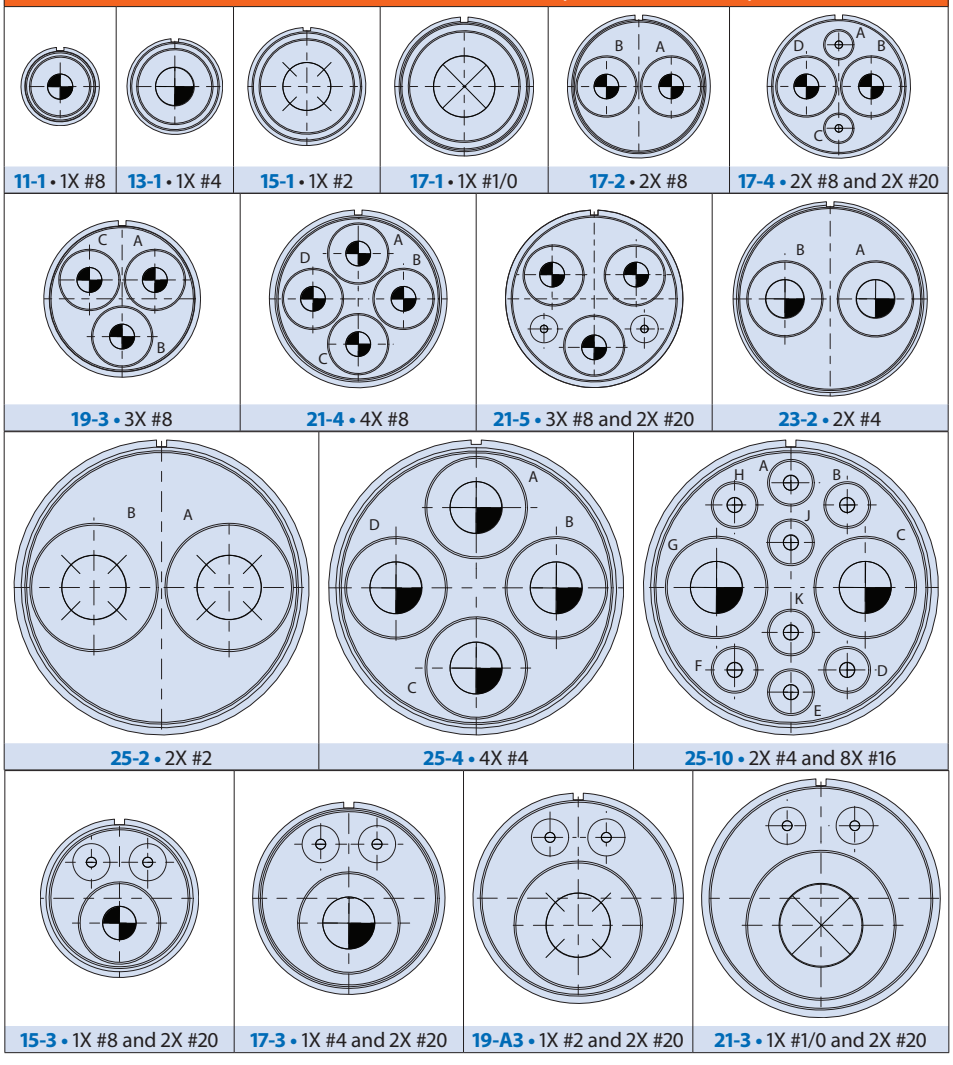
POLARIZATION KEYS AND KEYWAYS

Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

HOW TO ORDER

Sample Part Number	973-001	-	05	ME	13-1	P	N
Basic Part Number	**973-001** SuperNine PowerPlay Connector						
Rear Accessory Option	**-** = Accessory Thread and Teeth **B** = Banding Porch with Shrink Boot Groove						
Connector Style	**05** = Receptacle, In-Line						
Connector Material / Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc **Z1** = Stainless Steel, Passivate						
Size and Layout	See Shell Size / Contact Arrangements Table						
Contact Style	See Contact Style Table						
Polarization	**A, B, C, D, E, F, G, N** (see Polarization Keys and Keyways table)						

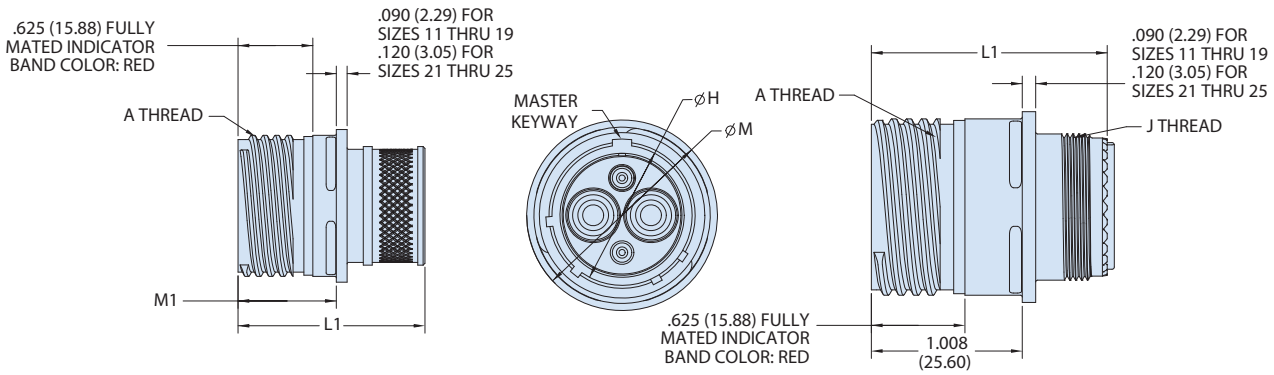
SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



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973-001 SuperNine Series III PowerPlay Triple-Start 05 In-Line Receptacle

05 IN-LINE RECEPTACLE



Shell Size-Contact Arr.	A Thread	Ø H	J Thread	Ø M Max	M1	L1 Max
11-1	.7500-.1P-.3L-TS-2A	0.575 (14.60) 0.569 (14.45)	M15 X 1.0-6g 0.100R	0.984 (24.99)	0.821 (20.85)	1.600 (40.64)
13-1	.8750-.1P-.3L-TS-2A	0.687 (17.45) 0.681 (17.30)	M18 X 1.0-6g 0.100R	1.157 (29.39)	0.821 (20.85)	1.600 (40.64)
15-1	1.0000-.1P-.3L-TS-2A	0.812 (20.62) 0.804 (20.42)	M22 X 1.0-6g 0.100R	1.280 (32.51)	0.821 (20.85)	2.000 (50.80)
15-3					0.821 (20.85)	1.600 (40.64)
17-1	1.1875-.1P-.3L-TS-2A	0.937 (23.80) 0.930 (23.62)	M25 X 1.0-6g 0.100R	1.406 (35.71)	0.821 (20.85)	2.000 (50.80)
17-2					0.821 (20.85)	1.600 (40.64)
17-3					0.821 (20.85)	1.600 (40.64)
17-4					0.821 (20.85)	1.600 (40.64)
19-3	1.2500-.1P-.3L-TS-2A	1.042 (26.47) 1.035 (26.29)	M28 X 1.0-6g 0.100R	1.516 (38.51)	0.821 (20.85)	1.600 (40.64)
19-A3					0.821 (20.85)	2.000 (50.80)
21-3	1.3750-.1P-.3L-TS-2A	1.167 (29.64) 1.161 (29.49)	M31 X 1.0-6g 0.100R	1.642 (41.71)	0.791 (20.09)	2.000 (50.80)
21-4					0.791 (20.09)	1.600 (40.64)
23-2	1.5000-.1P-.3L-TS-2A	1.292 (32.82) 1.285 (32.64)	M34 X 1.0-6g 0.100R	1.768 (44.91)	0.791 (20.09)	1.600 (40.64)
25-2	1.6250-.1P-.3L-TS-2A	1.417 (35.99) 1.411 (35.84)	M37 X 1.0-6g 0.100R	1.890 (48.01)	0.791 (20.09)	2.000 (50.80)
25-4					0.791 (20.09)	1.600 (40.64)
25-10					0.791 (20.09)	1.600 (40.64)

WIRE SEALING

Contact Size	Wire Diameter
20	.040-.083 (1.02-2.11)
16	.065-.109 (1.65-2.77)
8	.209-.277 (5.31-7.04)
4	.323-.391 (8.20-9.93)
2	.400-.477 (10.16-12.12)
0	.486-.572 (12.34-14.53)

FINGER-PROOF CONTACTS

Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

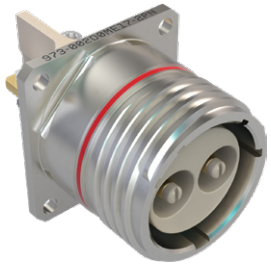
CONTACT STYLE

Contact Code	Description	Contact P/N
A	Pin Connector, No Contacts	
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Size #4 Crown Ring Pin Contacts and 39029 type Size #16 Pin Contacts (insert arrangement 25-10 only)	850-325 and 850-344-16
	Pin Connector, Size #8 or #4 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arrangements 17-4, 21-5, 15-3, 17-3)	850-325 and 850-202-20
	Pin Connector, Size #2 or #0 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arrangements 19-A3, 21-3)	850-325 and 850-346-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Size #4 Crown Ring Socket Contacts and 39029 type Size #16 Socket Contacts (arrangement 25-10 only)	850-326 850-309
	Socket Connector, Size #8 or #4 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arrangements 17-4, 21-5, 15-3, 17-3)	850-326 and AS39029/56-351
	Socket Connector, Size #2 or #0 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arrangements 19-A3, 21-3)	850-326 and 850-347-20
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

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973-002 SuperNine Series III PowerPlay with Lug Style Contact 00, D0, CS Panel-Mount Receptacles

SUPERNINE SERIES III POWERPLAY TRIPLE-START



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table.
- Seal/grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: hi-temp composite.

NOTES

- 973-002 mates with only 973-001 of the same size, layout, polarization and the opposite gender.
- Connector is supplied with contacts pre-installed.
- Connectors use standard mounting cutouts per MIL-DTL-38999 Series III.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell
  - (Sea level) insulation resistance: 5000 megohm min at 500 VDC
- Customer shall analyze bus-bar design and attachment hardware, to ensure proper clearances are maintained for the intended application (max voltage, environmental conditions, etc.)

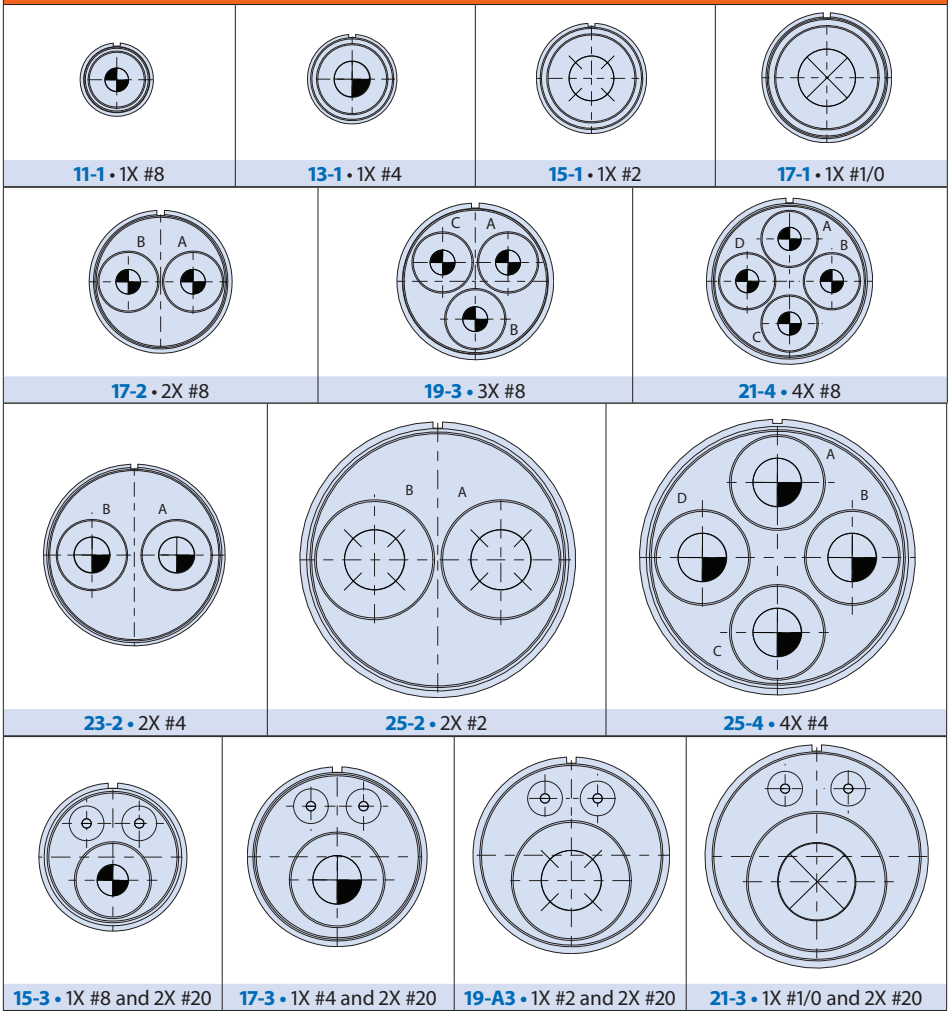
FINGER-PROOF CONTACTS		
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

HOW TO ORDER

Sample Part Number	973-002	-	00	ME	17-2	P	N
Basic Part Number	Receptacle with Lug Style Contact						
Lug Type	**-** = Lug with Thru Hole (See Contact Layouts table for Availability) **T** = Lug with Threaded Insert						
Connector Style	**00** = Receptacle, Panel-Mount with Slotted Holes **D0** = Receptacle, Panel-Mount with Round Holes **CS** = Receptacle, Panel-Mount with Standard Clinch Nuts						
Connector Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **Z1** = Stainless, Passivated **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc						
Size and Layout	See Contact Layouts Table						
Contact Style	**P** = Pin **S** = Socket						
Polarization:	**A, B, C, D, E, F, G, N** (see Polarization Keys and Keyways table)						

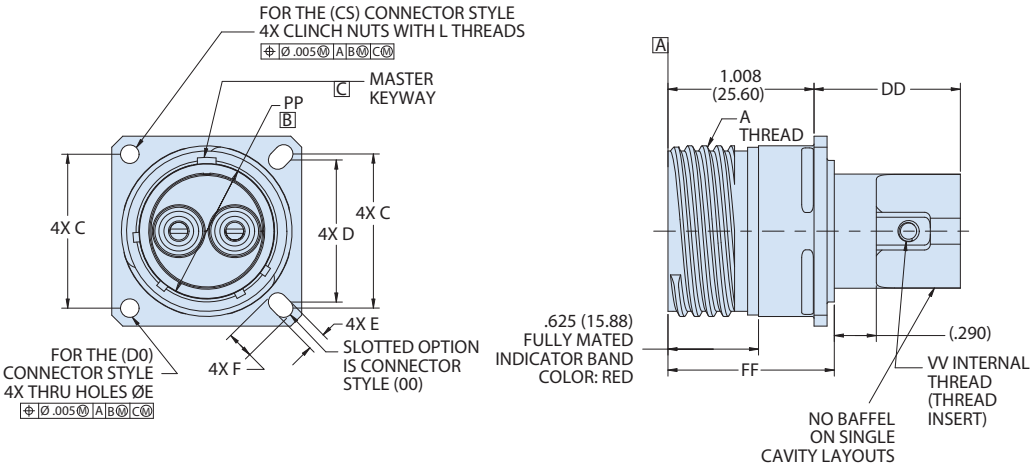
SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



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973-002 SuperNine Series III PowerPlay with Lug Style Contact 00, D0, CS Panel-Mount Receptacles

00, D0 AND CS PANEL-MOUNT AND IN-LINE RECEPTACLES

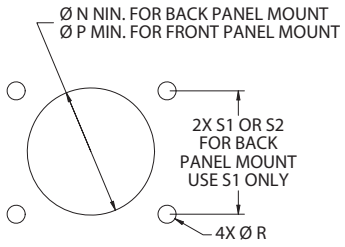


Shell Size	A Thread	B SQ	B' SQ	C BSC	D BSC	Ø PP	E	F	L Thread	Ø M Max	DD Max.	FF 0.025	VV Thread
11-1	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	1.187 (30.15) 1.147 (29.13)	0.812 (20.62)	0.719 (18.26)	0.447 (11.35) 0.441 (11.20)	0.136 (3.45) 0.120 (3.05)	0.202 (5.13) 0.186 (4.72)	.112-40 UNC-3B	0.984 (24.99)	N/A	1.148 (29.16)	4-40 UNC
13-1	.8750-.1P-.3L-TS-2A	1.138 (28.91) 1.114 (28.30)	1.281 (32.54) 1.241 (31.52)	0.906 (23.01)	0.812 (20.62)	0.687 (17.45) 0.681 (17.30)				1.157 (29.39)	N/A	1.148 (29.16)	8-32 UNC
15-1	1.0000-.1P-.3L-TS-2A	1.232 (31.29) 1.208 (30.68)	1.293 (32.84) 1.253 (31.83)	0.969 (24.61)	0.906 (23.01)	0.812 (20.62) 0.804 (20.42)				1.280 (32.51)	N/A	1.310 (33.27)	10-32 UNF
15-3											N/A	1.148 (29.16)	4-40 UNC
17-1	1.1875-.1P-.3L-TS-2A	1.323 (33.60) 1.299 (32.99)	1.386 (35.20) 1.346 (34.19)	1.062 (26.97)	0.969 (24.61)	0.937 (23.80) 0.930 (23.62)				1.406 (35.71)	N/A	1.310 (33.27)	10-32 UNF
17-2											1.040 (26.42)	1.148 (29.16)	4-40 UNC
17-3											N/A	1.148 (29.16)	8-32 UNC
19-3	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.531 (38.89) 1.491 (37.87)	1.156 (29.36)	1.062 (26.97)	1.042 (26.47) 1.036 (26.31)				1.516 (38.51)	1.040 (26.42)	1.148 (29.16)	4-40 UNC
19-A3											N/A	1.310 (33.27)	10-32 UNF
21-3	1.3750-.1P-.3L-TS-2A	1.575 (40.01) 1.551 (39.40)	1.625 (41.28) 1.585 (40.26)	1.250 (31.75)	1.156 (29.36)	1.167 (29.64) 1.161 (29.49)				1.642 (41.71)	N/A	1.310 (33.27)	10-32 UNF
21-4											1.040 (26.42)	1.148 (29.16)	4-40 UNC
23-2	1.5000-.1P-.3L-TS-2A	1.701 (43.21) 1.677 (42.60)	1.750 (44.45) 1.710 (43.43)	1.375 (34.93)	1.250 (31.75)	1.295 (32.89) 1.286 (32.66)	0.162 (4.11) 0.146 (3.71)	0.250 (6.35) 0.234 (5.94)	.138-32 UNC-3B	1.768 (44.91)	1.150 (29.21)	1.148 (29.16)	8-32 UNC
25-2	1.6250-.1P-.3L-TS-2A	1.823 (46.30) 1.799 (45.69)	1.875 (47.63) 1.835 (46.61)	1.500 (38.10)	1.375 (34.93)	1.417 (35.99) 1.411 (35.84)				1.890 (48.01)	1.372 (34.85)	1.310 (33.27)	10-32 UNF
25-4											1.150 (29.21)	1.148 (29.16)	8-32 UNC

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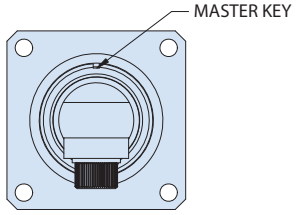
973-002 SuperNine Series III PowerPlay with Lug Style Contact 00, D0, CS Panel-Mount Receptacles

PANEL-MOUNT MOUNTING HOLES

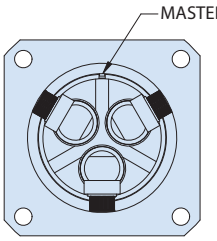


Shell Size	Ø N Min.	Ø P Min.	Ø R Holes	S1 Bsc	S2 Bsc
11	0.796 (20.22)	0.625 (15.88)	0.133 (3.38) 0.123 (3.12)	0.812 (20.62)	0.719 (18.26)
13	0.922 (23.42)	0.750 (19.05)		0.906 (23.01)	0.812 (20.62)
15	1.047 (26.59)	0.906 (23.01)		0.969 (24.61)	0.906 (23.01)
17	1.219 (30.96)	1.016 (25.81)		1.062 (26.97)	0.969 (24.61)
19	1.297 (32.94)	1.141 (28.98)		1.156 (29.36)	1.062 (26.97)
21	1.422 (36.12)	1.266 (32.16)		1.250 (31.75)	1.156 (29.36)
23	1.547 (39.29)	1.375 (34.92)	0.159 (4.04) 0.149 (3.78)	1.375 (34.92)	1.250 (31.75)
25	1.672 (42.47)	1.484 (37.69)		1.500 (38.10)	1.375 (34.92)

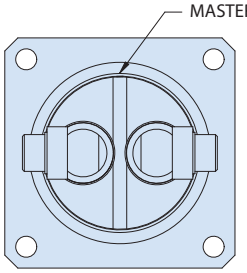
HARDWARE AND BUS-BAR (SHOWN FOR REFERENCE)



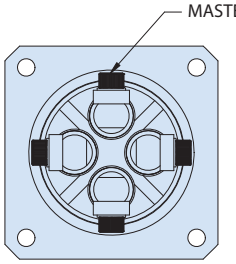
CONTACT POTTED IN THIS POSITION FOR 11-1, 13-1, 15-1, 17-1, 15-3, 17-3, 19-A3, AND 21-3



CONTACT POTTED IN THIS POSITION FOR LAYOUT 19-3

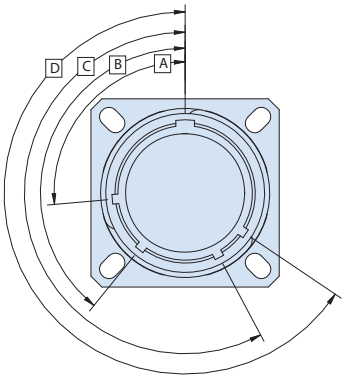


CONTACT POTTED IN THIS POSITION FOR LAYOUT 17-2, 23-2 AND 25-2



CONTACT POTTED IN THIS POSITION FOR LAYOUT 21-4 AND 25-4

POLARIZATION KEYS AND KEYWAYS

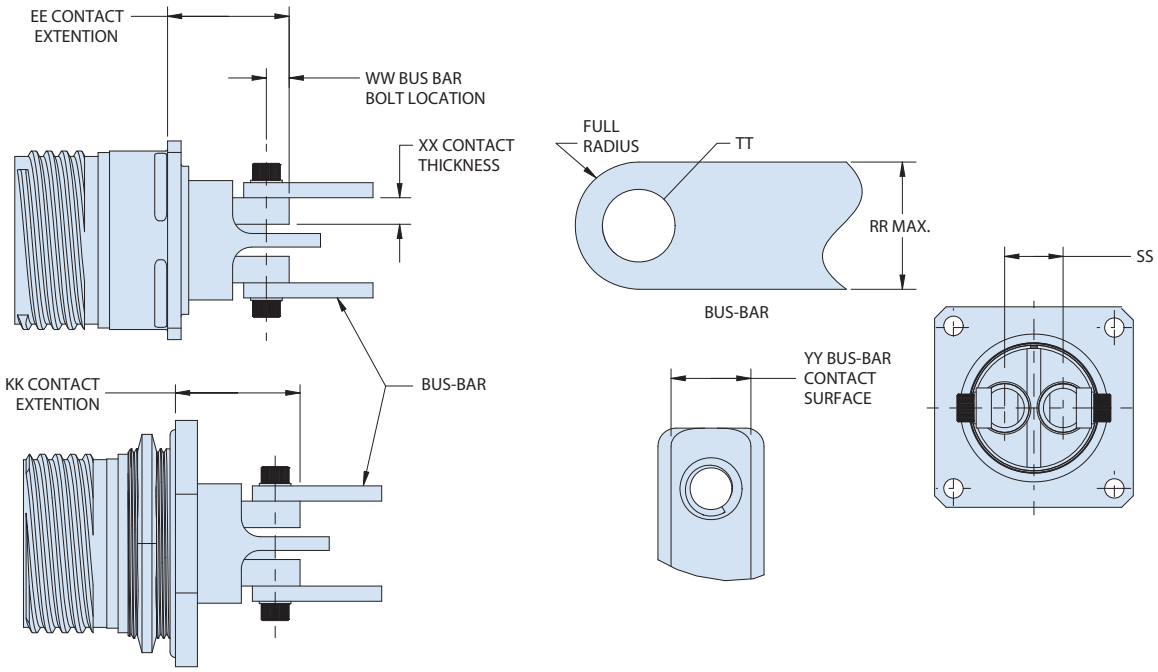


Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

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973-002 SuperNine Series III PowerPlay with Lug Style Contact 00, D0, CS Panel-Mount Receptacles

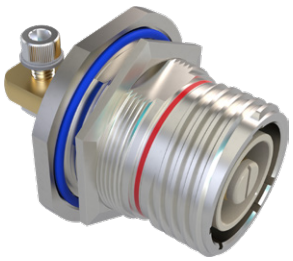
BUS-BAR DIMENSIONS



Shell Size	EE ±.015	KK ± .015	RR Max	TT ± .005	WW	XX		YY ± .015		SS	Rec. Torque in Lbs
						Threaded Insert	Thru Hole	Threaded Insert	Thru Hole		
11-1	0.803 (20.40)	0.808 (20.52)	0.265 (6.73)	0.119 (3.02)	0.150 (3.81)	0.173 (4.39)	0.075 (1.90)	0.192 (4.88)	0.249 (6.32)	N/A	2.85-3.35
13-1	0.896 (22.76)	0.901 (22.89)	0.385 (9.78)	0.171 (4.34)	0.200 (5.08)	0.230 (5.84)	0.085 (2.16)	0.264 (6.71)	0.340 (8.64)	N/A	11-17
15-1	1.193 (30.30)	1.044 (26.52)	0.475 (12.07)	0.197 (5.00)	0.230 (5.84)	0.260 (6.60)	0.085 (2.16)	0.367 (9.32)	0.442 (11.23)	N/A	20-29
15-3	0.803 (20.40)	0.808 (20.52)	0.265 (6.73)	0.119 (3.02)	0.150 (3.81)	0.173 (4.39)	0.075 (1.90)	0.192 (4.88)	0.249 (6.32)	N/A	2.85-3.35
17-1	1.193 (30.30)	1.044 (26.52)	0.595 (15.11)	0.197 (5.00)	0.230 (5.84)	0.260 (6.60)	0.085 (2.16)	0.484 (12.29)	0.543 (13.79)	N/A	20-29
17-2	0.803 (20.40)	0.808 (20.52)	0.265 (6.73)	0.119 (3.02)	0.150 (3.81)	0.173 (4.39)	0.075 (1.90)	0.192 (4.88)	0.249 (6.32)	0.386 (9.80)	2.85-3.35
17-3	0.896 (22.76)	0.901 (22.89)	0.385 (9.78)	0.171 (4.34)	0.200 (5.08)	0.230 (5.84)	0.085 (2.16)	0.264 (6.71)	0.340 (8.64)	N/A	11-17
19-3	0.803 (20.40)	0.808 (20.52)	0.265 (6.73)	0.119 (3.02)	0.150 (3.81)	0.173 (4.39)	0.075 (1.90)	0.192 (4.88)	0.249 (6.32)	0.390 (9.91)	2.85-3.35
19-A3	1.193 (30.30)	1.044 (26.52)	0.475 (12.07)	0.197 (5.00)	0.230 (5.84)	0.260 (6.60)	0.085 (2.16)	0.367 (9.32)	0.442 (11.23)	N/A	20-29
21-3	1.193 (30.30)	1.044 (26.52)	0.595 (15.11)	0.197 (5.00)	0.230 (5.84)	0.260 (6.60)	0.085 (2.16)	0.484 (12.29)	0.543 (13.79)	N/A	20-29
21-4	0.803 (20.40)	0.808 (20.52)	0.265 (6.73)	0.119 (3.02)	0.150 (3.81)	0.173 (4.39)	0.075 (1.90)	0.192 (4.88)	0.249 (6.32)	0.381 (9.68)	2.85-3.35
23-2	0.896 (22.76)	0.901 (22.89)	0.385 (9.78)	0.171 (4.34)	0.200 (5.08)	0.230 (5.84)	0.085 (2.16)	0.264 (6.71)	0.340 (8.64)	0.540 (13.72)	11-17
25-2	1.193 (30.30)	1.044 (26.52)	0.475 (12.07)	0.197 (5.00)	0.230 (5.84)	0.260 (6.60)	0.085 (2.16)	0.367 (9.32)	0.442 (11.23)	0.600 (15.24)	20-29
25-4	0.896 (22.76)	0.901 (22.89)	0.385 (9.78)	0.171 (4.34)	0.200 (5.08)	0.230 (5.84)	0.085 (2.16)	0.264 (6.71)	0.340 (8.64)	0.503 (12.78)	11-17

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973-002 SuperNine Series III PowerPlay with Lug Style Contact 07 Jam-Nut Mount Receptacle



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table.
- Seal/Grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: hi-temp composite.

NOTES

- 973-002 mates with only 973-001 of the same size, layout, polarization and the opposite gender.
- Connector is supplied with contacts pre-installed.
- Connectors use standard mounting cutouts per MIL-DTL-38999 Series III.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell
  - (Sea level) insulation resistance: 5000 megohm min at 500 VDC
- Customer shall analyze bus-bar design and attachment hardware, to ensure proper clearances are maintained for the intended application (max voltage, environmental conditions, etc.)

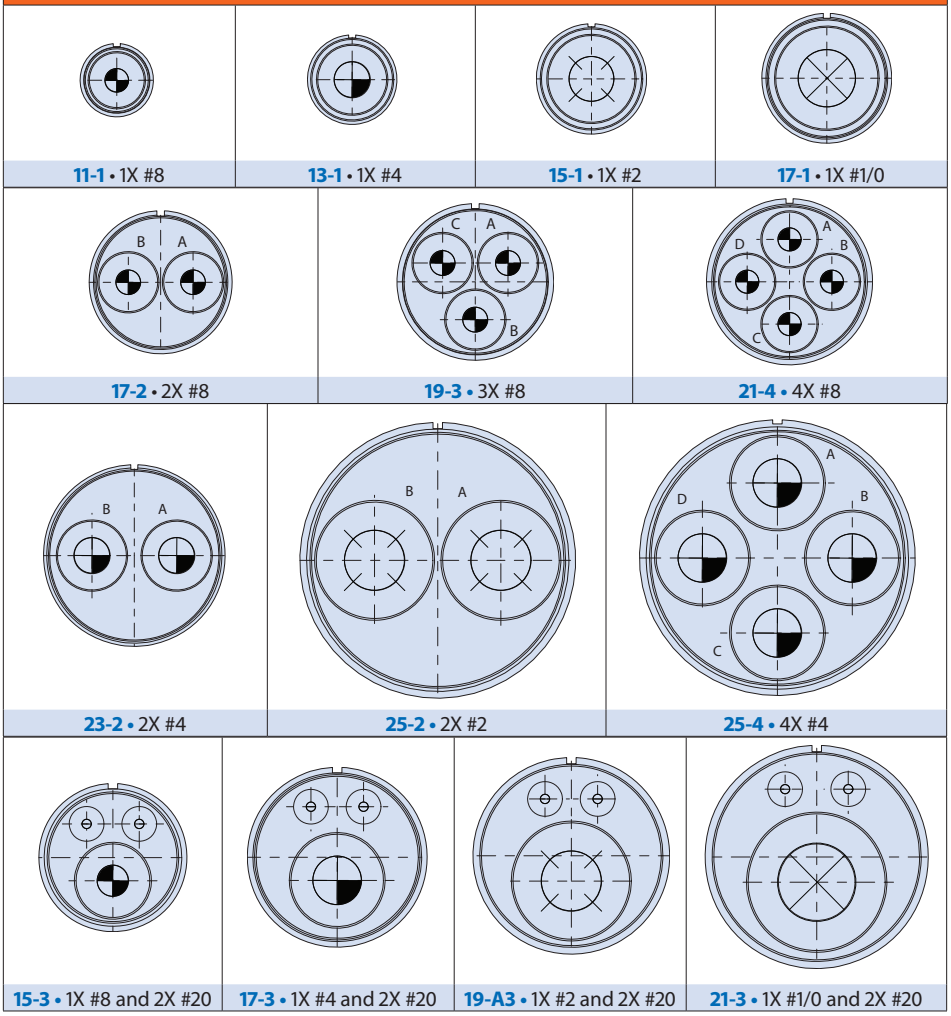
FINGER-PROOF CONTACTS		
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

HOW TO ORDER

Sample Part Number	973-002	-	07	ME	17-2	P	N
Basic Part Number	Receptacle with Lug Style Contact						
Lug Type	**-** = Lug with Thru Hole (See Contact Layouts table for Availability) **T** = Lug with Threaded Insert						
Connector Style	**07** = Receptacle, Jam Nut						
Connector Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **Z1** = Stainless, Passivated **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc						
Size and Layout	See Contact Layouts Table						
Contact Style	**P** = Pin **S** = Socket						
Polarization:	**A, B, C, D, E, F, G, N** (see Polarization Keys and Keyways table)						

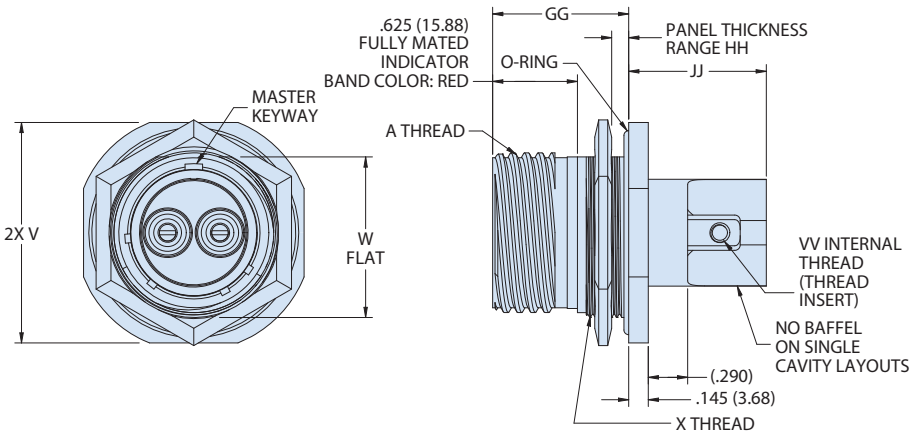
SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



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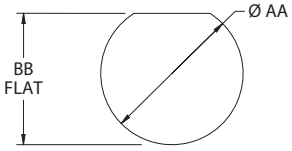
973-002 SuperNine Series III PowerPlay with Lug Style Contact 07 Jam-Nut Mount Receptacle

07 JAM-NUT MOUNT RECEPTACLE



Shell Size	A Thread	Ø U	V	W Flat	X Thread	GG .005	HH	JJ Max.	VV Thread
11-1	.7500-.1P-.3L-TS-2A	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	0.755 (19.18) 0.745 (18.92)	M20 X 1.0-6g 0.100R	1.003 (25.48)	0.135 (3.43); 0.062 (1.57)	N/A	4-40 UNC
13-1	.8750-.1P-.3L-TS-2A	1.512 (38.40) 1.488 (37.80)	1.390 (35.31) 1.358 (34.49)	0.942 (23.93) 0.932 (23.67)	M25 X 1.0-6g 0.100R	1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	N/A	8-32 UNC
15-1	1.0000-.1P-.3L-TS-2A	1.638 (41.61) 1.614 (41.00)	1.516 (38.51) 1.484 (37.69)	1.066 (27.08) 1.056 (26.82)	M28 X 1.0-6g 0.100R	1.157 (29.39)	0.300 (7.62) 0.062 (1.57)	N/A	10-32 UNF
15-3						1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	N/A	4-40 UNC
17-1	1.1875-.1P-.3L-TS-2A	1.764 (44.81) 1.740 (44.20)	1.642 (41.71) 1.610 (40.89)	1.191 (30.25) 1.181 (30.00)	M32 X 1.0-6g 0.100R	1.157 (29.39)	0.300 (7.62) 0.062 (1.57)	N/A	10-32 UNF
17-2						1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	1.045 (26.54)	4-40 UNC
17-3						1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	N/A	8-32 UNC
19-3	1.2500-.1P-.3L-TS-2A	1.949 (49.50) 1.925 (48.90)	1.827 (46.41) 1.795 (45.59)	1.316 (33.43) 1.306 (33.17)	M35 X 1.0-6g 0.100R	1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	1.045 (26.54)	4-40 UNC
19-A3						1.157 (29.39)	0.300 (7.62) 0.062 (1.57)	N/A	10-32 UNF
21-3	1.3750-.1P-.3L-TS-2A	2.075 (52.71) 2.051 (52.10)	1.953 (49.61) 1.921 (48.79)	1.441 (36.60) 1.431 (36.35)	M38 X 1.0-6g 0.100R	1.157 (29.39)	0.300 (7.62) 0.062 (1.57)	N/A	10-32 UNF
21-4						1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	1.045 (26.54)	4-40 UNC
23-2	1.5000-.1P-.3L-TS-2A	2.201 (55.91) 2.177 (55.30)	2.079 (52.81) 2.047 (51.99)	1.566 (39.78) 1.556 (39.52)	M41 X 1.0-6g 0.100R	1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	1.155 (29.34)	8-32 UNC
25-2	1.6250-.1P-.3L-TS-2A	2.323 (59.00) 2.299 (58.39)	2.205 (56.01) 2.173 (55.19)	1.691 (42.95) 1.681 (42.70)	M44 X 1.0-6g 0.100R	1.157 (29.39)	0.300 (7.62) 0.062 (1.57)	1.223 (31.06)	10-32 UNF
25-4						1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	1.155 (29.34)	8-32 UNC

JAM NUT CUT OUT

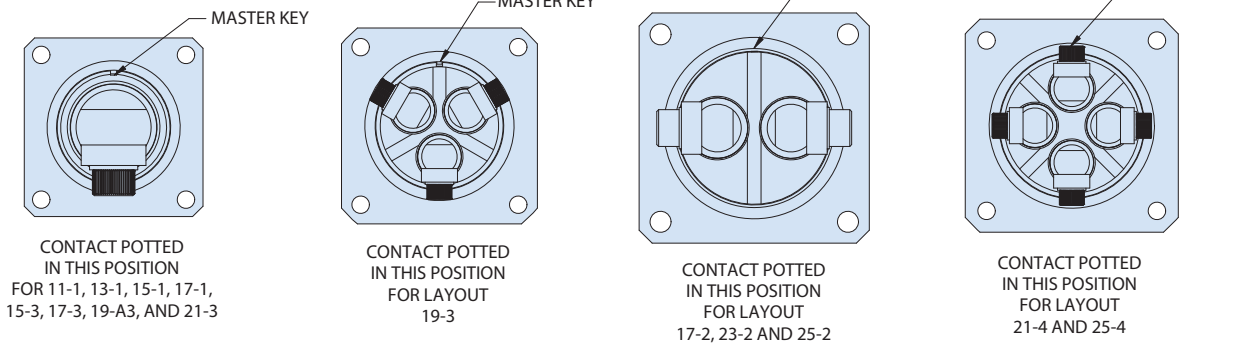


Shell Size	Ø AA	BB Flat
11	0.835 (21.21); 0.825 (20.96)	0.771 (19.58); 0.761 (19.33)
13	1.020 (25.91); 1.010 (25.65)	0.955 (24.26); 0.945 (24.00)
15	1.145 (29.08); 1.135 (28.83)	1.085 (27.56); 1.075 (27.30)
17	1.270 (32.26); 1.260 (32.00)	1.210 (30.73); 1.200 (30.48)
19	1.395 (35.43); 1.385 (35.18)	1.335 (33.91); 1.325 (33.65)
21	1.520 (38.61); 1.510 (38.35)	1.460 (37.08); 1.450 (36.83)
23	1.645 (41.78); 1.635 (41.53)	1.585 (40.26); 1.575 (40.00)
25	1.770 (44.96); 1.760 (44.70)	1.710 (43.43); 1.700 (43.18)

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973-002 SuperNine Series III PowerPlay with Lug Style Contact 07 Jam-Nut Mount Receptacle

HARDWARE AND BUS-BAR (SHOWN FOR REFERENCE)



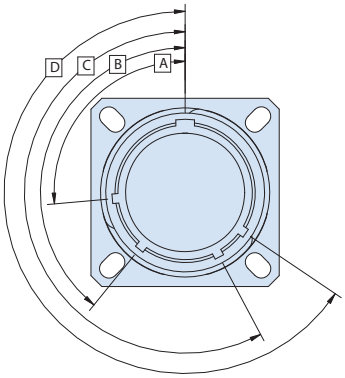
CONTACT POTTED IN THIS POSITION FOR 11-1, 13-1, 15-1, 17-1, 15-3, 17-3, 19-A3, AND 21-3

CONTACT POTTED IN THIS POSITION FOR LAYOUT 19-3

CONTACT POTTED IN THIS POSITION FOR LAYOUT 17-2, 23-2 AND 25-2

CONTACT POTTED IN THIS POSITION FOR LAYOUT 21-4 AND 25-4

POLARIZATION KEYS AND KEYWAYS

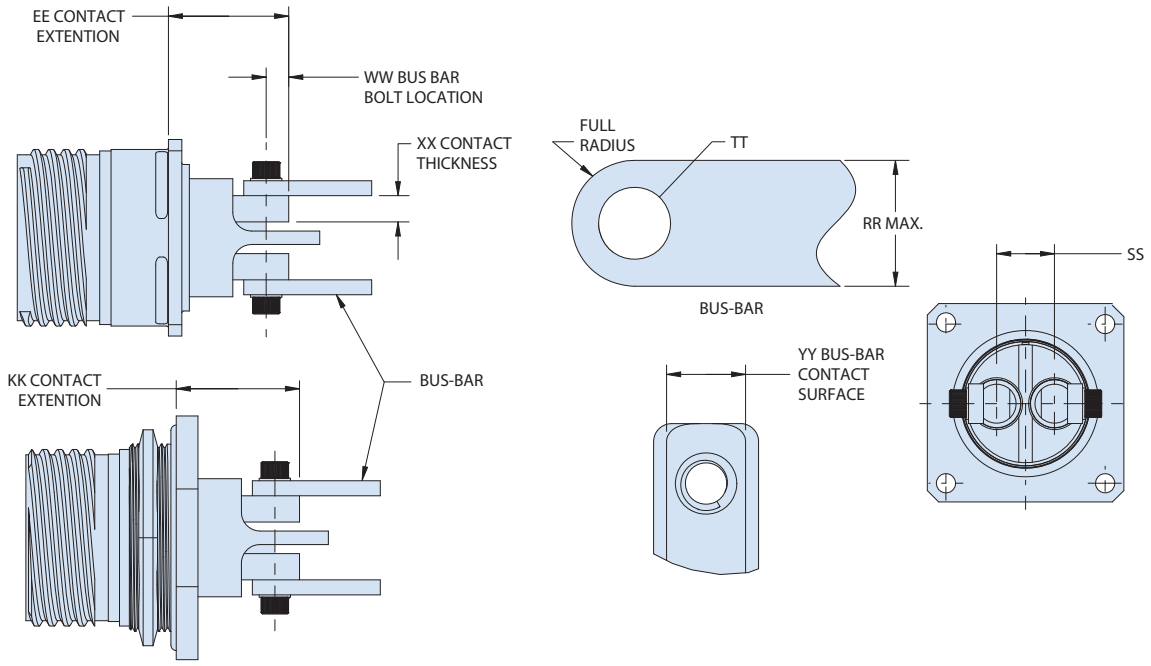


Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

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973-002 SuperNine Series III PowerPlay with Lug Style Contact 07 Jam-Nut Mount Receptacle

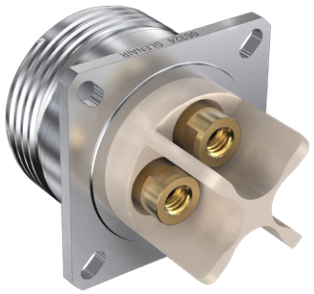
BUS-BAR DIMENSIONS



Shell Size	EE ±.015	KK ± .015	RR Max	TT ± .005	WW	XX		YY ± .015		SS	Rec. Torque in Lbs
						Threaded Insert	Thru Hole	Threaded Insert	Thru Hole		
11-1	0.803 (20.40)	0.808 (20.52)	0.265 (6.73)	0.119 (3.02)	0.150 (3.81)	0.173 (4.39)	0.075 (1.90)	0.192 (4.88)	0.249 (6.32)	N/A	2.85-3.35
13-1	0.896 (22.76)	0.901 (22.89)	0.385 (9.78)	0.171 (4.34)	0.200 (5.08)	0.230 (5.84)	0.085 (2.16)	0.264 (6.71)	0.340 (8.64)	N/A	11-17
15-1	1.193 (30.30)	1.044 (26.52)	0.475 (12.07)	0.197 (5.00)	0.230 (5.84)	0.260 (6.60)	0.085 (2.16)	0.367 (9.32)	0.442 (11.23)	N/A	20-29
15-3	0.803 (20.40)	0.808 (20.52)	0.265 (6.73)	0.119 (3.02)	0.150 (3.81)	0.173 (4.39)	0.075 (1.90)	0.192 (4.88)	0.249 (6.32)	N/A	2.85-3.35
17-1	1.193 (30.30)	1.044 (26.52)	0.595 (15.11)	0.197 (5.00)	0.230 (5.84)	0.260 (6.60)	0.085 (2.16)	0.484 (12.29)	0.543 (13.79)	N/A	20-29
17-2	0.803 (20.40)	0.808 (20.52)	0.265 (6.73)	0.119 (3.02)	0.150 (3.81)	0.173 (4.39)	0.075 (1.90)	0.192 (4.88)	0.249 (6.32)	0.386 (9.80)	2.85-3.35
17-3	0.896 (22.76)	0.901 (22.89)	0.385 (9.78)	0.171 (4.34)	0.200 (5.08)	0.230 (5.84)	0.085 (2.16)	0.264 (6.71)	0.340 (8.64)	N/A	11-17
19-3	0.803 (20.40)	0.808 (20.52)	0.265 (6.73)	0.119 (3.02)	0.150 (3.81)	0.173 (4.39)	0.075 (1.90)	0.192 (4.88)	0.249 (6.32)	0.390 (9.91)	2.85-3.35
19-A3	1.193 (30.30)	1.044 (26.52)	0.475 (12.07)	0.197 (5.00)	0.230 (5.84)	0.260 (6.60)	0.085 (2.16)	0.367 (9.32)	0.442 (11.23)	N/A	20-29
21-3	1.193 (30.30)	1.044 (26.52)	0.595 (15.11)	0.197 (5.00)	0.230 (5.84)	0.260 (6.60)	0.085 (2.16)	0.484 (12.29)	0.543 (13.79)	N/A	20-29
21-4	0.803 (20.40)	0.808 (20.52)	0.265 (6.73)	0.119 (3.02)	0.150 (3.81)	0.173 (4.39)	0.075 (1.90)	0.192 (4.88)	0.249 (6.32)	0.381 (9.68)	2.85-3.35
23-2	0.896 (22.76)	0.901 (22.89)	0.385 (9.78)	0.171 (4.34)	0.200 (5.08)	0.230 (5.84)	0.085 (2.16)	0.264 (6.71)	0.340 (8.64)	0.540 (13.72)	11-17
25-2	1.193 (30.30)	1.044 (26.52)	0.475 (12.07)	0.197 (5.00)	0.230 (5.84)	0.260 (6.60)	0.085 (2.16)	0.367 (9.32)	0.442 (11.23)	0.600 (15.24)	20-29
25-4	0.896 (22.76)	0.901 (22.89)	0.385 (9.78)	0.171 (4.34)	0.200 (5.08)	0.230 (5.84)	0.085 (2.16)	0.264 (6.71)	0.340 (8.64)	0.503 (12.78)	11-17

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973-003 SuperNine Series III PowerPlay with Threaded Contacts 00, D0, CS Panel-Mount Receptacles



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table
- Seal/grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: High-Temp composite

NOTES

- 973-003 mates with only 973-001 of the same size, layout, and polarization and the opposite gender.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC
- Customer shall analyze bus-bar design and attachment hardware, to ensure proper clearances are maintained for the intended application (max voltage, environmental conditions, etc.)

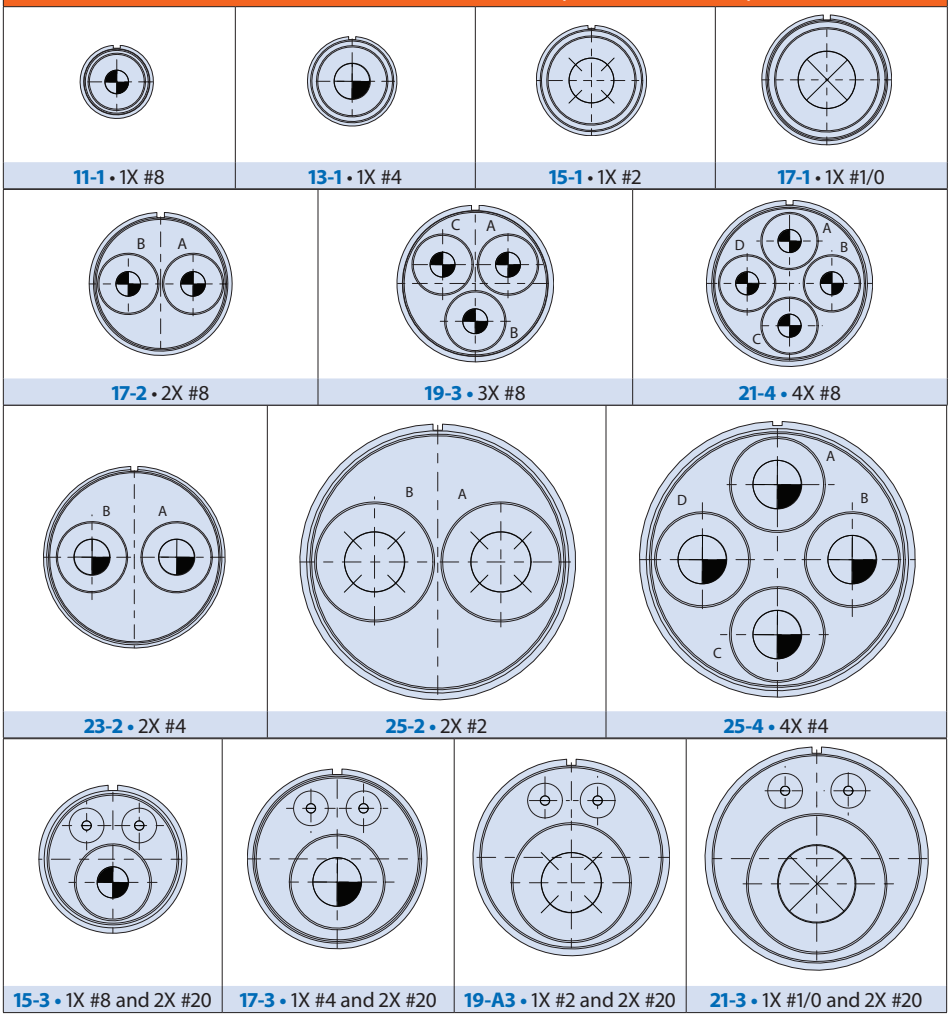
FINGER-PROOF CONTACTS		
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

HOW TO ORDER

Sample Part Number	973-003	-00	ME	17-2	P	N
Basic Part Number	SuperNine PowerPlay Connector					
Connector Style	**00** = Receptacle, Panel-Mount with Slotted Holes **D0** = Receptacle, Panel-Mount with Round Holes **CS** = Receptacle, Panel-Mount with Standard Clinch Nuts					
Connector Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc **Z1** = Stainless Steel, Passivate					
Size and Layout	See Contact Arrangements Table					
Contact Style	**P** = Pin **S** = Socket					
Polarization	**A, B, C, D, E, F, G, N** (see Polarization Keys and Keyways table)					

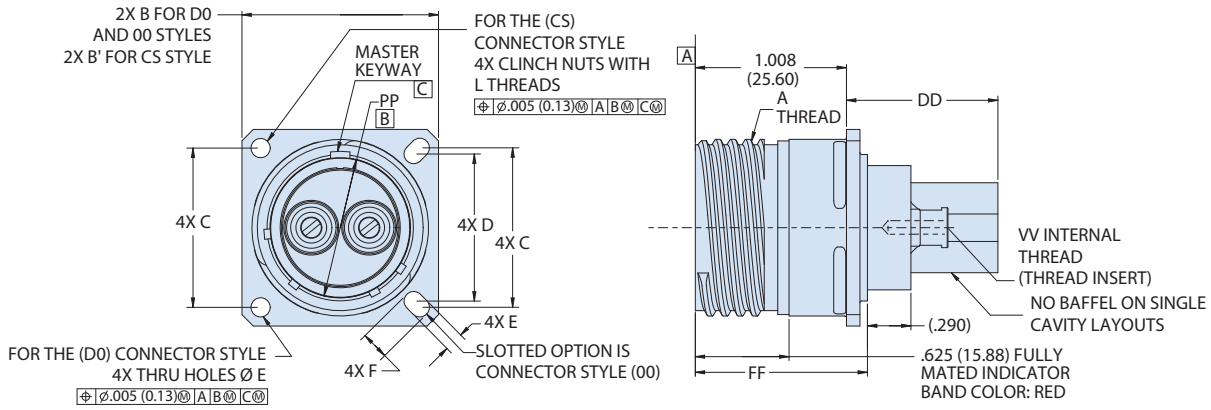
SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



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973-003 SuperNine Series III PowerPlay with Threaded Contacts 00, D0, CS Panel-Mount Receptacles

00, D0 AND CS PANEL-MOUNT AND IN-LINE RECEPTACLES

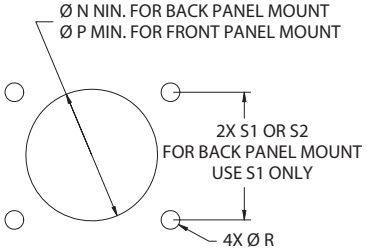


Shell Size	A Thread	B SQ	B' SQ	C BSC	D BSC	PP	E	F	L Thread	Ø M Max	DD Max.	FF 0.025	VV Thread
11-1	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	1.187 (30.15) 1.147 (29.13)	0.812 (20.62)	0.719 (18.26)	0.447 (11.35) 0.441 (11.20)	0.136 (3.45) 0.120 (3.05)	0.202 (5.13) 0.186 (4.72)	.112-40 UNC-3B	0.984 (24.99)	N/A	1.148 (29.16)	6-32 UNC
13-1	.8750-.1P-.3L-TS-2A	1.138 (28.91) 1.114 (28.30)	1.281 (32.54) 1.241 (31.52)	0.906 (23.01)	0.812 (20.62)	0.687 (17.45) 0.681 (17.30)				1.157 (29.39)	N/A	1.148 (29.16)	10-32 UNF
15-1	1.0000-.1P-.3L-TS-2A	1.232 (31.29)	1.293 (32.84)	0.969 (24.61)	0.906 (23.01)	0.812 (20.62)				1.280 (32.51)	N/A	1.310 (33.27)	1/4-28 UNF
15-3		1.208 (30.68)	1.253 (31.83)			0.804 (20.42)					N/A	1.148 (29.16)	6-32 UNC
17-1	1.1875-.1P-.3L-TS-2A	1.323 (33.60) 1.299 (32.99)	1.386 (35.20) 1.346 (34.19)	1.062 (26.97)	0.969 (24.61)	0.937 (23.80) 0.930 (23.62)				1.406 (35.71)	N/A	1.310 (33.27)	5/16-24 UNF
17-2											1.040 (26.42)	1.148 (29.16)	6-32 UNC
17-3											N/A	1.148 (29.16)	10-32 UNF
19-3	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.531 (38.89) 1.491 (37.87)	1.156 (29.36)	1.062 (26.97)	1.042 (26.47) 1.036 (26.31)				1.516 (38.51)	1.040 (26.42)	1.148 (29.16)	6-32 UNC
19-A3											N/A	1.310 (33.27)	1/4-28 UNF
21-3	1.3750-.1P-.3L-TS-2A	1.575 (40.01) 1.551 (39.40)	1.625 (41.28) 1.585 (40.26)	1.250 (31.75)	1.156 (29.36)	1.167 (29.64) 1.161 (29.49)				1.642 (41.71)	N/A	1.310 (33.27)	5/16-24 UNF
21-4											1.040 (26.42)	1.148 (29.16)	6-32 UNC
23-2	1.5000-.1P-.3L-TS-2A	1.701 (43.21) 1.677 (42.60)	1.750 (44.45) 1.710 (43.43)	1.375 (34.93)	1.250 (31.75)	1.295 (32.89) 1.286 (32.66)	0.162 (4.11) 0.146 (3.71)	0.250 (6.35) 0.234 (5.94)	.138-32 UNC-3B	1.768 (44.91)	1.150 (29.21)	1.148 (29.16)	10-32 UNF
25-2	1.6250-.1P-.3L-TS-2A	1.823 (46.30) 1.799 (45.69)	1.875 (47.63) 1.835 (46.61)	1.500 (38.10)	1.375 (34.93)	1.417 (35.99) 1.411 (35.84)				1.8 90 (48.01)	1.372 (34.85) 1.150 (29.21)	1.310 (33.27) 1.148 (29.16)	1/4-28 UNF 10-32 UNF
25-4													

POLARIZATION KEYS AND KEYWAYS

Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

PANEL CUT OUT FOR PANEL-MOUNT RECEPTACLES



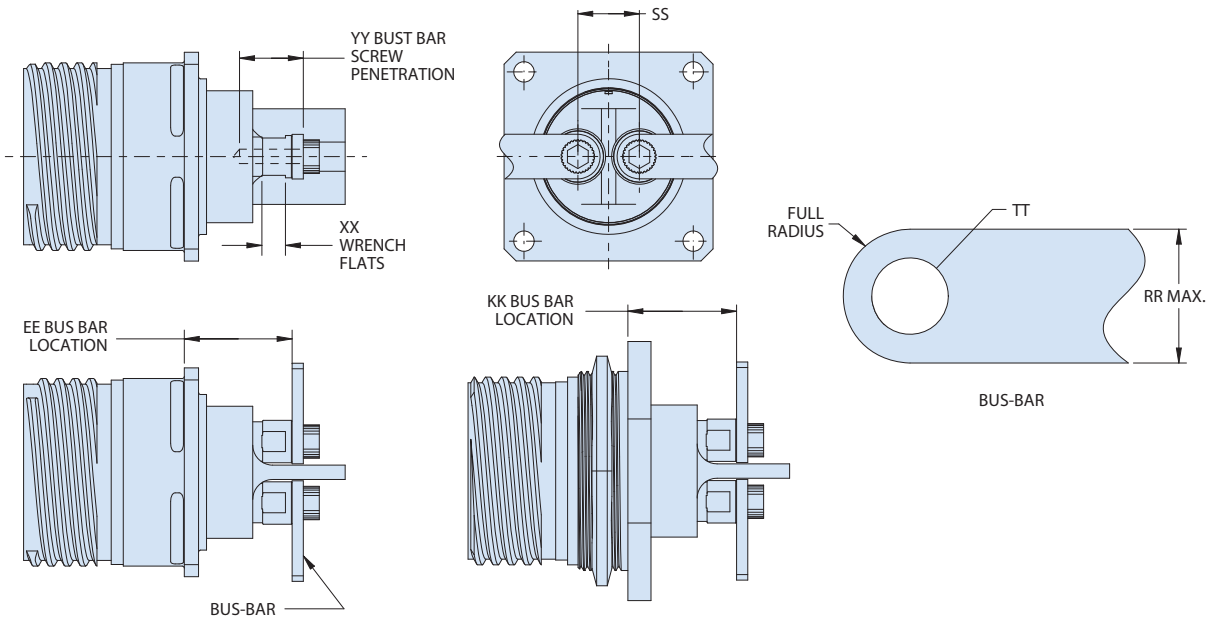
Shell Size	N Min.	P Min.	R Holes	S1 BSC	S2 BSC
11	.796 (20.22)	.625 (15.88)	.133 (3.38) .123 (3.12)	.812 (20.62)	.719 (18.26)
13	.922 (23.42)	.750 (19.05)		.906 (23.01)	.812 (20.62)
15	1.047 (26.59)	.906 (23.01)		.969 (24.61)	.906 (23.01)
17	1.219 (30.96)	1.016 (25.81)		1.062 (26.97)	.969 (24.61)
19	1.297 (32.94)	1.141 (28.98)		1.156 (29.36)	1.062 (26.97)
21	1.422 (36.12)	1.266 (32.16)		1.250 (31.75)	1.156 (29.36)
23	1.547 (39.29)	1.375 (34.93)	.159 (4.04) .149 (3.78)	1.375 (34.93)	1.250 (31.75)
25	1.672 (42.47)	1.484 (37.69)		1.500 (38.10)	1.375 (34.93)

Panel Thickness: .300 Max

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973-003 SuperNine Series III PowerPlay with Threaded Contacts 00, D0, CS Panel-Mount Receptacles

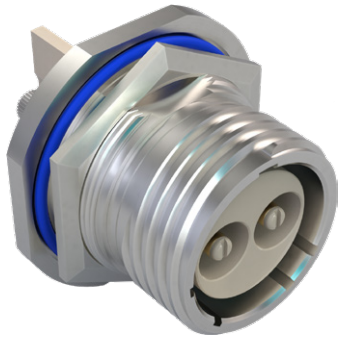
BUS-BAR DIMENSIONS



Shell Size	Ee 0.015	Kk ± .015	Rr	Tt ± .005	Ww	Xx	Yy	Ss	Recommended Torque (In. Lbs.)	Wrench Part Number
11-1	0.677 (17.20)	0.682 (17.32)	.265 (6.73) Max.	0.145 (3.68)	15/64″	0.140 (3.56)	.190 (4.83) Min./.325 (8.26) Max.	N/A	8-10	979-008-8
13-1	0.677 (17.20)	0.682 (17.32)	.385 (9.78) Max.	0.197 (5.00)	5/16″	0.140 (3.56)	.410 (10.41) Min./.560 (14.22) Max.	N/A	20-29	979-008-4
15-1	0.839 (21.31)	0.690 (17.53)	.475 (12.07) Max.	0.257 (6.53)	3/8″	0.140 (3.56)	.530 (13.46) Min./.680 (17.27) Max.	N/A	60-70	979-008-2
15-3	0.677 (17.20)	0.682 (17.32)	.265 (6.73) Max.	0.145 (3.68)	15/64″	0.140 (3.56)	.190 (4.83) Min./.325 (8.26) Max.	N/A	8-10	979-008-8
17-1	0.881 (22.38)	0.732 (18.59)	.595 (15.11) Max.	0.320 (8.13)	1/2″	0.190 (4.83)	.650 (16.51) Min./.800 (20.32) Max.	N/A	90-140	979-008-0
17-2	0.677 (17.20)	0.682 (17.32)	.265 (6.73) Max.	0.145 (3.68)	15/64″	0.140 (3.56)	.190 (4.83) Min./.325 (8.26) Max.	0.386	8-10	979-008-8
17-3	0.677 (17.20)	0.682 (17.32)	.385 (9.78) Max.	0.197 (5.00)	5/16″	0.140 (3.56)	.410 (10.41) Min./.560 (14.22) Max.	N/A	20-29	979-008-4
19-3	0.677 (17.20)	0.682 (17.32)	.265 (6.73) Max.	0.145 (3.68)	15/64″	0.140 (3.56)	.190 (4.83) Min./.325 (8.26) Max.	0.390	8-10	979-008-8
19-A3	0.839 (21.31)	0.690 (17.53)	.475 (12.07) Max.	0.257 (6.53)	3/8″	0.140 (3.56)	.530 (13.46) Min./.680 (17.27) Max.	N/A	60-70	979-008-2
21-3	0.881 (22.38)	0.732 (18.59)	.595 (15.11) Max.	0.320 (8.13)	1/2″	0.190 (4.83)	.650 (16.51) Min./.800 (20.32) Max.	N/A	90-140	979-008-0
21-4	0.677 (17.20)	0.682 (17.32)	.265 (6.73) Max.	0.145 (3.68)	15/64″	0.140 (3.56)	.190 (4.83) Min./.325 (8.26) Max.	0.381	8-10	979-008-8
23-2	0.677 (17.20)	0.682 (17.32)	.385 (9.78) Max.	0.197 (5.00)	5/16″	0.140 (3.56)	.410 (10.41) Min./.560 (14.22) Max.	0.540	20-29	979-008-4
25-2	0.839 (21.31)	0.690 (17.53)	.475 (12.07) Max.	0.257 (6.53)	3/8″	0.140 (3.56)	.530 (13.46) Min./.680 (17.27) Max.	0.600	60-70	979-008-2
25-4	0.677 (17.20)	0.682 (17.32)	.385 (9.78) Max.	0.197 (5.00)	5/16″	0.140 (3.56)	.410 (10.41) Min./.560 (14.22) Max.	0.503	20-29	979-008-4

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973-003 SuperNine Series III PowerPlay with Threaded Contacts 07 Jam-Nut Receptacle



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table
- Seal/grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: High-Temp composite

NOTES

- 973-003 mates with only 973-001 of the same size, layout, and polarization and the opposite gender.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC
- Customer shall analyze bus-bar design and attachment hardware, to ensure proper clearances are maintained for the intended application (max voltage, environmental conditions, etc.)

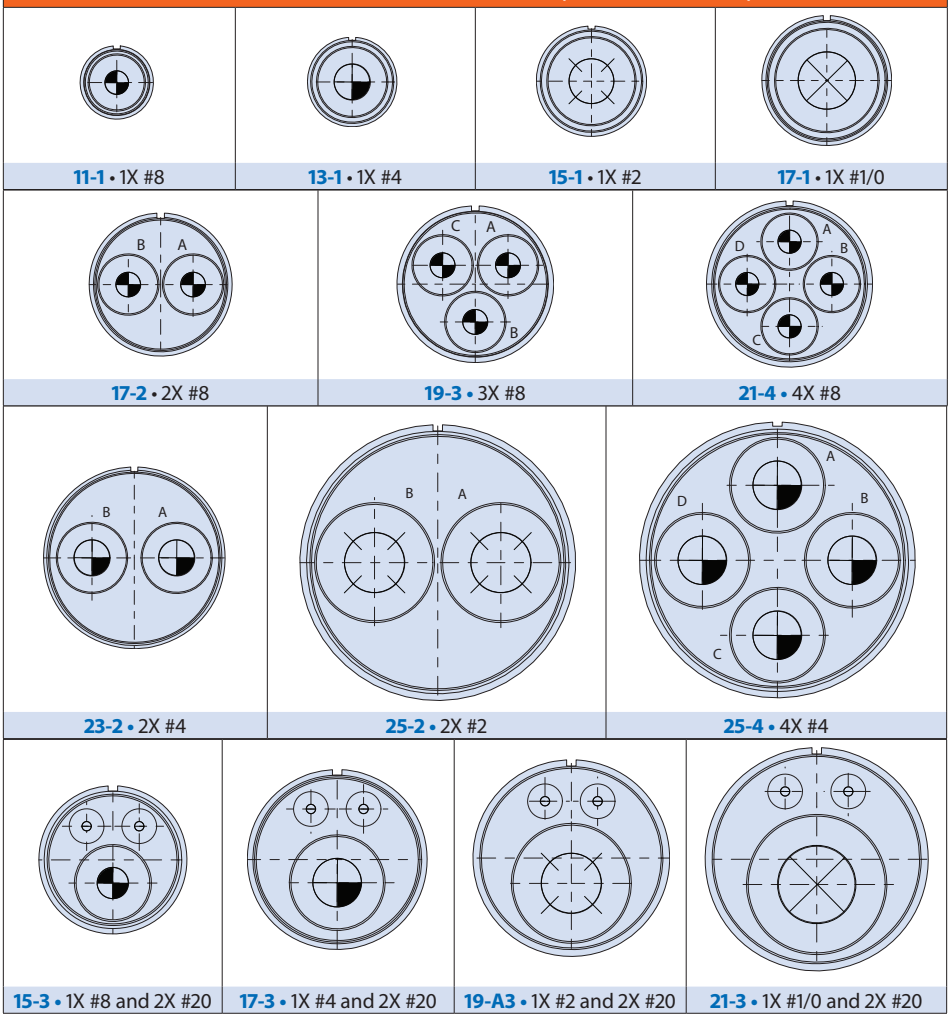
FINGER-PROOF CONTACTS		
Size	**Pin**	**Socket**
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

HOW TO ORDER

Sample Part Number	973-003	-07	ME	17-2	P	N
Basic Part Number	SuperNine PowerPlay Connector					
Connector Style	**07** = Receptacle, Jam Nut					
Connector Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc **Z1** = Stainless Steel, Passivate					
Size and Layout	See Contact Arrangements Table					
Contact Style	**P** = Pin **S** = Socket					
Polarization	**A, B, C, D, E, F, G, N** (see Polarization Keys and Keyways table)					

SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



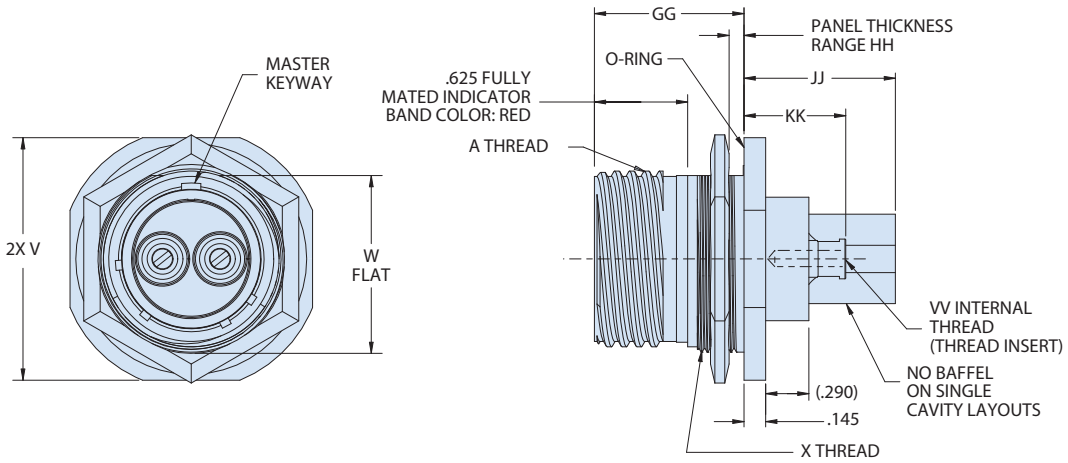
SUPERNINE SERIES III POWERPLAY TRIPLE-START

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973-003 SuperNine Series III PowerPlay with Threaded Contacts
07 Jam-Nut Receptacle

SUPERNINE SERIES III POWERPLAY TRIPLE-START

07 JAM-NUT RECEPTACLE

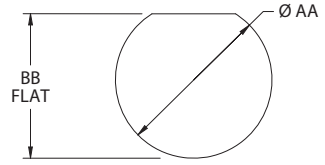


Shell Size	A Thread	Ø U	V	W Flat	X Thread	GG .005	HH	JJ Max.	VV Thread
11-1	.7500-.1P-.3L-TS-2A	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	0.755 (19.18) 0.745 (18.92)	M20 X 1.0-6g 0.100R	1.003 (25.48)	0.135 (3.43); 0.062 (1.57)	N/A	6-32 UNC
13-1	.8750-.1P-.3L-TS-2A	1.512 (38.40) 1.488 (37.80)	1.390 (35.31) 1.358 (34.49)	0.942 (23.93) 0.932 (23.67)	M25 X 1.0-6g 0.100R	1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	N/A	10-32 UNF
15-1	1.0000-.1P-.3L-TS-2A	1.638 (41.61) 1.614 (41.00)	1.516 (38.51) 1.484 (37.69)	1.066 (27.08) 1.056 (26.82)	M28 X 1.0-6g 0.100R	1.157 (29.39)	0.300 (7.62) 0.062 (1.57)	N/A	1/4-28 UNF
15-3						1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	N/A	6-32 UNC
17-1	1.1875-.1P-.3L-TS-2A	1.764 (44.81) 1.740 (44.20)	1.642 (41.71) 1.610 (40.89)	1.191 (30.25) 1.181 (30.00)	M32 X 1.0-6g 0.100R	1.157 (29.39)	0.300 (7.62) 0.062 (1.57)	N/A	5/16-24 UNF
17-2						1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	1.045 (26.54)	6-32 UNC
17-3						1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	N/A	10-32 UNF
19-3	1.2500-.1P-.3L-TS-2A	1.949 (49.50) 1.925 (48.90)	1.827 (46.41) 1.795 (45.59)	1.316 (33.43) 1.306 (33.17)	M35 X 1.0-6g 0.100R	1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	1.045 (26.54)	6-32 UNC
19-A3						1.157 (29.39)	0.300 (7.62) 0.062 (1.57)	N/A	1/4-28 UNF
21-3	1.3750-.1P-.3L-TS-2A	2.075 (52.71) 2.051 (52.10)	1.953 (49.61) 1.921 (48.79)	1.441 (36.60) 1.431 (36.35)	M38 X 1.0-6g 0.100R	1.157 (29.39)	0.300 (7.62) 0.062 (1.57)	N/A	5/16-24 UNF
21-4						1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	1.045 (26.54)	6-32 UNC
23-2	1.5000-.1P-.3L-TS-2A	2.201 (55.91) 2.177 (55.30)	2.079 (52.81) 2.047 (51.99)	1.566 (39.78) 1.556 (39.52)	M41 X 1.0-6g 0.100R	1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	1.155 (29.34)	10-32 UNF
25-2	1.6250-.1P-.3L-TS-2A	2.323 (59.00) 2.299 (58.39)	2.205 (56.01) 2.173 (55.19)	1.691 (42.95) 1.681 (42.70)	M44 X 1.0-6g 0.100R	1.157 (29.39)	0.300 (7.62) 0.062 (1.57)	1.223 (31.06)	1/4-28 UNF
25-4						1.003 (25.48)	0.135 (3.43) 0.062 (1.57)	1.155 (29.34)	10-32 UNF

POLARIZATION KEYS AND KEYWAYS

Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

PANEL CUT OUT FOR JAM NUT RECEPTACLES

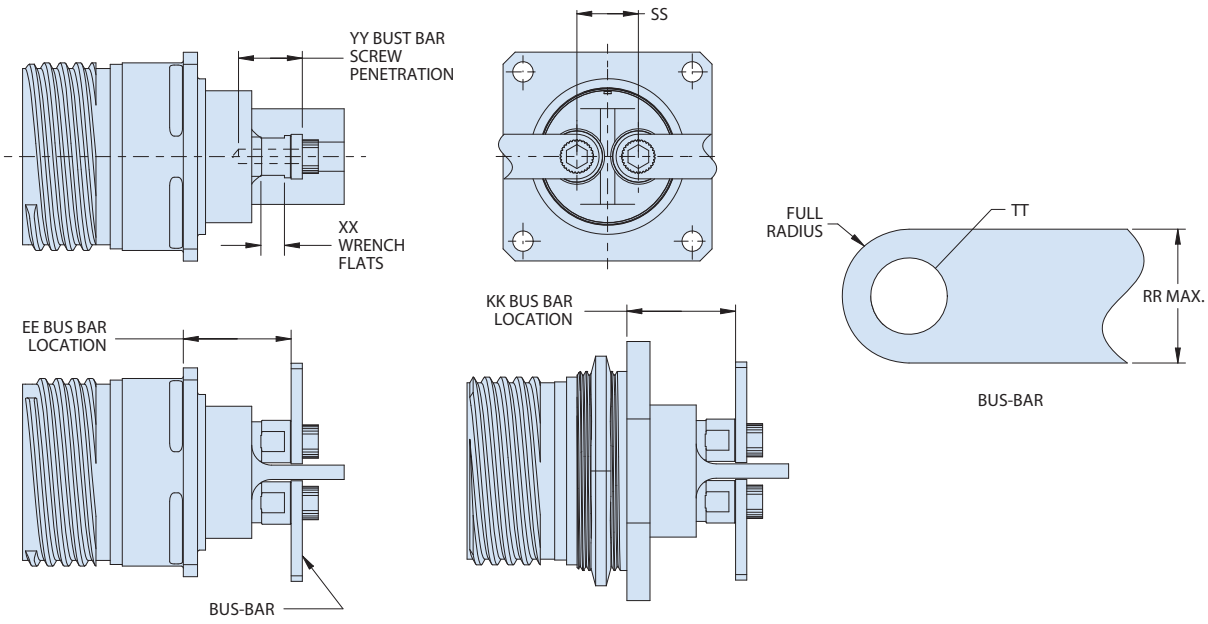


Shell Size	Ø AA	BB Flat
11	0.835 (21.21) 0.825 (20.96)	0.771 (19.58) 0.761 (19.33)
13	1.020 (25.91) 1.010 (25.65)	0.955 (24.26) 0.945 (24.00)
15	1.145 (29.08) 1.135 (28.83)	1.085 (27.56) 1.075 (27.31)
17	1.270 (32.26) 1.260 (32.00)	1.210 (30.73) 1.200 (30.48)
19	1.395 (35.43) 1.385 (35.18)	1.335 (33.91) 1.325 (33.66)
21	1.520 (38.61) 1.510 (38.35)	1.460 (37.08) 1.450 (36.83)
23	1.645 (41.78) 1.635 (41.53)	1.585 (40.26) 1.575 (40.01)
25	1.770 (44.96) 1.760 (44.70)	1.710 (43.43) 1.700 (43.18)

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973-003 SuperNine Series III PowerPlay with Threaded Contacts 07 Jam-Nut Receptacle

BUS-BAR DIMENSIONS

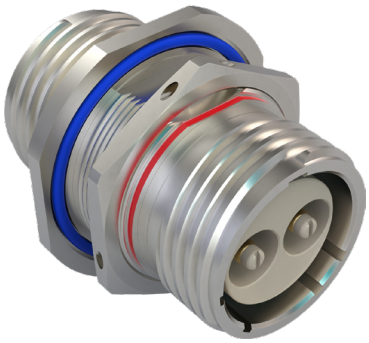


Shell Size	EE 0.015	KK ± .015	RR	TT ± .005	WW	XX	YY	SS	Recommended Torque (In. Lbs.)	Wrench Part Number
11-1	0.677 (17.20)	0.682 (17.32)	.265 (6.73) Max.	0.145 (3.68)	15/64″	0.140 (3.56)	.190 (4.83) Min./ .325 (8.26) Max.	N/A	8-10	979-008-8
13-1	0.677 (17.20)	0.682 (17.32)	.385 (9.78) Max.	0.197 (5.00)	5/16″	0.140 (3.56)	.410 (10.41) Min./ .560 (14.22) Max.	N/A	20-29	979-008-4
15-1	0.839 (21.31)	0.690 (17.53)	.475 (12.07) Max.	0.257 (6.53)	3/8″	0.140 (3.56)	.530 (13.46) Min./ .680 (17.27) Max.	N/A	60-70	979-008-2
15-3	0.677 (17.20)	0.682 (17.32)	.265 (6.73) Max.	0.145 (3.68)	15/64″	0.140 (3.56)	.190 (4.83) Min./ .325 (8.26) Max.	N/A	8-10	979-008-8
17-1	0.881 (22.38)	0.732 (18.59)	.595 (15.11) Max.	0.320 (8.13)	1/2″	0.190 (4.83)	.650 (16.51) Min./ .800 (20.32) Max.	N/A	90-140	979-008-0
17-2	0.677 (17.20)	0.682 (17.32)	.265 (6.73) Max.	0.145 (3.68)	15/64″	0.140 (3.56)	.190 (4.83) Min./ .325 (8.26) Max.	0.386	8-10	979-008-8
17-3	0.677 (17.20)	0.682 (17.32)	.385 (9.78) Max.	0.197 (5.00)	5/16″	0.140 (3.56)	.410 (10.41) Min./ .560 (14.22) Max.	N/A	20-29	979-008-4
19-3	0.677 (17.20)	0.682 (17.32)	.265 (6.73) Max.	0.145 (3.68)	15/64″	0.140 (3.56)	.190 (4.83) Min./ .325 (8.26) Max.	0.390	8-10	979-008-8
19-A3	0.839 (21.31)	0.690 (17.53)	.475 (12.07) Max.	0.257 (6.53)	3/8″	0.140 (3.56)	.530 (13.46) Min./ .680 (17.27) Max.	N/A	60-70	979-008-2
21-3	0.881 (22.38)	0.732 (18.59)	.595 (15.11) Max.	0.320 (8.13)	1/2″	0.190 (4.83)	.650 (16.51) Min./ .800 (20.32) Max.	N/A	90-140	979-008-0
21-4	0.677 (17.20)	0.682 (17.32)	.265 (6.73) Max.	0.145 (3.68)	15/64″	0.140 (3.56)	.190 (4.83) Min./ .325 (8.26) Max.	0.381	8-10	979-008-8
23-2	0.677 (17.20)	0.682 (17.32)	.385 (9.78) Max.	0.197 (5.00)	5/16″	0.140 (3.56)	.410 (10.41) Min./ .560 (14.22) Max.	0.540	20-29	979-008-4
25-2	0.839 (21.31)	0.690 (17.53)	.475 (12.07) Max.	0.257 (6.53)	3/8″	0.140 (3.56)	.530 (13.46) Min./ .680 (17.27) Max.	0.600	60-70	979-008-2
25-4	0.677 (17.20)	0.682 (17.32)	.385 (9.78) Max.	0.197 (5.00)	5/16″	0.140 (3.56)	.410 (10.41) Min./ .560 (14.22) Max.	0.503	20-29	979-008-4

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973-005 SuperNine Series III PowerPlay Triple-Start Bulkhead Feedthru Connector

SUPERNINE SERIES III POWERPLAY TRIPLE-START



MATERIAL/FINISH

- Shell and jam nut: per How to Order Table
- Seal and grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: High-Temp composite

NOTES

- Bulkhead feedthru receptacle 973-005 mates with 973-001 plugs having the same size, layout, polarization, and opposite contact gender.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

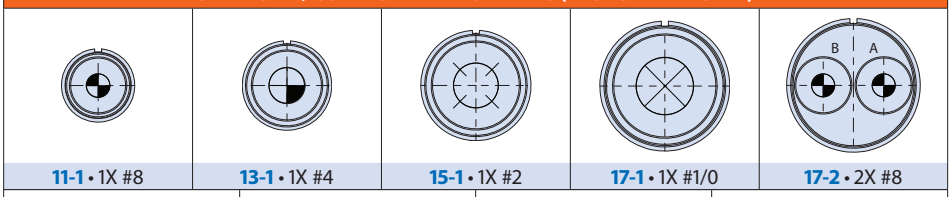
FINGER-PROOF CONTACTS		
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

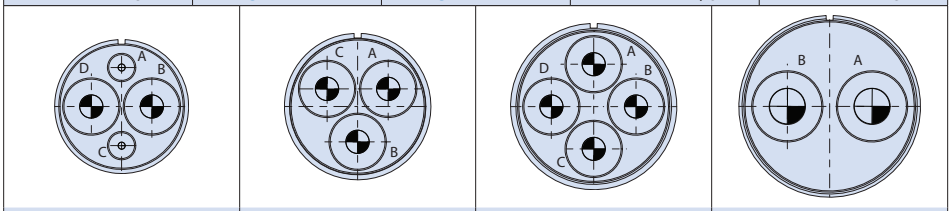
HOW TO ORDER

Sample Part Number	973-005	-D0	ME	17-2	P	N	N
Basic Part Number	38999 Power Connector						
Shell Style	**07** = Aluminum, CAD/O.D. Over Electroless Nickel **D0** = Receptacle, Wall Mount,with Round Holes **CS**= Receptacle, Wall Mount, with Clinch Nuts (Not Available for Z1 Option Per Table II)						
Material/Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc **Z1** = Stainless Steel, Passivated						
Shell Size/ Insert Arrangement	See Contact Arrangements Table						
Contact Style	**P** = Pin Contact on Panel Side (Socket Opposite) **S** = Socket Contact on Panel Side (Pin Opposite)						
Polarization Position	**A, B, C, D, E, N** = Normal (Panel Side)						
Polarization Position	**A, B, C, D, E, N** = Normal (Flange Side)						

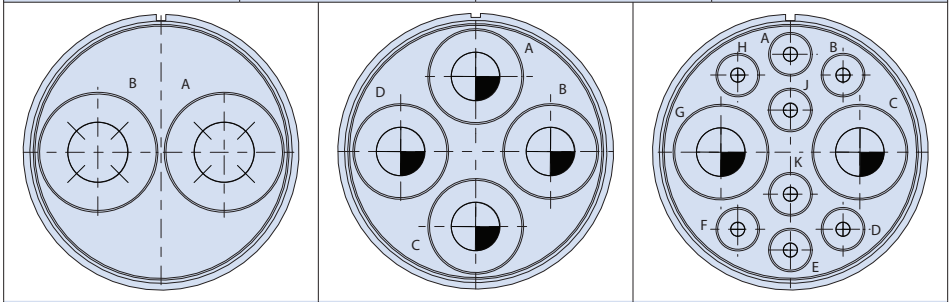
SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



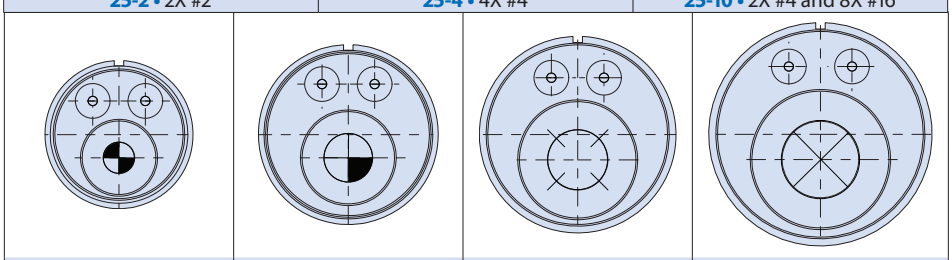
11-1 • 1X #8 | **13-1** • 1X #4 | **15-1** • 1X #2 | **17-1** • 1X #1/0 | **17-2** • 2X #8



17-4 • 2X #8 and 2X #20 | **19-3** • 3X #8 | **21-4** • 4X #8 | **23-2** • 2X #4



25-2 • 2X #2 | **25-4** • 4X #4 | **25-10** • 2X #4 and 8X #16

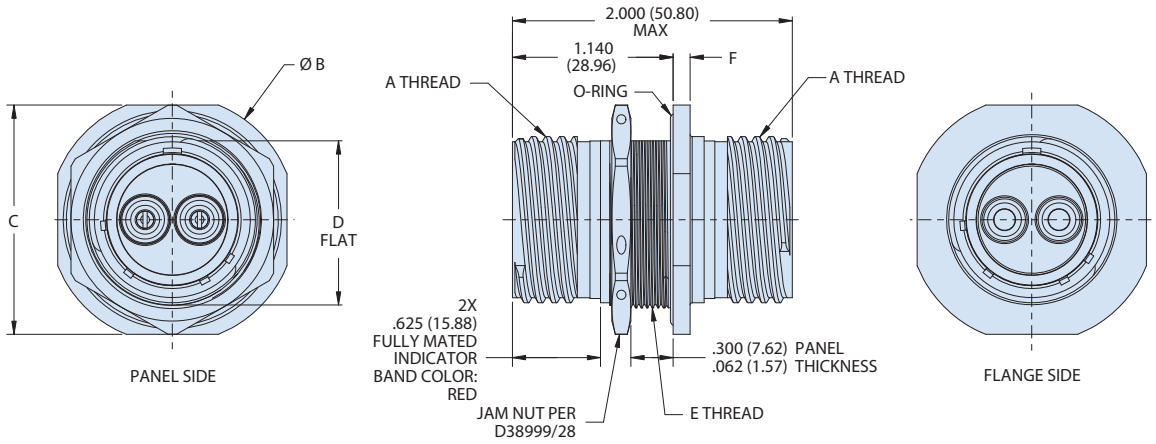


15-3 • 1X #8 and 2X #20 | **17-3** • 1X #4 and 2X #20 | **19-A3** • 1X #2 and 2X #20 | **21-3** • 1X #1/0 and 2X #20

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973-005 SuperNine Series III PowerPlay Triple-Start Bulkhead Feedthru Connector

DIMENSIONS

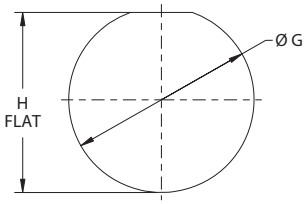


Shell Size	A Thread	Ø B	C	D Flat	E Thread	F
11	.7500-.1P-.3L-TS-2A	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	0.755 (19.18) 0.745 (18.92)	M20 X 1.0-6g-0.100R	.120 (3.05)
13	.8750-.1P-.3L-TS-2A	1.512 (38.40) 1.488 (37.80)	1.390 (35.31) 1.358 (34.49)	0.942 (23.93) 0.932 (23.67)	M25 X 1.0-6g-0.100R	
15	1.0000-.1P-.3L-TS-2A	1.638 (41.61) 1.614 (41.00)	1.516 (38.51) 1.484 (37.69)	1.066 (27.08) 1.056 (26.82)	M28 X 1.0-6g 0.100R	
17	1.1875-.1P-.3L-TS-2A	1.764 (44.81) 1.740 (44.20)	1.642 (41.71) 1.610 (40.89)	1.191 (30.25) 1.181 (30.00)	M32 X 1.0-6g-0.100R	
19	1.2500-.1P-.3L-TS-2A	1.949 (49.50) 1.925 (48.90)	1.827 (46.41) 1.795 (45.59)	1.316 (33.43) 1.306 (33.17)	M35 X 1.0-6g-0.100R	.145 (3.68)
21	1.3750-.1P-.3L-TS-2A	2.075 (52.71) 2.051 (52.10)	1.953 (49.61) 1.921 (48.79)	1.441 (36.60) 1.431 (36.35)	M38 X 1.0-6g-0.100R	
23	1.5000-.1P-.3L-TS-2A	2.201 (55.91) 2.177 (55.30)	2.079 (52.81) 2.047 (51.99)	1.566 (39.78) 1.556 (39.52)	M41 X 1.0-6g-0.100R	
25	1.6250-.1P-.3L-TS-2A	2.323 (59.00) 2.299 (58.39)	2.205 (56.01) 2.173 (55.19)	1.691 (42.95) 1.681 (42.70)	M44 X 1.0-6g-0.100R	

POLARIZATION KEYS AND KEYWAYS

Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

PANEL CUT OUT FOR BULKHEAD FEEDTHROUGH

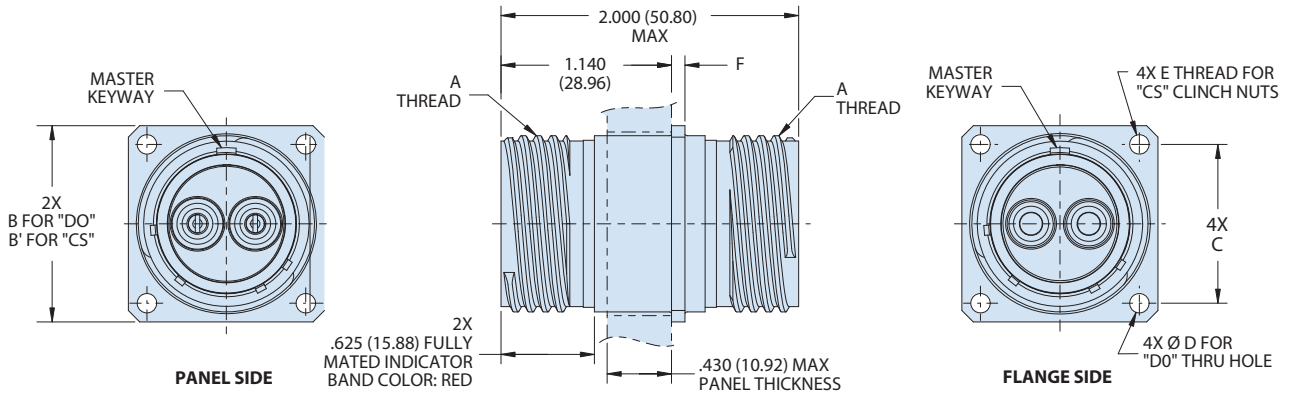


Shell Size	G	H Flat
11	0.835 (21.21) 0.825 (20.96)	.771 (19.58) .761 (19.33)
13	1.020 (25.91) 1.010 (25.65)	.955 (24.26) .945 (24.00)
15	1.145 (29.08) 1.135 (28.83)	1.085 (27.56) 1.075 (27.30)
17	1.270 (32.26) 1.260 (32.00)	1.210 (30.73) 1.200 (30.48)
19	1.395 (35.43) 1.385 (35.18)	1.335 (33.91) 1.325 (33.65)
21	1.520 (38.61) 1.510 (38.35)	1.460 (37.08) 1.450 (36.83)
23	1.645 (41.78) 1.635 (41.53)	1.585 (40.26) 1.575 (40.00)
25	1.770 (44.96) 1.760 (44.70)	1.710 (43.43) 1.700 (43.18)

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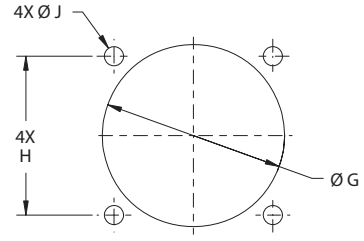
973-005 SuperNine Series III PowerPlay Triple-Start Bulkhead Feedthru Connector

-D0 AND -CS WALL MOUNT DIMENSIONS



Shell Size	A Thread	B Square	B' Square	C Basic	ØD	E	F
11	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	1.136 (28.85) 1.096 (27.84)	.812 (20.62)	.136 (3.45) .120 (3.05)	.112-40 UNC-3B	.090 (2.29)
13	.8750-.1P-.3L-TS-2A	1.138 (28.91) 1.114 (28.30)	1.230 (31.24) 1.190 (30.23)	.906 (23.01)			
15	1.0000-.1P-.3L-TS-2A	1.232 (31.29) 1.208 (30.68)	1.293 (32.84) 1.253 (31.83)	.969 (24.61)			
17	1.1875-.1P-.3L-TS-2A	1.323 (33.60) 1.299 (32.99)	1.386 (35.20) 1.346 (34.19)	1.062 (26.97)			
19	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.480 (37.59) 1.440 (36.58)	1.156 (29.36)			.120 (3.05)
21	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.574 (39.98) 1.534 (38.96)	1.250 (31.75)			
23	1.5000-.1P-.3L-TS-2A	1.701 (43.21) 1.677 (42.60)	1.759 (44.68) 1.719 (43.66)	1.375 (34.92)	.162 (4.11) .146 (3.71)	.138-32 UNC-3B	
25	1.6250-.1P-.3L-TS-2A	1.823 (46.30) 1.799 (45.69)	1.884 (47.85) 1.844 (46.84)	1.500 (38.10)			

PANEL CUT OUT FOR BULKHEAD FEEDTHROUGH

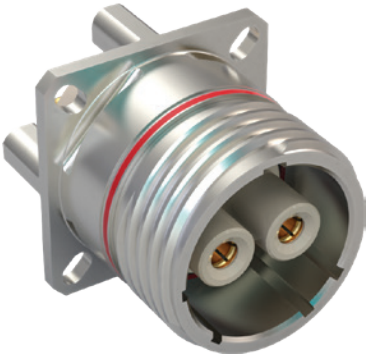


Shell Size	Ø G Min	H Basic	Ø J
11	.796 (20.22)	.812 (20.62)	.133 (3.38) .123 (3.12)
13	.922 (23.42)	.906 (23.01)	
15	1.047 (26.59)	.969 (24.61)	
17	1.219 (30.96)	1.062 (26.97)	
19	1.297 (32.94)	1.156 (29.36)	
21	1.422 (36.12)	1.250 (31.75)	
23	1.547 (39.29)	1.375 (34.92)	.159 (4.04) .149 (3.78)
25	1.672 (42.47)	1.500 (38.10)	

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973-006 SuperNine Series III PowerPlay with PC Tail Contacts 00, D0, CS Panel-Mount Receptacle Connectors

SUPERNINE SERIES III POWERPLAY TRIPLE-START



HOW TO ORDER

Sample Part Number	973-006	00	ME	17-2	P	N
Basic Part Number	38999 Power Connector					
Connector Style	**00** = Receptacle, Panel-Mount with Slotted Holes **D0** = Receptacle, Panel-Mount with Round Holes **CS** = Receptacle, Panel-Mount with Standard Clinch Nuts					
Material/Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc **Z1** = Stainless Steel, Passivated					
Shell Size/ Insert Arrangement	See Contact Arrangements Table					
Contact Style	**P** = Pin Contact **S** = Socket Contact					
Polarization Position	**A, B, C, D, E, N** = Normal					

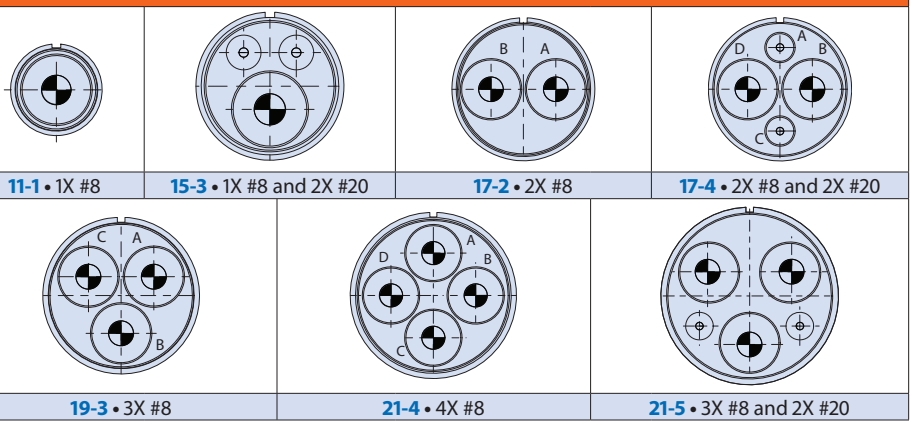
MATERIAL/FINISH

- Shell / jam nut: per How to Order table
- Interfacial / O-ring seal: silicone blend
- Contacts: copper alloy / gold
- Insulator: High-Temp composite

NOTES

- Panel-Mount and jam nut PC tail receptacles 973-006 mate with 973-001 plugs having the same size, layout, polarization, and opposite contact gender.
- Pin contacts with protective tip and installed socket contacts are finger-proof to IEC 60529 level IP2X (rated voltages not exceeding 1,000 VAC or 1500 VDC). Contacts are Glenair high conductivity Crown Ring contacts.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level) (DWV value pertains to connector interface and insert. It is up to the end user to ensure the board side is suitably insulated)
  - Insulation resistance: 5000 megohm min at 500 VDC

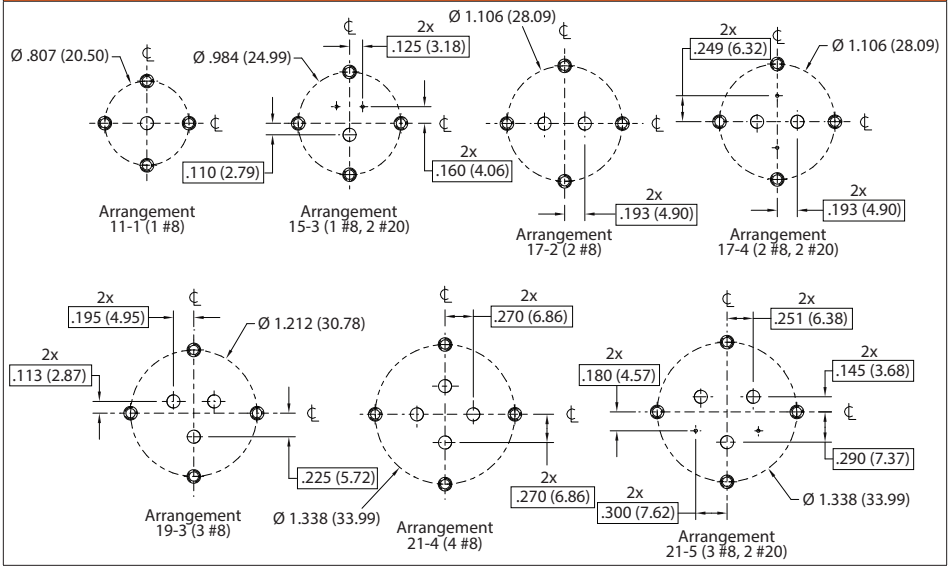
SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



11-1 • 1X #8 | **15-3** • 1X #8 and 2X #20 | **17-2** • 2X #8 | **17-4** • 2X #8 and 2X #20

19-3 • 3X #8 | **21-4** • 4X #8 | **21-5** • 3X #8 and 2X #20

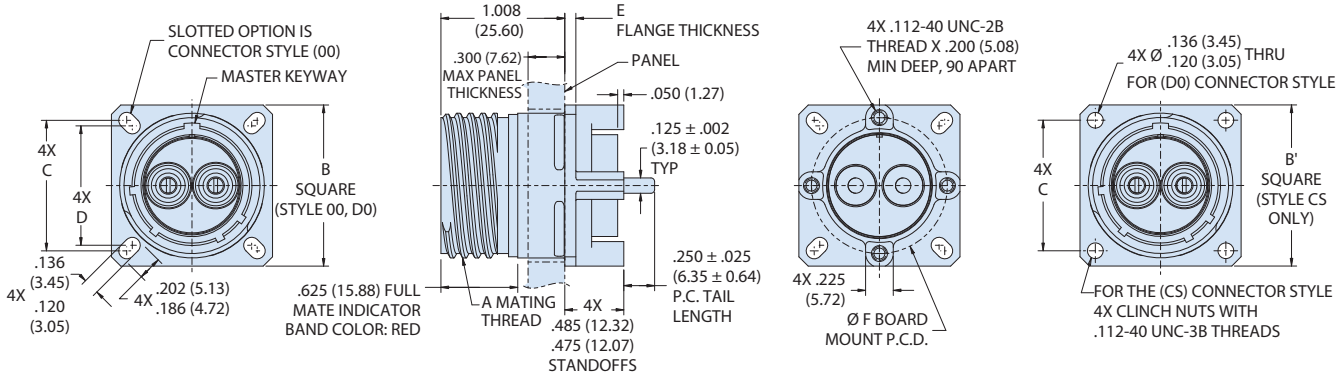
PC BOARD PATTERN



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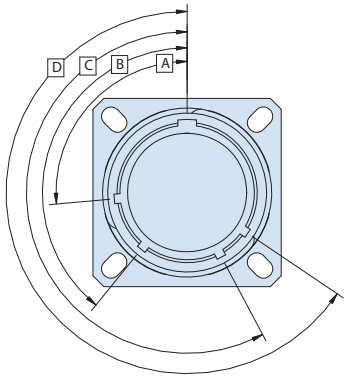
973-006 SuperNine Series III PowerPlay with PC Tail Contacts 00, D0, CS Panel-Mount Receptacle Connectors

00, D0, AND CS PANEL-MOUNT RECEPTACLE DIMENSIONS



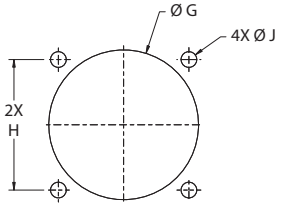
Shell Size	A Thread	B	B′	C Basic	D Basic	E	Ø F
11	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	1.136 (28.85) 1.096 (27.84)	0.812 (20.62)	0.719 (18.26)	.090 (2.29)	0.807 (20.50)
17	1.1875-.1P-.3L-TS-2A	1.323 (33.60) 1.299 (32.99)	1.386 (35.20) 1.346 (34.19)	1.062 (26.97)	.969 (24.61)		1.106 (28.09)
19	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.480 (37.59) 1.440 (36.58)	1.156 (29.36)	1.062 (26.97)		1.212 (30.78)
21	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.574 (39.98) 1.534 (38.96)	1.250 (31.75)	1.156 (29.36)	.120 (3.05)	1.338 (33.99)

POLARIZATION KEYS AND KEYWAYS



Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

PANEL CUT OUT FOR PANEL-MOUNT RECEPTACLES

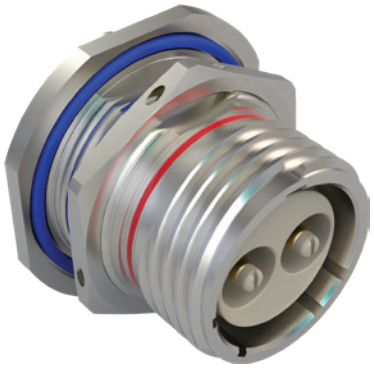


Shell Size	Ø G	H Basic	J Holes
11	0.796 (20.22)	0.812 (20.62)	0.133 (3.38) 0.123 (3.12)
17	1.219 (30.96)	1.062 (26.97)	
19	1.297 (32.94)	1.156 (29.36)	
21	1.422 (36.12)	1.250 (31.75)	

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973-006 SuperNine Series III PowerPlay with PC Tail Contacts
07 Jam-Nut Receptacle

SUPERNINE SERIES III POWERPLAY TRIPLE-START

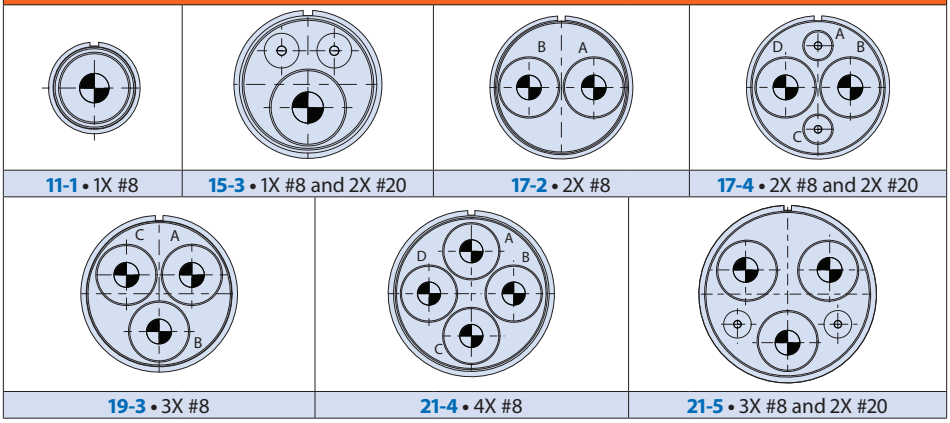


HOW TO ORDER

Sample Part Number	973-006	07	ME	17-2	P	N

Basic Part Number	38999 Power Connector
Connector Style	**07** = Jam-Nut Receptacle
Material/Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin Zinc **Z1** = Stainless Steel, Passivated
Shell Size/ Insert Arrangement	See Contact Arrangements Table
Contact Style	**P** = Pin Contact **S** = Socket Contact
Polarization Position	**A, B, C, D, E, N** = Normal

SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



11-1 • 1X #8 | **15-3** • 1X #8 and 2X #20 | **17-2** • 2X #8 | **17-4** • 2X #8 and 2X #20

19-3 • 3X #8 | **21-4** • 4X #8 | **21-5** • 3X #8 and 2X #20

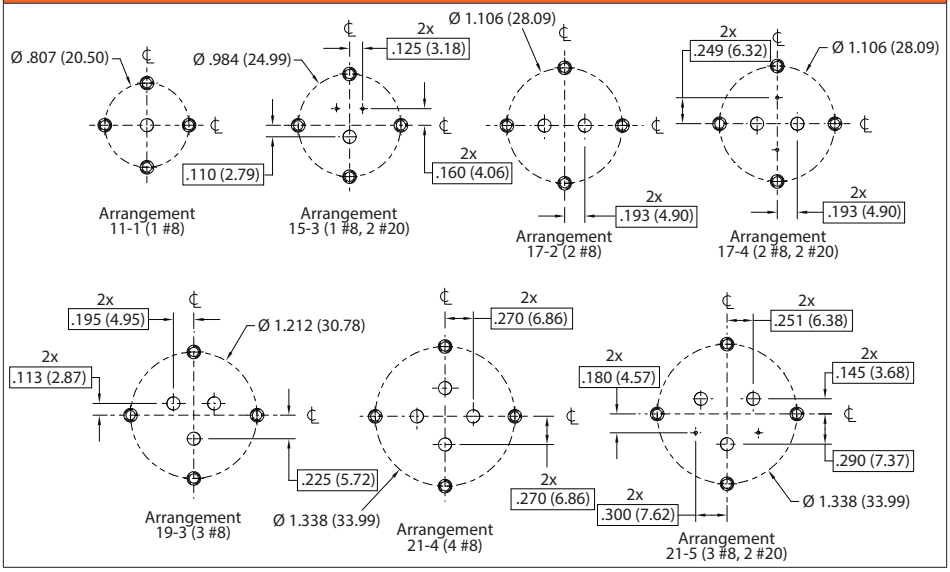
MATERIAL/FINISH

- Shell / jam nut: per How to Order table
- Interfacial / O-ring seal: silicone blend
- Contacts: copper alloy / gold
- Insulator: High-Temp composite

NOTES

- Panel-Mount and jam nut PC tail receptacles 973-006 mate with 973-001 plugs having the same size, layout, polarization, and opposite contact gender.
- Pin contacts with protective tip and installed socket contacts are finger-proof to IEC 60529 level IP2X (rated voltages not exceeding 1,000 VAC or 1500 VDC). Contacts are Glenair high conductivity Crown Ring contacts.
- Electrical Performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level) (DWV value pertains to connector interface and insert. It is up to the end user to ensure the board side is suitably insulated.)
  - Insulation resistance: 5000 megohm min at 500 VDC

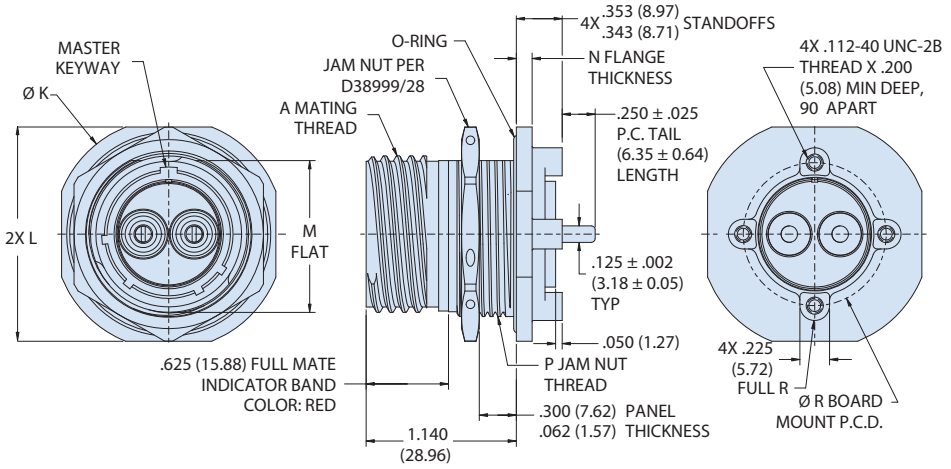
PC BOARD PATTERN



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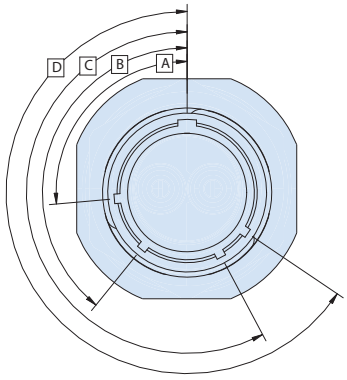
973-006 SuperNine Series III PowerPlay with PC Tail Contacts
07 Jam-Nut Receptacle

07 JAM NUT RECEPTACLE DIMENSIONS



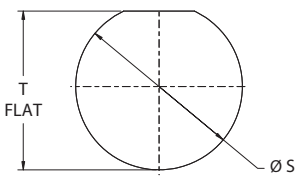
Shell Size	A Thread	Ø K	L	M	N	P Thread	Ø R
11	.7500-.1P-.3L-TS-2A	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	0.755 (19.18) 0.745 (18.92)	0.120 (3.05)	M20 X 1.0-6g 0.100R	0.807 (20.50)
17	1.1875-.1P-.3L-TS-2A	1.764 (44.81) 1.740 (44.20)	1.642 (41.71) 1.610 (40.89)	1.191 (30.25) 1.181 (30.00)		M32 X 1.0-6g 0.100R	1.106 (28.09)
19	1.2500-.1P-.3L-TS-2A	1.949 (49.50) 1.925 (48.90)	1.827 (46.41) 1.795 (45.59)	1.316 (33.43) 1.306 (33.17)	0.145 (3.68)	M35 X 1.0-6g 0.100R	1.212 (30.78)
21	1.3750-.1P-.3L-TS-2A	2.075 (52.71) 2.051 (52.10)	1.953 (49.61) 1.921 (48.79)	1.441 (36.60) 1.431 (36.35)		M38 X 1.0-6g 0.100R	1.338 (33.99)

POLARIZATION KEYS AND KEYWAYS



Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

PANEL CUT OUT FOR JAM NUT RECEPTACLES



Shell Size	Ø S	T Flat
11	0.835 (21.21) 0.825 (20.96)	0.771 (19.58) 0.761 (19.33)
17	1.270 (32.26) 1.260 (32.00)	1.210 (30.73) 1.200 (30.48)
19	1.395 (35.43) 1.385 (35.18)	1.335 (33.91) 1.325 (33.65)
21	1.520 (38.61) 1.510 (38.35)	1.460 (37.08) 1.450 (36.83)

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SuperNine Series III PowerPlay Triple-Start 660-137 Receptacle Cover



HOW TO ORDER

Sample Part Number	660-137	NF	19	R	6	-01

Basic Part Number	**660-137** PowerPlay Receptacle Cover
Material/Finish	**ME** = Aluminum Alloy, Electroless Nickel **MT** = Aluminum Alloy, Nickel-PTFE **NF** = Aluminum Alloy, Cad/O. D. Over Electroless Nickel (1000 Hour Salt Spray) **ZR** = Aluminum Alloy, Zinc Nickel, Black **Z1** = 300 SST, Passivate
Shell Size	**11**, **13**, **15**, **17**, **19**, **21**, **23**, **25**
Attachment Type	See Attachment Rings Style Table
Attachment Length	In Inches
Ring Style Dash Number	See Attachment Rings Table

MATERIAL/FINISH

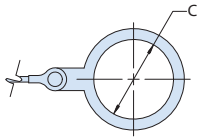
- Cover: see Material/Finish Table
- Hardware, rivet: CRES/passivate
- Sealant, rivet: 2 part epoxy
- Rope attachments: Per Attachment Rings Style Table
- Anti-decoupling device: corrosion resistant material

NOTES

- Max diameter over which mandrel will rotate freely shown in Attachment Ring Table.
- Length tolerance for sash chain (s) is ± one (1) link, for all other attachments ± .25.

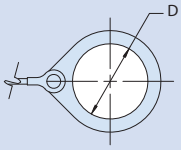
ATTACHMENT RING

Style A



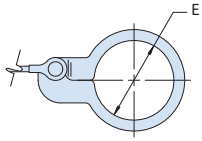
Dash Number	C Dia
085	0.265 (6.73)
095	0.312 (7.92)
100	0.391 (9.93)
101	0.516 (13.11)
102	0.583 (14.81)
103	0.641 (16.28)
104	0.708 (17.98)
105	0.766 (19.46)
106	0.896 (22.76)
107	1.016 (25.81)
108	1.141 (28.98)
109	1.266 (32.16)
110	1.391 (35.33)
111	1.521 (38.63)
112	1.641 (41.68)
113	1.766 (44.86)
114	1.891 (48.03)
115	2.078 (52.78)
116	2.406 (61.11)
117	2.510 (63.75)

Style B



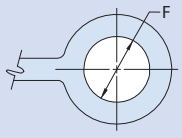
Dash Number	D Dia
08	0.468 (11.89)
10	0.593 (15.06)
12	0.718 (18.24)
14	0.844 (21.44)
16	0.968 (24.59)
18	1.093 (27.76)
20	1.187 (30.15)
22	1.343 (34.11)
24	1.484 (37.69)
28	1.687 (42.85)
32	1.968 (49.99)
36	2.187 (55.55)
40	2.406 (61.11)
44	2.656 (67.46)
48	3.031 (76.99)

Style C



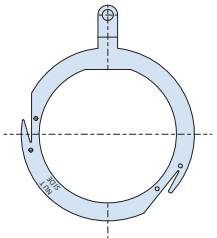
Dash Number	E Dia
50	0.425 (10.80)
52	0.485 (12.32)
54	0.640 (16.26)
56	0.750 (19.05)
58	0.890 (22.61)
60	1.015 (25.78)
62	1.095 (27.81)
64	1.130 (28.70)
66	1.250 (31.75)
68	1.350 (34.29)
70	1.375 (34.92)
72	1.485 (37.72)
74	1.625 (41.28)
76	1.750 (44.45)
78	1.875 (47.63)
80	1.980 (50.29)
82	2.060 (52.32)
84	2.235 (56.77)
86	2.310 (58.67)
88	2.475 (62.87)
90	2.655 (67.44)
92	2.810 (71.37)
94	3.045 (77.34)

Style D



Dash Number	F Dia
01	0.140 (3.56)
02	0.182 (4.62)
03	0.191 (4.85)
04	0.197 (5.00)
05	0.167 (4.24)
06	0.125 (3.18)
07	0.218 (5.54)
09	0.156 (3.96)
00	No Eyelet

Style RL

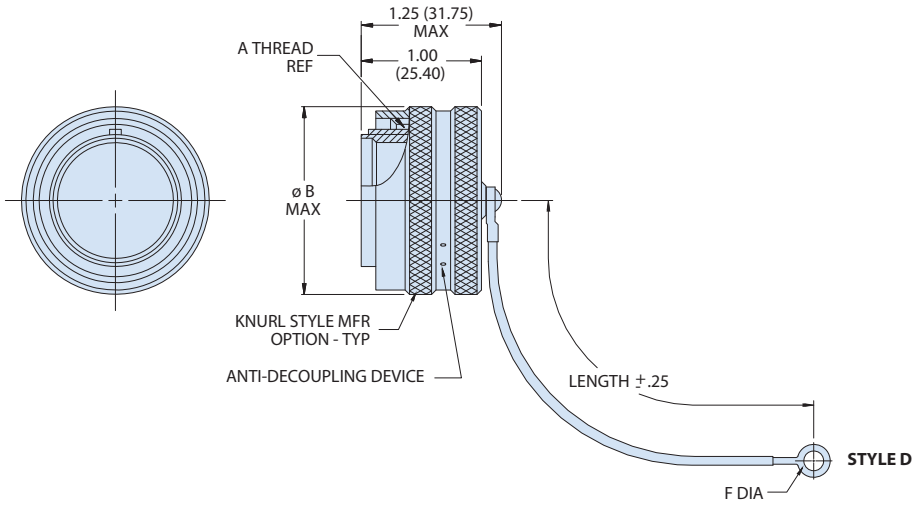


SEE DRAWING 677-048

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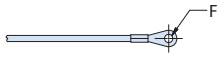
SuperNine Series III PowerPlay Triple-Start 660-137 Receptacle Cover

COVER DIMENSIONS

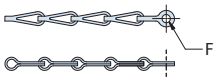


Shell Size	A Thread Class 2B	B Max
11	.7500-0.1P-0.3L-TS	0.98 (24.89)
13	.8750-0.1P-0.3L-TS	1.14 (28.96)
15	1.0000-0.1P-0.3L-TS	1.30 (33.02)
17	1.1875-0.1P-0.3L-TS	1.39 (35.31)
19	1.2500-0.1P-0.3L-TS	1.48 (37.59)
21	1.3750-0.1P-0.3L-TS	1.63 (41.40)
23	1.5000-0.1P-0.3L-TS	1.70 (43.18)
25	1.6250-0.1P-0.3L-TS	1.85 (46.99)

ATTACHMENT TYPE



Wire Rope
Types F, G, H, K, R, T, U



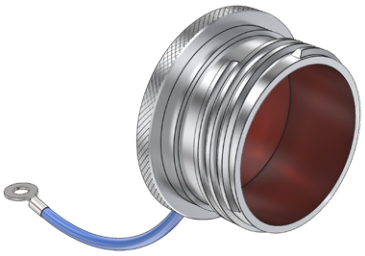
Sash Chain
Type S

Symbol	Attachment
F	Wire Rope, Nylon Jacket with Terminal
G	.094 Dia Nylon Cord (Black) with Loop Ends
H	Wire Rope, Teflon Jacket with Terminal
N	Attachment Omitted
NB	No Lanyard or Attachment Boss
R	Wire Rope, PVC Jacket with Terminal
T	Wire Rope, No Jacket, with Terminal
K	Nylon Rope
S	#8 Sash Chain, CRES, Passivate
U	Wire Rope, Polyurethane Jacket

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SuperNine Series III PowerPlay Triple-Start 660-023 Plug Cover

SUPERNINE SERIES III POWERPLAY TRIPLE-START



ATTACHMENT TYPE

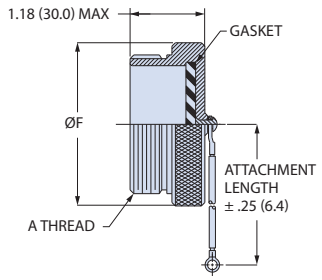
D		**SST Bead Chain** .125 (3.2) diameter, size 6, -65 to +200 °C
F		**Wire Rope, Blue Nylon Jacket** 6/6 nylon over stainless steel rope, fair flexibility, good abrasion resistance, -55 to +100 °C
G		**Black Nylon Rope** Very flexible, good abrasion and fuel resistance, .094 (2.4) diameter, -55 to +100 °C
H		**Wire Rope, Clear FEP Jacket** Clear FEP jacket over SST rope, fair flexibility, good abrasion resistance, .100" diameter, -65 to +200 °C
S		**Sash Chain** #8 sash chain, stainless steel. Length tolerance is ± one link .280 (7.1)
SK		**Nylon Rope with Slip Knot** Very flexible, good abrasion and fuel resistance, .094 (2.4) diameter. Length includes .5" (13mm) dia. loop, -55 to +100 °C
T		**SST Wire Rope, No Jacket** Good flexibility, good abrasion resistance, .047 (1.2) diameter, passivated, -65 to +200 °C
U		**Wire Rope, Black Polyurethane** Stainless steel rope with black polyurethane coating, flexible, excellent abrasion resistance and resistance to fuels, .080" (2mm) diameter, -55 to +125 °C

HOW TO ORDER

Sample Part Number	660-023	M	17	S	5	-05

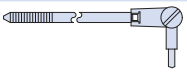
Basic Part Number	**660-023** Series 66 Plug Cover
Material/Finish	**C** = Aluminum, Black Anodize **M** = Aluminum, Electroless Nickel **NF** = Aluminum, Olive Drab Cadmium **MT** = Aluminum, Nickel-PTFE **ZR** = Aluminum, Black Zinc-Nickel **TZ** = Aluminum, Tin-Zinc **Z1** = Stainless Steel, Passivate
Shell Size	**11**, **13**, **15**, **17**, **19**, **21**, **23**, **25**
Attachment Type	**N** = No Attachment See Attachment Types Table
Attachment Length	Omit for Attachment Type N Length in One Inch Increments
Attachment Ring	Omit for Attachment Types N and SK **-00** = No Ring See Table for Attachment Ring Codes

DIMENSIONS



Shell Size	A Thread	ø F Max
11	.750-0.1P-0.3L-TS-2A	1.024 *(26.0)
13	.875-0.1P-0.3L-TS-2A	1.220 *(31.0)
15	1.000-0.1P-0.3L-TS-2A	1.300 *(33.0)
17	1.1875-0.1P-0.3L-TS-2A	1.457 *(37.0)
19	1.250-0.1P-0.3L-TS-2A	1.575 *(40.0)
21	1.375-0.1P-0.3L-TS-2A	1.732 *(44.0)
23	1.500-0.1P-0.3L-TS-2A	1.811 *(46.0)
25	1.625-0.1P-0.3L-TS-2A	1.969 *(50.0)

ATTACHMENT RING

EYELET		STYLE A RING		STYLE B RING		SPLIT RING	
							
Code	Eyelet I.D. ± .010 (0.3)	Code	Ring I.D. ± .015 (0.4)	Code	Ring I.D. ± .015 (0.4)	Code	Ring I.D. ± .015 (0.4)
-06	.125 (3.2)	-095	.312 (7.9)	-10	.593 (15.1)	-50	.425 (10.8)
-01	.140 (3.6)	-100	.391 (9.9)	-12	.718 (18.2)	-52	.485 (12.3)
-09	.156 (4.0)	-101	.516 (13.1)	-13	.765 (19.4)	-54	.640 (16.3)
-05	.167 (4.2)	-103	.641 (16.3)	-14	.844 (21.4)	-56	.750 (19.1)
-02	.182 (4.6)	-104	.708 (18.0)	-15	.890 (22.6)	-58	.890 (22.6)
-03	.191 (4.9)	-105	.766 (19.5)	-17	1.015 (25.8)	-60	1.015 (25.8)
-04	.197 (5.0)	-106	.896 (22.8)	-19	1.140 (29.0)	-62	1.095 (27.8)
-07	.218 (5.5)	-107	1.016 (25.8)	-20	1.203 (30.6)	-64	1.130 (28.7)
		-108	1.141 (29.0)	-21	1.265 (32.1)	-66	1.250 (31.8)
CABLE TIE		-208	1.203 (30.6)	-22	1.343 (34.1)	-68	1.350 (34.3)
		-109	1.266 (32.2)	-24	1.484 (37.7)	-70	1.375 (34.9)
		-110	1.391 (35.3)	-27	1.640 (41.7)	-72	1.485 (37.7)
		-111	1.521 (38.6)	-29	1.765 (44.8)	-74	1.625 (41.3)
		-112	1.641 (41.7)	-30	1.890 (48.0)	-76	1.750 (44.5)
		-113	1.766 (44.9)	-31	1.953 (49.6)	-80	1.980 (50.3)
		-114	1.891 (48.0)	-33	2.077 (52.8)	-84	2.235 (56.8)
		-115	2.078 (52.8)	-36	2.187 (55.5)	-86	2.310 (58.7)
		-116	2.406 (61.1)	-40	2.406 (61.1)	-88	2.475 (62.9)
		-117	2.510 (63.8)	-44	2.656 (67.5)	-90	2.655 (67.4)

-WS
Black 6/6 nylon cable tie 1.77 (45.0) max. wire bundle dia.

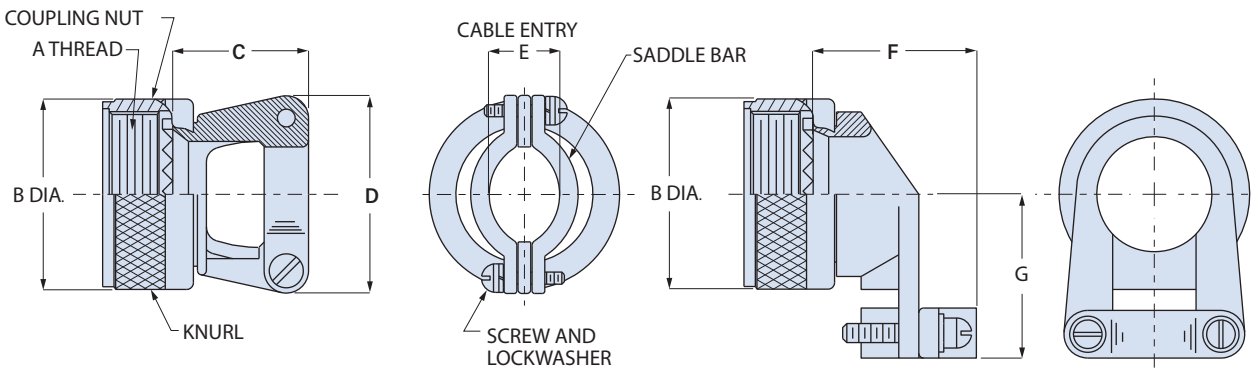
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SuperNine Series III PowerPlay Triple-Start
620H*011 Saddle Clamp, General Purpose



HOW TO ORDER			
Sample Part Number	**620H*011**	**TZ**	**11**
Basic Part Number	**620HS011** = Straight **620HA011** = 90°		
Material/Finish	**C** = Black Anodize **M** = Electroless Nickel **MT** = Nickel-PTFE **NF** = Olive Drab Cadmium **ZR** = Black Zinc-Nickel **TZ** = Tin-Zinc Body, saddles, coupling nut : aluminum Screws, washers, clinch nuts: stainless steel		
Shell Size	**11**, **13**, **15**, **17**, **19**, **21**, **23**, **25**		

CONNECTOR DIMENSIONS



Shell Size	A Thread	øB Max.	C Max	D Max	E Cable Entry		F Max.	G Max.	Screw Size
					Closed	Open			
11	M15X1.0-6H	.840 (21.3)	.88 (22.4)	.90 (22.9)	.153 (3.9)	.234 (5.9)	.786 (20.0)	.867 (22.0)	6-32
13	M18X1.0-6H	.960 (24.4)	.98 (24.9)	1.10 (27.9)	.190 (4.8)	.328 (8.3)	.979 (24.9)	.929 (24.0)	6-32
15	M22X1.0-6H	1.090 (27.7)	1.03 (26.2)	1.15 (29.2)	.260 (6.6)	.457 (11.6)	1.039 (26.4)	.992 (25.2)	6-32
17	M25X1.0-6H	1.230 (31.2)	1.13 (28.7)	1.30 (33.0)	.283 (7.2)	.614 (15.6)	1.188 (30.2)	1.056 (26.8)	6-32
19	M28X1.0-6H	1.360 (34.5)	1.38 (35.1)	1.50 (38.1)	.325 (8.3)	.634 (16.1)	1.300 (33.0)	1.233 (31.3)	8-32
21	M31X1.0-6H	1.480 (37.6)	1.48 (37.6)	1.60 (40.6)	.343 (8.7)	.698 (17.7)	1.425 (36.2)	1.296 (32.9)	8-32
23	M34X1.0-6H	1.600 (40.6)	1.63 (41.4)	1.70 (43.2)	.381 (9.7)	.823 (20.9)	1.550 (39.4)	1.358 (34.5)	8-32
25	M37X1.0-6H	1.720 (43.7)	1.73 (43.9)	1.80 (45.7)	.418 (10.6)	.853 (21.7)	1.675 (42.6)	1.420 (36.1)	8-32

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SuperNine Series III PowerPlay Triple-Start 870H001 Swing-Arm Saddle Clamp



MATERIAL/FINISH

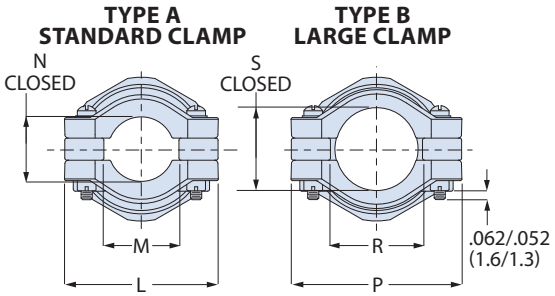
- **Composite (Code XB)**
  - Coupling nut, body, arms, saddles: polyetherimide (PEI), unplated
  - Screws, washers, inserts: stainless steel/passivated
  - Anti-decoupling springs: thermoplastic
  - Clinch Nuts: stainless steel, silver plated
- **Aluminum (Codes M, MT, NF, TZ, ZR)**
  - Coupling nut, body, arms, saddles: aluminum
  - Screws, washers, inserts: stainless steel/passivated
  - Anti-decoupling springs: thermoplastic
  - Clinch Nuts: Codes M, MT, TZ and ZR: stainless steel, silver plated.
    Code NF: stainless steel/ olive drab cadmium
- **Stainless Steel (Code Z1)**
  - Coupling nut, body, arms, saddles: SST
  - Screws, washers, inserts: stainless steel/passivated
  - Anti-decoupling springs: stainless steel
  - Clinch Nuts: stainless steel, silver plated

HOW TO ORDER

Sample Part Number	870H001	XB	23	B

Basic Part Number	**870H001** Swing-Arm Saddle Clamp for PowerPlay Connectors
Material/Finish	**XB** = Composite, No Finish (Black) **M** = Aluminum, Electroless Nickel **NF** = Aluminum, Olive Drab Cadmium **MT** = Aluminum, Nickel-PTFR **TZ** = Aluminum, Tin-Zinc **ZR** = Aluminum, Black Zinc-Nickel **Z1** = Stainless Steel, Passivated
Shell Size	**11**, **13**, **15**, **17**, **19**, **21**, **23**, **25**
Clamp Size	**A** = Standard Clamp **B** = Large Clamp

CLAMP DIMENSIONS



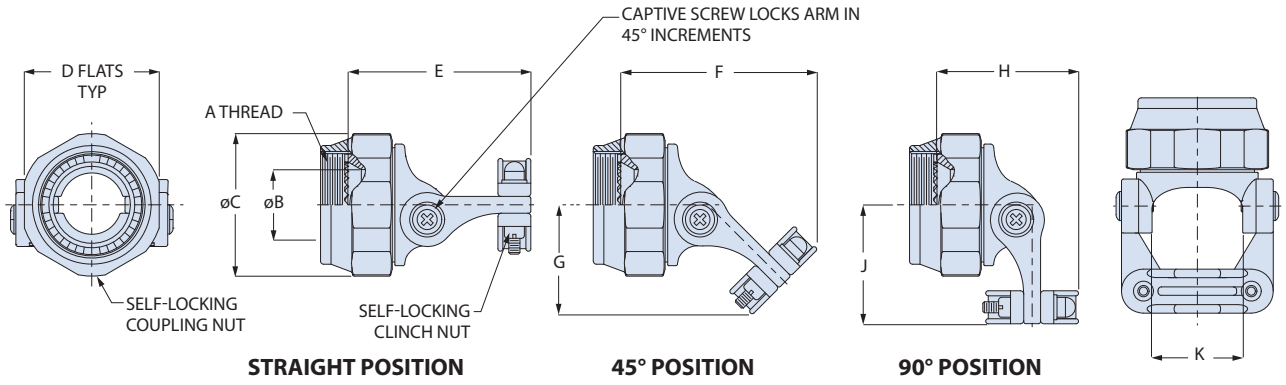
Standard Clamp			
Shell Size	L Max	M Min	N Ref.
11	1.05 (26.7)	.27 (6.9)	.310 (7.9)
13	1.20 (30.5)	.35 (8.9)	.422 (10.7)
15	1.30 (33.0)	.47 (11.9)	.538 (13.7)
17	1.44 (36.6)	.55 (14.0)	.590 (15.0)
19	1.56 (39.6)	.62 (15.7)	.660 (16.8)
21	1.69 (42.9)	.70 (17.8)	.744 (18.9)
23	1.77 (45.0)	.78 (19.8)	.826 (21.0)
25	1.89 (48.0)	.85 (21.6)	.896 (22.8)

Large Clamp			
Shell Size	P Max	R Min	S Ref.
11	1.20 (30.5)	.45 (11.4)	.422 (10.7)
13	1.45 (36.8)	.62 (15.7)	.637 (16.2)
15	1.54 (39.1)	.68 (17.3)	.707 (18.0)
17	1.60 (40.6)	.80 (20.3)	.759 (19.3)
19	1.73 (43.9)	.90 (22.9)	.841 (21.4)
21	1.95 (49.5)	1.05 (26.7)	.996 (25.3)
23	2.08 (52.8)	1.18 (30.0)	1.060 (26.9)
25	2.32 (58.9)	1.30 (33.0)	1.124 (28.5)

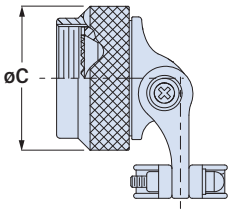
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SuperNine Series III PowerPlay Triple-Start 870H001 Swing-Arm Saddle Clamp

CONNECTOR DIMENSIONS



Shell Size	A Thread	øB Min	C Max	D Flats	E Max	F Max	G Max	H Max	J Max	K Ref.
11	M15X1.0-6H	.390 (9.9)	.938 (23.8)	.875 (22.2)	1.50 (38.1)	1.45 (36.8)	.87 (22.1)	.94 (23.9)	.96 (24.4)	.455 (11.6)
13	M18X1.0-6H	.504 (12.8)	1.125 (28.6)	1.000 (25.4)	1.56 (39.6)	1.60 (40.6)	.97 (24.6)	1.12 (28.4)	1.03 (26.2)	.598 (15.2)
15	M22X1.0-6H	.630 (16.0)	1.250 (31.8)	1.125 (28.6)	1.57 (39.9)	1.68 (42.7)	1.02 (25.9)	1.21 (30.7)	1.10 (27.9)	.710 (18.0)
17	M25X1.0-6H	.756 (19.2)	1.375 (34.9)	1.250 (31.8)	1.66 (42.2)	1.78 (45.2)	1.09 (27.7)	1.29 (32.8)	1.16 (29.5)	.839 (21.3)
19	M28X1.0-6H	.843 (21.4)	1.500 (38.1)	1.375 (34.9)	1.66 (42.2)	1.86 (47.2)	1.14 (29.0)	1.39 (35.3)	1.22 (31.0)	.934 (23.7)
21	M31X1.0-6H	.969 (24.6)	1.625 (41.3)	1.500 (38.1)	1.81 (46.0)	2.02 (51.3)	1.24 (31.5)	1.50 (38.1)	1.29 (32.8)	1.068 (27.1)
23	M34X1.0-6H	1.091 (27.7)	1.750 (44.5)	1.625 (41.3)	1.84 (46.7)	2.09 (53.1)	1.30 (33.0)	1.57 (39.9)	1.36 (34.5)	1.197 (30.4)
25	M37X1.0-6H	1.217 (30.9)	1.875 (47.6)	1.750 (44.5)	2.00 (50.8)	2.20 (55.9)	1.45 (36.8)	1.64 (41.7)	1.55 (39.4)	1.323 (33.6)



Aluminum and SST Versions

Aluminum and stainless steel versions have round knurled coupling nuts.

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SuperNine Series III PowerPlay Triple-Start
870H004 Swing-Arm Saddle Clamp, Composite, EMI Banding



Figure 1
Finish codes NFS, BNS

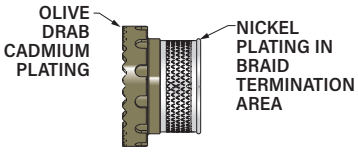
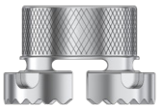


Figure 2
Banding adapter slots



Route pigtail shield braids into optional "T" slots in banding adapter.

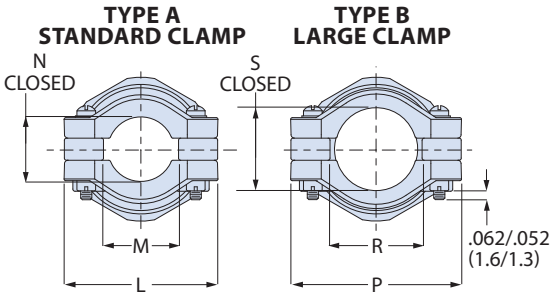
MATERIAL/FINISH

- Coupling nut, body, arms, saddles: polyetherimide (PEI)/ unplated black
- Screws, washers, inserts: stainless steel/passivated
- Anti-decoupling springs: thermoplastic
- Banding adapter: aluminum alloy or brass
- Band (optional): stainless steel/ passivated
- Clinch nuts: stainless steel/ silver plated

HOW TO ORDER

Sample Part Number	870H004	M	23	A	S	K
Basic Part Number	**870H001** Swing-Arm Saddle Clamp for PowerPlay Connectors					
Material/Finish	**M** = Alum/Electroless Nickel **NF** = Alum/Olive Drab Cadmium **NFS** = Alum/O.D. Cadmium, selective (fig. 1) **MT** = Alum/Nickel-PTFE **TZ** = Alum/Tin-Zinc **BM** = Brass/Electroless Nickel **BN** = Brass/Olive Drab Cadmium **BNS** = Brass/O.D. Cadmium, selective (fig. 1) **BMT** = Brass/Nickel-PTFE					
Shell Size	**11**, **13**, **15**, **17**, **19**, **21**, **23**, **25**					
Clamp Size	**A** = Standard Clamp **B** = Large Clamp					
Banding Adapter Slots	*Omit if not required. See Figure 2.* **S** = "T" Slots in Banding Adapter for Shield Pigtails					
Band	*Omit if not required.* **K** = Pre-Coiled Micro Band included With Clamp **J** = Pre-Coiled Micro-Slim Band included With Clamp					

CLAMP DIMENSIONS



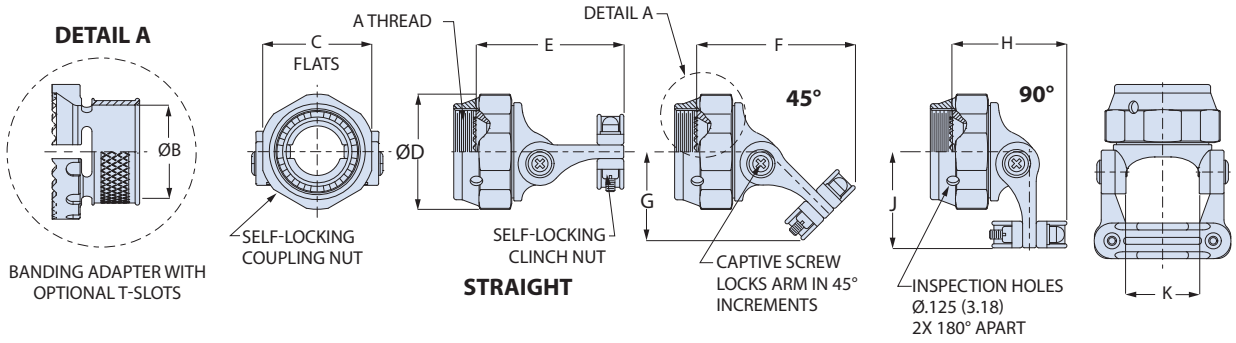
Standard Clamp			
Shell Size	L Max	M Min	N Ref.
11	1.03 (26.16)	.29 (7.37)	.310 (7.87)
13	1.21 (30.73)	.34 (8.64)	.422 (10.72)
15	1.32 (33.53)	.45 (11.43)	.538 (13.67)
17	1.45 (36.83)	.55 (13.97)	.590 (14.99)
19	1.54 (39.12)	.65 (16.51)	.660 (16.76)
21	1.67 (42.42)	.74 (18.80)	.744 (18.90)
23	1.79 (45.47)	.87 (22.10)	.826 (20.98)
25	1.92 (48.77)	.99 (25.15)	.896 (22.76)

Large Clamp			
Shell Size	P Max	R Min	S Ref.
11	1.20 (30.48)	.45 (11.43)	.422 (10.72)
13	1.45 (36.83)	.62 (15.75)	.637 (16.18)
15	1.54 (39.12)	.68 (17.27)	.707 (17.96)
17	1.60 (40.64)	.80 (20.32)	.759 (19.28)
19	1.73 (43.94)	.90 (22.86)	.841 (21.36)
21	1.95 (49.53)	1.05 (26.67)	.996 (25.30)
23	2.08 (52.83)	1.18 (29.97)	1.060 (26.92)
25	2.32 (58.93)	1.30 (33.02)	1.124 (28.55)

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SuperNine Series III PowerPlay Triple-Start
870H004 Swing-Arm Saddle Clamp, Composite, EMI Banding

CONNECTOR DIMENSIONS



Shell Size	A Thread	øB Min	C Max	D Flats	E Max	F Max	G Max	H Max	J Max	K Ref.
11	M15X1.0-6H	.305 (7.75)	.875 (22.23)	.938 (23.83)	1.58 (40.13)	1.52 (38.61)	.83 (21.08)	1.04 (26.42)	.93 (23.62)	.455 (11.56)
13	M18X1.0-6H	.404 (10.26)	1.000 (25.40)	1.125 (28.58)	1.66 (42.16)	1.67 (42.42)	.93 (23.62)	1.17 (29.72)	1.03 (26.16)	.598 (15.19)
15	M22X1.0-6H	.526 (13.36)	1.125 (28.58)	1.250 (31.75)	1.67 (42.42)	1.76 (44.70)	1.00 (25.40)	1.28 (32.51)	1.10 (27.94)	.710 (18.03)
17	M25X1.0-6H	.658 (16.71)	1.250 (31.75)	1.375 (34.92)	1.77 (44.96)	1.89 (48.01)	1.09 (27.69)	1.40 (35.56)	1.16 (29.46)	.839 (21.31)
19	M28X1.0-6H	.777 (19.74)	1.375 (34.92)	1.500 (38.10)	1.77 (44.96)	1.96 (49.78)	1.14 (28.96)	1.50 (38.10)	1.22 (30.99)	.934 (23.72)
21	M31X1.0-6H	.877 (22.28)	1.500 (38.10)	1.625 (41.28)	1.92 (48.77)	2.11 (53.59)	1.22 (30.99)	1.57 (39.88)	1.29 (32.77)	1.068 (27.13)
23	M34X1.0-6H	.999 (25.37)	1.625 (41.28)	1.750 (44.45)	1.95 (49.53)	2.18 (55.37)	1.28 (32.51)	1.67 (42.42)	1.36 (34.54)	1.197 (30.40)
25	M37X1.0-6H	1.127 (28.63)	1.750 (44.45)	1.875 (47.63)	1.98 (50.29)	2.25 (57.15)	1.34 (34.04)	1.73 (43.94)	1.43 (36.32)	1.323 (33.60)

BAND INFORMATION



Band



Micro Band Tool 601-101



Micro-Slim Band Tool 601-122

Shell Size	Pre-Coiled Micro Band Part No.	Pre-Coiled Micro-Slim Band Part No.	Length	Max Diameter
9 – 13	601-061	601-601	8.125 (206.38)	.88 (22.35)
15 – 25	601-065	601-603	14.25 (361.95)	1.88 (47.75)

Terminate cable braid to band adapter with optional pre-coiled banding strap. Glenair's Band-Master ATS® banding system provides quick, easy, cost-effective and highly reliable termination. Band is passivated stainless steel.

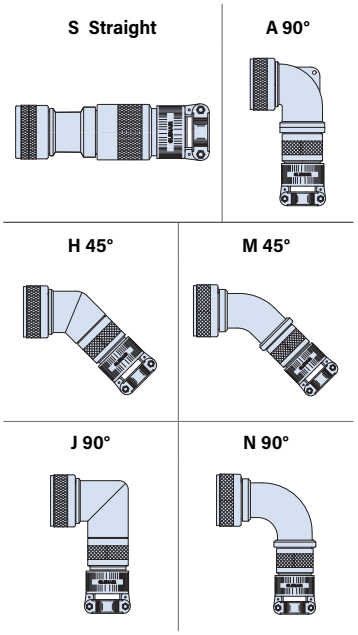
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SuperNine Series III PowerPlay Triple-Start
390H*055 EMI+Environmental Backshell, Self-Locking

SUPERNINE SERIES III POWERPLAY TRIPLE-START



PROFILE SELECTION GUIDE



Shell Size	A Thread	øB Max
11	M15X1.0-6H	1.06 (26.9)
13	M18X1.0-6H	1.17 (29.7)
15	M22X1.0-6H	1.29 (32.7)
17	M25X1.0-6H	1.42 (36.1)
19	M28X1.0-6H	1.54 (39.1)
21	M31X1.0-6H	1.67 (42.4)
23	M34X1.0-6H	2.01 (51.1)
25	M37X1.0-6H	2.12 (53.8)

HOW TO ORDER

Sample Part Number	390H*055	MT	17	10	D	3

Basic Part Number

390HS055= Straight
390HA055 = 90° Low Profile
390HH055= 45° Cut/Weld
390HJ055= 90° Cut/Weld
390HM055= 45° Full Radius
390HN055= 90° Full Radius

Material/Finish

M = Aluminum/ Electroless Nickel
MT = Aluminum/ Nickel-PTFE
NF = Aluminum/ Olive Drab Cadmium
ZR = Aluminum/ Black Zinc-Nickel
TZ = Aluminum/ Tin-Zinc
Z1 = SST/ Passivated (Profiles H, J, M, N, S only)

Shell Size

11, **13**, **15**, **17**, **19**, **21**, **23**, **25**

Entry Size

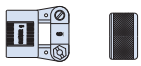
Entry Size	Max. Cable Dia.	Shell Size*
03	.250 (7.9)	09-25
04	.312 (7.9)	11-25
06	.437 (11.1)	13-25
08	.562 (14.3)	15-25
10	.625 (15.9)	15-25
12	.750 (19.1)	17-25

Entry Size	Max. Cable Dia.	Shell Size*
16	.937 (23.8)	21-25
20	1.250 (31.8)	25
24	1.375 (34.9)	-
28	1.625 (41.3)	-
32	1.875 (47.6)	-

* If selected entry size exceeds shell size range, a Style 2 transition adapter will be included. See Maximum Entry Size for details.

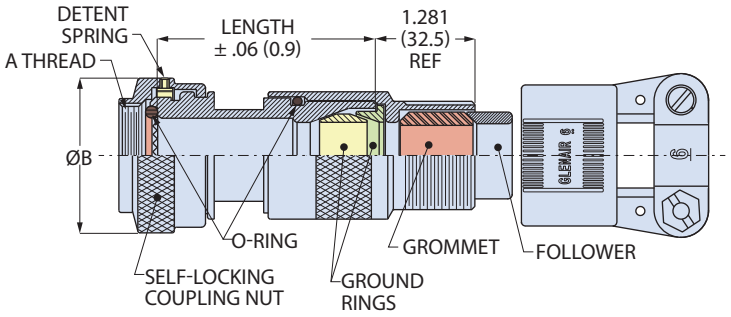
Strain Relief

H= Saddle Clamp
D = Nut



Length

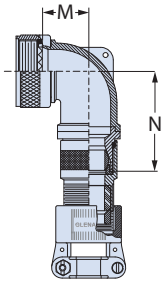
3 = 1.5 inches **6** = 3.0 inches
4 = 2.0 inches **8** = 4.0 inches
Applies to Profile **S** only.
If Entry Size is greater than "Maximum Entry Size" (see next page), then 2 inch minimum applies.



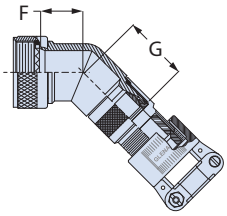
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SuperNine Series III PowerPlay Triple-Start 390H*055 EMI+Environmental Backshell, Self-Locking

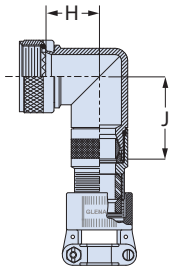
CONNECTOR DIMENSIONS



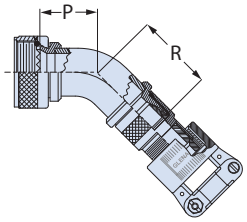
Profile A
Low Profile
90° Elbow



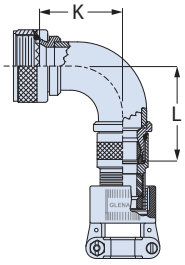
Profile H
Cut/Weld
45° Elbow



Profile J
Cut/Weld
90° Elbow



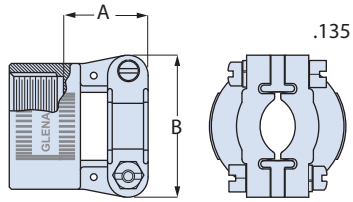
Profile M
Full Radius
45° Elbow



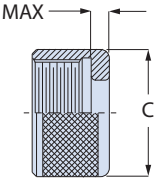
Profile N
Full Radius
90° Elbow

Shell Size	F Max	G Max	H Max	J Max	K Max	L Max	M Max	N Max	P Max	R Max
11	.820 (20.8)	1.063 (27.0)	.966 (24.5)	1.217 (30.9)	1.406 (35.7)	1.411 (35.8)	.750 (19.1)	1.990 (50.5)	1.031 (26.2)	1.145 (29.1)
13	.844 (21.4)	1.094 (27.8)	1.026 (26.1)	1.277 (32.4)	1.531 (38.9)	1.537 (39.0)	.765 (19.4)	2.020 (51.3)	1.094 (27.8)	1.195 (30.4)
15	.961 (21.9)	1.119 (28.4)	1.076 (27.3)	1.347 (34.2)	1.656 (42.1)	1.761 (44.7)	.855 (21.7)	2.154 (54.7)	1.156 (29.4)	1.245 (31.6)
17	.888 (22.6)	1.147 (29.1)	1.136 (28.9)	1.407 (35.7)	1.781 (45.2)	1.787 (45.4)	1.040 (26.4)	2.244 (57.0)	1.218 (30.9)	1.300 (33.0)
19	.904 (23.0)	1.157 (29.4)	1.176 (29.9)	1.427 (36.2)	1.906 (48.4)	1.911 (48.5)	1.130 (28.7)	2.414 (61.3)	1.250 (31.8)	1.350 (34.3)
21	.929 (23.6)	1.177 (29.9)	1.236 (31.4)	1.487 (37.8)	2.031 (51.6)	2.037 (51.7)	1.130 (28.7)	2.414 (61.3)	1.312 (33.3)	1.400 (35.6)
23	.956 (24.3)	1.217 (30.9)	1.296 (32.9)	1.567 (39.8)	2.156 (54.8)	2.161 (54.9)	1.280 (32.5)	2.587 (65.7)	1.344 (34.1)	1.455 (37.0)
25	.979 (24.9)	1.247 (31.7)	1.356 (34.4)	1.637 (41.6)	2.281 (57.9)	2.287 (58.1)	1.280 (32.5)	2.587 (65.7)	1.406 (35.7)	1.505 (38.1)

STRAIN RELIEF DIMENSIONS



Saddle Clamp

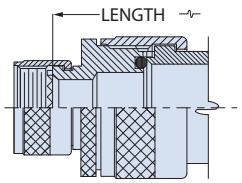


Nut

Entry Size	A Max	B Max	øC Max	Cable Range Min	Cable Range Max
03	.780 (19.8)	.957 (24.3)	.630 (16.0)	.125 (3.2)	.250 (6.4)
04	.780 (19.8)	.957 (24.3)	.755 (19.2)	.125 (3.2)	.312 (7.9)
06	.780 (19.8)	1.145 (29.1)	.942 (23.9)	.250 (6.4)	.437 (11.1)
08	.780 (19.8)	1.332 (33.8)	1.067 (27.1)	.312 (7.9)	.562 (14.3)
10	.780 (19.8)	1.332 (33.8)	1.192 (30.3)	.350 (8.9)	.625 (15.9)
12	.811 (20.6)	1.551 (39.4)	1.380 (35.1)	.500 (12.7)	.750 (19.1)
16	.905 (23.0)	1.770 (45.0)	1.535 (39.0)	.625 (15.9)	.937 (23.8)
20	1.092 (27.7)	2.113 (53.7)	1.848 (46.9)	.875 (22.2)	1.250 (31.8)
24	1.124 (28.5)	2.363 (60.0)	2.255 (57.3)	1.000 (25.4)	1.375 (34.9)
28	1.399 (35.5)	2.770 (70.4)	2.505 (63.6)	1.250 (31.8)	1.625 (41.3)
32	1.399 (35.5)	3.020 (76.7)	2.755 (70.0)	1.437 (36.5)	1.875 (47.6)

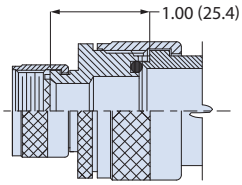
MAXIMUM ENTRY SIZE

Style 2 Straight Backshell*



The minimum length code increases from 3 (1 ½ inches) to 4 (2 inches).

Style 2 45° and 90° Backshells**



For 45° and 90° backshells, the length increases by 1.00 inches.

If the selected entry size exceeds the maximum size in this table, the backshell will have a front adapter. This is called a Style 2 backshell.

Shel Size	Maximum Entry Size
11	04
13	06
15	10
17	12
19	12
21	16
23	16
25	20

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973-004 SuperNine Series I Bayonet PowerPlay G6 Plug with EMI Spring

SUPERNINE SERIES I POWERPLAY BAYONET



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table
- Seal/Grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: hi-temp composite

NOTES

- 973-004 mates with only 973-004 of the same size, layout, and polarization and the opposite gender.
- Consult factory for crimp tools and accessory selection.
- Connectors use standard mounting cutouts and accessory threads and teeth per MIL-DTL-38999 Series III.
- Electrical performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

POLARIZATION KEYS AND KEYWAYS

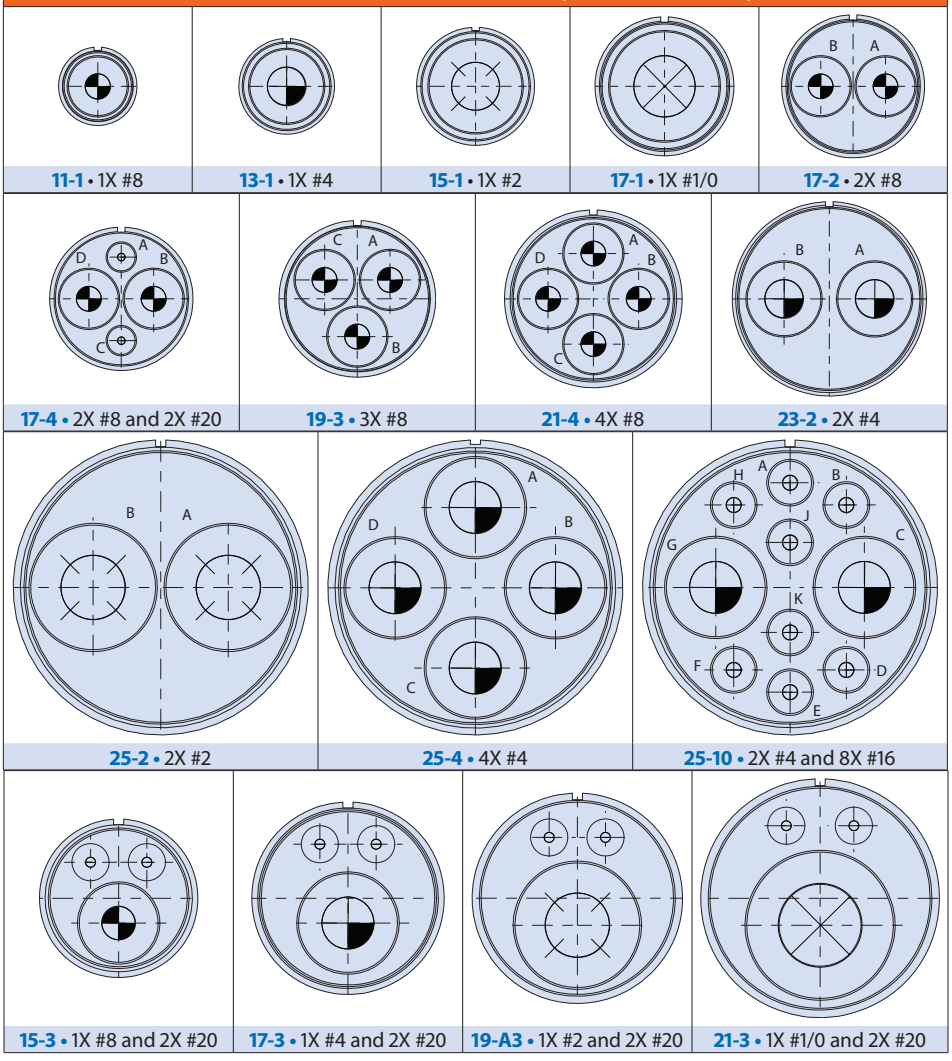
Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

HOW TO ORDER

Sample Part Number	973-004	-	G6	ME	13-1	P	N

Basic Part Number	Bayonet PowerPlay Connector
Rear Accessory Option	**-** = Accessory Thread and Teeth **B** = Banding Configuration with Groove for Shrink Boot
Connector Style	**G6** = Plug with EMI Spring
Connector Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **TZ** = Aluminum, Tin Zinc **ME** = Aluminum, Electroless Nickel **Z1** = Stainless, Passivated
Size and Layout	See Contact Layouts Table
Contact Style	See Contact Style Table
Polarization:	**A, B, C, D, E, F, G, N**

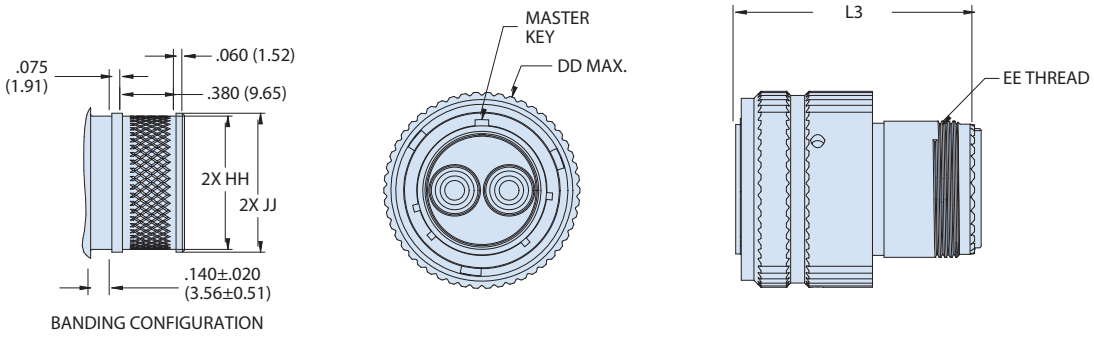
SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



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973-004 SuperNine Series I Bayonet PowerPlay G6 Plug with EMI Spring

G6 PLUG WITH EMI SPRING DIMENSIONS



Shell Size-Contact Arrangement	ØDD Max	EE Thread	ØHH	ØJJ	L3 Max
11-1	0.984 (24.99)	M15 X 1.0-6g 0.100R	0.550 (13.97)	0.595 (15.11)	1.720 (43.69)
13-1	1.157 (29.39)	M18 X 1.0-6g 0.100R	0.670 (17.02)	0.715 (18.16)	1.720 (43.69)
15-1	1.280 (32.51)	M22 X 1.0-6g 0.100R	0.815 (20.70)	0.898 (22.81)	2.100 (53.34)
15-3					1.720 (43.69)
17-1	1.406 (35.71)	M25 X 1.0-6g 0.100R	0.945 (24.00)	0.990 (25.15)	2.100 (53.34)
17-2					1.720 (43.69)
17-3					1.720 (43.69)
17-4					1.720 (43.69)
19-3	1.516 (38.51)	M28 X 1.0-6g 0.100R	1.050 (26.67)	1.100 (27.94)	1.720 (43.69)
19-A3					2.100 (53.34)
21-3	1.642 (41.71)	M31 X 1.0-6g 0.100R	1.170 (29.72)	1.220 (30.99)	2.100 (53.34)
21-4					1.720 (43.69)
23-2	1.768 (44.91)	M34 X 1.0-6g 0.100R	1.290 (32.77)	1.340 (34.04)	1.720 (43.69)
25-2	1.890 (48.01)	M37 X 1.0-6g 0.100R	1.400 (35.56)	1.450 (36.83)	2.100 (53.34)
25-4					1.720 (43.69)
25-10					1.720 (43.69)

WIRE SEALING

Contact Size	Wire Diameter
20	.040-.083 (1.02-2.11)
16	.065-.109 (1.65-2.77)
8	.209-.277 (5.31-7.04)
4	.323-.391 (8.20-9.93)
2	.400-.477 (10.16-12.12)
0	.486-.572 (12.34-14.53)

FINGER-PROOF CONTACTS

Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

CONTACT STYLE

Contact Code	Description	Contact P/N
A	Pin Connector, No Contacts	
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Size #4 Crown Ring Pin Contacts and 39029 type Size #16 Pin Contacts (insert arrangement 25-10 only)	850-325 and 850-344-16
	Pin Connector, Size #8 or #4 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arrangements 17-4, 21-5, 15-3, 17-3)	850-325 and 850-202-20
	Pin Connector, Size #2 or #0 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arrangements 19-A3, 21-3)	850-325 and 850-346-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Size #4 Crown Ring Socket Contacts and 39029 type Size #16 Socket Contacts (arrangement 25-10 only)	850-326 850-309
	Socket Connector, Size #8 or #4 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arrangements 17-4, 21-5, 15-3, 17-3)	850-326 and AS39029/56-351
	Socket Connector, Size #2 or #0 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arrangements 19-A3, 21-3)	850-326 and 850-347-20
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

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973-004 SuperNine Series I Bayonet PowerPlay 00, D0, CS Panel-Mount Receptacles

SUPERNINE SERIES I POWERPLAY BAYONET



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table
- Seal/Grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: hi-temp composite

NOTES

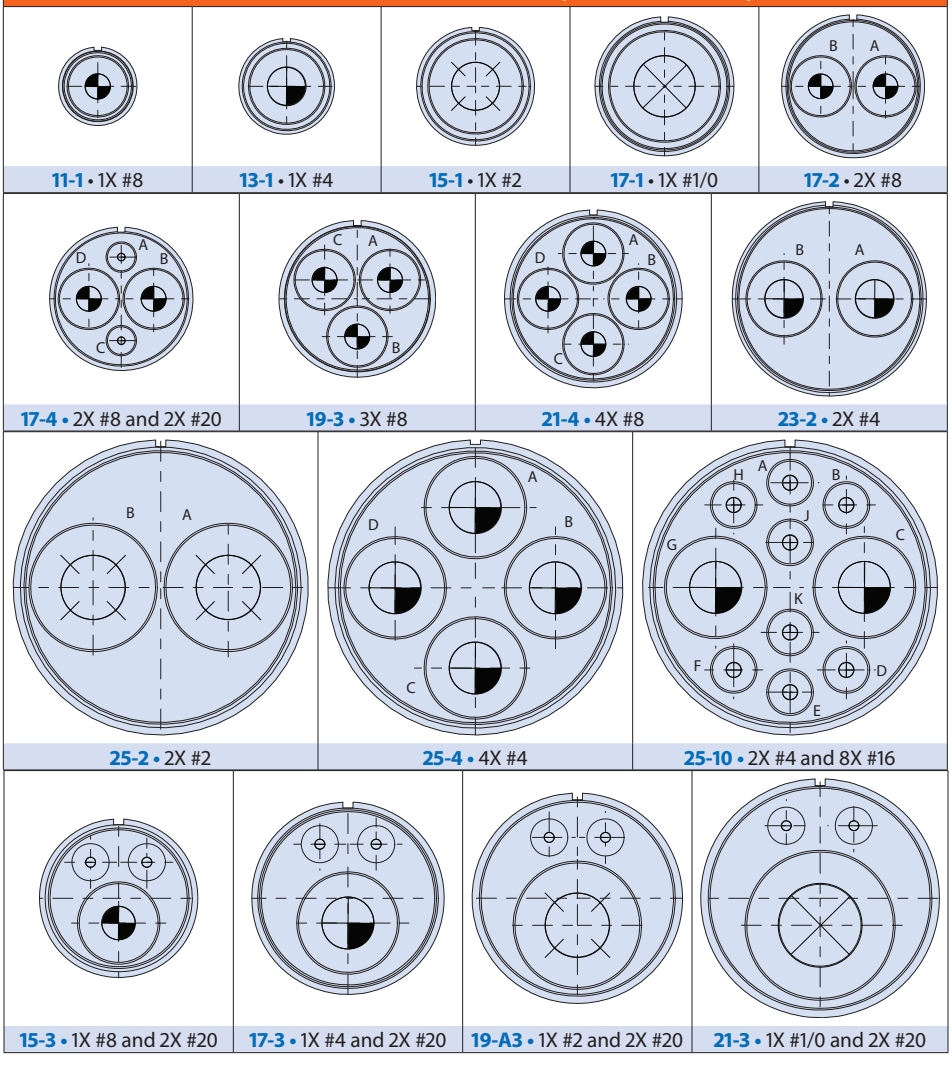
- 973-004 mates with only 973-004 of the same size, layout, and polarization and the opposite gender.
- Consult factory for crimp tools and accessory selection.
- Connectors use standard mounting cutouts and accessory threads and teeth per MIL-DTL-38999 Series III.
- Electrical performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

HOW TO ORDER

Sample Part Number	973-004	-	00	ME	13-1	P	N

Basic Part Number	Bayonet PowerPlay Connector
Rear Accessory Option	**-** = Accessory Thread and Teeth **B** = Banding Configuration with Groove for Shrink Boot
Connector Style	**00** = Receptacle, Panel-Mount with Slotted Holes **D0** = Receptacle, Panel-Mount with Round Holes **CS** = Receptacle, Panel-Mount with Standard Clinch Nuts
Connector Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **TZ** = Aluminum, Tin Zinc **ME** = Aluminum, Electroless Nickel **Z1** = Stainless, Passivated
Size and Layout	See Contact Layouts Table
Contact Style	See Contact Style Table
Polarization:	**A, B, C, D, E, F, G, N**

SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



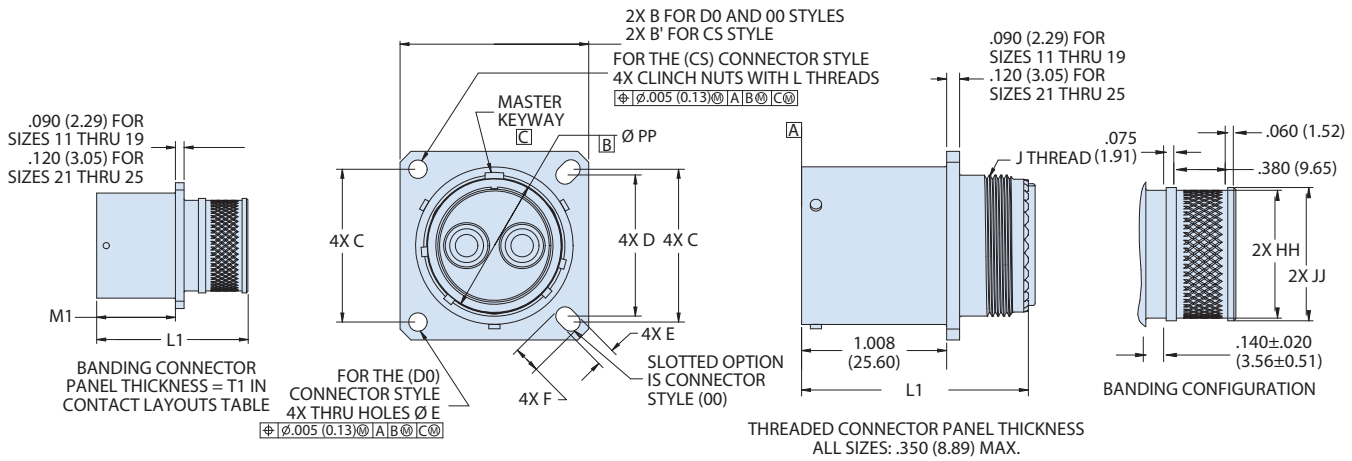
POLARIZATION KEYS AND KEYWAYS

Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

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973-004 SuperNine Series I Bayonet PowerPlay 00, D0, CS Panel-Mount Receptacles

00, D0 AND CS PANEL-MOUNT AND IN-LINE RECEPTACLE DIMENSIONS



Shell Size-Contact Arr.	B Sq	B' Sq	C Bsc	D Bsc	E	F	J Thread	L Thread	M1	L1 Max	T1 Max
11-1	1.043 (26.49) 1.019 (25.88)	1.187 (30.15) 1.147 (29.13)	0.812 (20.62)	0.719 (18.26)	0.136 (3.45) 0.120 (3.05)	0.202 (5.13) 0.186 (4.72)	M15 X 1.0-6g 0.100R	.112-40 UNC-3B	0.821 (20.85)	1.600 (40.64)	.150 (3.81)
13-1	1.138 (28.91) 1.114 (28.30)	1.281 (32.54) 1.241 (31.52)	0.906 (23.01)	0.812 (20.62)			M18 X 1.0-6g 0.100R		0.821 (20.85)	1.600 (40.64)	.150 (3.81)
15-1	1.232 (31.29) 1.208 (30.68)	1.293 (32.84) 1.253 (31.83)	.969 (24.61)	.906 (23.01)		.181 (4.60) .165 (4.19)	M22 X 1.0-6g 0.100R		0.821 (20.85)	2.000 (50.80)	.300 (7.62)
15-3									0.821 (20.85)	1.600 (40.64)	.150 (3.81)
17-1	1.323 (33.60) 1.299 (32.99)	1.437 (36.50) 1.342 (34.09)	1.062 (26.97)	0.969 (24.61)		0.202 (5.13) 0.186 (4.72)	M25 X 1.0-6g 0.100R		0.821 (20.85)	2.000 (50.80)	.300 (7.62)
17-2									0.821 (20.85)	1.600 (40.64)	.150 (3.81)
17-3									0.821 (20.85)	1.600 (40.64)	.150 (3.81)
17-4									0.821 (20.85)	1.600 (40.64)	.150 (3.81)
19-3	1.449 (36.80) 1.425 (36.20)	1.531 (38.89) 1.491 (37.87)	1.156 (29.36)	1.062 (26.97)			M28 X 1.0-6g 0.100R		0.821 (20.85)	1.600 (40.64)	.150 (3.81)
19-A3									0.821 (20.85)	2.000 (50.80)	.300 (7.62)
21-3	1.575 (40.00) 1.551 (39.40)	1.625 (41.28) 1.585 (40.26)	1.250 (31.75)	1.156 (29.36)			M31 X 1.0-6g 0.100R		0.791 (20.09)	2.000 (50.80)	.300 (7.62)
21-4									0.791 (20.09)	1.600 (40.64)	.125 (3.18)
23-2	1.701 (43.21) 1.677 (42.60)	1.750 (44.45) 1.710 (43.43)	1.375 (34.92)	1.250 (31.75)	0.162 (4.11) 0.146 (3.71)	0.250 (6.35) 0.234 (5.94)	M34 X 1.0-6g 0.100R	.138-32 UNC-3B	0.791 (20.09)	1.600 (40.64)	.125 (3.18)
25-2	1.823 (46.30) 1.799 (45.69)	1.875 (47.63) 1.835 (46.61)	1.500 (38.10)	1.375 (34.92)			M37 X 1.0-6g 0.100R		0.791 (20.09)	2.000 (50.80)	.300 (7.62)
25-4									0.791 (20.09)	1.600 (40.64)	.125 (3.18)
25-10									0.791 (20.09)	1.600 (40.64)	.125 (3.18)

WIRE SEALING

Contact Size	Wire Diameter
20	.040-.083 (1.02-2.11)
16	.065-.109 (1.65-2.77)
8	.209-.277 (5.31-7.04)
4	.323-.391 (8.20-9.93)
2	.400-.477 (10.16-12.12)
0	.486-.572 (12.34-14.53)

FINGER-PROOF CONTACTS

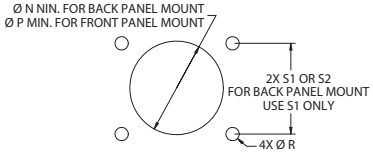
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

CONTACT STYLE

Code	Description	P/N
A	Pin Connector, No Contacts	
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Size #4 Crown Ring Pin Contacts and 39029 type Size #16 Pin Contacts (ins. arr. 25-10 only)	850-325 and 850-344-16
	Pin Connector, Size #8 or #4 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arr. 17-4, 21-5, 15-3, 17-3)	850-325 and 850-202-20
	Pin Connector, Size #2 or #0 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arr. 19-A3, 21-3)	850-325 and 850-346-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Size #4 Crown Ring Socket Contacts and 39029 type Size #16 Socket Contacts (arr. 25-10 only)	850-326 850-309
	Socket Connector, Size #8 or #4 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arr. 17-4, 21-5, 15-3, 17-3)	850-326 and AS39029/56-351
	Socket Connector, Size #2 or #0 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arr. 19-A3, 21-3)	850-326 and 850-347-20
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

PANEL CUT OUT FOR PANEL-MOUNT RECEPTACLES

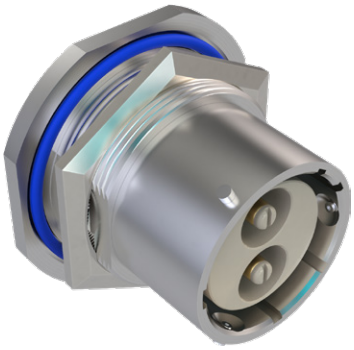


Shell Size	ØN Min	ØP Min	ØR Holes	S1 Bsc	S2 Bsc
11	0.796 (20.22)	0.625 (15.88)	0.133 (3.38)	0.812 (20.62)	0.719 (18.26)
13	0.922 (23.42)	0.750 (19.05)		0.906 (23.01)	0.812 (20.62)
15	1.047 (26.59)	.906 (23.01)		.969 (24.61)	.906 (23.01)
17	1.219 (30.96)	1.016 (25.81)	0.123 (3.12)	1.062 (26.97)	0.969 (24.61)
19	1.297 (32.94)	1.141 (28.98)		1.156 (29.36)	1.062 (26.97)
21	1.422 (36.12)	1.266 (32.16)		1.250 (31.75)	1.156 (29.36)
23	1.547 (39.29)	1.375 (34.92)	0.159 (4.04)	1.375 (34.92)	1.250 (31.75)
25	1.672 (42.47)	1.484 (37.69)	0.149 (3.78)	1.500 (38.10)	1.375 (34.92)

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973-004 SuperNine Series I Bayonet PowerPlay 07 Jam-Nut Receptacle

SUPERNINE SERIES I POWERPLAY BAYONET



MATERIAL/FINISH

- Housing and coupling ring per How to Order Table
- Seal/Grommet: silicone blend
- Contacts: copper alloy / gold
- Insulator: hi-temp composite

NOTES

- 973-004 mates with only 973-004 of the same size, layout, and polarization and the opposite gender.
- Consult factory for crimp tools and accessory selection.
- Connectors use standard mounting cutouts and accessory threads and teeth per MIL-DTL-38999 Series III.
- Electrical performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

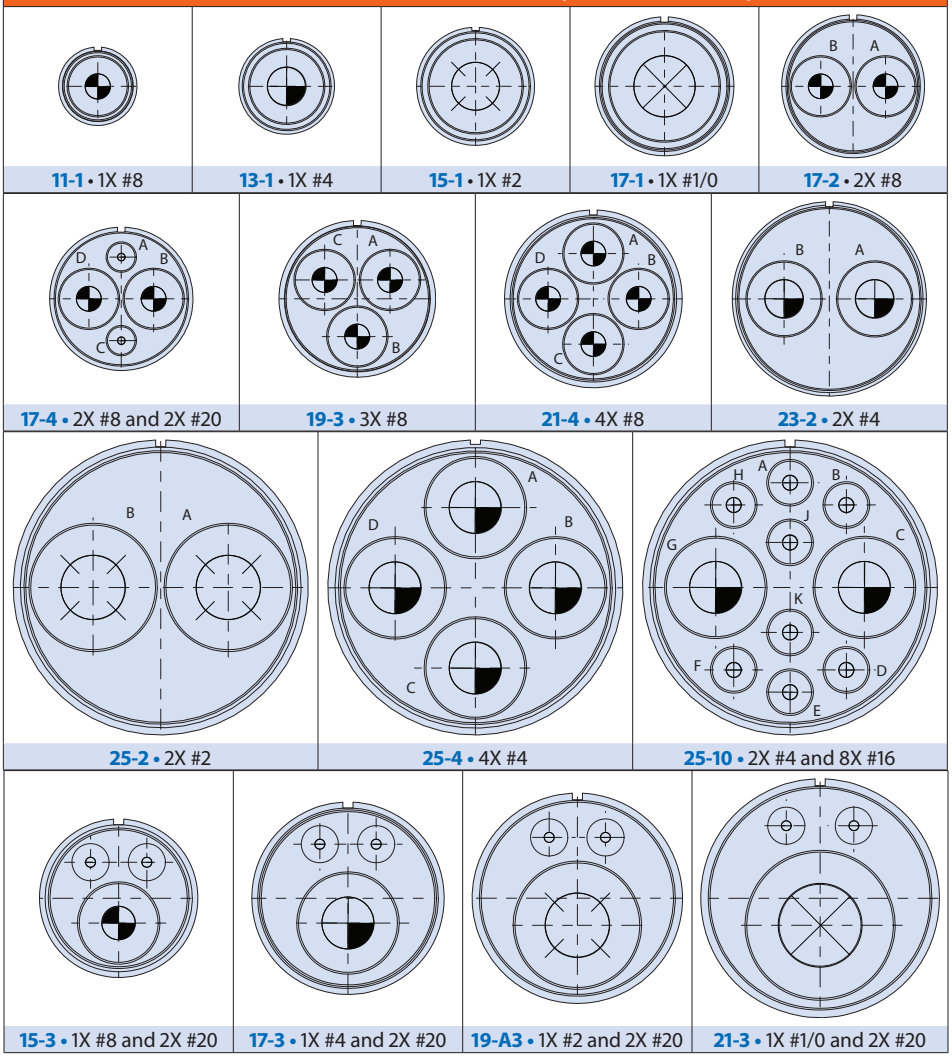
POLARIZATION KEYS AND KEYWAYS

Shell Size	Polarization Code	Minor Key/Keyway Rotation A°	B°	C°	D°
11 13 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
	F	77	141	220	273
	G	66	156	176	236
17 19 21 23 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	F	95	150	180	235
	G	115	157	185	270

HOW TO ORDER

Sample Part Number	973-004	-	07	ME	13-1	P	N
Basic Part Number	Bayonet PowerPlay Connector						
Rear Accessory Option	**-** = Accessory Thread and Teeth **B** = Banding Configuration with Groove for Shrink Boot						
Connector Style	**07** = Receptacle, Jam Nut						
Connector Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **TZ** = Aluminum, Tin Zinc **ME** = Aluminum, Electroless Nickel **Z1** = Stainless, Passivated						
Size and Layout	See Contact Layouts Table						
Contact Style	See Contact Style Table						
Polarization:	**A, B, C, D, E, F, G, N**						

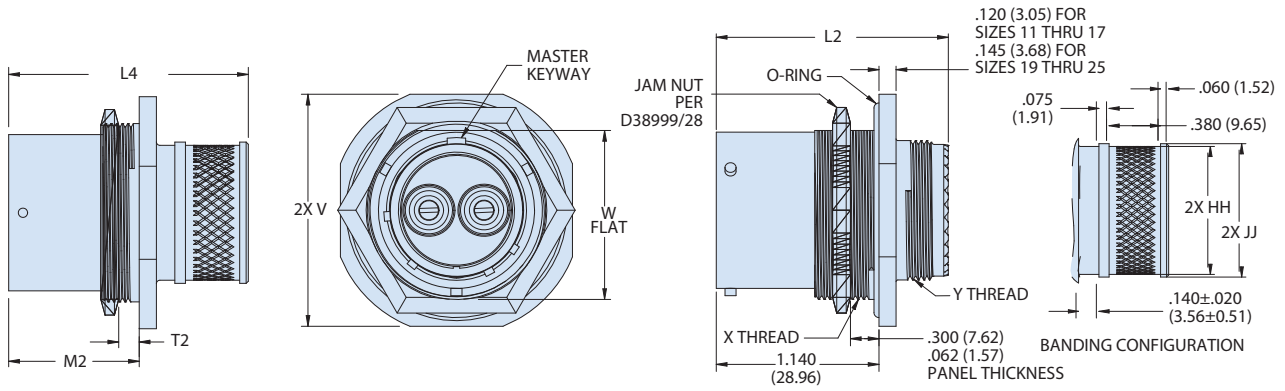
SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)



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973-004 SuperNine Series I Bayonet PowerPlay 07 Jam-Nut Receptacle

07 JAM NUT MOUNT RECEPTACLE DIMENSIONS



Shell Size-Contact Arr.	ØU	V	W Flat	X Thread	Y Thread	L2 Max	L4 Max	M2	T2
11-1	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	0.755 (19.18) 0.745 (18.92)	M20 X 1.0-6g 0.100R	M15 X 1.0-6g 0.100R	1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)
13-1	1.512 (38.40) 1.488 (37.80)	1.390 (35.31) 1.358 (34.49)	0.942 (23.93) 0.932 (23.67)	M25 X 1.0-6g 0.100R	M18 X 1.0-6g 0.100R	1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)
15-1	1.638 (41.61) 1.614 (41.00)	1.516 (38.51) 1.484 (37.69)	1.066 (27.08) 1.056 (26.82)	M28 X 1.0-6g 0.100R	M22 X 1.0-6g 0.100R	2.000 (50.80)	2.000 (50.80)	1.140 (28.96)	.300-.062 (7.62-1.57)
15-3						1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)
17-1	1.764 (44.81) 1.740 (44.20)	1.642 (41.71) 1.610 (40.89)	1.191 (30.25) 1.181 (30.00)	M32 X 1.0-6g 0.100R	M25 X 1.0-6g 0.100R	2.000 (50.80)	2.000 (50.80)	1.140 (28.96)	.300-.062 (7.62-1.57)
17-2						1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)
17-3						1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)
17-4						1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)
19-3	1.949 (49.50) 1.925 (48.90)	1.827 (46.41) 1.795 (45.59)	1.316 (33.43) 1.306 (33.17)	M35 X 1.0-6g 0.100R	M28 X 1.0-6g 0.100R	1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)
19-A3						2.000 (50.80)	2.000 (50.80)	1.140 (28.96)	.300-.062 (7.62-1.57)
21-3	2.075 (52.71) 2.051 (52.10)	1.953 (49.61) 1.921 (48.79)	1.441 (36.60) 1.431 (36.35)	M38 X 1.0-6g 0.100R	M31 X 1.0-6g 0.100R	2.000 (50.80)	2.000 (50.80)	1.140 (28.96)	.300-.062 (7.62-1.57)
21-4						1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)
23-2	2.201 (55.91) 2.177 (55.30)	2.079 (52.81) 2.047 (51.99)	1.566 (39.78) 1.556 (39.52)	M41 X 1.0-6g 0.100R	M34 X 1.0-6g 0.100R	1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)
25-2	2.323 (59.00) 2.299 (58.39)	2.205 (56.01) 2.173 (55.19)	1.691 (42.95) 1.681 (42.70)	M44 X 1.0-6g 0.100R	M37 X 1.0-6g 0.100R	2.000 (50.80)	2.000 (50.80)	1.140 (28.96)	.300-.062 (7.62-1.57)
25-4						1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)
25-10						1.650 (41.91)	1.800 (45.72)	1.005 (25.53)	.125-.062 (3.18-1.57)

WIRE SEALING

Contact Size	Wire Diameter
20	.040-.083 (1.02-2.11)
16	.065-.109 (1.65-2.77)
8	.209-.277 (5.31-7.04)
4	.323-.391 (8.20-9.93)
2	.400-.477 (10.16-12.12)
0	.486-.572 (12.34-14.53)

FINGER-PROOF CONTACTS

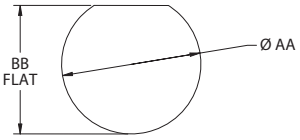
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No
2/0	No	Yes

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

CONTACT STYLE

Code	Description	P/N
A	Pin Connector, No Contacts	
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Size #4 Crown Ring Pin Contacts and 39029 type Size #16 Pin Contacts (ins. arr. 25-10 only)	850-325 and 850-344-16
	Pin Connector, Size #8 or #4 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arr. 17-4, 21-5, 15-3, 17-3)	850-325 and 850-202-20
	Pin Connector, Size #2 or #0 Crown Ring Pin Contacts and 39029 type #20 Pin Contacts (arr. 19-A3, 21-3)	850-325 and 850-346-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Size #4 Crown Ring Socket Contacts and 39029 type Size #16 Socket Contacts (arr. 25-10 only)	850-326 850-309
	Socket Connector, Size #8 or #4 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arr. 17-4, 21-5, 15-3, 17-3)	850-326 and AS39029/56-351
	Socket Connector, Size #2 or #0 Crown Ring Socket Contacts and 39029 type #20 Socket Contacts (arr. 19-A3, 21-3)	850-326 and 850-347-20
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

PANEL CUT OUT FOR JAM NUT RECEPTACLES

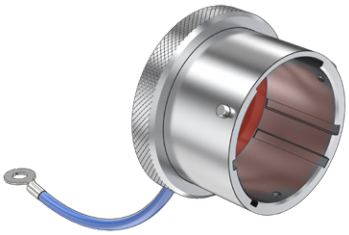


Shell Size	ØAA	BB Flat
11	0.835 (21.21); 0.825 (20.96)	0.771 (19.58); 0.761 (19.33)
13	1.020 (25.91); 1.010 (25.65)	0.955 (24.26); 0.945 (24.00)
15	1.145 (29.08); 1.135 (28.83)	1.085 (27.56); 1.075 (27.30)
17	1.270 (32.26); 1.260 (32.00)	1.210 (30.73); 1.200 (30.48)
19	1.395 (35.43); 1.385 (35.18)	1.335 (33.91); 1.325 (33.65)
21	1.520 (38.61); 1.510 (38.35)	1.460 (37.08); 1.450 (36.83)
23	1.645 (41.78); 1.635 (41.53)	1.585 (40.26); 1.575 (40.00)
25	1.770 (44.96); 1.760 (44.70)	1.710 (43.43); 1.700 (43.18)

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SuperNine Series I Bayonet PowerPlay 660-140 Plug Cover

SUPERNINE SERIES I POWERPLAY BAYONET



MATERIAL/FINISH

- Hardware, rivet: CRES/passivate
- Sealant, rivet: two part epoxy
- Rope attachments: Per Attachment Rings Style Table
- Gasket - silicone

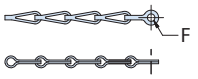
NOTES

- Max diameter over which mandrel will rotate freely shown in Attachment Ring Table.
- Length tolerance for sash chain (s) is ± one (1) link, for all other attachments ± .25.

ATTACHMENT TYPE



Wire Rope
Types F, G, R, T, H



Sash Chain
Type S

Symbol	Attachment
F	Wire Rope, Nylon Jacket with Terminal
G	.094 Dia Nylon Cord (Black) with Loop Ends
H	Wire Rope, Teflon Jacket with Terminal
N	Attachment Omitted
R	Wire Rope, PVC Jacket with Terminal
T	Wire Rope, No Jacket, with Terminal
K	Nylon Rope
S	#8 Sash Chain, CRES, Passivate

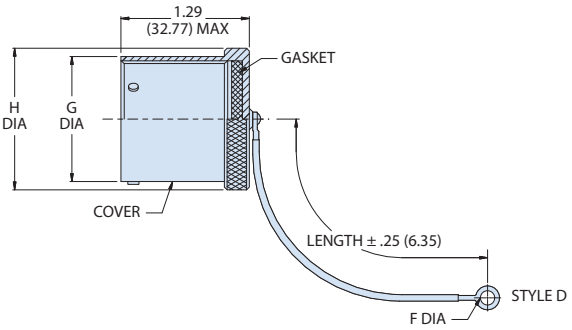
HOW TO ORDER

Sample Part Number	660-140	ME	13	R	6	-01

Basic Part Number	660-140 PowerPlay Plug Cover
Material/Finish	ME = Aluminum Alloy, Electroless Nickel MT = Aluminum Alloy, Nickel-PTFE NF = Aluminum Alloy, Cad/O. D. Over Electroless Nickel (1000 Hour Salt Spray) TZ = Aluminum Alloy, Zinc Nickel Z1 = Stainless, Passivate
Shell Size	See Cover Dimensions Table
Attachment Type	See Attachment Rings Style Table
Attachment Length	In Inches
Ring Style Dash Number	See Attachment Ring Table

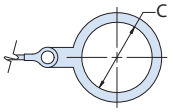
COVER DIMENSIONS

Shell Size	G DIA	H DIA MAX
11	.700 (17.78)	.940 (23.88)
13	.850 (21.59)	1.070 (27.18)
15	.975 (24.76)	1.190 (30.23)
17	1.100 (27.94)	1.320 (33.53)
19	1.207 (30.66)	1.440 (36.58)
21	1.332 (33.83)	1.570 (39.88)
23	1.457 (37.01)	1.690 (42.93)
25	1.582 (40.18)	1.820 (46.23)



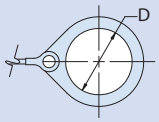
ATTACHMENT RING

Style A



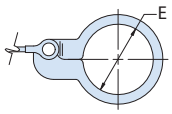
Dash Number	C Dia
085	0.265 (6.73)
095	0.312 (7.92)
100	0.391 (9.93)
101	0.516 (13.11)
102	0.583 (14.81)
103	0.641 (16.28)
104	0.708 (17.98)
105	0.766 (19.46)
106	0.896 (22.76)
107	1.016 (25.81)
108	1.141 (28.98)
109	1.266 (32.16)
110	1.391 (35.33)
111	1.521 (38.63)
112	1.641 (41.68)
113	1.766 (44.86)
114	1.891 (48.03)
115	2.078 (52.78)
116	2.406 (61.11)
117	2.510 (63.75)

Style B



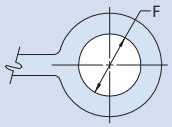
Dash Number	D Dia
08	0.468 (11.89)
10	0.593 (15.06)
12	0.718 (18.24)
14	0.844 (21.44)
16	0.968 (24.59)
18	1.093 (27.76)
20	1.187 (30.15)
22	1.343 (34.11)
24	1.484 (37.69)
28	1.687 (42.85)
32	1.968 (49.99)
36	2.187 (55.55)
40	2.406 (61.11)
44	2.656 (67.46)
48	3.031 (76.99)

Style C



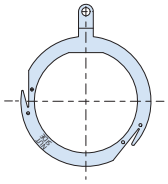
Dash Number	E Dia
50	0.425 (10.80)
52	0.485 (12.32)
54	0.640 (16.26)
56	0.750 (19.05)
58	0.890 (22.61)
60	1.015 (25.78)
62	1.095 (27.81)
64	1.130 (28.70)
66	1.250 (31.75)
68	1.350 (34.29)
70	1.375 (34.92)
72	1.485 (37.72)
74	1.625 (41.28)
76	1.750 (44.45)
78	1.875 (47.63)
80	1.980 (50.29)
82	2.060 (52.32)
84	2.235 (56.77)
86	2.310 (58.67)
88	2.475 (62.87)
90	2.655 (67.44)
92	2.810 (71.37)
94	3.045 (77.34)

Style D



Dash Number	F Dia
01	0.140 (3.56)
02	0.182 (4.62)
03	0.191 (4.85)
04	0.197 (5.00)
05	0.167 (4.24)
06	0.125 (3.18)
07	0.218 (5.54)
09	0.156 (3.96)
00	No Eyelet

Style RL



STYLE RL
SEE DRAWING
677-048

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Series 973 PowerPlay™ • Dimensions in Inches (millimeters) are subject to change without notice.

SuperNine Series I Bayonet PowerPlay 660-141 Receptacle Cover



MATERIAL/FINISH

- Hardware, rivet: CRES/passivate
- Sealant, rivet: two part epoxy
- Rope attachments: Per Attachment Rings Style Table

NOTES

- Max diameter over which mandrel will rotate freely shown in Attachment Ring Table.
- Length tolerance for sash chain (s) is ± one (1) link, for all other attachments ± .25.
- Knurling: mfr's option

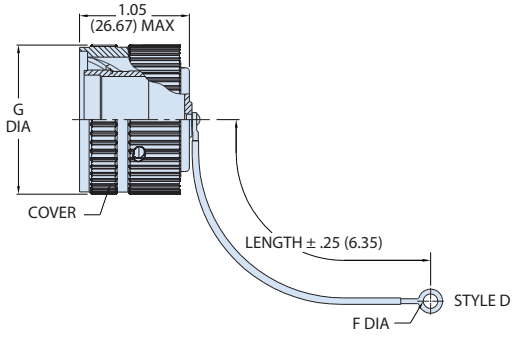
HOW TO ORDER

Sample Part Number	660-141	ME	17	R	6	-01

Basic Part Number	**660-141** PowerPlay Receptacle Cover
Material/Finish	**ME** = Aluminum Alloy, Electroless Nickel **MT** = Aluminum Alloy, Nickel-PTFE **NF** = Aluminum Alloy, Cad/O. D. Over Electroless Nickel (1000 Hour Salt Spray) **TZ** = Aluminum Alloy, Tin Zinc **Z1** = Stainless, Passivate
Shell Size	See Cover Dimensions Table
Attachment Type	See Attachment Rings Style Table
Attachment Length	In Inches
Ring Style Dash Number	See Attachment Ring Table

COVER DIMENSIONS

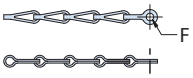
Shell Size	G DIA Max
11	.984 (24.99)
13	1.157 (29.39)
15	1.280 (32.51)
17	1.406 (35.71)
19	1.516 (38.51)
21	1.642 (41.71)
23	1.768 (44.91)
25	1.890 (48.01)



ATTACHMENT TYPE



Wire Rope
Types F, G, R, T, H

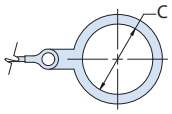


Sash Chain
Type S

Symbol	Attachment
F	Wire Rope, Nylon Jacket with Terminal
G	.094 Dia Nylon Cord (Black) with Loop Ends
H	Wire Rope, Teflon Jacket with Terminal
N	Attachment Omitted
R	Wire Rope, PVC Jacket with Terminal
T	Wire Rope, No Jacket, with Terminal
K	Nylon Rope
S	#8 Sash Chain, CRES, Passivate

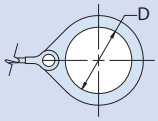
ATTACHMENT RING

Style A



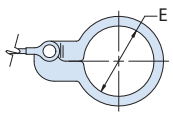
Dash Number	C Dia
085	0.265 (6.73)
095	0.312 (7.92)
100	0.391 (9.93)
101	0.516 (13.11)
102	0.583 (14.81)
103	0.641 (16.28)
104	0.708 (17.98)
105	0.766 (19.46)
106	0.896 (22.76)
107	1.016 (25.81)
108	1.141 (28.98)
109	1.266 (32.16)
110	1.391 (35.33)
111	1.521 (38.63)
112	1.641 (41.68)
113	1.766 (44.86)
114	1.891 (48.03)
115	2.078 (52.78)
116	2.406 (61.11)
117	2.510 (63.75)

Style B



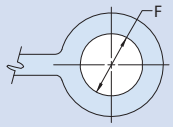
Dash Number	D Dia
08	0.468 (11.89)
10	0.593 (15.06)
12	0.718 (18.24)
14	0.844 (21.44)
16	0.968 (24.59)
18	1.093 (27.76)
20	1.187 (30.15)
22	1.343 (34.11)
24	1.484 (37.69)
28	1.687 (42.85)
32	1.968 (49.99)
36	2.187 (55.55)
40	2.406 (61.11)
44	2.656 (67.46)
48	3.031 (76.99)

Style C



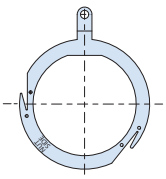
Dash Number	E Dia
50	0.425 (10.80)
52	0.485 (12.32)
54	0.640 (16.26)
56	0.750 (19.05)
58	0.890 (22.61)
60	1.015 (25.78)
62	1.095 (27.81)
64	1.130 (28.70)
66	1.250 (31.75)
68	1.350 (34.29)
70	1.375 (34.92)
72	1.485 (37.72)
74	1.625 (41.28)
76	1.750 (44.45)
78	1.875 (47.63)
80	1.980 (50.29)
82	2.060 (52.32)
84	2.235 (56.77)
86	2.310 (58.67)
88	2.475 (62.87)
90	2.655 (67.44)
92	2.810 (71.37)
94	3.045 (77.34)

Style D



Dash Number	F Dia
01	0.140 (3.56)
02	0.182 (4.62)
03	0.191 (4.85)
04	0.197 (5.00)
05	0.167 (4.24)
06	0.125 (3.18)
07	0.218 (5.54)
09	0.156 (3.96)
00	No Eyelet

Style RL



STYLE RL
SEE DRAWING
677-048

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SuperNine Series I Bayonet PowerPlay 870H001 Swing-Arm Saddle Clamp



MATERIAL/FINISH

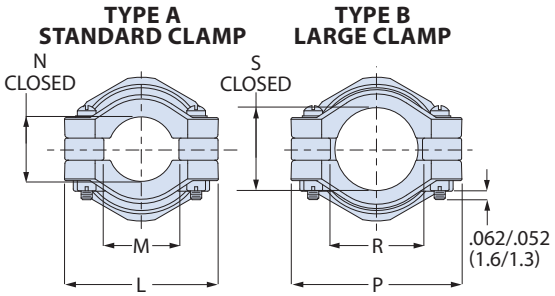
- **Composite (Code XB)**
  - Coupling nut, body, arms, saddles: polyetherimide (PEI), unplated
  - Screws, washers, inserts: stainless steel/passivated
  - Anti-decoupling springs: thermoplastic
  - Clinch Nuts: stainless steel, silver plated
- **Aluminum (Codes M, MT, NF, TZ, ZR)**
  - Coupling nut, body, arms, saddles: aluminum
  - Screws, washers, inserts: stainless steel/passivated
  - Anti-decoupling springs: thermoplastic
  - Clinch Nuts: Codes M, MT, TZ and ZR: stainless steel, silver plated.
    Code NF: stainless steel/ olive drab cadmium
- **Stainless Steel (Code Z1)**
  - Coupling nut, body, arms, saddles: SST
  - Screws, washers, inserts: stainless steel/passivated
  - Anti-decoupling springs: stainless steel
  - Clinch Nuts: stainless steel, silver plated

HOW TO ORDER

Sample Part Number	870H001	XB	23	B

Basic Part Number	**870H001** Swing-Arm Saddle Clamp for PowerPlay Connectors
Material/Finish	**XB** = Composite, No Finish (Black) **M** = Aluminum, Electroless Nickel **NF** = Aluminum, Olive Drab Cadmium **MT** = Aluminum, Nickel-PTFR **TZ** = Aluminum, Tin-Zinc **ZR** = Aluminum, Black Zinc-Nickel **Z1** = Stainless Steel, Passivated
Shell Size	**11**, **13**, **15**, **17**, **19**, **21**, **23**, **25**
Clamp Size	**A** = Standard Clamp **B** = Large Clamp

CLAMP DIMENSIONS



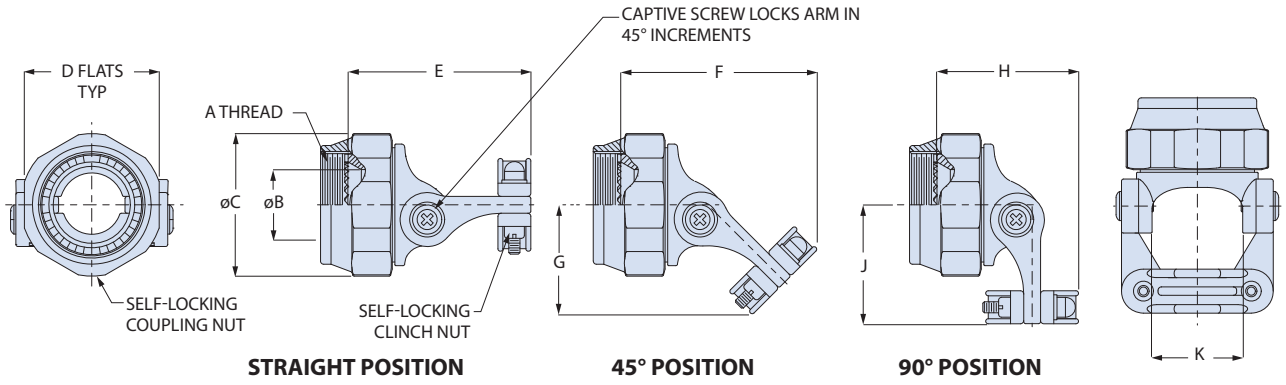
Standard Clamp			
Shell Size	L Max	M Min	N Ref.
11	1.05 (26.7)	.27 (6.9)	.310 (7.9)
13	1.20 (30.5)	.35 (8.9)	.422 (10.7)
15	1.30 (33.0)	.47 (11.9)	.538 (13.7)
17	1.44 (36.6)	.55 (14.0)	.590 (15.0)
19	1.56 (39.6)	.62 (15.7)	.660 (16.8)
21	1.69 (42.9)	.70 (17.8)	.744 (18.9)
23	1.77 (45.0)	.78 (19.8)	.826 (21.0)
25	1.89 (48.0)	.85 (21.6)	.896 (22.8)

Large Clamp			
Shell Size	P Max	R Min	S Ref.
11	1.20 (30.5)	.45 (11.4)	.422 (10.7)
13	1.45 (36.8)	.62 (15.7)	.637 (16.2)
15	1.54 (39.1)	.68 (17.3)	.707 (18.0)
17	1.60 (40.6)	.80 (20.3)	.759 (19.3)
19	1.73 (43.9)	.90 (22.9)	.841 (21.4)
21	1.95 (49.5)	1.05 (26.7)	.996 (25.3)
23	2.08 (52.8)	1.18 (30.0)	1.060 (26.9)
25	2.32 (58.9)	1.30 (33.0)	1.124 (28.5)

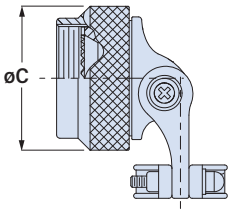
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SuperNine Series I Bayonet PowerPlay 870H001 Swing-Arm Saddle Clamp

CONNECTOR DIMENSIONS



Shell Size	A Thread	øB Min	C Max	D Flats	E Max	F Max	G Max	H Max	J Max	K Ref.
11	M15X1.0-6H	.390 (9.9)	.938 (23.8)	.875 (22.2)	1.50 (38.1)	1.45 (36.8)	.87 (22.1)	.94 (23.9)	.96 (24.4)	.455 (11.6)
13	M18X1.0-6H	.504 (12.8)	1.125 (28.6)	1.000 (25.4)	1.56 (39.6)	1.60 (40.6)	.97 (24.6)	1.12 (28.4)	1.03 (26.2)	.598 (15.2)
15	M22X1.0-6H	.630 (16.0)	1.250 (31.8)	1.125 (28.6)	1.57 (39.9)	1.68 (42.7)	1.02 (25.9)	1.21 (30.7)	1.10 (27.9)	.710 (18.0)
17	M25X1.0-6H	.756 (19.2)	1.375 (34.9)	1.250 (31.8)	1.66 (42.2)	1.78 (45.2)	1.09 (27.7)	1.29 (32.8)	1.16 (29.5)	.839 (21.3)
19	M28X1.0-6H	.843 (21.4)	1.500 (38.1)	1.375 (34.9)	1.66 (42.2)	1.86 (47.2)	1.14 (29.0)	1.39 (35.3)	1.22 (31.0)	.934 (23.7)
21	M31X1.0-6H	.969 (24.6)	1.625 (41.3)	1.500 (38.1)	1.81 (46.0)	2.02 (51.3)	1.24 (31.5)	1.50 (38.1)	1.29 (32.8)	1.068 (27.1)
23	M34X1.0-6H	1.091 (27.7)	1.750 (44.5)	1.625 (41.3)	1.84 (46.7)	2.09 (53.1)	1.30 (33.0)	1.57 (39.9)	1.36 (34.5)	1.197 (30.4)
25	M37X1.0-6H	1.217 (30.9)	1.875 (47.6)	1.750 (44.5)	2.00 (50.8)	2.20 (55.9)	1.45 (36.8)	1.64 (41.7)	1.55 (39.4)	1.323 (33.6)



Aluminum and SST Versions

Aluminum and stainless steel versions have round knurled coupling nuts.

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SuperNine Series I Bayonet PowerPlay
870H004 Swing-Arm Saddle Clamp, Composite, EMI Banding



Figure 1
Finish codes NFS, BNS

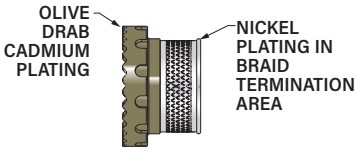
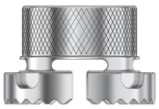


Figure 2
Banding adapter slots



Route pigtail shield braids into optional "T" slots in banding adapter.

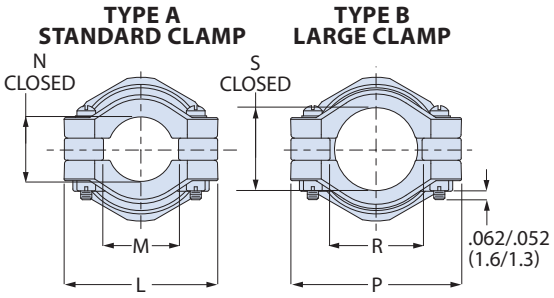
MATERIAL/FINISH

- Coupling nut, body, arms, saddles: polyetherimide (PEI)/ unplated black
- Screws, washers, inserts: stainless steel/passivated
- Anti-decoupling springs: thermoplastic
- Banding adapter: aluminum alloy or brass
- Band (optional): stainless steel/ passivated
- Clinch nuts: stainless steel/ silver plated

HOW TO ORDER

Sample Part Number	870H004	M	23	A	S	K
Basic Part Number	**870H001** Swing-Arm Saddle Clamp for PowerPlay Connectors					
Material/Finish	**M** = Alum/Electroless Nickel **NF** = Alum/Olive Drab Cadmium **NFS** = Alum/O.D. Cadmium, selective (fig. 1) **MT** = Alum/Nickel-PTFE **TZ** = Alum/Tin-Zinc **BM** = Brass/Electroless Nickel **BN** = Brass/Olive Drab Cadmium **BNS** = Brass/O.D. Cadmium, selective (fig. 1) **BMT** = Brass/Nickel-PTFE					
Shell Size	**11**, **13**, **15**, **17**, **19**, **21**, **23**, **25**					
Clamp Size	**A** = Standard Clamp **B** = Large Clamp					
Banding Adapter Slots	*Omit if not required. See Figure 2.* **S** = "T" Slots in Banding Adapter for Shield Pigtails					
Band	*Omit if not required.* **K** = Pre-Coiled Micro Band included With Clamp **J** = Pre-Coiled Micro-Slim Band included With Clamp					

CLAMP DIMENSIONS



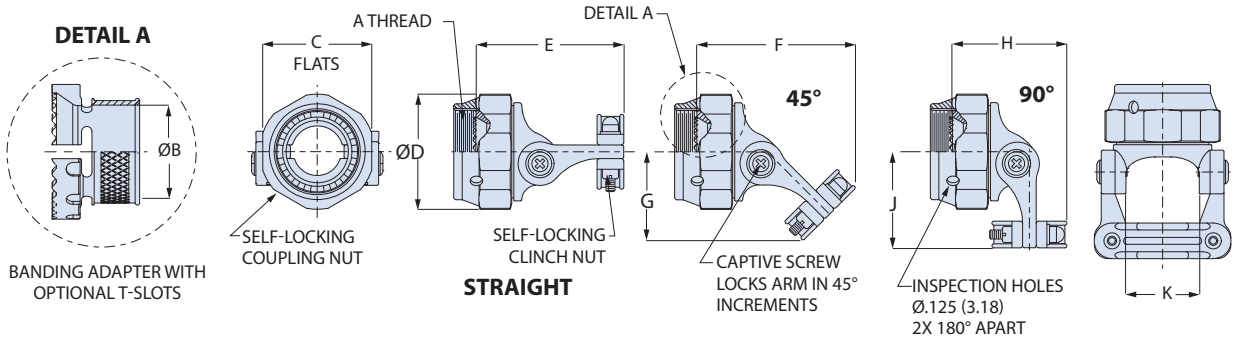
Standard Clamp			
Shell Size	L Max	M Min	N Ref.
11	1.03 (26.16)	.29 (7.37)	.310 (7.87)
13	1.21 (30.73)	.34 (8.64)	.422 (10.72)
15	1.32 (33.53)	.45 (11.43)	.538 (13.67)
17	1.45 (36.83)	.55 (13.97)	.590 (14.99)
19	1.54 (39.12)	.65 (16.51)	.660 (16.76)
21	1.67 (42.42)	.74 (18.80)	.744 (18.90)
23	1.79 (45.47)	.87 (22.10)	.826 (20.98)
25	1.92 (48.77)	.99 (25.15)	.896 (22.76)

Large Clamp			
Shell Size	P Max	R Min	S Ref.
11	1.20 (30.48)	.45 (11.43)	.422 (10.72)
13	1.45 (36.83)	.62 (15.75)	.637 (16.18)
15	1.54 (39.12)	.68 (17.27)	.707 (17.96)
17	1.60 (40.64)	.80 (20.32)	.759 (19.28)
19	1.73 (43.94)	.90 (22.86)	.841 (21.36)
21	1.95 (49.53)	1.05 (26.67)	.996 (25.30)
23	2.08 (52.83)	1.18 (29.97)	1.060 (26.92)
25	2.32 (58.93)	1.30 (33.02)	1.124 (28.55)

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SuperNine Series I Bayonet PowerPlay
870H004 Swing-Arm Saddle Clamp, Composite, EMI Banding

CONNECTOR DIMENSIONS



Shell Size	A Thread	øB Min	C Max	D Flats	E Max	F Max	G Max	H Max	J Max	K Ref.
11	M15X1.0-6H	.305 (7.75)	.875 (22.23)	.938 (23.83)	1.58 (40.13)	1.52 (38.61)	.83 (21.08)	1.04 (26.42)	.93 (23.62)	.455 (11.56)
13	M18X1.0-6H	.404 (10.26)	1.000 (25.40)	1.125 (28.58)	1.66 (42.16)	1.67 (42.42)	.93 (23.62)	1.17 (29.72)	1.03 (26.16)	.598 (15.19)
15	M22X1.0-6H	.526 (13.36)	1.125 (28.58)	1.250 (31.75)	1.67 (42.42)	1.76 (44.70)	1.00 (25.40)	1.28 (32.51)	1.10 (27.94)	.710 (18.03)
17	M25X1.0-6H	.658 (16.71)	1.250 (31.75)	1.375 (34.92)	1.77 (44.96)	1.89 (48.01)	1.09 (27.69)	1.40 (35.56)	1.16 (29.46)	.839 (21.31)
19	M28X1.0-6H	.777 (19.74)	1.375 (34.92)	1.500 (38.10)	1.77 (44.96)	1.96 (49.78)	1.14 (28.96)	1.50 (38.10)	1.22 (30.99)	.934 (23.72)
21	M31X1.0-6H	.877 (22.28)	1.500 (38.10)	1.625 (41.28)	1.92 (48.77)	2.11 (53.59)	1.22 (30.99)	1.57 (39.88)	1.29 (32.77)	1.068 (27.13)
23	M34X1.0-6H	.999 (25.37)	1.625 (41.28)	1.750 (44.45)	1.95 (49.53)	2.18 (55.37)	1.28 (32.51)	1.67 (42.42)	1.36 (34.54)	1.197 (30.40)
25	M37X1.0-6H	1.127 (28.63)	1.750 (44.45)	1.875 (47.63)	1.98 (50.29)	2.25 (57.15)	1.34 (34.04)	1.73 (43.94)	1.43 (36.32)	1.323 (33.60)

BAND INFORMATION



Band



Micro Band Tool 601-101



Micro-Slim Band Tool 601-122

Shell Size	Pre-Coiled Micro Band Part No.	Pre-Coiled Micro-Slim Band Part No.	Length	Max Diameter
9 – 13	601-061	601-601	8.125 (206.38)	.88 (22.35)
15 – 25	601-065	601-603	14.25 (361.95)	1.88 (47.75)

Terminate cable braid to band adapter with optional pre-coiled banding strap. Glenair's Band-Master ATS® banding system provides quick, easy, cost-effective and highly reliable termination. Band is passivated stainless steel.

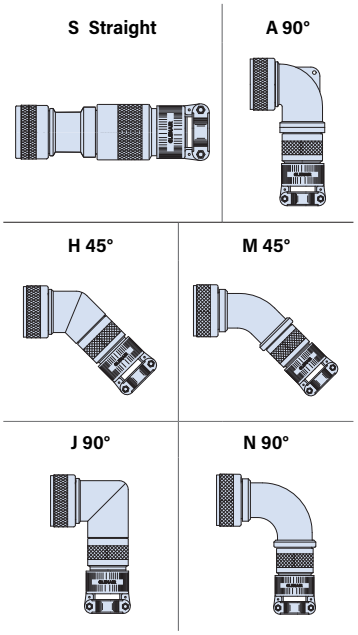
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SuperNine Series I Bayonet PowerPlay
390H*055 EMI+Environmental Backshell, Self-Locking

SUPERNINE SERIES I POWERPLAY BAYONET



PROFILE SELECTION GUIDE



Shell Size	A Thread	øB Max
11	M15X1.0-6H	1.06 (26.9)
13	M18X1.0-6H	1.17 (29.7)
15	M22X1.0-6H	1.29 (32.7)
17	M25X1.0-6H	1.42 (36.1)
19	M28X1.0-6H	1.54 (39.1)
21	M31X1.0-6H	1.67 (42.4)
23	M34X1.0-6H	2.01 (51.1)
25	M37X1.0-6H	2.12 (53.8)

HOW TO ORDER

Sample Part Number	390H*055	MT	17	10	D	3

Basic Part Number
- **390HS055**= Straight
- **390HA055** = 90° Low Profile
- **390HH055**= 45° Cut/Weld
- **390HJ055**= 90° Cut/Weld
- **390HM055**= 45° Full Radius
- **390HN055**= 90° Full Radius

Material/Finish
- **M** = Aluminum/ Electroless Nickel
- **MT** = Aluminum/ Nickel-PTFE
- **NF** = Aluminum/ Olive Drab Cadmium
- **ZR** = Aluminum/ Black Zinc-Nickel
- **TZ** = Aluminum/ Tin-Zinc
- **Z1** = SST/ Passivated (Profiles H, J, M, N, S only)

Shell Size
11, **13**, **15**, **17**, **19**, **21**, **23**, **25**

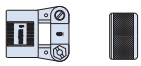
Entry Size

Entry Size	Max. Cable Dia.	Shell Size*
03	.250 (7.9)	09-25
04	.312 (7.9)	11-25
06	.437 (11.1)	13-25
08	.562 (14.3)	15-25
10	.625 (15.9)	15-25
12	.750 (19.1)	17-25

Entry Size	Max. Cable Dia.	Shell Size*
16	.937 (23.8)	21-25
20	1.250 (31.8)	25
24	1.375 (34.9)	-
28	1.625 (41.3)	-
32	1.875 (47.6)	-

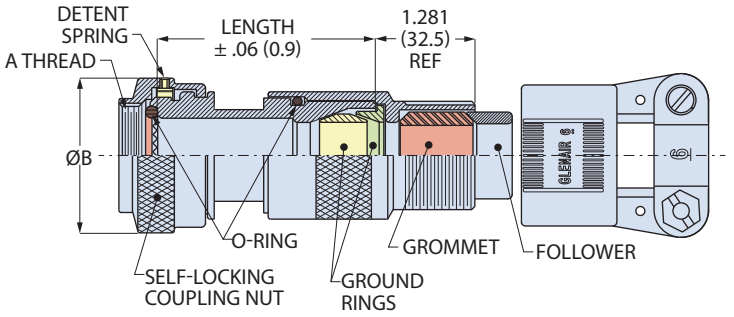
* If selected entry size exceeds shell size range, a Style 2 transition adapter will be included. See Maximum Entry Size for details.

Strain Relief
- **H**= Saddle Clamp
- **D** = Nut



Length
- **3** = 1.5 inches
- **4** = 2.0 inches
- **6** = 3.0 inches
- **8** = 4.0 inches

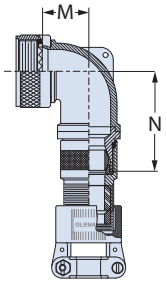
Applies to Profile **S** only.
If Entry Size is greater than "Maximum Entry Size" (see next page), then 2 inch minimum applies.



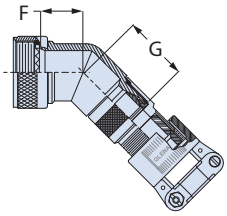
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SuperNine Series I Bayonet PowerPlay 390H*055 EMI+Environmental Backshell, Self-Locking

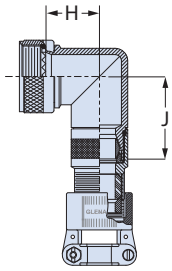
CONNECTOR DIMENSIONS



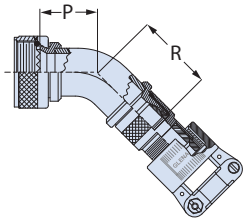
Profile A
Low Profile
90° Elbow



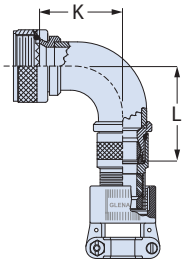
Profile H
Cut/Weld
45° Elbow



Profile J
Cut/Weld
90° Elbow



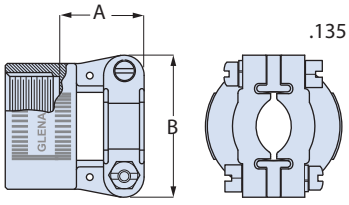
Profile M
Full Radius
45° Elbow



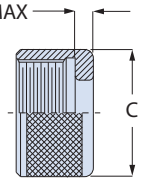
Profile N
Full Radius
90° Elbow

Shell Size	F Max	G Max	H Max	J Max	K Max	L Max	M Max	N Max	P Max	R Max
11	.820 (20.8)	1.063 (27.0)	.966 (24.5)	1.217 (30.9)	1.406 (35.7)	1.411 (35.8)	.750 (19.1)	1.990 (50.5)	1.031 (26.2)	1.145 (29.1)
13	.844 (21.4)	1.094 (27.8)	1.026 (26.1)	1.277 (32.4)	1.531 (38.9)	1.537 (39.0)	.765 (19.4)	2.020 (51.3)	1.094 (27.8)	1.195 (30.4)
15	.961 (21.9)	1.119 (28.4)	1.076 (27.3)	1.347 (34.2)	1.656 (42.1)	1.761 (44.7)	.855 (21.7)	2.154 (54.7)	1.156 (29.4)	1.245 (31.6)
17	.888 (22.6)	1.147 (29.1)	1.136 (28.9)	1.407 (35.7)	1.781 (45.2)	1.787 (45.4)	1.040 (26.4)	2.244 (57.0)	1.218 (30.9)	1.300 (33.0)
19	.904 (23.0)	1.157 (29.4)	1.176 (29.9)	1.427 (36.2)	1.906 (48.4)	1.911 (48.5)	1.130 (28.7)	2.414 (61.3)	1.250 (31.8)	1.350 (34.3)
21	.929 (23.6)	1.177 (29.9)	1.236 (31.4)	1.487 (37.8)	2.031 (51.6)	2.037 (51.7)	1.130 (28.7)	2.414 (61.3)	1.312 (33.3)	1.400 (35.6)
23	.956 (24.3)	1.217 (30.9)	1.296 (32.9)	1.567 (39.8)	2.156 (54.8)	2.161 (54.9)	1.280 (32.5)	2.587 (65.7)	1.344 (34.1)	1.455 (37.0)
25	.979 (24.9)	1.247 (31.7)	1.356 (34.4)	1.637 (41.6)	2.281 (57.9)	2.287 (58.1)	1.280 (32.5)	2.587 (65.7)	1.406 (35.7)	1.505 (38.1)

STRAIN RELIEF DIMENSIONS



Saddle Clamp

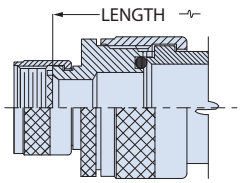


Nut

Entry Size	A Max	B Max	øC Max	Cable Range Min	Cable Range Max
03	.780 (19.8)	.957 (24.3)	.630 (16.0)	.125 (3.2)	.250 (6.4)
04	.780 (19.8)	.957 (24.3)	.755 (19.2)	.125 (3.2)	.312 (7.9)
06	.780 (19.8)	1.145 (29.1)	.942 (23.9)	.250 (6.4)	.437 (11.1)
08	.780 (19.8)	1.332 (33.8)	1.067 (27.1)	.312 (7.9)	.562 (14.3)
10	.780 (19.8)	1.332 (33.8)	1.192 (30.3)	.350 (8.9)	.625 (15.9)
12	.811 (20.6)	1.551 (39.4)	1.380 (35.1)	.500 (12.7)	.750 (19.1)
16	.905 (23.0)	1.770 (45.0)	1.535 (39.0)	.625 (15.9)	.937 (23.8)
20	1.092 (27.7)	2.113 (53.7)	1.848 (46.9)	.875 (22.2)	1.250 (31.8)
24	1.124 (28.5)	2.363 (60.0)	2.255 (57.3)	1.000 (25.4)	1.375 (34.9)
28	1.399 (35.5)	2.770 (70.4)	2.505 (63.6)	1.250 (31.8)	1.625 (41.3)
32	1.399 (35.5)	3.020 (76.7)	2.755 (70.0)	1.437 (36.5)	1.875 (47.6)

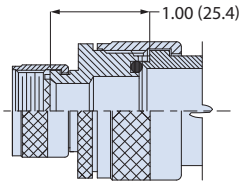
MAXIMUM ENTRY SIZE

Style 2 Straight Backshell*



The minimum length code increases from 3 (1 ½ inches) to 4 (2 inches).

Style 2 45° and 90° Backshells**



For 45° and 90° backshells, the length increases by 1.00 inches.

If the selected entry size exceeds the maximum size in this table, the backshell will have a front adapter. This is called a Style 2 backshell.

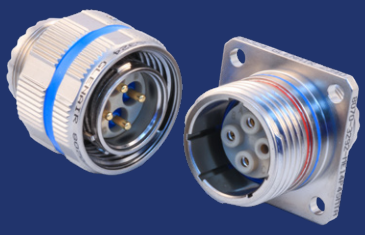
Shell Size	Maximum Entry Size
11	04
13	06
15	10
17	12
19	12
21	16
23	16
25	20

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SERIES 806 MIL-AERO HIGH-DENSITY POWERPLAY

PowerPlay™

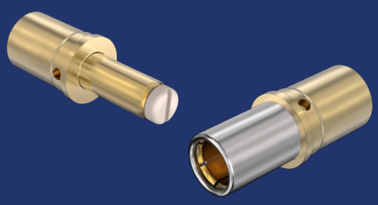
- Series 806 Mil-Aero Raised Tower Architecture
- High-Temperature Crown Ring Contacts
- Compatible TurboFlex Cabling



Series 806 Mil-Aero PowerPlay high density with hybrid insert arrangements for both high- and and low-power requirements. Available interlock (last-mate / first-break).

- **High-density insert arrangements, reduced size and weight compared to SuperNine Series I and III PowerPlay**
- **Available size #22D contact arrangements for interlock applications**
- **Support for both Crown Ring power socket contacts and standard-duty power contacts (size #8) for non-propulsion requirements**
- **Triple-start stub ACME high vibration and shock mating IAW MIL-DTL-38999 Series III**
- **Raised tower "safe-touch" architecture**
- **Crown Ring contact / TurboFlex cable support for #16 and #12 contacts**

HIGH-TEMPERATURE TOLERANT CROWN RING CONTACTS



Glenair Signature Crown Ring contact series

provides reduced contact resistance, superior conductivity, and higher temperature-tolerance than conventional AS39029 contacts and specialized high-power contacts from other manufacturers

- Maximum operating temperature 260°C
- Superior conductivity performance compared to beryllium copper contacts, across full temperature range
- Up to 60% lower contact resistance than AS39029 contacts (normalized, less wire)
- Contact bodies made from high conductivity copper alloy (approximately 95% IACS)
- Pin contact equipped with thermoplastic safe-touch tip
- Stainless steel Crown Ring
  - Provides socket forces without stress relaxation at High-Temperatures
  - Moves socket spring function from socket body to ring, allowing use of high-conductivity copper
- Gold over nickel plating
  - Thicker plating than industry standards for reduced contact fretting and higher temperature endurance
  - Gold over nickel is "gold standard" for high-reliability aerospace contacts
- Crimp versions use standard industry tooling, including crimp die/locator and insertion/extraction tools (2AWG Crown Ring contacts require custom tooling)

ABOUT TURBOFLEX "M" AND TURBOFLEX "R" CABLE CONSTRUCTION

TurboFlex cables are jacketed with Duralectric insulation, which contributes to the flexibility of the product. TurboFlex R (rope-lay core) provides maxiumum flexibility. TurboFlex M (M22759 core) has a slightly larger bend radius but far superior flexibility compared to standard M22759 cable.





TurboFlex R with rope-lay cable construction





TurboFlex M with M22759 cable construction

TURBOFLEX AND SR. 806 MIL-AERO POWERPLAY CONNECTOR, CONTACT, AND CABLE ECOSYSTEM									
		TurboFlex M with M22759 cable construction					TurboFlex R with Rope-Lay cable construction		
Cable Type		Single-Wall TurboFlex M Cable	Dual-Wall Turboflex M Shielded Cable	Single-Wall TurboFlex M, Shield + Fabric Overbraid	Single-Wall TurboFlex M Cable	Dual-Wall Turboflex M Shielded Cable	Single-Wall TurboFlex R Cable	Dual-Wall TurboFlex R Cable	Single-Wall TurboFlex R Cable
Part No.		967-600	967-601	967-602	967-022	967-024	961-106-2000	961-107-2000	961-108-2000
Insulation / Jacket / Shield Type		Duralectric D Insulation	Duralectric D Insulation / Jacket, EMI Shield	Duralectric D Insulation EMI Shield Fabric Overbraid	Duralectric L Insulation	Duralectric L Insulation / Jacket, EMI Shield	Duralectric D Insulation	Duralectric D Insulation / Jacket	Duralectric L Insulation
VAC Rating		725–2875	725–2875	725–2875	2000	2000	2000	2000	2000
Gauge AWG	Typical Current (A)	✓ = Available Gauges					✓ = Available Gauges		
22	8–18	✓	✓	✓					
16	15–35	✓	✓	✓					
12	30–70	✓	✓	✓					
8	55–135	✓	✓	✓	✓	✓	✓	✓	✓

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PowerPlay™ High-Power Connectors and Cables

Series 806 PowerPlay high-density Overview and insert arrangements

SAVE SIZE AND WEIGHT WITH SERIES 806 VERSUS D38999

Series 806 Mil-Aero is the Glenair micro miniature circular series offering significant size and weight savings while meeting key performance benchmarks for a broad range of applications such as commercial and military aerospace, industrial robotics, and transportation systems. Designed for general use in harsh vibration, shock, and environmental settings—as well as high-altitude, unpressurized aircraft zones with aggressive voltage ratings and altitude immersion standards—the Series 806 Mil-Aero features numerous mechanical design innovations including durable mechanical insert retention, radial seals and triple-ripple grommet seals. Its reduced thread pitch and re-engineered ratchet prevent decoupling problems, particularly in small shell sizes, solving one of the major problems of shell size 9 and 11 MIL-DTL-38999 Series III connectors. PowerPlay versions of the Series 806 leverage all of these performance and design advantages, combined with support for PowerPlay contacts, safe-touch inserts, and TurboFlex cable.

Series 806 Mil-Aero
Smallest Size
.500 In. Mating Threads
3 #20 Contacts
or 7 #22 contacts

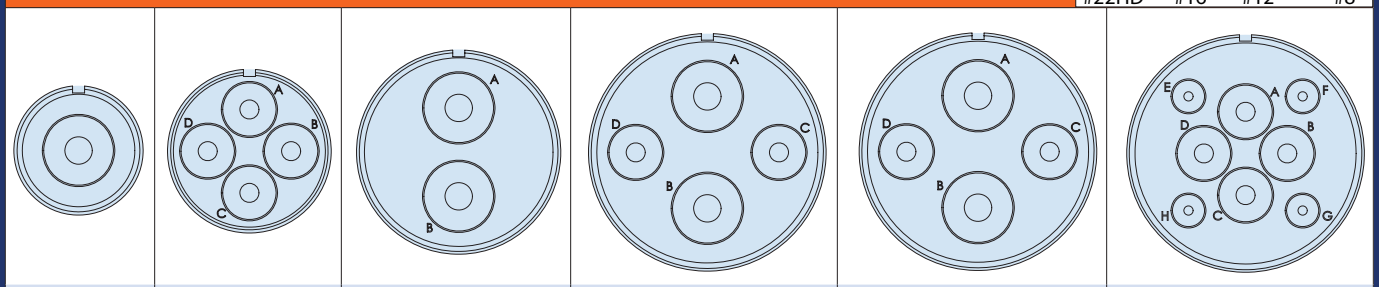


MIL-DTL-38999
Smallest Size
.625 In. Mating Threads
3 #20 Contacts or
6 #22 contacts

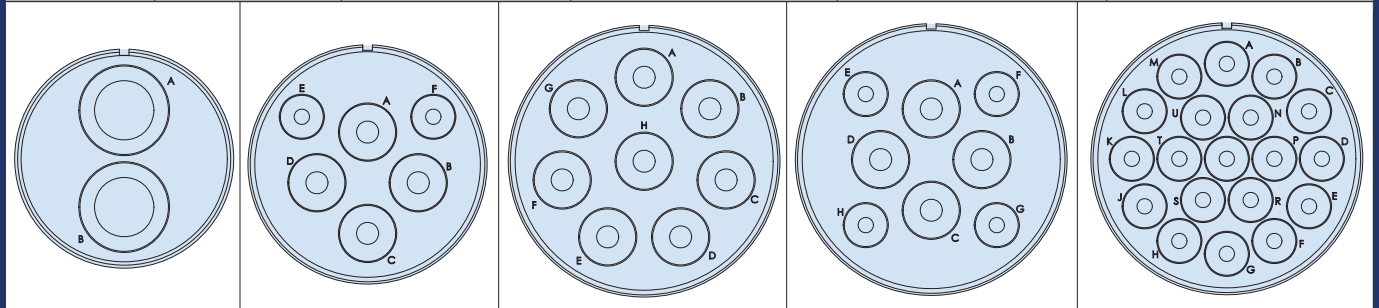
- **Next-generation small form factor aerospace-grade circular connector**
- **Designed for general use in harsh application environments such as aircraft, industrial robotics and more**
- **Upgraded environmental, electrical, and mechanical performance**
- **Integrated anti-decoupling technology**
- **Higher density 20HD and 22HD contact arrangements**
- **New PowerPlay designs with hybrid insert arrangements for standard and high-power applications**

SERIES 806 POWERPLAY SHELL INSERT / CONTACT ARRANGEMENTS
(FRONT PIN ARRANGEMENT SHOWN, SOCKET ARRANGEMENT IS REVERSED)

#22HD #16 #12 #8



11P1	14P4	16P2	18P4	18P4A	18P8
1x Size 12	4x Size 16	2x Size 12	4x Size 12	2x Size 16, 2x Size 12	4x Size 16, 4x Size 22HD (Interlock)



20P2	22P6	24P8	24P8A	24P19
2x Size 8	2x Size 16, 4x Size 12	8x Size 12	4x Size 16, 4x Size 12	19x Size 16

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Rev. 02.24.25

806-091 Series 806 Mil-Aero PowerPlay Plug Connector

SERIES 806 MIL-AERO POWERPLAY HIGH DENSITY



MATERIAL/FINISH

- Shell: Al alloy or CRES / see How to Order table
- Insulators: high grade rigid dielectric
- Interfacial seal, grommet: fluorosilicone blend
- Contact: copper alloy / gold plate

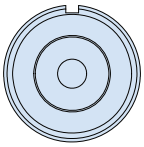
NOTES

- Blue color band indicates rear release retention system.
- See Series 806 catalog for contact termination tools.
- 14P4 pin insert arrangement shown for reference only, see Dimensions table for available arrangements.
- This plug connector mates with power receptacle connector 806-092 and 806-093 with same polarization and opposite contact gender.
- "P" & "S" contact types supplied with standard crimp contacts, see Contact Part Numbers table. "H" contact type supplied with special Crown Ring power socket contacts (REF: 850-305) "H" contact type not available for size #8 or #22HD contact arrangements.
- Terminate shield with Glenair BandMaster ATS tool 601-108 and Glenair nanoband.
- Groove for use with overmold strain relief or 809-060 heat shrink boots.
- #22HD interlock contacts are last to mate and first to break.

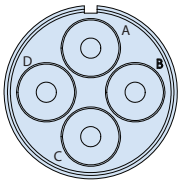
HOW TO ORDER

Sample Part Number	806-091	-ME	14P4	P	B	A
Basic Part Number	Series 806 Mil-Aero PowerPlay Plug					
Material and Finish	**NF** = Aluminum Alloy, O.D. CAD Over Electroless Nickel **MT** = Aluminum alloy, Nickel-PTFE **ME** = Aluminum Alloy, Electroless Nickel **ZR** = Aluminum Alloy, Black Zinc-Nickel **TZ** = Aluminum Alloy, Tin Zinc **Z1** = Stainless Steel, Passivated **ZL** = Stainless Steel, Electro-Deposited Nickel					
Shell Size / Insert Arrangement	See Shell Insert/Contact Arrangement tables					
Contact Type	**Standard Contacts** **P** = Pin **S** = Socket **Power Contacts** **H** = Power socket **Less Contacts** **A** = Pin type, less contacts **B** = Socket type, less contacts					
Shell Style	**M** = Metric (accessory thread) **B** = Band platform (for attaching cable shield)					
Polarization Key Code Way	**A**, **B**, **C**, **D**, **E**, **F** (See Polarization Key Code table)					

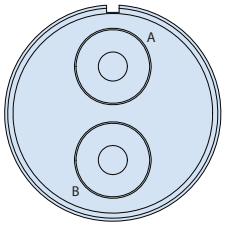
SHELL INSERT / CONTACT ARRANGEMENTS
(FRONT PIN ARRANGEMENT SHOWN, SOCKET ARRANGEMENT IS REVERSED)



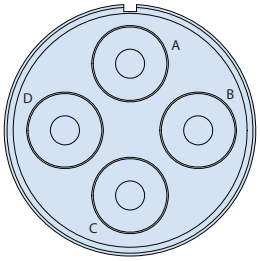
11P1
1x Size 12



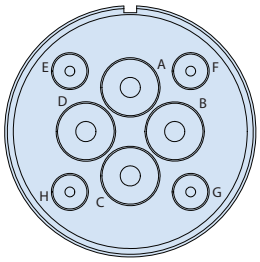
14P4
4x Size 16



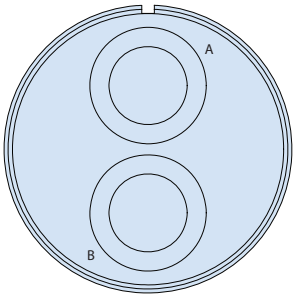
16P2
2x Size 12



18P4
4x Size 12



18P8
4x Size 16
4x Size 22HD (Interlock)

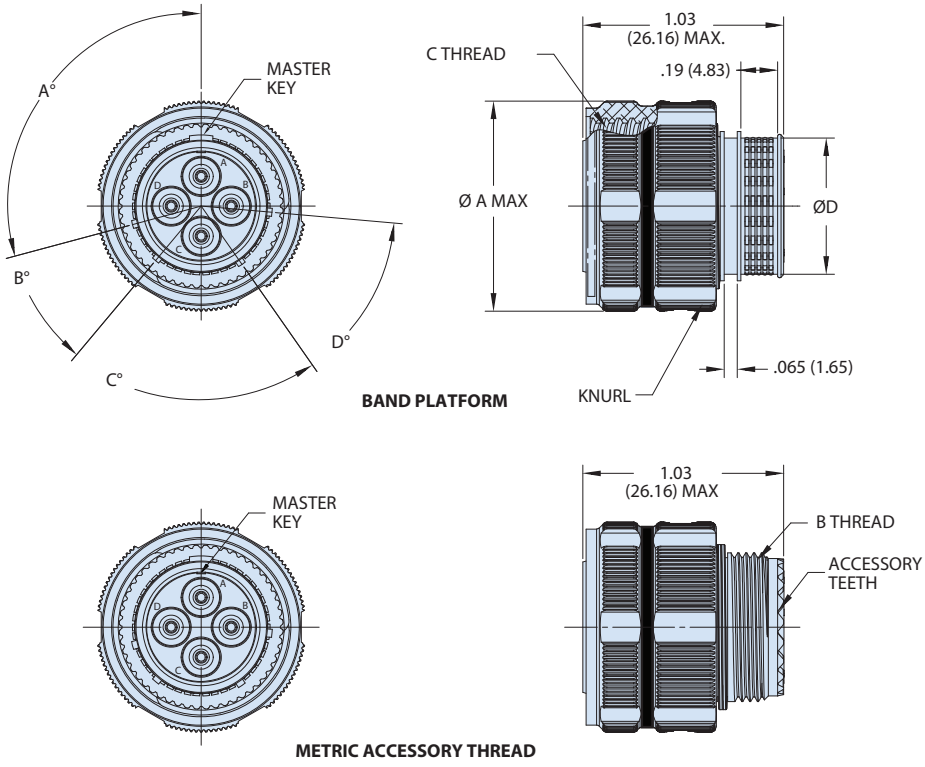


20P2
2x Size 8

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806-091 Series 806 Mil-Aero PowerPlay Plug Connector

DIMENSIONS



Size / Arrangements	Contacts	Ø A Max	B Thread	C Mating Thread	Ø D
11P1	1X #12	0.890 (22.61)	M15x1.0-6g-0.100R	.6875-.067P-.2L-TS-2B	0.527 (13.39)
14P4	4X #16	1.110 (28.19)	M19 X 1.0-6g-.100R	.875 -.067P-.2L-TS-2B	0.681 (17.30)
16P2	2X #12	1.170 (29.72)	M22 X 1.0-6g-.100R	1.000 -.067P-.2L-TS-2B	0.782 (19.86)
18P4	4X #12	1.350 (34.29)	M25 X 1.0-6g-.100R	1.125 -.067P-.2L-TS-2B	0.899 (22.83)
18P8	4X #16 4X #22HD	1.350 (34.29)	M25 X 1.0-6g-.100R	1.125 -.067P-.2L-TS-2B	0.899 (22.83)
20P2	2X #8	1.470 (37.34)	M28 X 1.0-6g-.100R	1.250 -.067P-.2L-TS-2B	1.043 (26.49)

POLARIZATION KEY CODE

Pos.	A	B	C	D
A	105°	140°	215°	265°
B	102°	170°	248°	305°
C	80°	150°	230°	295°
D	68°	140°	205°	275°
E	64°	155°	234°	304°
F	72°	120°	200°	298°

CONTACT PART NUMBERS [REF]

Contact Size	Pin	Std Socket	Power Socket
#8	850-159	850-158	N/A
#12	850-356-12	809-113	850-305-12
#16	850-356-16	809-111	850-305-16
#22HD Interlock	850-094-1	850-095-1	N/A

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806-092 Series 806 Mil-Aero PowerPlay Square-Flange Receptacle Connector

SERIES 806 MIL-AERO POWERPLAY HIGH DENSITY



MATERIAL/FINISH

- Shell: Al alloy or CRES / see How to Order table
- Insulators: high grade rigid dielectric
- Interfacial seal, grommet: fluorosilicone blend
- Contact: copper alloy / gold plate

NOTES

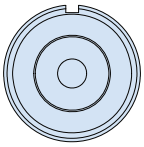
- Blue color band indicates rear release retention system.
- See Series 806 catalog for contact termination tools.
- 14P4 socket insert arrangement shown for reference only, see Dimensions table for available arrangements.
- This receptacle connector mates with power plug connector 806-091 with same polarization and opposite contact gender.
- "P" & "S" contact types supplied with standard crimp contacts. "H" contact type supplied with special Crown Ring power socket contacts (REF: 850-305). Note: "H" contact type not available for size #8 or #22HD contact arrangements.
- Terminate shield with Glenair BandMaster ATS tool 601-108 and Glenair nanoband.
- Groove for use with overmold strain relief or 809-060 heat shrink boots.
- #22HD interlock contacts are last to mate and first to break.

HOW TO ORDER

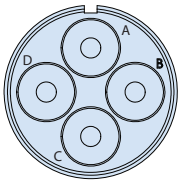
Sample Part Number	806-092	-ME	14P4	S	M	T	A

Basic Part Number	Series 806 Mil-Aero, PowerPlay Square-Flange Receptacle
Material and Finish	**NF** = Aluminum Alloy, O.D. Cad Over Electroless Nickel **MT** = Aluminum Alloy, Nickel-PTFE **ME** = Aluminum Alloy, Electroless Nickel **ZR** = Aluminum Alloy, Black Zinc-Nickel **TZ** = Aluminum Alloy, Tin Zinc **Z1** = Stainless Steel, Passivated **ZL** = Stainless Steel, Electro-Deposited Nickel
Shell Size / Insert Arrangement	See Shell Insert/Contact Arrangements Table
Contact Type	**Standard Contacts** **Power Contacts** **P** = Pin **S** = Socket **H** = Power socket **Less Contacts** **A** = Pin type, less contacts **B** = Socket type, less contacts
Shell Style	**M** = Metric (accessory thread) **B** = Band platform (for attaching cable shield)
Panel Mounting Hole Style	**T** = Thru hole **C** = Clinch nut, 4-40 thd, M45938/6-4c (for rear panel mounting)
Polarization Key Code Way	**A**, **B**, **C**, **D**, **E**, **F** (See Polarization Key Code table)

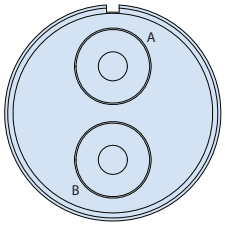
SHELL INSERT / CONTACT ARRANGEMENTS
(FRONT PIN ARRANGEMENT SHOWN, SOCKET ARRANGEMENT IS REVERSED)



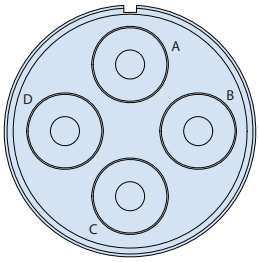
11P1
1x Size 12



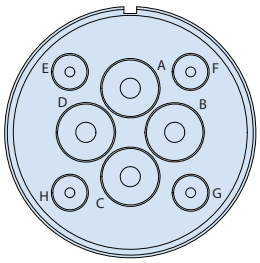
14P4
4x Size 16



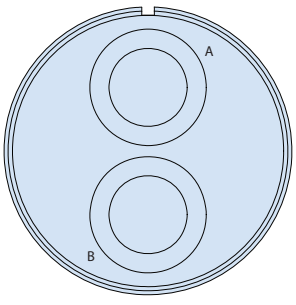
16P2
2x Size 12



18P4
4x Size 12



18P8
4x Size 16
4x Size 22HD (Interlock)

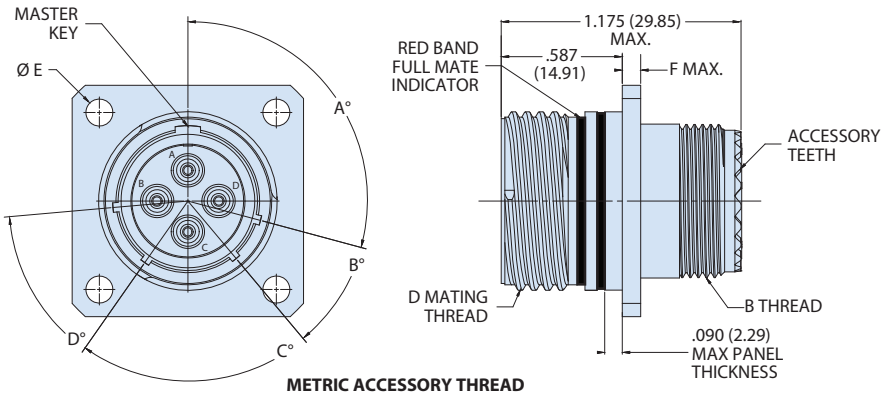


20P2
2x Size 8

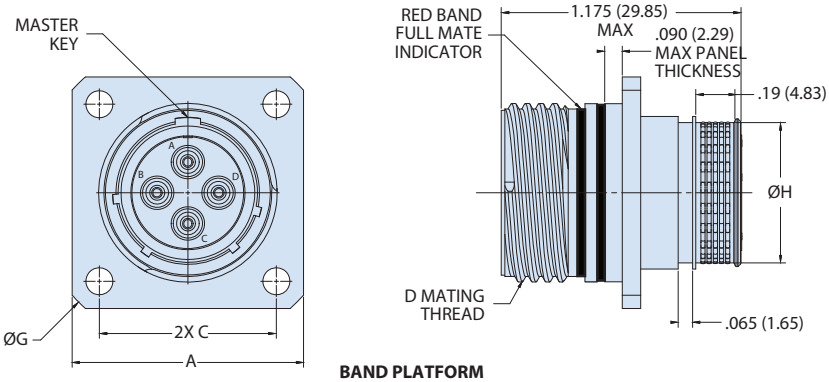
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806-092 Series 806 Mil-Aero PowerPlay Square-Flange Receptacle Connector

DIMENSIONS

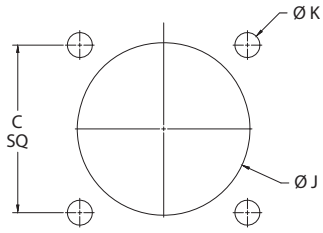


METRIC ACCESSORY THREAD



BAND PLATFORM

PANEL MOUNT INFO



Size	ØJ	K	
		With Clinch Nut	Without Clinch Nut
11	.707 (17.96)	.128 (3.25)	.128 (3.25)
14	.885 (22.48)		
16	1.01 (25.65)		
18	1.12 (28.45)		
20	1.27 (32.26)		.154 (3.91)

Size / Arrangements	Contacts	A Max	B Thread	C	D Mating Thread	ØE Thru Holes	F Max	G Max	ØH
11P1	1X #12	0.944 (23.98)	M15 X 1-6g-.100R	0.670 (17.02)	.6875-.067p-.2L-TS-2A	0.128 (3.25)	0.100 (2.54)	1.2 (30.48)	0.527 (13.39)
14P4	4X #16	1.133 (28.78)	M19 X 1-6g-.100R	0.859 (21.82)	.8750-.067p-.2L-TS-2A	0.128 (3.25)	0.100 (2.54)	1.510 (38.35)	0.684 (17.37)
16P2	2X #12	1.227 (31.17)	M22 X 1-6g-.100R	0.938 (23.83)	1.0000-.067p-.2L-TS-2A	0.128 (3.25)	0.100 (2.54)	1.620 (41.15)	0.785 (19.94)
18P4	4X #12	1.320 (33.53)	M25 X 1-6g-.100R	1.016 (25.81)	1.1250-.067p-.2L-TS-2A	0.128 (3.25)	0.100 (2.54)	1.784 (45.31)	0.899 (22.83)
18P8	4X #16	1.320 (33.53)	M25 X 1-6g-.100R	1.016 (25.81)	1.1250-.067p-.2L-TS-2A	0.128 (3.25)	0.100 (2.54)	1.784 (45.31)	0.899 (22.83)
20P2	2X #8	1.444 (36.68)	M28 X 1-6g-.100R	1.109 (28.17)	1.2500-.067p-.2L-TS-2A	0.154 (3.91)	0.125 (3.18)	1.910 (48.51)	1.046 (26.57)

POLARIZATION KEY CODE

Pos.	A	B	C	D
A	105°	140°	215°	265°
B	102°	170°	248°	305°
C	80°	150°	230°	295°
D	68°	140°	205°	275°
E	64°	155°	234°	304°
F	72°	120°	200°	298°

CONTACT PART NUMBERS [REF]

Contact Size	Pin	Std Socket	Power Socket
#8	850-159	850-158	N/A
#12	850-356-12	809-113	850-305-12
#16	850-356-16	809-111	850-305-16
#22HD Interlock	850-094-1	850-095-1	N/A

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806-093 Series 806 Mil-Aero PowerPlay Jam-Nut Receptacle Connector

SERIES 806 MIL-AERO POWERPLAY HIGH DENSITY



MATERIAL/FINISH

- Shell: Al alloy or CRES / see How to Order table
- Insulators: high grade rigid dielectric
- Interfacial seal, grommet: fluorosilicone blend
- Contact: copper alloy / gold plate

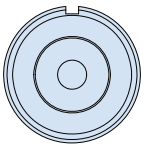
NOTES

- Blue color band indicates rear release retention system.
- See Series 806 catalog for contact termination tools.
- 14P4 socket insert arrangement shown for reference only, see Dimensions table for available arrangements.
- This receptacle connector mates with power plug connector 806-091 with same polarization and opposite contact gender.
- "P" & "S" contact types supplied with standard crimp contacts, see Contact Part Numbers table. "H" contact type supplied with special Crown Ring power socket contacts (REF: 850-305). Note: "H" contact type not available for size #8 or #22HD contact arrangements.
- Terminate shield with Glenair BandMaster ATS tool 601-108 and Glenair nanoband.
- Groove for use with overmold strain relief or 809-060 heat shrink boots.
- #22HD interlock contacts are last to mate and first to break.

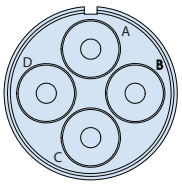
HOW TO ORDER

Sample Part Number	806-093	-ME	14P4	P	B	A
Basic Part Number	Series 806 Mil-Aero, Jam Nut Receptacle Connector					
Material and Finish	**NF** = Aluminum Alloy, O.d. Cad Over Electroless Nickel **MT** = Aluminum Alloy, Nickel-PTFE **ME** = Aluminum Alloy, Electroless Nickel **ZR** = Aluminum Alloy, Black Zinc-Nickel **TZ** = Aluminum Alloy, Tin Zinc **Z1** = Stainless Steel, Passivated **ZL** = Stainless Steel, Electro-Deposited Nickel					
Shell Size / Insert Arrangement	See Shell Insert/Contact Arrangements Table					
Contact Type	**Standard Contacts** **Power Contacts** **P** = Pin **S** = Socket **H** = Power socket **Less Contacts** **A** = Pin type, less contacts **B** = Socket type, less contacts					
Shell Style	**M** = Metric (accessory thread) **B** = Band platform (for attaching cable shield)					
Polarization Key Code Way	**A**, **B**, **C**, **D**, **E**, **F** (See Polarization Key Code table)					

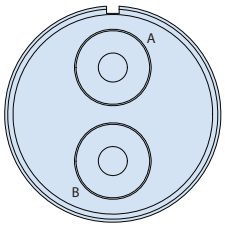
SHELL INSERT / CONTACT ARRANGEMENTS
(FRONT PIN ARRANGEMENT SHOWN, SOCKET ARRANGEMENT IS REVERSED)



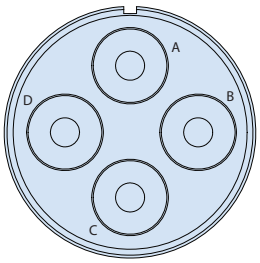
11P1
1x Size 12



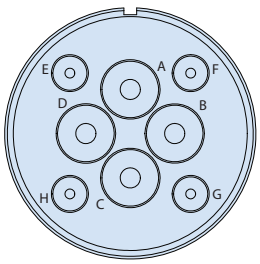
14P4
4x Size 16



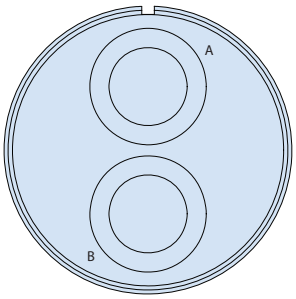
16P2
2x Size 12



18P4
4x Size 12



18P8
4x Size 16
4x Size 22HD (Interlock)

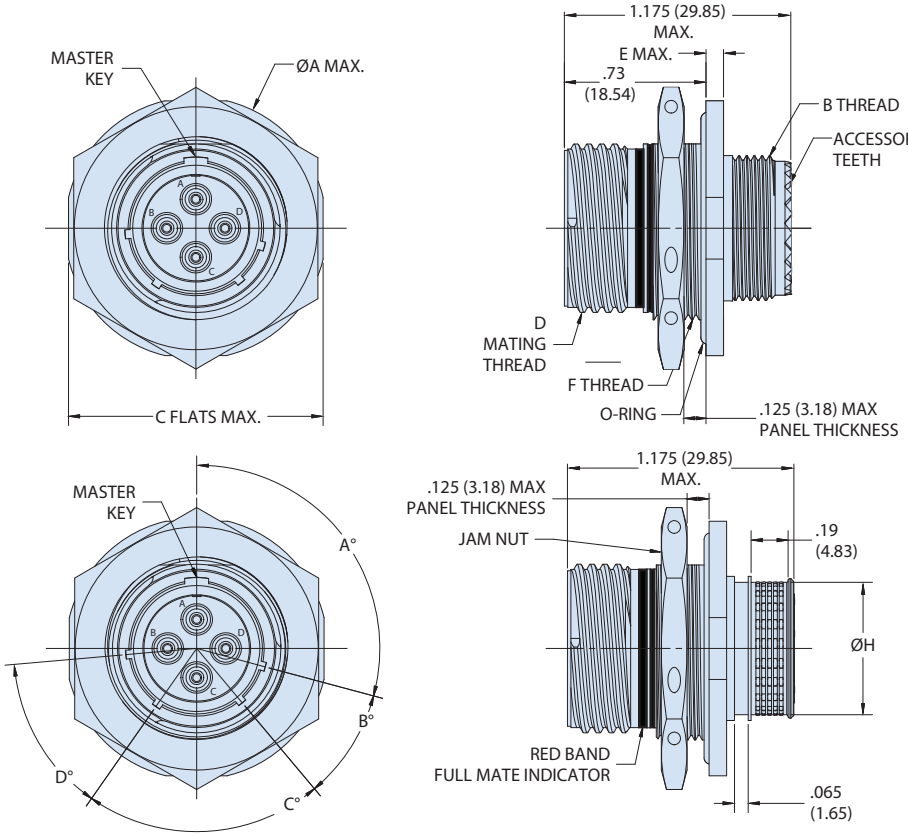


20P2
2x Size 8

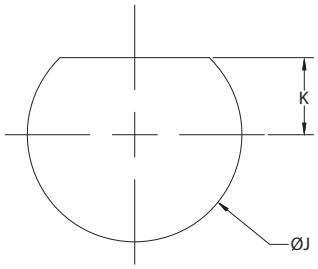
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806-093 Series 806 Mil-Aero PowerPlay Jam-Nut Receptacle Connector

DIMENSIONS



PANEL MOUNT INFO



Shell Size	K +.005/-.00	ØJ +.005/-.00
11	.350 (8.89)	.719 (18.26)
14	.443 (11.25)	.955 (24.26)
16	.505 (12.83)	1.073 (27.25)
18	.568 (14.43)	1.192 (30.28)
20	.630 (16.00)	1.349 (34.26)

Size / Arrangements	Contacts	ØA Max.	B Thread	C Max.	D Mating Thread	E Max.	F Thread	ØH
11P1	1X #12	1.160 (29.46)	M15 X 1-6g-.100R	1.110	.6875-.067P-.2L-TS-2A	0.100 (2.54)	M19 X 1-6g-.100R	0.527 (13.39)
14P4	4X #16	1.360 (34.54)	M19 X 1-6g-.100R	1.320	.8750-.067P-.2L-TS-2A		M24 X 1-6g-.100R	0.684 (17.37)
16P2	2X #12	1.515 (38.48)	M22 X 1-6g-.100R	1.444	1.0000-.067P-.2L-TS-2A		M27 X 1-6g-.100R	0.785 (19.94)
18P4	4X #12	1.610 (40.89)	M25 X 1-6g-.100R	1.570	1.1250-.067P-.2L-TS-2A		M30 X 1-6g-.100R	0.899 (22.83)
18P8	4X #16 4X #22HD	1.610 (40.89)	M25 X 1-6g-.100R	1.570	1.1250-.067P-.2L-TS-2A		M30 X 1-6g-.100R	0.899 (22.83)
20P2	2X #8	1.850 (46.99)	M28 X 1-6g-.100R	1.760	1.2500-.067P-.2L-TS-2A	0.128 (3.25)	M34 X 1-6g-.100R	1.043 (26.49)

POLARIZATION KEY CODE

Pos.	A	B	C	D
A	105°	140°	215°	265°
B	102°	170°	248°	305°
C	80°	150°	230°	295°
D	68°	140°	205°	275°
E	64°	155°	234°	304°
F	72°	120°	200°	298°

CONTACT PART NUMBERS [REF]

Contact Size	Pin	Std Socket	Power Socket
#8	850-159	850-158	N/A
#12	850-356-12	809-113	850-305-12
#16	850-356-16	809-111	850-305-16
#22HD Interlock	850-094-1	850-095-1	N/A

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Series 806 Mil-Aero PowerPlay
667-440, 667-441, 667-443 Receptacle and Plug Covers



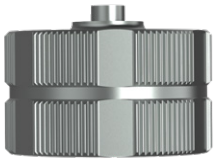


Figure 1
667-440 Receptacle Cover



Figure 2
667-441 Plug Cover

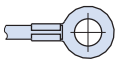
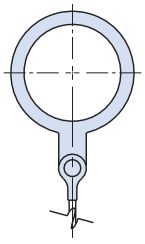
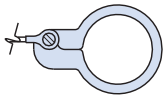


Figure 3
667-443 Self-Locking Receptacle Cover

MATERIAL/FINISH

- Cover: aluminum alloy, high grade engineering thermoplastic or stainless steel. See ordering info for finish options
- O-ring, gasket: fluorosilicone
- Hardware: stainless steel, passivated
- Lanyard: see Attachment Lanyards table

TABLE 2 RING CODES

Ring Type	Ring Code	Inside Diameter
No Ring	00	—
 Ring Terminal	04	.126 (3.20)
	06	.145 (3.68)
	08	.188 (4.78)
	10	.197 (5.00)
 Solid Ring	12	.423 (10.74)
	14	.481 (12.22)
	16	.560 (14.22)
	18	.600 (15.24)
	20	.635 (16.13)
	22	.695 (17.65)
	24	.715 (18.16)
	26	.766 (19.46)
	28	.845 (21.46)
	30	.885 (22.48)
	32	.950 (24.13)
	34	1.015 (25.78)
	36	1.070 (27.18)
	38	1.135 (28.83)
	40	1.210 (30.73)
	42	1.275 (32.39)
	44	1.380 (35.05)
	46	1.470 (37.34)
	48	1.625 (41.28)
 Split Ring	50	.432 (10.97)
	52	.492 (12.50)
	54	.648 (16.46)
	56	.757 (19.23)
	58	.898 (22.81)
	60	1.023 (25.98)
	64	1.137 (28.88)
	68	1.357 (34.47)

HOW TO ORDER

Sample Part Number	667-441	ME	12	U	01	-6
Basic Part Number	**667-440** = Receptacle cover *(fig. 1)* **667-441** = Plug cover *(fig. 2)* **667-443** = Receptacle cover, self-locking *(fig. 3)*					
Material and Finish	**NF** = Aluminum, CAD/O.D. Over Electroless Nickel **MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin-Zinc **Z1** = Stainless, Passivated					
Shell Size	**11**, **14**, **16**, **18**, **20**					
Attachment Lanyard (Table I)	**N** = No attachment **G** = Nylon rope **SK** = Nylon rope with slip knot **U** = SST rope with polyurethane coating **H** = SST rope with High-Temperature translucent FEP jacket **S** = Sash chain, #8, SST					
Attachment Ring Code (Table 2)	Omit for attachment types N and SK See Table 2 for ring styles and sizes					
Attachment Length	Omit for attachment type N Lanyard length in inches					

ATTACHMENT LANYARDS



Nylon Rope (G)
-55° to +100°C, black, very flexible, very good abrasion resistance, good resistance to fuels, .120" (3mm) diameter



Sash Chain (S)
Stainless steel, #8 chain, .240" (6mm)



Polyurethane Coated Wire Rope (U)
Black polyurethane over stainless steel rope, -55° to +125°C, very flexible, excellent abrasion resistance, excellent resistance to fuels, .080" (2mm) diameter



Slip Knot (SK)
55° to +100°C, black, very flexible, very good abrasion resistance, good resistance to fuels, .120" (3mm) diameter. Length includes .5" (13mm) diameter loop.

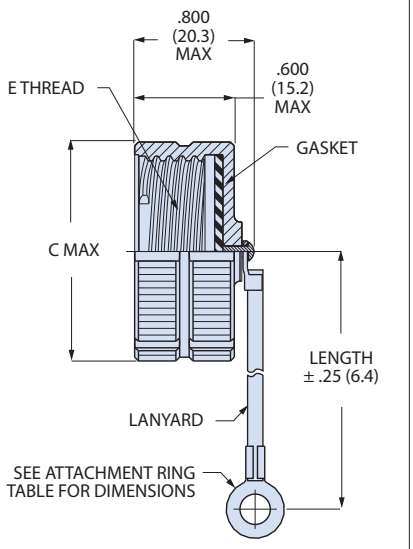


Teflon® Jacketed Wire Rope (H)
Translucent FEP jacket over stainless steel, -55° to +200°C, fair flexibility, good abrasion resistance, .100" diameter

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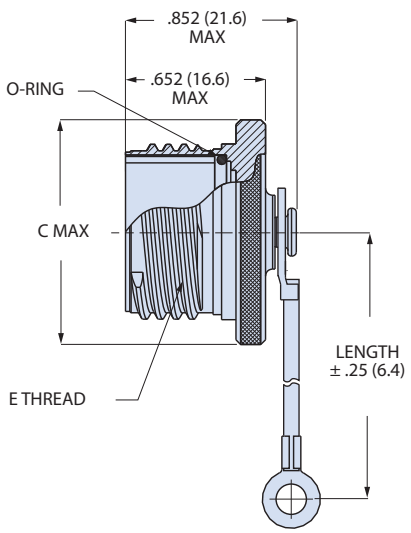
Series 806 Mil-Aero PowerPlay
667-440, 667-441, 667-443 Receptacle and Plug Covers

667-440 RECEPTACLE COVER



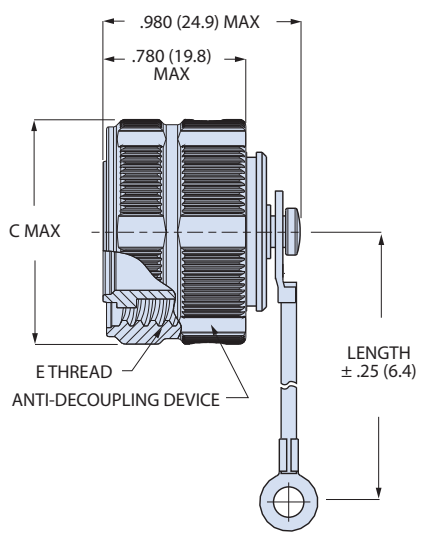
Shell Size	ØC Max	E Thread
7	.600 (15.2)	.4375-.067P-.2L-TS-2B
8	.640 (16.3)	.5000-.067P-.2L-TS-2B
9	.730 (18.5)	.5625-.067P-.2L-TS-2B
10	.775 (19.7)	.6250-.067P-.2L-TS-2B
11	.828 (21)	.6875-.067P-.2L-TS-2B
12	.890 (22.6)	.7500-.067P-.2L-TS-2B
14	1.030 (26.2)	.875-.067P-.2L-TS-2B
16	1.140 (30)	1.000-.067P-.2L-TS-2B
18	1.280 (32.5)	1.125-.067P-.2L-TS-2B
20	1.390 (35.3)	1.250-.067P-.2L-TS-2B
22	1.515 (38.5)	1.375-.067P-.2L-TS-2B
24	1.710 (43.4)	1.500-.067P-.2L-TS-2B

667-441 PLUG COVER



Shell Size	ØC Max	E Thread
7	.606 (15.4)	.4375-.067P-.2L-TS-2A
8	.676 (17.2)	.5000-.067P-.2L-TS-2A
9	.771 (19.6)	.5625-.067P-.2L-TS-2A
10	.832 (21.1)	.6250-.067P-.2L-TS-2A
11	.890 (22.6)	.6875-.067P-.2L-TS-2A
12	.950 (24.1)	.7500-.067P-.2L-TS-2A
14	1.110 (28.2)	.875-.067P-.2L-TS-2A
16	1.170 (29.7)	1.000-.067P-.2L-TS-2A
18	1.350 (34.3)	1.125-.067P-.2L-TS-2A
20	1.470 (37.3)	1.250-.067P-.2L-TS-2A
22	1.600 (40.6)	1.375-.067P-.2L-TS-2A
24	1.710 (43.4)	1.500-.067P-.2L-TS-2A

667-443 RECEPTACLE COVER WITH ANTI-DECOUPLING DEVICE



Shell Size	ØC Max	E Thread
7	.606 (15.4)	.4375-.067P-.2L-TS-2B
8	.676 (17.2)	.5000-.067P-.2L-TS-2B
9	.771 (19.6)	.5625-.067P-.2L-TS-2B
10	.832 (21.1)	.6250-.067P-.2L-TS-2B
11	.890 (22.6)	.6875-.067P-.2L-TS-2B
12	.950 (24.1)	.7500-.067P-.2L-TS-2B
14	1.110 (28.2)	.875-.067P-.2L-TS-2B
16	1.170 (29.7)	1.000-.067P-.2L-TS-2B
18	1.350 (34.3)	1.125-.067P-.2L-TS-2B
20	1.470 (37.3)	1.250-.067P-.2L-TS-2B
22	1.600 (40.6)	1.375-.067P-.2L-TS-2B
24	1.710 (43.4)	1.500-.067P-.2L-TS-2B

SOLID ATTACHMENT RING DIMENSIONS

Ring Code	Inside Diameter	Max. Outside Diameter
00	—	—
04	.126 (3.20)	.310 (7.87)
06	.145 (3.68)	.310 (7.87)
08	.188 (4.78)	.310 (7.87)
10	.197 (5.00)	.310 (7.87)
11	.326 (8.28)	.445 (11.30)
12	.423 (10.74)	.535 (13.59)
14	.481 (12.22)	.593 (15.06)
16	.560 (14.22)	.672 (17.07)
18	.600 (15.24)	.712 (18.08)
20	.635 (16.13)	.770 (19.56)
22	.695 (17.65)	.830 (21.08)

Ring Code	Inside Diameter	Max. Outside Diameter
24	.715 (18.16)	.830 (21.08)
26	.766 (19.46)	.895 (22.73)
28	.845 (21.46)	1.026 (26.06)
30	.885 (22.48)	1.026 (26.06)
32	.950 (24.13)	1.172 (29.77)
34	1.015 (25.78)	1.205 (30.61)
36	1.070 (27.18)	1.205 (30.61)
38	1.135 (28.83)	1.260 (32.00)
40	1.210 (30.73)	1.322 (33.58)
42	1.275 (32.39)	1.385 (35.18)
44	1.380 (35.05)	1.485 (37.72)
46	1.470 (37.34)	1.672 (42.47)

Ring Code	Inside Diameter	Max. Outside Diameter
48	1.625 (41.28)	1.797 (45.64)
50	.432 (10.97)	.570 (14.48)
52	.492 (12.50)	.630 (16.00)
54	.648 (16.46)	.790 (20.07)
56	.757 (19.23)	.890 (22.61)
58	.898 (22.81)	1.040 (26.42)
60	1.023 (25.98)	1.160 (29.46)
64	1.137 (28.88)	1.270 (32.26)
68	1.357 (34.47)	1.480 (37.59)

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Series 806 Mil-Aero PowerPlay
620V*080 Metal Strain Relief Cable Clamp



HOW TO ORDER			
Sample Part Number	**620VS080**	**MT**	**08**
Basic Part Number	**620VS080** = Straight Strain Relief **620VB080** = 45° Strain Relief **620VA080** = 90° Strain Relief		
Material/ Finish	**ME** = Aluminum, Electroless Nickel **MT** = Aluminum, Ni/PTFE **ZR** = Aluminum, Black Zinc-Nickel **NF** = Aluminum, Olive Drab Cadmium		
Shell Size	**11**, **14**, **16**, **18**, **20**		

SPECIFICATIONS

- Operating temperature:
  codes ME and MT: -65°C to +200°C
  codes ZR, NF, NFP: -65°C to +175°C
- Salt spray (corrosion)
  Code ME: 96 hours
  Code NF, ZR, MT: 1000 hours
- Vibration, shock: SAE AS85049 Category 4C

FEATURES

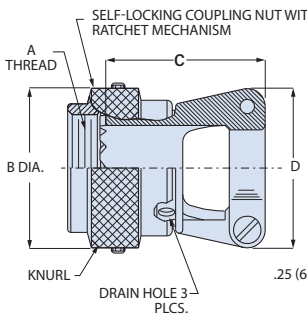
- Straight, 45° and 90°
- Self-locking spin coupling
- Fits Series 806 micro miniature connectors
- Captive threaded inserts

MATERIAL/FINISH

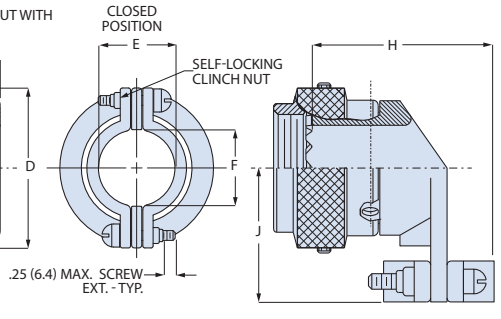
- Clamp, body, saddles, coupling nut: aluminum alloy. See material/finish options in How to Order table for options.
- Hardware: 300 series stainless steel
- Anti-decoupling device: corrosion-resistant material

DIMENSIONS

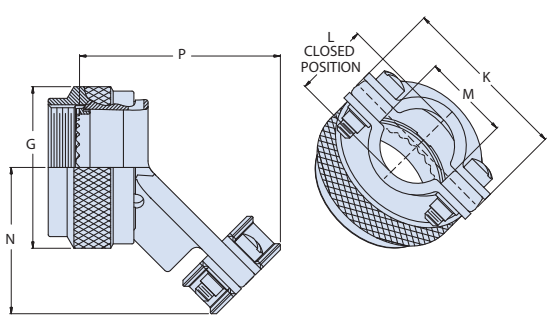
620VS080
Straight Exit



620VA080
90° Exit



620VB080
45° Exit



Shell Size	A ISO Metric Thd	øB Max.	C Max.	D Max.	E ± .031 (0.79)	F Min.	H Max.	J Max.	ØG Max.	K Max.	J ±.031	M Min.	N Max.	P Max.
11	M15 x 1.0-6H	.84 (21.34)	.960 (24.38)	1.08 (27.43)	.430 (10.92)	.44 (11.18)	1.10 (27.94)	.97 (24.64)	.91 (23.11)	1.00 (25.40)	.310 (7.87)	.31 (7.87)	1.05 (26.67)	1.50 (38.10)
14	M19 x 1.0-6H	1.02 (25.91)	1.100 (27.94)	1.20 (30.48)	.530 (13.46)	.54 (13.72)	1.18 (29.97)	1.06 (26.92)	1.02 (25.91)	1.27 (32.26)	.390 (9.91)	.39 (9.91)	1.11 (28.19)	1.55 (39.37)
16	M22 x 1.0-6H	1.16 (29.46)	1.100 (27.94)	1.29 (32.77)	.620 (15.75)	.63 (16.00)	1.30 (33.02)	1.16 (29.46)	1.18 (29.97)	1.38 (35.05)	.506 (12.85)	.51 (12.95)	1.18 (29.97)	1.65 (41.91)
18	M25 x 1.0-6H	1.26 (32.00)	1.230 (31.24)	1.41 (35.81)	.700 (17.78)	.71 (18.03)	1.38 (35.05)	1.34 (34.04)	1.31 (33.27)	1.48 (37.59)	.591 (15.01)	.59 (14.99)	1.23 (31.24)	1.77 (44.96)
20	M28 x 1.0-6H	1.40 (35.56)	1.410 (35.81)	1.59 (40.39)	.778 (19.76)	.78 (19.81)	1.46 (37.08)	1.41 (35.81)	1.42 (36.07)	1.58 (40.13)	.661 (16.79)	.66 (16.76)	1.29 (32.77)	1.81 (45.97)

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Series 806 Mil-Aero PowerPlay
380V*143 Metal EMI/RFI Full Radius Profile Backshell



MATERIAL/FINISH

- Coupling nut, adapter, ferrules, clamps: see material/finish codes
- Anti-decoupling device: corrosion-resistant material
- Hardware: stainless steel, passivated

NOTES

- EMI/RFI protected
- Self-locking spin coupling
- Telescoping clamp screws
- Non-environmental

SPECIFICATIONS

- Operating temperature: codes ME, MT and Z1:-65°C to +200°C
  codes ZR, NF:-65°C to +175°C
- Shell conductivity: aluminum versions: 2.5 milliohms max.
  Stainless steel: 5 milliohms max.
- Salt spray (corrosion)
  Code ME: 96 hours
  Code NF, ZR, MT, Z1: 1000 hours
- Vibration: SAE AS85049 Category 3C
- Shock: SAE AS85049 Category 3C

HOW TO ORDER

Sample Part Number	380VS143	ME	12	06	H	4
Basic Part Number	**380VS143** = EMI Backshell, Straight **380VM143** = EMI Backshell, 45° **380VN143** = EMI Backshell, 90°					
Material/ Finish	**ME** = Aluminum, Electroless Nickel **MT** = Aluminum, Ni/PTFE **ZR** = Aluminum, Black Zinc-Nickel **NF** = Aluminum, Olive Drab Cadmium **Z1** = Stainless Steel, Passivated					
Shell Size	**11**, **14**, **16**, **18**, **20**					
Cable Clamp Size	*See Table 1 for cable clamp sizes*					
Strain Relief Clamp	**H** = Saddle bar clamp, heavy duty, with telescoping screws					
Backshell Length	***Omit for 45° and 90° versions. Applicable to 380VS143 only.*** Length in ½ inch increments: **3** = 1½ inches (min. for Style 1 shown at right) **4** = 2 inches (min. for Style 2 shown on following page) **5** = 2½ inches **6** = 3 inches					

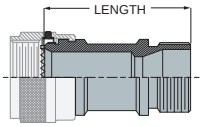
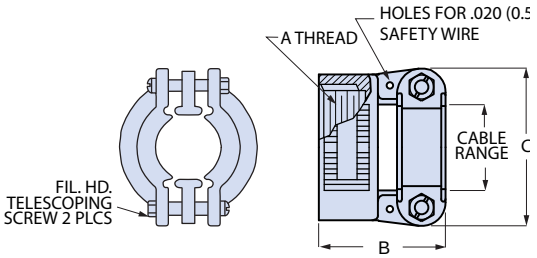
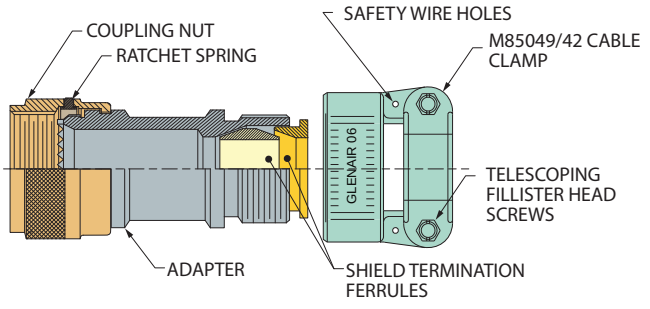


TABLE 1 CABLE CLAMP SIZE



Clamp Size	Cable Range		A Thread Class 2B	B Max.	C Max.
	Min.	Max.			
04	.125 (3.18)	.312 (7.92)	.625-24UNEF	1.301 (33.05)	.957 (24.31)
06	.250 (6.35)	.437 (11.10)	.750-20UNEF	1.301 (33.05)	1.145 (29.08)
08	.312 (7.92)	.562 (14.27)	.875-20UNEF	1.301 (33.05)	1.332 (33.83)
10	.350 (8.89)	.625 (15.88)	1.000-20UNEF	1.301 (33.05)	1.332 (33.83)
12	.500 (12.70)	.750 (19.05)	1.1875-18UNEF	1.332 (33.83)	1.551 (39.40)
16	.625 (15.88)	.937 (23.80)	1.4375-18UNEF	1.426 (36.22)	1.770 (44.96)
20	.875 (22.23)	1.250 (31.75)	1.750-18UNS	1.613 (40.97)	2.113 (53.67)
24	1.000 (25.40)	1.375 (34.92)	2.000-18UNS	1.645 (41.78)	2.363 (60.02)

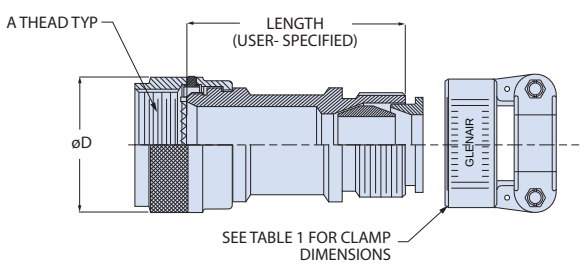


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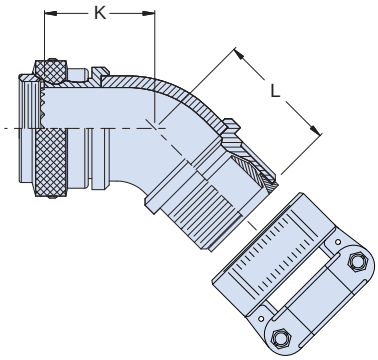
Series 806 Mil-Aero PowerPlay
380V*143 Metal EMI/RFI Full Radius Profile Backshell

DIMENSIONS

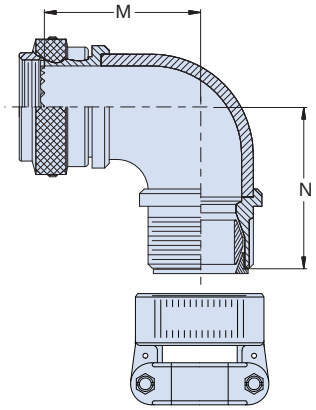
380VS143
Straight Exit



380VM143
45° Exit



380VN143
90° Exit

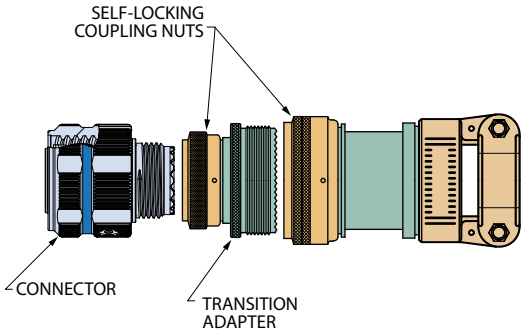


Shell Size	A ISO Metric Thread	øD Max.	K Max. (1)	L Max.	M Max. (1)	N Max.	Max. Clamp Size(1)	Max. Cable Dia. (1)
11	M15 x 1.0-6H	.84 (0.03)	.790 (0.03)	1.130 (0.04)	.970 (0.04)	1.320 (0.05)	06 (0.24)	.437 (0.02)
14	M19 x 1.0-6H	1.02 (0.04)	.830 (0.03)	1.210 (0.05)	1.040 (0.04)	1.420 (0.06)	08 (0.31)	.562 (0.02)
16	M22 x 1.0-6H	1.16 (0.05)	.840 (0.03)	1.280 (0.05)	1.080 (0.04)	1.520 (0.06)	10 (0.39)	.625 (0.02)
18	M25 x 1.0-6H	1.26 (0.05)	.890 (0.04)	1.360 (0.05)	1.140 (0.04)	1.620 (0.06)	12 (0.47)	.750 (0.03)
20	M28 x 1.0-6H	1.40 (0.06)	.920 (0.04)	1.430 (0.06)	1.210 (0.05)	1.710 (0.07)	16 (0.63)	.937 (0.04)

(1) If the maximum clamp size is exceeded, the backshell will be a "Style 2" with a transition adapter as shown below. The K and M dimensions will be increased by 1.00 inch (25.4 mm.) maximum.

Style 2 Backshells for Large Diameter Cables

If the cable clamp is larger than the maximum clamp size shown in the table above, the backshell will be supplied with a ***transition adapter*** and a second coupling nut. This type of backshell is called a ***Style 2***. The large diameter of the Style 2 backshell allows it to slide over the cable until the connector is wired and ready for backshell installation. On straight exit backshells, the transition adapter does not affect the length. On 45° and 90° versions the transition adapter adds 1.00 inch (25.4mm) maximum to the backshell length.



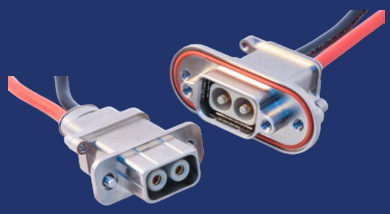
Style 2 Backshell

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SERIES 971 MICRO-CRIMP HIGH DENSITY POWERPLAY

PowerPlay™

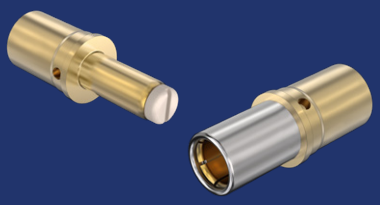
- Sr. 971 Rectangular with Raised Tower Architecture
- High-Temperature Crown Ring Contacts
- Compatible TurboFlex Cabling



Micro-Crimp PowerPlay Rectangular: aerospace-grade micro miniature rectangular for high-power applications.

- **The high-reliability interconnect industry's only high-power micro miniature rectangular**
- **High-density insert arrangements with crimp-removable Crown Ring high-power contacts**
- **Hybrid insert arrangements with size #20 contacts for last-mate / first-break interlock applications**
- **Raised tower "safe-touch" architecture plus finger-proof pins for maxiumum user safety**
- **Crown Ring contact/TurboFlex support for #8, #4, #2, and #1/0 contacts**

HIGH-TEMPERATURE TOLERANT CROWN RING CONTACTS



Glenair Signature Crown Ring contact series

provides reduced contact resistance, superior conductivity, and higher temperature-tolerance than conventional AS39029 contacts and specialized high-power contacts from other manufacturers

- Maximum operating temperature 260°C
- Superior conductivity performance compared to beryllium copper contacts, across full temperature range
- Up to 60% lower contact resistance than AS39029 contacts (normalized, less wire)
- Contact bodies made from high conductivity copper alloy (approximately 95% IACS)
- Pin contact equipped with thermoplastic safe-touch tip
- Stainless steel Crown Ring
  - Provides socket forces without stress relaxation at High-Temperatures
  - Moves socket spring function from socket body to ring, allowing use of high-conductivity copper
- Gold over nickel plating
  - Thicker plating than industry standards for reduced contact fretting and higher temperature endurance
  - Gold over nickel is "gold standard" for high-reliability aerospace contacts
- Crimp versions use standard industry tooling, including crimp die/locator and insertion/extraction tools (2AWG Crown Ring contacts require custom tooling)

ABOUT TURBOFLEX "M" AND TURBOFLEX "R" CABLE CONSTRUCTION

TurboFlex cables are jacketed with Duralectric insulation, which contributes to the flexibility of the product. TurboFlex R (rope-lay core) provides maxiumum flexibility. TurboFlex M (M22759 core) has a slightly larger bend radius but far superior flexibility compared to standard M22759 cable.





TurboFlex R with rope-lay cable construction





TurboFlex M with M22759 cable construction

TURBOFLEX AND SR. 971 MICRO-CRIMP POWERPLAY CONNECTOR, CONTACT, AND CABLE ECOSYSTEM

		TurboFlex M with M22759 cable construction					TurboFlex R with Rope-Lay cable construction		
Cable Type		Single-Wall TurboFlex M Cable	Dual-Wall Turboflex M Shielded Cable	Single-Wall TurboFlex M, Shield + Fabric Overbraid	Single-Wall TurboFlex M Cable	Dual-Wall Turboflex M Shielded Cable	Single-Wall TurboFlex R Cable	Dual-Wall TurboFlex R Cable	Single-Wall TurboFlex R Cable
Part No.		967-600	967-601	967-602	967-022	967-024	961-106-2000	961-107-2000	961-108-2000
Insulation / Jacket / Shield Type		Duralectric D Insulation	Duralectric D Insulation / Jacket, EMI Shield	Duralectric D Insulation EMI Shield Fabric Overbraid	Duralectric L Insulation	Duralectric L Insulation / Jacket, EMI Shield	Duralectric D Insulation	Duralectric D Insulation / Jacket	Duralectric L Insulation
VAC Rating		725–2875	725–2875	725–2875	2000	2000	2000	2000	2000
Gauge AWG	Typical Current (A)	✓ = Available Gauges					✓ = Available Gauges		
20	10–25	✓	✓	✓					
8	55–135	✓	✓	✓	✓	✓	✓	✓	✓
4	105–250	✓	✓	✓	✓	✓	✓	✓	✓
2	145–345	✓	✓	✓	✓	✓	✓	✓	✓
0	195–465	✓	✓	✓	✓	✓	✓	✓	✓

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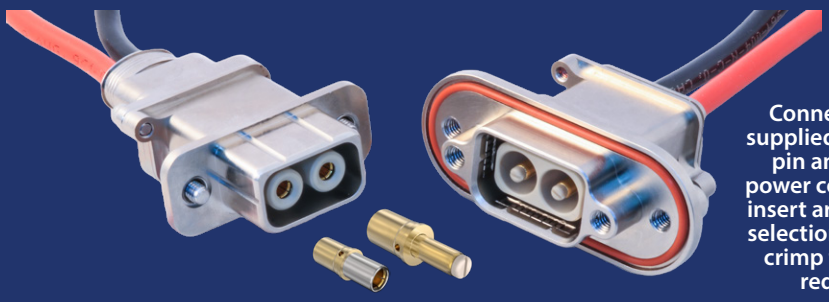
PowerPlay™ High-Power Connectors and Cables

Series 971 Micro-Crimp PowerPlay
Overview and insert arrangements

HIGH-POWER RECTANGULAR CONNECTOR FOR PROPULSION APPLICATIONS

The Series 971 Micro-Crimp PowerPlay is a signature Glenair rectangular power connector, purpose-designed for electrical and hybrid electrical aircraft propulsion applications. The series is equipped with a unique rasied tower architecture for improved creep path electrical performance. Series 971 is equipped with the Glenair high-temperature and high-shock resistant Crown Ring power contact and is fully compatible with ultra high flexibility TurboFlex cable. Supplied in nine high-density power insert arrangements with #8, #4, #2, and #1/0 contacts. Interlock last-mate / first-break arrangements with conventional #20 contacts are also supported. Raised socket towers and safe-touch pin contacts ensure operator safety. Connector shells and bodies are precision-machined from aluminum or stainless steel material and are fully shrouded for electromagnetic compatibility. Full environmental sealing ensures life-of-system reliability in even the harshest high-altitude environments.

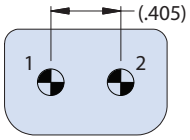
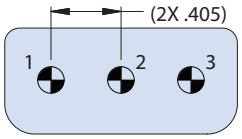
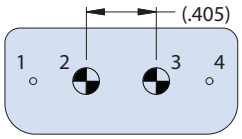
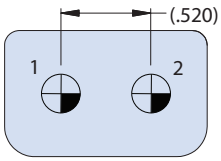
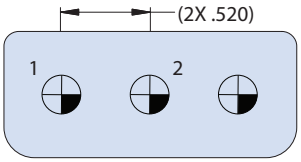
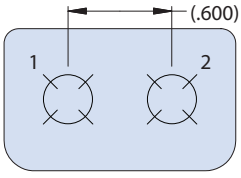
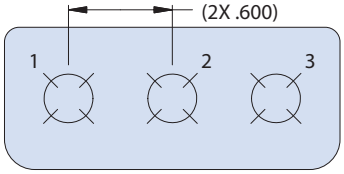
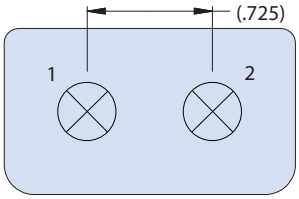
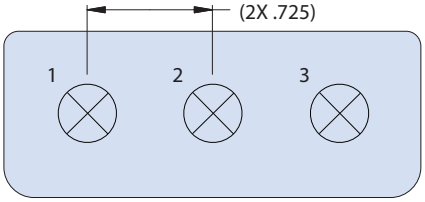
- **Next-generation small form factor aerospace-grade rectangular connector**
- **Designed for optimal size, weight, and power in electrical aircraft propulsion applications**
- **Upgraded environmental, electrical and mechanical performance compared to industry-standard rectangulars such as M24308**
- **Cable connectors optimized for use with TurboFlex cabling and rated up to 3000VAC**



Connectors are supplied with loose pin and socket power contacts IAW insert arrangement selection. Standard crimp tools only required.

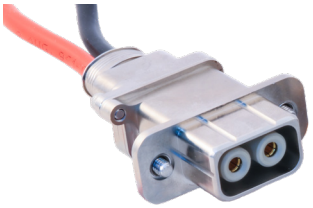
MICRO-CRIMP POWERPLAY SHELL INSERT / CONTACT ARRANGEMENTS
(FRONT PIN ARRANGEMENT SHOWN, SOCKET ARRANGEMENT IS REVERSED)

#20 #8 #4 #2 #1/0

		
A-2 2X Size #8	**B-3** 3X Size #8	**B-4** 2X Size #8 / 2X Size #20
		
C-2 2X Size #4	**D-3** 3X Size #4	**E-2** 2X Size #2
		
F-3 3X Size #2	**G-2** 2X Size #0	**H-3** 3X Size #0

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971-010 Micro-Crimp PowerPlay Rectangular Plug with Safe-Touch Crimp-Removable Contacts



MATERIAL/FINISH

- Shell: per How to Order Table
- Seal/Grommet: hi-temp silicone rubber
- Contacts: copper alloy / gold with stainless steel Crown Ring and thermoplastic safe-touch tip
- Insulator: hi-temp composite

NOTES

- 971-010 plugs mate with 971-011/-012/-013 receptacles of the same size, layout and the opposite contact gender.
- See contact drawings for crimp and removal tools.
- Electrical performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

WIRE SEALING	
Contact Size	Wire Diameter Range
20AWG	.040-.083 (1.02-2.11)
8AWG	.209-.277 (5.31-7.04)
4AWG	.323-.391 (8.20-9.93)
2AWG	.400-.477 (10.16-12.12)
1/0	.486-.572 (12.34-14.53)

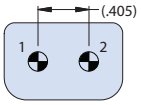
FINGER-PROOF CONTACTS		
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

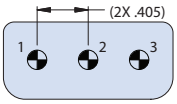
HOW TO ORDER

Sample Part Number	971-010	-ME	E-2	S	-A
Basic Part Number	Rectangular Plug with Crimp Removable Contacts				
Connector Finish and Material	**MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin-Zinc **Z1** = Stainless, Passivated				
Shell Size and Insert Arrangement	See Shell Size and Insert Arrangement Table				
Contact Type	See Contact Type Table				
Backshell Style	**A** = Environmental, with Banding Platform; (P/N 979-010) **B** = Strain Relief (979-014) **Omit** = Supplied Without Backshell				

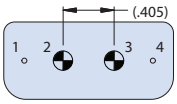
SHELL SIZE / CONTACT ARRANGEMENTS - FACE VIEW, PIN INSERT



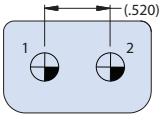
A-2 2X Size #8



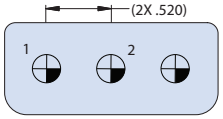
B-3 3X Size #8



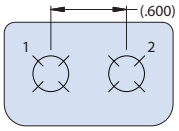
B-4 2X Size #8 / 2X Size #20



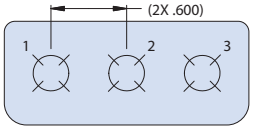
C-2 2X Size #4



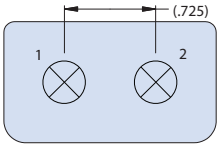
D-3 3X Size #4



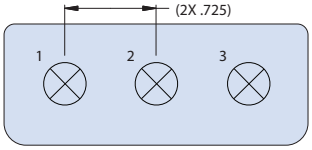
E-2 2X Size #2



F-3 3X Size #2



G-2 2X Size #0



H-3 3X Size #0

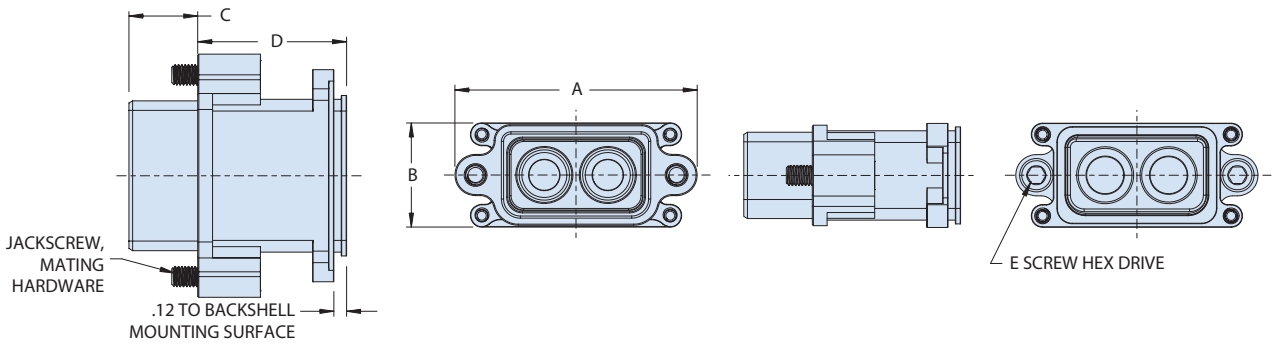
CONNECTOR CONTACT TYPE

Contact Code	Description	Contact P/N
A	Pin Connector, No Contacts	N/A
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Crown Ring Pin Contacts and 39029 type Size #20 contacts (insert arrangement B-4 only)	850-325 and 850-202-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	N/A
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Crown Ring Socket Contacts and 39029 type Size #20 contacts (insert arrangement B-4 only)	850-326 and AS39029/56-351
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

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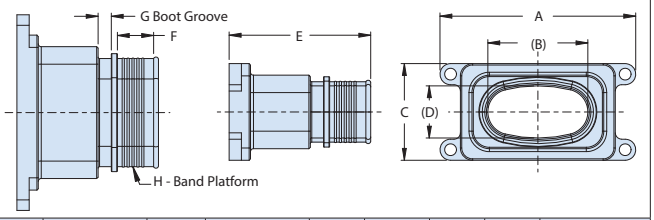
971-010 Micro-Crimp PowerPlay Rectangular Plug with Safe-Touch Crimp-Removable Contacts

PLUG DIMENSIONS



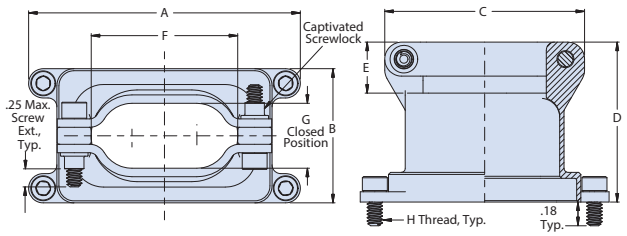
Shell Size	A	B	C	D	E Hex Size
A	1.82 (46.23)	0.78 (19.81)	.59 (14.99)	1.03 (26.16)	9/64″
B	2.23 (56.64)				
C	2.05 (52.07)	.90 (22.86)			
D	2.57 (65.28)				
E	2.30 (58.42)	.99 (25.15)	.65 (16.51)	1.40 (35.56)	5/32″
F	3.09 (78.49)	1.00 (25.40)			3/16″
G	2.74 (69.60)	1.13 (28.70)		1.44 (36.58)	
H	3.46 (87.88)				

979-010 BACKSHELL (INCLUDED WITH "A" OPTION)



Size	A	(B)	C	(D)	E	F	G	H Band Size
A	1.60 (40.64)	(0.60)	0.78 (19.81)	(0.39)	1.19 (30.23)	.270 (6.86)	.060 (1.52)	Glenair Micro-Band (1/8" W)
B	2.00 (50.80)	(0.90)						
C	1.83 (46.48)	(0.83)	0.90 (22.86)	(0.48)	1.22 (30.99)			
D	2.35 (59.69)	(1.24)						
E	2.00 (50.80)	(1.02)	0.99 (25.15)	(0.53)	1.45 (36.83)	.370 (9.40)	.135 (3.43)	Glenair Standard Band (1/4" W)
F	2.71 (68.83)	(1.52)	1.00 (25.40)					
G	2.37 (60.20)	(1.22)	1.13 (28.70)	(0.67)	1.63 (41.40)			
H	3.09 (78.49)	(1.82)						

979-014 BACKSHELL (INCLUDED WITH "B" OPTION)



Size	A	B	C Max.	D	E	F Min.	G	H Thd.
A	1.60 (40.64)	0.78 (19.81)	1.230 (31.24)	1.140 (28.96)	0.375 (9.52)	0.65 (16.51)	0.28 (7.11)	4-40
B	2.00 (50.80)	0.78 (19.81)	1.495 (37.97)	1.140 (28.96)	0.375 (9.52)	0.92 (23.37)	0.28 (7.11)	
C	1.83 (46.48)	0.90 (22.86)	1.450 (36.83)	1.175 (29.85)	0.375 (9.52)	0.87 (22.10)	0.39 (9.91)	
D	2.35 (59.69)	0.90 (22.86)	1.840 (46.74)	1.175 (29.85)	0.375 (9.52)	1.27 (32.26)	0.39 (9.91)	
E	2.00 (50.80)	0.99 (25.15)	1.620 (41.15)	1.205 (30.61)	0.375 (9.52)	1.05 (26.67)	0.48 (12.19)	
F	2.71 (68.83)	1.00 (25.40)	2.245 (57.02)	1.515 (38.48)	0.500 (12.70)	1.49 (37.85)	0.48 (12.19)	6-32
G	2.37 (60.20)	1.13 (28.70)	1.965 (49.91)	1.515 (38.48)	0.500 (12.70)	1.21 (30.73)	0.57 (14.48)	
H	3.09 (78.49)	1.13 (28.70)	2.540 (64.52)	1.515 (38.48)	0.500 (12.70)	1.78 (45.21)	0.57 (14.48)	

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971-011 Micro-Crimp PowerPlay Rectangular Receptacle with Crimp-Removable Crown Ring Contacts



MATERIAL/FINISH

- Shell: per How to Order Table
- Seal/Grommet: hi-temp silicone rubber
- Contacts: copper alloy / gold with stainless steel Crown Ring and thermoplastic safe-touch tip
- Insulator: hi-temp composite

NOTES

- 971-011 receptacles mate with 971-010 plugs of the same size, layout and the opposite contact gender.
- See contact drawings for crimp and removal tools.
- Electrical performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

WIRE SEALING	
Contact Size	Wire Diameter Range
20AWG	.040-.083 (1.02-2.11)
8AWG	.209-.277 (5.31-7.04)
4AWG	.323-.391 (8.20-9.93)
2AWG	.400-.477 (10.16-12.12)
1/0	.486-.572 (12.34-14.53)

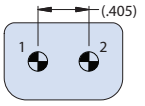
FINGER-PROOF CONTACTS		
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

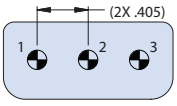
HOW TO ORDER

Sample Part Number	971-011	-ME	E-2	P	-A
Basic Part Number	Rear-Mount, Micro-Crimp PowerPlay Rectangular Receptacle				
Connector Finish and Material	**MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin-Zinc **Z1** = Stainless, Passivated				
Shell Size and Insert Arrangement	See Shell Size and Insert Arrangement Table				
Contact Type	See Contact Type Table				
Backshell Style	**A** = Environmental, with Banding Platform; (P/N 979-010) **B** = Strain Relief (979-014) **Omit** = Supplied Without Backshell				

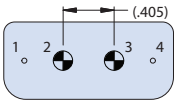
SHELL SIZE / CONTACT ARRANGEMENTS - FACE VIEW, PIN INSERT



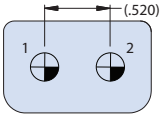
A-2 2X Size #8



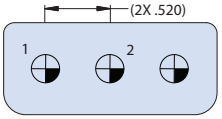
B-3 3X Size #8



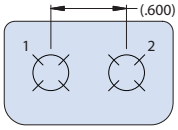
B-4 2X Size #8 / 2X Size #20



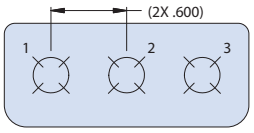
C-2 2X Size #4



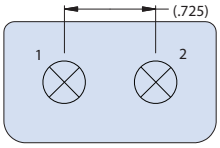
D-3 3X Size #4



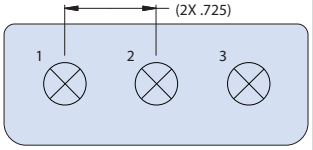
E-2 2X Size #2



F-3 3X Size #2



G-2 2X Size #0



H-3 3X Size #0

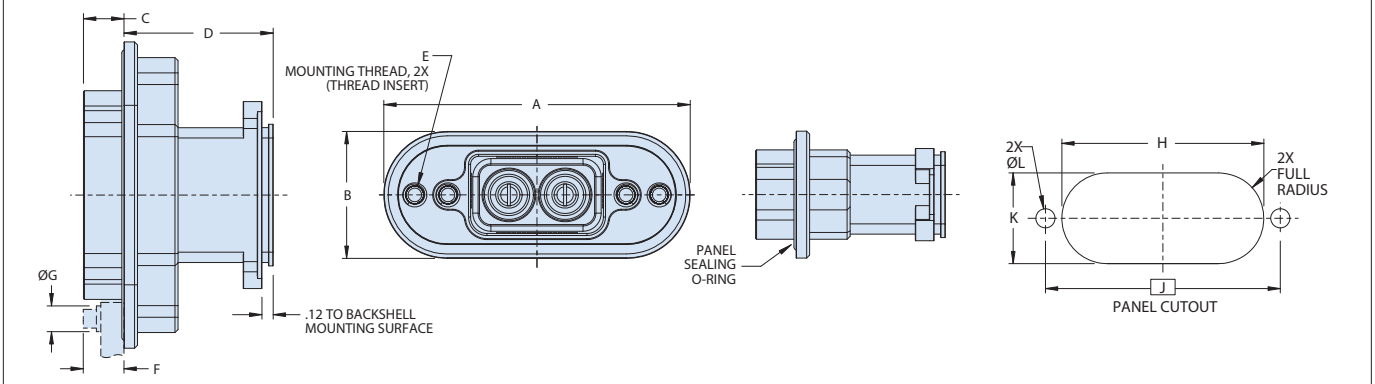
CONNECTOR CONTACT TYPE

Contact Code	Description	Contact P/N
A	Pin Connector, No Contacts	N/A
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Crown Ring Pin Contacts and 39029 type Size #20 contacts (insert arrangement B-4 only)	850-325 and 850-202-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	N/A
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Crown Ring Socket Contacts and 39029 type Size #20 contacts (insert arrangement B-4 only)	850-326 and AS39029/56-351
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

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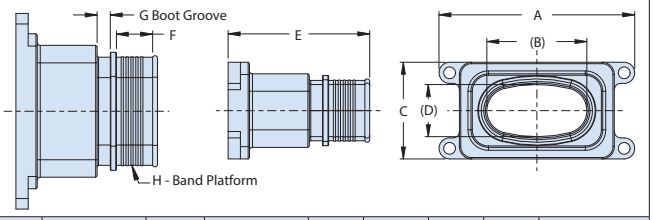
971-011 Micro-Crimp PowerPlay Rectangular Receptacle with Crimp-Removable Crown Ring Contacts

CONNECTOR DIMENSIONS / PANEL CUTOUT



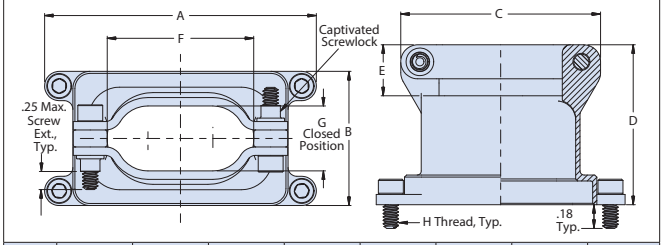
Shell Size	A	B	C	D	E		F (Panel + Mtg. Hardware)	ØG (Screw Head or Washer)	Panel Cutout			
					Thread	Hole Depth			H ±.012	J Basic	K ±.012	ØL ±.004
A	2.73 (69.34)	1.15 (29.21)	.37 (9.40)	1.32 (33.53)	8-32 UNC	.360 (9.14) Min	.350 (8.89) Max	.325 (8.25) Max	1.782 (45.26)	(2.09)	.776 (19.71)	.173 (4.39)
B	3.14 (79.76)								2.187 (55.55)	(2.50)		
C	2.96 (75.18)	1.26 (32.00)							2.014 (51.16)	(2.32)	.893 (22.68)	
D	3.48 (88.39)								2.534 (64.36)	(2.84)		
E	3.27 (83.06)	1.36 (34.54)	.43 (10.92)	1.63 (41.40)	10-24 UNC	.440 (11.18) Min	.420 (10.67) Max	.375 (9.52) Max	2.252 (57.20)	(2.61)	.986 (25.04)	.199 (5.05)
F	4.22 (107.19)	1.37 (34.80)	.57 (14.48)	1.49 (37.85)	1/4-20 UNC	.560 (14.22) Min	.560 (14.22) Min	.490 (12.45) Max	3.026 (76.86)	(3.50)	1.000 (25.40)	.259 (6.58)
G	3.88 (98.55)	1.50 (38.10)		1.53 (38.86)					2.681 (68.10)	(3.16)	1.125 (28.58)	
H	4.61 (117.09)								3.406 (86.51)	(3.88)		

979-010 BACKSHELL (INCLUDED WITH "A" OPTION)



Size	A	(B)	C	(D)	E	F	G	H Band Size
A	1.60 (40.64)	(0.60)	0.78 (19.81)	(0.39)	1.19 (30.23)	.270 (6.86)	.060 (1.52)	Glenair Micro-Band (1/8" W)
B	2.00 (50.80)	(0.90)						
C	1.83 (46.48)	(0.83)	0.90 (22.86)	(0.48)	1.22 (30.99)			
D	2.35 (59.69)	(1.24)						
E	2.00 (50.80)	(1.02)	0.99 (25.15)	(0.53)	1.45 (36.83)	.370 (9.40)	.135 (3.43)	Glenair Standard Band (1/4" W)
F	2.71 (68.83)	(1.52)	1.00 (25.40)					
G	2.37 (60.20)	(1.22)	1.13 (28.70)	(0.67)	1.63 (41.40)			
H	3.09 (78.49)	(1.82)						

979-014 BACKSHELL (INCLUDED WITH "B" OPTION)



Size	A	B	C Max.	D	E	F Min.	G	H Thd.
A	1.60 (40.64)	0.78 (19.81)	1.230 (31.24)	1.140 (28.96)	0.375 (9.52)	0.65 (16.51)	0.28 (7.11)	4-40
B	2.00 (50.80)	0.78 (19.81)	1.495 (37.97)	1.140 (28.96)	0.375 (9.52)	0.92 (23.37)	0.28 (7.11)	
C	1.83 (46.48)	0.90 (22.86)	1.450 (36.83)	1.175 (29.85)	0.375 (9.52)	0.87 (22.10)	0.39 (9.91)	
D	2.35 (59.69)	0.90 (22.86)	1.840 (46.74)	1.175 (29.85)	0.375 (9.52)	1.27 (32.26)	0.39 (9.91)	
E	2.00 (50.80)	0.99 (25.15)	1.620 (41.15)	1.205 (30.61)	0.375 (9.52)	1.05 (26.67)	0.48 (12.19)	
F	2.71 (68.83)	1.00 (25.40)	2.245 (57.02)	1.515 (38.48)	0.500 (12.70)	1.49 (37.85)	0.48 (12.19)	6-32
G	2.37 (60.20)	1.13 (28.70)	1.965 (49.91)	1.515 (38.48)	0.500 (12.70)	1.21 (30.73)	0.57 (14.48)	
H	3.09 (78.49)	1.13 (28.70)	2.540 (64.52)	1.515 (38.48)	0.500 (12.70)	1.78 (45.21)	0.57 (14.48)	

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971-012 Rear-Mount Rectangular Receptacle with Lug Contacts

MATERIAL/FINISH

- Shell: per How to Order Table
- Seal/Grommet: hi-temp silicone rubber
- Contacts: copper alloy / gold
- Insulator: hi-temp composite

NOTES

- Glenair 971-012 receptacles are designed to mate with 971-010 plugs of the same size, layout and the opposite contact gender.
- Pin contacts with protective tips are finger proof to IEC 60529 level ip2x (rated voltages not exceeding 1,000vac or 1500vdc). Contacts are glenair high conductivity crown ring contacts.
- Electrical performance:
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

FINGER-PROOF CONTACTS		
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No

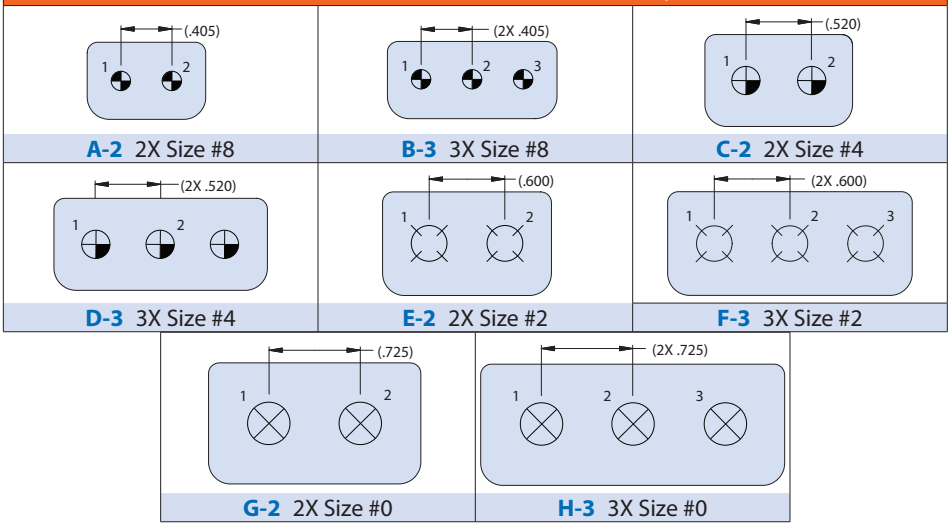
Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

HOW TO ORDER

Sample Part Number	971-012	-	ME	E-2	P

Basic Part Number	Rear-Mount Rectangular Receptacle with Lug Contacts
Lug Type	**-** = Lug with Thru Hole **T** = Lug with Threaded Insert See Contact Features Table
Connector Finish and Material	**MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin-Zinc **Z1** = Stainless, Passivated
Shell Size and Insert Arrangement	See Shell Size and Insert Arrangement Table
Contact Type	**P** = Pins **S** = Sockets

SHELL SIZE / CONTACT ARRANGEMENTS - FACE VIEW, PIN INSERT



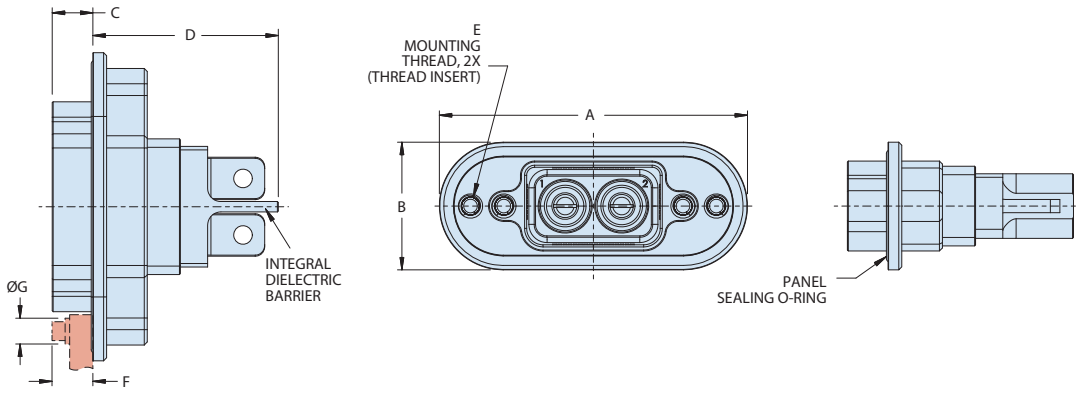
CONNECTOR CONTACT TYPE

Contact Code	Description	Contact P/N
A	Pin Connector, No Contacts	N/A
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Crown Ring Pin Contacts and 39029 type Size #20 contacts (insert arrangement B-4 only)	850-325 and 850-202-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	N/A
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Crown Ring Socket Contacts and 39029 type Size #20 contacts (insert arrangement B-4 only)	850-326 and AS39029/56-351
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

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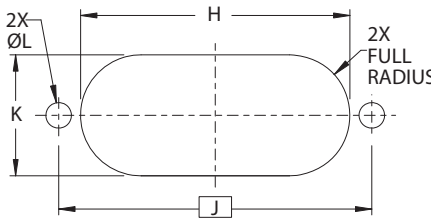
971-012 Rear-Mount Rectangular Receptacle with Lug Contacts

CONNECTOR DIMENSIONS / PANEL CUTOUT



Shell Size	A	B	C	D	E		F (Panel + Mtg. Hardware)	ØG (Screw Head or Washer)
					Thread	Hole Depth		
A	2.73 (69.34)	1.15 (29.21)	.37 (9.40)	1.63 Max	8-32 UNC	.360 (9.14) Min	.350 (8.89) Max	.325 (8.25) Max
B	3.14 (79.76)							
C	2.96 (75.18)	1.26 (32.00)		1.84 Max				
D	3.48 (88.39)							
E	3.27 (83.06)	1.36 (34.54)	.43 (10.92)	2.00 Max	10-24 UNC	.440 (11.18) Min	.420 (10.67) Max	.375 (9.52) Max
F	4.22 (107.19)	1.37 (34.80)	.57 (14.48)	1.86 Max	1/4-20 UNC	.560 (14.22) Min	.560 (14.22) Min	.490 (12.45) Max
G	3.88 (98.55)	1.50 (38.10)		2.04 Max				
H	4.61 (117.09)							

PANEL CUTOUT

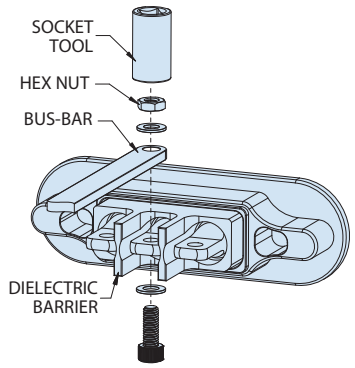


Shell Size	H ±.012	J Basic	K ±.012	ØI ±.004
A	1.782 (45.26)	(2.09)	.776 (19.71)	.173 (4.39)
B	2.187 (55.55)	(2.50)		
C	2.014 (51.16)	(2.32)	.893 (22.68)	
D	2.534 (64.36)	(2.84)		
E	2.252 (57.20)	(2.61)	.986 (25.04)	.199 (5.05)
F	3.026 (76.86)	(3.50)	1.000 (25.40)	.259 (6.58)
G	2.681 (68.10)	(3.16)	1.125 (28.58)	
H	3.406 (86.51)	(3.88)		

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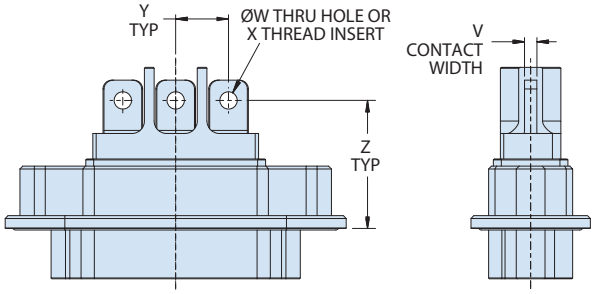
971-012-Rear Mount Rectangular Receptacle with Lug Contacts

BUS-BAR ATTACHMENT, FOR THRU HOLE CONTACTS



Contact Size	Socket O.D. Max	Hex Nut Size *
8AWG	5/16"	3/16"
4AWG	13/32"	1/4"
2AWG	15/32"	5/16"
1/0	9/16"	5/16" to 3/8"

CONTACT FEATURES



Contact Size	V		ØW or X		Y
	Thru Hole	Threaded	Thru Hole ±.005	Insert Thread	
8AWG	(.075)	(.173)	.119	4-40UNC	(.405)
4AWG	(.115)	(.230)	.171	8-32UNC	(.520)
2AWG	(.140)	(.260)	.197	10-32UNF	(.600)
1/0	(.200)				(.725)

(See p/n development for thru hole or thread insert option)

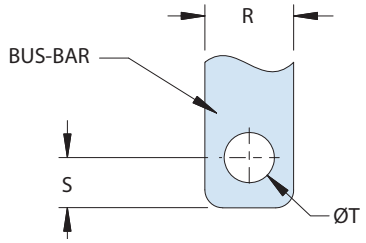
RECOMMENDED TORQUE FOR CONTACTS WITH THREAD INSERTS

Contact Size	Torque (In-Lb)
8AWG	2.8-3.4
4AWG	11-17
2AWG	20-29
1/0	

HOLE TO PANEL DIMENSIONS

Insert Arrangement	Z
A-2	(1.25)
B-3	
C-2	(1.39)
D-3	
E-2	(1.59)
F-3	(1.45)
G-2	(1.42)
H-3	

BUS-BAR DIMENSIONS FOR CONTACT CONNECTION



Contact Size	R	S Basic	T ±.004
8AWG	.250 MAX	.130 MAX	.119
4AWG	.335 MAX	.180 MAX	.171
2AWG	.425 MAX	.260 MAX	.197
1/0	.520 MAX		

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971-013 Micro-Crimp PowerPlay Rectangular Rear-Mount Receptacle for Bus-Bar Termination



HOW TO ORDER				
Sample Part Number	**971-013**	**-ME**	**E-2**	**P**
Basic Part Number	Micro-Crimp PowerPlay Rectangular Receptacle Connector, Rear Mount for Bus-Bar Termination			
Connector Finish and Material	**MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin-Zinc **Z1** = Stainless, Passivated			
Shell Size and Insert Arrangement	See Shell Size and Insert Arrangement Table			
Contact Type	**P** = Pins **S** = Sockets			

MATERIAL/FINISH

- Shell: per How to Order Table
- Seal/Grommet: hi-temp silicone rubber
- Contacts: copper alloy / gold with stainless steel Crown Ring and thermoplastic safe-touch tip
- Insulator: hi-temp composite

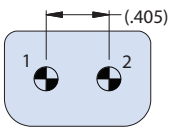
NOTES

- 971-013 receptacles mate with 971-010 plugs of the same size, layout and the opposite contact gender.
- Electrical performance
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

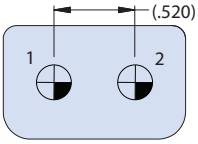
FINGER-PROOF CONTACTS		
Size	**Pin**	**Socket**
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

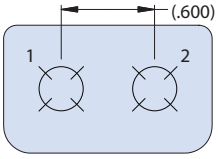
SHELL SIZE / CONTACT ARRANGEMENTS - FACE VIEW, PIN INSERT



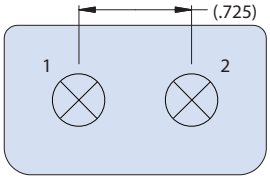
A-2 2X Size #8



C-2 2X Size #4

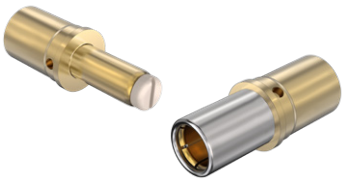


E-2 2X Size #2



G-2 2X Size #0

GLENAIR SIGNATURE CROWN RING CONTACTS

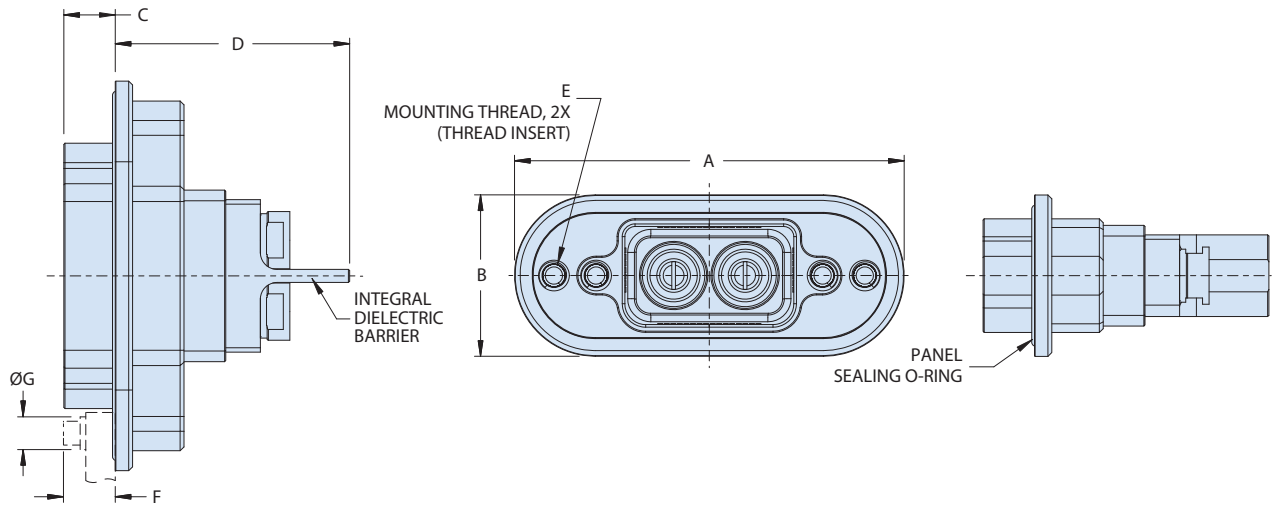


- **High vibration-resistant, high-conductivity gold-plated copper alloy. Socket contact equipped with stainless steel Crown Ring. Pin contact equipped with thermoplastic finger-safe tip.**

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971-013 Micro-Crimp PowerPlay Rectangular Rear-Mount Receptacle for Bus-Bar Termination

DIMENSIONS

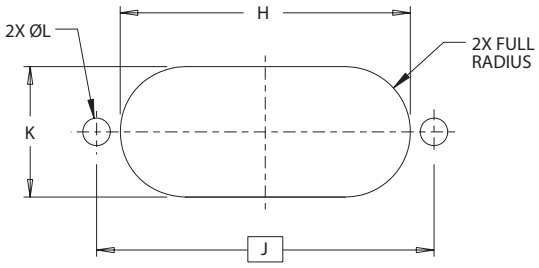


Shell Size	A	B	C	D	E		F Panel Plus Mounting Hardware	ØG Screw Head or Washer Dia.
					Thread	Hole Depth		
A	2.73 (69.34)	1.15 (29.21)	.37 (9.40)	1.63 (41.40) Max	8-32UNC	.360 (9.14) Min	.350 (8.89) Max	.325 (8.25) Max
C	2.96 (75.18)	1.26 (32.00)		1.84 (46.74) Max				
E	3.27 (83.06)	1.36 (34.54)	.43 (10.92)	2.00 (50.80) Max	10-24UNC	.440 (11.18) Min	.420 (10.67) Max	.375 (9.52) Max
G	3.88 (98.55)	1.50 (38.10)	.57 (14.48)	2.04 (51.82) Max	1/4-20UNC	.560 (14.22) Min	.560 (14.22) Max	.490 (12.45) Max

COMPATIBLE TURBOFLEX CABLES

Single-Wall TurboFlex R Cable		Single-Wall TurboFlex M Cable		Dual-Wall Turboflex M Shielded Cable		Dual-Wall TurboFlex R Cable
961-004	961-041	967-021	967-022	967-023	967-024	961-035
Duralectric Insulation	Duralectric Light Insulation	Duralectric Insulation	Duralectric Light Insulation	Duralectric Insulation	Duralectric Light Insulation	Duralectric Insulation

PANEL CUTOUT

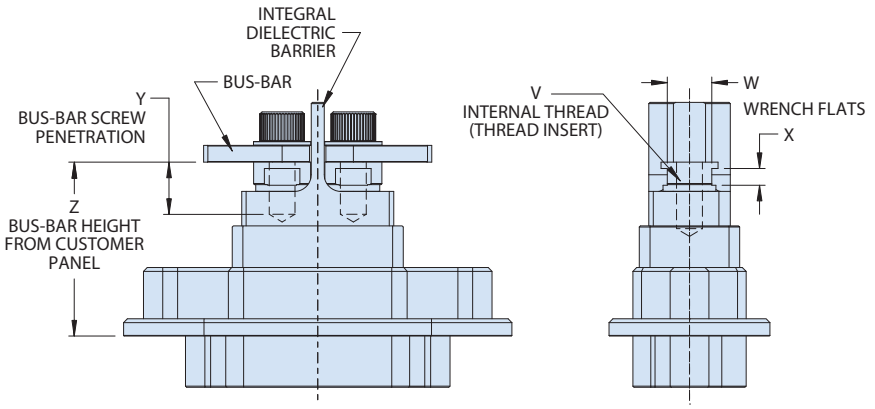


Shell Size	H ±.012	J Basic	K ±.012	ØL ±.004
A	1.782 (45.26)	(2.09)	0.776 (19.71)	0.173 (4.39)
C	2.014 (51.16)	(2.32)	0.893 (22.68)	
E	2.252 (57.20)	(2.61)	0.986 (25.04)	0.199 (5.05)
G	2.681 (68.10)	(3.16)	1.125 (28.58)	0.259 (6.58)

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971-013 Micro-Crimp PowerPlay Rectangular Rear-Mount Receptacle for Bus-Bar Termination

CONTACT FEATURES AND TOOL P/N



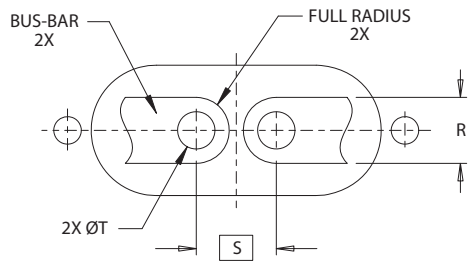
Contact Size	V Thread	W Wrench Flats	X	Y	Wrench Part No.
8AWG	6-32UNC	(15/64")	(0.14)	.190 Min./.325 MAX	979-008-8
4AWG	10-32UNF	(5/16")		.410 Min./.560 MAX	979-008-4
2AWG	1/4-28UNF	(3/8")		.530 Min./.680 MAX	979-008-2
1/0	5/16-24UNF	(1/2")	(0.19)	.650 Min./.800 MAX	979-008-0

RECOMMENDED TORQUE	
Contact Size	Torque (In-Lb)
8AWG	8-10
4AWG	20-29
2AWG	60-70
1/0	90-140

BUS-BAR HEIGHT FROM PANEL*	
Insert Arrangement	Z ±.015
A-2	1.265 (32.13)
C-2	1.365 (34.67)
E-2	1.465 (37.21)
G-2	1.375 (34.92)

* Important dimension/tolerance, to be held by customer, at system level

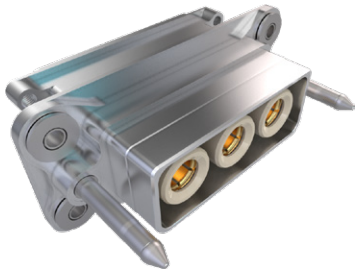
BUS-BAR DIMENSIONS FOR CONTACT CONNECTION



Insert Arrangement	R	S Basic	T ±.004
A-2	.265 MAX	(0.41)	0.145 (3.68)
C-2	.385 MAX	(0.52)	0.197 (5.00)
E-2	.475 MAX	(0.60)	0.257 (6.53)
G-2	.595 MAX	(0.73)	0.320 (8.13)

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971-016 Micro-Crimp PowerPlay Rectangular Rear Float-Mount Receptacle with Crimp-Removable Contacts



971-016

HOW TO ORDER

Sample Part Number	971-016	-ME	E-2	S	-A
Basic Part Number	Rear Float Mount Micro-Crimp PowerPlay Rectangular Receptacle Connector with Crimp-removable Contacts				
Connector Finish	**MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin-Zinc **Z1** = Stainless, Passivated				
Size and Layout	See Shell Size and Insert Arrangement Table				
Contact Type	See Contact Type table				
Backshell Style	**A** = Environmental, with Banding Platform; (P/N 979-010) **B** = Strain Relief (979-014) **Omit** = Supplied Without Backshell				

MATERIAL/FINISH

- Shell: per How to Order Table
- Seal/Grommet: hi-temp silicone rubber
- Contacts: copper alloy / gold with stainless steel Crown Ring and thermoplastic safe-touch tip
- Insulator: hi-temp composite

NOTES

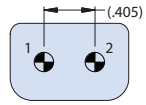
- 971-016 plugs mate with 971-017 receptacles of the same size, layout and the opposite contact gender.
- See contact drawings for crimp and removal tools.
- Electrical performance
  - DWV: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

FINGER-PROOF CONTACTS

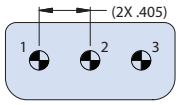
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

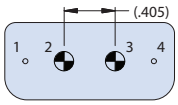
SHELL SIZE / CONTACT ARRANGEMENTS - FACE VIEW, PIN INSERT



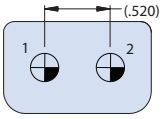
A-2 2X Size #8



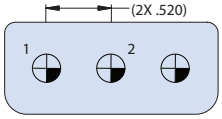
B-3 3X Size #8



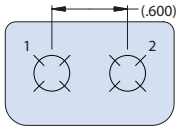
B-4 2X Size #8 / 2X Size #20



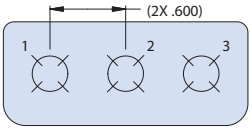
C-2 2X Size #4



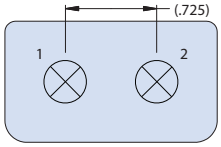
D-3 3X Size #4



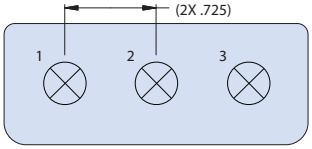
E-2 2X Size #2



F-3 3X Size #2



G-2 2X Size #0



H-3 3X Size #0

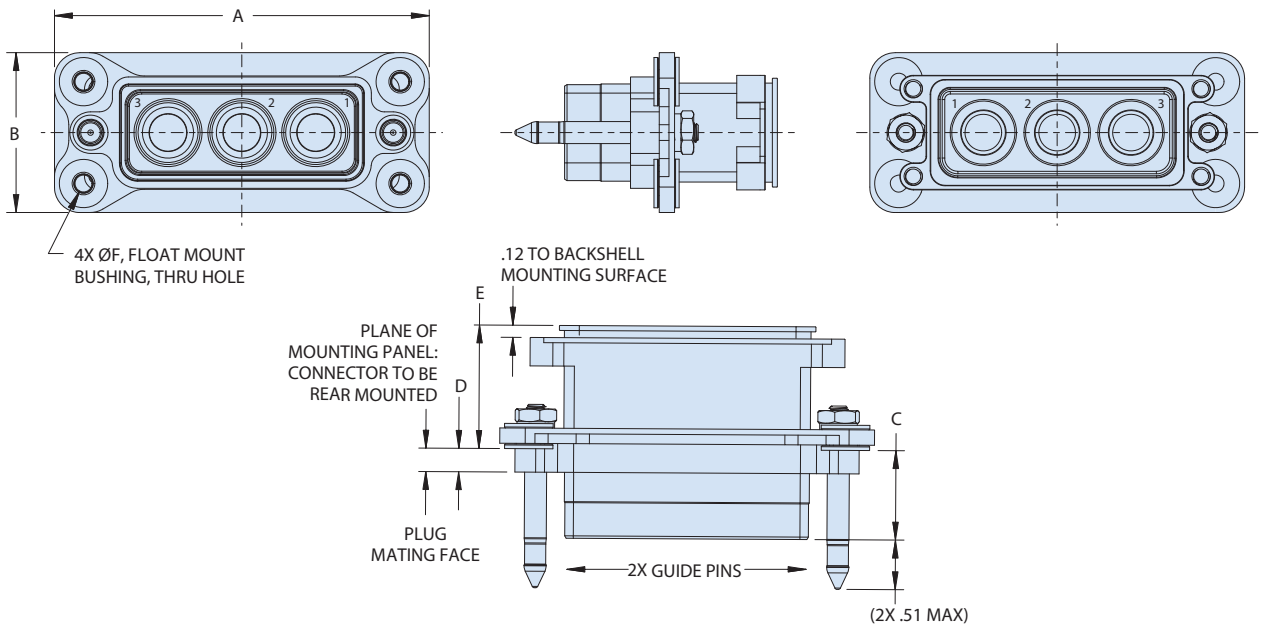
CONNECTOR CONTACT TYPE

Contact Code	Description	Contact P/N
A	Pin Connector, No Contacts	N/A
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Crown Ring Pin Contacts and 39029 type Size #20 contacts (insert arrangement B-4 only)	850-325 and 850-202-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	N/A
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Crown Ring Socket Contacts and 39029 type Size #20 contacts (insert arrangement B-4 only)	850-326 and AS39029/56-351
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

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971-016 Micro-Crimp PowerPlay Rectangular Rear Float-Mount Receptacle with Crimp-Removable Contacts

DIMENSIONS



Shell Size	A	B	C	D ±.012	E	ØF ±.003	Mounting Screw Size	Nominal Radial Float
A	2.05 (52.07)	1.27 (32.26)	0.79 (20.07)	0.200 (5.08)	0.83 (21.08)	0.142 (3.61)	#6	0.040 (1.02)
B	2.46 (62.48)							
C	2.32 (58.93)							
D	2.84 (72.14)							
E	2.68 (68.07)	1.50 (38.10)	.88 (22.35)	.230 (5.84)	1.17 (29.72)	.168 (4.27)	#8	.050 (1.27)
F	3.28 (83.31)	1.57 (39.88)						
G	2.97 (75.44)				1.21 (30.73)			
H	3.68 (93.47)							

WIRE SEALING

Contact Size	Wire Diameter Range
20AWG	.040-.083 (1.02-2.11)
8AWG	.209-.277 (5.31-7.04)
4AWG	.323-.391 (8.20-9.93)
2AWG	.400-.477 (10.16-12.12)
1/0	.486-.572 (12.34-14.53)

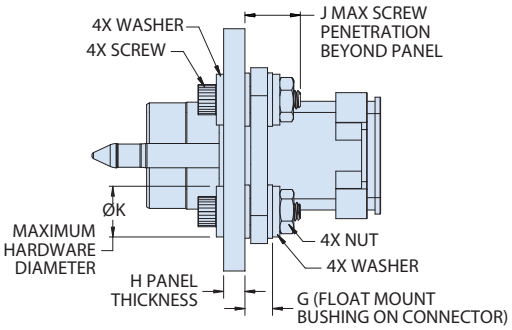
COMPATIBLE TURBOFLEX CABLES

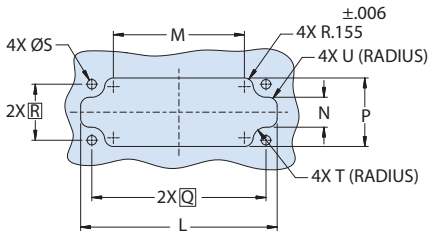
Single-Wall TurboFlex Cable		Single-Wall TurboFlex M Cable		Single Wall Turboflex M Shielded Cable		Dual-Wall TurboFlex Cable
961-004	961-041	967-021	967-022	967-023	967-024	961-035
Duralectric Insulation	Duralectric Light Insulation	Duralectric Insulation	Duralectric Light Insulation	Duralectric Insulation	Duralectric Light Insulation	Duralectric Insulation

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971-016 Micro-Crimp PowerPlay Rectangular Rear Float-Mount Receptacle with Crimp-Removable Contacts

MOUNTING AND PANEL CUTOUT

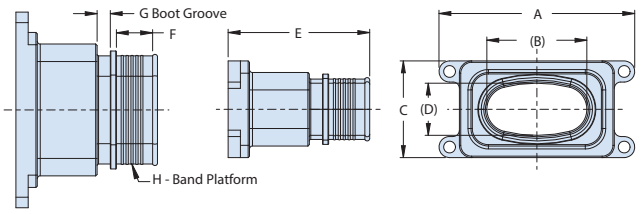




PANEL CUTOUT

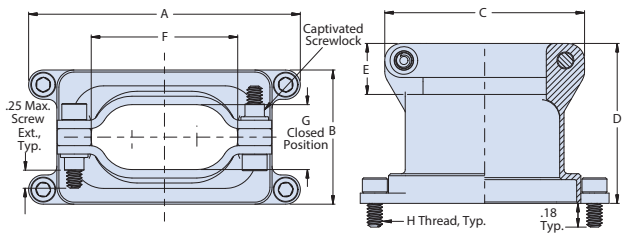
Shell Size	G	H	J	ØK Max	Mounting Hardware Size	L ±.012	M ±.010	N ±.010	P ±.010	Q Basic	R Basic	Øs ±.003	T±.006	U±.006
A	0.22 (5.59)	.090-.170 (2.29-4.32)	0.47 (11.94)	0.363 (9.22)	#6	1.873 (47.57)	0.918 (23.32)	.402 (10.21)	.859 (21.82)	1.58 (40.13)	.80 (20.32)	.143 (3.63)	.199 (5.05)	.125 (3.18)
B						2.278 (57.86)	1.328 (33.73)			1.99 (50.55)				
C						2.105 (53.47)	1.155 (29.34)		.976 (24.79)	1.85 (46.99)				
D						2.625 (66.68)	1.675 (42.55)			2.37 (60.20)				
E	0.25 (6.35)	.120-.200 (3.05-5.08)	0.73 (18.54)	0.453 (11.51)	#8	2.363 (60.02)	1.349 (34.26)	.464 (11.79)	1.089 (27.66)	2.11 (53.59)	.93 (23.62)	.169 (4.29)	.233 (5.92)	.155 (3.94)
F						3.137 (79.68)	1.963 (49.86)	.535 (13.59)	1.103 (28.02)	2.71 (68.83)	1.00 (25.40)			
G						2.792 (70.92)	1.629 (41.38)		1.228 (31.19)	2.40 (60.96)				
H						3.515 (89.28)	2.339 (59.41)			3.11 (78.99)				

979-010 BACKSHELL (INCLUDED WITH "A" OPTION)



Size	A	(B)	C	(D)	E	F	G	H Band Size
A	1.60 (40.64)	(0.60)	0.78 (19.81)	(0.39)	1.19 (30.23)	.270 (6.86)	.060 (1.52)	Glenair Micro-Band (1/8" W)
B	2.00 (50.80)	(0.90)						
C	1.83 (46.48)	(0.83)	0.90 (22.86)	(0.48)	1.22 (30.99)			
D	2.35 (59.69)	(1.24)						
E	2.00 (50.80)	(1.02)	0.99 (25.15)	(0.53)	1.45 (36.83)	.370 (9.40)	.135 (3.43)	Glenair Standard Band (1/4" W)
F	2.71 (68.83)	(1.52)	1.00 (25.40)					
G	2.37 (60.20)	(1.22)	1.13 (28.70)	(0.67)	1.63 (41.40)			
H	3.09 (78.49)	(1.82)						

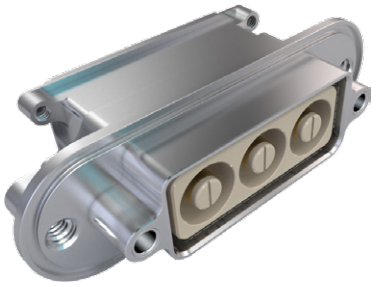
979-014 BACKSHELL (INCLUDED WITH "B" OPTION)



Size	A	B	C Max.	D	E	F Min.	G	H Thd.
A	1.60 (40.64)	0.78 (19.81)	1.230 (31.24)	1.140 (28.96)	0.375 (9.52)	0.65 (16.51)	0.28 (7.11)	4-40
B	2.00 (50.80)	0.78 (19.81)	1.495 (37.97)	1.140 (28.96)	0.375 (9.52)	0.92 (23.37)	0.28 (7.11)	
C	1.83 (46.48)	0.90 (22.86)	1.450 (36.83)	1.175 (29.85)	0.375 (9.52)	0.87 (22.10)	0.39 (9.91)	
D	2.35 (59.69)	0.90 (22.86)	1.840 (46.74)	1.175 (29.85)	0.375 (9.52)	1.27 (32.26)	0.39 (9.91)	
E	2.00 (50.80)	0.99 (25.15)	1.620 (41.15)	1.205 (30.61)	0.375 (9.52)	1.05 (26.67)	0.48 (12.19)	
F	2.71 (68.83)	1.00 (25.40)	2.245 (57.02)	1.515 (38.48)	0.500 (12.70)	1.49 (37.85)	0.48 (12.19)	6-32
G	2.37 (60.20)	1.13 (28.70)	1.965 (49.91)	1.515 (38.48)	0.500 (12.70)	1.21 (30.73)	0.57 (14.48)	
H	3.09 (78.49)	1.13 (28.70)	2.540 (64.52)	1.515 (38.48)	0.500 (12.70)	1.78 (45.21)	0.57 (14.48)	

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971-017 Micro-Crimp PowerPlay Rectangular Rear Blind-Mate Receptacle with Crimp-Removable Contacts



MATERIAL/FINISH

- Shell: per How to Order Table
- Seal/Grommet: hi-temp silicone rubber
- Contacts: copper alloy / gold with stainless steel Crown Ring and thermoplastic safe-touch tip
- Insulator: hi-temp composite

NOTES

- 971-017 receptacles mate with 971-016 plugs of the same size, layout and the opposite contact gender.
- See contact drawings for crimp and removal tools.
- Electrical performance
  - Dwv: 5000 VAC pin-pin and pin-shell (sea level)
  - Insulation resistance: 5000 megohm min at 500 VDC

WIRE SEALING	
Contact Size	Wire Diameter Range
20AWG	.040-.083 (1.02-2.11)
8AWG	.209-.277 (5.31-7.04)
4AWG	.323-.391 (8.20-9.93)
2AWG	.400-.477 (10.16-12.12)
1/0	.486-.572 (12.34-14.53)

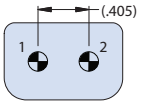
FINGER-PROOF CONTACTS		
Size	Pin	Socket
8	Yes	Yes
4	Yes	Yes
2	Yes	Yes
1/0	Yes	No

Finger-proof to IEC 60529 Level IP2X (Rated voltages Not exceeding 1,000 VAC or 1500 VDC)

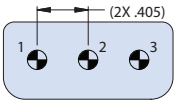
HOW TO ORDER

Sample Part Number	971-017	-ME	E-2	P	-A
Basic Part Number	Blind Mate, Rear Mount Micro-Crimp PowerPlay Rectangular Receptacle Connector with Crimp-removable Contacts				
Connector Finish and Material	**MT** = Aluminum, Nickel-PTFE **ME** = Aluminum, Electroless Nickel **TZ** = Aluminum, Tin-Zinc **Z1** = Stainless, Passivated				
Size and Insert Arrangement	See Shell Size and Insert Arrangement Table				
Contact Type	See Contact Type table				
Backshell Style	**A** = Environmental, with Banding Platform; (P/N 979-010) **B** = Strain Relief (979-014) **Omit** = Supplied Without Backshell				

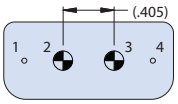
SHELL SIZE / CONTACT ARRANGEMENTS - FACE VIEW, PIN INSERT



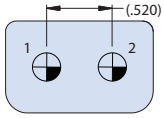
A-2 2X Size #8



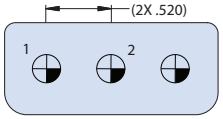
B-3 3X Size #8



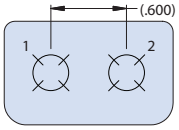
B-4 2X Size #8 / 2X Size #20



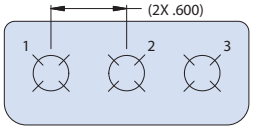
C-2 2X Size #4



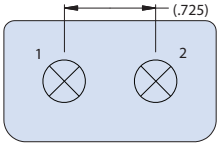
D-3 3X Size #4



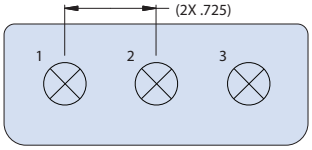
E-2 2X Size #2



F-3 3X Size #2



G-2 2X Size #0



H-3 3X Size #0

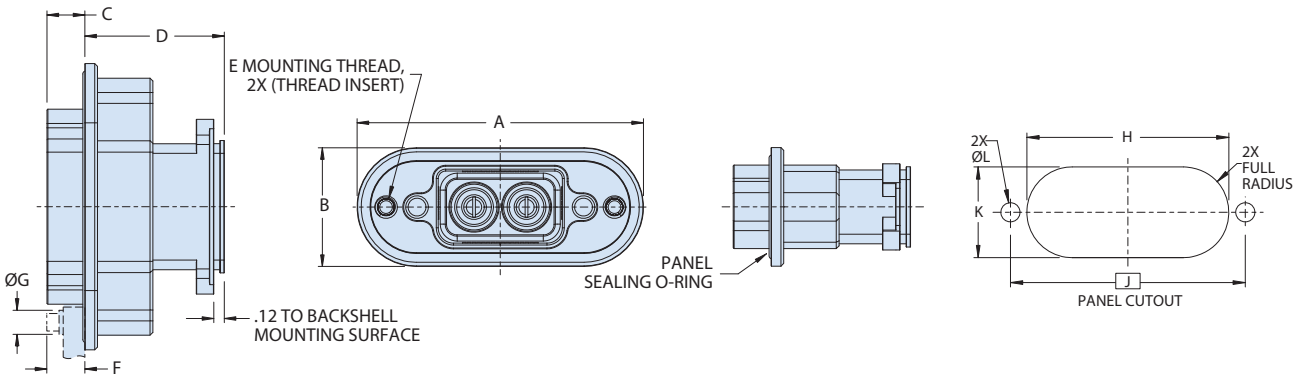
CONNECTOR CONTACT TYPE

Contact Code	Description	Contact P/N
A	Pin Connector, No Contacts	N/A
P	Pin Connector, Crown Ring Pin Contacts	850-325
	Pin Connector, Crown Ring Pin Contacts and 39029 type Size #20 contacts (insert arrangement B-4 only)	850-325 and 850-202-20
G	Pin Connector, Reduced Crimp Barrel Crown Ring Pin Contacts (for Size #8 and Size #4 contacts only)	850-325
B	Socket Connector, No Contacts	N/A
S	Socket Connector, Crown Ring Socket Contacts	850-326
	Socket Connector, Crown Ring Socket Contacts and 39029 type Size #20 contacts (insert arrangement B-4 only)	850-326 and AS39029/56-351
H	Socket Connector, Reduced Crimp Barrel Crown Ring Socket Contacts (for Size #8 and Size #4 contacts only)	850-326

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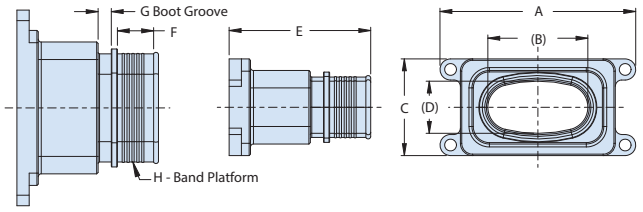
971-017 Micro-Crimp PowerPlay Rectangular Rear Blind-Mate Receptacle with Crimp-Removable Contacts

CONNECTOR DIMENSIONS / PANEL CUTOUT



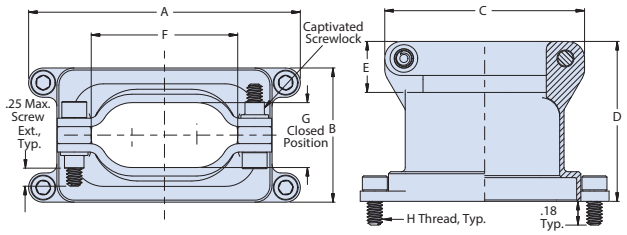
Shell Size	A	B	C	D	E		F (Panel + Mtg. Hardware)	ØG (Screw Head or Washer)	Panel Cutout			
					Thread	Hole Depth			H ±.012	J Basic	K ±.012	ØL ±.004
A	2.73 (69.34)	1.15 (29.21)	.37 (9.40)	1.32 (33.53)	8-32 UNC	.360 (9.14) Min	.350 (8.89) Max	.325 (8.25) Max	1.782 (45.26)	(2.09)	.776 (19.71)	.173 (4.39)
B	3.14 (79.76)								2.187 (55.55)	(2.50)		
C	2.96 (75.18)	1.26 (32.00)							2.014 (51.16)	(2.32)	.893 (22.68)	
D	3.48 (88.39)								2.534 (64.36)	(2.84)		
E	3.27 (83.06)	1.36 (34.54)	.43 (10.92)	1.63 (41.40)	10-24 UNC	.440 (11.18) Min	.420 (10.67) Max	.375 (9.52) Max	2.252 (57.20)	(2.61)	.986 (25.04)	.199 (5.05)
F	4.22 (107.19)	1.37 (34.80)	.57 (14.48)	1.49 (37.85)	1/4-20 UNC	.560 (14.22) Min	.560 (14.22) Min	.490 (12.45) Max	3.026 (76.86)	(3.50)	1.000 (25.40)	.259 (6.58)
G	3.88 (98.55)	1.50 (38.10)		1.53 (38.86)					2.681 (68.10)	(3.16)	1.125 (28.58)	
H	4.61 (117.09)								3.406 (86.51)	(3.88)		

979-010 BACKSHELL (INCLUDED WITH "A" OPTION)



Size	A	(B)	C	(D)	E	F	G	H Band Size
A	1.60 (40.64)	(0.60)	0.78 (19.81)	(0.39)	1.19 (30.23)	.270 (6.86)	.060 (1.52)	Glenair Micro-Band (1/8" W)
B	2.00 (50.80)	(0.90)						
C	1.83 (46.48)	(0.83)	0.90 (22.86)	(0.48)	1.22 (30.99)			
D	2.35 (59.69)	(1.24)						
E	2.00 (50.80)	(1.02)	0.99 (25.15)	(0.53)	1.45 (36.83)	.370 (9.40)	.135 (3.43)	Glenair Standard Band (1/4" W)
F	2.71 (68.83)	(1.52)	1.00 (25.40)					
G	2.37 (60.20)	(1.22)	1.13 (28.70)	(0.67)	1.63 (41.40)			
H	3.09 (78.49)	(1.82)						

979-014 BACKSHELL (INCLUDED WITH "B" OPTION)



Size	A	B	C Max.	D	E	F Min.	G	H Thd.
A	1.60 (40.64)	0.78 (19.81)	1.230 (31.24)	1.140 (28.96)	0.375 (9.52)	0.65 (16.51)	0.28 (7.11)	4-40
B	2.00 (50.80)	0.78 (19.81)	1.495 (37.97)	1.140 (28.96)	0.375 (9.52)	0.92 (23.37)	0.28 (7.11)	
C	1.83 (46.48)	0.90 (22.86)	1.450 (36.83)	1.175 (29.85)	0.375 (9.52)	0.87 (22.10)	0.39 (9.91)	
D	2.35 (59.69)	0.90 (22.86)	1.840 (46.74)	1.175 (29.85)	0.375 (9.52)	1.27 (32.26)	0.39 (9.91)	
E	2.00 (50.80)	0.99 (25.15)	1.620 (41.15)	1.205 (30.61)	0.375 (9.52)	1.05 (26.67)	0.48 (12.19)	
F	2.71 (68.83)	1.00 (25.40)	2.245 (57.02)	1.515 (38.48)	0.500 (12.70)	1.49 (37.85)	0.48 (12.19)	6-32
G	2.37 (60.20)	1.13 (28.70)	1.965 (49.91)	1.515 (38.48)	0.500 (12.70)	1.21 (30.73)	0.57 (14.48)	
H	3.09 (78.49)	1.13 (28.70)	2.540 (64.52)	1.515 (38.48)	0.500 (12.70)	1.78 (45.21)	0.57 (14.48)	

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turboflex®

THE ULTRA FLEXIBLE RUGGED POWER CABLE





TurboFlex is an ultra flexible and rugged power cable solution ideal for high-power electrical distribution and propulsion applications such as battery-plant-to-inverter-to-electric-motor cables for eVTOL aircraft. Constructed from rope-lay configuration copper or aluminum wire and jacketed with Glenair signature Duralectric insulation, TurboFlex cables are optimized for use in an ecosystem of Glenair signature contact and connector technologies. Turnkey connectorized or lugged cable assemblies—fully tested and ready for immediate use—provide reliable high-temperature tolerant performance up to 4500 VAC.



◀ Duralectric™ is the high-performance TurboFlex® jacketing material. Different compounding formulas are optimized for weight savings, radiation resistance, ultra low temperatures, conductivity, and immersion in chemical or caustic fuels. Available in a broad range of colors including safety orange.

STANDARD TURBOFLEX R VS. TURBOFLEX M





TurboFlex M with M22759 cable construction





TurboFlex R with rope-lay cable construction

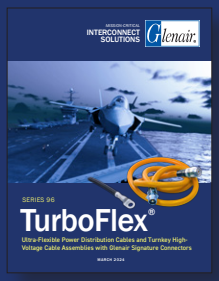
All TurboFlex cables are jacketed with Duralectric insulation, which contributes significantly to the flexibility of the product. Available wire cores include rope-lay cable (TurboFlex R) and M22759 cable (TurboFlex M). TurboFlex R provides maxiumum flexibility. TurboFlex M has a slightly larger bend radius but far superior flexibility compared to standard M22759 cable.

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PowerPlay™ High-Power Connectors and Cables

TurboFlex High-Current, High-Power Cables

THE TURBOFLEX ECOSYSTEM: CABLES, CONTACTS, CONNECTORS, AND ACCESSORIES



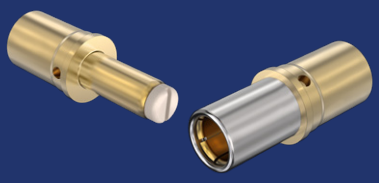
A range of TurboFlex cable constructions are available for different application requirements. At the most basic level, we offer two major categories, rope-lay construction and slightly less-flexible M22759 type wound-wire construction (TurboFlex M). The use of single and dual-wall insulation (Duralectric or Duralectric Light) meets the need for differing voltage requirements from 725 to 4500 VAC.

Other available TurboFlex configurations: TurboFlex cable with shielding optimizes cable performance for different voltage, power, and environmental requirements (see complete TurboFlex catalog for all available constructions including for 2-pole DC power, added abrasion protection, 3-phase power plus ground, and VFD 3-phase power requirements for contact gauges #8, #4, #2, #0, #00, and #0000).

TURBOFLEX AND POWERPLAY CONNECTOR, CONTACT, AND CABLE ECOSYSTEM

		TurboFlex M with M22759 cable construction					TurboFlex R with Rope-Lay cable construction		
Cable Type		Single-Wall TurboFlex M Cable	Dual-Wall Turboflex M Shielded Cable	Single-Wall TurboFlex M, Shield + Fabric Overbraid	Single-Wall TurboFlex M Cable	Dual-Wall Turboflex M Shielded Cable	Single-Wall TurboFlex R Cable	Dual-Wall TurboFlex R Cable	Single-Wall TurboFlex R Cable
Part No.		967-600	967-601	967-602	967-022	967-024	961-106-2000	961-107-2000	961-108-2000
Insulation / Jacket / Shield Type		Duralectric D Insulation	Duralectric D Insulation / Jacket, EMI Shield	Duralectric D Insulation EMI Shield Fabric Overbraid	Duralectric L Insulation	Duralectric L Insulation / Jacket, EMI Shield	Duralectric D Insulation	Duralectric D Insulation / Jacket	Duralectric L Insulation
VAC Rating		725–2875	725–2875	725–2875	2000	2000	2000	2000	2000
Gauge AWG	Typical Current (A)	✓ = Available Gauges					✓ = Available Gauges		
24	6–14	✓	✓	✓					
22	8–18	✓	✓	✓					
20	10–25	✓	✓	✓					
18	15–30	✓	✓	✓					
16	15–35	✓	✓	✓					
12	30–70	✓	✓	✓					
10	40–90	✓	✓	✓	✓	✓			
8	55–135	✓	✓	✓	✓	✓	✓	✓	✓
4	105–250	✓	✓	✓	✓	✓	✓	✓	✓
2	145–345	✓	✓	✓	✓	✓	✓	✓	✓
1	170–400	✓	✓	✓					
0	195–465	✓	✓	✓	✓	✓	✓	✓	✓
00	255–540	✓	✓	✓			✓	✓	✓
000	260–640	✓	✓	✓			✓	✓	✓
0000	310–755	✓	✓	✓					

TURBOFLEX-COMPATIBLE HIGH-TEMPERATURE TOLERANT CROWN RING CONTACTS



Glenair Signature Crown Ring contact series

provides reduced contact resistance, superior conductivity, and higher temperature-tolerance than conventional AS39029 contacts and specialized high-power contacts from other manufacturers

- Maximum operating temperature 260°C
- Superior conductivity performance compared to beryllium copper contacts, across full temperature range
- Up to 60% lower contact resistance than AS39029 contacts (normalized, less wire)
- Contact bodies made from high conductivity copper alloy (approximately 95% IACS)
- Pin contact equipped with thermoplastic safe-touch tip
- Stainless steel Crown Ring
  - Provides socket forces without stress relaxation at high temperatures
  - Moves socket spring function from socket body to ring, allowing use of high- conductivity copper
- Gold over nickel plating
  - Thicker plating than industry standards for reduced contact fretting and higher temperature endurance
  - Gold over nickel is "gold standard" for high-reliability aerospace contacts
- Crimp versions use standard industry tooling, including crimp die/locator and insertion/extraction tools (2AWG Crown Ring contacts require custom tooling)

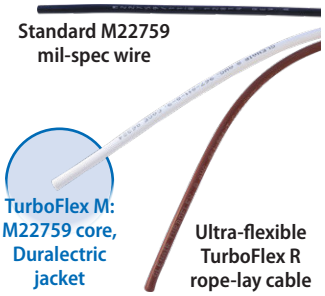
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TurboFlex® M AS22759-type conductor, Duralectric™ D Insulation, 725–2875 VAC • 967-600 Imperial

TURBOFLEX M • COPPER CORE

FEATURES

- TurboFlex M, with mil-spec conductor per AS29606 provides flight heritage and the stiffness required in some installations, while Duralectric D Insulation provides more flexibility than standard mil-spec wire. 725–2875 VAC, 2450–6750 VDC-rated performance.

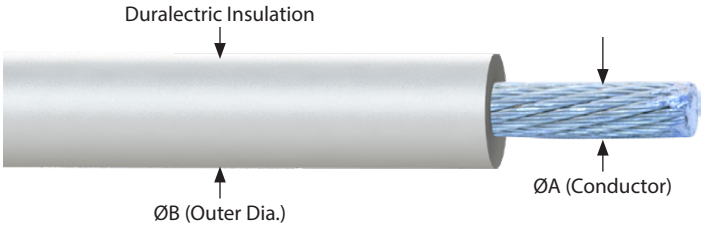


NOTES

1. Cable will be marked with "GLENAIR TURBOFLEX M", wire gauge, part number, CAGE 06324.
2. Conductors per AS29606
3. Bend radius (reference only) 3X O.D.
4. Designed to meet all test requirements of M16878/7, M16878/8, NEMA HB6 Type ZHS and ZHSS

Table II: Duralectric D Insulation Color	
Weatherproof, halogen free, flame resistant	
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Kelly Green
6	Blue
7	Violet
8	Gray
9	White
Consult factory for other specific colors	

HOW TO ORDER TURBOFLEX® M					
Sample Part Number	**967-600**	**-28**	**SCA**	**-016**	**-0**
Basic No.	**TurboFlex M** = AS22759 type conductor with Duralectric D Insulation				
Wire Conductor Size (See Tables)	**-24**,**-22**, **-20**, **-18**, **-16**, **-12**, **-10**, **-8**, **-6**, **-4**, **-2**, **-1**, **-0**, **-00**, **-000**, **-0000**				
Conductor Type (See Tables for Specifications, Resistance Values, and Conductor Diameter)	**NCA** = Nickel-Coated High-Strength Copper Alloy (-60° – 200°C) **NCC** = Nickel-Coated Annealed Copper (-60° – 200°C) **SCA** = Silver-Coated High-Strength Copper Alloy (-60° – 200°C) **SCC** = Silver-Coated Annealed Copper (-60° – 200°C) **TCC** = Tin-Coated Annealed Copper (-60° – 150°C)				
Duralectric D Insulation Thickness (See Tables)	**-016** = .016 **-024** = .024 **-032** = .032 **-047** = .047 **-062** = .062 **-093** = .093 **-125** = .125				
Duralectric D Insulation Color	See Table II				



VOLTAGE RATING / INSULATION RESISTANCE							
Wall (in.)	.016 wall	.024 wall	.032 wall	.047 wall	.062 wall	.093 wall	.125 wall
IR Test Voltage (VDC)	1000	1000	1500	1500	2000	2500	3000
Voltage Rating (VAC)	725	975	1125	1450	1750	2300	2875
DWV (VAC)	2450	2950	3250	3900	4500	5600	6750
Wire Size AWG	Insulation Resistance (Megohms / 1000 ft.)						
24	1500	2000	2300	N/A	N/A	N/A	N/A
22	1300	1800	2100	N/A	N/A	N/A	N/A
20	1100	1500	1800	N/A	N/A	N/A	N/A
18	1000	1300	1500	N/A	N/A	N/A	N/A
16	900	1200	1500	N/A	N/A	N/A	N/A
12	600	900	1000	1400	N/A	N/A	N/A
10	500	700	900	1200	1400	N/A	N/A
8	400	600	700	900	1100	N/A	N/A
6	N/A	500	600	700	900	N/A	N/A
4	N/A	400	500	600	800	1000	1200
2	N/A	300	400	500	600	900	1100
1	N/A	300	400	500	600	800	1000
0	N/A	300	400	500	600	700	900
00	N/A	N/A	300	400	500	700	800
000	N/A	N/A	N/A	400	500	600	800
0000	N/A	N/A	N/A	N/A	400	600	700

TYPICAL CURRENT RANGE															
Tin Copper						Nickel/Silver Copper									
AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps
24	6-12	**18**	15-30	**10**	40-75	**24**	6-14	**16**	15-35	**4**	105-250	**0**	195-465		
22	8-15	**16**	15-30	**8**	55-115	**22**	8-18	**10**	40-90	**2**	145-345	**00**	225-540		
20	10-20					**20**	10-25	**8**	55-135	**1**	170-400	**3/0**	260-640		
						18	15-30	**6**	75-185			**4/0**	310-755		

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TurboFlex® M AS22759-type conductor, Duralectric™ D Insulation, 725–2875 VAC • 967-600 Imperial

NCA NICKEL-COATED HIGH-STRENGTH COPPER ALLOY CONDUCTOR

NCA WIRE SPECIFICATIONS								
Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm)			Max Weight (lbs/1000 ft)		
			.016 wall	.024 wall	.032 wall	.016 wall	.024 wall	.032 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)	2.8	3.9	4.9
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)	3.8	5.1	6.1
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)	5.5	6.9	8.0
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)	7.9	9.5	10.8
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)	10.0	11.4	13.0

NCA WIRE RESISTANCE / CONDUCTOR DIA.		
Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	30.1	.024 (0.61)
22	18.6	.029 (0.74)
20	11.4	.038 (0.97)
18	6.79	.048 (1.22)
16	5.16	.053 (1.35)

TCC TIN-COATED ANNEALED COPPER CONDUCTOR

TCC WIRE SPECIFICATIONS																
Wire Size AWG	No. Strands X AWG	Circular Mils Nominal	Ø B (Inches)							Max Weight (Lbs/1000 Ft)						
			0.016 Wall	0.024 Wall	0.032 Wall	0.047 Wall	0.062 Wall	0.093 Wall	0.125 Wall	.016 Wall	.024 Wall	.032 Wall	.047 Wall	.062 Wall	.093 Wall	.125 Wall
28	7 X 36	175	0.047 ± .003	N/A	N/A	N/A	N/A	N/A	N/A	1.6	N/A	N/A	N/A	N/A	N/A	N/A
26	19 X 38	304	0.051 ± .003	N/A	N/A	N/A	N/A	N/A	N/A	2.1	N/A	N/A	N/A	N/A	N/A	N/A
24	19 X 36	475	0.055 ± .003	0.074 ± .003	0.087 ± .003	N/A	N/A	N/A	N/A	2.8	3.9	4.9	N/A	N/A	N/A	N/A
22	19 X 34	754	0.061 ± .003	0.080 ± .003	0.093 ± .003	N/A	N/A	N/A	N/A	3.8	5.1	6.1	N/A	N/A	N/A	N/A
20	19 X 32	1216	0.069 ± .003	0.088 ± .003	0.101 ± .003	N/A	N/A	N/A	N/A	5.5	6.9	8.0	N/A	N/A	N/A	N/A
18	19 X 30	1900	0.079 ± .003	0.098 ± .003	0.111 ± .003	N/A	N/A	N/A	N/A	7.9	9.5	10.8	N/A	N/A	N/A	N/A
16	19 X 29	2426	0.088 ± .003	0.104 ± .003	0.119 ± .003	N/A	N/A	N/A	N/A	10.0	11.4	13.0	N/A	N/A	N/A	N/A
14	19 X 27	3831	0.100 ± .003	0.119 ± .003	0.131 ± .003	0.164 ± .003	N/A	N/A	N/A	14.2	16.1	17.5	22.0	N/A	N/A	N/A
12	37 X 28	5874	0.118 ± .003	0.138 ± .003	0.150 ± .003	0.183 ± .003	N/A	N/A	N/A	21.5	23.8	25.4	30.5	N/A	N/A	N/A
10	37 X 26	9354	0.143 ± .005	0.161 ± .005	0.175 ± .005	0.205 ± .005	0.235 ± .005	N/A	N/A	33.8	36.4	38.6	43.9	50.0	N/A	N/A
8	133 X 29	16983	0.198 ± .006	0.219 ± .006	0.230 ± .006	0.260 ± .006	0.290 ± .006	N/A	N/A	61.5	65.6	67.9	74.7	82.3	N/A	N/A
6	133 X 27	26818	N/A	0.268 ± .006	0.282 ± .006	0.311 ± .006	0.341 ± .006	N/A	N/A	N/A	99.7	103.3	111.2	120.2	N/A	N/A
4	133 X 25	42615	N/A	0.320 ± .006	0.333 ± .006	0.363 ± .006	0.393 ± .006	0.455 ± .006	0.519 ± .006	N/A	153.1	157.0	166.6	177.0	201.2	229.7
2	665 X 30	66500	N/A	0.394 ± .007	0.407 ± .007	0.435 ± .007	0.466 ± .007	0.528 ± .007	0.592 ± .007	N/A	245.0	249.8	260.6	273.4	301.7	334.5
1	817 X 30	81700	N/A	0.434 ± .007	0.457 ± .007	0.477 ± .007	0.507 ± .007	0.565 ± .007	0.632 ± .007	N/A	309.4	318.8	327.4	340.9	369.4	406.1
0	1045 X 30	104500	N/A	0.482 ± .007	0.493 ± .007	0.522 ± .007	0.552 ± .007	0.617 ± .007	0.678 ± .007	N/A	374.8	379.7	393.2	408.0	442.8	478.9
00	1330 X 30	133000	N/A	N/A	0.543 ± .008	0.573 ± .008	0.603 ± .008	0.665 ± .008	0.729 ± .008	N/A	N/A	469.0	484.4	500.6	536.6	577.4
000	1665 X 30	166500	N/A	N/A	N/A	0.638 ± .008	0.668 ± .008	0.730 ± .008	0.794 ± .008	N/A	N/A	N/A	593.7	611.6	651.3	695.9
0000	2109 X 30	210900	N/A	N/A	N/A	N/A	0.733 ± .008	0.795 ± .008	0.859 ± .008	N/A	N/A	N/A	N/A	756.0	799.3	847.7

TCC WIRE RESISTANCE / CONDUCTOR DIA.		
Wire Size AWG	Resistance at 20°C (68°F) (Ohms/1000 Ft) Max	Ø A (Inches) Nominal
28	68.6	0.015
26	41.3	0.019
24	26.2	0.024
22	16.2	0.030
20	9.88	0.038
18	6.23	0.047
16	4.81	0.053

TCC WIRE RESISTANCE / CONDUCTOR DIA.		
Wire Size AWG	Resistance at 20°C (68°F) (Ohms/1000 Ft) Max	Ø A (Inches) Nominal
14	3.06	0.066
12	2.02	0.085
10	1.26	0.107
8	0.701	0.161
6	0.418	0.209
4	0.264	0.261
2	0.170	0.333

TCC WIRE RESISTANCE / CONDUCTOR DIA.		
Wire Size AWG	Resistance at 20°C (68°F) (Ohms/1000 Ft) Max	Ø A (Inches) Nominal
1	0.149	0.370
0	0.116	0.413
00	0.091	0.467
000	0.071	0.520
0000	0.056	0.585

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TurboFlex® M AS22759-type conductor, Duralectric™ D Insulation, 725–2875 VAC • 967-600 Imperial

TURBOFLEX M • COPPER CORE

NCC NICKEL-COATED ANNEALED COPPER CONDUCTOR

NCC WIRE SPECIFICATIONS

Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm)							Max Weight (lbs/1000 ft)						
			.016 wall	.024 wall	.032 wall	.047 wall	.062 wall	.093 wall	.125 wall	.016 wall	.024 wall	.032 wall	.047 wall	.062 wall	.093 wall	.125 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)	N/A	N/A	N/A	N/A	2.8	3.9	4.9	N/A	N/A	N/A	N/A
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)	N/A	N/A	N/A	N/A	3.8	5.1	6.1	N/A	N/A	N/A	N/A
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)	N/A	N/A	N/A	N/A	5.5	6.9	8.0	N/A	N/A	N/A	N/A
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)	N/A	N/A	N/A	N/A	7.9	9.5	10.8	N/A	N/A	N/A	N/A
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)	N/A	N/A	N/A	N/A	10.0	11.4	13.0	N/A	N/A	N/A	N/A
12	37 X 28	5874	.118 ±.003 (3.00 ±.08)	.138 ±.003 (3.51 ±.08)	.150 ±.003 (3.81 ±.08)	.183 ±.003 (4.65 ±.08)	N/A	N/A	N/A	21.5	23.8	25.4	30.5	N/A	N/A	N/A
10	37 X 26	9354	.143 ±.005 (3.63 ±.13)	.161 ±.005 (4.09 ±.13)	.175 ±.005 (4.44 ±.13)	.205 ±.005 (5.21 ±.13)	.235 ±.005 (5.97 ±.13)	N/A	N/A	33.8	36.4	38.6	43.9	50.0	N/A	N/A
8	133 X 29	16983	.198 ±.006 (5.03 ±.15)	.219 ±.006 (5.56 ±.15)	.230 ±.006 (5.84 ±.15)	.260 ±.006 (6.60 ±.15)	.290 ±.006 (7.37 ±.15)	N/A	N/A	61.5	65.6	67.9	74.7	82.3	N/A	N/A
6	133 X 27	26818	N/A	.268 ±.006 (6.81 ±.15)	.282 ±.006 (7.16 ±.15)	.311 ±.006 (7.90 ±.15)	.341 ±.006 (8.66 ±.15)	N/A	N/A	N/A	99.7	103.3	111.2	120.2	N/A	N/A
4	133 X 25	42615	N/A	.320 ±.006 (8.13 ±.15)	.333 ±.006 (8.46 ±.15)	.363 ±.006 (9.22 ±.15)	.393 ±.006 (9.98 ±.15)	.455 ±.006 (11.56 ±.15)	.519 ±.006 (13.18 ±.15)	N/A	153.1	157.0	166.6	177.0	201.2	229.7
2	665 X 30	66500	N/A	.394 ±.007 (10.00 ±.18)	.407 ±.007 (10.34 ±.18)	.435 ±.007 (11.05 ±.18)	.466 ±.007 (11.84 ±.18)	.528 ±.007 (13.41 ±.18)	.592 ±.007 (15.04 ±.18)	N/A	245.0	249.8	260.6	273.4	301.7	334.5
1	817 X 30	81700	N/A	.434 ±.007 (11.02 ±.18)	.457 ±.007 (11.61 ±.18)	.477 ±.007 (12.12 ±.18)	.507 ±.007 (12.88 ±.18)	.565 ±.007 (14.35 ±.18)	.632 ±.007 (16.05 ±.18)	N/A	309.4	318.8	327.4	340.9	369.4	406.1
0	1045 X 30	104500	N/A	.482 ±.007 (12.24 ±.18)	.493 ±.007 (12.52±.18)	.522 ±.007 (13.26 ±.18)	.552 ±.007 (14.02 ±.18)	.617 ±.007 (15.67 ±.18)	.678 ±.007 (17.22 ±.18)	N/A	374.8	379.7	393.2	408.0	442.8	478.9
00	1330 X 30	133000	N/A	N/A	.543 ±.008 (13.79 ±.20)	.573 ±.008 (14.55 ±.20)	.603 ±.008 (15.32 ±.20)	.665 ±.008 (16.89 ±.20)	.729 ±.008 (18.52 ±.20)	N/A	N/A	469.0	484.4	500.6	536.6	577.4
000	1665 X 30	166500	N/A	N/A	N/A	.638 ±.008 (16.21 ±.20)	.668 ±.008 (16.97 ±.20)	.730 ±.008 (18.54 ±.20)	.794 ±.008 (20.17 ±.20)	N/A	N/A	N/A	593.7	611.6	651.3	695.9
0000	2109 X 30	210900	N/A	N/A	N/A	N/A	.733 ±.008 (18.62 ±.20)	.795 ±.008 (20.19 ±.20)	.859 ±.008 (21.82 ±.20)	N/A	N/A	N/A	N/A	756.0	799.3	847.7

NCC WIRE RESISTANCE / CONDUCTOR DIA.

Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	25.9	.024 (0.61)
22	16.0	.030 (0.76)
20	9.77	.038 (0.97)
18	6.1	.047 (1.19)
16	4.76	.053 (1.35)

NCC WIRE RESISTANCE / CONDUCTOR DIA.

Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
14	3.0	.067 (1.70)
12	1.98	.085 (2.16)
10	1.24	.107 (2.72)
8	0.694	.161 (4.09)
6	0.436	.209 (5.31)
4	0.275	.261 (6.63)

NCC WIRE RESISTANCE / CONDUCTOR DIA.

Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
2	0.177	.333 (8.46)
1	0.144	.370 (9.40)
0	0.113	.413 (10.49)
00	0.089	.467 (11.86)
000	0.071	.520 (13.21)
0000	0.056	.585 (14.86)

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TurboFlex® M AS22759-type conductor, Duralectric™ D Insulation, 725–2875 VAC • 967-600 Imperial

SCA SILVER-COATED HIGH-STRENGTH COPPER ALLOY CONDUCTOR

SCA WIRE SPECIFICATIONS								
Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm)			Max Weight (lbs/1000 ft)		
			.016 wall	.024 wall	.032 wall	.016 wall	.024 wall	.032 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)	2.8	3.9	4.9
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)	3.8	5.1	6.1
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)	5.5	6.9	8.0
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)	7.9	9.5	10.8
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)	10.0	11.4	13.0

SCA WIRE RESISTANCE / CONDUCTOR DIA.		
Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	28.4	.024 (0.61)
22	17.5	.030 (0.76)
20	10.7	.038 (0.97)
18	6.43	.047 (1.19)
16	4.9	.053 (1.35)

SCC SILVER-COATED ANNEALED COPPER CONDUCTOR

SCC WIRE SPECIFICATIONS												
Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm)					Max Weight (lbs/1000 ft)				
			.016 wall	.024 wall	.032 wall	.047 wall	.062 wall	.016 wall	.024 wall	.032 wall	.047 wall	.062 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)	N/A	N/A	2.8	3.9	4.9	N/A	N/A
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)	N/A	N/A	3.8	5.1	6.1	N/A	N/A
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)	N/A	N/A	5.5	6.9	8.0	N/A	N/A
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)	N/A	N/A	7.9	9.5	10.8	N/A	N/A
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)	N/A	N/A	10.0	11.4	13.0	N/A	N/A
14	19 X 27	3831	.100 ±.003 (2.54 ±.08)	.119 ±.003 (3.02 ±.08)	.131 ±.003 (3.33 ±.08)	.164 ±.003 (4.17 ±.08)	N/A	14.2	16.1	17.5	22.0	N/A
12	37 X 28	5874	.118 ±.003 (3.00 ±.08)	.138 ±.003 (3.51 ±.08)	.150 ±.003 (3.81 ±.08)	.183 ±.003 (4.65 ±.08)	N/A	21.5	23.8	25.4	30.5	N/A
10	37 X 26	9354	.143 ±.005 (3.63 ±.13)	.161 ±.005 (4.09 ±.13)	.175 ±.005 (4.44 ±.13)	.205 ±.005 (5.21 ±.13)	.235 ±.005 (5.97 ±.13)	33.8	36.4	38.6	43.9	50.0
8	133 X 29	16983	.198 ±.006 (5.03 ±.15)	.219 ±.006 (5.56 ±.15)	.230 ±.006 (5.84 ±.15)	.260 ±.006 (6.60 ±.15)	.290 ±.006 (7.37 ±.15)	61.5	65.6	67.9	74.7	82.3

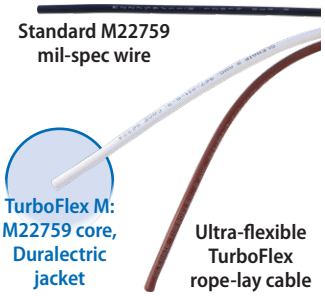
SCC WIRE RESISTANCE / CONDUCTOR DIA.			SCC WIRE RESISTANCE / CONDUCTOR DIA.			SCC WIRE RESISTANCE / CONDUCTOR DIA.		
Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.	Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.	Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	24.3	.024 (0.61)	20	9.19	.038 (0.97)	12	1.90	.086 (2.18)
22	15.1	.030 (0.76)	18	5.79	.047 (1.19)	10	1.19	.108 (2.74)
			16	4.52	.053 (1.35)	8	.658	.161 (4.09)

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TurboFlex® M Copper Core, Dual-Layer Duralectric™ D Jackets and Metallic Braided Shield, 725–2875 VAC • 967-601 Imperial

FEATURES

- TurboFlex M, with mil-spec conductor per AS29606 provides flight heritage and the stiffness required in some installations, while Duralectric D Insulation provides more flexibility than standard mil-spec wire. 725–2875 VAC, 2450–6750 VDC-rated performance.



NOTES

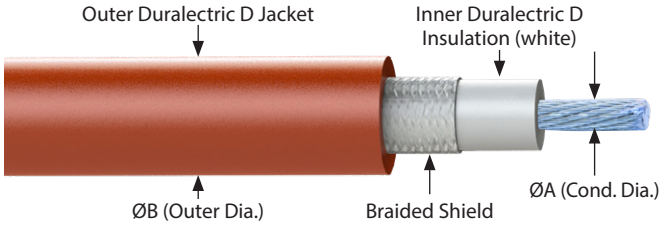
1. Cable will be marked with "GLENAIR TURBOFLEX M", wire gauge, part number, CAGE 06324.
2. Conductors per AS29606
3. Bend radius (ref. only) 4X O.D.
4. Resistance values with respect to center conductor
5. Shield direct current ratings are for information only. Values are for uninsulated shield, in free air, at 30°C. Should be derated as shield is insulated.

Table II: Duralectric D Insulation Color	
Weatherproof, halogen free, flame resistant	
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Kelly Green
6	Blue
7	Violet
8	Gray
9	White
Consult factory for other specific colors	

HOW TO ORDER TURBOFLEX® M

Sample Part Number	967-601	-28	SCA	-016	-S	-0

Basic No.	**TurboFlex M** = AS22759 type conductor with Duralectric D Insulation and Jacket and braided EMI shielding
Wire Conductor Size (See Tables)	**-24**,**-22**, **-20**, **-18**, **-16**, **-12**, **-10**, **-8**, **-6**, **-4**, **-2**, **-1**, **-0**, **-00**, **-000**, **-0000**
Conductor Type (See Tables for Specifications, Resistance Values, and Conductor Diameter)	**NCA** = Nickel-Coated High-Strength Copper Alloy (-60° – 200°C) **NCC** = Nickel-Coated Annealed Copper (-60° – 200°C) **SCA** = Silver-Coated High-Strength Copper Alloy (-60° – 200°C) **SCC** = Silver-Coated Annealed Copper (-60° – 200°C) **TCC** = Tin-Coated Annealed Copper (-60° – 150°C)
Duralectric D Insulation Thickness (See Tables)	**-016** = .016 **-024** = .024 **-032** = .032 **-047** = .047 **-062** = .062 **-093** = .093 **-125** = .125
Braided Shield Material	**T** = Tin/Copper (100-001A), 0.011 thick (ref) **S** = Silver/Copper (100-002A), 0.011 (ref) **N** = Nickel/Copper (100-003A), 0.011 (ref) **AM** = AmberStrand (103-026), 0.009 (ref) **AR** = ArmorLite™ (103-051), 0.008 (ref) **CF** = ArmorLite™ CF (103-126), 0.009 (ref)
Outer Duralectric D Jacket Color	See Table II



VOLTAGE RATING / INSULATION RESISTANCE							
Wall (in.)	.016 wall	.024 wall	.032 wall	.047 wall	.062 wall	.093 wall	.125 wall
IR Test Voltage (VDC)	1000	1000	1500	1500	2000	2500	3000
Voltage Rating (VAC)	725	975	1125	1450	1750	2300	2875
DWV (VAC)	2450	2950	3250	3900	4500	5600	6750
Wire Size AWG	Insulation Resistance (Megohms / 1000 ft.)						
24	1500	2000	2300	N/A	N/A	N/A	N/A
22	1300	1800	2100	N/A	N/A	N/A	N/A
20	1100	1500	1800	N/A	N/A	N/A	N/A
18	1000	1300	1500	N/A	N/A	N/A	N/A
16	900	1200	1500	N/A	N/A	N/A	N/A
12	600	900	1000	1400	N/A	N/A	N/A
10	500	700	900	1200	1400	N/A	N/A
8	400	600	700	900	1100	N/A	N/A
6	N/A	500	600	700	900	N/A	N/A
4	N/A	400	500	600	800	1000	1200
2	N/A	300	400	500	600	900	1100
1	N/A	300	400	500	600	800	1000
0	N/A	300	400	500	600	700	900
00	N/A	N/A	300	400	500	700	800
000	N/A	N/A	N/A	400	500	600	800
0000	N/A	N/A	N/A	N/A	400	600	700

TYPICAL CURRENT RANGE															
Tin Copper						Nickel/Silver Copper									
AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps
24	6-12	18	15-30	10	40-75	24	6-14	16	15-35	4	105-250	0	195-465		
22	8-15	16	15-30	8	55-115	22	8-18	10	40-90	2	145-345	00	225-540		
20	10-20	12	30-60			20	10-25	8	55-135	1	170-400	3/0	260-640		
						18	15-30	6	75-185			4/0	310-755		

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TurboFlex® M Copper Core, Dual-Layer Duralectric™ D Jackets and Metallic Braided Shield, 725–2875 VAC • 967-601 Imperial

NCA NICKEL-COATED HIGH-STRENGTH COPPER ALLOY CONDUCTOR

NCA WIRE SPECIFICATIONS					
Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm)		
			.016 wall	.024 wall	.032 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)

NCA WIRE RESISTANCE / CONDUCTOR DIA.		
Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	30.1	.024 (0.61)
22	18.6	.029 (0.74)
20	11.4	.038 (0.97)
18	6.79	.048 (1.22)
16	5.16	.053 (1.35)

TCC TIN-COATED ANNEALED COPPER CONDUCTOR

TCC WIRE SPECIFICATIONS								
Wire Size AWG	No. Strands X AWG	Circular Mils Nominal	Ø B (Inches)					
			0.016 Wall	0.024 Wall	0.032 Wall	0.047 Wall	0.062 Wall	0.093 Wall	0.125 Wall
28	7 X 36	175	0.047 ± .003	N/A	N/A	N/A	N/A	N/A	N/A
26	19 X 38	304	0.051 ± .003	N/A	N/A	N/A	N/A	N/A	N/A
24	19 X 36	475	0.055 ± .003	0.074 ± .003	0.087 ± .003	N/A	N/A	N/A	N/A
22	19 X 34	754	0.061 ± .003	0.080 ± .003	0.093 ± .003	N/A	N/A	N/A	N/A
20	19 X 32	1216	0.069 ± .003	0.088 ± .003	0.101 ± .003	N/A	N/A	N/A	N/A
18	19 X 30	1900	0.079 ± .003	0.098 ± .003	0.111 ± .003	N/A	N/A	N/A	N/A
16	19 X 29	2426	0.088 ± .003	0.104 ± .003	0.119 ± .003	N/A	N/A	N/A	N/A
14	19 X 27	3831	0.100 ± .003	0.119 ± .003	0.131 ± .003	0.164 ± .003	N/A	N/A	N/A
12	37 X 28	5874	0.118 ± .003	0.138 ± .003	0.150 ± .003	0.183 ± .003	N/A	N/A	N/A
10	37 X 26	9354	0.143 ± .005	0.161 ± .005	0.175 ± .005	0.205 ± .005	0.235 ± .005	N/A	N/A
8	133 X 29	16983	0.198 ± .006	0.219 ± .006	0.230 ± .006	0.260 ± .006	0.290 ± .006	N/A	N/A
6	133 X 27	26818	N/A	0.268 ± .006	0.282 ± .006	0.311 ± .006	0.341 ± .006	N/A	N/A
4	133 X 25	42615	N/A	0.320 ± .006	0.333 ± .006	0.363 ± .006	0.393 ± .006	0.455 ± .006	0.519 ± .006
2	665 X 30	66500	N/A	0.394 ± .007	0.407 ± .007	0.435 ± .007	0.466 ± .007	0.528 ± .007	0.592 ± .007
1	817 X 30	81700	N/A	0.434 ± .007	0.457 ± .007	0.477 ± .007	0.507 ± .007	0.565 ± .007	0.632 ± .007
0	1045 X 30	104500	N/A	0.482 ± .007	0.493 ± .007	0.522 ± .007	0.552 ± .007	0.617 ± .007	0.678 ± .007
00	1330 X 30	133000	N/A	N/A	0.543 ± .008	0.573 ± .008	0.603 ± .008	0.665 ± .008	0.729 ± .008
000	1665 X 30	166500	N/A	N/A	N/A	0.638 ± .008	0.668 ± .008	0.730 ± .008	0.794 ± .008
0000	2109 X 30	210900	N/A	N/A	N/A	N/A	0.733 ± .008	0.795 ± .008	0.859 ± .008

TCC WIRE RESISTANCE / CONDUCTOR DIA.		
Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A Nominal
28	68.6	.015 (0.38)
26	41.3	.019 (0.48)
24	26.2	.024 (0.61)
22	16.2	.030 (0.76)
20	9.88	.038 (0.97)
18	6.23	.047 (1.19)
16	4.81	.053 (1.35)
14	3.06	.066 (1.68)
12	2.02	.085 (2.16)
10	1.26	.107 (2.72)
8	.701	.161 (4.09)
6	.418	.209 (5.31)
4	.264	.261 (6.63)
2	.170	.333 (8.46)
1	.149	.370 (9.40)
0	.116	.413 (10.49)
00	.091	.467 (11.86)
000	.071	.520 (13.21)
0000	0.056	.585 (14.86)

SCA SILVER-COATED HIGH-STRENGTH COPPER ALLOY CONDUCTOR

SCA WIRE SPECIFICATIONS					
Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm)		
			.016 wall	.024 wall	.032 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)

SCA WIRE RESISTANCE / CONDUCTOR DIA.		
Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	28.4	.024 (0.61)
22	17.5	.030 (0.76)
20	10.7	.038 (0.97)
18	6.43	.047 (1.19)
16	4.9	.053 (1.35)

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Dimensions in Inches (millimeters) are subject to change without notice.

TurboFlex® M Copper Core, Dual-Layer Duralectric™ D Jackets and Metallic Braided Shield, 725–2875 VAC • 967-601 Imperial

NCC NICKEL-COATED ANNEALED COPPER CONDUCTOR

NCC WIRE SPECIFICATIONS

Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm)						
			.016 wall	.024 wall	.032 wall	.047 wall	.062 wall	.093 wall	.125 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)	N/A	N/A	N/A	N/A
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)	N/A	N/A	N/A	N/A
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)	N/A	N/A	N/A	N/A
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)	N/A	N/A	N/A	N/A
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)	N/A	N/A	N/A	N/A
12	37 X 28	5874	.118 ±.003 (3.00 ±.08)	.138 ±.003 (3.51 ±.08)	.150 ±.003 (3.81 ±.08)	.183 ±.003 (4.65 ±.08)	N/A	N/A	N/A
10	37 X 26	9354	.143 ±.005 (3.63 ±.13)	.161 ±.005 (4.09 ±.13)	.175 ±.005 (4.44 ±.13)	.205 ±.005 (5.21 ±.13)	.235 ±.005 (5.97 ±.13)	N/A	N/A
8	133 X 29	16983	.198 ±.006 (5.03 ±.15)	.219 ±.006 (5.56 ±.15)	.230 ±.006 (5.84 ±.15)	.260 ±.006 (6.60 ±.15)	.290 ±.006 (7.37 ±.15)	N/A	N/A
6	133 X 27	26818	N/A	.268 ±.006 (6.81 ±.15)	.282 ±.006 (7.16 ±.15)	.311 ±.006 (7.90 ±.15)	.341 ±.006 (8.66 ±.15)	N/A	N/A
4	133 X 25	42615	N/A	.320 ±.006 (8.13 ±.15)	.333 ±.006 (8.46 ±.15)	.363 ±.006 (9.22 ±.15)	.393 ±.006 (9.98 ±.15)	.455 ±.006 (11.56 ±.15)	.519 ±.006 (13.18 ±.15)
2	665 X 30	66500	N/A	.394 ±.007 (10.00 ±.18)	.407 ±.007 (10.34 ±.18)	.435 ±.007 (11.05 ±.18)	.466 ±.007 (11.84 ±.18)	.528 ±.007 (13.41 ±.18)	.592 ±.007 (15.04 ±.18)
1	817 X 30	81700	N/A	.434 ±.007 (11.02 ±.18)	.457 ±.007 (11.61 ±.18)	.477 ±.007 (12.12 ±.18)	.507 ±.007 (12.88 ±.18)	.565 ±.007 (14.35 ±.18)	.632 ±.007 (16.05 ±.18)
0	1045 X 30	104500	N/A	.482 ±.007 (12.24 ±.18)	.493 ±.007 (12.52±.18)	.522 ±.007 (13.26 ±.18)	.552 ±.007 (14.02 ±.18)	.617 ±.007 (15.67 ±.18)	.678 ±.007 (17.22 ±.18)
00	1330 X 30	133000	N/A	N/A	.543 ±.008 (13.79 ±.20)	.573 ±.008 (14.55 ±.20)	.603 ±.008 (15.32 ±.20)	.665 ±.008 (16.89 ±.20)	.729 ±.008 (18.52 ±.20)
000	1665 X 30	166500	N/A	N/A	N/A	.638 ±.008 (16.21 ±.20)	.668 ±.008 (16.97 ±.20)	.730 ±.008 (18.54 ±.20)	.794 ±.008 (20.17 ±.20)
0000	2109 X 30	210900	N/A	N/A	N/A	N/A	.733 ±.008 (18.62 ±.20)	.795 ±.008 (20.19 ±.20)	.859 ±.008 (21.82 ±.20)

NCC WIRE RESISTANCE / CONDUCTOR DIA.

Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	24.3	.024 (0.61)
22	15.1	.030 (0.76)
20	9.19	.038 (0.97)
18	5.79	.047 (1.19)
16	4.52	.053 (1.35)
12	1.98	.085 (2.16)
10	1.24	.107 (2.72)
8	0.694	.161 (4.09)
6	0.436	.209 (5.31)
4	0.275	.261 (6.63)
2	0.177	.333 (8.46)
1	0.144	.370 (9.40)
0	0.113	.413 (10.49)
00	0.089	.467 (11.86)
000	0.071	.520 (13.21)
0000	0.056	.585 (14.86)

SCC SILVER-COATED ANNEALED COPPER CONDUCTOR

SCC WIRE SPECIFICATIONS

Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm)				
			.016 wall	.024 wall	.032 wall	.047 wall	.062 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)	N/A	N/A
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)	N/A	N/A
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)	N/A	N/A
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)	N/A	N/A
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)	N/A	N/A
12	37 X 28	5874	.118 ±.003 (3.00 ±.08)	.138 ±.003 (3.51 ±.08)	.150 ±.003 (3.81 ±.08)	.183 ±.003 (4.65 ±.08)	N/A
10	37 X 26	9354	.143 ±.005 (3.63 ±.13)	.161 ±.005 (4.09 ±.13)	.175 ±.005 (4.44 ±.13)	.205 ±.005 (5.21 ±.13)	.235 ±.005 (5.97 ±.13)
8	133 X 29	16983	.198 ±.006 (5.03 ±.15)	.219 ±.006 (5.56 ±.15)	.230 ±.006 (5.84 ±.15)	.260 ±.006 (6.60 ±.15)	.290 ±.006 (7.37 ±.15)

SCC WIRE RESISTANCE / CONDUCTOR DIA.

Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	24.3	.024 (0.61)
22	15.1	.030 (0.76)
20	9.19	.038 (0.97)
18	5.79	.047 (1.19)
16	4.52	.053 (1.35)
12	1.90	.086 (2.18)
10	1.19	.108 (2.74)
8	.658	.161 (4.09)

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TurboFlex® M Copper Core, Dual-Layer Duralectric™ D Jackets and Metallic Braided Shield, 725–2875 VAC • 967-601 Imperial

WEIGHT (LBS/1000 FT) NOMINAL: TIN / SILVER / NICKEL COPPER SHIELD

Wire Size AWG	Wall Size						
	.016	.024	.032	.047	.062	.093	.125
24	9.2	12.8	16.5	N/A	N/A	N/A	N/A
22	10.4	16.5	17.8	N/A	N/A	N/A	N/A
20	14.3	18.5	19.9	N/A	N/A	N/A	N/A
18	20.5	22.7	26.5	N/A	N/A	N/A	N/A
16	22.9	24.8	29.0	N/A	N/A	N/A	N/A
12	37.4	51.0	53.0	55.1	N/A	N/A	N/A
10	61.2	64.4	62.6	80.6	94.2	N/A	N/A
8	102.7	114.4	117.3	125.6	126.1	N/A	N/A
6	N/A	151.1	141.3	156.1	180.4	N/A	N/A
4	N/A	212.2	216.8	228.0	243.3	275.6	314.7
2	N/A	311.3	316.8	329.1	348.4	387.2	433.3
1	N/A	377.8	393.3	403.0	425.3	456.8	507.3
0	N/A	450.6	456.1	478.4	494.7	543.0	591.6
00	N/A	N/A	555.3	582.2	600.0	648.6	692.8
000	N/A	N/A	N/A	695.2	723.7	766.7	819.8
0000	N/A	N/A	N/A	N/A	871.6	923.2	975.0

WEIGHT (LBS/1000 FT) NOMINAL: AMBERSTRAND SHIELD

Wire Size AWG	Wall Size						
	.016	.024	.032	.047	.062	.093	.125
24	6.4	8.9	10.3	N/A	N/A	N/A	N/A
22	7.6	10.3	11.6	N/A	N/A	N/A	N/A
20	10.4	12.3	13.7	N/A	N/A	N/A	N/A
18	14.2	16.5	18.2	N/A	N/A	N/A	N/A
16	16.6	18.6	20.7	N/A	N/A	N/A	N/A
12	29.2	34.0	36.0	42.5	N/A	N/A	N/A
10	44.1	47.4	50.1	56.4	63.6	N/A	N/A
8	78.4	83.6	86.5	96.0	105.2	N/A	N/A
6	N/A	121.4	125.8	135.2	145.8	N/A	N/A
4	N/A	177.6	182.2	193.3	208.4	235.9	269.3
2	N/A	276.5	281.9	294.2	308.7	341.8	377.9
1	N/A	343.0	353.6	363.2	379.9	411.4	453.4
0	N/A	410.9	416.4	432.9	449.3	487.6	528.6
00	N/A	N/A	509.9	526.8	544.6	585.6	629.8
000	N/A	N/A	N/A	641.3	660.8	703.8	757.9
0000	N/A	N/A	N/A	N/A	808.6	861.4	913.1

WEIGHT (LBS/1000 FT) NOMINAL: ARMORLITE SHIELD

Wire Size AWG	Wall Size						
	.016	.024	.032	.047	.062	.093	.125
24	7.7	10.1	11.4	N/A	N/A	N/A	N/A
22	8.8	11.4	12.8	N/A	N/A	N/A	N/A
20	11.6	13.5	14.9	N/A	N/A	N/A	N/A
18	15.4	17.6	19.4	N/A	N/A	N/A	N/A
16	17.8	19.7	21.9	N/A	N/A	N/A	N/A
12	30.3	34.9	37.0	43.5	N/A	N/A	N/A
10	45.1	48.4	51.0	57.4	64.6	N/A	N/A
8	79.4	84.6	87.5	97.4	106.6	N/A	N/A
6	N/A	122.9	127.2	136.6	147.2	N/A	N/A
4	N/A	179.0	183.6	194.8	210.2	237.7	270.4
2	N/A	278.2	283.7	296.0	310.4	342.9	379.1
1	N/A	344.7	355.4	365.0	381.0	412.6	455.1
0	N/A	412.7	418.2	434.1	450.5	488.7	530.3
00	N/A	N/A	511.0	528.0	545.8	587.3	631.5
000	N/A	N/A	N/A	643.0	662.5	705.4	766.4
0000	N/A	N/A	N/A	N/A	810.3	869.9	921.6

WEIGHT (LBS/1000 FT) NOMINAL: ARMORLITE CF SHIELD

Wire Size AWG	Wall Size						
	.016	.024	.032	.047	.062	.093	.125
24	8.4	10.7	12.0	N/A	N/A	N/A	N/A
22	9.6	12.0	13.4	N/A	N/A	N/A	N/A
20	12.2	14.1	15.5	N/A	N/A	N/A	N/A
18	16.0	18.2	20.0	N/A	N/A	N/A	N/A
16	18.4	20.4	22.5	N/A	N/A	N/A	N/A
12	31.0	36.2	38.2	44.7	N/A	N/A	N/A
10	46.3	49.6	52.3	58.6	65.8	N/A	N/A
8	80.6	85.8	88.7	99.3	108.5	N/A	N/A
6	N/A	124.7	129.1	138.5	149.1	N/A	N/A
4	N/A	180.9	185.5	196.6	212.4	239.8	272.4
2	N/A	280.4	285.9	298.2	312.6	344.8	381.0
1	N/A	346.9	357.5	367.2	382.9	414.5	458.9
0	N/A	414.9	420.3	436.0	452.4	490.6	534.1
00	N/A	N/A	512.9	529.9	547.7	591.2	635.3
000	N/A	N/A	N/A	646.8	666.3	709.3	772.5
0000	N/A	N/A	N/A	N/A	816.8	875.9	927.7

SHIELD CURRENT RATINGS: NICKEL / SILVER / TIN BRAID

Wire Size AWG	Wall Size		
	.016	.024	.032
24	7	11	16
22	7	16	16
20	11	16	16
18	16	16	19
16	16	16	19

Wire Size AWG	Wall Size						
	.016	.024	.032	.047	.062	.093	.125
12	19	25	25	32	N/A	N/A	N/A
10	25	32	32	46	46	N/A	N/A
8	32	46	46	35	35	N/A	N/A
6	N/A	35	35	42	42	N/A	N/A
4	N/A	42	42	42	53	55	62

Wire Size AWG	Wall Size						
	.016	.024	.032	.047	.062	.093	.125
2	N/A	53	53	55	55	62	70
1	N/A	53	55	55	62	70	77
0	N/A	55	55	62	62	70	77
00	N/A	N/A	62	70	70	77	77
000	N/A	N/A	N/A	77	77	77	71
0000	N/A	N/A	N/A	N/A	77	71	71

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TurboFlex® M Copper Core, Duralectric™ D Insulation, Metallic Braided Shield, Fabric Overbraid 725–2875 VAC • 967-602 Imperial

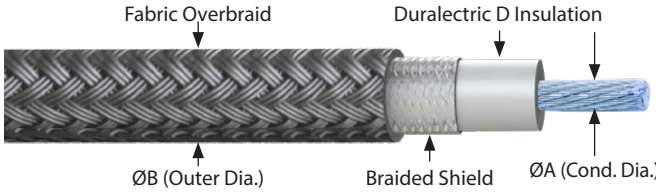
FEATURES

- TurboFlex M, with mil-spec conductor per AS29606 provides flight heritage and the stiffness required in some installations, while Duralectric D Insulation provides more flexibility than standard mil-spec wire. 725–2875 VAC, 2450–6750 VDC-rated performance.
- Fabric overbraid provides abrasion and temperature protection. Choose the appropriate braid with the selection guide table at right.

HOW TO ORDER TURBOFLEX® M

Sample Part Number	967-602	-28	SCA	-016	-0	-N	-M	-B

Basic No.	**TurboFlex** M = AS22759 type conductor with Duralectric D, shield, and fabric overbraid
Wire Conductor Size (See Tables)	**-24**,**-22**, **-20**, **-18**, **-16**, **-12**, **-10**, **-8**, **-6**, **-4**, **-2**, **-1**, **-0**, **-00**, **-000**, **-0000**
Conductor Type (See Tables for Specifications, Resistance Values, and Conductor Diameter)	**NCA** = Nickel-Coated High-Strength Copper Alloy (-60°–200°C) **NCC** = Nickel-Coated Annealed Copper (-60°–200°C) **SCA** = Silver-Coated High-Strength Copper Alloy (-60°–200°C) **SCC** = Silver-Coated Annealed Copper (-60°–200°C) **TCC** = Tin-Coated Annealed Copper (-60°–150°C)
Duralectric D Insulation Thickness	**-016** = .016 **-024** = .024 **-032** = .032 **-047** = .047 **-062** = .062 **-093** = .093 **-125** = .125
Duralectric D Insulation Color	See Table II
Braided Shield Material	**T** = Tin/Copper (100-001A), 0.011 thick (ref) **S** = Silver/Copper (100-002A), 0.011 (ref) **N** = Nickel/Copper (100-003A), 0.011 (ref) **AM** = AmberStrand (103-026), 0.009 (ref) **AR** = ArmorLite™ (103-051), 0.008 (ref) **CF** = ArmorLite™ CF (103-126), 0.009 (ref)
Overbraid Material	See Braid Material and Color Selection Guide (**Omit** if not required)
Overbraid Color	See Braid Material and Color Selection Guide (**Omit** if not required)



NOTES

1. Cable will be tagged with complete part number
2. Conductors per AS29606
3. Consult factory for applications above 200° and available thermal endurance test reports

Table II: Duralectric D Insulation Color

Weatherproof, halogen free, flame resistant	
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Kelly Green
6	Blue
7	Violet
8	Gray
9	White
Consult factory for other specific colors	

VOLTAGE RATING / INSULATION RESISTANCE

Wall (in.)	.016 wall	.024 wall	.032 wall	.047 wall	.062 wall	.093 wall	.125 wall
IR Test Voltage (VDC)	1000	1000	1500	1500	2000	2500	3000
Voltage Rating (VAC)	725	975	1125	1450	1750	2300	2875
DWV (VAC)	2450	2950	3250	3900	4500	5600	6750
Wire Size AWG	Insulation Resistance (Megohms / 1000 ft.)						
24	1500	2000	2300	N/A	N/A	N/A	N/A
22	1300	1800	2100	N/A	N/A	N/A	N/A
20	1100	1500	1800	N/A	N/A	N/A	N/A
18	1000	1300	1500	N/A	N/A	N/A	N/A
16	900	1200	1500	N/A	N/A	N/A	N/A
12	600	900	1000	1400	N/A	N/A	N/A
10	500	700	900	1200	1400	N/A	N/A
8	400	600	700	900	1100	N/A	N/A
6	N/A	500	600	700	900	N/A	N/A
4	N/A	400	500	600	800	1000	1200
2	N/A	300	400	500	600	900	1100
1	N/A	300	400	500	600	800	1000
0	N/A	300	400	500	600	700	900
00	N/A	N/A	300	400	500	700	800
000	N/A	N/A	N/A	400	500	600	800
0000	N/A	N/A	N/A	N/A	400	600	700

TYPICAL CURRENT RANGE

Tin Copper						Nickel/Silver Copper							
AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps	AWG	Amps
24	6-12	18	15-30	10	40-75	24	6-14	16	15-35	6	75-185	0	195-465
22	8-15	16	15-30	8	55-115	22	8-18	12	30-70	4	105-250	00	225-540
20	10-20	12	30-60			20	10-25	10	40-90	2	145-345	3/0	260-640
						18	15-30	8	55-135	1	170-400	4/0	310-755

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TurboFlex® M Copper Core, Duralectric™ D Insulation, Metallic Braided Shield, Fabric Overbraid 725–2875 VAC • 967-602 Imperial

BRAID MATERIAL AND COLOR SELECTION GUIDE										
PRINCIPAL SELECTION CRITERIA	**GENERAL DUTY / ABRASION RESISTANCE**					**ECONOMY**		**TEMPERATURE TOLERANCE**	**FIRE RESISTANCE**	
BRAID CODE MATERIAL CONSTRUCTION	**Z** Monofilament FEP	**P** Monofilament PET, Type FR	**H** Monofilament Halar®	**M** Yarn, Nomex®	**R** Monofilament Ryton, Type R-7	**D** Yarn, Dacron®	**Y** Yarn, Nylon	**K** Monofilament PEEK	**X** Yarn, PTFE-Glass	**V** Yarn, Kevlar®
COLOR CODE OPTIONS	**C** = Clear	**B** = Black **W** = White	**B** = Black **W** = White **BW** = Black w/ White Tracer **WB** = White w/ Black Tracer	**B** = Black **R** = Red **OR** = Orange **GN** = Green **GY** = Gray **W** = White **TN** = Desert Tan	**N** = Natural	**B** = Black	**B** = Black **GY** = Gray **OD** = Olive Drab	**B** = Black	**BR** = Brown **N** = Natural	**B** = Black **N** = Natural
HALOGEN-FREE	NO	✓	NO	✓	✓	✓	✓	✓	NO	✓
THICKNESS (REF.)	.016	.030	.028	.020	.040	.030	.030	.016	.045	.020
TEMPERATURE RANGE	-55°C to +200°C	-55°C to +125°C	-65°C to +150°C	-55°C to +200°C	-65°C to +180°C	-62°C to +125°C	-20° to +170°	-65°C to +260°C	-204°C to +482°C	-73°C to +160°C
TENSILE STRENGTH (PSI) YIELD	3300	50,000	7000	90,000	19,000	10,000	12,400	13,000	450,000	400,000
ELONGATION PERCENTAGE	50%	20%	15%	25%	40%	12%	90%	38%	5%	3.6%
CHEMICAL RESISTANCE	Excellent	Good	Excellent	Excellent	Excellent	Good	Excellent	Excellent	Excellent	Excellent
ABRASION RESISTANCE	Good	Good	Excellent	Good	Excellent	Fair	Excellent	Excellent	Excellent	Good
WEIGHT / DUTY (SPECIFIC GRAVITY)	Heavy (2.17)	Medium (1.38)	Medium (1.68)	Medium (1.58)	Light (1.25)	Medium (1.38)	Light (1.14)	Light (1.3)	Heavy (2.5)	Medium (1.44)
FLAMMABILITY	Very Low	Flammable, Self-Extinguishing	Very Low	Will Not Melt	Very Low	Flammable	Flammable	Very Low	Will Not Burn	Will Not Melt

TABLE V: SERVICE TEMPERATURE MATRIX (MIN./MAX IN °C) SERVICE TEMPERATURE DEPENDENT ON CONDUCTOR AND BRAID MATERIAL SELECTED				
		Conductor Material (and temperature range)		
Braid Code	**Braid Material (and temperature range)**	**Tin Copper (-65/+150)**	**Silver Copper (-65/+200)**	**Nickel Copper (-65/+260)**
D	Dacron (-62/+125)	(-65/+125)	(-65/+125)	(-65/+125)
H	Halar (-65/+150)	(-65/+150)	(-65/+150)	(-65/+150)
Y	Nylon (-20/+170)	(-20/+150)	(-20/+170)	(-20/+170)
M	Nomex (-55/+200)	(-55/+150)	(-55/+200)	(-55/+200)
P	Polyester Type FR (-55/+125)	(-55/+125)	(-55/+125)	(-55/+125)
Z	FEP Teflon (-55/+200)	(-55/+150)	(-55/+200)	(-55/+200)
R	Ryton Type R-7 (-65/+180)	(-65/+150)	(-65/+180)	(-65/+180)
K	PEEK (-65/+260)	(-65/+150)	(-65/+200)	(-65/+260)
V	Kevlar (-73/+160)	(-65/+150)	(-65/+160)	(-65/+160)
X	PTFE-Glass (-204/+482)	(-65/+150)	(-65/+200)	(-65/+260)

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NCC NICKEL-COATED ANNEALED COPPER CONDUCTOR

NCC WIRE SPECIFICATIONS

Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm) .016 wall	.024 wall	.032 wall	.047 wall	.062 wall	.093 wall	.125 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)	N/A	N/A	N/A	N/A
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)	N/A	N/A	N/A	N/A
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)	N/A	N/A	N/A	N/A
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)	N/A	N/A	N/A	N/A
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)	N/A	N/A	N/A	N/A
12	37 X 28	5874	.118 ±.003 (3.00 ±.08)	.138 ±.003 (3.51 ±.08)	.150 ±.003 (3.81 ±.08)	.183 ±.003 (4.65 ±.08)	N/A	N/A	N/A
10	37 X 26	9354	.143 ±.005 (3.63 ±.13)	.161 ±.005 (4.09 ±.13)	.175 ±.005 (4.44 ±.13)	.205 ±.005 (5.21 ±.13)	.235 ±.005 (5.97 ±.13)	N/A	N/A
8	133 X 29	16983	.198 ±.006 (5.03 ±.15)	.219 ±.006 (5.56 ±.15)	.230 ±.006 (5.84 ±.15)	.260 ±.006 (6.60 ±.15)	.290 ±.006 (7.37 ±.15)	N/A	N/A
6	133 X 27	26818	N/A	.268 ±.006 (6.81 ±.15)	.282 ±.006 (7.16 ±.15)	.311 ±.006 (7.90 ±.15)	.341 ±.006 (8.66 ±.15)	N/A	N/A
4	133 X 25	42615	N/A	.320 ±.006 (8.13 ±.15)	.333 ±.006 (8.46 ±.15)	.363 ±.006 (9.22 ±.15)	.393 ±.006 (9.98 ±.15)	.455 ±.006 (11.56 ±.15)	.519 ±.006 (13.18 ±.15)
2	665 X 30	66500	N/A	.394 ±.007 (10.00 ±.18)	.407 ±.007 (10.34 ±.18)	.435 ±.007 (11.05 ±.18)	.466 ±.007 (11.84 ±.18)	.528 ±.007 (13.41 ±.18)	.592 ±.007 (15.04 ±.18)
1	817 X 30	81700	N/A	.434 ±.007 (11.02 ±.18)	.457 ±.007 (11.61 ±.18)	.477 ±.007 (12.12 ±.18)	.507 ±.007 (12.88 ±.18)	.565 ±.007 (14.35 ±.18)	.632 ±.007 (16.05 ±.18)
0	1045 X 30	104500	N/A	.482 ±.007 (12.24 ±.18)	.493 ±.007 (12.52±.18)	.522 ±.007 (13.26 ±.18)	.552 ±.007 (14.02 ±.18)	.617 ±.007 (15.67 ±.18)	.678 ±.007 (17.22 ±.18)
00	1330 X 30	133000	N/A	N/A	.543 ±.008 (13.79 ±.20)	.573 ±.008 (14.55 ±.20)	.603 ±.008 (15.32 ±.20)	.665 ±.008 (16.89 ±.20)	.729 ±.008 (18.52 ±.20)
000	1665 X 30	166500	N/A	N/A	N/A	.638 ±.008 (16.21 ±.20)	.668 ±.008 (16.97 ±.20)	.730 ±.008 (18.54 ±.20)	.794 ±.008 (20.17 ±.20)
0000	2109 X 30	210900	N/A	N/A	N/A	N/A	.733 ±.008 (18.62 ±.20)	.795 ±.008 (20.19 ±.20)	.859 ±.008 (21.82 ±.20)

NCC WIRE RESISTANCE / CONDUCTOR DIA.

Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	25.9	.024 (0.61)
22	16.0	.030 (0.76)
20	9.77	.038 (0.97)
18	6.1	.047 (1.19)
16	4.76	.053 (1.35)
12	1.98	.085 (2.16)
10	1.24	.107 (2.72)
8	0.694	.161 (4.09)
6	0.436	.209 (5.31)
4	0.275	.261 (6.63)
2	0.177	.333 (8.46)
1	0.144	.370 (9.40)
0	0.113	.413 (10.49)
00	0.089	.467 (11.86)
000	0.071	.520 (13.21)
0000	0.056	.585 (14.86)

SCA SILVER-COATED HIGH-STRENGTH COPPER ALLOY CONDUCTOR

SCA WIRE SPECIFICATIONS

Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm) .016 wall	.024 wall	.032 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)

SCA WIRE RESISTANCE / CONDUCTOR DIA.

Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	28.4	.024 (0.61)
22	17.5	.030 (0.76)
20	10.7	.038 (0.97)
18	6.43	.047 (1.19)
16	4.9	.053 (1.35)

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SCC SILVER-COATED ANNEALED COPPER CONDUCTOR

SCC WIRE SPECIFICATIONS							
Wire Size AWG	No. Strands X AWG	Circular Mils Nom.	Ø B in. (mm)				
			.016 wall	.024 wall	.032 wall	.047 wall	.062 wall
24	19 X 36	475	.055 ±.003 (1.40 ±.08)	.074 ±.003 (1.88 ±.08)	.087 ±.003 (2.21 ±.08)	N/A	N/A
22	19 X 34	754	.061 ±.003 (1.55 ±.08)	.080 ±.003 (2.03 ±.08)	.093 ±.003 (2.36 ±.08)	N/A	N/A
20	19 X 32	1216	.069 ±.003 (1.75 ±.08)	.088 ±.003 (2.24 ±.08)	.101 ±.003 (2.57 ±.08)	N/A	N/A
18	19 X 30	1900	.079 ±.003 (2.01 ±.08)	.098 ±.003 (2.49 ±.08)	.111 ±.003 (2.82 ±.08)	N/A	N/A
16	19 X 29	2426	.088 ±.003 (2.24 ±.08)	.104 ±.003 (2.64 ±.08)	.119 ±.003 (3.02 ±.08)	N/A	N/A
12	37 X 28	5874	.118 ±.003 (3.00 ±.08)	.138 ±.003 (3.51 ±.08)	.150 ±.003 (3.81 ±.08)	.183 ±.003 (4.65 ±.08)	N/A
10	37 X 26	9354	.143 ±.005 (3.63 ±.13)	.161 ±.005 (4.09 ±.13)	.175 ±.005 (4.44 ±.13)	.205 ±.005 (5.21 ±.13)	.235 ±.005 (5.97 ±.13)
8	133 X 29	16983	.198 ±.006 (5.03 ±.15)	.219 ±.006 (5.56 ±.15)	.230 ±.006 (5.84 ±.15)	.260 ±.006 (6.60 ±.15)	.290 ±.006 (7.37 ±.15)

SCC WIRE RESISTANCE / CONDUCTOR DIA.		
Wire Size AWG	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A nom.
24	24.3	.024 (0.61)
22	15.1	.030 (0.76)
20	9.19	.038 (0.97)
18	5.79	.047 (1.19)
16	4.52	.053 (1.35)
12	1.90	.086 (2.18)
10	1.19	.108 (2.74)
8	.658	.161 (4.09)

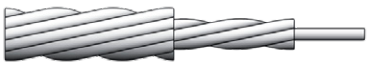
TCC TIN-COATED ANNEALED COPPER CONDUCTOR

TCC WIRE SPECIFICATIONS											
Wire Size Awg	No. Strands X AWG	Circular Mils Nominal	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A Nomi	Ø B (Inches)						
					0.016 Wall	0.024 Wall	0.032 Wall	0.047 Wall	0.062 Wall	0.093 Wall	0.125 Wall
28	7 X 36	175	68.6 (1742.44)	0.015 (0.38)	0.047 ± .003	N/A	N/A	N/A	N/A	N/A	N/A
26	19 X 38	304	41.3 (1049.02)	0.019 (0.48)	0.051 ± .003	N/A	N/A	N/A	N/A	N/A	N/A
24	19 X 36	475	26.2 (665.48)	0.024 (0.61)	0.055 ± .003	0.074 ± .003	0.087 ± .003	N/A	N/A	N/A	N/A
22	19 X 34	754	16.2 (411.48)	0.030 (0.76)	0.061 ± .003	0.080 ± .003	0.093 ± .003	N/A	N/A	N/A	N/A
20	19 X 32	1216	9.88 (250.95)	0.038 (0.97)	0.069 ± .003	0.088 ± .003	0.101 ± .003	N/A	N/A	N/A	N/A
18	19 X 30	1900	6.23 (158.24)	0.047 (1.19)	0.079 ± .003	0.098 ± .003	0.111 ± .003	N/A	N/A	N/A	N/A
16	19 X 29	2426	4.81 (122.17)	0.053 (1.35)	0.088 ± .003	0.104 ± .003	0.119 ± .003	N/A	N/A	N/A	N/A
14	19 X 27	3831	3.06 (77.72)	0.066 (1.68)	0.100 ± .003	0.119 ± .003	0.131 ± .003	0.164 ± .003	N/A	N/A	N/A
12	37 X 28	5874	2.02 (51.31)	0.085 (2.16)	0.118 ± .003	0.138 ± .003	0.150 ± .003	0.183 ± .003	N/A	N/A	N/A
10	37 X 26	9354	1.26 (32.00)	0.107 (2.72)	0.143 ± .005	0.161 ± .005	0.175 ± .005	0.205 ± .005	0.235 ± .005	N/A	N/A
8	133 X 29	16983	0.701 (17.81)	0.161 (4.09)	0.198 ± .006	0.219 ± .006	0.230 ± .006	0.260 ± .006	0.290 ± .006	N/A	N/A
6	133 X 27	26818	0.418 (10.62)	0.209 (5.31)	N/A	0.268 ± .006	0.282 ± .006	0.311 ± .006	0.341 ± .006	N/A	N/A
4	133 X 25	42615	0.264 (6.71)	0.261 (6.63)	N/A	0.320 ± .006	0.333 ± .006	0.363 ± .006	0.393 ± .006	0.455 ± .006	0.519 ± .006
2	665 X 30	66500	0.170 (4.32)	0.333 (8.46)	N/A	0.394 ± .007	0.407 ± .007	0.435 ± .007	0.466 ± .007	0.528 ± .007	0.592 ± .007
1	817 X 30	81700	0.149 (3.78)	0.370 (9.40)	N/A	0.434 ± .007	0.457 ± .007	0.477 ± .007	0.507 ± .007	0.565 ± .007	0.632 ± .007
0	1045 X 30	104500	0.116 (2.95)	0.413 (10.49)	N/A	0.482 ± .007	0.493 ± .007	0.522 ± .007	0.552 ± .007	0.617 ± .007	0.678 ± .007
00	1330 X 30	133000	0.091 (2.31)	0.467 (11.86)	N/A	N/A	0.543 ± .008	0.573 ± .008	0.603 ± .008	0.665 ± .008	0.729 ± .008
000	1665 X 30	166500	0.071 (1.80)	0.520 (13.21)	N/A	N/A	N/A	0.638 ± .008	0.668 ± .008	0.730 ± .008	0.794 ± .008
0000	2109 X 30	210900	0.056 (1.42)	0.585 (14.86)	N/A	N/A	N/A	N/A	0.733 ± .008	0.795 ± .008	0.859 ± .008

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TurboFlex® M Copper Core, Lightweight Duralectric™ L Insulation, 2000 VAC • 967-022

TURBOFLEX M CORE CABLE CONSTRUCTION





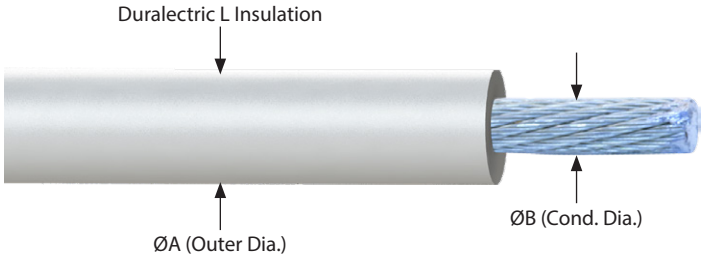
TurboFlex M with M22759 copper-core wound cable construction

DURALECTRIC LIGHT PERFORMANCE SUMMARY

- Service temperature range: -65°C to +200°C
- Fire-resistant and Low Smoke-Zero Halogen (LSZH)
- Excellent abrasion resistance
- 30% lighter than Duralectric D
- 50% lighter than Teflon®

HOW TO ORDER				
Sample Part Number	**967-022**	**-NCC**	**-8**	**-0**
Basic Part Number	High-Voltage TurboFlex M Hookup Wire with Duralectric Light Insulation			
Conductor Material	**NCC** = Nickel Coated Annealed Copper (-60° to 200°C) **SCC** = Silver Coated Annealed Copper (-60° to 200°C) **TCC** = Tin Coated Annealed Copper (-60° to 150°C)			
Conductor Size	**-10, -8, -4, -2, -0**			
Insulation Color	See Insulation Color table			

TURBOFLEX WIRE SIZE, DIMENSIONS, DC RESISTANCE AND AMPACITY RATINGS



NCC Conductor						
Wire Size AWG	No. Strands X AWG	Circular Mils Nominal	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A ±.025	Ø B Nominal	Weight (Lbs per 1000 ft)
10	37 X 26	9354	1.24 (31.50)	TBD	0.107 (2.72)	TBD
8	133 X 29	16983	0.694 (17.63)	0.251 (6.38)	0.161 (4.09)	70.4
4	133 X 25	42615	0.275 (6.99)	0.354 (8.99)	0.261 (6.63)	162.5
2	665 X 30	66500	0.177 (4.50)	0.427 (10.85)	0.333 (8.46)	258.5
0	1045 X 30	104500	0.113 (2.87)	0.513 (13.03)	0.413 (10.49)	392.1

SCC Conductor						
Wire Size AWG	No. Strands X AWG	Circular Mils Nominal	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A ±.025	Ø B Nominal	Weight (Lbs per 1000 ft)
10	37 X 26	9354	1.19 (30.23)	TBD	.108 (2.74)	TBD
8	133 X 29	16983	0.658 (16.71)	0.251 (6.38)	0.161 (4.09)	70.4
TCC Conductor						
Wire Size AWG	No. Strands X AWG	Circular Mils Nominal	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A ±.025	Ø B Nominal	Weight (Lbs per 1000 ft)
10	37 X 26	9354	1.26 (32.00)	TBD	0.107 (2.72)	TBD
8	133 X 29	16983	.701 (17.81)	0.251 (6.38)	0.161 (4.09)	70.4

TABLE II: DURALECTRIC L INSULATION COLOR	
Weatherproof, halogen free, flame resistant	
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Kelly Green
6	Blue
7	Violet
8	Gray
9	White
Consult factory for other specific colors	

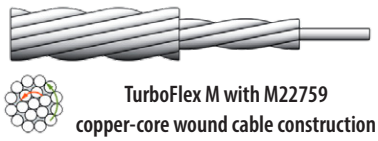
NOTES

1. Bend radius is 3X the outer diameter
2. Cable will be marked with "GLENAIR TURBOFLEX", wire gauge, part number, CAGE 06324.
3. Insulation thickness tolerance is ±10%

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Series 973 PowerPlay™ • Dimensions in Inches (millimeters) are subject to change without notice.

TurboFlex® M Copper Core, Lightweight Duralectric™ L Insulation / Jacket, Metallic Braided Shield, 2000 VAC • 967-024

TURBOFLEX M CORE CABLE CONSTRUCTION



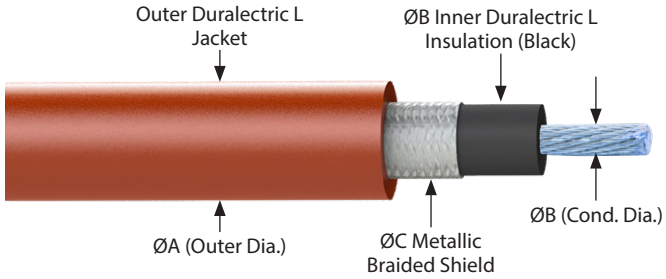
TurboFlex M with M22759 copper-core wound cable construction

DURALECTRIC LIGHT PERFORMANCE SUMMARY

- Service temperature range: -65°C to +200°C
- Fire-resistant and Low Smoke-Zero Halogen (LSZH)
- Excellent abrasion resistance
- 30% lighter than Duralectric D
- 50% lighter than Teflon®
- Braided shield plating to match selected conductor plating. 90% optical coverage.

HOW TO ORDER				
Sample Part Number	**967-024**	**-NCC**	**-8**	**-0**
Basic Part Number	High-Voltage TurboFlex M Shielded Hookup Wire with Duralectric Light Insulation			
Conductor Material	**NCC** = Nickel Coated Annealed Copper (-60° to 200°C) **SCC** = Silver Coated Annealed Copper (-60° to 200°C) **TCC** = Tin Coated Annealed Copper (-60° to 150°C)			
Conductor Size	**-10, -8, -4, -2, -0**			
Duralectric Jacket Color Option	See Table II			

TURBOFLEX WIRE SIZE, DIMENSIONS, DC RESISTANCE AND AMPACITY RATINGS



NCC Conductor

Wire Size AWG	No. Strands X AWG	Circular Mils Nominal	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A Nominal	Ø B Nominal	Ø C Nominal	Ø D Nominal	Weight (Lbs per 1000 ft)
10	37 X 26	9354	1.24 (31.50)	0.107 (2.72)	TBD	TBD	TBD	TBD
8	133 X 29	16983	0.694 (17.63)	0.161 (4.09)	0.251 (6.38)	0.273 (6.93)	0.333 (8.46)	121.8
4	133 X 25	42615	0.275 (6.99)	0.261 (6.63)	0.354 (8.99)	0.376 (9.55)	0.436 (11.07)	224.7
2	665 X 30	66500	0.177 (4.50)	0.333 (8.46)	0.427 (10.85)	0.449 (11.40)	0.509 (12.93)	328.1
0	1045 X 30	104500	0.113 (2.87)	0.413 (10.49)	0.513 (13.03)	0.535 (13.59)	0.595 (15.11)	478.6

SCC Conductor

Wire Size AWG	No. Strands X AWG	Circular Mils Nominal	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A Nominal	Ø B Nominal	Ø C Nominal	Ø D Nominal	Weight (Lbs per 1000 ft)
10	37 X 26	9354	1.19 (30.23)	0.108 (2.74)	TBD	TBD	TBD	TBD
8	133 X 29	16983	.658 (16.71)	0.161 (4.09)	0.251 (6.38)	0.273 (6.93)	0.333 (8.46)	121.8

TCC Conductor

Wire Size AWG	No. Strands X AWG	Circular Mils Nominal	DC Resistance @ 20°C (Ohms/1000 ft.)	Ø A Nominal	Ø B Nominal	Ø C Nominal	Ø D Nominal	Weight (Lbs per 1000 ft)
10	37 X 26	9354	1.26 (32.00)	0.108 (2.74)	TBD	TBD	TBD	TBD
8	133 X 29	16983	.701 (17.81)	0.161 (4.09)	0.251 (6.38)	0.273 (6.93)	0.333 (8.46)	121.8

TABLE II: DURALECTRIC LIGHT JACKET COLOR	
Weatherproof, halogen free, flame resistant	
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Kelly Green
6	Blue
7	Violet
8	Gray
9	White
Consult factory for other specific colors	

NOTES

1. Bend radius is 4X the outer diameter
2. Cable will be marked with "GLENAIR TURBOFLEX", wire gauge, part number, CAGE 06324.
3. Insulation thickness tolerance is ±10%

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TurboFlex® R Copper Core, Duralectric™ D Insulation, 2000 VAC
961-106-2000 Imperial

GENERAL-DUTY • COPPER CORE

TURBOFLEX FEATURES

- Ultra-flexible rope lay power cable construction
- Wire gauges and insulation optimized for PowerPlay™ connectors
- Equipped with ruggedized Duralectric insulation

DURALECTRIC D PERFORMANCE SUMMARY

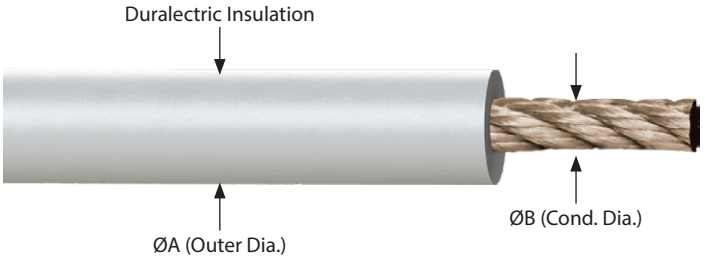
- Service temperature range: -65°C to +200°C
- Fire-resistant and Low Smoke-Zero Halogen (LSZH)
- Resistant to common aerospace, military and industrial fluids
- UV resistant

HOW TO ORDER

Sample Part Number	961	-106	-2000	-00	-N	-0

Basic No.	**TurboFlex** single-wall hookup wire
Insulation Material	**-106** = Duralectric
Voltage Rating	**-2000** = 2000 VAC
Wire Size Code (See Table I)	**-8**, **-4**, **-2**, **-0**, **-00**, **-0000**
Conductor Material	**-N** = Nickel/Copper (-60° – 200°C) **-S** = Silver/Copper (-60° – 200°C) **-T** = Tin/Copper (-60° – 150°C)
Insulation Color	See Insulation Color table

TURBOFLEX WIRE SIZE, DIMENSIONS, DC RESISTANCE AND AMPACITY RATINGS



Wire Size Code	AWG	Strand / Count / AWG	Cir Mil (nom)	Weight lbs/1000 ft. (nom.)	Ø A ±.025	Ø B Ref.	DC Resistance @ 20°C (Ohms / 1000 ft.)		
							Nickel Copper	Silver Copper	Tin Copper
8	8	7 X 95/36	16625	74.91	.270 (6.86)	.159 (4.04)	.7188	.6755	.7252
4	4	7 X 7 X 34/36	41650	171.48	.384 (9.75)	.271 (6.88)	.2979	.2800	.3006
2	2	7 X 7 X 54/36	66150	259.67	.456 (11.58)	.342 (8.69)	.1876	.1763	.1893
0	1/0	7 X 7 X 86/36	105350	399.00	.548 (13.92)	.431 (10.95)	.1178	.1107	.1188
00	2/0	7 X 7 X 108/36	132300	493.47	.601 (15.27)	.483 (12.27)	.0938	.0882	.0946
0000	4/0	19 X 7 X 64/36	212800	779.79	.734 (18.64)	.613 (15.57)	.0588	.0553	.0594

TABLE II: DURALECTRIC D INSULATION COLOR

Weatherproof, halogen free, flame resistant	
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Kelly Green
6	Blue
7	Violet
8	Gray
9	White
Consult factory for other specific colors	

NOTES

1. Bend radius is 3X the outer diameter
2. Cable will be marked with "GLENAIR TURBOFLEX", wire gauge, part number, CAGE 06324.
3. Insulation thickness tolerance is ±10%

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Dimensions in Inches (millimeters) are subject to change without notice.

TurboFlex® R Copper Core, Duralectric™ D Insulation and Jacket, 2000 VAC • 961-107-2000 Imperial

TURBOFLEX FEATURES

- Ultra-flexible rope lay power cable construction
- Wire gauges and insulation optimized for PowerPlay™ connectors
- Equipped with ruggedized Duralectric insulation

DURALECTRIC D PERFORMANCE SUMMARY

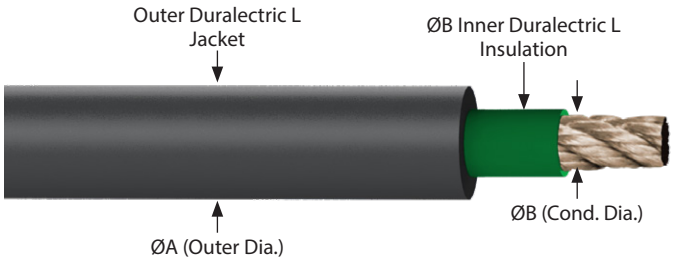
- Service temperature range: -65°C to +200°C
- Fire-resistant and Low Smoke-Zero Halogen (LSZH)
- Resistant to common aerospace, military and industrial fluids
- UV resistant

HOW TO ORDER

Sample Part Number	961	-107	-2000	-00	-N	-0

Basic No.	**TurboFlex** dual-wall interconnect cable
Insulation / Jacket Material	**-107** = Duralectric insulation, Duralectric outer jacket
Voltage Rating	**-2000** = 2000 VAC
Wire Size Code (See Table I)	**-8**, **-4**, **-2**, **-0**, **-00**, **-0000**
Conductor Material	**-N** = Nickel/Copper (-60° – 200°C) **-S** = Silver/Copper (-60° – 200°C) **-T** = Tin/Copper (-60° – 150°C)
Outer Jacket Color	See Insulation Color table. Insulation shall be Green for all outer jacket colors except Green. For Green outer jacket, insulation shall be White.

TURBOFLEX WIRE SIZE, DIMENSIONS, DC RESISTANCE AND AMPACITY RATINGS



Wire Size Code	AWG	Strand / Count / AWG	Cir Mil (nom)	Weight lbs/1000 ft. (nom.)	Ø A ±.025	Ø B Ref.	DC Resistance @ 20°C (Ohms / 1000 ft.)		
							Nickel Copper	Silver Copper	Tin Copper
8	8	7 X 95/36	16625	80.38	.290 (7.34)	.159 (4.04)	.7188	.6755	.7252
4	4	7 X 7 X 34/36	41650	179.77	.406 (10.31)	.271 (6.88)	.2979	.2800	.3006
2	2	7 X 7 X 54/36	66150	269.46	.478 (12.14)	.342 (8.69)	.1876	.1763	.1893
0	1/0	7 X 7 X 86/36	105350	411.81	.572 (14.53)	.431 (10.95)	.1178	.1107	.1188
00	2/0	7 X 7 X 108/36	132300	507.50	.625 (15.88)	.483 (12.27)	.0938	.0882	.0946
0000	4/0	19 X 7 X 64/36	212800	796.86	.758 (19.25)	.613 (15.57)	.0588	.0553	.0594

JACKET/INSULATION COLOR

Code	Jacket Color	Insulation Color
0	Black	Green
1	Brown	Green
2	Red	Green
3	Orange	Green
4	Yellow	Green
5	Green	White
6	Blue	Green
7	Violet	Green
8	Gray	Green
9	White	Green

NOTES

1. Bend radius is 3X the outer diameter
2. Cable will be marked with "GLENAIR TURBOFLEX", wire gauge, part number, CAGE 06324.
3. Insulation thickness tolerance is ±10%

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Dimensions in Inches (millimeters) are subject to change without notice.

TurboFlex® R Copper Core, Duralectric™ L Insulation, 2000 VAC
961-108-2000 Imperial

TURBOFLEX FEATURES

- Ultra-flexible rope lay power cable construction
- Wire gauges and insulation optimized for PowerPlay™ connectors
- Equipped with ruggedized Duralectric L (Light) insulation

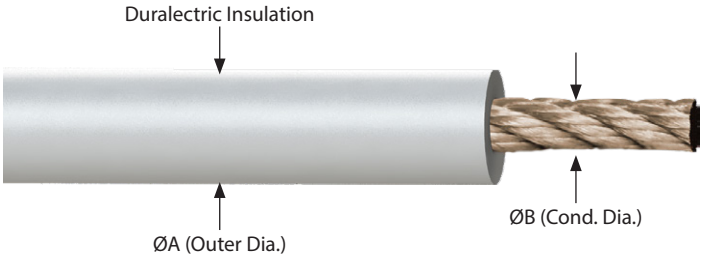
DURALECTRIC LIGHT PERFORMANCE SUMMARY

- Service temperature range: -65°C to +200°C
- Fire-resistant and Low Smoke-Zero Halogen (LSZH)
- Excellent abrasion resistance
- 30% lighter than Duralectric D
- 50% lighter than Teflon®

HOW TO ORDER

Sample Part Number	961	-108	-2000	-00	-N	-0
Basic No.	**TurboFlex** single-wall hookup wire					
Insulation Material	**-108** = Duralectric Light					
Voltage Rating	**-2000** = 2000 VAC					
Wire Size Code (See Table I)	**-8, -4, -2, -0, -00, -0000**					
Conductor Material	**-N** = Nickel/Copper (-60° – 200°C) **-S** = Silver/Copper (-60° – 200°C) **-T** = Tin/Copper (-60° – 150°C)					
Insulation Color	See Insulation Color table					

TURBOFLEX WIRE SIZE, DIMENSIONS, DC RESISTANCE AND AMPACITY RATINGS



Wire Size Code	AWG	Strand / Count / AWG	Cir Mil (nom)	Weight lbs/1000 ft. (nom.)	Ø A ±.025	Ø B Ref.	DC Resistance @ 20°C (Ohms / 1000 ft.)		
							Nickel Copper	Silver Copper	Tin Copper
8	8	7 X 95/36	16625	64.51	.250 (6.35)	.159 (4.04)	.7188	.6755	.7252
4	4	7 X 7 X 34/36	41650	155.50	.364 (9.25)	.271 (6.88)	.2979	.2800	.3006
2	2	7 X 7 X 54/36	66150	240.20	.436 (11.07)	.342 (8.69)	.1876	.1763	.1893
0	1/0	7 X 7 X 86/36	105350	374.81	.528 (13.41)	.431 (10.95)	.1178	.1107	.1188
00	2/0	7 X 7 X 108/36	132300	466.58	.581 (14.76)	.483 (12.27)	.0938	.0882	.0946
0000	4/0	19 X 7 X 64/36	212800	745.91	.714 (18.14)	.613 (15.57)	.0588	.0553	.0594

TABLE II: DURALECTRIC D INSULATION COLOR

Weatherproof, halogen free, flame resistant	
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Kelly Green
6	Blue
7	Violet
8	Gray
9	White
Consult factory for other specific colors	

NOTES

1. Bend radius is 3X the outer diameter
2. Cable will be marked with "GLENAIR TURBOFLEX", wire gauge, part number, CAGE 06324.
3. Insulation thickness tolerance is ±10%

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Dimensions in Inches (millimeters) are subject to change without notice.

SERIES 850
HIGH-POWER
CROWN RING
CONTACTS

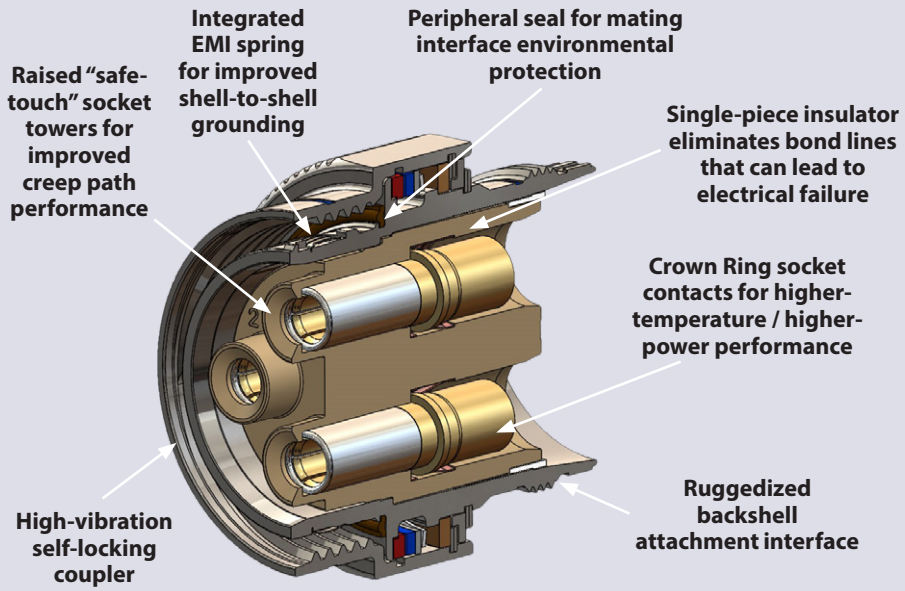
Glenair Signature Crown Ring Contact Series

For reduced contact resistance, superior conductivity, and higher temperature-tolerance than conventional AS39029 contacts and specialized high-power contacts from other manufacturers

CROWN RING CONTACTS: THE HEART OF THE POWERPLAY CONNECTOR ARCHITECTURE

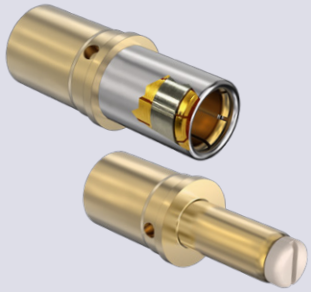
PowerPlay connectors are engineered with a special single-piece dielectric insulator equipped with safe-touch socket towers housing Glenair high-power Crown Ring contacts. Innovative socket contact design incorporates a high-tension stainless steel ring compressing socket tines firmly against the pin contact preventing material relaxation under high-heat / high-power conditions.

CROWN RING CONTACT / RAISED TOWER INSULATOR ARCHITECTURE



PLUG CUTAWAY VIEW

GLENAIR SIGNATURE CROWN RING CONTACTS



- Crown Ring compresses socket split tines for higher normal force
- Precision-machined high conductivity copper alloy lowers contact-to-contact resistance up to 60% compared to AS39029 contacts
- Raised tower architecture and safe-touch pin ensures operator safety

GLENAIR SIGNATURE CROWN RING CONTACTS MATERIALS AND PERFORMANCE



Crown Ring contact connector packaging

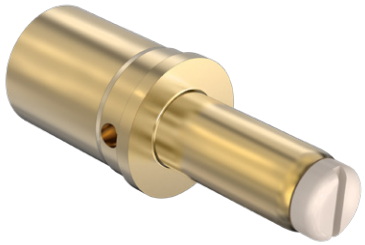
A range of contact gauge sizes and insert arrangements are supplied for each of the four PowerPlay connector designs. Broadest range of sizes available in SuperNine MIL-DTL-38999 Series I and III.

- Maximum operating temperature 260°C
- Superior conductivity performance compared to beryllium copper contacts, across full temperature range
- Up to 60% lower contact resistance than AS39029 contacts (normalized, less wire)
- Contact bodies made from high conductivity copper alloy (approximately 95% IACS)
- Pin contact equipped with thermoplastic safe-touch tip
- Stainless steel Crown Ring
  - Provides socket forces without stress relaxation at High-Temperatures
  - Moves socket spring function from socket body to ring, allowing use of high-conductivity copper
- Gold over nickel plating
  - Thicker plating than industry standards for reduced contact fretting and higher temperature endurance
  - Gold over nickel is "gold standard" for high-reliability aerospace contacts
- Crimp versions use standard industry tooling, including crimp die/locator and insertion/extraction tools (2AWG Crown Ring contacts require custom tooling)

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850-325 Crown Ring Pin Contacts for Micro-Crimp PowerPlay and SuperNine I and III PowerPlay

CONTACTS



Contacts are for use in Series 971 Micro-Crimp PowerPlay and 973 SuperNine PowerPlay connectors.

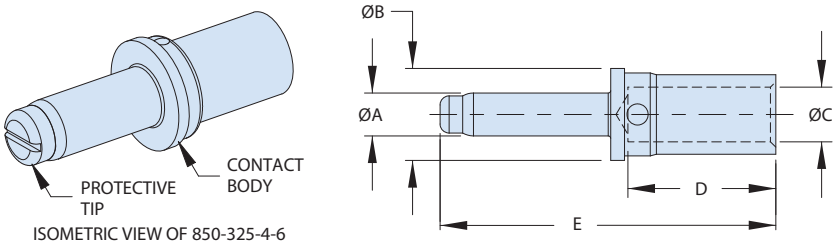
MATERIAL/FINISH

- Contact body: high conductivity copper, IACS approx. 95% plating in accordance with AS39029, gold over nickel
- Protective tip: high performance thermoplastic (no finish)

NOTES

- Contacts meet all applicable requirements of SAE AS39029 except higher performance and finger protection, as noted herein.
- Temperature rating: 260°C (446°F)
- Contact resistance: 40% of typical AS39029 contacts, when mated to Glenair socket contacts 850-326 (see Mating Socket Table)
- Crimp and extraction tools: see Glenair drawing 979-013
- Contacts are for use in Glenair Series 971 Micro-Crimp PowerPlay and 973 SuperNine PowerPlay connectors, or equivalent Glenair power connectors.
- Contacts are fingerproof to IEC 60529 level IP2X (rated voltages not exceeding 1,000VAC or 1500VDC) when used in Glenair series 971-010/011 and 973-001/002 connectors.

CONTACT DIMENSIONS



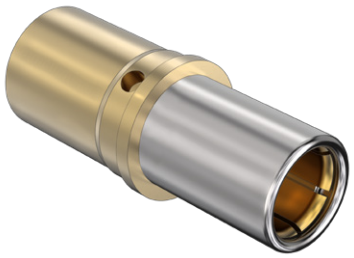
Contact P/N	Contact Size	Wire/Crimp Size	ØA	ØB	ØC Min	D Min	E
850-325-8-10	8AWG	10AWG	(.142)	(.30)	0.134 (3.40)	.485 (12.32)	(1.11)
850-325-8-8	8AWG	8AWG			0.178 (4.52)		
850-325-4-4	4AWG	4AWG	(.225)	(.42)	0.278 (7.06)		
850-325-4-6	4AWG	6AWG			0.231 (5.87)		
850-325-2-2	2AWG	2AWG	(.283)	(.50)	0.356 (9.04)	.535 (13.59)	(1.40)
850-325-0-0	1/0AWG	1/0AWG	(.357)	(.61)	0.450 (11.43)	.565 (14.35)	(1.44)

(8AWG Contact Shown Above)

MATING SOCKET	
Contact P/N (Pin)	Mating Socket P/N
850-325-8-10	850-326-8-10
850-325-8-8	850-326-8-8
850-325-4-4	850-326-4-4
850-325-4-6	850-326-4-6
850-325-2-2	850-326-2-2
850-325-0-0	850-326-0-0

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Series 973 PowerPlay™ • Dimensions in Inches (millimeters) are subject to change without notice.

850-326 Crown Ring Socket Contacts for Micro-Crimp PowerPlay and SuperNine I and III PowerPlay



Contacts are for use in Series 971 Micro-Crimp PowerPlay and 973 SuperNine PowerPlay connectors.

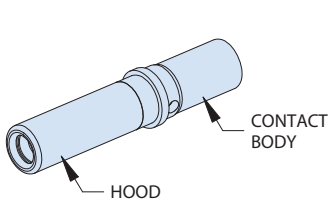
MATERIAL/FINISH

- Socket body: high conductivity copper, IACS approx. 95% plating in accordance with AS39029, gold over nickel
- Internal spring member and hood: stainless steel, passivated

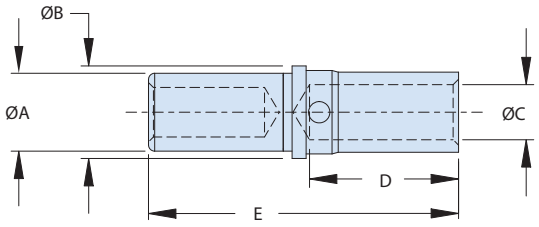
NOTES

- Contacts meet all applicable requirements of SAE AS39029 except higher performance and finger protection, as noted herein.
- Temperature rating: 260°C (446°F)
- Contact resistance: 40% of typical AS39029 contacts, when mated to Glenair socket contacts 850-325 (see Mating Pin Table)
- Crimp and extraction tools: see Glenair drawing 979-013
- Contacts are for use in glenair Series 971 PowerPlay and 973 PowerPlay connectors, or equivalent Glenair power connectors.
- Internal spring member provides contact spring forces and is resistant to stress relaxation at temperatures beyond 230°C.

CONTACT DIMENSIONS



ISOMETRIC VIEW OF 850-326-8-8
SOCKET SHOWN FOR REFERENCE ONLY



Contact P/N	Contact Size	Wire/Crimp Size	ØA	ØB	ØC Min	D Min	E
850-326-8-10	8AWG	10AWG	(.250)	(.30)	0.134 (3.40)	.485 (12.32)	(1.02)
850-326-8-8	8AWG	8AWG			0.178 (4.52)		
850-326-4-4	4AWG	4AWG	(.375)	(.42)	0.278 (7.06)		
850-326-4-6	4AWG	6AWG			0.231 (5.87)		
850-326-2-2	2AWG	2AWG	(.420)	(.50)	0.356 (9.04)	.535 (13.59)	(1.28)
850-326-0-0	1/0AWG	1/0AWG	(.515)	(.61)	0.450 (11.43)	.565 (14.35)	(1.32)

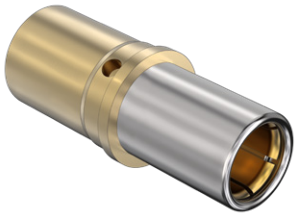
(8AWG Contact Shown Above)

MATING PIN

Contact P/N (Pin)	Mating Socket P/N
850-326-8-10	850-325-8-10
850-326-8-8	850-325-8-8
850-326-4-4	850-325-4-4
850-326-4-6	850-325-4-6
850-326-2-2	850-325-2-2
850-326-0-0	850-325-0-0

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850-305 Crown Ring Socket Contacts for Series 806 PowerPlay



Contacts are for use in Series 806 PowerPlay connectors accepting socket contacts.

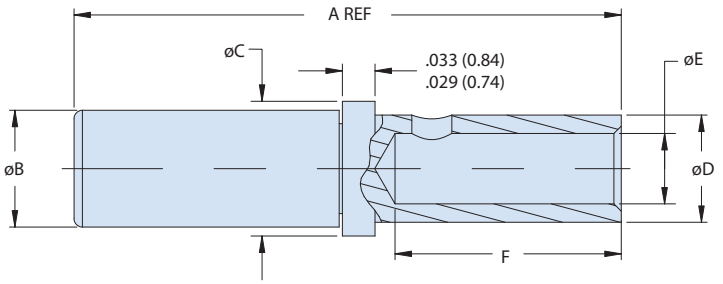
MATERIAL/FINISH

- Body: High conductivity copper alloy (approx 93% IACS) per ASTM B301 / gold plate per ASTM B488 over nickel per SAXE-AMS-QQ-N-290
- Crown ring: 17-4PH CRES per AMS 5528 / passivated
- Hood: 305 CRES per SAE-AMS-QQ-S-763 / passivated

NOTES

- Crimp toola:
  - Crimper: M22520/1-01
  - Locator: M22520/1-04
  - Insertion/Extraction:
    #16 - M81969/14-03
    #12 - M81969/14/04
- Performance data
  - Operating temperature: -65°C to 260°C
- Contacts to be bagged and identified with Glenair part number and date code.

CONTACT DIMENSIONS



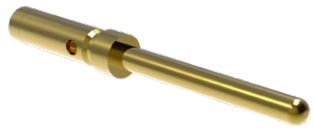
Part Number	Size	A (Ref)	B Max	C	D	E	F Min
850-305-16	#16	0.518 (13.16)	0.113 (2.87)	0.130 (3.30) 0.127 (3.23)	0.103 (2.62) 0.101 (2.57)	0.068 (1.73) 0.066 (1.68)	0.209 (5.31)
850-305-12	#12	0.518 (13.16)	0.161 (4.09)	0.182 (4.62) 0.179 (4.55)	0.151 (3.84) 0.148 (3.76)	0.102 (2.59) 0.098 (2.49)	0.209 (5.31)

TOOL DATA

Contact Size	Wire Size	Crimp Tool		Locator		Insertion/Extraction	
		Military P/N	Glenair	Military P/N	Glenair	Military P/N	Glenair
#16	16-20 AWG	M22520/1-01	809-136	M22520/1-04	809-137	M81969/14-03	809-131
#12	12-14 AWG	M22520/1-01	809-136	M22520/1-04	809-137	M81969/14-04	809-132

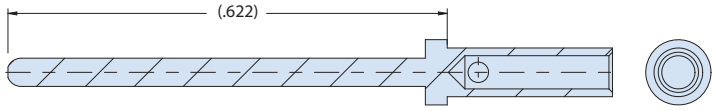
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850-202-20 standard • 850-346-20 extended-length #20 Pin Contacts for Micro-Crimp PowerPlay and SuperNine I and III PowerPlay



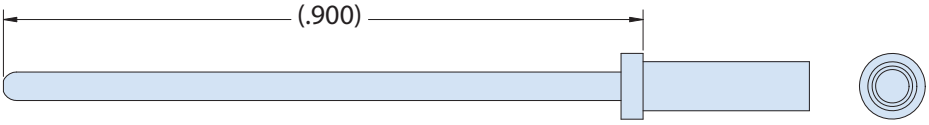
Contacts are for use in Series 971 Micro-Crimp PowerPlay and 973 SuperNine PowerPlay connectors.

850-202-20 SIZE #20 STANDARD-LENGTH PIN CONTACT



SECTION A-A

850-346-20 SIZE #20 EXTENDED-LENGTH PIN CONTACT
FOR INTERLOCK FIRST-MATE / LAST-BREAK APPLICATIONS



MATERIALS/FINISHES:

- Brass alloy/gold over nickel.

NOTES

- Contacts are for use in Glenair PowerPlay series.
- Dimensions are per AS39029 except as noted.
- Crimp tools:
  - Crimper: M22520/1-01
  - Locator: M22520/1-04

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850-347-20 AS39029/56 Type Crimp Socket Contact for Micro-Crimp PowerPlay and SuperNine I and III PowerPlay



MATERIAL/FINISH

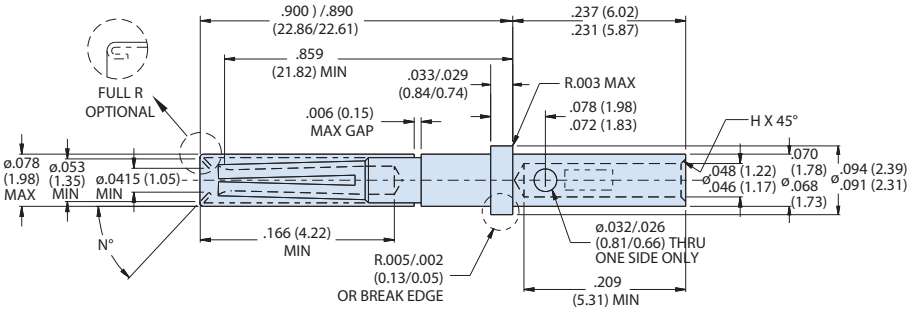
- Contact body: copper alloy / gold plated over nickel (selective plating acceptable).
- Hood: 305 CRES, passivated.

NOTES

- Socket contacts shall meet or exceed the applicable dimensional, electrical and mechanical requirements specified in SAE-AS39029 & AS39029/56 before and after 500 durability cycles.
- Crimp tooling shall be per AS39029/56.

850-347-20 AS39029/56 TYPE CRIMP SOCKET CONTACT

850-202-20 SIZE #20 STANDARD-LENGTH PIN CONTACT



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850-356 Size #16 and Size #12 Pin Contacts for Series 806 Mil-PowerPlay connectors



Contacts are for use in Series 806 PowerPlay connectors accepting pin contacts.

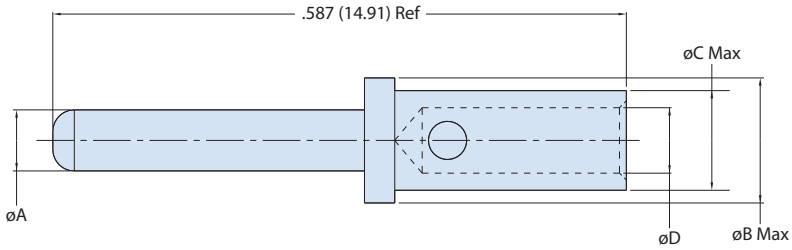
MATERIAL/FINISH

- Material: Copper alloy
- Finish: 50 microinches min. gold plating per ASTM B 488 over nickel underplate. Crimp area may have less plating.

NOTES

- Intended use: These contacts are intended for use in all Glenair special power type Series 806 connector assemblies accepting pin contacts.
- Crimp tools:
  - Crimper: M22520/1-01
  - Locator: M22520/1-04
  - Insertion/Extraction:
    #16 - M81969/14-03
    #12 - M81969/14/04
- Operating temperature: -65°C to +200°C
- Meets performance requirements of SAE AS39029/58
- Contacts packaged in bulk in a common container.

CONTACT DIMENSIONS



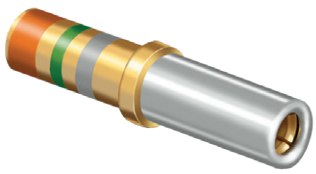
Contact P/N	Contact Size	ØA	ØB Max	ØC Max	ØD	Current Rating
850-356-16	#16	.0635 (1.61) .0616 (1.56)	.130 (3.30)	.103 (2.62)	.068 (1.73) .066 (1.68)	13 A
850-356-12	#12	.095 (2.41) .093 (2.36)	.182 (4.62)	.151 (3.84)	.102 (2.59) .098 (2.49)	23 A

PERFORMANCE DATA

Contact Size	Wire Size	Crimp Tensile Strength (with Silver/Tin Plated Wire) (Ref AS39029 Table X)		Contact Resistance (Silver Plated Wire) (29°C, Ref AS39029 Table V)	
		Axial Load (lbs)			
		Initial Condition	Thermal Condition	Test Current Amperes	Max mV Drop
#16	20	20	14	7.5	55
	16	50	45	13	49
#12	14	70	61	17	40
	12	110	93	23	42

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809-111 Size #16 Socket Contacts for Series 806 PowerPlay connectors



Contacts are for use in Series 806 PowerPlay connectors accepting socket contacts.

Standard size #16 contacts accept #16 to #20 AWG wire. At rated test current of 13 amps, the maximum voltage drop is 49 millivolts. Contacts are gold-plated copper alloy. Socket contacts feature stainless steel hoods to protect against probe damage. Approved to SAE-AMS-39029. Contacts are bulk packaged. Terminate with M22520/1-01 crimper and M22520/1-04 positioner.

SPECIFICATIONS

- Operating temperature: -65°C to +200°C
- Current rating: 13 A
- VAC: 2300
- Crimp Tensile Strength: silver tin-plated wire, (AS39029 Table X)

Wire Size	Axial Load lbs.	
	Init. Cond.	Therm. Cond.
16	50	45
20	20	14

- Contact Resistance: silver-plated wire, 25°C ±3, (AS39029 Table V)

Wire Size	Test Current Amperes	Max. mV Drop
16	13	49
20	7.5	55

- Meets performance requirements of SAE AS39029/58 and /57

CONSTRUCTION

- Copper alloy, 50 microinches gold over nickel plating
- Socket Hood: stainless steel, passivated

TERMINATION TOOLS

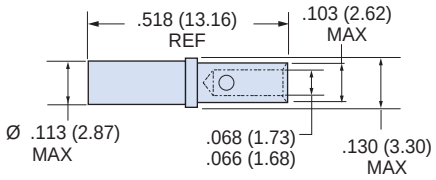
- Hand Crimp Tool: 809-136 (M22520/1-01)
- Pin/Skt Positioner: 809-137 (M22520/1-04)

INSERTION/ EXTRACTION TOOL

- Tool: 809-131 (M81969/14-03)

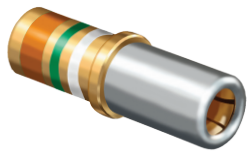
SIZE 16 HD POWER CONTACTS						
Contact Type	Wire Size	Part Number	Military Part Number	Color Band		
				1st	2nd	3rd
Socket	#16 – #20	809-111	AS39029/57-358	Orange	Green	Gray

SOCKET CONTACT 809-111



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809-113 Size #12 Socket Contacts for Series 806 PowerPlay connectors



Contacts are for use in Series 806 PowerPlay connectors accepting socket contacts.

Standard size #12 contacts accept #12 to #14 AWG wire. At rated test current of 23 amps, the maximum voltage drop is 63 millivolts. Contacts are gold-plated copper alloy. Socket contacts feature stainless steel hoods to protect against probe damage. Approved to SAE AS39029. Contacts are bulk packaged. Terminate with M22520/1-01 crimper and M22520/1-04 positioner.

SPECIFICATIONS

- Operating temperature: -65°C to +200°C
- Current rating: 23 A
- Crimp Tensile Strength: silver tin-plated copper wire, (AS39029 Table X):

Wire Size	Axial Load lbs.	
	Init. Values	Therm. Values
16	50	45
20	20	14

- Contact Resistance: silver-plated wire, 25° ±3°, C (AS39029 Table V)

Wire Size	Test Current Amperes	Max. mV Drop
12	23	42
14	17	40

- Meets performance requirements of SAE AS39029/58 and /57

CONSTRUCTION

- Copper alloy, 50 microinches gold over nickel plating
- Socket Hood: stainless steel, passivated

TERMINATION TOOLS

- Crimp Tool: 809-136 (M22520/1-01)
- Positioner: 809-137 (M22520/1-04)

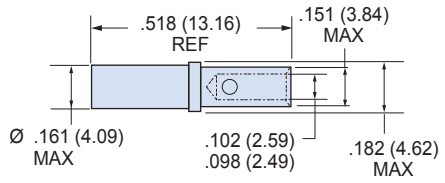
INSERTION/ EXTRACTION TOOL

- Pin and Socket Tool: 809-132(M81969/14-04)

SIZE 12 CONTACTS

Contact Type	Wire Size	Part Number	Military Part Number	Color Band		
				1st	2nd	3rd
Socket	#12 – #14	809-113	AS39029/57-359	Orange	Green	White

SOCKET CONTACT 809-113



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Updated 04.07.25

850-159 • 850-158 Size #8 Pin and Socket Contacts for Series 806 PowerPlay connectors

CONTACTS



Contacts are for use in Series 806 PowerPlay connectors accepting pin and socket contacts.

Military grade. Gold plating. Size #8 contacts accept #8 AWG wire. Compatible with Series 806 connectors with size 8 contact cavities. Crimp termination. Bulk packaged.

SPECIFICATIONS

- Operating temperature: -65°C to +200°C
- Current rating 46 A
- DWV:
  - Accommodates size #8 AWG wire
  - Meets performance requirements of SAE AS39029/45

CONSTRUCTION

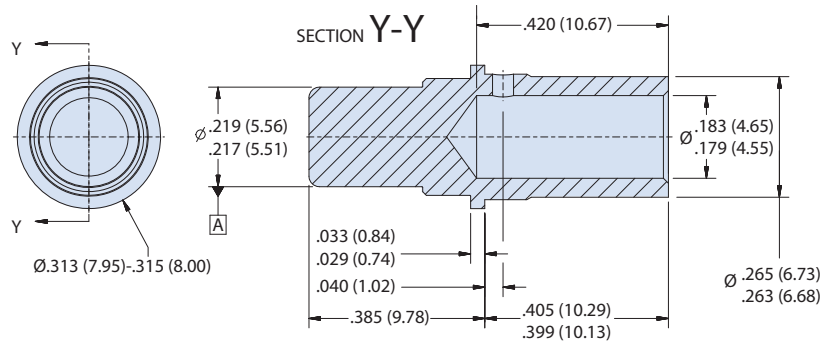
- Copper alloy, 50 microinches gold over nickel plating

TERMINATION TOOLS

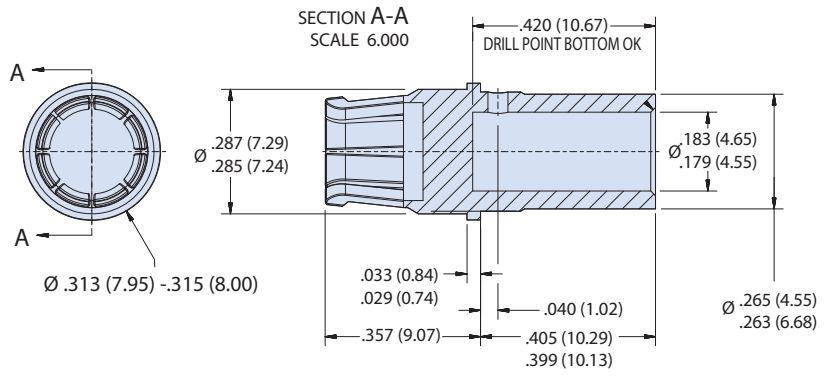
- Crimp Tool: 859-025 (M22520/23-01)
- Die Assembly: 8569-026 (M22520/23-02)
- Locator: 859-046.
- Spring loaded locator recommended: 859-164

#8 POWER CONTACTS						
Contact Type	Wire Size AWG	Grommet Follower	Part Number	Crimp Tool	Die Assembly	Locator
Pin	#8	no	850-159	859-025 (M22520/23-01)	859-026 (M22520/23-02)	859-046 or 859-164 (recommended)
Pin	#8	yes	850-159F			
Socket	#8	no	850-158	859-025 (M22520/23-01)	809-026 (M22520/23-02)	
Socket	#8	yes	850-158F			

PIN CONTACT 850-159

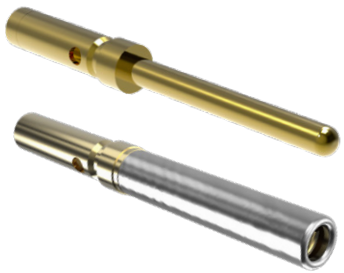


SOCKET CONTACT 850-158



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850-094 • 850-095 Size #22HD Pin and Socket Contacts for Series 806 PowerPlay connectors



Contacts are for use in Series 806 PowerPlay connectors accepting pin and socket contacts.

Military grade. Heavy gold plating. High-density size #22HD contacts accept #22 to #30 AWG wire. Compatible with Series 806 connectors with size 22HD contact cavities. Crimp termination. Contacts are bulk packaged.

SPECIFICATIONS

- Operating temperature: -65°C to +200°C
- Current rating 5 A
- Crimp Tensile Strength:

Wire Size	Axial Load (lbs)
22	12
24	8
26	5
28	3
30	1.5

- Contact Resistance: silver-plated wire, 25°C (AS39029 Table 5)

Wire Size	Test Current Amperes	Max. mV Drop
22	5	73
24	3	45
26	2	52
28	1.5	54
30	1	60

- Meets performance requirements of SAE AS39029/121 and /122

CONSTRUCTION

- Copper alloy, 50 microinches gold over nickel plating
- Socket Hood: stainless steel, passivated

TERMINATION TOOLS

Contact Part Number	Positioner	Crimp Tool
850-094-1	859-147	809-015
850-094-2	859-148	
850-095-1	809-005	
850-095-2	809-057	

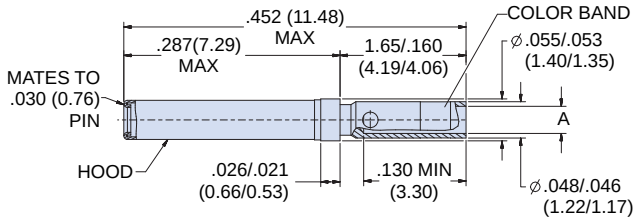
ASSEMBLY TOOLS

- Insertion/Extraction Tool: 859-163

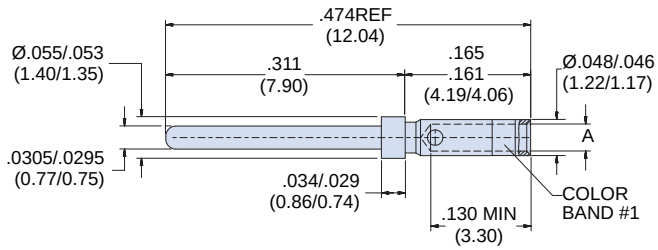
SIZE 22HD CONTACTS FOR SERIES 806 CONNECTORS

Contact Type	Wire Size AWG	Part Number	A	Color Band
Pin	#22 – #28	850-094-1	.0335-.0355; (.851-0.902)	(none)
Pin	#26 – #30	850-094-2	.0229-.0245; (.582-0.622)	Blue
Socket	#22 – #28	850-095-1	.0335-.0355; (.851-0.902)	(none)
Socket	#26 – #30	850-095-2	.0229-.0245; (.582-0.622)	Blue

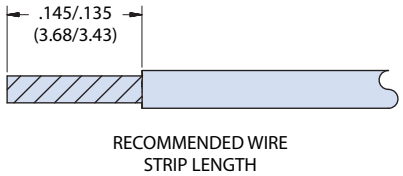
SIZE 22HD SOCKET CONTACT 850-095



SIZE 22HD PIN CONTACT 850-094



WIRE STRIP LENGTH



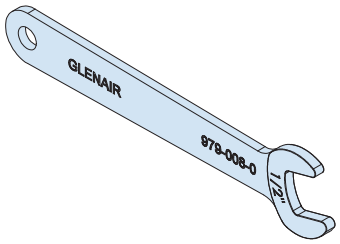
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Crown Ring Contact Crimp Tooling for 850-325 pin and 850-326 socket

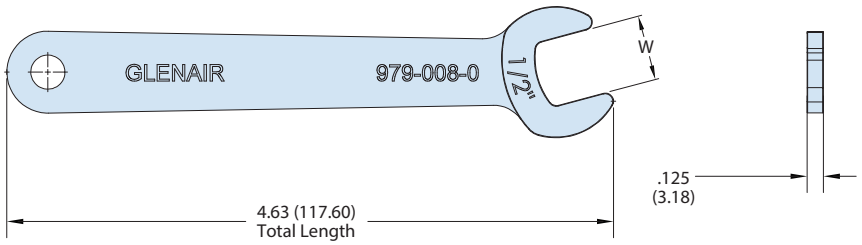
850-325 AND 850-326 TOOLING												
Contact P/N	Contact Size	Wire/ Crimp Size	Die Assembly P/N*			Locator P/N*			Extraction Tool P/N Metal		Extraction Tool P/N Plastic	
			Glenair	Mil-Spec	Daniels (DMC)	Glenair	Mil-Spec	Daniels (DMC)	Glenair	Mil-Spec	Glenair	Mil-Spec
850-325-8-10 **850-326-8-10**	8	10	859-026	M22520/23-02	WA23-2	859-173	N/A	N/A	859-139	M81969/15-01	859-022	M81969/14-06
850-325-8-8 **850-326-8-8**		8				859-029	M22520/23-09	WA23-9				
850-325-4-6 **850-326-4-6**	4	6	859-177	M22520/23-03	WA23-3	859-030	M22520/23-11	WA23-11	859-138	M81969/15-02	N/A	N/A
850-325-4-4 **850-326-4-4**		4	859-027	M22520/23-04	WA23-4						859-023	M81969/14-07
850-325-2-2 **850-326-2-2**	2	2	859-169	N/A	N/A	859-170	N/A	N/A	859-171	N/A	N/A	N/A
850-325-0-0 **850-326-0-0**	1/0	1/0	859-028	M22520/23-05	WA23-5	859-031	M22520/23-13	WA23-13	859-137	M81969/15-03	859-024	M81969/14-08

* Used with Pneumatic Crimper: Glenair P/N 859-025, Mil-Spec P/N M22520/23-01, DMC P/N WA23

979-008 HOLDING WRENCH, POWERPACK, FOR RECTANGULAR POWERPLAY CONNECTORS



HOW TO ORDER		
Sample Part Number	**979-008**	**–X**
Basic No.	**979-008** Holding Wrench	
Size	**-X** See Table I	



NOTES

- Holding wrench is intended to be used on 977-113 & 977-114.
- Material: 300 series stainless steel.

TABLE I - SIZE		
Wrench Part No.	Contact Size	W Wrench Flats
979-008-0	1/0	(1/2")
979-008-2	2AWG	(3/8")
979-008-4	4AWG	(5/16")
979-008-8	8AWG	(15/64")

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Crown Ring Contact Termination, Installation, and Removal

HOW TO TERMINATE, INSTALL AND REMOVE CROWN RING CONTACTS

1 ***Set Up Crimp Tool.*** Install proper die assembly and locator into the pneumatic crimper. See 979-013 for proper tools needed for each contact size.

2 ***Strip Wire.*** Remove wire insulation, taking care to avoid nicking or cutting wire strands. Strip wire to length shown on table.

3 ***Insert Wire*** into contact. The wire should be visible in the inspection hole.

4 ***Insert contact into crimp tool.*** Make sure the contact is fully inserted into the locator.

5 ***Crimp contact.*** While keeping contact seated, press the actuation button and hold the crimp die closed for a minimum of 8 seconds, to allow adequate dwell time for wire strand deformation.

6 ***Inspect crimped contact.*** Wire should be fully inserted and visible through the inspection hole. The crimp should be uniform in appearance.

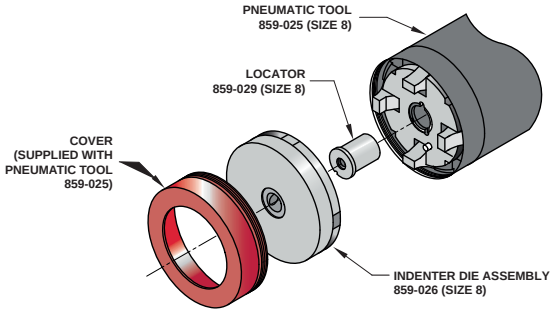
7 ***Install contact into connector.*** Brush Isopropyl Alcohol (IPA) onto the contact and approximately 1" of the wire. Before IPA dries, push the contact through the rear grommet until the contact locks into place. This can be done by hand without the need for a tool. **USE CARE TO AVOID DAMAGING THE CONNECTOR/ GROMMET.**

8 ***Contact Extraction.*** Use the correct extraction tools per 979-013. Install the tool over the wire for the contact to be removed. Brush a generous amount of Isopropyl Alcohol (IPA) onto the grommet, where the wire is exiting. Before IPA dries, slide the tip of the tool into the connector/ grommet. Push the tool into the connector cavity until the tip bottoms in the connector. Avoid wiggling or rocking the tip. This may damage the cavity. A straight push is best. Holding both the wire and the tool, pull the tool and contact out of the connector. **Ensure the wire insulation is within the acceptable limits listed on the connector datasheet.**

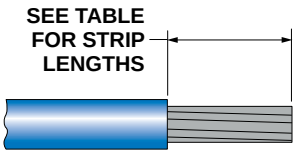
PNEUMATIC CRIMP TOOL

1



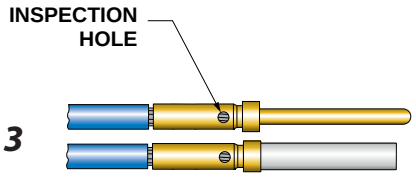


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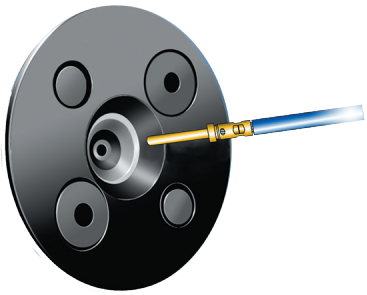


Wire Size (AWG)	Strip Length in. (mm)
10	.495-.545 (12.57-13.84)
8	
6	
4	
2	.550-.600 (13.97-15.24)
1/0	.575-.625 (14.60-15.88)

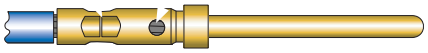
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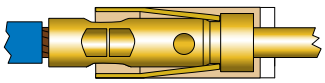
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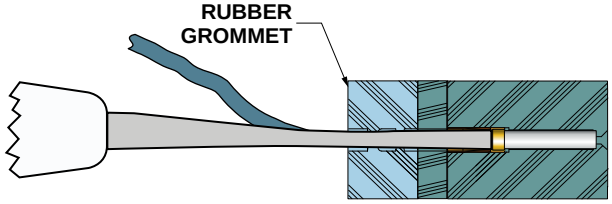
5/6



7



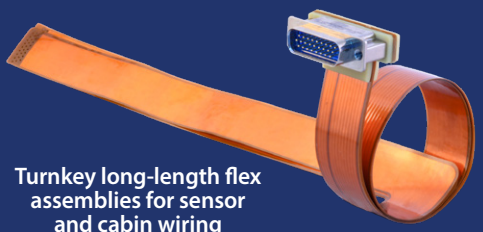
8



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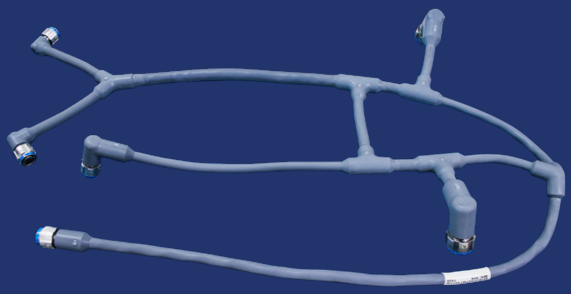
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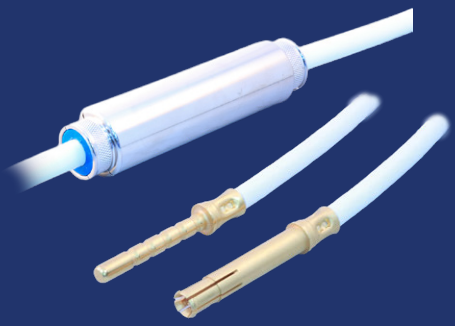
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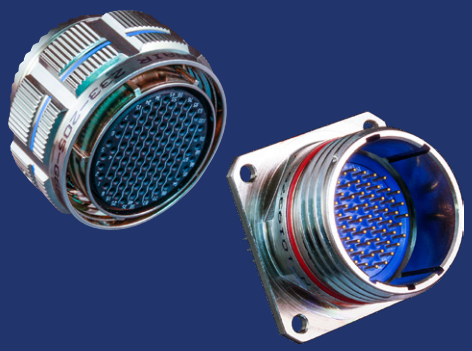
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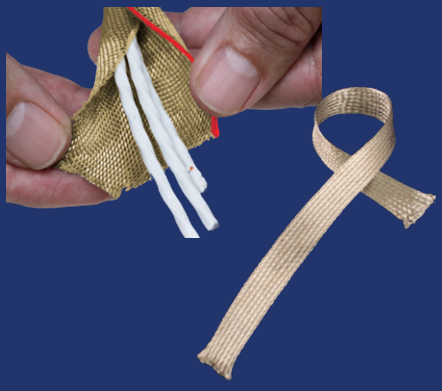


Autoshrink cold-action tubing and boots

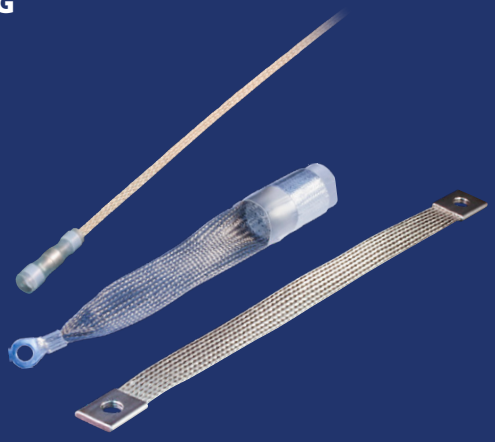
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