

972-203 Feed-thru receptacle, jam-nut mount, fixed contacts, pin / socket configuration

POWERLOAD CONNECTORS - CRIMP CONTACTS



972-203 Feed-Thru Receptacle

CONNECTOR FEATURES

- Socket towers for improved creep path performance
- Single-piece insulator eliminates bond lines that can lead to electrical failure
- High-temperature Crown Ring contact technology

POWER SPECIFICATIONS

- For applications up to 2000 VAC/ 1500 Hz, and from 150 – 800 Amps.
- 230°C maximum operating temperature (stainless steel bodies and shells)
- 100% DWV tested at 5,000 VAC (all arrangements)
- Up to 60% lower contact resistance than equivalent AS39029 contacts (normalized, less wire)

MATERIAL SPECIFICATIONS

Insulators - PEEK thermoplastic, glass reinforced
 Seals and o-ring- high-temperature silicone/N.A.
 Contact body - high-conductivity copper alloy, gold plated
 Socket contact hood, crown ring - stainless steel, passivated

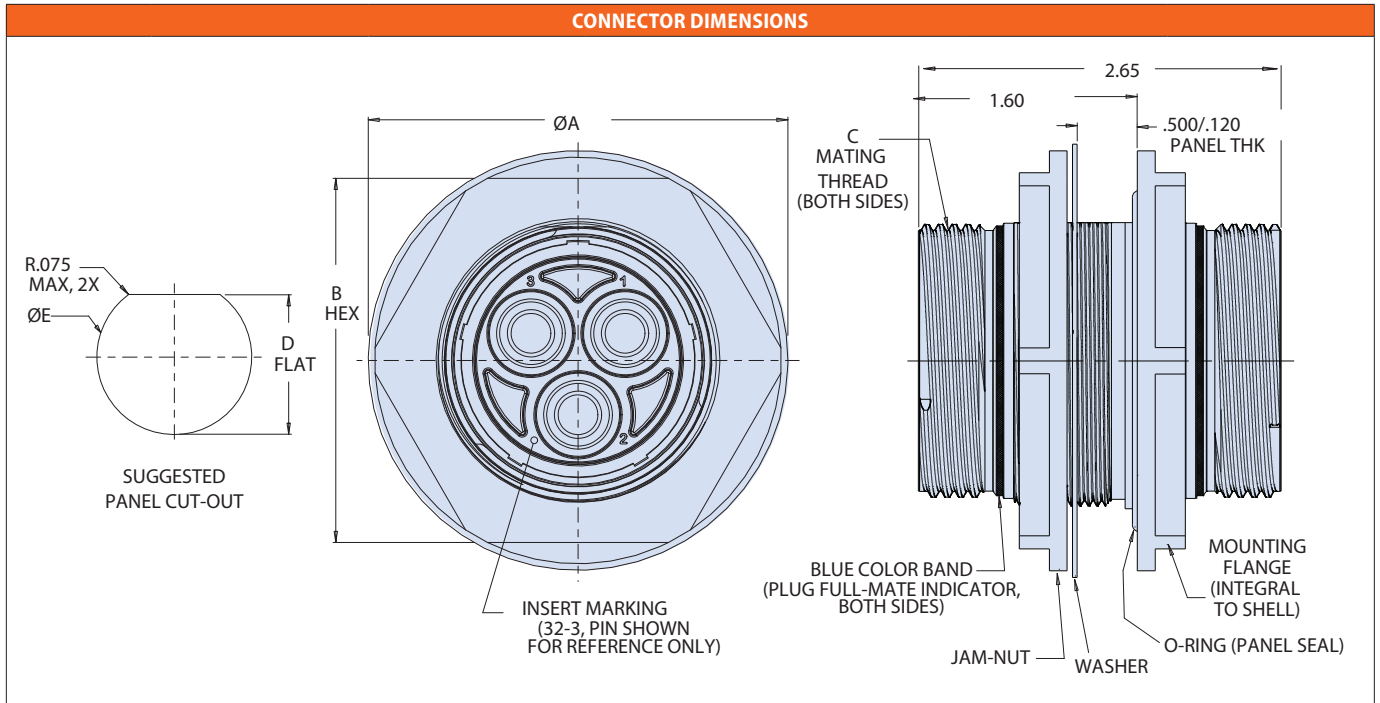
HOW TO ORDER					
Sample Part Number	972-203	NF	32-3	P	1
Basic Part Number	PowerLoad™ Feed-Thru Receptacle, Jam-Nut mount				
Material/Finish	ME, MT, NF, ZR, Z1, ZL (See Table)				
Shell Size / Contact Arrangement	See PowerLoad contact arrangements table				
Contact Gender	P = Pin on jam nut side S = Socket on jam nut side (opposite side of connector is opposite gender)				
Polarization	1, 2, 3, 4, 5, or 6 (see Keyway Positions table)				

SHELL SIZE / CONTACT ARRANGEMENTS (FACE OF PIN INSERT)					
16-A1 1X #8	16-1 1X #4	20-A1 1X #2	20-1 1X #1/0	22-1* 1X #2/0	22-2 2X #8
22-3 3X #8	24-1* 1X #4/0	24-2 2X #4	24-4 4X #8	28-2 2X #2	28-3 3X #2
28-4 4X #4	28-6 6X #8	32-2 2X #1/0	32-3 3X #1/0	32-4 4X #2	
36-2* 2X #2/0	36-4 4X #1/0	40-3* 3X #2/0	Contact Size Key * Consult Factory		

PowerLoad™ Connectors

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Shell Size	A ±.030	B ±.010	C Mating Thread	ØD ±.005	ØE ±.005
16	2.125 (53.98)	1.750 (44.45)	1.000-0.1P-0.3L-TS-2A	1.103 (28.02)	1.178 (29.92)
20	2.375 (60.33)	2.000 (50.80)	1.250-0.1P-0.3L-TS-2A	1.353 (34.37)	1.428 (36.27)
22	2.500 (63.50)	2.125 (53.97)	1.375-0.1P-0.3L-TS-2A	1.478 (37.54)	1.553 (39.45)
24	2.625 (66.68)	2.250 (57.15)	1.500-0.1P-0.3L-TS-2A	1.603 (40.72)	1.675 (42.55)
28	2.875 (73.02)	2.500 (63.50)	1.750-0.1P-0.3L-TS-2A	1.853 (47.07)	1.928 (48.97)
32	3.200 (81.28)	2.750 (69.85)	2.000-0.1P-0.3L-TS-2A	2.103 (53.42)	2.178 (55.32)
36	3.375 (85.73)	3.000 (76.20)	2.250-0.1P-0.3L-TS-2A	2.353 (59.77)	2.428 (61.67)
40	3.625 (92.07)	3.250 (82.55)	2.500-0.1P-0.3L-TS-2A	2.603 (66.12)	2.678 (68.02)

MATERIAL / FINISH			
Code	Material	Finish	Temp. Rating
ME	Aluminum	Electroless Nickel	-54° - +200°C
MT		Nickel-PTFE	-54° - +200°C
NF		Cadmium, OD	-54° - +175°C
ZR		Zinc-Ni, Black (Tri-Valent CR)	-54° - +175°C
Z1	Stainless	Passivate	-54° - +230°C
ZL	Steel	Electrodeposited Nickel	-54° - +230°C

EXAMPLE CONTACT ARRANGEMENT CURRENT RATINGS				
Ins. Arr.	#8AWG 145 A ¹	#4 AWG 270 A ¹	#2 AWG 360 A ¹	1/0 490 A ¹
28-3			3X (156 A ²)	
28-4		4X (104 A ²)		
28-6	6X (49 A ²)			
32-3				3X (210 A ²)

¹ Absolute maximum current rating per SAE AS50881: single conductor, sea level, 205° temp rise (25° ambient to 230° C max for "Z1" connectors)
² Derated current for typical applications per SAE AS50881: multiple conductors, 50,000 ft. altitude, 100°C temp rise

RECEPTACLE KEYWAY POSITIONS				
Position	A°	B°	C°	D°
1	76	148	212	284
2	135	170	200	310
3	49	169	200	244
4	66	140	200	257
5	62	145	180	280
6	79	153	197	272