



## Jam Nut Receptacles

### 970-004 Jam Nut Receptacle with Accessory Thread



970-004 jam nut receptacle has accessory thread for attaching cable clamp, backshell or adapter. Coupling threads are triple-start ACME quick-disconnect. EMI protected with ground spring on plug. Aluminum or stainless steel shell has five polarizing keyways. Crimp rear-release contacts are packaged with connector. PowerTrip connectors feature low resistance LouverBand contacts and are designed to withstand extreme environments.

- Quick-disconnect, high shock, high vibration, self-locking connector
- 2000 VAC (DWV)
- -65° to +200 °C
- Plug has EMI ground spring
- Crimp, rear-release contacts
- Advanced IP68+ sealing

JAM NUT RECEPTACLES

INSERT ARRANGEMENTS						
Insert Arr.	Contact Size and Quantity					
	#16	#12	#8	#4	#1/0	#2/0
18-2			2			
18-4		2	2			
20-3			3			
20-4			4			
20-5		2	3			
20-7	4		3			
24-1					1	
24-2				2		
24-3				3		
24-5			5			
24-6		4		2		
24-A1						1
24-A6		3		3		
28-12	6		6			
28-15	15					
28-4				4		
28-8		1	7			
28-9	5			4		
32-12	2		10			
32-2					2	
32-20	1	19				
32-3					3	
32-4				2	2	
32-5				5		
32-6		3			3	
32-7				7		
32-A22		22				
36-16	3		13			
36-2						2
36-4					4	
36-9	14	14	2	1		
36-A8				8		
36-B8	4				4	
40-10	16		9	4		
40-21			21			
40-5					5	

HOW TO ORDER						
Sample Part Number →		970-004	TZ	36-4	P1	-1
<b>Basic Part Number</b>	970-004 Jam Nut Receptacle with Accessory Thread					
<b>Material/Finish</b>	ME = Aluminum / Electroless Nickel MT = Aluminum / Nickel PTFE NF = Aluminum / Olive Drab Cadmium TZ = Aluminum / Tin-Zinc ZR = Aluminum / Black Zinc-Nickel Z1 = Stainless Steel / Passivated					
<b>Shell Size-Insert Arr.</b>	See "Insert Arrangements" Table					
<b>Contact Gender and Plating</b>	A = Pin Connector, without Contacts B = Socket Connector, without Contacts P1 = Pin Contacts, Silver Plating* P2 = Pin Contacts, Gold Plating S1 = Socket Contacts, Silver Plating* S2 = Socket Contacts, Gold Plating * Size 12 and 16 contacts are gold-plated. Size 8, 4, 1/0 and 2/0 are silver plated.					
<b>Keyway Position</b>	-1, -2, -3, -4, -5, or -6					

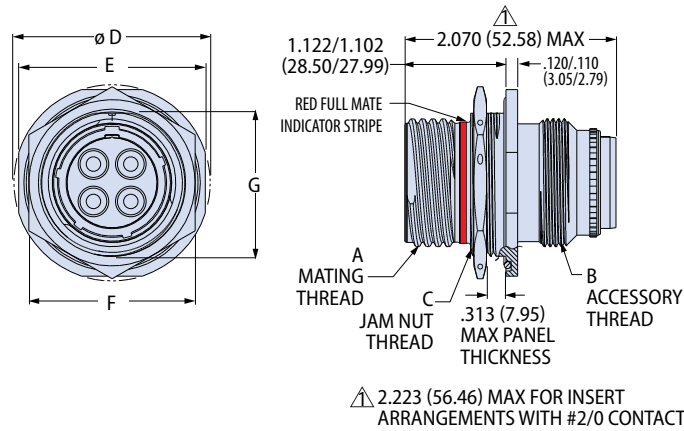
RATINGS
<b>Voltage (DWV):</b> 2000 Volts AC
<b>Current:</b> Size 16 contact 13 amps Size 12 contact 23 amps Size 8 contact 60 amps Size 4 contact 100 amps Size 1/0 contact 175 amps Size 2/0 contact 205 amps
<b>Operating temperature:</b> Matl/Finish Codes ME, Z1: -65° to +200°C Codes MT,NF, TZ, ZR: -65 to +175 °C
<b>Durability:</b> 500 mating cycles
<b>EMI shielding effectiveness:</b> 65 dB min. 100 MHz to 10 GHz
<b>Shock:</b> 50 g
<b>Vibration:</b> per MIL-DTL-38999 Series III MIL-S-901 high impact shock: Grade A
<b>Ingress protection:</b> IP67
<b>Water pressure:</b> 6 feet, 48 hours

CONSTRUCTION
<b>Contacts:</b> size #8 and larger: high conductivity copper alloy, gold or silver plated. Size #12, #16: copper alloy, gold plated
<b>Shell:</b> Aluminum or stainless steel, see How to Order
<b>Insulator:</b> Glass-filled thermoset epoxy
<b>Wire grommet, face seal:</b> Fluorosilicone/silicone blend
<b>Contact Retention clip:</b> Beryllium copper
<b>Insert retainer ring:</b> High-temperature thermoplastic
<b>O-ring:</b> Fluorosilicone

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DIMENSIONS											
Shell Size	A Mating Thd.	B Accessory Thd.	C Jam-Nut Thd.	ø D		E		F		G	
				In.	mm.	In.	mm.	In.	mm.	In.	mm.
18	1.125-1P-.3L-TS-2A	1.125-18 UNEF-2A	1.250-18 UNEF-2A	1.733	44.02	1.639	41.63	1.438	36.53	1.212	30.78
20	1.250-1P-.3L-TS-2A	1.250-18 UNEF-2A	1.4375-18 UNEF-2A	1.921	48.79	1.827	46.41	1.625	41.28	1.399	35.53
24	1.500-1P-.3L-TS-2A	1.4375-18 UNEF-2A	1.625-18 UNEF-2A	2.108	53.54	2.014	51.16	1.822	46.28	1.587	40.31
28	1.750-1P-.3L-TS-2A	1.8125-16 UN-2A	1.9375-16 UN-2A	2.425	61.60	2.327	59.11	2.188	55.58	1.899	48.23
32	2.000-1P-.3L-TS-2A	2.0625-16 UNS-2A	2.125-16 UN-2A	2.607	66.24	2.513	63.83	2.375	60.33	2.084	52.93
36	2.250-1P-.3L-TS-2A	2.250-16 UN-2A	2.375-16 UN-2A	2.857	72.57	2.763	70.18	2.625	66.68	2.323	59.00
40	2.500-1P-.3L-TS-2A	2.500-16 UN-2A	2.625-16 UN-2A	3.107	78.92	3.013	76.53	2.875	73.03	2.548	64.72

KEY POSITIONS				
Position	A°	B°	C°	D°
1	80	142	196	293
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

PANEL CUTOUT				
	Diameter		Flat	
Shell Size	In.	mm.	In.	mm.
	-0.0/+0.010	-0.0/+0.25	-0.0/+0.010	-0.0/+0.25
18	1.265	32.13	1.217	30.91
20	1.452	36.88	1.409	35.79
24	1.640	41.66	1.596	40.54
28	1.952	49.58	1.910	48.51
32	2.140	54.36	2.092	53.14
36	2.390	60.71	2.342	59.49
40	2.640	67.06	2.557	64.95

RECOMMENDED JAM NUT TORQUE	
Shell Size	Min-Max (in-lb.)
18	80-85
20	100-110
24	110-120
28	145-155
32	170-180
36	190-200
40	210-220