

CRYOGENIC ThermaRex Cryo SuperNine® Connectors



Jam Nut Receptacle 806-061

THERMAREX™ CRYO



FEATURES AND BENEFITS

- Operating temperature -195°C to +200°C
- Special low-temperature 300G shock and aerospace vibration testing while submerged in liquid nitrogen
- Triple-start stub ACME mating thread
- High density #22HD and #20HD arrangements for reduced size and weight plus #16, #12 and #8 standard and hybrid contact layouts
- Aerospace-grade materials, construction
- Band platform or accessory threads

SPECIFICATIONS

- Dielectric withstanding voltage
#22HD contacts: 1300 VAC
#20HD contacts: 1800 VAC
#16 contacts: varies, contact factory
#12 contacts: varies, contact factory
#8 contacts: varies, contact factory
- Mating durability: 500 cycles
- Mechanical shock: EIA-364-27, 300g.
- Vibration (sine): MIL-DTL-38999M, 60g.
- Vibration (random) EIA-364-28 Condition VI, Letter J, 43.92 Grms, +200°C
- High Impact shock: MIL-S-901 Grade A
- Humidity: EIA-364-31 Method 4
- Salt spray (dynamic): EIA-364-26, 500 hours (96 hours for nickel-plated versions)
- Fluid immersion: EIA-364-10
- Altitude immersion: EIA-364-03 75,000 feet altitude
- Indirect Lightning Strike: EIA-364-75 Type B Level 2 10kA Peak

MATERIALS/FINISH

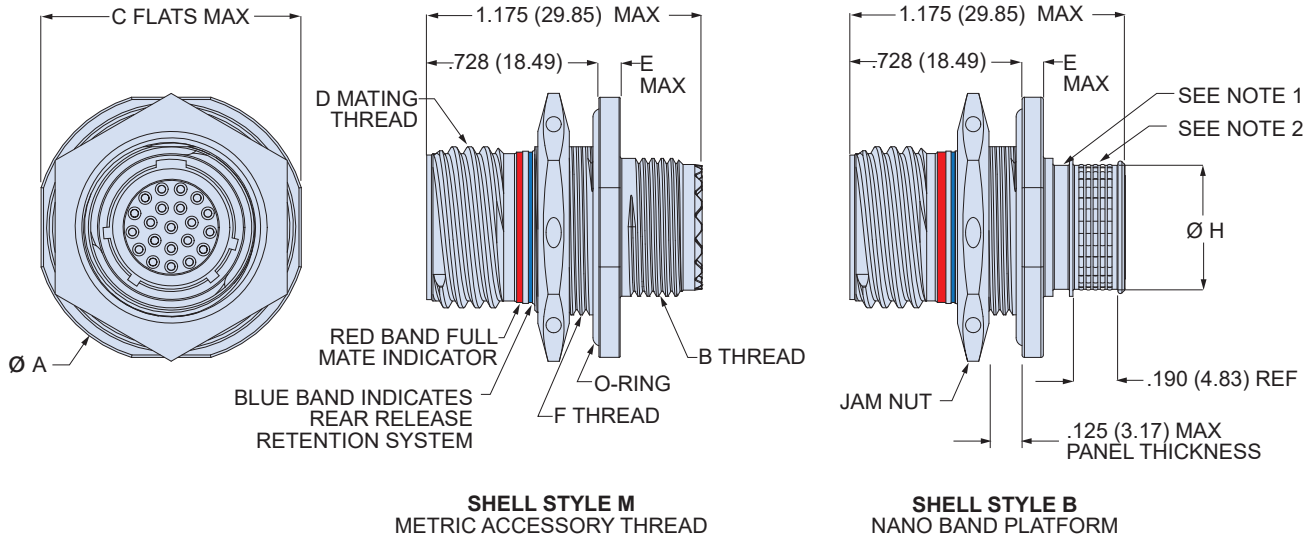
- Shell: passivated CRES or Aluminum Alloy
- Contacts: copper alloy, gold plate
- Insulator: high grade rigid dielectric
- Interfacial seal, grommet: Duralectric K low-temp silicone

Extreme low-temperature 806-061 ThermaRex receptacle connectors are rated to perform in temperatures as low as -195° C. Intended for use in sub-zero harsh applications such as space vehicles or aircraft zones subject to high altitude, while providing size and weight savings compared to conventional aerospace-grade circular connectors. Unique triple-start mating thread provides improved de-coupling resistance under vibration. Jam nut receptacle styles include integrated metric accessory thread or band platform.

How To Order ThermaRex Series 806 Mil-Aero Jam-nut Receptacle						
Sample Part Number	806-061	-Z1	11-19	S	M	A
Series / Basic Part No.	806-061 ThermaRex Cryogenic Jam Nut Receptacle					
Material/Finish	ME = Aluminum alloy / electroless nickel Z1 = Stainless steel / passivated					
Shell Size/Insert Arr.	See Table I					
Contact Style	A = Pin connector less contacts B = Socket connector Less contacts		P = Pin S = Socket			
Shell Style	M = Metric (Accessory Thread) B = Band (platform for attaching cable shield)					
Polarization	A, B, C, D, E, F					

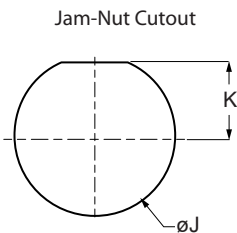
Table I: Shell Size - Insert Arrangement																	
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts				
	22HD	20HD	16	12	8		22HD	20HD	16	12	8		22HD	20HD	16	12	8
7-3	3					22-69		69				18-3					3
8-4	4					24-92		92				20-4					4
8-7	7					8-1			1			22-5					5
9-11	11					10-2			2			24-8					8
10-15	15					11-4			4			10-8A	6		2		
11-19	19					12-5			5			11-13	11		2		
12-26	26					14-7			7			12-27	26		1		
14-39	39					16-12			12			14-21	17		4		
16-60	60					18-15			15			16-41	37		4		
18-85	85					20-22			22			18-59	55		4		
20-110	110					22-24			24			11-14	13			1	
22-140	140					24-35			35			12-14	12			2	
24-186	186					9-1				1		14-22	20			2	
8-3		3				12-2				2		16-32	28			4	
9-5		5				14-3				3		16-42	40			2	
10-8		8				16-4				4		18-62	60			2	
11-10		10				16-7				7		14-20A	19				1
12-15		15				18-8				8		16-22	20				2
14-20		20				20-11				11		18-21	18				3
16-31		31				22-13				13		20-28	24				4
18-41		41				24-19				19		22-44	40				4
20-55		55				10-1					1	24-97	93				4
						16-2					2						

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Dimensions							
Shell Size	ØA Max	B Thread	C Max	D Mating Thread	E Max	F Thread	ØH
7	.848 (21.54)	M8 X 1-6g-.100R	.908 (23.06)	.4375-.067P-2L-TS-2A	0.100 (2.54)	M13 X 1-6g-.100R	.265 (6.73)
8	.980 (24.89)	M10 X 1-6g-.100R	.920 (23.37)	.5000-.067P-2L-TS-2A		M15 X 1-6g-.100R	.327 (8.31)
9	1.040 (26.42)	M12 X 1-6g-.100R	.980 (24.89)	.5625-.067P-2L-TS-2A		M16 X 1-6g-.100R	.406 (10.31)
10	1.110 (28.19)	M14 X 1-6g-.100R	1.050 (26.67)	.6250-.067P-2L-TS-2A		M18 X 1-6g-.100R	.484 (12.29)
11	1.160 (29.46)	M15 X 1-6g-.100R	1.110 (28.19)	.6875-.067P-2L-TS-2A		M19 X 1-6g-.100R	.524 (13.31)
12	1.230 (31.24)	M17 X 1-6g-.100R	1.170 (29.72)	.7500-.067P-2L-TS-2A		M21 X 1-6g-.100R	.603 (15.32)
14	1.360 (34.54)	M19 X 1-6g-.100R	1.320 (33.53)	.8750-.067P-2L-TS-2A		M24 X 1-6g-.100R	.681 (17.30)
16	1.515 (38.48)	M22 X 1-6g-.100R	1.444 (36.68)	1.000-.067P-2L-TS-2A		M27 X 1-6g-.100R	.782 (19.86)
18	1.610 (40.89)	M25 X 1-6g-.100R	1.570 (39.88)	1.1250-.067P-2L-TS-2A		M30 X 1-6g-.100R	.899 (22.83)
20	1.850 (46.99)	M28 X 1-6g-.100R	1.760 (44.70)	1.250-.067P-2L-TS-2A		0.128 (3.25)	M34 X 1-6g-.100R
22	2.010 (51.05)	M31 X 1-6g-.100R	1.913 (48.59)	1.3750-.067P-2L-TS-2A	M37 X 1-6g-.100R		1.155 (29.34)
24	2.195 (55.75)	M34 X 1-6g-.100R	2.070 (52.58)	1.500-.067P-2L-TS-2A	M41 X 1-6g-.100R		1.273 (32.33)



SHELL SIZE	Recommended Mounting Hole	
	K +.005 (0.13) 0.000 (0.00)	J +.005 (0.13) 0.00 (0.00)
7	.224 (5.69)	.522 (13.26)
8	.256 (6.50)	.601 (15.27)
9	.287 (7.29)	.640 (16.26)
10	.318 (8.08)	.719 (18.26)
11	.350 (8.89)	.759 (19.28)
12	.381 (9.68)	.837 (21.26)
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)
22	.693 (17.60)	1.467 (37.26)
24	.755 (19.18)	1.624 (41.25)

NOTES:

- Boot groove for use with overmolded strain relief or 809-060 heat shrink boots
- Terminate shield with Glenair Band-Master ATS tool 601-108 and Glenair Nano band