

CRYOGENIC, MICRO MINIATURE CIRCULAR

Series 806

Mil-Aero Connectors

806-060 ThermaRex Cryogenic Plug



Features

- 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#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
#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

Connector Construction

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

Extreme low-temperature 806-060 ThermaRex Cryo plug 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. Rugged ratchet mechanism and unique triple-start mating thread provide improved de-coupling resistance under vibration. Shell styles include integrated metric accessory thread or band platform.

How To Order ThermaRex Series 806 Mil-Aero Plug							
SAMPLE PART NUMBER		806-060	-Z1	11-19	S	M	A
Series / Basic Part No.	806-060 ThermaRex Cryogenic Plug						
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						

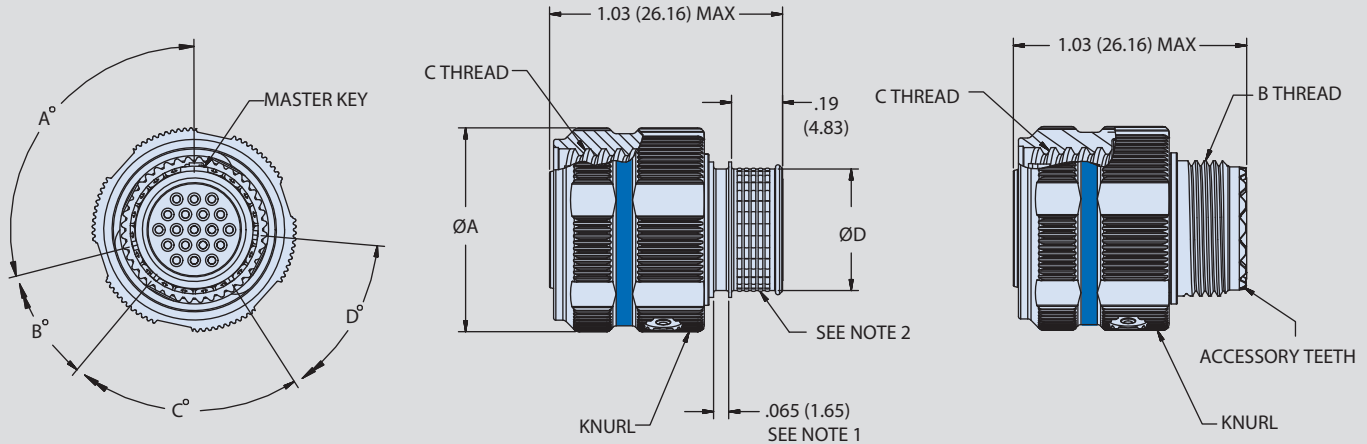
Table I: Shell Size - Insert Arrangement																
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts			
	20HD	16	12	8			20HD	16	12	8			20HD	16	12	8
8-3	3					10-2		2				16-4			4	
9-5	5					11-4		4				16-7			7	
10-8	8					12-5		5				18-8			8	
11-10	10					14-7		7				20-11			11	
12-15	15					16-12		12				22-13			13	
14-20	20					18-15		15				24-19			19	
16-31	31					20-22		22				10-1				1
18-41	41					22-24		24				16-2				2
20-55	55					24-35		35				18-3				3
22-69	69					9-1			1			20-4				4
24-92	92					12-2			2			22-5				5
8-1		1				14-3			3			24-8				8

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BAND PLATFORM

METRIC ACCESSORY THREAD

806-060 Dimensions				
SHELL SIZE	ØA MAX	B THREAD	C MATING THREAD	Ø D
7	.606 (15.39)	M8X 1-6g-.100R	.4375-.067P-.2L-TS-2B	.267 (6.78)
8	.676 (17.17)	M10 X 1-6g-.100R	.500-.067P-.2L-TS-2B	.327 (8.31)
9	.774 (19.66)	M12 X 1-6g-.100R	.562-.067P-.2L-TS-2B	.406 (10.31)
10	.832 (21.13)	M14 X 1-6g-.100R	.625-.067P-.2L-TS-2B	.484 (12.29)
11	.890 (22.61)	M15 X 1-6g-.100R	.688-.067P-.2L-TS-2B	.524 (13.31)
12	.950 (24.13)	M17 X 1-6g-.100R	.750-.067P-.2L-TS-2B	.603 (15.32)
14	1.110 (28.19)	M19 X 1-6g-.100R	.875-.067P-.2L-TS-2B	.681 (17.30)
16	1.170 (29.72)	M22 X 1-6g-.100R	1.000-.067P-.2L-TS-2B	.782 (19.86)
18	1.350 (34.29)	M25 X 1-6g-.100R	1.1250-.067P-.2L-TS-2B	.899 (22.83)
20	1.470 (37.34)	M28 X 1-6g-.100R	1.250-.067P-.2L-TS-2B	1.043 (26.49)
22	1.600 (40.64)	M31 X 1-6g-.100R	1.375-.067P-.2L-TS-2B	1.155 (29.34)
24	1.710 (43.43)	M34 X 1-6g-.100R	1.500-.067P-.2L-TS-2B	1.273 (32.33)

NOTES:

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