

# ENVIRONMENTAL, MICRO MINIATURE CIRCULAR

## Series 806

### Mil-Aero Connectors

#### 806-012 Plug Connector



#### Features

- Triple-start stub ACME mating thread
- High density #20HD and #22HD arrangements for reduced size and weight plus #16, #12, and #8 arrangements and combo layouts
- Aerospace-grade materials, construction
- Snap-in crimp contacts

#### Specifications

- Operating temperature: Finishes ME, MT, Z1: -65°C to +200°C Finishes NF, ZR: -65°C to +175°C
- Dielectric withstanding voltage Size 20HD contacts: 1800 VAC Size 22HD contacts: 1300 VAC Size 16 contacts: varies; contact factory Size 12 contacts: contact factory Size 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)
- Altitude immersion: EIA-364-03 75,000 feet altitude

#### Connector Construction

- Shell and coupling nut: aluminum or stainless steel
- Contacts: copper alloy, gold plating
- Wire grommet: fluorosilicone
- Dielectric inserts: high grade rigid dielectric
- Ground spring: copper alloy, nickel plating
- Contact retention clips: copper alloy
- Ratchet springs: stainless steel, passivated
- Retainer rings: stainless steel, passivated

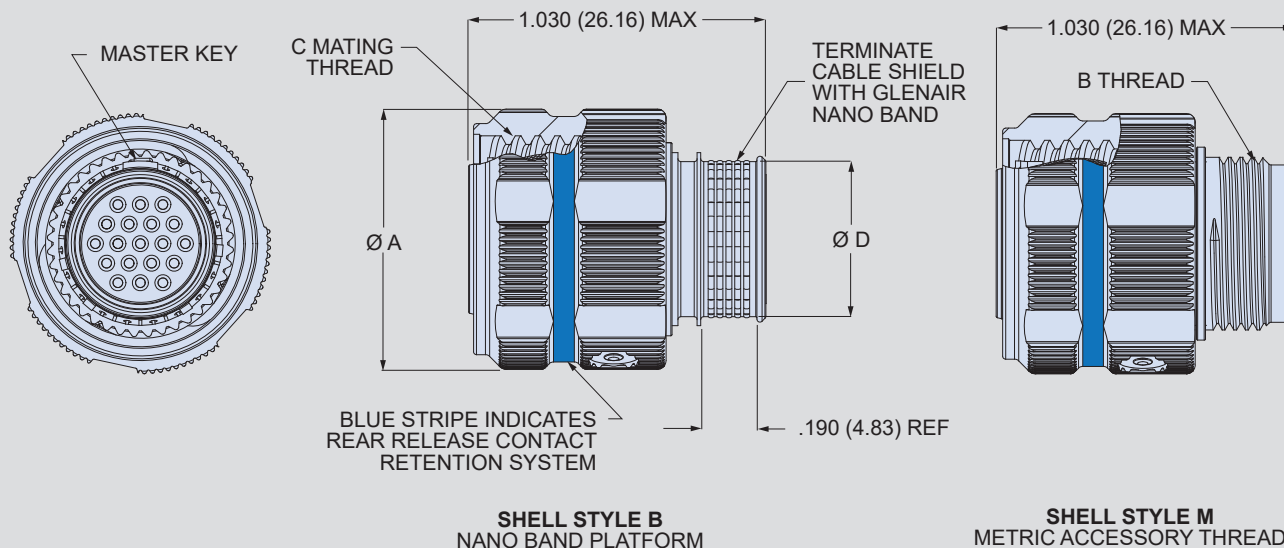
Micro miniature 806-012 cable plugs save space and weight compared to conventional aerospace-grade circular connectors. Rugged ratchet mechanism and unique triple-start mating thread provide improved de-coupling resistance under vibration. Series 806 connectors are intended for use in harsh application areas such as unpressurized aircraft zones subject to vibration, moisture, altitude, and temperature extremes. Available with integral Nano Band platform or metric accessory threads. Insert arrangements support size #22HD, #20HD, #16, #12, and #8 snap-in, rear-release contacts.

How To Order							
SAMPLE PART NUMBER		806-012	-ME	8-3	S	M	A
Product	806-012 = Cable Plug						
Shell Material and Finish	ME = Aluminum, Electroless Nickel MT = Aluminum, Ni/PTFE ZR = Aluminum, Black Zinc-Nickel NF = Aluminum, Olive Drab Cadmium Z1 = Stainless Steel, Passivated						
Arrangement Number	See Table 1 (Shell Size - Insert Arr.)						
Contact Type	P = Pin S = Socket A = Pin connector, less contacts B = Socket connector, less contacts For datalink contacts (including El Ochito) order connector without contacts and order datalink contacts separately						
Shell Style	M = Metric accessory threads B = Nano Band platform						
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							

# Series 806 Mil-Aero Connectors

## 806-012 Plug Connector



806-012 Plug Dimensions				
Shell Size	ØA Max	B Thread	C Mating Thread	ØD
7	.606 (15.39)	M8x1.0-6g-0.100R	.4375-.067P-.2L-TS-2B	.267 (6.78)
8	.676 (17.17)	M10x1.0-6g-0.100R	.5000-.067P-.2L-TS-2B	.327 (8.31)
9	.771 (19.58)	M12x1.0-6g-0.100R	.5625-.067P-.2L-TS-2B	.406 (10.31)
10	.832 (21.13)	M14x1.0-6g-0.100R	.6250-.067P-.2L-TS-2B	.484 (12.29)
11	.890 (22.61)	M15x1.0-6g-0.100R	.6875-.067P-.2L-TS-2B	.524 (13.31)
12	.950 (24.13)	M17x1.0-6g-0.100R	.7500-.067P-.2L-TS-2B	.603 (15.32)
14	1.110 (28.19)	M19x1.0-6g-0.100R	.8750-.067P-.2L-TS-2B	.681 (17.30)
16	1.170 (29.72)	M22x1.0-6g-0.100R	1.0000-.067P-.2L-TS-2B	.782 (19.86)
18	1.350 (34.29)	M25x1.0-6g-0.100R	1.1250-.067P-.2L-TS-2B	.899 (22.83)
20	1.470 (37.34)	M28x1.0-6g-0.100R	1.2500-.067P-.2L-TS-2B	1.043 (26.49)
22	1.600 (40.64)	M31x1.0-6g-0.100R	1.3750-.067P-.2L-TS-2B	1.155 (29.34)
24	1.710 (43.43)	M34x1.0-6g-0.100R	1.5000-.067P-.2L-TS-2B	1.273 (32.33)

**NOTES:**

1. Boot groove for use with 809-060 Heat Shrink boots
2. Terminate shield with Glenair Band-Master ATS tool 601-108 and Glenair Nanoband