

# ENVIRONMENTAL, MICRO MINIATURE CIRCULAR

## Series 806

### Mil-Aero Connectors

#### 806-019 In-Line Receptacle Connectors



#### 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  
#20HD contacts: 1800 VAC  
#22HD contacts: 1300 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

#### Connector Construction

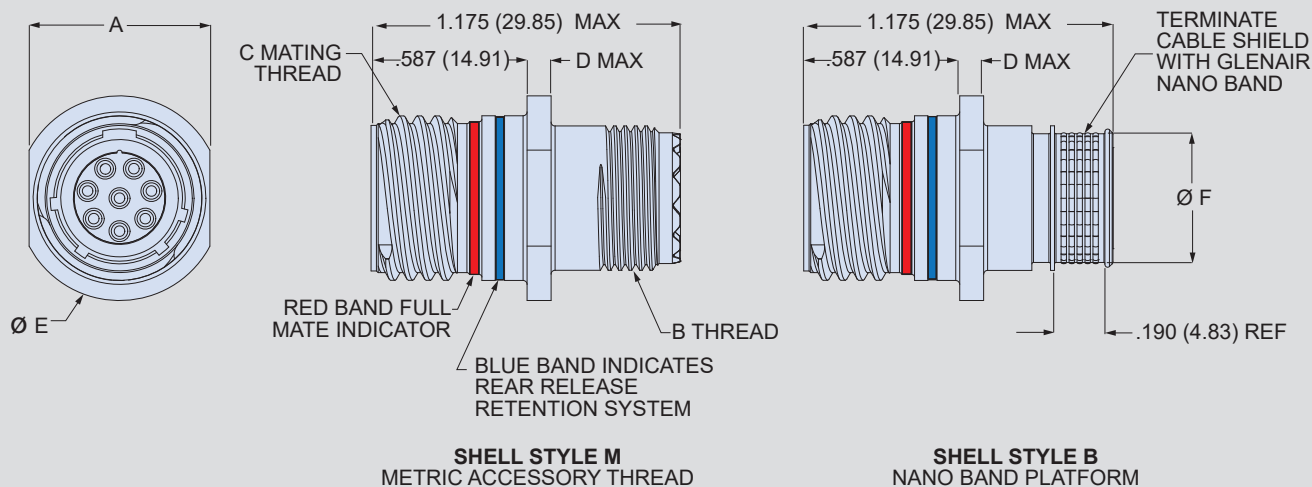
- Shell: aluminum or stainless steel
- Contacts: copper alloy, gold plating
- Wire grommet: fluorosilicone
- Dielectric inserts: high grade rigid dielectric
- Peripheral seal: fluorosilicone
- Contact retention clips: copper alloy
- Retainer rings: stainless steel, passivated

806-019 Micro miniature Series 806 connectors save size and weight compared to conventional aerospace-grade circular connectors. These high performance connectors are suitable for harsh environmental areas such as unpressurized aircraft zones subject to vibration, moisture, altitude, and temperature extremes. Available with integral Nano Band platform or with metric accessory threads. Insert arrangements support size #22HD, #20HD, #16, #12, and #8 snap-in, rear-release contacts.

How To Order							
SAMPLE PART NUMBER	806-019	-NF	14-20	P	B	A	
<b>Product</b>	806-019 = In-Line Receptacle						
<b>Shell Material and Finish</b>	ME = Aluminum, Electroless Nickel MT = Aluminum, Ni/PTFE ZR = Aluminum, Black Zinc-Nickel NF = Aluminum, Olive Drab Cadmium Z1 = Stainless Steel, Passivated						
<b>Arrangement Number (Shell Size - Insert Arr.)</b>	See Table 1						
<b>Contact Type</b>	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						
<b>Shell Style</b>	M = Metric accessory threads B = Nano Band platform						
<b>Polarization</b>	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				16-2					2
8-4	4					24-92		92				18-3					3
8-7	7					8-1			1			20-4					4
9-11	11					10-2			2			22-5					5
10-15	15					11-4			4			24-8					8
11-19	19					12-5			5			10-8A	6		2		
12-26	26					14-7			7			11-13	11		2		
14-39	39					16-12			12			12-27	26		1		
16-60	60					18-15			15			14-21	17		4		
18-85	85					20-22			22			16-41	37		4		
20-110	110					22-24			24			18-59	55		4		
22-140	140					24-35			35			11-14	13			1	
24-186	186					9-1				1		12-14	12			2	
8-3		3				12-2				2		14-22	20			2	
9-5		5				14-3				3		12-14	12			2	
10-8		8				16-4				4		16-42	40			2	
11-10		10				16-7				7		18-62	60			2	
12-15		15				18-8				8		14-20A	19				1
14-20		20				20-11				11		16-22	20				2
16-31		31				22-13				13		18-21	18				3
18-41		41				24-19				19		20-28	24				4
20-55		55				10-1					1	22-44	40				4
												24-97	93				4

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**Series 806**  
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 806-019 Line Receptacle Connectors



806-019 Receptacle Dimensions						
Shell Size	A ±.010 (0.25) ±0.25 (6.35)	B Thread	C Mating Thread	D Max	ØE	ØF
7	.440 (11.18)	M8x1.0-6g-0.100R	.4375-.067P-.2L-TS-2A	.100 (2.54)	.572 (14.53)	.265 (6.73)
8	.545 (13.84)	M10x1.0-6g-0.100R	.5000-.067P-.2L-TS-2A	.100 (2.54)	.635 (16.13)	.327 (8.31)
9	.612 (15.54)	M12x1.0-6g-0.100R	.5625-.067P-.2L-TS-2A	.100 (2.54)	.702 (17.83)	.406 (10.31)
10	.680 (17.27)	M14x1.0-6g-0.100R	.6250-.067P-.2L-TS-2A	.100 (2.54)	.770 (19.56)	.484 (12.29)
11	.747 (18.97)	M15x1.0-6g-0.100R	.6875-.067P-.2L-TS-2A	.100 (2.54)	.837 (21.26)	.524 (13.31)
12	.803 (20.40)	M17x1.0-6g-0.100R	.7500-.067P-.2L-TS-2A	.100 (2.54)	.893 (22.68)	.603 (15.32)
14	.925 (23.50)	M19x1.0-6g-0.100R	.8750-.067P-.2L-TS-2A	.100 (2.54)	1.015 (25.78)	.681 (17.30)
16	1.050 (26.67)	M22x1.0-6g-0.100R	1.0000-.067P-.2L-TS-2A	.100 (2.54)	1.140 (28.96)	.782 (19.86)
18	1.160 (29.46)	M25x1.0-6g-0.100R	1.1250-.067P-.2L-TS-2A	.100 (2.54)	1.250 (31.75)	.899 (22.83)
20	1.310 (33.27)	M28x1.0-6g-0.100R	1.2500-.067P-.2L-TS-2A	.125 (3.18)	1.400 (35.56)	1.043 (26.49)
22	1.435 (36.45)	M31x1.0-6g-0.100R	1.3750-.067P-.2L-TS-2A	.125 (3.18)	1.525 (38.73)	1.155 (29.34)
24	1.560 (39.62)	M34x1.0-6g-0.100R	1.5000-.067P-.2L-TS-2A	.125 (3.18)	1.650 (41.91)	1.273 (32.33)

**NOTES:**

1. Boot groove for use with 809-463 Thermo-Rex Autoshrink boots
2. Terminate shield with Glenair Band-Master ATS tool 601-108 and Glenair Nanoband
3. High temperature crown ring pin and socket contacts required to meet higher operating temps