ULTRAMINIATURE CIRCULAR

Series 806
Mighty Mouse Mil-Aero Connectors
806-019 Line Receptacle Connectors

Ultraminiature Series 806 connectors save size and weight compared to traditional aerospace-grade circular connectors. These high performance connectors are suitable for unpressurized aircraft areas subject to vibration, moisture, and temperature extremes. 806-019 free-hanging receptacles feature crimp, snap-in contacts. 20 - 28 AWG wire accommodation. 5 A (#22HD contact) or 7 A (#20HD). Contacts are packaged loose with connector.

Features

- Triple-start stub ACME mating thread
- High density #20HD and #22HD arrangements for reduced size and weight
- 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
- Wire sizes:
  #20HD contacts: 20–24 AWG
  #22HD contacts: 22–28 AWG
- Dielectric withstanding voltage
  #20HD layouts:1800 Vac
  #22HD layouts: 1300 Vac
- Current rating
  #20HD contacts 7.5 A
  #22HD contacts 5 A
- 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

How To Order

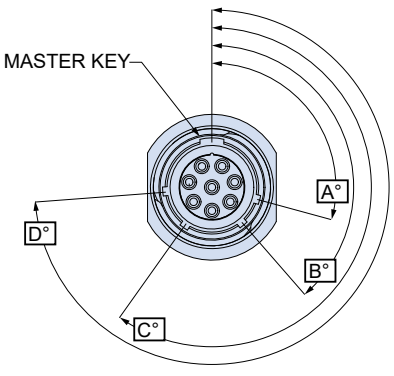
	SAMPLE PART NUMBER →	806-019	-NF	14-20	P	B	A
Product	**806-019** = Line Receptacle						
Shell Material and Finish	**ME** = Aluminum, Electroless Nickel **MT** = Aluminum, Ni/PTFE **ZR** = Aluminum, Black Zinc-Nickel **NF** = Aluminum, Olive Drab Cadmium **Z1** = Stainless Steel, Passivated						
Arrangement Number (Shell Size - Insert Arr.)	See Table 1						
Contact Type	**Connector supplied with contacts** **P** = Pin **S** = Socket **Connector supplied without contacts** **A** = Pin **B** = Socket						
Shell Style	**M** = Metric accessory threads **B** = Nano Band platform						
Polarizing Position (Table 2)	**A B C D E F**						

Table 1
Arrangement Number

No. of Contacts	#20HD	#22HD	Arr.	Shell Size
3	●		8-3	8
4		●	8-4	8
5	●		9-5	9
7		●	8-7	8
8	●		10-8	10
10	●		11-10	11
11		●	9-11	9
15		●	10-15	10
15	●		12-15	12
19		●	11-19	11
20	●		14-20	14
26		●	12-26	12
31	●		16-31	16
39		●	14-39	14
41	●		18-41	18
55	●		20-55	20
60		●	16-60	16
69	●		22-69	22
85		●	18-85	18
92	●		24-92	24
110		●	20-110	20
140		●	22-140	22
186		●	24-186	24

Table 2
Polarizing Positions

Position	A°	B°	C°	D°
A	105	140	215	265
B	102	170	248	305
C	80	150	230	295
D	68	140	205	275
E	64	155	234	304
F	72	120	200	298



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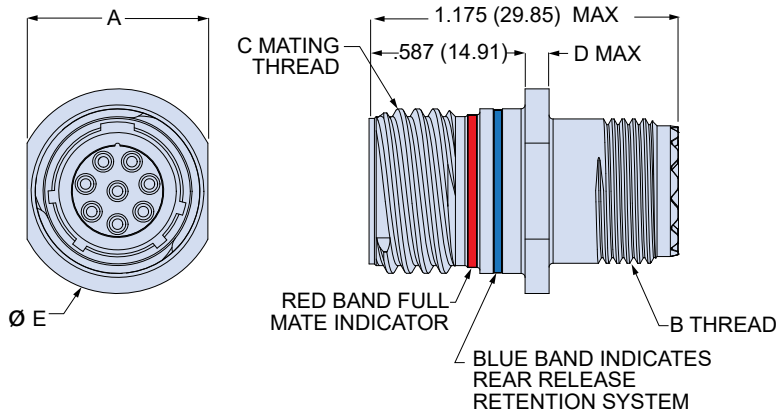
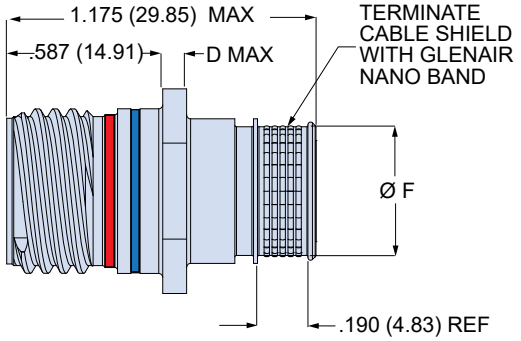


SHELL STYLE M
METRIC ACCESSORY THREAD



SHELL STYLE B
NANO BAND PLATFORM

806-019 Receptacle Dimensions

Shell Size	A In. ±.010	A mm. ±0.25	B Thread	C Mating Thread	D Max In.	D Max mm.	øE In.	øE mm.	øF In.	øF mm.
8	.545	13.84	M10x1.0-6g-0.100R	.5000-.067P-.2L-TS-2A	.100	2.54	.635	16.13	.330	8.38
9	.612	15.54	M12x1.0-6g-0.100R	.5625-.067P-.2L-TS-2A	.100	2.54	.702	17.83	.409	10.39
10	.680	17.27	M14x1.0-6g-0.100R	.6250-.067P-.2L-TS-2A	.100	2.54	.770	19.56	.487	12.37
11	.747	18.97	M15x1.0-6g-0.100R	.6875-.067P-.2L-TS-2A	.100	2.54	.837	21.26	.527	13.39
12	.803	20.40	M17x1.0-6g-0.100R	.7500-.067P-.2L-TS-2A	.100	2.54	.893	22.68	.606	15.39
14	.925	23.50	M19x1.0-6g-0.100R	.8750-.067P-.2L-TS-2A	.100	2.54	1.015	25.78	.684	17.37
16	1.050	26.67	M22x1.0-6g-0.100R	1.0000-.067P-.2L-TS-2A	.100	2.54	1.140	28.96	.785	19.94
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	1.046	26.57
22	1.435	36.45	M31x1.0-6g-0.100R	1.3750-.067P-.2L-TS-2A	.125	3.18	1.525	38.74	1.158	29.41
24	1.560	39.62	M34x1.0-6g-0.100R	1.5000-.067P-.2L-TS-2A	.125	3.18	1.650	41.91	1.276	32.41