

Series 806

Mighty Mouse Mil-Aero Connectors

806-020 Jam Nut Receptacle Connectors



Ultriminiature 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. 806-020 rear panel mount 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 and jam nut: aluminum or stainless steel
- Contacts: copper alloy, gold plating
- Wire grommet: fluorosilicone
- Dielectric inserts: high grade rigid dielectric
- Panel O-ring: fluorosilicone
- Contact retention clips: copper alloy
- Retainer rings: stainless steel, passivated

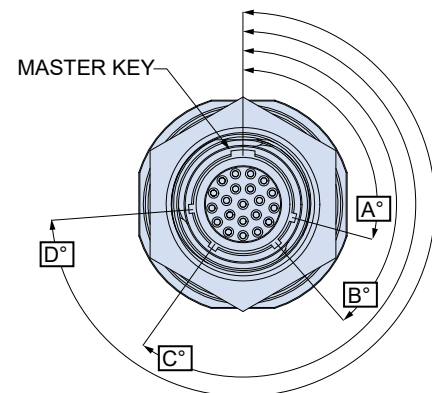
How To Order							
SAMPLE PART NUMBER →		806-020	-ME	10-15	S	M	A
Product	806-020 = Jam Nut Receptacle						
Shell Material and Finish	ME = Aluminum, Electroless Nickel MT = Aluminum, Ni/PTFE ZR = Aluminum, Black Zinc-Nickel NF = Aluminum, Olive Drab Cadmium Z1 = Stainless Steel, Passivated						
Arrangement 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						

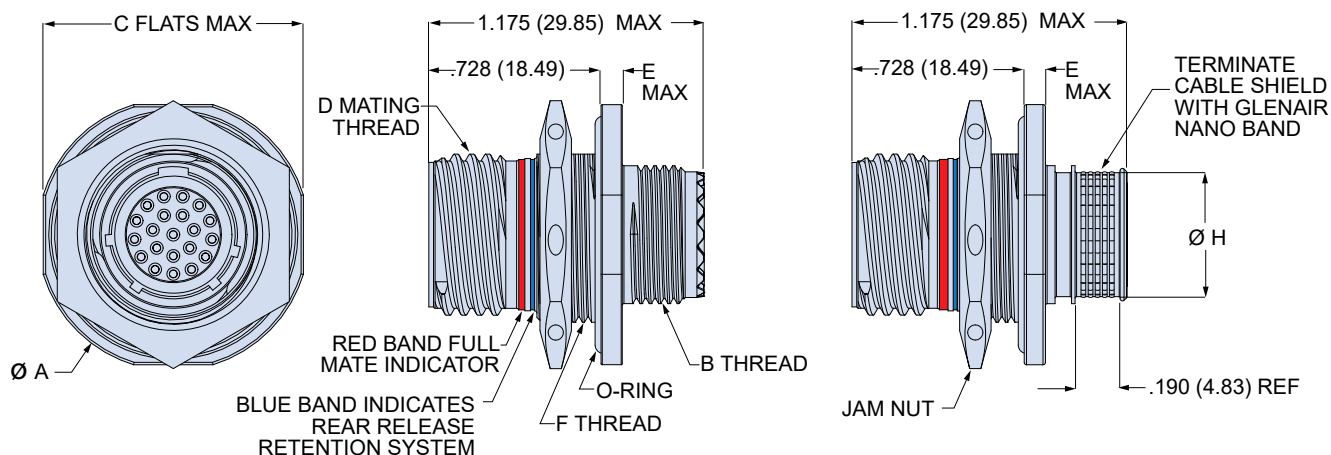
Table 1
Arrangement Number

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





SHELL STYLE M
METRIC ACCESSORY THREAD

SHELL STYLE B
NANO BAND PLATFORM

806-020 Receptacle Dimensions											
Shell Size	ØA Max		B Thread	C Max		D Mating Thread	E Max		F Thread	ØH	
	In.	mm.		In.	mm.		In.	mm.		In.	mm.
8	.980	24.69	M10x1.0-6g-0.100R	.920	23.37	.5000-.067P-2L-TS-2A	.100	2.54	M15x1.0-6g-0.100R	.330	8.38
9	1.040	26.42	M12x1.0-6g-0.100R	.980	24.89	.5625-.067P-2L-TS-2A	.100	2.54	M16x1.0-6g-0.100R	.409	10.39
10	1.110	28.19	M14x1.0-6g-0.100R	1.050	26.67	.6250-.067P-2L-TS-2A	.100	2.54	M18x1.0-6g-0.100R	.487	12.37
11	1.160	29.46	M15x1.0-6g-0.100R	1.110	28.19	.6875-.067P-2L-TS-2A	.100	2.54	M19x1.0-6g-0.100R	.527	13.39
12	1.230	31.24	M17x1.0-6g-0.100R	1.170	29.72	.7500-.067P-2L-TS-2A	.100	2.54	M21x1.0-6g-0.100R	.606	15.39
14	1.360	34.54	M19x1.0-6g-0.100R	1.320	33.53	.8750-.067P-2L-TS-2A	.100	2.54	M24x1.0-6g-0.100R	.684	17.37
16	1.515	38.48	M22x1.0-6g-0.100R	1.444	36.68	1.0000-.067P-2L-TS-2A	.100	2.54	M27x1.0-6g-0.100R	.785	19.94
18	1.610	40.89	M25x1.0-6g-0.100R	1.570	39.88	1.1250-.067P-2L-TS-2A	.100	2.54	M30x1.0-6g-0.100R	.899	22.83
20	1.850	46.99	M28x1.0-6g-0.100R	1.760	44.70	1.2500-.067P-2L-TS-2A	.128	3.25	M34x1.0-6g-0.100R	1.046	26.57
22	2.010	51.05	M31x1.0-6g-0.100R	1.913	48.59	1.3750-.067P-2L-TS-2A	.128	3.25	M37x1.0-6g-0.100R	1.158	29.41
24	2.195	55.75	M34x1.0-6g-0.100R	2.070	52.58	1.5000-.067P-2L-TS-2A	.128	3.25	M41x1.0-6g-0.100R	1.276	32.41

806-020 Jam Nut D-Hole Dimensions				
Shell Size	ØA		B	
	In.	mm.	In.	mm.
8	.601	15.27	.256	6.50
9	.640	16.26	.287	7.29
10	.719	18.26	.318	8.08
11	.759	19.28	.350	8.89
12	.837	21.26	.381	9.67
14	.955	24.26	.443	11.25
16	1.073	27.25	.505	12.83
18	1.192	30.28	.568	14.43
20	1.349	34.26	.630	16.00
22	1.467	37.26	.693	17.60
24	1.624	41.25	.755	19.18

