

SERIES 802, 3500 PSI SUBMERSIBLE AquaMouse Connectors and Cables



Hermetic, 1000 PSI Open Face Rated Jam-Nut Mount Bulkhead Feedthrough



NOTES

1. Mates with 802 series plugs
2. Electrical safety limits and maximum usage pressure to be determined by the customer
3. I.R.: 5,000 megohms test(@ 500 VDC minimum)
4. Hermeticity: 5×10^{-8} ccHe/sec at 1 atm

TEST REQUIREMENTS

- DWV:
 - » #23 contacts: 750 VAC pin-topin and pin-to-shell without breakdown
 - » #20 contacts 1000 VAC pin-to-pin and pin-to-shell without breakdown
 - » #16, #12, #8 contacts: 1800 VAC pin-to-pin and pin-to-shell without breakdown
- Insulation resistance: 5,000 megohms minimum at 500 VDC
- Factory pressure test: 3,500 PSI open-face

Series 802 Hermetic Jam-Nut Mount, Bulkhead Feedthrough provide a separable hermetic connection on both sides of a mounting panel. 100% tested to meet 1×10^{-7} ccHe/sec @ 1 atm helium leak rate. Gold plated iron alloy contacts and compression glass dielectric material. The passivated, stainless steel connector shell offers excellent corrosion protection. Available with pin-to-pin contacts. Power applied to a given contact on one end will result in power to contact directly opposite, regardless of contact identification letter. Shell sizes 5 thru 21 have a maximum open face rated test pressure of 1,000 PSI in one direction.

How To Order								
Sample Part Number	802-064	Z1	15-85	P	P	A	04	V
Series	802-064 = Bulkhead Feed-Thru Hermetic							
Shell Material and Finish	Z1 = 316 Stainless Steel / Passivated							
Shell Size - Insert Arrangement	See Contact Arrangements pages M-8 thru M-32							
Contact Type Jam-Nut Side	P = Pin							
Contact Type Opposite Side	P = Pin							
Polarization (See Table I)	A = Normal D = Pos. D	B = Pos. B E = Pos. E						
Panel Thickness (See Table II)	-01 = .500/1.000 -04 = 2.000/2.500 -07 = 3.500/4.000	-02 = 1.000/1.500 -05 = 2.500/3.000		-03 = 1.500/2.000 -06 = 3.000/3.500				
O-ring Material	V = Viton N = Nitrile NA = No external O-rings supplied (suggested material: Nitrile)							

Table II: Panel Thickness

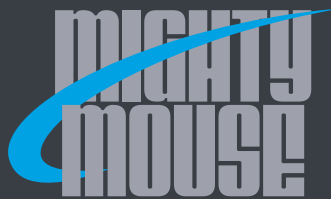
Panel Thickness Code	H Panel Thickness	J Maximum Length
-01	.500/1.000	2.450
-02	1.000/1.500	2.950
-03	1.500/2.000	3.450
-04	2.000/2.500	3.950
-05	2.500/3.000	4.450
-06	3.000/3.500	4.950
-07	3.500/4.000	5.450

DWV Rating

Contact Sizes	Test Voltage
23	750 VAC
20 HD	1000 VAC
16, 12, 8	1800 VAC

Table I: Keyway Positions

Key Position	Key Rotation	
	A°	B°
A Normal	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

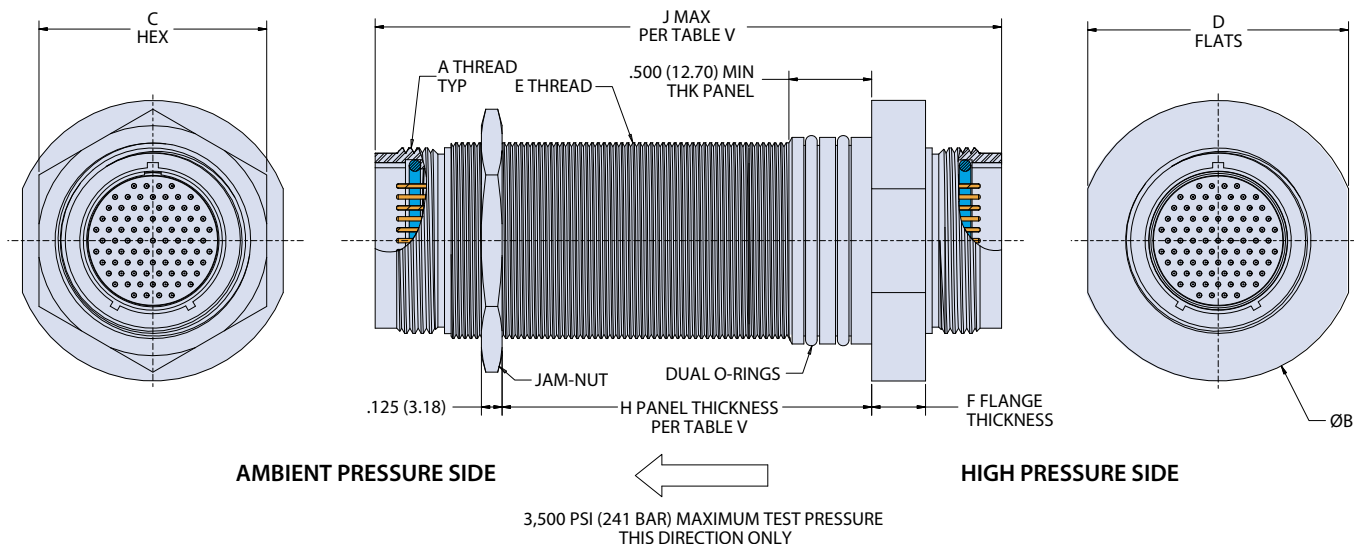


SERIES 802, 3500 PSI SUBMERSIBLE AquaMouse Connectors and Cables



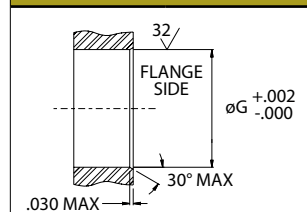
Hermetic, 1000 PSI Open Face Rated Jam-Nut Mount Bulkhead Feedthrough

JAM-NUT MOUNT BULKHEAD FEED-THRU



Dimensions								
Shell Size	A Thread	Ø B Max	C Hex	D Flat	E Thread	Ø G	Ext. O-Ring	F
5	.4375-28 UNEF	.950 (24.13)	.688 (17.48)	.880 (22.35) .870 (22.10)	.5000-32 UN-2A	.562 (14.27)	2-013	.260 (6.60)
6	.5625-20 UN	1.150 (29.21)	.812 (20.62)	1.010 (25.65) 1.000 (25.40)	.6250-20 UN-2A	.687 (17.45)	2-015	.260 (6.60)
7	.6250-20 UN	1.225 (31.12)	.875 (22.23)	1.080 (27.43) 1.070 (27.18)	.6875-28 UN-2A	.750 (19.05)	2-016	.260 (6.60)
8	.6875-20 UN	1.275 (32.39)	.938 (23.83)	1.140 (28.96) 1.130 (28.70)	.7500-28 UN-2A	.812 (20.62)	2-017	.260 (6.60)
9	.7500-20 UNEF	1.325 (33.65)	1.000 (25.40)	1.205 (30.61) 1.195 (30.35)	.8125-28 UN-2A	.875 (22.23)	2-018	.260 (6.60)
10	.8125-20 UNEF	1.380 (35.05)	1.000 (25.40)	1.270 (32.26) 1.260 (32.00)	.8750-28 UN-2A	.937 (23.80)	2-019	.260 (6.60)
12	.8750-20 UNEF	1.462 (37.13)	1.125 (28.58)	1.330 (33.78) 1.320 (33.53)	.9375-28 UN-2A	1.000 (25.40)	2-020	.260 (6.60)
14	1.0625-20 UN	1.650 (41.91)	1.312 (33.32)	1.520 (38.61) 1.510 (38.35)	1.1250-28 UN-2A	1.187 (30.15)	2-023	.325 (8.25)
15	1.1250-20 UN	1.700 (43.18)	1.375 (34.92)	1.580 (40.13) 1.570 (39.88)	1.1875-28 UN-2A	1.250 (31.75)	2-024	.325 (8.25)
19	1.3125-20 UN	2.000 (50.80)	1.500 (38.10)	1.855 (47.12) 1.845 (46.86)	1.3750-20 UN-2A	1.430 (36.32)	2-027	.325 (8.25)
21	1.4375-20 UN	2.165 (54.99)	1.700 (43.18)	2.015 (51.18) 2.005 (50.93)	1.5000-28 UN-2A	1.625 (41.28)	2-029	.325 (8.25)

Jam-Nut Mount Bulkhead Feed-Thru, Panel Cutout Dimensions



Shell Size	Ø G
5	.562 (14.27)
6	.687 (17.45)
7	.750 (19.05)
8	.812 (20.62)
9	.875 (22.23)
10	.937 (23.80)
12	1.000 (25.40)
14	1.187 (30.15)
15	1.250 (31.75)
19	1.430 (36.32)
21	1.625 (41.28)

Material/Finish

- Shell, jam-nut: SST / passivated
- Pin contacts: nickel-iron alloy/gold plate
- Insulator high pressure side: vitreous glass
- Insulator low pressure side: rigid dielectric
- O-rings: Viton (FKM) standard