

SERIES 802, 3500 PSI SUBMERSIBLE AquaMouse Connectors and Cables



Hermetic Receptacle with Rear Accessory Threads and Solder Cup Contacts



Series 802 Hermetic Receptacles feature gold plated nickle-iron alloy contacts and compression glass dielectric material. Stainless steel connector shell provides excellent corrosion protection. Viton® O-rings offer improved resistance to high temperature and harsh chemicals. Hermetically Sealed and 100% tested to meet 1 X 10⁻⁷ ccHe/sec @ 1 atm helium leak rate. Open face (unmated) pressure rating is 1000 PSI. When mated, Series 802 connectors withstand 3500 PSI hydrostatic pressure.

NOTES

1. Mates to 802 series plugs
2. Performance capabilities:
 - Hydrostatic pressure rating: 1000 PSI open face, 3500 PSI fully mated and properly molded
 - Insulation resistance (test): 5,000 meg-ohms @ 500 VDC minimum
 - Dielectric withstanding voltage (test): See Table III
 - Hermeticity: 1 x 10⁻⁷ ccHe/sec leak rate at 1 ATM
3. Parker O-ring compound V709-90 or equivalent
4. For insert arrangements with #8 contacts, add .364 (9.25) to overall length
5. See page F-8 for panel cut-out dimensions

How To Order						
Sample Part Number	802-062	-07	Z1	6-7	P	A
Series	802-062 = Hermetic Receptacle					
Shell Style (See Table I)	-00 = Jam-Nut, Front Panel Mount -02 = Box Mount -07 = Jam-Nut, Rear Panel Mount					
Shell Material and Finish	Z1 = Stainless Steel / Passivated ZL = Stainless Steel / Nickel Plated					
Shell Size - Insert Arrangement	See Contact Arrangements pages M-8 thru M-32					
Contact Type	P = Pin Face S = Socket Face					
Polarization (See Table II)	A = Normal B = Pos. B C = Pos. C D = Pos. D E = Pos. E F = Pos. F					

Table I: Shell Style

-00 Jam-Nut for Front Panel Mounting	-02 Square Flange	-07 Jam-Nut for Rear Panel Mounting

Table II: Key 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°

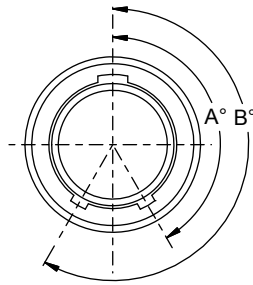
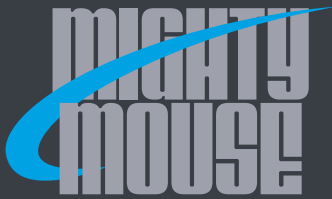


Table III: DWV Rating

Contact Sizes	Test Voltage
23	750 VAC
20HD	1000 VAC
16, 12, 8	1800 VAC
Combo	Refer to Section B

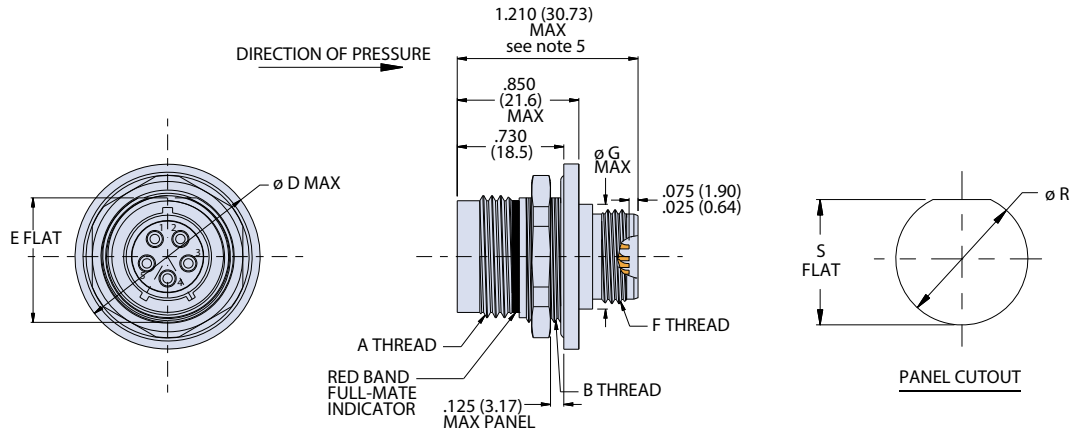


SERIES 802, 3500 PSI SUBMERSIBLE AquaMouse Connectors and Cables



Hermetic Receptacle with Rear Accessory Threads and Solder Cup Contacts

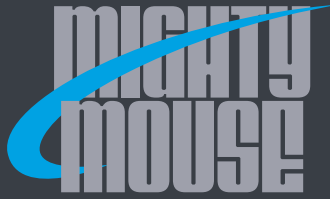
JAM-NUT, REAR PANEL MOUNT RECEPTACLE - SHELL STYLE 07



Dimensions									
Shell Size	A Thread	B Thread	Ø D	E Flat	F Thread UNEF-2A	N Flat	P Hex	Piston O-Ring	Flange O-Ring Style 07 See Note 4
5	.4375-28 UNEF	.5000-32 UN-2A	.885 (22.48)	.469 (11.91)/ .463 (11.76)	.250-32	0.281	0.500	2-009	2-015
6	.5625-20 UN	.6250-28 UN-2A	1.010 (25.65)	.594 (15.09)/ .588 (14.94)	.312-32	0.406	0.625	5-052	2-017
7	.6250-20 UN	.6875-28 UN-2A	1.072 (27.23)	.656 (16.66)/ .650 (16.51)	.438-28	0.469	0.688	2-012	2-019
8	.6875-20 UN	.7500-28 UN-2A	1.135 (28.83)	.729 (18.52)/ .725 (18.42)	.500-28	0.531	0.750	5-212	2-019
9	.7500-20 UNEF	.8125-28 UN-2A	1.195 (30.35)	.781 (19.84)/ .775 (19.68)	.562-24	0.594	0.812	2-014	2-020
10	.8125-20 UNEF	.8750-28 UN-2A	1.260 (32.00)	.830 (21.08)/ .824 (20.93)	.625-24	0.656	0.875	2-015	2-021
12	.8750-20 UNEF	.9375-28 UN-2A	1.322 (33.58)	.893 (22.68)/ .887 (22.53)	.688-24	0.719	0.938	2-016	2-022
14	1.0625-20 UN	1.1250-28 UN-2A	1.510 (38.35)	1.080 (27.43)/ 1.074 (27.28)	.875-20	0.893	1.125	2-019	2-025
15	1.1250-20 UN	1.1875-28 UN-2A	1.572 (39.93)	1.143 (29.03)/ 1.137 (28.88)	.938-20	0.955	1.188	2-020	2-026
19	1.3125-20 UN	1.3750-20 UN	1.790 (45.47)	1.345 (34.16)/ 1.341 (34.06)	1.063-18	1.235	1.438	2-022	2-029
21	1.4375-20 UN	1.5000-28 UN	1.940 (49.28)	1.467 (37.26)/ 1.463 (37.16)	1.250-18	1.257	1.500	2-023	2-030

Material/Finish

- Shell, jam-nut: SST / see part number development
- Insulator, hermetic: full glass
- Insulator, socket: high-grade rigid dielectric
- Seals, grommet: fluorosilicone
- Contact, hermetic: alloy 52/gold plate
- Contact, socket: copper alloy/gold plate
- O-rings: fluorocarbon (FKM)/none

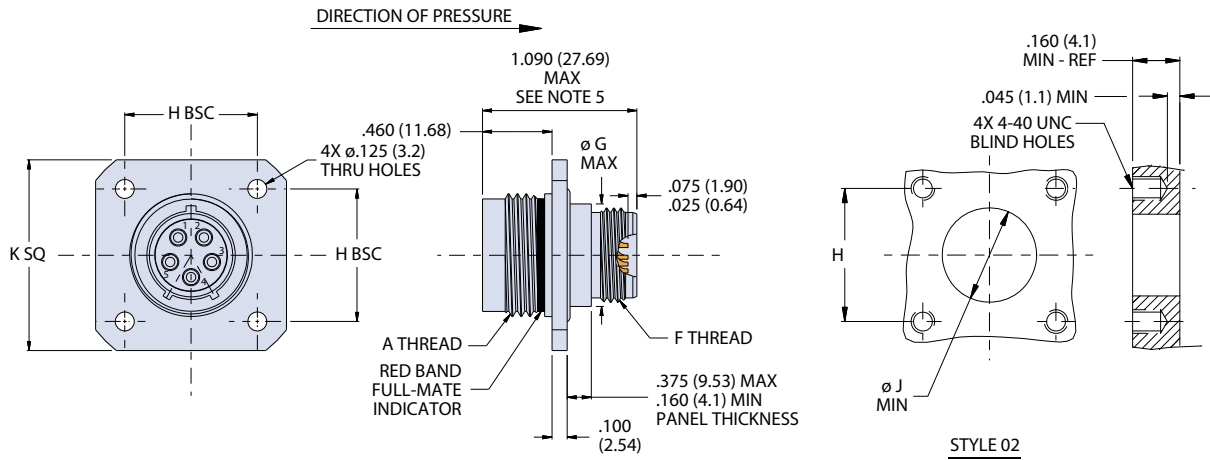


SERIES 802, 3500 PSI SUBMERSIBLE AquaMouse Connectors and Cables



Hermetic Receptacle with Rear Accessory Threads and Solder Cup Contacts

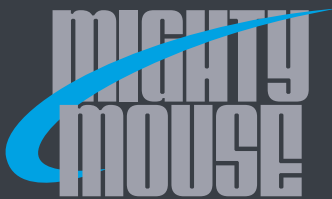
BOX MOUNT, RECEPTACLE - SHELL STYLE 02



Dimensions							
Shell Size	A Thread	F Thread UNEF-2A	ϕG	H Dim	K Dim	Piston O-Ring	O-Ring Style 02 See Note 4
5	.4375-28 UNEF	.250-32	0.320	0.500	0.885	2-009	2-012
6	.5625-20 UN	.312-32	0.380	0.625	1.010	5-052	2-014
7	.6250-20 UN	.438-28	0.510	0.688	1.072	2-012	2-015
8	.6875-20 UN	.500-28	0.560	0.750	1.135	5-212	2-016
9	.7500-20 UNEF	.562-24	0.635	0.812	1.195	2-014	2-017
10	.8125-20 UNEF	.625-24	0.695	0.875	1.260	2-015	2-018
12	.8750-20 UNEF	.688-24	0.755	0.938	1.323	2-016	2-019
14	1.0625-20 UN	.875-20	0.945	1.125	1.510	2-019	2-022
15	1.1250-20 UN	.938-20	1.005	1.188	1.573	2-020	2-023
19	1.3125-20 UN	1.063-18	1.185	1.250	1.625	2-022	2-027
21	1.4375-20 UN	1.250-18	1.305	1.375	1.750	2-023	2-028

Material/Finish

- Shell: SST / see part number development
- Insulator, hermetic: full glass
- Insulator, socket: high-grade rigid dielectric
- Seals, grommet: fluorosilicone
- Contact, hermetic: alloy 52/gold plate
- Contact, socket: copper alloy/gold plate
- O-rings: fluorocarbon (FKM)/none

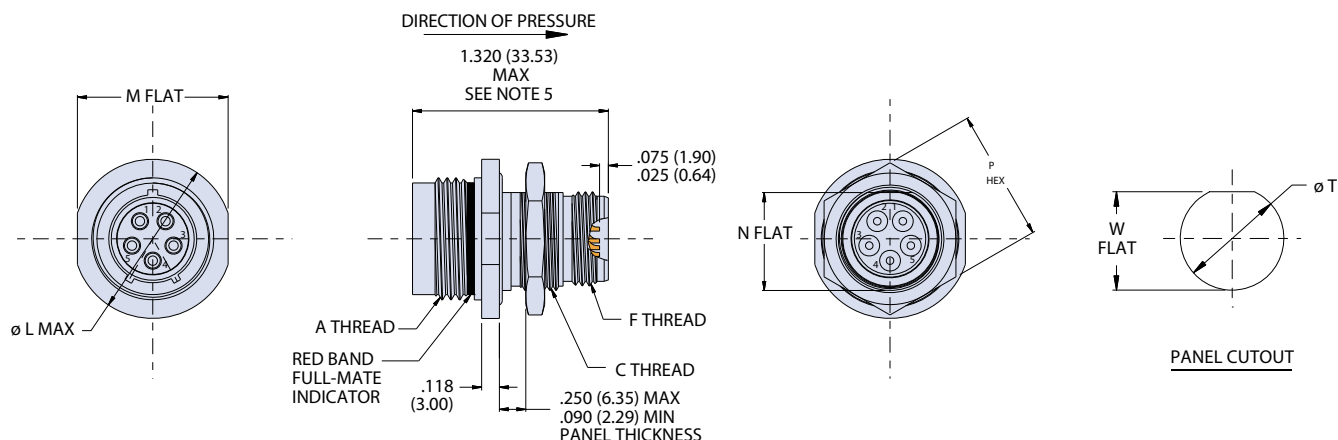


SERIES 802, 3500 PSI SUBMERSIBLE AquaMouse Connectors and Cables



Hermetic Receptacle with Rear Accessory Threads and Solder Cup Contacts

JAM-NUT, FRONT PANEL MOUNT RECEPTACLE - SHELL STYLE 00



Dimensions									
Shell Size	A Thread	C Thread	F Thread UNEF-2A	Ø L	M Flat	N Flat	P Hex	Piston O-Ring	O-Ring Style 00 See Note 4
5	.4375-28 UNEF	.312-28 UN	.250-32	0.72	0.625	0.281	0.500	2-009	2-012
6	.5625-20 UN	.438-28 UN	.312-32	0.78	0.750	0.406	0.625	5-052	2-014
7	.6250-20 UN	.500-32 UN	.438-28	0.91	0.812	0.469	0.688	2-012	2-015
8	.6875-20 UN	.562-28 UN	.500-28	0.96	0.875	0.531	0.750	5-212	2-016
9	.7500-20 UNEF	.625-20 UN	.562-24	1.03	0.937	0.594	0.812	2-014	2-017
10	.8125-20 UNEF	.687-28 UN	.625-24	1.09	1.000	0.656	0.875	2-015	2-018
12	.8750-20 UNEF	.750-28 UN	.688-24	1.16	1.062	0.719	0.938	2-016	2-019
14	1.0625-20 UN	.938-28 UN	.875-20	1.34	1.250	0.893	1.125	2-019	2-022
15	1.1250-20 UN	1.000-28 UN	.938-20	1.41	1.312	0.955	1.188	2-020	2-023
19	1.3125-20 UN	1.250-28 UN	1.063-18	1.63	1.530	1.235	1.438	2-022	2-027
21	1.4375-20 UN	1.312-28 UN	1.250-18	1.70	1.562	1.257	1.500	2-023	2-028

Material/Finish

- Shell, jam-nut: SST / see part number development
- Insulator, hermetic: full glass
- Insulator, socket: high-grade rigid dielectric
- Seals, grommet: fluorosilicone
- Contact, hermetic: alloy 52/gold plate
- Contact, socket: copper alloy/gold plate
- O-rings: fluorocarbon (FKM)/none