

# SERIES 802, 3500 PSI SUBMERSIBLE AquaMouse Connectors and Cables



## Hermetic Receptacle with Crimp Removable Termination and Integral Banding Porch



**Series 802 Hermetic Receptacles** feature integral banding porch. Gold plated nickle-iron alloy contacts and compression glass dielectric material. Stainless steel connector shell with integral banding porch provides excellent corrosion protection and is suitable for e-beam welding. Viton® O-rings offer improved resistance to high temperature and harsh chemicals.

**Hermetically Sealed** 100% tested to meet  $1 \times 10^{-7}$  ccHe/sec @ 1 atm. Open face (unmated) pressure rating is 1000 PSI. When mated, Series 802 connectors withstand 3500 PSI hydrostatic pressure.

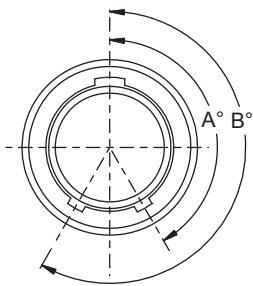
How To Order						
<b>Sample Part Number</b>	<b>802-056</b>	<b>-07</b>	<b>Z1</b>	<b>6-7</b>	<b>P</b>	<b>A</b>
<b>Series</b>	<b>802-056</b> = Hermetic Receptacle					
<b>Shell Style</b> (See Table I)	<b>-00</b> = Jam-Nut, Front Panel Mount <b>-02</b> = Box Mount <b>-07</b> = Jam-Nut, Rear Panel Mount					
<b>Shell Material and Finish</b>	<b>Z1</b> = Stainless Steel / Passivated <b>ZL</b> = Stainless Steel / Nickel Plated					
<b>Shell Size - Insert Arrangement</b>	See Contact Arrangements page F-3					
<b>Contact Type</b>	<b>P</b> = Pin, Face <b>S</b> = Socket, Face					
<b>Polarization (See Table II)</b>	<b>A</b> = Normal <b>B</b> = Pos. B <b>C</b> = Pos. C <b>D</b> = Pos. D <b>E</b> = Pos. E <b>F</b> = Pos. F					

**Table I: Shell Style**

<b>-00</b> Jam-Nut for Front Panel Mounting	<b>-02</b> Square Flange	<b>-07</b> Jam-Nut for Rear Panel Mounting

**Table II: Key Positions**

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

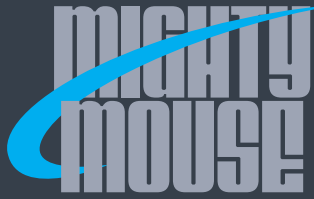


### NOTES

1. Socket contacts for termination are shipped loose with parts
2. Mates to 802 series plugs
3. Performance capabilities:
  - Hydrostatic pressure rating: 1000 PSI open face, 3500 PSI fully mated and properly molded
  - Insulation resistance (test): 5,000 megohms @ 500 VDC minimum
  - Dielectric withstanding voltage (test): See Table III
  - Hermeticity:  $1 \times 10^{-7}$  ccHe/sec leak rate at 1 ATM
4. See page F-8 for panel cut-out dimensions

**Table III: DWV Rating by Contact**

23	750 VAC
20 HD	1000 VAC
16, 12, 8	1800 VAC

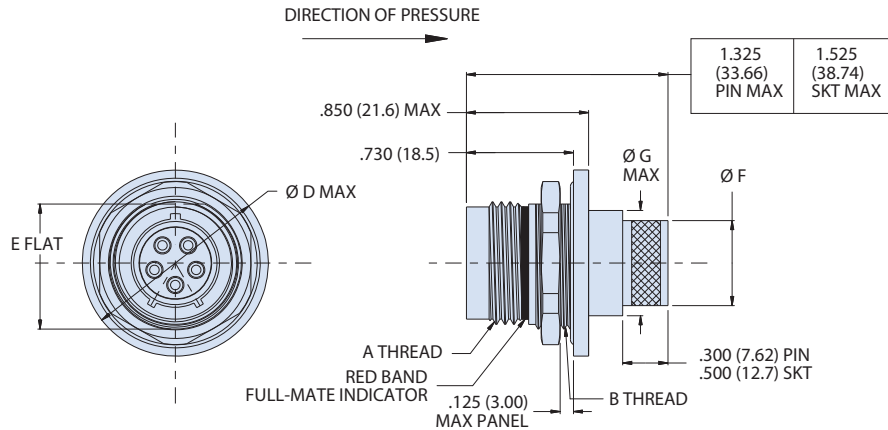


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## Hermetic Receptacle with Crimp Removable Termination and Integral Banding Porch

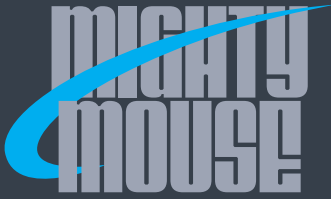
### JAM-NUT, REAR PANEL MOUNT RECEPTACLE - SHELL STYLE 07



Dimensions								
Shell Size	A Thread	B Thread	Ø D	E Flat	Ø F	Ø G	Piston O-ring	Flange O-ring Style 07
5	.4375-28 UNEF	.5000-32 UN	0.885 (22.50)	.469/.463 (11.9/11.8)	0.232 (5.90)	0.320 (8.10)	2-009	2-015
6	.5625-20 UN	.6250-20 UN	1.010 (25.70)	.594/.588 (15.1/14.9)	0.312 (7.90)	0.380 (9.60)	5-052	2-017
7	.6250-20 UN	.6875-28 UN	1.072 (27.20)	.656/.650 (16.7/16.5)	0.375 (9.50)	0.510 (12.90)	2-012	2-019
8	.6875-20 UN	.7500-28 UN	1.135 (28.80)	.729/.725 (18.5/18.4)	0.438 (11.10)	0.560 (14.20)	5-212	2-019
9	.7500-20 UNEF	.8125-28 UN	1.195 (30.40)	.781/.775 (19.8/19.7)	0.500 (12.70)	0.635 (16.10)	2-014	2-020
10	.8125-20 UNEF	.8750-28 UN	1.260 (32.00)	.830/.824 (21.1/20.9)	0.562 (14.30)	0.695 (17.70)	2-015	2-021
12	.8750-20 UNEF	.9375-28 UN	1.322 (33.60)	.893/.887 (22.7/22.5)	0.656 (16.70)	0.755 (19.20)	2-016	2-022
14	1.0625-20 UN	1.1250-28 UN	1.510 (38.40)	1.080/1.074 (27.4/27.3)	0.812 (20.60)	0.945 (24.00)	2-019	2-025
15	1.1250-20 UN	1.1875-28 UN	1.572 (39.90)	1.143/1.137 (29.0/28.9)	0.885 (22.40)	1.005 (25.50)	2-020	2-026
19	1.3125-20 UN	1.3750-20 UN	1.790 (45.47)	1.345/1.341 (34.16/34.06)	1.003 (25.48)	1.192 (30.28)	2-022	2-029
21	1.4375-20 UN	1.5000-28 UN	1.940 (49.30)	1.467/1.463 (37.3/37.2)	1.188 (30.20)	1.305 (33.10)	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: Viton/ 75-90 shore

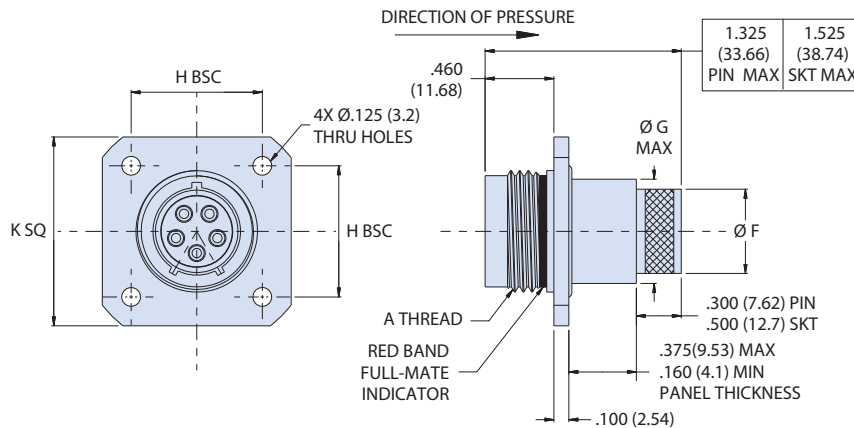


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## Hermetic Receptacle with Crimp Removable Termination and Integral Banding Porch

### BOX MOUNT, RECEPTACLE - SHELL STYLE 02

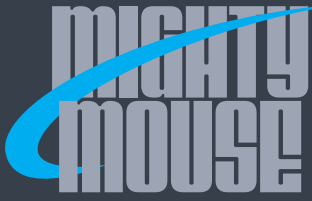


Dimensions							
Shell Size	A Thread	Ø F	Ø G	H Dim	K Dim	Piston O-ring	Flange O-ring Stlye 02
5	.4375-28 UNEF	0.232 (5.90)	0.320 (8.10)	0.500 (12.70)	0.885 (22.50)	2-009	2-012
6	.5625-20 UN	0.312 (7.90)	0.380 (9.60)	0.625 (15.90)	1.010 (25.70)	5-052	2-014
7	.6250-20 UN	0.375 (9.50)	0.510 (12.90)	0.688 (17.50)	1.072 (27.20)	2-012	2-015
8	.6875-20 UN	0.438 (11.10)	0.560 (14.20)	0.750 (19.10)	1.135 (28.80)	5-212	2-016
9	.7500-20 UNEF	0.500 (12.70)	0.635 (16.10)	0.812 (20.60)	1.195 (30.40)	2-014	2-017
10	.8125-20 UNEF	0.562 (14.30)	0.695 (17.70)	0.875 (22.20)	1.260 (32.00)	2-015	2-018
12	.8750-20 UNEF	0.656 (16.70)	0.755 (19.20)	0.938 (23.80)	1.323 (33.60)	2-016	2-019
14	1.0625-20 UN	0.812 (20.60)	0.945 (24.00)	1.125 (28.60)	1.510 (38.40)	2-019	2-022
15	1.1250-20 UN	0.885 (22.40)	1.005 (25.50)	1.188 (30.20)	1.573 (40.00)	2-020	2-023
19	1.3125-20 UN	1.003 (25.48)	1.192 (30.28)	1.250 (31.75)	1.625 (41.28)	2-022	2-027
21	1.4375-20 UN	1.188 (30.20)	1.305 (33.10)	1.375 (34.90)	1.750 (44.50)	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: Viton/ 75-90 shore

SERIES 802 AQUAMOUSE

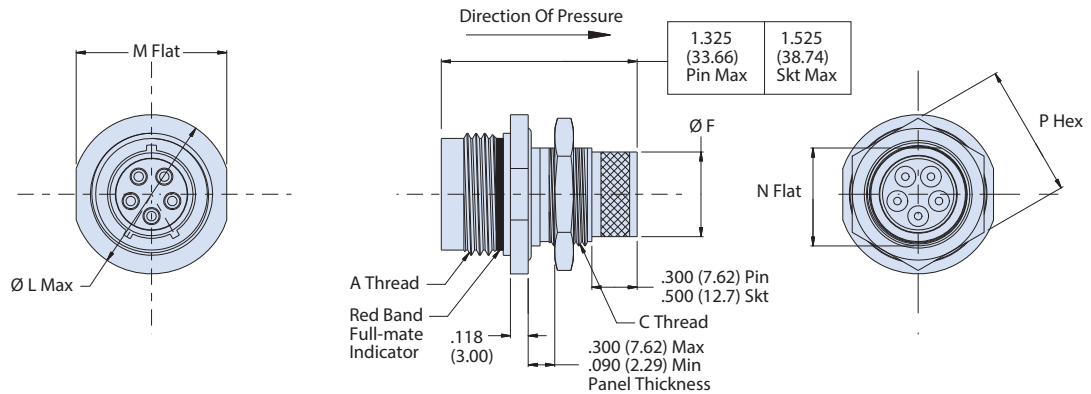


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## Hermetic Receptacle with Crimp Removable Termination and Integral Banding Porch

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



Dimensions									
Shell Size	A Thread	C Thread	Ø F	Ø L	M Flat	N Flat	P Hex	Piston O-ring	Flange O-ring Style 00
5	.4375-28 UNEF	.312-28 UN	0.232 (5.90)	0.72 (18.30)	0.625 (15.90)	0.281 (7.10)	0.500 (12.70)	2-009	2-012
6	.5625-20 UN	.438-28 UN	0.312 (7.90)	0.78 (19.80)	0.750 (19.10)	0.406 (10.30)	0.625 (15.90)	5-052	2-014
7	.6250-20 UN	.500-32 UN	0.375 (9.50)	0.91 (23.10)	0.812 (20.60)	0.469 (11.90)	0.688 (17.50)	2-012	2-015
8	.6875-20 UN	.562-28 UN	0.438 (11.10)	0.96 (24.40)	0.875 (22.20)	0.531 (13.50)	0.750 (19.10)	5-212	2-016
9	.7500-20 UNEF	.625-20 UN	0.500 (12.70)	1.03 (26.20)	0.937 (23.80)	0.594 (15.10)	0.812 (20.60)	2-014	2-017
10	.8125-20 UNEF	.687-28 UN	0.562 (14.30)	1.09 (27.70)	1.000 (25.40)	0.656 (16.70)	0.875 (22.20)	2-015	2-018
12	.8750-20 UNEF	.750-28 UN	0.656 (16.70)	1.16 (29.50)	1.062 (27.00)	0.719 (18.30)	0.938 (23.80)	2-016	2-019
14	1.0625-20 UN	.938-28 UN	0.812 (20.60)	1.34 (34.00)	1.250 (31.80)	0.893 (22.70)	1.125 (28.60)	2-019	2-022
15	1.1250-20 UN	1.000-28 UN	0.885 (22.40)	1.41 (35.80)	1.312 (33.30)	0.955 (24.30)	1.188 (30.20)	2-020	2-023
19	1.3125-20 UN	1.250-28 UN	1.003 (25.48)	1.63 (41.40)	1.530 (38.86)	1.235 (31.37)	1.438 (36.53)	2-022	2-027
21	1.4375-20 UN	1.312-28 UN	1.188 (30.20)	1.70 (43.20)	1.562 (39.70)	1.257 (31.90)	1.500 (38.10)	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: Viton/ 75-90 shore