



Series 802 AquaMouse™ 3500 PSI Submersible Receptacle with PC Tails or Solder Cups

802-012 and 802-030 Ordering Information



Environmental, PCB Receptacle 802-012 connectors feature low profile shells for minimum protrusion inside enclosures and integral board standoffs. Contacts are non-removable. Specify 802-012 connectors for applications where open face water immersion is not a requirement.

Water Tight PCB Receptacle 802-030 connectors are identical to 802-012 but are specially sealed ("MOD-518") and 100% tested to maintain a helium leak rate of less than 1×10^{-4} cc/second at one atmosphere pressure differential. Connectors meet MIL-STD-810 Method 512G immersion requirements in unmated/open face condition.

How To Order

Sample Part Number	802-012	-00	Z1	9-200	P	A
Series	802-012 = Receptacle for Solder Cup or PCB Termination, with Standard Epoxy Potting 802-030 = Receptacle for Solder Cup or PCB Termination, with Special "MOD-518" Sealing for Open Face (Unmated) Water Immersion Requirements. 100% Leak Tested.					
Shell Style (See Table I)	-00 = Jam-Nut, Front Panel Mount -02 = Square Flange, Front Panel Mount -07 = Jam-Nut, Rear Panel Mount					
Shell Material and Finish	Z1 = Stainless Steel / Passivated RoHS Compliant ZM = Stainless Steel/Electroless Nickel Plated AB = Marine Bronze/Unplated					
Shell Size - Insert Arrangement	See Contact Arrangements page E-2 See Section B for PCB Footprints					
Contact Type	P = Pin, PC Tail E = Pin, Solder Cup S = Socket, PC Tail F = Socket, Solder Cup					
Polarization (See Table II)	A = Normal B = Pos. B C = Pos. C D = Pos. D E = Pos. E F = Pos. F					

NOTES

- Contacts are PCB and solder type
- Mates to 802 series receptacle
- Performance capabilities:
 - Current rating: 5 amp max
 - Contact voltage drop: 70 millivolts max at 5 amps, 25°C
 - Hydrostatic pressure rating: 3500 PSI fully mated and properly molded
 - Insulation resistance: 5,000 megohms minimum
 - DWV: 500 VAC
- Electrical safety limits to be set by user peak voltages, switching surges, transients etc. should be used to determine safe application

Table I: Shell Style

-00 Jam-Nut, Front Panel Mount	-02 Square Flange, Front Panel Mount	-07 Jam-Nut, Rear Panel Mount

Table II: Shell Keyway Positions

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

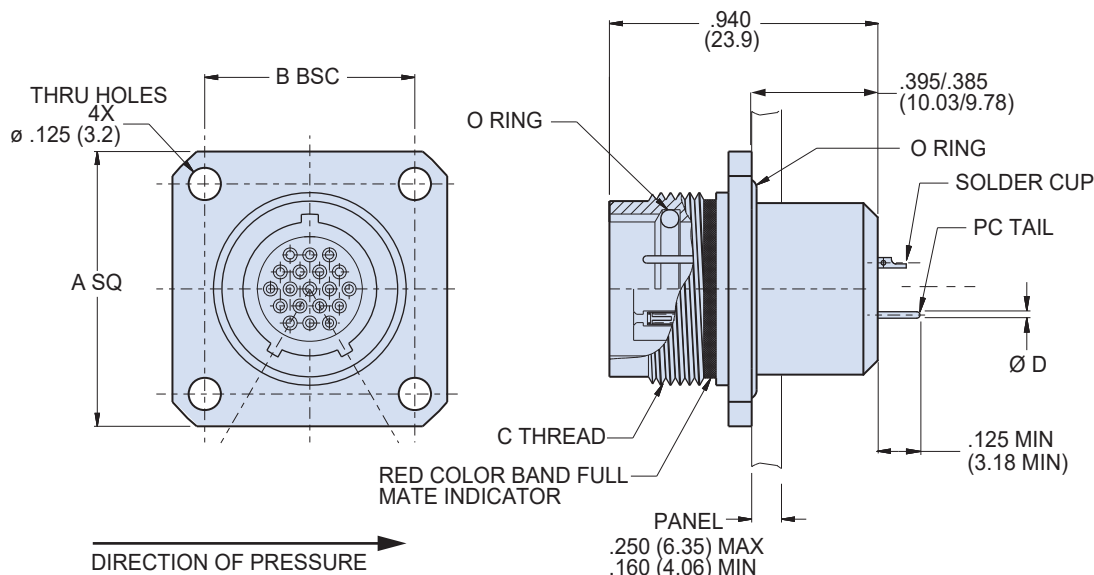
Dimensions in Inches (millimeters) are subject to change without notice.

Series 802 AquaMouse™ 3500 PSI Submersible
Receptacle with PC Tails or Solder Cups
802-012-02 and 802-030-02 Dimensions



Series 802

Square flange, front panel mount receptacle - shell style 02

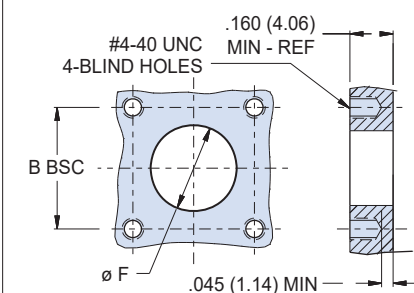


Dimensions					
Shell Size	A Square	B BSC	C Mating Threads	Ø D Tail Dia.	Ø E
5	.885 (22.48)	.500 (12.70)	.4375-28 UNEF	#23 .018/.022 (0.46/0.56)	.327 (8.31)
6	1.010 (25.65)	.625 (15.88)	.5625-20 UN		.390 (9.91)
7	1.072 (27.23)	.688 (17.48)	.6250-20 UN		.515 (13.08)
8	1.135 (28.83)	.750 (19.05)	.6875-20 UN	#20 .024/.028 (0.61/0.71)	.577 (14.66)
9	1.195 (30.35)	.812 (20.62)	.7500-20 UNEF		.640 (16.26)
10	1.260 (32.00)	.875 (22.23)	.8125-20 UNEF	#16 .060/.064 (1.52/1.63)	.702 (17.83)
12	1.323 (33.60)	.938 (23.83)	.8750-20 UNEF		.765 (19.43)
14	1.510 (38.35)	1.125 (28.58)	1.0625-20 UN	#12 .092/.096 (2.34/2.44)	.953 (24.21)
15	1.573 (39.95)	1.188 (30.18)	1.1250-20 UN		1.015 (25.78)
21	1.750 (44.45)	1.375 (34.92)	1.4375-20 UN		1.312 (33.32)

Material/finish

- Shell, receptacle: SST / see How to Order table
- Insulator: high grade rigid dielectric
- Interfacial seal: fluorosilicone
- Contact: copper alloy / gold plate per ASTM B 488, Type II Class 1.25, over a suitable underplate
- O-ring: Viton 90 shore / N.A.
- Potting: epoxy

Series 802 Square Flange Front Panel Mount, Panel Cutout



Shell size	B BSC	Ø F
5	.500 (12.70)	.327 (8.31)
6	.625 (15.88)	.390 (9.91)
7	.688 (17.48)	.515 (13.08)
8	.750 (19.05)	.577 (14.66)
9	.812 (20.62)	.640 (16.26)
10	.875 (22.23)	.702 (17.83)
12	.938 (23.83)	.765 (19.43)
14	1.125 (28.58)	.953 (24.21)
15	1.188 (30.18)	1.015 (25.78)
21	1.375 (34.92)	1.312 (33.32)

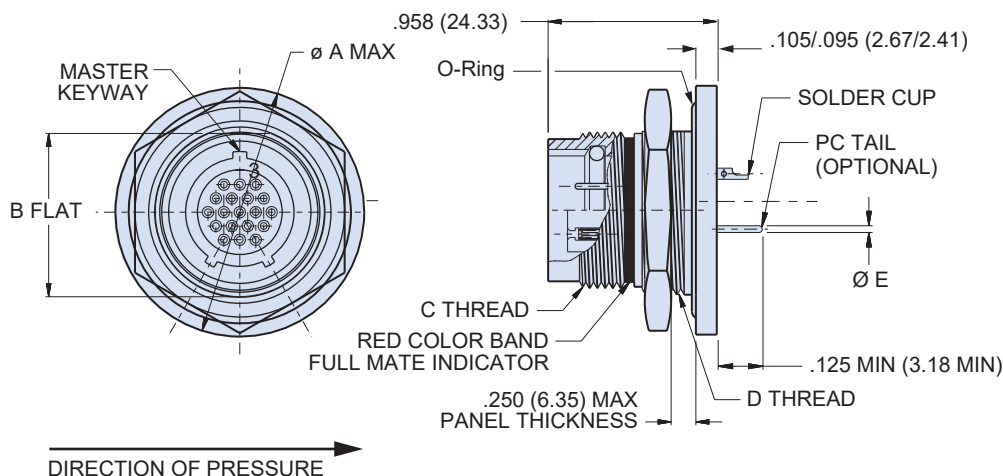
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Series 802 AquaMouse™ 3500 PSI Submersible Receptacle with PC Tails or Solder Cups

802-012-07 and 802-030-07 Dimensions

Jam-nut, rear panel mount receptacle - shell style 07



Dimensions

Shell Size	Ø A Max.	B Flat ± .003 (±0.08)	C Mating Threads	D Threads	Ø E Tail Dia.	F Flat ± .003 (±0.08)	Ø G
5	.885 (22.48)	.466 (11.84)	.4375-28 UNEF	.5000-32 UN-2A	#23 .018/.022 (0.46/0.56) #20 .024/.028 (0.61/0.71) #16 .060/.064 (1.52/1.63) #12 .092/.096 (2.34/2.44)	.477 (12.12)	.510 (12.95)
6	1.010 (25.65)	.591 (15.01)	.5625-20 UN	.6250-28 UN-2A		.602 (15.29)	.635 (16.13)
7	1.072 (27.23)	.653 (16.59)	.6250-20 UN	.6875-28 UN-2A		.664 (16.87)	.697 (17.70)
8	1.135 (28.83)	.716 (18.19)	.6875-20 UN	.7500-28 UN-2A		.727 (18.47)	.760 (19.30)
9	1.195 (30.35)	.778 (19.76)	.7500-20 UNEF	.8125-28 UN-2A		.789 (20.04)	.822 (20.88)
10	1.260 (32.00)	.827 (21.01)	.8125-20 UNEF	.8750-28 UN-2A		.838 (21.29)	.885 (22.48)
12	1.322 (33.58)	.890 (22.61)	.8750-20 UNEF	.9375-28 UN-2A		.901 (22.89)	.948 (24.08)
14	1.510 (38.35)	1.077 (27.36)	1.0625-20 UN	1.1250-28 UN-2A		1.088 (27.64)	1.135 (28.83)
15	1.572 (39.93)	1.140 (28.96)	1.1250-20 UN	1.1875-28 UN-2A		1.151 (29.24)	1.198 (30.43)
21	1.940 (49.28)	1.463 (37.16) 1.467 (37.26)	1.4375-20 UN	1.500-28 UN-2A		1.473 (37.41)	1.510 (38.35)

Material/finish

- Shell, receptacle, jam-nut: SST / see How to Order table
- Insulator: high grade rigid dielectric
- Interfacial seal: fluorosilicone
- Contact: copper alloy / gold plate per ASTM B 488, Type II Class 1.25, over a suitable underplate
- O-ring: Viton 90 shore / N.A.
- Potting: epoxy

Jam-Nut, Rear Panel Mount Panel Cutout Dimensions

Shell Size	F Flat +.005 (+.13) -.000 (-.00)	Ø G
5	.474 (12.04)	.510 (12.95)
6	.599 (15.21)	.635 (16.13)
7	.661 (16.79)	.697 (17.70)
8	.724 (18.39)	.760 (19.30)
9	.786 (19.96)	.822 (20.88)
10	.835 (21.21)	.885 (22.48)
12	.898 (22.81)	.948 (24.08)
14	1.085 (27.56)	1.135 (28.83)
15	1.148 (29.16)	1.198 (30.43)
19	1.357 (34.47)	1.385 (35.18)
21	1.471 (37.36)	1.510 (38.35)

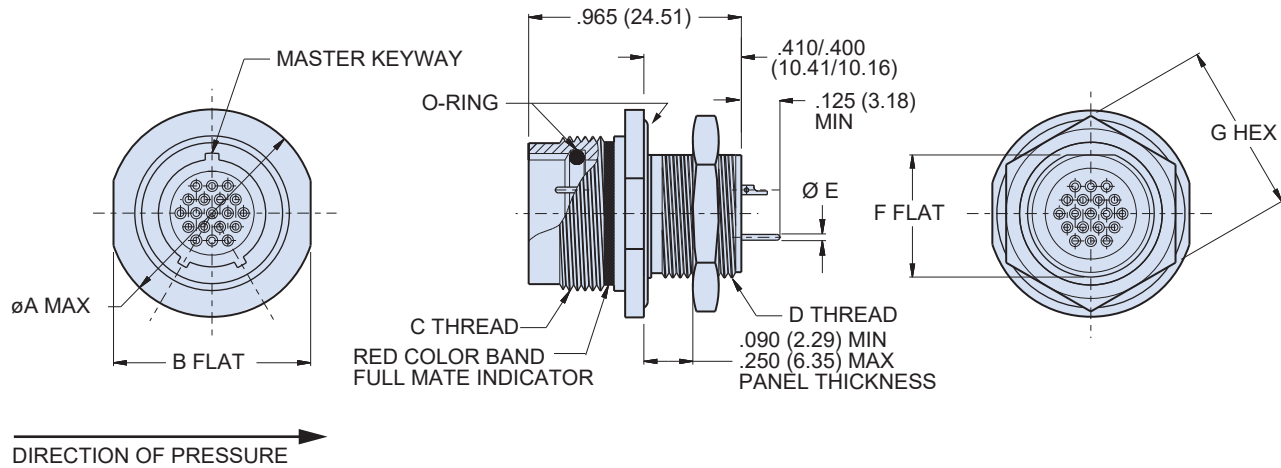
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Series 802 AquaMouse™ 3500 PSI Submersible
Receptacle with PC Tails or Solder Cups
802-012-00 and 802-030-00 Dimensions



Series 802

Jam-nut, front panel mount receptacle - shell style 00



Dimensions							
Shell Size	Ø A Max.	B Flat	C Mating Threads	D Threads	Ø E Tail Dia.	F Flat	G Hex
5	.72 (18.29)	.625 (15.88)	.4375-28 UNEF-2A	.312-28 UN-2A	#23 .018/.022 (0.46/0.56)	.281 (7.14)	.500 (12.70)
6	.78 (19.81)	.750 (19.05)	.5625-20 UN-2A	.438-28 UN-2A		.344 (8.74)	.625 (15.88)
7	.91 (23.11)	.812 (20.62)	.6250-20 UN-2A	.500-32 UN-2A		.469 (11.91)	.688 (17.48)
8	.96 (24.38)	.875 (22.23)	.6875-20 UN-2A	.562-28 UN-2A	#20 .024/.028 (0.61/0.71)	.531 (13.49)	.750 (19.05)
9	1.03 (26.16)	.937 (23.80)	.7500-20 UNEF-2A	.625-28 UN-2A		.594 (15.09)	.812 (20.62)
10	1.09 (27.69)	1.000 (25.40)	.8125-20 UNEF-2A	.687-28 UN-2A		.656 (16.66)	.875 (22.23)
12	1.16 (29.46)	1.062 (26.97)	.8750-20 UNEF-2A	.750-28 UN-2A	#16 .060/.064 (1.52/1.63)	.719 (18.26)	.938 (23.83)
14	1.34 (34.04)	1.250 (31.75)	1.0625-20 UN-2A	.938-28 UN-2A		.893 (22.68)	1.125 (28.58)
15	1.41 (35.81)	1.312 (33.32)	1.1250-20 UN-2A	1.000-28 UN-2A		.955 (24.26)	1.188 (30.18)
21	1.70 (43.18)	1.562 (39.67)	1.4375-20 UN-2A	1.312-28 UN	#12 .092/.096 (2.34/2.44)	1.257 (31.93)	1.500 (38.10)

Material/finish

- Shell, receptacle, jam-nut: SST / see How to Order table
- Insulator: high grade rigid dielectric
- Interfacial seal: fluorosilicone
- Contact: copper alloy / gold plate per ASTM B 488, Type II Class 1.25, over a suitable underplate
- O-ring: Viton 90 shore / N.A.
- Potting: epoxy

Jam-Nut, Front Panel Mount Panel Cutout Dimensions			
	Shell Size	H Flat +.005 (.13) -.000 (-.00)	Ø J
	5	.286 (7.26)	.322 (8.18)
	6	.412 (10.46)	.448 (11.38)
	7	.474 (12.04)	.510 (12.95)
	8	.536 (13.61)	.572 (14.53)
	9	.599 (15.21)	.635 (16.13)
	10	.661 (16.79)	.697 (17.70)
	12	.724 (18.39)	.760 (19.30)
	14	.898 (22.81)	.948 (24.08)
	15	.960 (24.38)	1.010 (25.65)
	19	1.091 (27.71)	1.135 (28.83)
	21	1.263 (32.08)	1.322 (33.58)

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