

**802-013**  
**Series 802 "Aqua Mouse" Submersible**  
**Hermetic Receptacle How to Order Information**



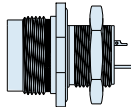
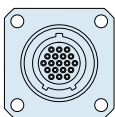
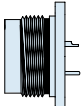
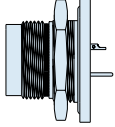
**Style 00 Front Mount**

**Series 802 Hermetic Receptacles** feature gold plated iron alloy contacts and compression glass dielectric material. The 316L stainless steel connector shell provides excellent corrosion protection and is suitable for e-beam welding. The Viton® interfacial seal and piston o-ring offer improved resistance to harsh chemicals.

**1 x 10<sup>-7</sup> cc/Second Maximum Helium Leak Rate.** Open face (unmated) pressure rating is 1000 PSI. When mated, Series 802 connectors withstand 3500 PSI hydrostatic pressure.

| HERMETIC LEAK RATE MOD CODES |  |
|------------------------------|--|
| Designator                   | Required Leak Rate                         |
| -585A                        | 1 x 10 <sup>-10</sup> cc Helium per second |
| -585B                        | 1 x 10 <sup>-9</sup> cc Helium per second  |
| -585C                        | 1 x 10 <sup>-8</sup> cc Helium per second  |

**HOW TO ORDER SERIES 802 HERMETIC RECEPTACLES**

| Sample Part Number   |  |   |  |  |   |
|--|--|---|--|--|---|
| 802-013  | -00  | Z1  | 6-7  | P  | A   |
| Series   | Shell Style  | Shell Material / Finish   | Shell Size- Insert Arrangement               | Contact Type   | Shell Key Position  |
| <p><b>802-013</b><br/>Series 802 Hermetic Receptacle with Solder Cup or PCB Contacts</p> | <br><p><b>-00</b><br/>Jam Nut for Front Panel Mounting</p> <br><p><b>-02</b><br/>Square Flange Mount</p> <br><p><b>-03</b><br/>Weld Mount</p> <br><p><b>-07</b><br/>Jam Nut for Rear Panel Mounting</p> | <p><b>Z1</b><br/>Stainless Steel / Passivated</p> <p><b>ZL</b><br/>Stainless Steel / Nickel Plated</p> <p>*Titanium and Inconel® shell materials are available. Consult factory for ordering information.</p> | <p>See Page C-4 for Contact Arrangements</p> | <p><b>E</b><br/>Pin, Solder Cup</p> <p><b>P</b><br/>Pin, PC Tail</p> <p><b>S</b><br/>Socket, Solder Cup</p> <p><b>D</b><br/>Sockets, PC Tail</p> | <p><b>A</b><br/>Normal</p> <p><b>B</b><br/>Pos. B</p> <p><b>C</b><br/>Pos. C</p> <p><b>D</b><br/>Pos. D</p> |

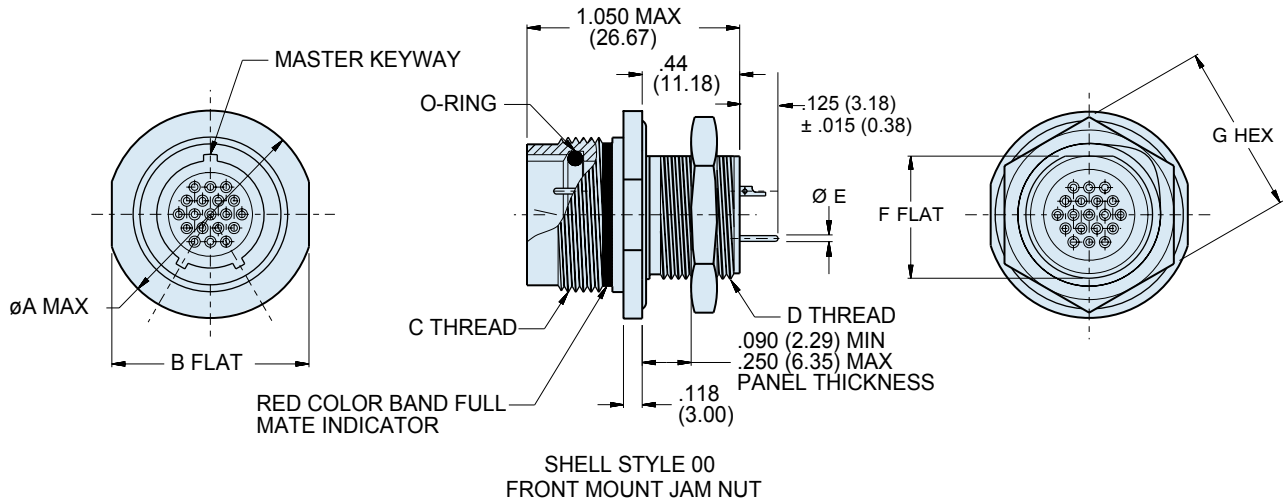
Dimensions in Inches (millimeters) are subject to change without notice.



802-013-00

Series 802 "Aqua Mouse" Submersible  
Hermetic Front Mount Jam Nut Receptacle  
Connector Dimensions

C



DIMENSIONS

| Shell Size | A Max. |       | B Flat |       | C Mating Threads | D Threads      | Ø E Tail Dia.                | F Flat |       | G Hex |       |
|------------|--------|-------|--------|-------|------------------|----------------|------------------------------|--------|-------|-------|-------|
|            | In.    | mm.   | In.    | mm.   |                  |                |                              | In.    | mm.   | In.   | mm.   |
| 5          | .720   | 18.29 | .625   | 15.88 | .438-28 UNEF-2A  | .312-28 UN-2A  | #23<br>.018/.022 (0.46/0.56) | .281   | 7.14  | .500  | 12.70 |
| 6          | .780   | 19.81 | .750   | 19.05 | .562-20 UN-2A    | .438-28 UN-2A  |                              | .344   | 8.74  | .625  | 15.88 |
| 7          | .910   | 23.11 | .812   | 20.62 | .625-20 UN-2A    | .500-32 UN-2A  |                              | .469   | 11.91 | .688  | 17.48 |
| 8          | .960   | 24.38 | .875   | 22.23 | .687-20 UN-2A    | .562-28 UN-2A  | #20<br>.024/.028 (0.61/0.71) | .531   | 13.49 | .750  | 19.05 |
| 9          | 1.030  | 26.16 | .937   | 23.80 | .750-20 UNEF-2A  | .625-20 UN-2A  |                              | .594   | 15.09 | .812  | 20.62 |
| 10         | 1.090  | 27.69 | 1.000  | 25.40 | .812-20 UNEF-2A  | .687-28 UN-2A  |                              | .656   | 16.66 | .875  | 22.23 |
| 12         | 1.160  | 29.46 | 1.062  | 26.97 | .875-20 UNEF-2A  | .750-28 UN-2A  | #16<br>.060/.064 (1.52/1.63) | .719   | 18.26 | .938  | 23.83 |
| 14         | 1.340  | 34.04 | 1.250  | 31.75 | 1.062-20 UN-2A   | .938-28 UN-2A  |                              | .893   | 22.68 | 1.125 | 28.58 |
| 15         | 1.410  | 35.18 | 1.312  | 33.32 | 1.125-20 UN-2A   | 1.000-28 UN-2A |                              | .955   | 24.26 | 1.188 | 30.18 |
| 21         | 1.700  | 43.18 | 1.562  | 39.67 | 1.4375-20 UN-2A  | 1.312-28 UN-2A | #12<br>.092/.096 (2.34/2.44) | 1.257  | 31.93 | 1.500 | 38.10 |

SERIES 802 RECEPTACLE KEY POSITIONS

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

CUTOUT DIMENSIONS

| Shell Size | H Flat      |           | Ø J   |      |
|------------|-------------|-----------|-------|------|
|            | In.         | mm.       | In.   | mm.  |
| 5          | .291/.286   | 7.4/7.3   | .322  | 8.2  |
| 6          | .417/.412   | 10.6/10.5 | .448  | 11.4 |
| 7          | .479/.474   | 12.2/12.0 | .510  | 13.0 |
| 8          | .541/.536   | 13.7/13.6 | .572  | 14.5 |
| 9          | .604/.599   | 15.3/15.2 | .635  | 16.1 |
| 10         | .666/.661   | 16.9/16.8 | .697  | 17.7 |
| 12         | .729/.724   | 18.5/18.4 | .760  | 19.3 |
| 14         | .903/.898   | 22.9/22.8 | .948  | 24.1 |
| 15         | .965/.960   | 24.5/24.4 | 1.010 | 25.7 |
| 21         | 1.267/1.263 | 32.2/32.1 | 1.322 | 33.6 |

RECOMMENDED PANEL CUTOUT FOR STYLE 00 FRONT MOUNT JAM NUT

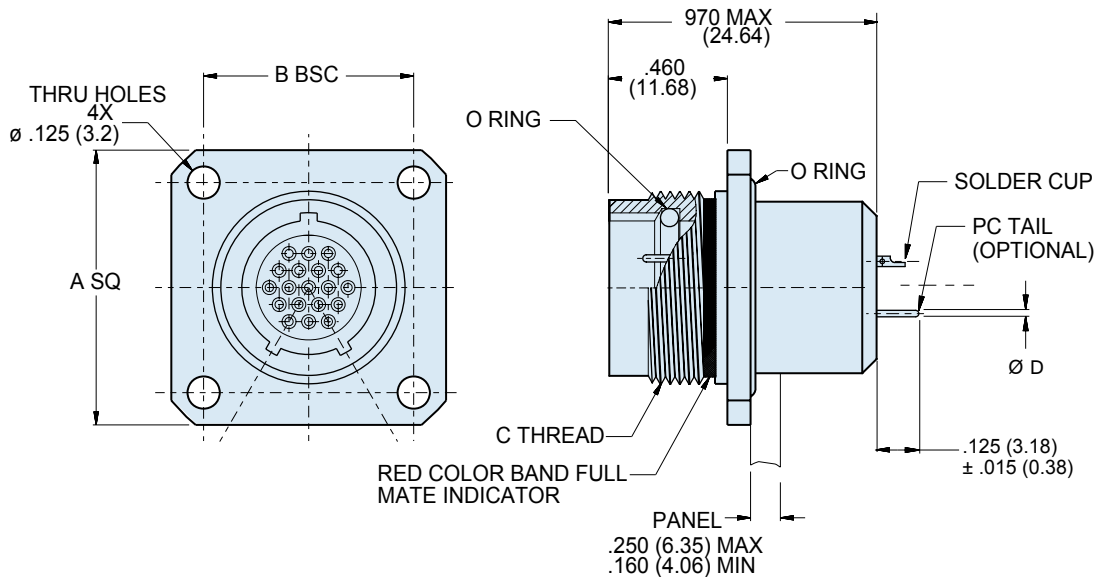
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802-013-02

Series 802 "Aqua Mouse" Submersible  
Square Flange Mount Hermetic Receptacle  
Connector Dimensions



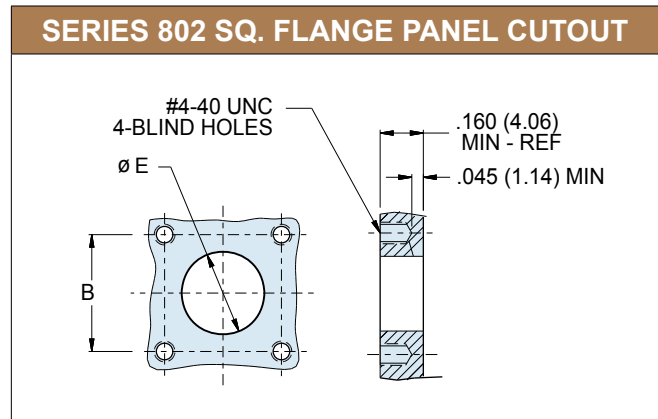
Series 80  
Mighty Mouse



C

| DIMENSIONS |          |       |        |       |                  |                              |                 |       |
|------------|----------|-------|--------|-------|------------------|------------------------------|-----------------|-------|
| Shell Size | A Square |       | B BSC. |       | C Mating Threads | $\varnothing$ D Tail Dia.    | $\varnothing$ E |       |
|            | In.      | mm.   | In.    | mm.   |                  |                              | In.             | mm.   |
| 5          | .885     | 22.48 | .500   | 12.70 | .438-28 UNEF     | #23<br>.018/.022 (0.46/0.56) | .327            | 8.31  |
| 6          | 1.010    | 25.65 | .625   | 15.88 | .562-20 UN       |                              | .390            | 9.91  |
| 7          | 1.072    | 27.23 | .688   | 17.48 | .625-20 UN       |                              | .515            | 13.08 |
| 8          | 1.135    | 28.83 | .750   | 19.05 | .687-20 UN       | #20<br>.024/.028 (0.61/0.71) | .577            | 14.66 |
| 9          | 1.195    | 30.35 | .812   | 20.62 | .750-20 UNEF     |                              | .640            | 16.26 |
| 10         | 1.260    | 32.00 | .875   | 22.23 | .812-20 UNEF     | #16<br>.060/.064 (1.52/1.63) | .702            | 17.83 |
| 12         | 1.323    | 33.60 | .938   | 23.83 | .875-20 UNEF     |                              | .765            | 19.43 |
| 14         | 1.510    | 38.25 | 1.125  | 28.58 | 1.062-20 UN      | #12<br>.092/.096 (2.34/2.44) | .953            | 24.21 |
| 15         | 1.573    | 39.95 | 1.188  | 30.18 | 1.125-20 UN      |                              | 1.015           | 25.78 |
| 21         | 1.750    | 44.45 | 1.375  | 34.93 | 1.4375-20 UN     |                              | 1.312           | 33.32 |

| SERIES 802 RECEPTACLE KEY POSITIONS |              |      |
|-------------------------------------|--------------|------|
| Key Position                        | Key Rotation |      |
|                                     | A°           | B°   |
| Normal (A)                          | 150°         | 210° |
| B                                   | 75°          | 210° |
| C                                   | 95°          | 230° |
| D                                   | 140°         | 275° |
| E                                   | 75°          | 275° |
| F                                   | 95°          | 210° |

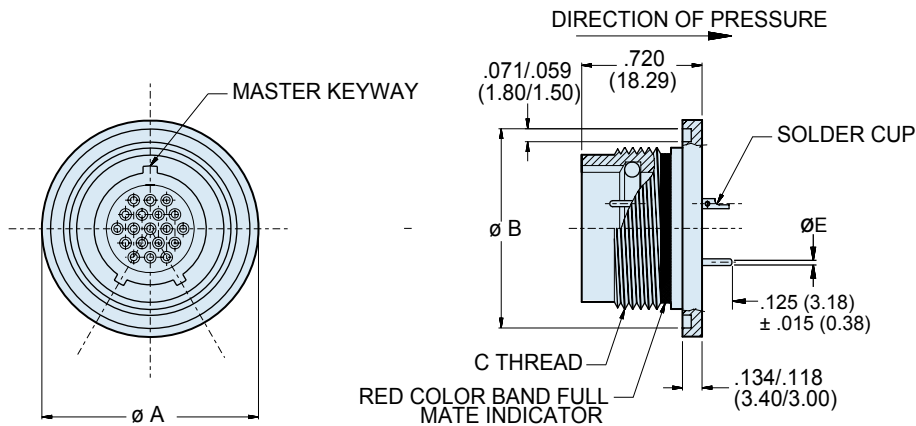


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802-013-03

Series 802 "Aqua Mouse" Submersible  
Weld Mount Hermetic Receptacle  
Connector Dimensions



SHELL STYLE 03  
WELD MOUNT

DIMENSIONS

| Shell Size | $\varnothing A$ |                | $\varnothing B$ |                | C Mating Threads | $\varnothing E$ Tail Dia.    |
|------------|-----------------|----------------|-----------------|----------------|------------------|------------------------------|
|            | In. $\pm .006$  | mm. $\pm 0.15$ | In. $\pm .006$  | mm. $\pm 0.15$ |                  |                              |
| 5          | .788            | 20.02          | .745            | 18.92          | .438-28 UNEF     | #23<br>.018/.022 (0.46/0.56) |
| 6          | .912            | 23.16          | .869            | 22.07          | .562-20 UN       |                              |
| 7          | .975            | 24.77          | .933            | 23.70          | .625-20 UN       |                              |
| 8          | 1.038           | 26.37          | .995            | 25.27          | .687-20 UN       | #20<br>.024/.028 (0.61/0.71) |
| 9          | 1.100           | 27.94          | 1.057           | 26.85          | .750-20 UNEF     |                              |
| 10         | 1.162           | 29.53          | 1.119           | 28.42          | .812-20 UNEF     | #16<br>.060/.064 (1.52/1.63) |
| 12         | 1.225           | 31.12          | 1.182           | 30.02          | .875-20 UNEF     |                              |
| 14         | 1.412           | 35.86          | 1.369           | 34.77          | 1.062-20 UN      | #12<br>.092/.096 (2.34/2.44) |
| 15         | 1.475           | 37.47          | 1.432           | 36.37          | 1.125-20 UN      |                              |
| 21         | 1.795           | 45.59          | 1.747           | 44.38          | 1.4375-20 UN     |                              |

SERIES 802 RECEPTACLE KEY POSITIONS

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

Diagram showing the key positions A and B on the receptacle. The key is located at the bottom of the shell, and the key positions are defined by the angles A° and B° relative to the vertical axis.

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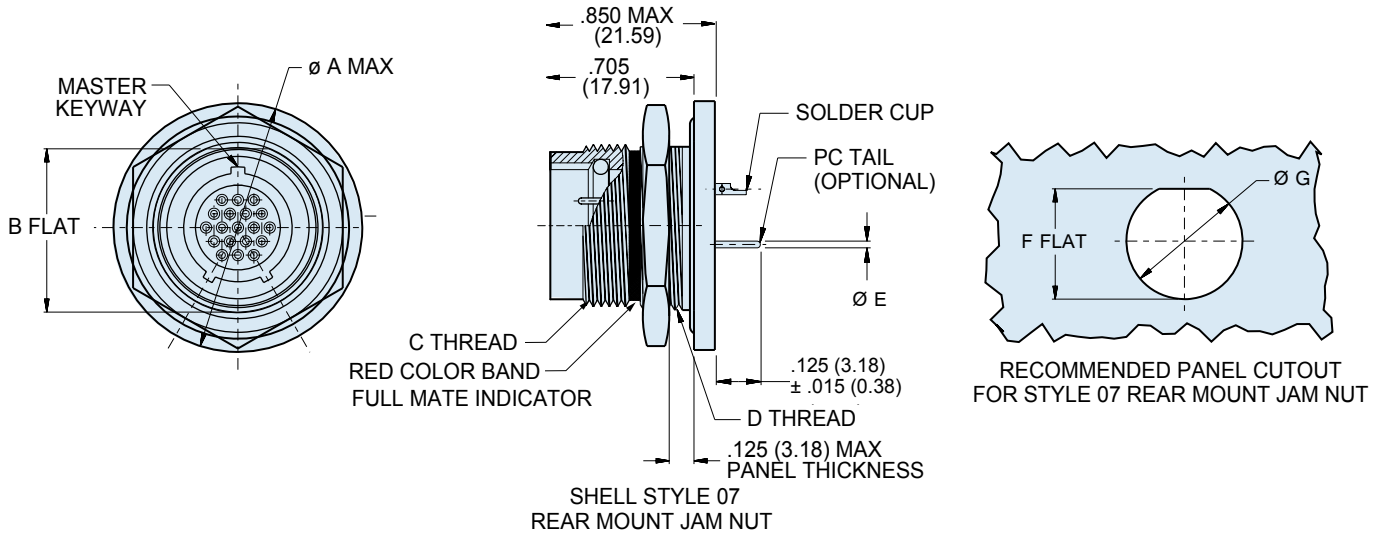
802-013-07

Series 802 "Aqua Mouse" Submersible  
Hermetic Rear Mount Jam Nut Receptacle  
Connector Dimensions



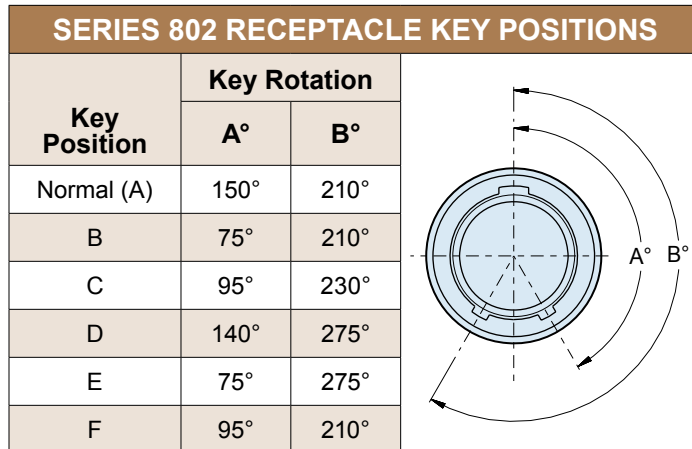
Series 80  
Mighty Mouse

C



DIMENSIONS

| Shell Size | $\varnothing A$ Max. |       | B Flat         |                | C Mating Threads | D Threads      | $\varnothing E$ Tail Dia.    | F Flat         |                | $\varnothing G$ |       |
|------------|----------------------|-------|----------------|----------------|------------------|----------------|------------------------------|----------------|----------------|-----------------|-------|
|            | In.                  | mm.   | In. $\pm .003$ | mm. $\pm 0.08$ |                  |                |                              | In. $\pm .003$ | mm. $\pm 0.08$ | In.             | mm.   |
| 5          | .885                 | 22.48 | .466           | 11.84          | .438-28 UNEF     | .500-32 UN-2A  | #23<br>.018/.022 (0.46/0.56) | .473           | 12.01          | .510            | 12.95 |
| 6          | 1.010                | 25.65 | .591           | 15.01          | .562-20 UN       | .625-20 UN-2A  |                              | .603           | 15.32          | .635            | 16.13 |
| 7          | 1.072                | 27.23 | .653           | 16.59          | .625-20 UN       | .687-28 UN-2A  |                              | .662           | 16.81          | .697            | 17.70 |
| 8          | 1.135                | 28.83 | .727           | 18.47          | .687-20 UN       | .750-28 UN-2A  | #20<br>.024/.028 (0.61/0.71) | .735           | 18.67          | .760            | 19.30 |
| 9          | 1.195                | 30.35 | .778           | 19.76          | .750-20 UNEF     | .812-28 UN-2A  |                              | .785           | 19.94          | .822            | 20.88 |
| 10         | 1.260                | 32.00 | .827           | 21.01          | .812-20 UNEF     | .875-28 UN-2A  | #16<br>.060/.064 (1.52/1.63) | .835           | 21.21          | .885            | 22.48 |
| 12         | 1.322                | 33.58 | .890           | 22.61          | .875-20 UNEF     | .938-28 UN-2A  |                              | .899           | 22.83          | .948            | 24.08 |
| 14         | 1.510                | 38.25 | 1.077          | 27.36          | 1.062-20 UN      | 1.125-28 UN-2A | #12<br>.092/.096 (2.34/2.44) | 1.085          | 27.56          | 1.135           | 28.83 |
| 15         | 1.572                | 39.93 | 1.140          | 28.96          | 1.125-20 UN      | 1.188-28 UN-2A |                              | 1.155          | 29.34          | 1.198           | 30.43 |
| 21         | 1.940                | 49.28 | 1.464          | 37.19          | 1.4375-20 UN     | 1.500-28 UN-2A |                              | 1.473          | 37.41          | 1.510           | 39.12 |



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