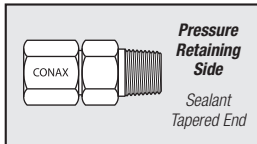


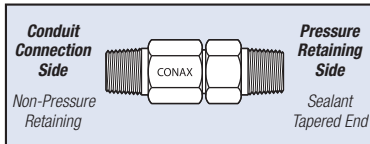
Conax Technologies Model EG (Electrode) Glands are designed to conduct rated amperage through vessel walls for applications such as vacuum furnaces, autoclaves, transformers, power supplies and other vessels requiring a sealed environment. EG glands also electrically and/or thermally isolate single electrodes, tubes, temperature sensors and liquid level probes in pressure/vacuum applications. These bare electrical feedthroughs seal against gases and liquids and resist element movement under pressure.

EG gland bodies with NPT threads or SAE threads are constructed from 303SST standard. Weld-neck style glands are constructed from 316LSST. Caps and followers for all styles are constructed from 303SST. Many optional materials are also available. See page 9 for details. Cap Style A offers a mounting thread only. Cap Style B provides threading on both ends for attachment to conduit or terminal heads. Alternative sealant materials are available. Please consult a Conax Technologies sales engineer for custom needs.

Conductors are available in Copper, Nickel and 303SST. Use of Nickel rather than Copper is recommended in oxidizing atmospheres. For further information on conductor selection, see page 11. Custom conductors, such as nickel-plated copper, are available. Please consult factory.



Type A has mounting thread only.



Type B has cap end threaded. B Cap NPT matches the standard mounting NPT.

- Temperature Range: -300° F to +1600° F (-185° C to +870° C)
- Pressure Range: Vacuum to 8,000 PSIG (551 bar) – see Pressure Ratings in Specifications Chart.
- Voltage to 2000 VDC
- Amperage to 400 amp
- Supplied with or without conductor

Accessories

The replaceable sealant permits repeated use of the same fitting. Electrodes can be easily assembled or replaced in the field. To replace the sealant or element, simply loosen the cap, replace the necessary items, relubricate and retorque the cap.

Glands are supplied factory lubricated. When reused, the glands should be relubricated to maintain the published torque and pressure ratings. If glands are cleaned prior to assembly, they should be relubricated. On weld mount models, the heat from the welding process will destroy the lubricant. These models must be relubricated prior to use. See page 103 for information on our lubrication kit.

Replacement Packing Sets are available. These consist of a sealant and two insulators. Replacement sealants, conductors and insulators may also be ordered separately.

To order a Replacement Packing Set, order
RPS – (Gland) – (Diameter) – (Sealant)

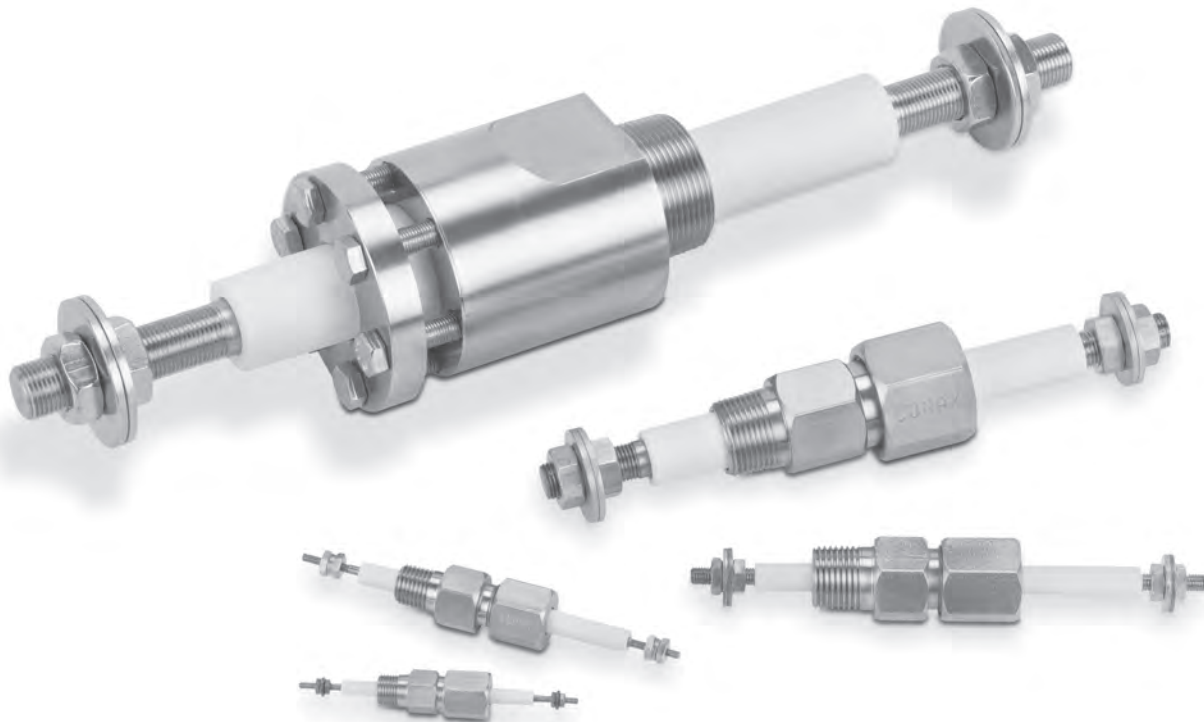
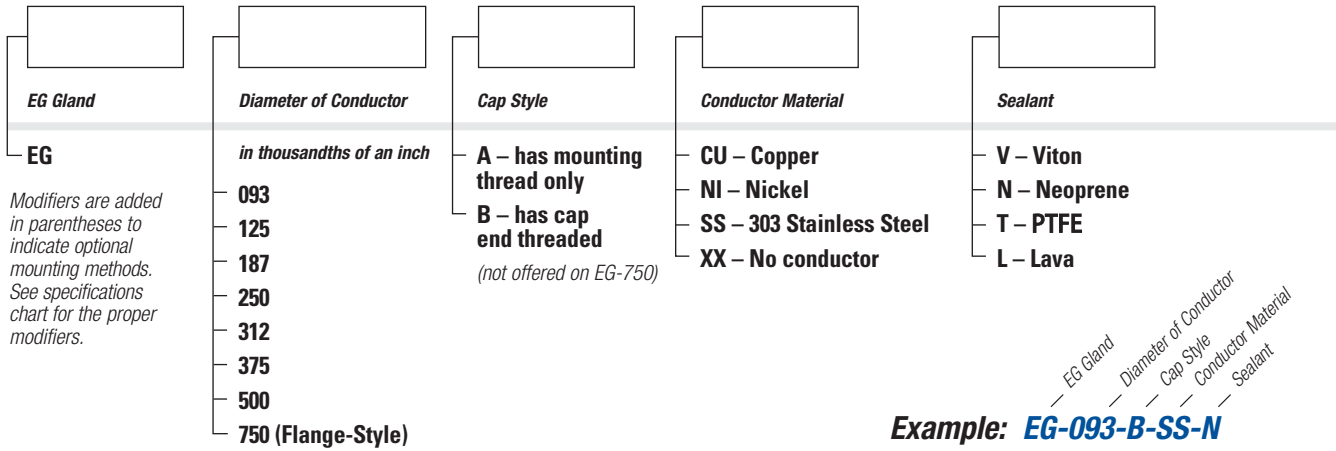
Example: RPS-EG-093-V

To order a Replacement Sealant only, order
RS – (Gland) – (Diameter) – (Sealant)

Example: RS-EG-093-V

For replacement insulators and conductors, see Accessories on page 102.

Catalog Numbering System



Specifications

| Catalog Number | Conductor Std. | | | | Amperage Rating | | | Voltage Rating DC | Length 'A' | | Length 'B' | | Hex Size | | | | Pressure Rating | | | | | | | |
|--|----------------|-----------|----------|-----------|-----------------|----|----|-------------------|------------|------|------------|-------|----------|--------|---------|--------|-----------------|-----|-------|-----|-------|-----|-------|-----|
| | Diam. IN | Length IN | Diam. MM | Length MM | CU | NI | SS | | IN | MM | IN | MM | Body IN | Cap IN | Body MM | Cap MM | Neoprene | | Viton | | PTFE | | Lava | |
| Standard 1/8 NPT | | | | | | | | | | | | | | | | | | | | | | | | |
| EG-093 | 0.093 | 3.500 | 2.36 | 88.90 | 20 | 10 | 3 | 2000 | 1.38 | 34.9 | 1.75 | 44.5 | 0.500 | 0.563 | 12.7 | 14.3 | 3,200 | 220 | 3,200 | 220 | 3,200 | 220 | 4,000 | 276 |
| Weld Neck (Weld Neck Length 0.39", Diameter 0.405")** | | | | | | | | | | | | | | | | | | | | | | | | |
| EG(SWM1/S316L)-093 | 0.093 | 3.500 | 2.36 | 88.90 | 20 | 10 | 3 | 2000 | 1.38 | 34.9 | 1.75 | 44.5 | 0.500 | 0.563 | 12.7 | 14.3 | 3,200 | 220 | 3,200 | 220 | 3,200 | 220 | 4,000 | 276 |
| Standard 1/4 NPT | | | | | | | | | | | | | | | | | | | | | | | | |
| EG-125 | 0.120 | 5.000 | 3.05 | 127.00 | 40 | 15 | 6 | 2000 | 2.00 | 50.8 | 2.63 | 66.7 | 0.750 | 0.750 | 19.1 | 19.1 | 5,200 | 358 | 3,200 | 220 | 5,000 | 345 | 8,000 | 551 |
| EG-187 | 0.182 | 5.000 | 4.62 | 127.00 | 60 | 25 | 9 | 2000 | 2.00 | 50.8 | 2.63 | 66.7 | 0.750 | 0.750 | 19.1 | 19.1 | 2,500 | 172 | 3,200 | 220 | 2,500 | 172 | 4,800 | 331 |
| Weld Neck (Weld Neck Length 0.59", Diameter 0.54")** | | | | | | | | | | | | | | | | | | | | | | | | |
| EG(SWM2/S316L)-125 | 0.120 | 5.000 | 3.05 | 127.00 | 40 | 15 | 6 | 2000 | 2.00 | 50.8 | 2.63 | 66.7 | 0.750 | 0.750 | 19.1 | 19.1 | 5,200 | 358 | 3,200 | 220 | 5,000 | 345 | 8,000 | 551 |
| EG(SWM2/S316L)-187 | 0.182 | 5.000 | 4.62 | 127.00 | 60 | 25 | 9 | 2000 | 2.00 | 50.8 | 2.63 | 66.7 | 0.750 | 0.750 | 19.1 | 19.1 | 2,500 | 172 | 3,200 | 220 | 2,500 | 172 | 4,800 | 331 |
| SAE 3/4 -16 Thread Mount (formerly MS) | | | | | | | | | | | | | | | | | | | | | | | | |
| EG(MSE8)-125 | 0.120 | 5.000 | 3.05 | 127.00 | 40 | 15 | 6 | 2000 | 2.00 | 50.8 | 2.63 | 66.7 | 1.000 | 0.750 | 25.4 | 19.1 | 5,200 | 358 | 3,200 | 220 | 5,000 | 345 | 8,000 | 551 |
| EG(MSE8)-187 | 0.182 | 5.000 | 4.62 | 127.00 | 60 | 25 | 9 | 2000 | 2.00 | 50.8 | 2.63 | 66.7 | 1.000 | 0.750 | 25.4 | 19.1 | 2,500 | 172 | 3,200 | 220 | 2,500 | 172 | 4,800 | 331 |
| Standard 1/2 NPT | | | | | | | | | | | | | | | | | | | | | | | | |
| EG-250 | 0.245 | 6.500 | 6.22 | 165.10 | 95 | 40 | 15 | 2000 | 2.56 | 65.1 | 3.38 | 85.9 | 1.000 | 1.000 | 25.4 | 25.4 | 1,200 | 83 | 1,200 | 83 | 2,000 | 138 | 5,500 | 379 |
| EG-312 | 0.307 | 6.500 | 7.80 | 165.10 | 125 | 50 | 20 | 2000 | 2.56 | 65.1 | 3.38 | 85.9 | 1.000 | 1.000 | 25.4 | 25.4 | 1,600 | 110 | 1,200 | 83 | 3,200 | 220 | 5,500 | 379 |
| Weld Neck (Weld Neck Length 0.78", Diameter 0.84")** | | | | | | | | | | | | | | | | | | | | | | | | |
| EG(SWM4/S316L)-250 | 0.245 | 6.500 | 6.22 | 165.10 | 95 | 40 | 15 | 2000 | 2.56 | 65.1 | 3.38 | 85.9 | 1.000 | 1.000 | 25.4 | 25.4 | 1,200 | 83 | 1,200 | 83 | 2,000 | 138 | 5,500 | 379 |
| EG(SWM4/S316L)-312 | 0.307 | 6.500 | 7.80 | 165.10 | 125 | 50 | 20 | 2000 | 2.56 | 65.1 | 3.38 | 85.9 | 1.000 | 1.000 | 25.4 | 25.4 | 1,600 | 110 | 1,200 | 83 | 3,200 | 220 | 5,500 | 379 |
| SAE 7/8 -14 Thread Mount (formerly MS) | | | | | | | | | | | | | | | | | | | | | | | | |
| EG(MSE10)-250 | 0.245 | 6.500 | 6.22 | 165.10 | 95 | 40 | 15 | 2000 | 2.56 | 65.1 | 3.38 | 85.9 | 1.125 | 1.000 | 28.6 | 25.4 | 1,200 | 83 | 1,200 | 83 | 2,000 | 138 | 5,500 | 379 |
| EG(MSE10)-312 | 0.307 | 6.500 | 7.80 | 165.10 | 125 | 50 | 20 | 2000 | 2.56 | 65.1 | 3.38 | 85.9 | 1.125 | 1.000 | 28.6 | 25.4 | 1,600 | 110 | 1,200 | 83 | 3,200 | 220 | 5,500 | 379 |
| Standard 3/4 NPT | | | | | | | | | | | | | | | | | | | | | | | | |
| EG-375 | 0.370 | 8.500 | 9.40 | 215.90 | 160 | 65 | 24 | 2000 | 3.31 | 84.1 | 4.06 | 103.1 | 1.250 | 1.500 | 31.8 | 38.1 | 600 | 41 | 800 | 55 | 2,500 | 172 | 4,000 | 276 |
| EG-500 | 0.495 | 8.500 | 12.57 | 215.90 | 200 | 80 | 30 | 2000 | 3.31 | 84.1 | 4.06 | 103.1 | 1.250 | 1.500 | 31.8 | 38.1 | 600 | 41 | 600 | 41 | 1,600 | 110 | 1,500 | 103 |
| Weld Neck (Weld Neck Length 0.79", Diameter 1.05")** | | | | | | | | | | | | | | | | | | | | | | | | |
| EG(SWM5/S316L)-375 | 0.370 | 8.500 | 9.40 | 215.90 | 160 | 65 | 24 | 2000 | 3.31 | 84.1 | 4.06 | 103.1 | 1.375 | 1.500 | 34.9 | 38.1 | 600 | 41 | 800 | 55 | 2,500 | 172 | 4,000 | 276 |
| EG(SWM5/S316L)-500 | 0.495 | 8.500 | 12.57 | 215.90 | 200 | 80 | 30 | 2000 | 3.31 | 84.1 | 4.06 | 103.1 | 1.375 | 1.500 | 34.9 | 38.1 | 600 | 41 | 600 | 41 | 1,600 | 110 | 1,500 | 103 |
| SAE 1-5/16 -12 Thread Mount (formerly MS) | | | | | | | | | | | | | | | | | | | | | | | | |
| EG(MSE16)-375 | 0.370 | 8.500 | 9.40 | 215.90 | 160 | 65 | 24 | 2000 | 3.31 | 84.1 | 4.06 | 103.1 | 1.625 | 1.500 | 41.3 | 38.1 | 600 | 41 | 800 | 55 | 2,500 | 172 | 4,000 | 276 |
| EG(MSE16)-500 | 0.495 | 8.500 | 12.57 | 215.90 | 200 | 80 | 30 | 2000 | 3.31 | 84.1 | 4.06 | 103.1 | 1.625 | 1.500 | 41.3 | 38.1 | 600 | 41 | 600 | 41 | 1,600 | 110 | 1,500 | 103 |

| Catalog Number | Conductor Std. | | | | Amperage Rating | | | Voltage Rating DC | Length 'A' | | Length 'B' | | Diameter | | | | Pressure Rating | | | | | | | |
|---|----------------|-----------|----------|-----------|-----------------|-----|----|-------------------|------------|-------|------------|----|-----------|-----------|---------|---------|-----------------|----|-------|----|-------|-----|------|-----|
| | Diam. IN | Length IN | Diam. MM | Length MM | CU | NI | SS | | IN | MM | IN | MM | Flange IN | Flange MM | Body IN | Body MM | Neoprene | | Viton | | PTFE | | Lava | |
| Standard 1-1/2 NPT | | | | | | | | | | | | | | | | | | | | | | | | |
| EG-750 | 0.745 | 15.500 | 18.92 | 393.70 | 400 | 165 | 60 | 2000 | 5.00 | 127.0 | NA | NA | 3.250 | 82.6 | 3.000 | 76.2 | NA | NA | NA | NA | 1,800 | 124 | C/F | C/F |
| Weld Neck (Weld Neck Length 1.03", Diameter 1.90")** | | | | | | | | | | | | | | | | | | | | | | | | |
| EG(SWM8/S316L)-750 | 0.745 | 15.500 | 18.92 | 393.70 | 400 | 165 | 60 | 2000 | 5.00 | 127.0 | NA | NA | 3.250 | 82.6 | 3.000 | 76.2 | NA | NA | NA | NA | 1,800 | 124 | C/F | C/F |

Note: EG-750 is not available with SAE threads.

* Hex size for the body and cap are the same unless a cap size is provided in parentheses.

** Weld neck models require relubrication prior to use.

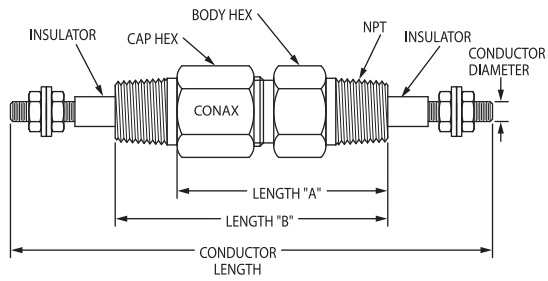
NA = Not Applicable. C/F = Consult Factory.

All pressure and torque ratings were determined at 68° F (20° C) using a solid electrode as the element. Pressure ratings may degrade at higher temperatures.

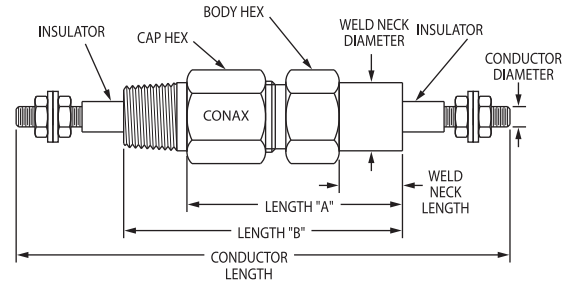
Pressure rating guide values are provided for glands with elements restrained by the compressed sealant. Higher pressure may be attained with additional element restraints. For proper assembly of these sealing glands, see the Assembly Instructions provided on pages 106-119.

5001D

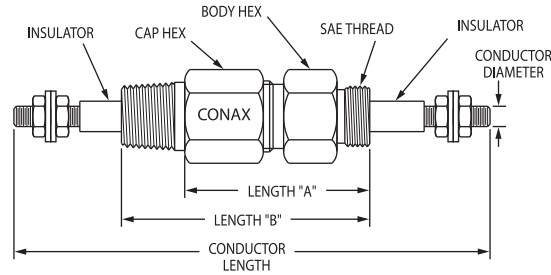
SINGLE ELECTRODE SEALING (to 2000 Volts) ■ EG SERIES



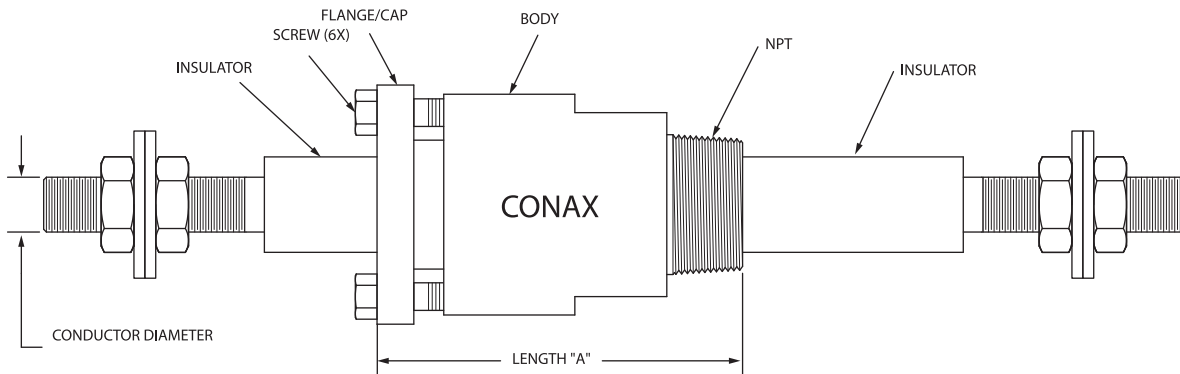
Standard NPT



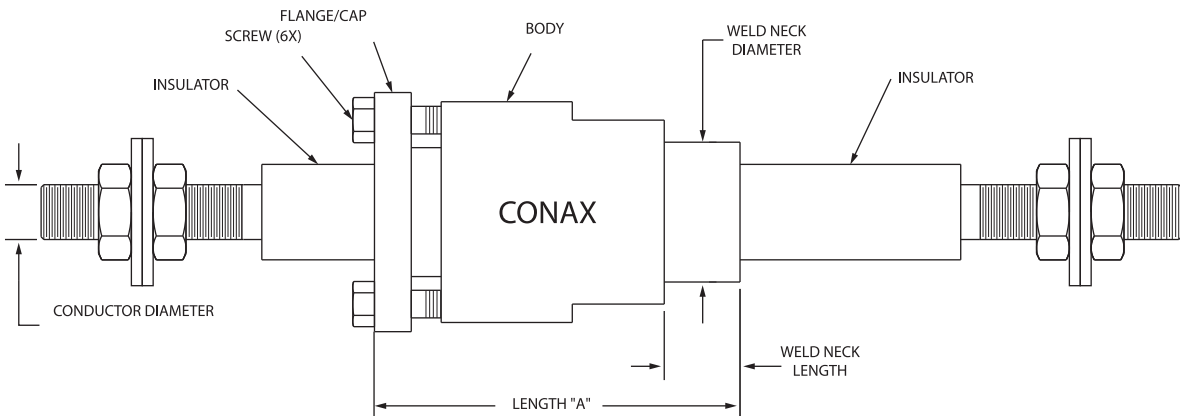
Weld Neck Mount



SAE Thread Mount



EG-750 NPT



**EG-750
Weld Neck Mount**