

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.

- 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.

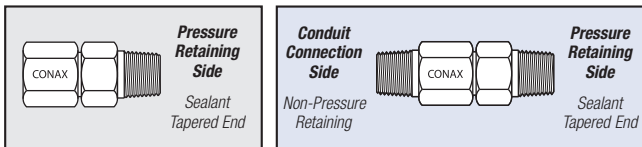
To order a Replacement Packing Set, order
RPS – (Gland) – (Diameter) – (Sealant)

Example: RPS-EG-093-V

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

Example: RS-EG-093-V

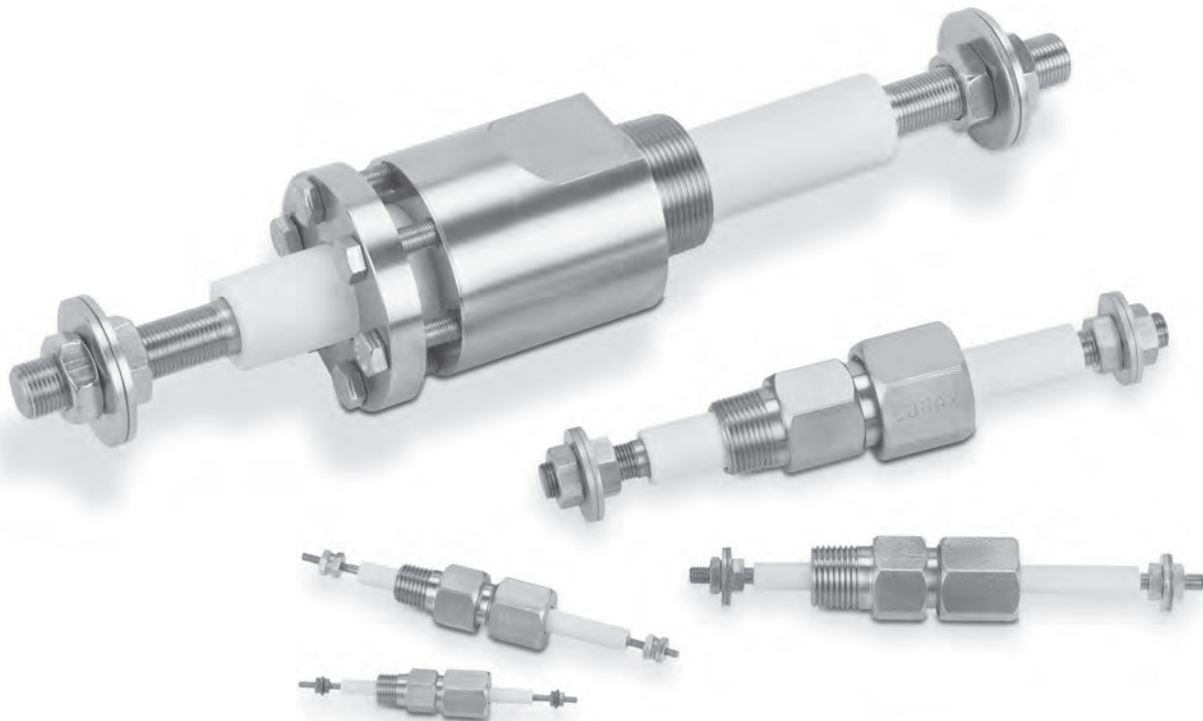
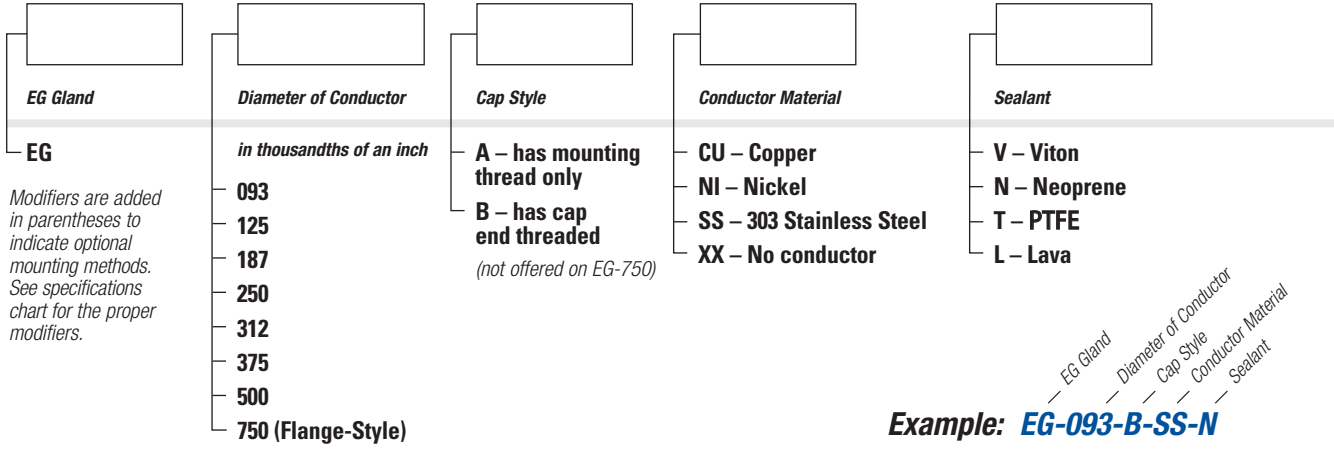
For replacement insulators and conductors, see Accessories on page 102.



Type A has mounting thread only.

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

Catalog Numbering System



Specifications

Catalog Number	Conductor				Amperage Rating			Voltage Rating DC	Length 'A'		Length 'B'		Hex Size				Pressure Rating							
	Diam. IN	Length IN	Std. Diam. MM	Std. 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				Amperage Rating			Voltage Rating DC	Length 'A'		Length 'B'		Diameter				Pressure Rating							
	Diam. IN	Length IN	Std. Diam. MM	Std. 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.

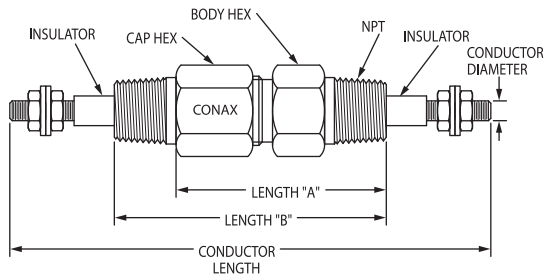
* Hex size for the body and cap are the same unless a cap size is provided in parentheses.

** Weld neck models require relubrication prior to use.

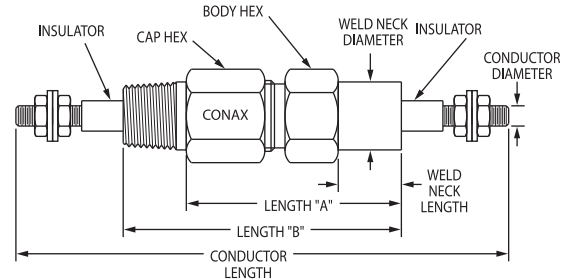
NA = Not Applicable. C/F = Consult Factory.

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.

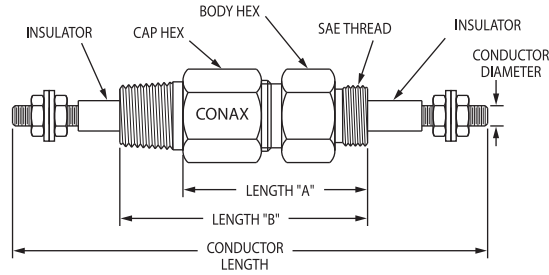
Pressure rating guide values are provided for glands with elements restrained by the compressed sealant. Higher pressure may be attained with additional element restraints. For proper assembly of these sealing glands, see the Assembly Instructions provided on pages 106-119.



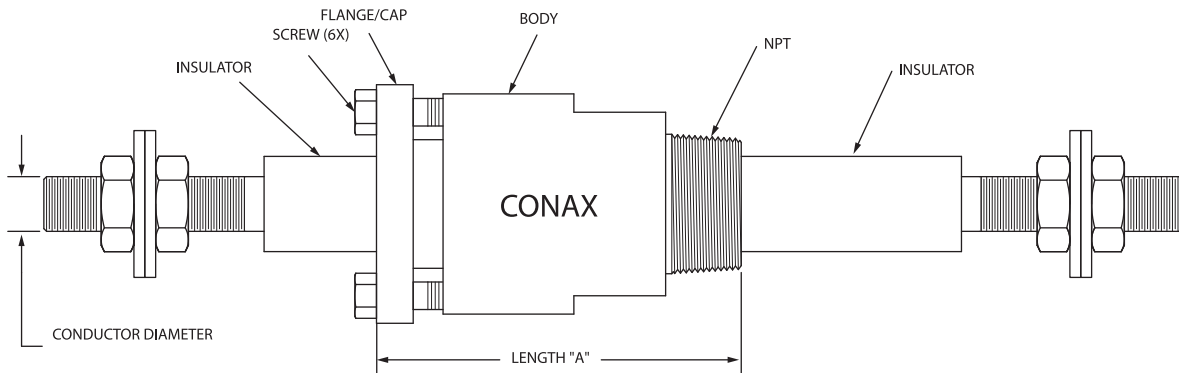
Standard NPT



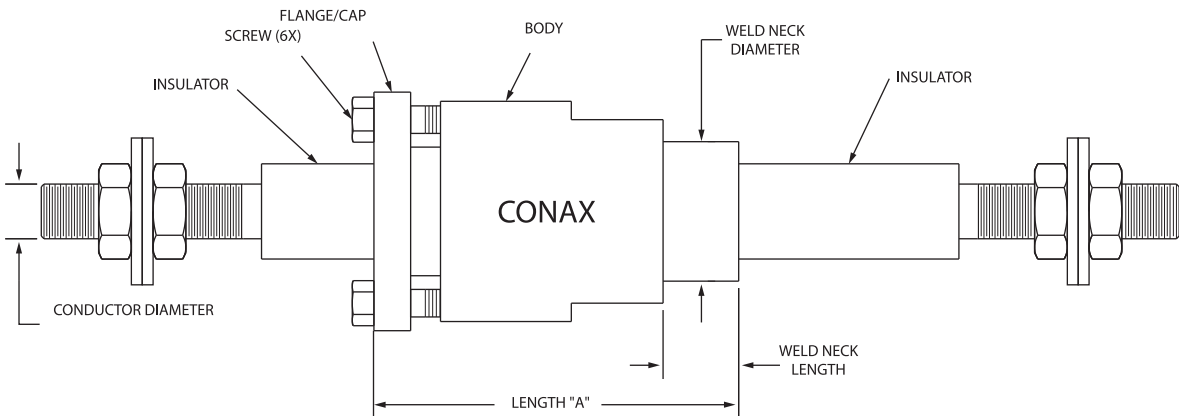
Weld Neck Mount



SAE Thread Mount



EG-750 NPT



**EG-750
Weld Neck Mount**