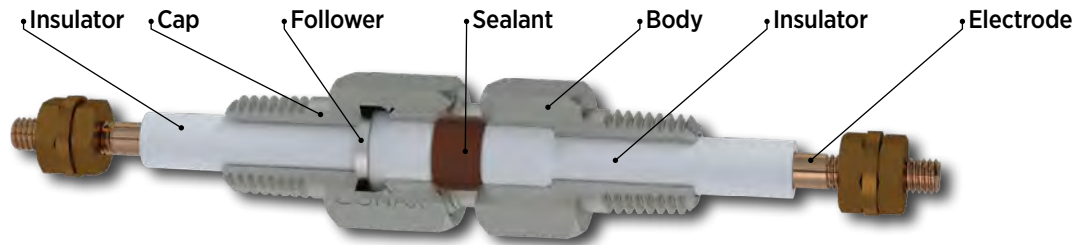


EG Single electrode sealing to 2000VDC



Conax Technologies Model EG (Electrode Gland) Feedthroughs 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 Feedthroughs 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 Feedthrough bodies with NPT threads or SAE threads are constructed from 303 SST standard. Weld neck style feedthroughs are constructed from 316L SST standard. Followers for all styles are constructed from 303 SST standard. 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 303 SST. 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 Specification Charts.
- Voltage Rating: to 2000VDC
- Amperage Rating: 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.

Feedthroughs are supplied factory lubricated. When reused, the feedthroughs should be relubricated to maintain the published torque and pressure ratings. If feedthroughs 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 109 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.

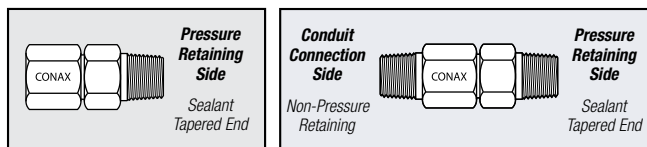
To order a Replacement Packing Set, order RPS – EG (Diameter) – (Sealant).

Example: RPS-EG-093-V

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

Example: RS-EG-093-V

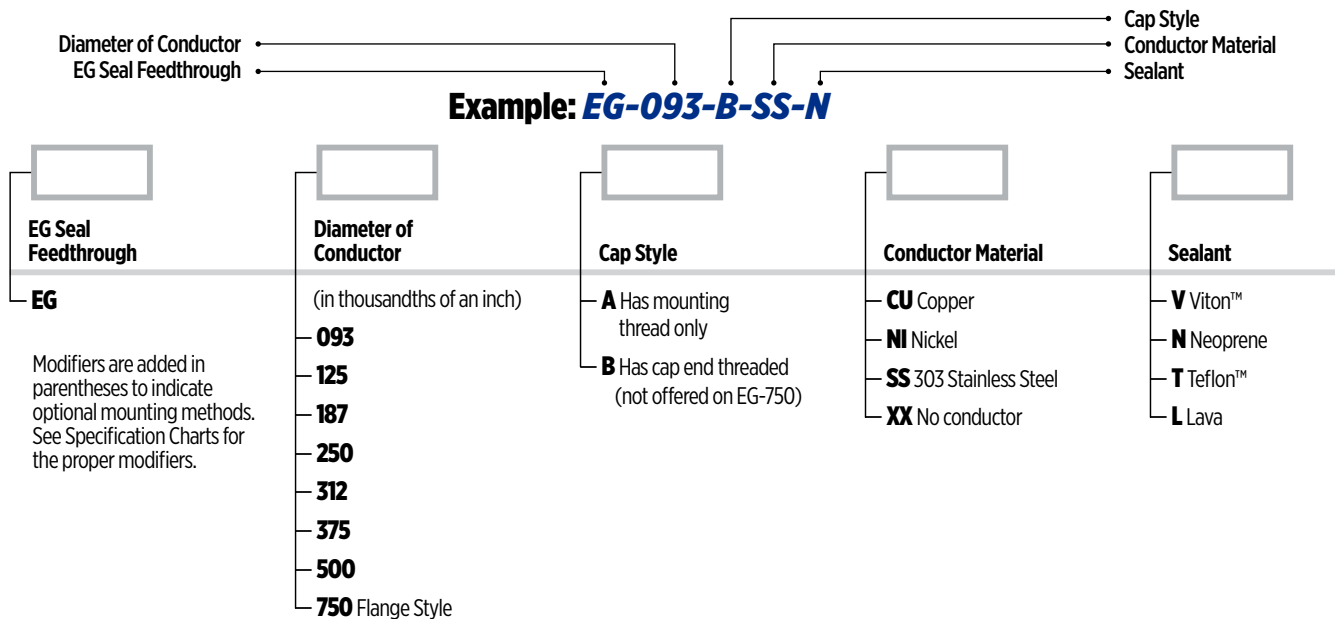
For replacement insulators and conductors, see Accessories on page 106.



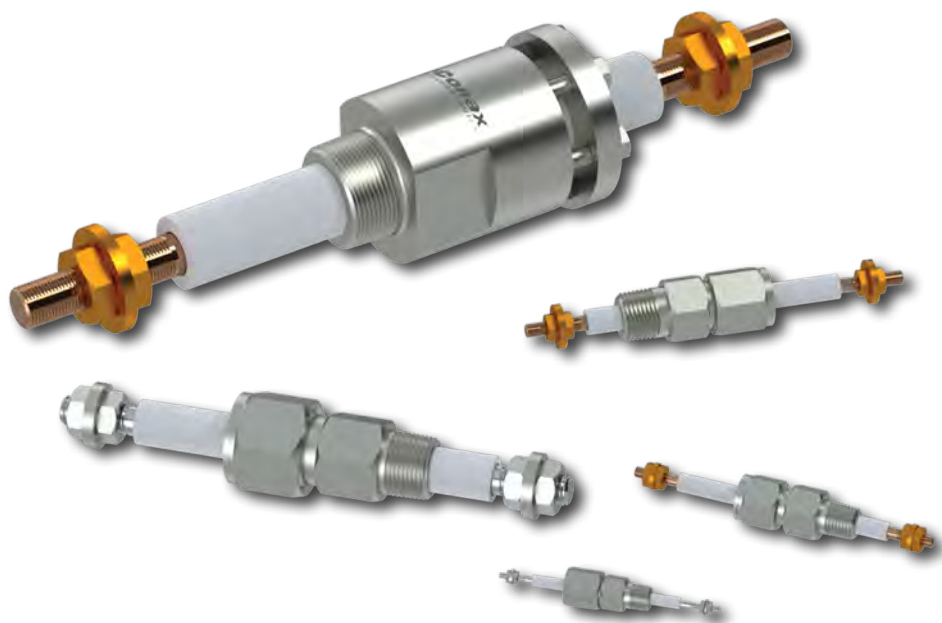
Type A has mounting thread only.

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

Catalog Numbering System



EG SERIES



Specifications

EG SERIES

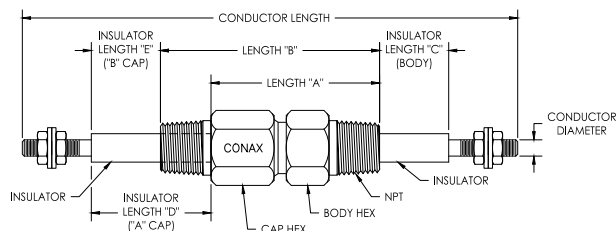
EG Series Single Electrode Sealing—Hex	Conductor				Amperage Rating			Voltage Rating	Length				Hex Size				Pressure Rating							
	Standard		Standard		(@ 30 °C, 90 °C max)				Length A		Length B		Body		Cap		Neoprene		Viton™		Teflon™		Lava	
	Dia.	Length	Dia.	Length					IN	MM	IN	MM	IN	MM	IN	MM	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR
Catalog Number	IN	MM	IN	MM	CU	NI	SS	DC	IN	MM	IN	MM	IN	MM	IN	MM	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR
Standard 1/8" NPT																								
EG-093	0.093	3.5	2.36	88.9	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	3.5	2.36	88.9	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	5.0	3.05	127.0	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	5.0	4.62	127.0	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	5.0	3.05	127.0	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	5.0	4.62	127.0	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	5.0	3.05	127.0	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	5.0	4.62	127.0	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	6.5	6.22	165.1	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	6.5	7.80	165.1	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	6.5	6.22	165.1	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	6.5	7.80	165.1	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	6.5	6.22	165.1	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	6.5	7.80	165.1	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	8.5	9.40	215.9	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	8.5	12.57	215.9	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	8.5	9.40	215.9	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	8.5	12.57	215.9	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	8.5	9.40	215.9	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	8.5	12.57	215.9	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

EG Series Single Electrode Sealing—Flange	Conductor				Amperage Rating			Voltage Rating	Length				Diameter				Pressure Rating							
	Standard		Standard		(@ 30 °C, 90 °C max)				Length A		Length B		Flange		Body		Neoprene		Viton™		Teflon™		Lava	
	Dia.	Length	Dia.	Length					IN	MM	IN	MM	IN	MM	IN	MM	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR
Catalog Number	IN	MM	IN	MM	CU	NI	SS	DC	IN	MM	IN	MM	IN	MM	IN	MM	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR
Standard 1-1/2" NPT																								
EG-750	0.745	15.5	18.92	393.7	400	165	60	2,000	5.00	127.0	N/A	N/A	3.250	82.6	3.000	76.2	N/A	N/A	N/A	N/A	1,800	124	C/F	C/F
Weld Neck (Weld Neck Length 1.03", Diameter 1.90")*																								
EG(SWM8/S316L)-750	0.745	15.5	18.92	393.7	400	165	60	2,000	5.00	127.0	N/A	N/A	3.250	82.6	3.000	76.2	N/A	N/A	N/A	N/A	1,800	124	C/F	C/F

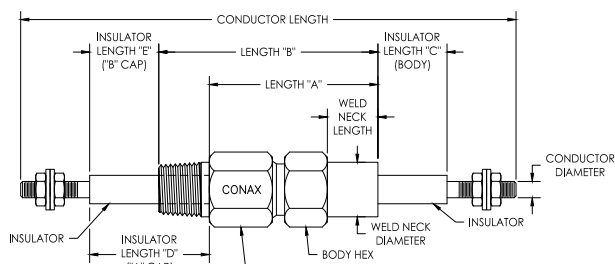
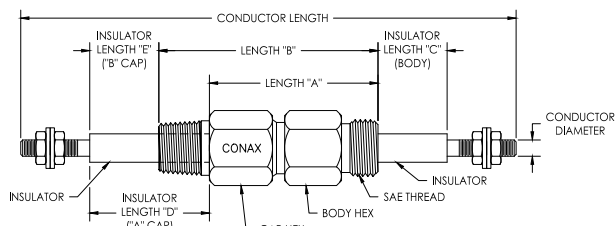
Note: EG-750 is not available with SAE threads.
 Note: The pressure and torque ratings provided in this catalog apply only when bores are drilled by Conax Technologies. Custom bore sizes and/or a blank body, follower and/or sealant may be provided. Consult factory.
 * Weld neck models require lubrication prior to use.
 C/F = Consult Factory. N/A = Not Applicable.
 All pressure and torque ratings were determined at 68 °F (20 °C) using stainless steel rod as the element. Pressure ratings may degrade at higher temperatures. Pressure rating guide values are provided for fittings with elements restrained by the compressed sealant. Higher pressure may be attained with additional element restraints. For proper assembly of these seal fittings, see the Assembly Instructions provided on pages 112-126.

EG Series		Length (inches)		
Cap Style	Process Connection	C	D	E
Hex	1/8" NPT & 0.405" Weld Neck	0.17	0.56	0.50
Hex	1/4" NPT & 0.540" Weld Neck	0.44	1.03	0.50
Hex	1/2" NPT & 0.840" Weld Neck	0.50	1.28	0.56
Hex	3/4" NPT & 1.050" Weld Neck	0.87	1.66	1.00
Flange	1-1/2" NPT & 1.900" Weld Neck	02.97	1.53	N/A
For SAE threads, all sizes – Consult Factory		C/F	C/F	C/F

Hex Style



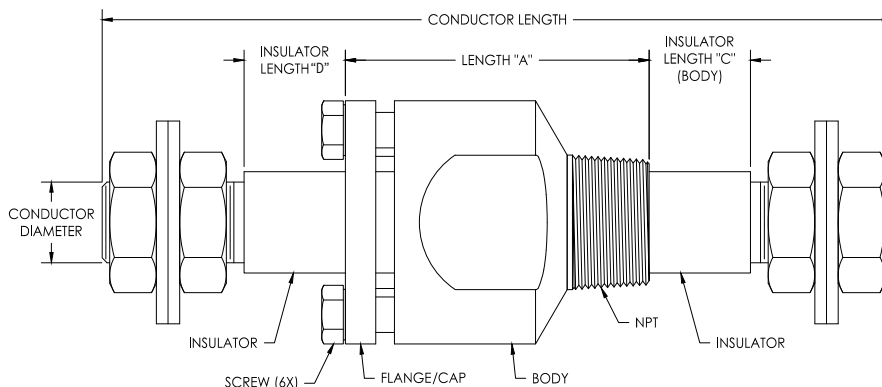
Standard 3/4 NPT



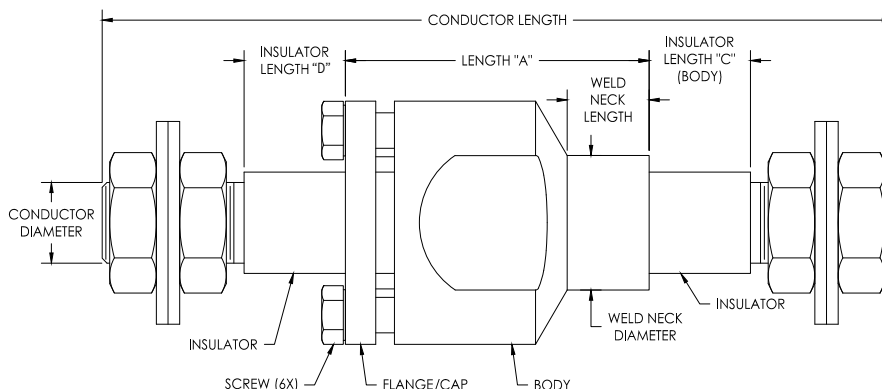
Weld Neck Mount

SAE Thread Mount

Flange Style



EG-750 NPT



EG-750 Weld Neck Mount

