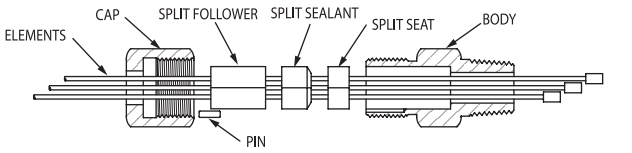
PGS, SPG & DSPG SERIES ■ SPLIT SEALS FOR SINGLE & MULTIPLE PROBE SEALING

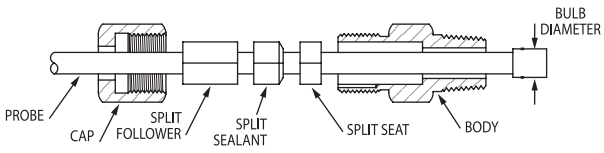
Conax Technologies offers three models of split seals designed to facilitate assembly and sealant replacement when the diameter of the probe tip is larger than the diameter of the element(s) at the location of the seal. Split glands provide split sealants, followers and seats to facilitate easy sealant change without removing the element(s) from the system.

Possible applications include the sealing of analyzer sampling probes with blow-out collars, gas-filled capillary bulb temperature sensors, cable assemblies with factory-installed connectors or to facilitate assembly and disassembly of long cable/sheath lengths.

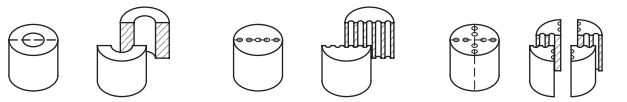
- **PGS Series** assemblies seal on single elements.
- **SPG Series** assemblies seal on multiple elements with a single split.
- **DSPG Series** assemblies seal on multiple elements with a double split.



SPG & DSPG GLAND CONFIGURATION



PGS GLAND CONFIGURATION

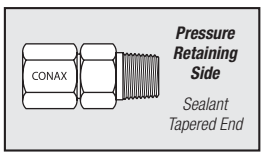


PGS FOLLOWER, SEALANT & SEAT (SINGLE HOLE - ONE SPLIT)

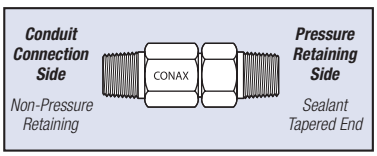
SPG FOLLOWER, SEALANT & SEAT (MULTIPLE HOLES - ONE SPLIT)

DSPG FOLLOWER, SEALANT & SEAT (MULTIPLE HOLES - TWO SPLITS)

Bodies with NPT threads are constructed from 303SST standard. Weld-neck style gland bodies are constructed from 316LSST standard.



Type A has mounting thread only.



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

Optional materials are also available. See page 9 for details. Caps, seats and followers for all styles are constructed from 303SST. Cap Style A offers a mounting thread only. Cap Style B provides threading on both ends for attachment to conduit or terminal heads.

Split glands are offered with Viton, Teflon, Lava and Grafoil sealants, however, due to the complexities of construction, not all hole densities are available in all sealant materials. Alternative sealant materials and custom bore sizes are available. Please consult a Conax sales engineer for custom needs.

- Temperature Range: -400˚ F to +1600˚ F (-240˚ C to +870˚ C)
- Pressure Range: Vacuum to 10,000 PSIG (690 bar) for PGS Series. For SPG and DSPG, due to the many variables affecting pressure ratings on these assemblies, no pressure rating guide is provided. Please consult factory for pressure ratings on a given assembly.

Accessories

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

Glands are supplied factory lubricated. If glands are cleaned prior to assembly or when reused, the glands should be relubricated to maintain the published torque and pressure ratings. See page 103 for information on our lubrication kit.

To order a Replacement Sealant for SPG and DSPG models, order RS – (Gland) – (Diameter) – (Number of Holes) – (Sealant)

Example: ***RS-SPG75-062-2-T***

To order a Replacement Packing Set, including sealant, seat and follower, order RPS – (Gland) – (Diameter) – (Number of Holes) – (Sealant)

Example: ***RPS-SPG75-062-2-T***

To order a Replacement Sealant for PGS models, order RS – (Gland) – (Diameter) – (Sealant)

Example: ***RS-PG2S-093-T***

To order a Replacement Packing Set, including sealant, seat and follower, order RPS – (Gland) – (Diameter) – (Sealant)

Example: ***RPS-PG2S-093-T***

Catalog Numbering System – PGS

Gland Style

PG2S
- 0.062 to 0.250 bore sizes – maximum bulb diameter 0.32"

PG4S
- 0.093 to 0.375 bore sizes – maximum bulb diameter 0.45"

PG5S
- 0.187 to 0.500 bore sizes – maximum bulb diameter 0.78"

Modifiers are added in parentheses to indicate optional mounting methods. See specifications chart for the proper modifiers.

Diameter of Tube or Probe

in thousandths of an inch

062
093
125
187
250
312
375
500

in metric bore

039 (1 mm)
118 (3 mm)
236 (6 mm)

Custom bore sizes also available.

Cap Style

A – has mounting thread only
B – has cap end threaded

Sealant

V – Viton
T – Teflon
L – Lava
G – Grafoil

Other sealant materials also available.

Gland Style / Diameter of Tube or Probe / Cap Style / Sealant

Example: ***PG2S-093-A-T***

Catalog Numbering System – SPG and DSPG

Gland Style

SPG75
- 1/4 NPT

SPG100
- 1/2 NPT

SPG150
- 3/4 NPT

DSPG75
- 1/4 NPT

DSPG100
- 1/2 NPT

DSPG150
- 3/4 NPT

Modifiers are added in parentheses to indicate optional mounting methods. See specifications chart for the proper modifiers.

Diameter of Element

in thousandths of an inch

020 (SPG only)
032
040
062
093
125
187
250

in metric bore

039 (1 mm)
118 (3 mm)
236 (6 mm)

Custom bore sizes also available.

Cap Style

A – has mounting thread only
B – has cap end threaded

Number of Elements Sealed

1
2
3
4
5
6
7
9
10
11
13
17

Sealant

V – Viton
T – Teflon
L – Lava
G – Grafoil

Other sealant materials also available.

Gland Style / Diameter of Tube or Probe / Cap Style / Sealant

Example: ***SPG75-062-A2-T***

Maximum Probe Density

Probe Diameter	SPG75	SPG100	SPG150	DSPG75	DSPG100	DSPG150
0.020	5	7	11	N/O	N/O	N/O
0.032	4	5	10	5	9	17
0.040	3	5	9	5	9	17
0.062	2	4	7	4	5	13
0.093	2	3	5	N/O	5	9
0.125	1	2	4	N/O	4	6
0.187	1	1	3	N/O	N/O	5
0.250	1	1	2	N/O	N/O	4

SPG and DSPG assemblies are not available in all gland sealant materials and/or hole densities. Please consult factory for availability.
N/O = Not Offered.

Specifications – SPG & DSPG

Catalog Number	Length 'A' IN	Length 'A' MM	Length 'B' IN	Length 'B' MM	Hex Size Body IN	Hex Size Cap IN	Hex Size Body MM	Hex Size Cap MM	Pressure Rating PSIG	Pressure Rating BAR
Standard 1/4 NPT										
SPG75	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	C/F	C/F
DSPG75	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	C/F	C/F
Weld Neck Mount (Weld Neck Mount Length 0.59", Diameter 0.540")										
SPG75(SWM2S316L)	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	C/F	C/F
DSPG75(SWM2/S316L)	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	C/F	C/F
Standard 1/2 NPT										
SPG100	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	C/F	C/F
DSPG100	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	C/F	C/F
Weld Neck Mount (Weld Neck Mount Length 0.78", Diameter 0.840")										
SPG100(SWM4/S316L)	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	C/F	C/F
DSPG100(SWM4/S316L)	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	C/F	C/F
Standard 3/4 NPT										
SPG150	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	C/F	C/F
DSPG150	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	C/F	C/F
Weld Neck Mount (Weld Neck Mount Length 0.79", Diameter 1.050")										
SPG150(SWM5/S316L)	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	C/F	C/F
DSPG150(SWM5/316L)	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	C/F	C/F

** Hex size for the body and cap are the same.*
*** When applying torque to SPG150 and DSPG150 models with 0.040" diameters or less containing Grafoil sealants, torque to 200 ft.-lbs., then retorque to 225 ft.-lbs after 24 hours.*
† Weld neck models require lubrication prior to use.
N/O = Not Offered. C/F = Consult Factory.
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 glands with elements restrained by the compressed sealant. Higher pressure may be attained with additional element restraints. Tolerance of tube or probe diameters 0.040" and larger is ±0.005; less than 0.040" is ±0.003. Deviation from the nominal may affect the pressure rating.

Specifications – PGS

Catalog Number	Tube/Probe Diameter IN	Tube/Probe Diameter MM	Length 'A' IN	Length 'A' MM	Length 'B' IN	Length 'B' MM	Hex Size Body IN	Hex Size Cap IN	Hex Size Body MM	Hex Size Cap MM	Pressure Rating Viton PSIG	Viton BAR	Teflon PSIG	Teflon BAR	Lava PSIG	Lava BAR	Grafoil PSIG	Grafoil BAR
Standard 1/4 NPT																		
PG2S-062	0.062	1.57	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	10,000	689	3,200	220	10,000	689	10,000	689
PG2S-093	0.093	2.36	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	9,600	661	1,900	131	10,000	689	9,600	661
PG2S-125	0.125	3.18	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	7,200	496	1,400	96	10,000	689	7,200	496
PG2S-187	0.187	4.75	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	4,500	310	900	62	10,000	689	4,800	331
PG2S-250	0.250	6.35	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	3,000	207	720	50	8,000	551	3,600	248
Weld Neck Mount (Weld Neck Mount Length 0.59", Diameter 0.540")																		
PG2S(SWM2/S316L)-062	0.062	1.57	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	10,000	689	3,200	220	10,000	689	10,000	689
PG2S(SWM2/S316L)-093	0.093	2.36	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	9,600	661	1,900	131	10,000	689	9,600	661
PG2S(SWM2/S316L)-125	0.125	3.18	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	7,200	496	1,400	96	10,000	689	7,200	496
PG2S(SWM2/S316L)-187	0.187	4.75	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	4,500	310	900	62	10,000	689	4,800	331
PG2S(SWM2/S316L)-250	0.250	6.35	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	3,000	207	720	50	8,000	551	3,600	248
Standard 1/2 NPT																		
PG4S-093	0.093	2.36	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	10,000	689	10,000	689	10,000	689	10,000	689
PG4S-125	0.125	3.18	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	10,000	689	10,000	689	10,000	689	10,000	689
PG4S-187	0.187	4.75	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	9,600	661	7,200	496	10,000	689	10,000	689
PG4S-250	0.250	6.35	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	1,500	103	2,400	165	10,000	689	5,000	345
PG4S-312	0.312	7.92	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	1,200	83	2,000	138	10,000	689	5,000	345
PG4S-375	0.375	9.53	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	500	34	1,400	96	10,000	689	3,200	220
Weld Neck Mount (Weld Neck Mount Length 0.78", Diameter 0.840")																		
PG4S(SWM4/S316L)-093	0.093	2.36	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	10,000	689	10,000	689	10,000	689	10,000	689
PG4S(SWM4/S316L)-125	0.125	3.18	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	10,000	689	10,000	689	10,000	689	10,000	689
PG4S(SWM4/S316L)-187	0.187	4.75	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	9,600	661	7,200	496	10,000	689	10,000	689
PG4S(SWM4/S316L)-250	0.250	6.35	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	1,500	103	2,400	165	10,000	689	5,000	345
PG4S(SWM4/S316L)-312	0.312	7.92	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	1,200	83	2,000	138	10,000	689	5,000	345
PG4S(SWM4/S316L)-375	0.375	9.53	2.56	65.1	3.38	85.7	1.000	1.000	25.4	25.4	500	34	1,400	96	10,000	689	3,200	220
Standard 3/4 NPT																		
PG5S-187	0.187	4.75	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	2,100	145	2,500	172	9,600	661	1,200	83
PG5S-250	0.250	6.35	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	1,600	110	1,900	131	7,200	496	900	62
PG5S-375	0.375	9.53	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	1,000	69	1,200	83	4,800	331	600	41
PG5S-500	0.500	12.70	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	800	55	960	66	3,600	248	480	33
Weld Neck Mount (Weld Neck Mount Length 0.79", Diameter 1.050")																		
PG5S(SWM5/S316L)-187	0.187	4.75	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	2,100	145	2,500	172	9,600	661	1,200	83
PG5S(SWM5/S316L)-250	0.250	6.35	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	1,600	110	1,900	131	7,200	496	900	62
PG5S(SWM5/S316L)-375	0.375	9.53	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	1,000	69	1,200	83	4,800	331	600	41
PG5S(SWM5/S316L)-500	0.500	12.70	3.31	84.1	4.06	103.1	1.250	1.500	31.8	38.1	800	55	960	66	3,600	248	480	33

CAUTION: *When sealing on soft, fragile or crushable elements, catalog torques may not apply. When catalog torques are applied, compressed sealants generate considerable forces on the element to be sealed. These forces could result in damaging soft or fragile elements such as coax cables or thin-wall materials. Consult factory for these types of applications.*