

Split Seals for Single and Multiple Probe Sealing

Conax Technologies offers several models of split seal fittings 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 fittings provide removable body internals including split seats, split sealants, and split followers to facilitate easy sealant change without removing the element(s) from the fitting.

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 easy assembly and disassembly of long cable/sheath lengths.

- PGS Series assemblies seal on single elements
- SPGA and SPG Series assemblies seal on multiple elements with a single split
- DSPGA and DSPG Series assemblies seal on multiple elements with a double split
- PGS, SPGA and DSPGA fittings have factory-developed torque values and associated pressure ratings. The legacy SPG and DSPG fittings are qualified by customer-determined torque values and associated customer-determined pressure ratings. Dependent on the sealant, fitting temperature range is within -400 °F to +1600 °F (-240 °C to +870 °C)

Optional materials of construction are available for Bodies, Caps, Followers and Seats. 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.

Split fittings 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.

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. Fittings are supplied factory lubricated. If fittings are cleaned prior to assembly or when reused, the fittings should be relubricated to maintain the published torque and pressure ratings. See page 109 for information on our lubrication kit.

To order a Replacement Packing Set for a PGS, including sealant, seat and follower, order RPS - (Fitting Type/Size) - (Diameter) - (Number of Holes) - (Sealant).

Example: RPS-PG2S-032-T

To order a Replacement Sealant for PGS models, order RS - (Fitting Type/Size) - (Diameter) - (Number of Holes) - (Sealant).

Example: RS-PG2S-032-T

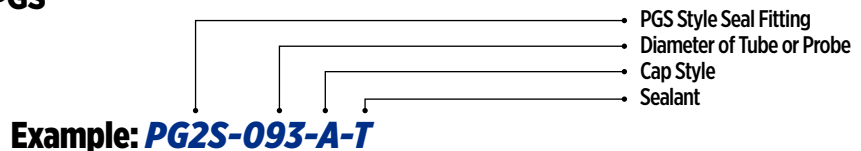
To order a Replacement Sealant only for SPGA and DSPGA models, order RS - (SPGA [size]) - (Diameter) - (Sealant).

Example: RS-SPGA100-062-2-T

To order a Replacement Packing Set, including sealant, seat and follower, order RPS - (SPGA [size]) - (Diameter) - (Sealant).

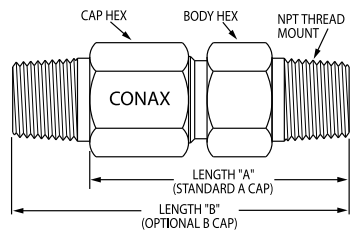
Example: RPS-SPGA100-062-2-T

Catalog Numbering System for PGS

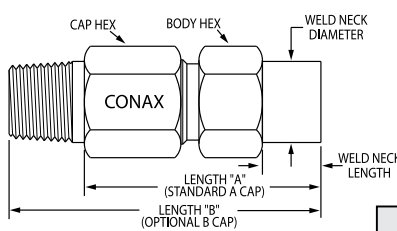


PGS Style Seal Fitting	Diameter of Tube or Probe	Cap Style	Sealant
PG2S • 0.062 to 0.250 bore sizes – max bulb diameter 0.32"	(in thousandths of an inch) 062 250 093 312 125 375 187 500	(in metric bore) 039 1 mm 118 3 mm 236 6 mm Custom bore sizes also available.	V Viton™ T Teflon™ L Lava G GraFoil™ Other sealant materials also available.
PG4S • 0.093 to 0.375 bore sizes – max bulb diameter 0.45"		A Has mounting thread only B Has cap end threaded	
PG5S • 0.187 to 0.500 bore sizes – max bulb diameter 0.78"			

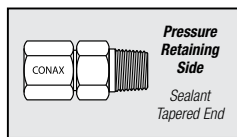
Modifiers are added in parentheses to indicate optional mounting methods. See pages 9-11. See Specification Charts for the proper modifiers.



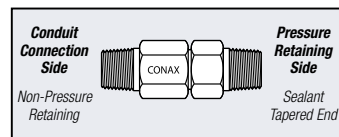
Standard NPT



Weld Neck Mount



Type A has mounting thread only.



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

PGS Series Catalog Number	Tube/Probe		Length				Hex Size				Pressure Rating							
	IN	MM	IN	MM	IN	MM	Body IN	Cap IN	Body MM	Cap MM	Viton™		Teflon™		Lava		GraFoil™	
											PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	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	2,800	193	1,900	131	9,000	620	8,000	551
PG2S-125	0.125	3.18	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	2,800	193	1,400	96	9,000	620	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	8,800	606	4,000	276
PG2S-250	0.250	6.35	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	2,000	138	720	50	7,500	517	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	2,800	193	1,900	131	9,000	620	8,000	551
PG2S(SWM2/S316L)-125	0.125	3.18	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	2,800	193	1,400	96	9,000	620	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	8,800	606	4,000	276
PG2S(SWM2/S316L)-250	0.250	6.35	2.00	50.8	2.63	66.7	0.750	0.750	19.1	19.1	2,000	138	720	50	8,000	517	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	1,500	103	1,600	110	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	1,500	103	1,600	110	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	1,500	103	1,600	110	10,000	689	8,000	551
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	1,600	110	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	7,500	517	4,500	310
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	1,500	103	1,600	110	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	1,500	103	1,600	110	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	1,500	103	1,600	110	10,000	689	8,000	551
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	1,600	110	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	7,500	517	4,500	310
Standard 3/4" NPT																		
PG5S-187	0.187	4.75	3.31	84.1	4.19	106.4	1.250	1.500	31.8	38.1	2,100	145	800	55	2,000	138	1,200	83
PG5S-250	0.250	6.35	3.31	84.1	4.19	106.4	1.250	1.500	31.8	38.1	1,600	110	800	55	2,000	138	900	62
PG5S-375	0.375	9.53	3.31	84.1	4.19	106.4	1.250	1.500	31.8	38.1	1,000	69	800	55	2,800	193	600	41
PG5S-500	0.500	12.70	3.31	84.1	4.19	106.4	1.250	1.500	31.8	38.1	800	55	800	55	2,000	138	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	4.19	106.4	1.250	1.500	31.8	38.1	2,100	145	800	55	2,000	138	1,200	83
PG5S(SWM5/S316L)-250	0.250	6.35	3.31	84.1	4.19	106.4	1.250	1.500	31.8	38.1	1,600	110	800	55	2,000	138	900	62
PG5S(SWM5/S316L)-375	0.375	9.53	3.31	84.1	4.19	106.4	1.250	1.500	31.8	38.1	1,000	69	800	55	2,800	193	600	41
PG5S(SWM5/S316L)-500	0.500	12.70	3.31	84.1	4.19	106.4	1.250	1.500	31.8	38.1	800	55	800	55	2,000	138	480	33

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.

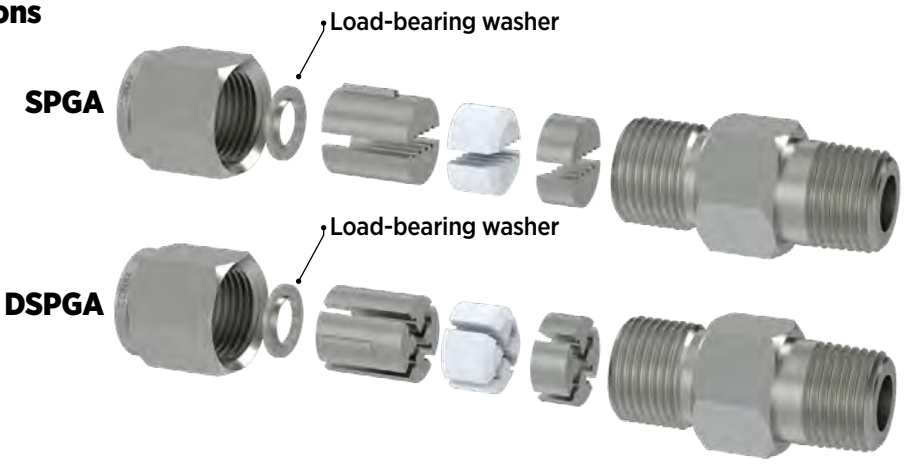
* Weld neck models require lubrication prior to use.

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.

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.

PGS, SPGA, DSPGA, LEGACY SPG & DSPG SERIES

Specifications



Our tightest split seal fitting ever

Conax now offers split seal fittings with pressure ratings that are higher than typical ratings achieved with our legacy SPG and DSPG multi-hole split compression seal fittings.

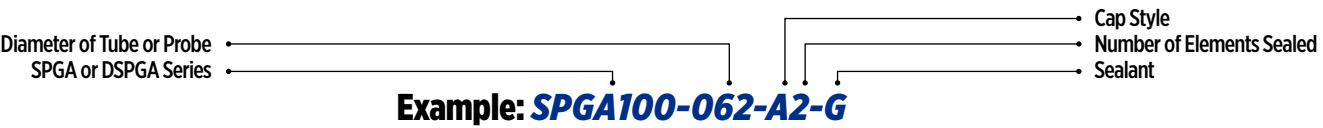
Conax SPGA and DSPGA fittings are our first multi-hole split seal fittings that carry both hydraulic and pneumatic catalog pressure ratings. There's no need to consult the factory when your application falls within the catalog ratings and no need for users to develop their own torque values and associated pressure ratings.

Because the amount of pressure transmitted from the cap to the load-bearing washer, follower, sealant, and seat set is higher, the SPGA and DSPGA create higher sealing pressures that result in a tighter seal on the fitting body and elements. Viton™, Lava and GraFoil™ sealants are available.

The following chart compares the new split fittings to their legacy counterparts. **NOTE: Seats and Followers are NOT interchangeable between new and legacy split fittings.**

New SPGA & DSPGA vs Legacy SPG & DSPG		
Availability	New SPGA/DSPGA	Legacy SPG/DSPG
1/4" NPT Body	N	Y
1/2" & 3/4" NPT Body	Y	Y
Follower with Integral Pin	Y	Y
Load Bearing Washer	Y	N
High-Strength Cap & Follower	Y	N
Pneumatic Pressure Rating	Y	N
Hydraulic Pressure Rating	Y	N
Tight-toleranced Bore for Seat & Follower	Y	N

Catalog Numbering System for SPGA and DSPGA



Example: SPGA100-062-A2-G

SPGA or DSPGA Series	Diameter of Tube or Probe	Cap Style	Number of Elements Sealed	Sealant
SPGA100 DSPGA100 • 1/2 NPT • Max bulb diameter 0.45"	(in thousandths of an inch) 040 062 125 250 Custom bore sizes also available.	A Has mounting thread only B Has cap end threaded	1 2 3 4 5 7 9 10 11 12	V Viton™ L Lava G GraFoil™ Other sealant materials also available.

Modifiers are added in parentheses to indicate optional mounting methods. See pages 9-11. See Specification Charts for the proper modifiers.

Specifications

SPGA Series		GraFoil™				Viton™				Lava			
Catalog Number	Maximum Number of holes	Pneumatic		Hydraulic		Pneumatic		Hydraulic		Pneumatic*		Hydraulic	
		PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR
SPGA100-040	4	6,000	413	7,700	530	6,000	413	9,100	627	2,200	151	10,000	689
SPGA100-062	4	6,000	413	9,700	668	6,000	413	9,100	627	2,200	151	10,000	689
SPGA100-125	2	6,000	413	7,400	510	6,000	413	9,100	627	1,800	124	10,000	689
SPGA150-062	5	3,400	234	3,400	234	2,200	151	2,200	151	500	34	6,800	468
SPGA150-125	4	4,500	310	4,500	310	1,800	124	1,800	124	500	34	5,100	351
SPGA150-250	2	3,100	213	3,100	213	900	62	900	62	500	34	5,700	393

DSPGA Series		GraFoil™				Viton™				Lava			
Catalog Number	Maximum Number of holes	Pneumatic		Hydraulic		Pneumatic		Hydraulic		Pneumatic*		Hydraulic	
		PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR	PSIG	BAR
DSPGA100-040-G	8	4,500	310	6,000	413	4,500	310	7,100	489	500	34	8,400	579
DSPGA100-062-G	4	4,500	310	7,500	517	4,500	310	7,100	489	500	34	8,400	579
DSPGA150-062-G	12	3,000	206	4,000	275	1,200	82	1,200	82	500	34	4,400	303
DSPGA150-250-G	4	2,700	186	2,400	165	900	62	900	62	500	34	4,000	275

Note: The pressure and torque ratings provided in this data sheet 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.

All pressure and torque ratings were determined at 68 °F (20 °C) using mineral insulated metal sheath material as the element. Pressure ratings may degrade at higher temperatures. Pressure rating guide values are provided for fittings with elements unrestrained by the compressed sealant.

• Lava sealant not recommended for gaseous applications.

