

100, 200, 300 Threaded Seals

FEATURES

- Alloy (6 top housing and pressure instrument)
- Flushing port (101, 201 & 301) provides for easy cleaning of process
- Continuous duty design prevents loss of process fluid if instrument is removed



SPECIFICATIONS

Connection Style:	100, 200, 300: threaded 101, 201, 301: threaded with flushing port
Process Connection Size:	¼ to 1½ NPT Female ¼ to 1 NPT Male
Instrument Connection Size:	¼ or ½ NPT
Pressure Ratings (MAWP):	2,500 psi (OPT. 5,000 psi)
Added Tolerance:	±0.5% typical
Wetted Components:	Diaphragm (see Table 1) Bottom housing (see Table 2)
Non-Wetted Components:	Top Housing: Nickel plated carbon steel (STD.); 316L SS, Monel®, titanium (OPT.) Bolt/Clamp rings: Carbon steel Nuts/bolts: Zinc plated alloy steel



100, 200, 300
Threaded Seal



TABLE 1 - DIAPHRAGM MATERIALS

Material	Letter Code	100 Series	200 Series	300 Series	Notes
304L SS	C	•	•		
Carpenter 20®	D	•	•		
904L SS	F		•		
Hastelloy® B	G	•	•		
Hastelloy® C-276	H	•	•		
Hastelloy® C-22	J	•	•		
Kalrez®	K		•	•	Temp limits: 30°F to 212°F Max. pressure: 500 psi
Nickel	N	•	•		
Monel® 400	P	•	•		200-series must be ordered with XYM Monel® top housing option
316L SS	S	•	•		
PTFE	T		•	•	Temp limits: -40°F to 400°F
Titanium	Ti		•		Includes titanium top housing
Gold Plated 316L SS	W	•			
Viton®	Y		•	•	Temp limits: -40°F to 350°F Max. pressure: 500 psi

TABLE 2 - BOTTOM HOUSING MATERIALS

Material	Letter Code	Notes
Super Duplex 2507®	A	
Carbon Steel	B	
304L SS	C	
Carpenter 20®	D	
347 SS	E	
904L SS	F	
Hastelloy® B	G	
Hastelloy® C-276	H	
Hastelloy® C-22	J	
PVDF	KY	Only offered in ½ NPT, ¼ NPT, and socket weld process connections. Not available with flushing connection. PVDF Temperature Limits: 200 psi - 74°F, 125 psi - 125°F, 80 psi - 150°F
Incoloy® 825	L	
Monel® 400	M	
Nickel	N	
321 SS	Q	
316L SS	S	
Titanium	Ti	
PVC	V	Only offered in ½ NPT, ¼ NPT, and socket weld process connections. Not available with flushing connection. PVC Temperature Limits: 200 psi - 74°F, 125 psi - 125°F, 80 psi - 150°F
Inconel® 625	W	
Duplex 2205®	Z	

ORDERING CODE	Example:	10	2	01	S	S	02T	XCK	NH
Process Connection Size									
25 - ¼ NPT Female									
50 - ½ NPT Female									
75 - ¾ NPT Female									
10 - 1 NPT Female		10							
15 - 1½ NPT Female									
02 - ¼ NPT Male									
04 - ½ NPT Male									
06 - ¾ NPT Male									
08 - 1 NPT Male									
SA - ¼" Socket weld									
SB - ½" Socket weld									
SC - ¾" Socket weld									
SD - 1" Socket weld									
Diaphragm Type									
1 - 100 series capsule diaphragm threaded into top housing									
2 - 200 series diaphragm welded (metallic) or bonded (elastomeric) to top housing			2						
3 - 300 series elastomeric diaphragm clamped between top and lower housing									
Flushing Port									
00 - No flushing port									
01 - Flushing port in lower housing				01					
Diaphragm Materials									
S - 316L SS					S				
See Table 1 on page 150									
Bottom Housing Materials									
S - 316L SS						S			
See Table 2 on page 150									
Instrument Connection Size									
02T - ¼ NPT Female instrument connection							02T		
04T - ½ NPT Female instrument connection									
Options (if choosing an option(s) must include an "X")									
								X__	
Fill Fluid (for seals attached to instruments)									
CG - Glycerin									
CK - Silicone SF-96								CK	
CF - Halocarbon®									
See Table 3 on page 175 for more available fill fluids									
Optional Features									
AW - Single ½" flushing connection (Process connection must be ¾ NPT or smaller)									
DB - Dual ½" flushing connections (Process connection must be ¾ NPT or smaller)									
DK - Dual ¼" flushing connections									
PU - Pipe plug for flushing connection (Plug will match bottom housing material. Seals with flushing connections only)									
YT - 316L SS top housing									
YM - Monel® 400 top housing (Must be ordered with Monel® or tantalum diaphragm)									
SB - SS clamping bolts									
SE - SS rings and bolts									
HP - High-pressure clamping rings (Increases MAWP to 5,000 psi unless otherwise limited by material 100, 300 series only)									
LD - SS locking device									
NH - SS instrument tag									NH
NX - Teflon®-free diaphragm seal (200 psi maximum working pressure, 200 series only)									
DU - Instrument welded to top housing (Instrument socket must be like-material to top housing)									
MQ - Positive material identification									
6B - Cleaned for oxygen service									
CD-5 - NACE compliance certificate									

Flange Ratings and Fill Fluids

TABLE 3 - FILL FLUIDS

Fill Fluid	Temperature	Viscosity (cSt at RT)	Variation Code	Notes
Syltherm® XLT	-150°F to 500°F (-100°C to 260°C)	1.4	CC	Low temperature applications
Glycerin (food grade)	0°F to 400°F (-18°C to 204°C)	1,300	CG	Direct-mounting only. Not for use with vacuum service
Silicone SF®-96	-40°F to 500°F (-40°C to 260°C)	50	CK	
Halocarbon® 4.2	-70°F to 300°F (-57°C to 199°C)	4.2	CF	For use with oxygen/oxidizing process media
50/50 Ethylene Glycol/Water	-25°F to 190°F (-32°C to 88°C)	2.9	CT	
Polypropylene Glycol	-50°F to 325°F (-46°C to 163°C)	54	CV	
Food-grade Silicone	-40°F to 500°F (-40°C to 260°C)	350	CZ	
DC®-200 Silicone	-40°F to 500°F (-40°C to 260°C)	10	DJ	
Distilled Water	40°F to 185°F (4°C to 85°C)	0.9	FJ	
Ethylene Glycol	20°F to 325°F (-7°C to 163°C)	14	FK	
50/50 Glycerin/Water	15°F to 200°F (-9°C to 93°C)	30	GH	
80/20 Glycerin/Water	15°F to 225°F (-9°C to 107°C)	270	GR	
Slytherm® 800	-40°F to 750°F (-40°C to 400°C)	10	HA	High temperature applications
Calflo® AF	-20°F to 600°F (-29°C to 316°C)	60	KF	
Mineral Oil	10°F to 400°F (-12°C to 204°C)	75	MY	
Neobee® M-20	5°F to 400°F (-15°C to 204°C)	9.5	NM	Food grade
95/5 Water/Propylene Glycol	40°F to 185°F (4°C to 85°C)	1.0	PY	

TABLE 5 - FLANGE RATINGS

CARBON STEEL FLANGE							STAINLESS STEEL FLANGE						
Maximum Allowable Pressure (psi)							Maximum Allowable Pressure (psi)						
Temp. (°F)	FLANGE CLASS						Temp. (°F)	FLANGE CLASS					
	150	300	600	900	1500	2500		150	300	600	900	1500	2500
<100	285	740	1480	2220	3705	6170	<100	275	750	1440	2160	3600	6000
200	260	675	1350	2025	3375	5625	200	230	600	1200	1800	3000	5000
300	230	655	1315	1970	3280	5470	300	205	540	1075	1615	2690	4480
400	200	635	1270	1900	3170	5280	400	190	495	995	1490	2485	4140
500	170	600	1200	1795	2995	4990	500	170	465	930	1395	2330	3880
600	140	550	1095	1640	2735	4560	600	140	440	885	1325	2210	3680
650	125	535	1075	1610	2685	4475	650	125	430	865	1295	2160	3600
700	110	535	1065	1600	2665	4440	700	110	420	845	1265	2110	3520
750	95	505	1010	1510	2520	4200	750	95	415	825	1240	2065	3440
800	80	410	825	1235	2060	3430	800	80	405	810	1215	2030	3380
850	65	270	535	805	1340	2230	850	65	395	790	1190	1980	3300
900	50	170	345	515	860	1430	900	50	390	780	1165	1945	3240
950	35	105	205	310	515	860	950	35	380	765	1145	1910	3180
1000	20	50	105	155	280	430	1000	20	355	710	1065	1770	2950