

- Broad selection of materials for meeting various service applications, including Teflon, Viton and Kalrez diaphragms.
- Elastomeric diaphragm is clamped securely between the top and bottom housings by clamp rings, assuring positive seal.
- Top housing is contoured to match diaphragm, minimizing distortion of the diaphragm should the pressure instrument be removed.
- Continuous duty.
- Fill/bleed connection is standard.
- Top housing and diaphragm are nonremovable.
- Teflon, Viton and Kalrez diaphragms available in threaded and flanged inlet connections.



### SELECTION TABLES

**Table A – Process Connection/Type Number**

	Process Connection Size/Code—Inches											Type Number
	Size	¼	½	¾	1	1½	2	3	4	6	8	
Process Connection	Code	25	50	75	10	15	20	30	40	60	80	
Threaded—female NPT		•	•	•	•	•						300
Threaded—female NPT (with flushing connection)		•	•	•	•	•						301
Flanged <sup>(1)</sup>		•	•	•	•	•	•	•				302
Flanged (with flushing connection)			•	•	•	•	•	•				303
In-line—threaded NPT		•	•	•	•							304

Pressure Ratings—All 2500 psi except flanged seals are per ASME B 16.5, temperature limit determined by diaphragm, bottom housing and/or filling fluid.

**Table B  
Diaphragm Material**

Material	Code
Teflon <sup>(5)</sup>	T
Viton <sup>(6)</sup>	Y
Kalrez <sup>(12)</sup>	K

**Table C  
Bottom Housing Materials**

Material	Code
Steel	B
304L stainless steel	C
316L stainless steel	S
Hastelloy B	G
Hastelloy C 22 <sup>(7)</sup>	J
Hastelloy C 276 <sup>(7)</sup>	H
Carpenter 20	D
Monel “400”	M
Inconel “600”	W
Nickel	N
PVC <sup>(8)</sup>	V
Tantalum clad stainless steel <sup>(9)</sup>	SU
Halar coated stainless steel <sup>(10)</sup>	BH
Teflon flanged steel <sup>(11)</sup>	T
Kynar <sup>(13)(14)</sup>	KY
Titanium <sup>(13)</sup>	TI

**Table D  
Instrument Connection**

Size – NPT	Code
¼	02T
½	04T

#### NOTES:

- (1) 150, 300, 600, 900, 1500 & 2500 class flanges except 1” 1.50.
- (4) Viton diaphragm in Types 302 & 303 limited to 2” – 150 class flange.
- (5) Temp. Limits: –40/400°F.
- (6) Max. Pressure: 500 psi. Temp. Limits: –40/350°F.
- (7) Use on applications where NACE standard MR-01-75 2003 is specified.
- (8) Maximum Press./Temp. Threaded: 200 psi/74°F, 125 psi/125°F, 80 psi/150°F. Flanged: 75 psi/100°F.
- (9) Type 302 only.
- (10) Type 302 only – Temp. Limits: –40/300°F.
- (11) Only available in 1”, 1 ½”, & 2” 150 class, Type 302. Max. Press./Temp. – 270 psi and 150°F. Consult factory for conditions beyond these limits.
- (12) Max. Pressure: 500 psi. Temp. Limits: 30/212°F.
- (13) On application.
- (14) Maximum Pressure/Temp.: 200 psi and 180°F.

**Table E – Filling Fluid**

Filling	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure/Vacuum	Direct or Flexible Line	–40/750	HA

### TO ORDER THIS TYPE 300 DIAPHRAGM SEAL:

1. From Table A...select TYPE NUMBER based on process connection, process connection size and diaphragm type/construction. (e.g., Threaded/1”clamped–code-10-300)
2. From Table B...select DIAPHRAGM MATERIAL. (e.g., 316L stainless steel–code S)
3. From Table C...select BOTTOM HOUSING MATERIAL. (e.g., 316 stainless steel–code S)
4. From Table D...select INSTRUMENT CONNECTION size. (e.g., ¼ NPT–code 02T)
5. From Table E...select FILLING FLUID, if diaphragm seal will be attached to instrument. (e.g., Glycerin–code CG)

Coded order: 10–300SS–02T–CG

Consult factory for guidance in product selection  
Phone (203) 385-0217, Fax (203) 385-0602 or  
visit our web site at [www.ashcroft.com](http://www.ashcroft.com)