

The comprehensive line of Ashcroft® diaphragm seals will meet a wide variety of application or installation requirements. Over 30,000 variations are possible with the types, connections and materials available.

- The top housing and diaphragm capsule are interchangeable with all Ashcroft bottom housings.
- A fill/bleed connection is standard, which permits filling the seal and instrument simultaneously after evacuation and allows the fill to flow into the completed unit.

- A Viton O-ring, compatible with all standard fill fluids, and a Teflon back-up ring provide a seal between the diaphragm capsule and the top housing.
- A thin Teflon PTFE gasket between the diaphragm and bottom housing assures a leak-tight corrosion resistant seal even at high pressure.
- Top housing and pressure instrument are removable.
- Continuous-duty design will prevent loss of process fluid if pressure instrument is removed or fails.



SELECTION TABLES

Table A – Process Connection/Type Number

Process Connection	Process Connection Size/Code—Inches											Type Number
	Size	¼	½	¾	1	1½	2	3	4	6	8	
Threaded—female NPT	Code	25	50	75	10	15	20	30	40	60	80	Capsule
Threaded—female NPT		•	•	•	•	•						100
Threaded—female NPT (with flushing connection)		•	•	•	•	•						101
Flanged ⁽¹⁾		•	•	•	•	•	•	•				102
Flanged (with flushing connection)		•	•	•	•	•	•	•				103
In-line—threaded NPT		•	•	•	•							104
Saddle									•	AND LARGER		105
In-line—butt weld		•	•	•	•	•	•	•	•	•	•	108
In-line—flanged ⁽²⁾		•	•	•	•	•	•	•	•	•	•	106
In-line—socket weld		•	•	•	•	•	•	•	•	•	•	107

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
316L stainless steel	S
304 stainless steel	C
K-Monel ⁽⁶⁾	P
Nickel	N
Carpenter 20	D
Tantalum	U
Hastelloy B	G
Hastelloy C 22 ⁽⁷⁾	J
Hastelloy C 276 ⁽⁷⁾	H
Halar Coated Monel	PH
Gold Plated 304 st. stl.	W

**Table C
Bottom Housing Materials**

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

**Table D
Instrument Connection**

Size – NPT	Code
¼	02T
½	04T

NOTES:

- (1) 150, 300, 600, 900, 1500 & 2500 class flanges.
- (2) 1" 150 thru 8" 300 class flanges only.
- (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 102 only.
- (10) Type 102 only – Temp. Limits: –40/300°F.
- (11) Only available in 1", 1 ½", & 2" 150 class, Types 102.
Max. Press./Temp. – 270 psi and 150°F.
Consult factory for conditions beyond these limits.
- (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 100 DIAPHRAGM SEAL:

1. From **Table A**...select TYPE NUMBER based on process connection, process connection size and diaphragm type/construction. (e.g., Threaded/1"/capsule—code-10-100)
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: 10-100SS-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