

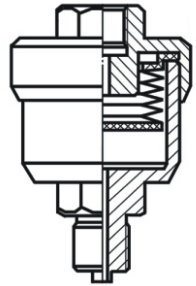
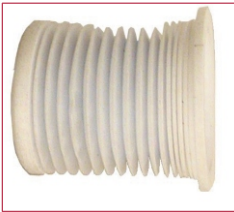
VULCAN SERIES

Developed using aerospace technology, the Vulcan series of PTFE bellows seals possess a unique elasticity and pressure sensitivity that allows them to be used in a huge range of applications which were previously the preserve of metal diaphragm seals.

With a wall thickness of .2mm and V-section convolutions the bellows itself has a large displacement volume which improves accuracy and they provide a more compact solution to process pressure transmission compared with a system using steel or exotic metal diaphragms.



They have wide operating temperature and pressure ranges and are particularly useful in low pressure situations. Reduced ambient and process temperature effects on the accuracy of the reading coupled with a chemical stability which can be more corrosion-resistant than tantalum or platinum-coated diaphragms and the potential to use very long capillary lines (up to 60m) between the seal and the pressure indicator make for a durable, flexible system with a wide variety of uses.



Standard Features

Seal Housing	316 Stainless Steel
Seal Construction	PTFE, 0.2mm V-shaped convolutions
Seal Diameter	32mm
Process Connection	1/2" NPT Female
Instrument Connection	1/2" NPT Male
Transmission Fill	TO -05
Accuracy	see table below
Max. Operating Temp.	200°C see below)
Max. Operating Pressure	200 bar

Several bellows sizes are available. The greater the displacement volume, the better the accuracy at low pressures.

Bellows Diameter (mm)	Internal Volume (cc)	Displacement Volume(cc)	Accuracy	Min Span (bar)
32	12	5	0.50%	6
48	30	12	0.20%	2.5
76	45	30	0.20%	1



Instrument Limitations

Seal Housing	Operating Temp. Range	Max. Working Pressure (bar)
PVDF	-50 to +80°C	60
St. Steel 316	-50 to +250°C	200
St. Steel 321	-50 to +250°C	200
Monel 400	-50 to +200°C	160
Hastelloy C276	-50 to +250°C	200
Titanium	-50 to +250°C	200

Options	
Seal Housing	St. Steel 321, Hastelloy C276, Monel 400, Titanium, PVDF
Seal Diameter	48mm, 76mm
Process Connection	1/4", 1/2", 3/4" BSP or NPT Male or Female ASME 1/2", 1 1/2", 2" / DIN DN15, 25, 40 Flanges
Instrument Connection	1/4", 1/2", 3/4" BSP or NPT Male or Female
Transmission Fill	TO-23, TO-31, TO-41, TO-47



ORDERING MATRIX

Locate the order code for your specification and enter it into the appropriate box. See the Diaphragm Seals introduction and the tables on the previous page for more information about each component.

PROCESS CONNECTION

FLANGED			THREADED		
FLANGE SIZE	PRESSURE RATING		CONNECTION	SIZE	TYPE
A: ASME 1/2"	A: 150#	1: 1.5	1: NPT	A: 1/4"	M: Male
B: ASME 1 1/2"	B: 300#	2: 10-40	2: BSP	B: 1/2"	F: Female
C: ASME 2"	C: 4-600#	3: 64-140		C: 3/4"	
D: DIN 15	D: 9-1500#	4: 250			
E: DIN 25	E: 2500#	5: 320			
F: DIN 40		6: 400			

TRANSMISSION FILL

- 1:** TO - 02
- 2:** TO - 03
- 3:** TO - 11
- 4:** TO - 17
- 5:** TO - 23
- 6:** TO - 31
- 7:** TO - 41
- 8:** TO - 47

HOUSING MATERIAL

- A:** Standard
- B:** St. Steel 321
- C:** MONEL® 400
- D:** Hastelloy C276
- F:** Titanium
- G:** PVDF

DIAPHRAGM SIZE

- A:** 32mm
- B:** 48mm
- C:** 76mm

- ### SIZE
- A:** 1/4"
 - B:** 1/2"
 - C:** 3/4"

INSTRUMENT CONNECTION

- #### CONNECTION
- 1:** NPT
 - 2:** BSP

- #### TYPE
- M:** Male
 - F:** Female

CAPILLARY

LENGTH

- 0:** None
- A:** 1m
- B:** 1.5m
- C:** 2m
- D:** 3m
- E:** 4m
- F:** 6m

QUANTITY

MODEL



Other process connections available on request.



Can be fitted to

PG TR PS

Select the instrument you want to have connected to this seal and write in the complete order number in the empty matrix above. Together with the seal order number this completes the specifications for your instrument.