# Diaphragm Seals General Specifications



## 2 Piece Screwed Chemical Seal

Type CSS

### Application.

Designed for the chemical and petroleum industries, the twopiece screwed chemical seal operates up to 60bar. The screwed fitting allows easy separation of top and bottom chambers for cleaning or servicing. Both chambers are generally made from 316L stainless steel, however the diaphragm material can be changed for harsher applications. Available in several male threaded process connections the two-piece chemical seal provides an excellent chemical barrier to protect pressure gauges and transmitters where process control is required and small line sizes are used.

#### Configuration.

The CSS seal consists of 2 parts. The top half has the diaphragm welded in place and is fixed to the instrument either directly or by capillary. The lower half is attached to the process. The two halves are screwed together, and sealed by a Viton "O"Ring. Note that although the diaphragm can be made of various materials the top half is a wetted part and is manufactured from 316L stainless steel.

#### Seal Construction.

Body machined from 316L stainless steel bar stock. Other materials available on request.

#### **Process Connection.**

3/8" BSPT male 1/2" NPT male

Other connections available on request.

#### **Instrument Connections.**

1/4" BSPT female

1/4" NPT female

1/4" BSPP female

3/8" BSPP female

½" BSPP female

Other connections available on request.

## Diaphragm Materials.

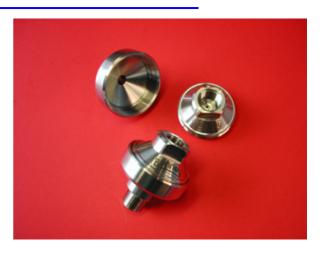
316L Stainless Steel (Standard) 304 Stainless Steel Hastelloy C-276 Monel 400 Nickel 200 Other materials available on request.

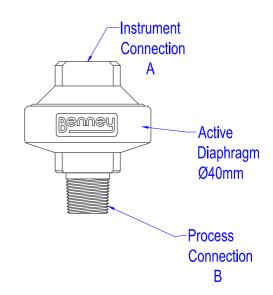
#### Maximum Pressure.

60 bar maximum, or the maximum working pressure of the associated pipe-work and fittings.

#### Zero Stability.

Stability will be affected by the instrument configuration, ambient temperature, process temperature, connection size (diaphragm size) and the measuring range. For temperature effects and instrument accuracy please contact us.





#### Standard seal configuration.

"A"	"B"
½" BSPP - Female	½" NPT - Male
½" BSPP - Female	3/8" BSPT - Male
3/8" BSPP - Female	½" NPT - Male
½" NPT - Female	3/8" BSPT - Male