# type DT manual

## DT 108 STAINLESS STEEL DIAPHRAGM SEAL

#### **FEATURES**

The economical DT108 diaphragm seal is designed for equipping pressure gauges, pressure transmitters and pressure switches which cannot be directly mounted in contact with a corrosive, viscous or crystallising liquid for which they measure the pressure. Threaded connection.

### **LIMITS OF USE**

Fluid WP:	40 bar
Fluid WT° (outside filling liquid):	-40°C / +150°C

connection		minimum range	maximum
pressure gauge	process	(bar)	range (bar)
G 1/2" F	G 1/2" M	0-1.6	0-40
G 1/4" F	G 1/4" M	0-1.6	0-40

#### **CONSTRUCTION**

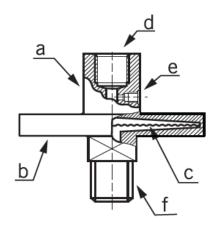
Name	Material	
Upper body		
Lower body	AISI 316 SS	
Membrane	AISI 316 L stainless steel	
Instrument fitting	n.a.	
Filling orifice	n.a.	
Process fitting	n.a.	
	Upper body Lower body Membrane Instrument fitting Filling orifice	

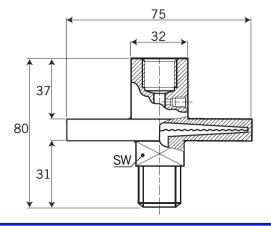
### **DIMENSIONS (mm) AND CONNECTIONS**

Tightening wrench		
SW	26	









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## **HOW TO CHOOSE A DIAPHRAGM SEAL**

- 1. The diaphragm seal has to be chosen depending upon the process conditions (type of fluid, pressure, temperature, etc.) and upon the volume of the measuring device to protect.
- 2. The filling liquid has to be chosen depending upon the process conditions (type of fluid, pressure, temperature, etc.), upon the material of the measuring device to protect, and upon the type of application (standard or food-related).
- 3. The liquid used must not contain gas.

### **FILLING INSTRUCTIONS**

- 1. Mount the pressure gauge on the diaphragm seal using a suitable gasket to prevent leakage.
- 2. Bring the system chamber to vacuum by using the filling orifice reference mark (e).
- 3. Fill the chamber with the filling liquid chosen.
- 4. To provide optimum filling, push with compressed air (maximum 0.5 bar).
- 5. During the filling phase, it is important to balance the pressure on each side of the membrane to prevent its deformation.
- 6. Close the filling orifice (e).
- 7. Check that the liquid is not under pressure. If this is the case, release a little bit of pressure by loosening the
- 8. Check the membrane flatness.

#### INSTRUCTIONS FOR INSTALLING THE SYSTEM

- 1. Connect the diaphragm seal pressure gauge system to the process. To tighten threaded models, use a flat wrench gripping the diaphragm seal flat spot at the bottom. Never try to tighten by gripping the dial of a pressure gauge.
- 2. Diaphragm seals do not need servicing.
- 3. The diaphragm seal must not leak. If a leakage occurs, the pressure measurement will be wrong.
- 4. Pressure gauges lose one class of accuracy when mounted on a diaphragm seal.

