

# DIAPHRAGM TYPE CHEMICAL SEAL



**Process connection:  
Flange acc. to DIN 1092-1**

**or  
Flange acc. to ANSI B 16.5**



## Discription

Chemical seals are used when media can falsify the pressure measurements due to high temperature, high viscosity (media in paste form) or their propensity to crystallise.

Chemical seals transmit the process pressure to the measuring instrument, with the diaphragm forming a hermetic seal between the medium and measuring instrument.

The flanges of the diaphragm type chemical seal Compact match the dimensions of standardised flanges. The diaphragm is either internal or flush at the front depending on the design.

The medium wetted parts of these chemical seals are manufactured in stainless steel as standard. In connection with a Bourdon tube pressure gauge or a transducer, they are suitable for pressure ranges from 0...1 bar to 0...100 bar.

The parts in contact with the medium can be manufactured in special materials for particular service conditions.

## Features

- Compact design with internal diaphragm
- Membran and flange in stainless steel
- Special materials for extreme service requirements
- for media up to 200°C
- Mountable on instrumentation and control equipment

## Pressure ranges

0 ... 1 bar up to 0 ... 100 bar

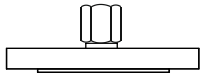
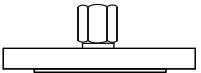
## Rated pressure

max. PN 100

## Applications

Plant and apparatus construction,  
Food industries  
Chemical and petrochemicals industries  
Pharmacy

## Technical information

Type	1005		1006		Options
Symbol					
Process-connection	acc. to DIN EN 1092-1		acc. to ASME B16.5		Others in request
Execution	One part, welded diaphragm flush				
Membran	Stainless steel				Others on request
Pressure connection	DN 25	DN 50	1"	2"	
Membran-diameter	28 mm	48 mm	28 mm	48 mm	
Flange	Stainless steel				
Filling Fluid	Oil				Others on request
Operation temperature	-20°C up to 200 °C				up to 400°C

### Applications type 1005

Ø Membran	Rated press.	Application
DN 25	PN 40	≥ 6 ; ≤ 40 bar
	PN 100	≥ 10 ; ≤ 100 bar
DN 50	PN 40	≥ 1 ; ≤ 40 bar
	PN 63	≥ 6 ; ≤ 60 bar
	PN 100	≥ 6 ; ≤ 100 bar

### Applications type 1006

Ø Membran	Class (lb/sq.)	Application
1"	Class 150	≥ 1 ; ≤ 10 bar
	Class 300	≥ 1 ; ≤ 16 bar
2"	Class 150	≥ 1 ; ≤ 10 bar
	Class 300	≥ 6 ; ≤ 16 bar

### Important notes on the selection of chemical seals

The process pressure to be measured is applied to the measuring instrument by the chemical seal with the aid of a liquid.

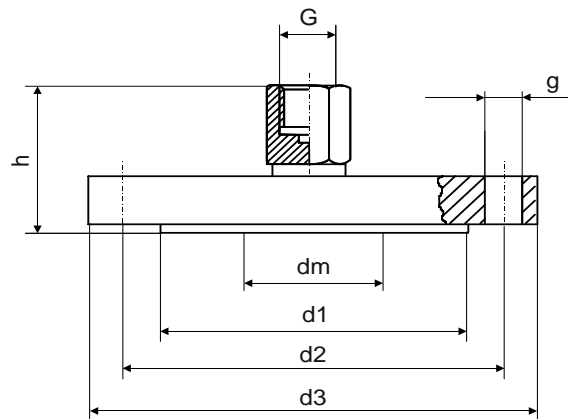
The chemical seal and measuring instrument can be connected by capillary lines (length up to max. 15m) for system related reasons and in order to prevent the exposure of measuring instruments to impermissibly high temperatures.

The temperature drop between the instrumentation and control unit and the chemical seal can be several 100°C.

Measuring errors resulting from temperature are therefore possible and may be of a magnitude several times the accuracy of the measuring instrument.

Matching of the chemical seal and pressure measuring instrument therefore requires expertise and we shall be pleased to assist you. We recommend you to request our special questionnaire on service conditions and order data.

**Dimensional drawing**      Dimensions in mm



**Type 1005 connection acc. to DIN 1092-1**

DN	PN	G	dm	d1	d2	d3	h	g	approx. weight
25	40	G½	28	68	85	115	60	4 x Ø 14	1,4 kg
50	40	G½	48	102	125	165	60	4 x Ø 18	3,0 kg
50	63	G½	48	102	135	180	64	4 x Ø 22	5,0 kg
50	100	G½	48	102	145	195	66	4 x Ø 26	5,0 kg

**Type 1006 connection acc. to ASME B16.5**

DN	Class	G	dm	d1	d2	d3	h	g	approx. weight
1"	150	G½	28	51	79,5	110	60	4 x Ø 16	1,4 kg
2"	150	G½	28	92	120,7	165	60	4 x Ø 20	3,0 kg
1"	300	G½	48	51	89	125	60	4 x Ø 16	1,4 kg
2"	300	G½	48	92	127	165	60	4 x Ø 20	3,0 kg

**Ordering details:**

Model / Process connection (Size/Norm) / Materials (wetted parts) / Instrument connection / Filling liquid Installation at pressure gauge / Process conditions as per questionnaire