

Capsule-Chemical Seals

**Process connection: male pipe thread
or male running nut
or female union nut**



Description

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.

By the constructional condition and by different process connection types capsule-chemical seals are particularly suitable for flowing, heterogeneous measuring materials, since they dive directly into the medium.

The medium wetted parts of these chemical seals are manufactured in stainless steel as standard. In connection with a Bourdon tube pressure gauge or an transducer, they are suitable for pressure ranges from 0 .. 10 bar to 0... 1600 bar.

The connection can be executed as capillary line with cooling element or after customer's request.

Features

- o Various process connections
- o For media up to 400°C
- o Sensor with medium
- o Suitable for high pressures
- o Simple mounting
- o Mountable on instrumentation and control equipment

Pressure ranges

0 ... 10 bar to 0 ... 1600 bar

Rated pressure


max. PN 1600

Applications

Plant and apparatus construction,
Process engineering,
Chemical and petrochemical industries.

Model: P3030

Technical data

Models	P3030			Options
Symbol				
Rated pressure	PN 1600			
Pressure ranges	0 ... 10 bar to 0 ... 1600 bar			
Process connection	Male pipe thread f	Male running nut	Female union nut	Other connections on request
Thread/Capsule	G 1/2 B / 75 x 13 x 6 M 20x1.5 / 75 x 13 x 6 G 3/4 B / 100 x 18 x 7	G 1/2 B / 75x13x6 G 3/4 B / 100x18x7	G 1/2 female / 75x13x6 G 3/4 female / 100x18x7	
Material	Stainless steel 1.4571	Stainless steel 1.4571	G 1 female / 100x18x7 Stainless steel 1.4571	
Instrument connection	G 1/2 to DIN 16 288, form Z			Other connections on request
Material	Stainless steel 1.4571			
Capsule sensor	Stainless steel 1.4571, welded with instrument connection			

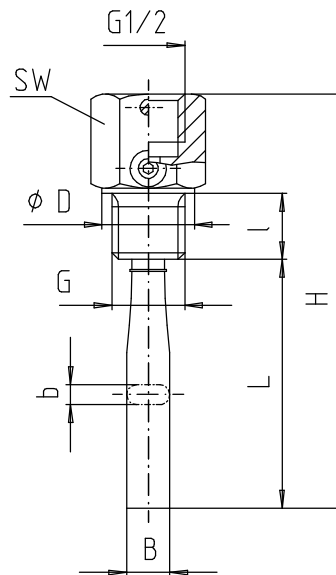
Important notes on the selection of chemical seals

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 together by capillary lines (length up to max. 15 m) 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. The particular operating conditions can be taken into account in the manufacture of I&C device-chemical seal combinations.

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.

Dimension (mm)

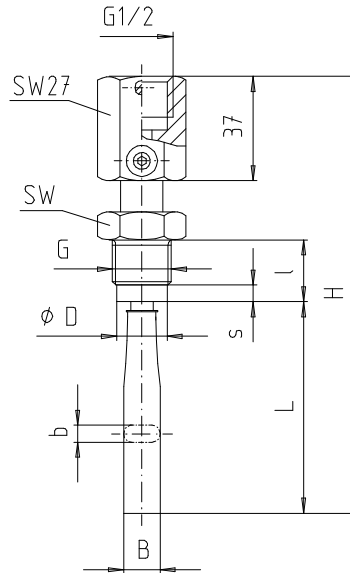
Male pipe thread



Dimensions [mm]								Weight [kg]
G	I	D	SW	L	B	b	H	
G 1/2 B	20	28	30	75	13	6	125	0.25
M 20 x 1.5	20	28	30	75	13	6	125	0.25
G 3/4 B	22	35	36	100	18	7	152	0.40

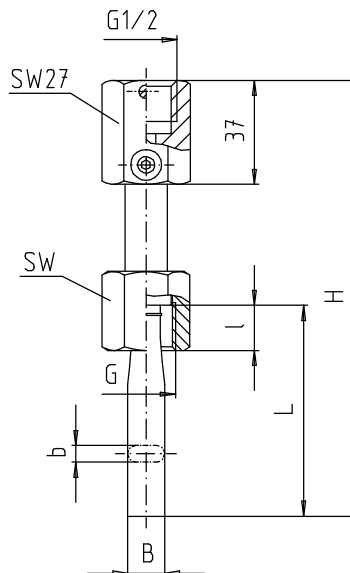
Dimension (mm)

Male thread running nut



Dimensions [mm]									Weight [kg]
G	I	D	s	SW	L	B	b	H	
G 1/2 B	22	18	6	27	75	13	6	155	0.30
G 3/4 B	24	24	6	32	100	18	7	180	0.40

Union nut



Dimensions [mm]							Weight [kg]
G	I	SW	L	B	b	H	
G 1/2	16	27	75	13	6	155	0.30
G 3/4	18	32	100	18	7	180	0.40
G 1	18	41	100	18	7	180	0.50

Ordering details:

Model/Process connection (Size/Norm) /Material (wetted parts)/Thread/Filling liquid/Installation to pressure gauge / Operating conditions according to special questionnaire.