Diaphragm type chemical seal Compact with tube

Process connection: flange to DIN 2 501
or flange to ANSI B 16.5

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. With various process connection systems the chemical seal "**Compact with tube**" is especially available for flush installation at heavily insulated vessels.

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 .. 25 mbar to 0..40 bar.

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

When the permissible rated pressure is exceeded, a specially designed diaphragm prevents damage to the chemical seal.

Features

- o Various process connections
- o For media up to 400°C
- o Overload protection by diaphragm bed
- o flush installation at heavily insulated vessels
- o Special materials for extreme service requirements
- o Mountable on instrumentation and control equipment

Pressure ranges

0 ... 25 mbar to 0 ... 40 bar

Rated pressure

max. PN 40

Applications

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

Model: P3007, P3008

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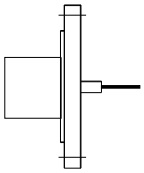
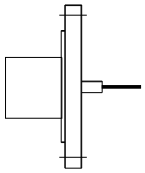
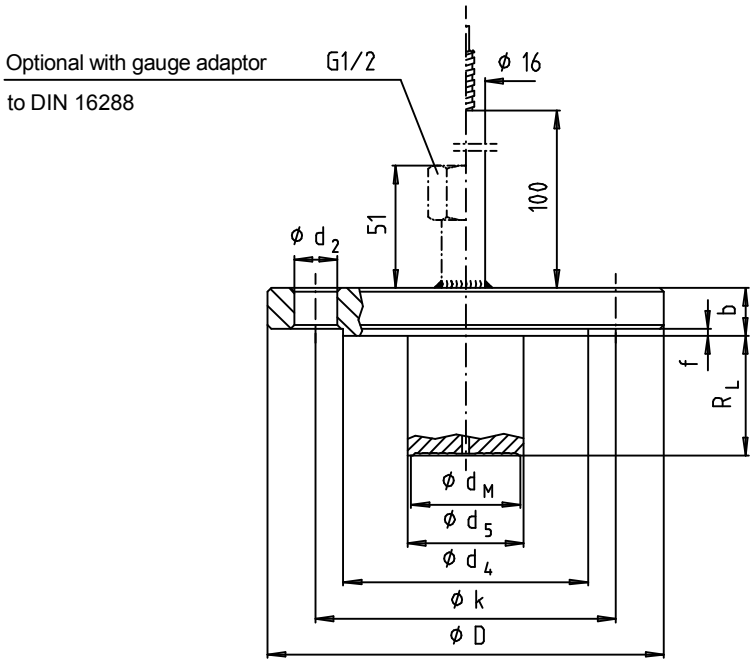
Technical data

Models	P3007	P3008	Options
Symbol			
Rated pressure	PN 16, PN40	Class 150, Class 300	
Process connection	DIN 2 501 DN 50, 80, 100, 125	ANSI B 16.5 DN 2", 3", 4", 5"	Others on request
Instrument connection with capillary material	Gauge adaptor G1/2 female thread to DIN 16 288, form Z with capillary welded at flange body stainless steel		1/2 NPT Others on request
Flange body with tube material	Flange body welded with tube stainless steel 1.4571		stainless steel 1.4404, 1.4435 1.4541, Titan
Tube length	50, 100, 150, 200 mm		Special length
Diaphragm material	Stainless steel 1.4571, welded with tube		Others on request
Sealing face	DIN 2 526 form D	ANSI RF	DIN 2 526 form E, ANSI B 16.5 RFSF and others
Capillary Material Standard length	Stainless steel, with trail handspike welded at flange body 1; 1.6; 2.5; 4; 6; 8; 10; 15 m; smallest benting radius 50 mm		Special length
Protection hose	Stainless steel		PE, smooth
Mounting	Sealing to DIN 2 690	Sealing to ANSI B 16.5	
	not inclusive		

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.

Matching of the chemical seal and pressure measuring instrument therefore requires expertise, and we shall be pleased to assist you.

Dimensions



Model P3007 Connection to DIN 2 501

DN [mm]	PN [bar]	Dimensions [mm]									
					Bore			Raised portion		Tube	
		d_M	D	b	numbersl	d_2	k	f	d_4	d_5	R_L
50	40	47	165	20	4	18	125	3	102	48.3	50, 100, 150, 200
80	16	72	200	20	8	18	160	3	138	76	50, 100, 150, 200
	40	72	200	24	8	18	160	3	138	76	50, 100, 150, 200
100	16	89	220	20	8	18	180	3	158	94	50, 100, 150, 200
	40	89	235	24	8	22	190	3	162	94	50, 100, 150, 200
125	16	124	250	22	8	18	210	3	188	125	50, 100, 150, 200
	40	124	270	26	8	26	220	3	188	125	50, 100, 150, 200

Model P3008 Connection to ANSI B 16.5

DN [in]	Class	Dimensions [mm]									
					Bore			Raised portioin		Tube	
		d_M	D	b	numbers	d_2	k	f	d_4	d_5	R_L
2	300	47	165	22.5	8	20	127	1.6	92	48.3	50, 100, 150, 200
3	150	72	190	24	4	20	152.5	1.6	127	76	50, 100, 150, 200
	300	72	210	29	8	22	168.5	1.6	127	76	50, 100, 150, 200
4	150	89	230	24	8	20	190.5	1.6	158	94	50, 100, 150, 200
	300	89	255	32	8	22	200	1.6	158	94	50, 100, 150, 200

Ordering details :
Model / process connection (Size / Norm) / Material (wetted parts) / Instrument connection / Filling liquid / Installation at pressure gauge / Process conditions as per questionnaire.