



Diaphragm-Type Chemical Seals

Cell-Type (Sandwich) Diaphragm Seals • Model 990.28

Chemical Seals

Service intended

Process industry chemical seal to combine with pressure transmitters. Suitable for corrosive, contaminated, hot or viscous pressure media.

Desian

Body with sealing face and integral diaphragm to be sandwiched between stock flanges

Process connection

To fit flanges DN 50 to DN 125 (2 to 5 in.) per DIN, ANSI or other standards

Pressure rating

PN 16 to PN 400/420 (class 150 to 2500)

Suitable pressure ranges

25 mbar and up, depending on diaphragm size and process conditions

Standard features

Body (process connection)

Stainless steel 1.4571 to accept capillary extension Dimensions to DIN 2501 resp. ANSI B 16.5 (available sizes see drawing and table) Sealing face to DIN 2526 Form D resp. ANSI RF

Diaphragm

Stainless steel 1.4571, welded to body

Capillary extension

Radial-entry armoured capillary of stainless steel 1.4571, welded with body.

Armour material stainless steel 1.4301

Standard extension 1, 1.6, 2.5, 4, 6, 8, 10, 15 m

Minimum curve radius 50 mm

Instrument connection

Adaptor G $\frac{1}{2}$ female per DIN 16 288, form Z, welded to capillary Material stainless steel 1.4571

Installation

Use appropriate blind stock flange and gasket per DIN 2690, DIN 2698 or ANSI B 16.5 (gasket not included)



Optional extras

Body (process connection)

- Sealing faces:

DIN 2526 form E, C; ANSI B 16.5 RFSF DIN 2512 groove and tongue; DIN 2513 projection and recess ANSI B 16.5 snap ring groove form RJF

- limited for special materials (please inquire)
- Flame proof throttle approved for Zone 0

Diaphragm

- Stainless steel 1.4404, 1.4435, 1.4541
- Hastelloy B2, C4, C276, Monel 400, nickel, Inconel 600
- Incoloy 825, tantalum
- Metal-bonded to flange body of 1.4571, suitable up to 400 °C
- Silver foil max. 150 °C
- Gold plating approx. 25 micron
- titanium
- PTFE foil max. 150 °C £ +100 bar
- PFA coating max. 260 °C
- ECTFE coating max. 150 °C

Capillary extension

- Custom extension lengths between 1 and 15 m
- Soft polyethylene armour

Instrument connection

- Adaptor with optional welding or pipe thread nipple

Dimensions Standard version

0 d M 0 d 4

1036 955.01

Flange per DIN 2501

DN [mm]	PN [bar]	Dimensions [mm]			Weight
		d _M	d ₄	b	[kg]
50	16 400	59	102	20	1.30
80	16 400	89	138	20	2.30
100	16 400	89	158	20	3.10
125	16 400	124	188	22	4.80

Flange per ANSI B 16.5

DN [in.]	PN [class]	Dimensions [mm]			Weight
		d_{M}	d ₄	b	[kg]
2	150 2500	59	100	20	1.25
3	150 2500	89	134	20	2.25
4	150 2500	89	158	20	3.10
5	150 2500	124	186	22	4.70

Effective diameter of diaphragm = d_M

Ordering information

Specify:

Model / Size, pressure rating and applicable standard of connection / Material of wetted parts / Size of instrument connection / Filling liquid / Pressure instrument desired / Process conditions as per questionnaire / Optional extras required

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.



