

Flanged Process Connection, Diaphragm Seals Cell-Type (Sandwich) Seals Model 990.28

WIKA Data Sheet DS 99.28

Applications

- Chemical process industry
- Petrochemical industry
- Suitable for corrosive, highly viscous, crystallising or hot pressure media
- High pressure applications

Special Features

- Sandwich flange (cell) with a flush welded diaphragm with contoured diaphragm bed
- Available for all standard dimensions and nominal diameters
- With special materials all wetted parts of the selected material



Diaphragm Seal, Flanged Process Connection, Cell-Type (Sandwich) Model 990.28 with Capillary

Description

Process connection

Flanges DN 40, 50, 80, 100, 125 following EN 1092-1, sealing face form B1 or NPS 1½", 2", 3", 4", 5" per ASME B 16.5, RF 125 ... 250 AA

For the mounting an additional blind flange is required (not included in the scope of delivery)

Pressure rating

See table (reverse side)

Suitable pressure ranges

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

Material of wetted parts

Stainless steel 316L

Instrument connection

Material stainless steel 316L, adaptor G ½ female per EN 837-1, welded to capillary

Capillary extension

Radial entry capillary of stainless steel 1.4571, welded to body,

armoured, armour material stainless steel 1.4301

Standard extensions: 1, 1.6, 2.5, 4, 5, 6, 7, 8 m

Minimum curve radius: 30 mm

Optional extras

Process connection

- Sealing faces per EN 1092-1, form B2 or per ASME B 16.5, RF 125 AA, 500AA, RFSF; EN 1092-1 groove and tongue; projection and recess; ASME B 16.5 snap ring groove form RJF (limited for special materials, please inquire)

Instrument connection

- Adaptor with optional welding or pipe thread nipple

Material of wetted parts

- Stainless steel 1.4435, 1.4541, 1.4571, 1.4462, Monel 400, Hastelloy C276, Inconel 600, Incoloy 825, tantalum max. 400 °C
- Hastelloy B2, C4, C22 and nickel max. 260 °C (max. 400 °C on inquiry)
- Platinum, titanium, zircon max. 150 °C (max. 400 °C on inquiry)
- Silver foil max. 150 °C
- Stainless steel 316L with gold plating approx. 25 micron
- PTFE foil max. 260 °C ≤ 100 bar
- PFA coating max. 260 °C
- ECTFE (Halar®) coating max. 150 °C

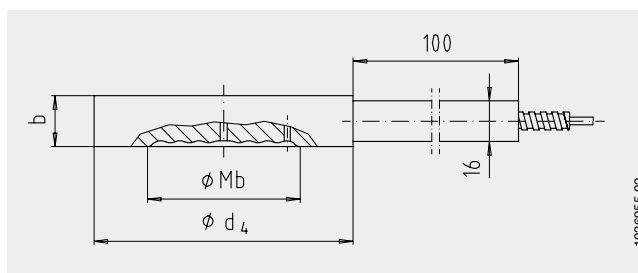
Capillary extension

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

Flushing ring

- Stainless steel 316L, for flange DN 40 ... 125 per EN resp. NPS 1½" ... 5" per ASME (see data sheet AC 91.05)

Dimensions in mm



Flange connection following EN 1092-1, form B1

| DN in mm | PN in bar | Dimensions in mm | | | Weight in kg |
|-------------|--------------|------------------|----------------|----|-----------------|
| | | Mb | d ₄ | b | |
| 40 | 16 ... 100 | 40 | 88 | 20 | 0.90 |
| 50 | 16 ... 100 | 59 | 102 | 20 | 1.30 |
| 80 | 16 ... 100 | 89 | 138 | 20 | 2.30 |
| 100 | 16 ... 100 | 89 | 159 | 20 | 3.10 |
| 125 | 16 ... 100 | 124 | 188 | 22 | 4.80 |

PN 16 ... 400 following DIN 2501et seqq.
Higher pressure ratings PN on inquiry
Mb = effective diameter of diaphragm

Flange connection per ASME B 16.5, raised face

| NPS | Class | Dimensions in mm | | | Weight in kg |
|-----|--------------|------------------|----------------|----|-----------------|
| | | Mb | d ₄ | b | |
| 1½" | 150 ... 2500 | 40 | 73 | 20 | 0.70 |
| 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 |

Mb = effective diameter of diaphragm

Ordering information

Model / Process connection (standard, nominal size, pressure rating, sealing face) / Material of wetted parts / Instrument connection: directly combined or capillary extension, capillary length / Fill fluid / Pressure gauge model / Process conditions: application, process temperature max. and min., ambient temperature max. and min.

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



WIKAL Alexander Wiegand GmbH & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Phone (+49) 93 72/132-0
Fax (+49) 93 72/132-406
E-Mail info@wika.de
www.wika.de