

Flanged Process Connection, Diaphragm Seals Flange-Type Seals with Extended Diaphragm Model 990.29

WIKA Data Sheet DS 99.29

Applications

- Chemical process industry
- Petrochemical industry
- Suitable for corrosive, highly viscous, crystallising or hot pressure media
- For thick-walled or isolated tanks and pipelines

Special Features

- Flange with an extended 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, Flange-Type Seal with Extended Diaphragm
Model 990.29 with Capillary**

Description

Process connection

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

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

Diaphragm extension

50, 100, 150 or 200 mm

Instrument connection

Material stainless steel 316L, axial weld-in connection or adaptor G ½ female per EN 837-1, welded to capillary

Capillary extension

Axial 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

- Other flanged process connections on inquiry
- 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)
- Flame arrester approved for Zone 0

Instrument connection

- Adaptor with optional welding or pipe thread nipple
- Gauge adaptor G ½ female for directly mounted gauge
- Various adaptors for directly mounted transmitters
- Cooling tower for directly mounted gauge when fluid temperature > 100 °C

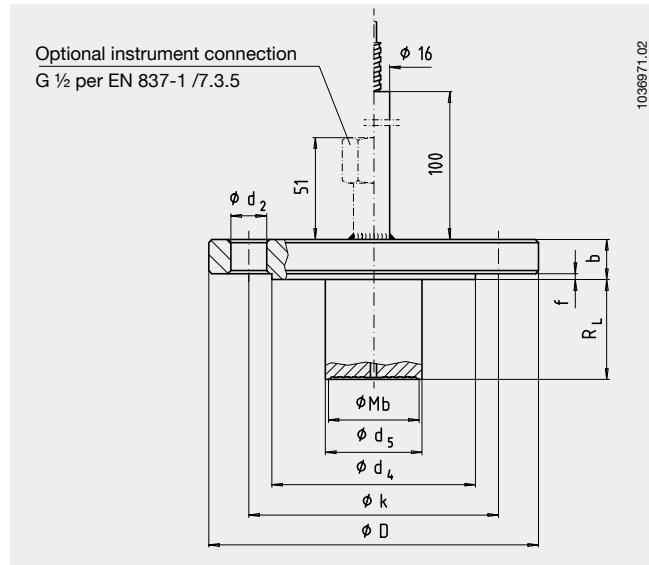
Material of wetted parts

- Stainless steel 1.4435, 1.4541, 1.4571, 1.4462 titanium; Hastelloy B3, C4, C276; Monel 400; nickel Inconel 600; Incoloy 825; tantalum
- Stainless steel 316L, diaphragm with gold plating approx. 25 micron
- 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

Dimensions in mm



Flange connection following EN 1092-1, form B1

DN in mm	PN in bar	Dimensions in mm					Raised portion				Extension
		Mb	D	b	d ₂	k	f	d ₄	d ₅	x	R _L 1)
50	40	47	165	20	18	125	2	102	48.3	4	50, 100, 150, 200
80	16	72	200	20	18	160	2	138	76	8	50, 100, 150, 200
	40	72	200	24	18	160	2	138	76	8	50, 100, 150, 200
100	16	89	220	20	18	180	2	158	94	8	50, 100, 150, 200
	40	89	235	24	22	190	2	162	94	8	50, 100, 150, 200
125	16	124	250	22	18	210	2	188	125	8	50, 100, 150, 200
	40	124	270	26	26	220	2	188	125	8	50, 100, 150, 200

Mb = effective diameter of diaphragm, x = number of drill holes

1) Custom lengths available

Flange connection per ASME B 16.5, raised face

NPS	Class	Dimensions in mm					Raised portion				Extension
		Mb	D	b	d ₂	k	f	d ₄	d ₅	x	R _L 1)
2"	300	47	165	22.5	20	127	1.6	92	48.3	8	50, 100, 150, 200
3"	150	72	190	24	20	152.5	1.6	127	76	4	50, 100, 150, 200
	300	72	210	29	22	168.5	1.6	127	76	8	50, 100, 150, 200
4"	150	89	230	24	20	190.5	1.6	158	94	8	50, 100, 150, 200
	300	89	255	32	22	200	1.6	158	94	8	50, 100, 150, 200

Mb = effective diameter of diaphragm, x = number of drill holes

1) Custom lengths available

Ordering information

Model / Process connection (standard, nominal size, pressure rating, sealing face) / Extension R_L / 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.



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