

# In-line diaphragm seal For flange connection Model 981.27, flange-type

WIKA data sheet DS 98.27

## Applications

- For direct, permanent installation in pipelines
- For flowing, pure and aggressive media
- Chemical process industry
- Petrochemical industry

## Special features

- Completely round, no corners and edges
- For direct installation between two flanges
- Wide choice of special materials

## Description

### Process connection

for flanges following EN 1092-1 / ASME B 16.5  
DN 25, 40, 50, 80, 100 or 1", 2", 3", 4"  
Nominal size: see drawing and tables (DN)  
Sealing face, Form B1 or ASME RF 125 ... 250 AA

### Pressure rating

PN 16/40 or Class 150/300

### Pressure ranges

preferably mounted to pressure gauges  
NS 63, 100, 160 or pressure transmitters,  
Pressure ranges 0 ... 0.6 to 0 ... 40 bar

### Body and material of wetted parts

Stainless steel (AISI 316L)

### Measuring instrument connection

Pressure gauge or transmitter directly welded,  
process pressure transmitter with threaded adapter



In-line diaphragm seal for flange connection,  
model 981.27

## Options

### Process connection

- Larger nominal sizes
- Other flange connections on request
- Sealing faces per EN 1092-1, form B2 or per ASME B 16.5, RF 125 AA, 500 AA, RFSF; EN 1092-1 groove and tongue; projection and recess; ASME B 16.5 snap ring groove form RJF (limited for special materials, please request)
- Flame arrester approved for zone 0

### Material of wetted parts

Stainless steel 1.4571, 1.4435, 1.4541, Monel, Hastelloy B3, C4, C22, C276, tantalum

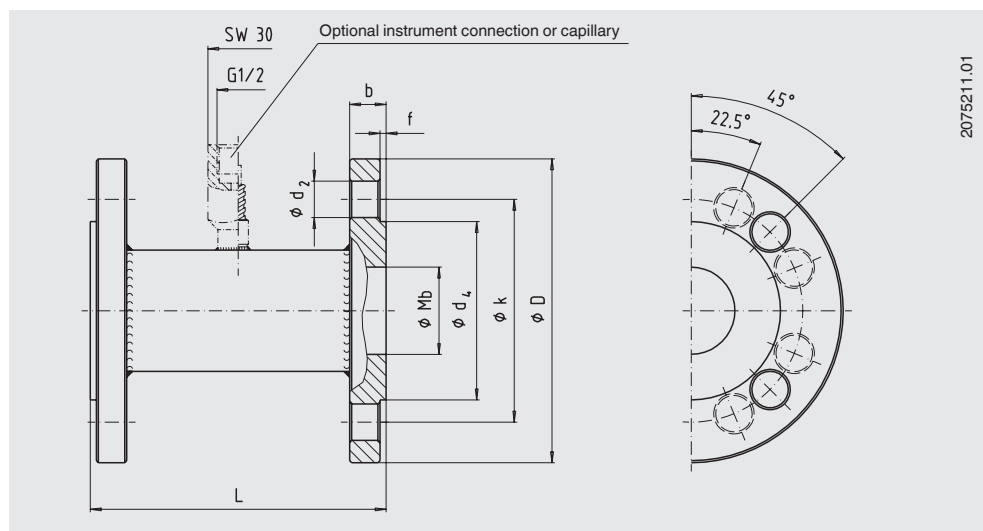
### Measuring instrument connection

- Capillary, when ordering please specify: length of capillary
- Cooling tower (for directly mounted gauge when fluid temperature > +140 °C)

### Capillary

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

## Dimensions in mm



### Flange connection following EN 1092-1

DN in mm	PN	D	b	$d_2$	k	f	$d_4$	Number of bores	L	$Mb^{1)}$
25	40	115	18	14	85	2	68	4	114	28.5
40	40	150	18	18	110	3	88	4	146	43
50	40	165	20	18	125	3	102	4	156	54.5
80	40	200	24	18	160	3	138	8	166	82.5
100	16	220	20	18	180	3	158	8	166	107
	40	235	24	22	190	3	162	8	166	107

1) WIKA standard diameter, other pipe diameters and nominal sizes on request.

### Flange connection per ASME B 16.5

DN	Class	D	b	$d_2$	k	f	$d_4$	Number of bores	L	$Mb^{1)}$
1"	150	110	14.5	16	79.5	2	51	4	114	26.6
	300	125	17.5	20	89	2	51	4	114	26.6
2"	150	150	19.5	20	120.5	2	92	4	156	52.5
	300	165	22.5	20	127	2	92	8	156	52.5
3"	150	190	24	20	152.5	2	127	4	166	78
	300	210	29	22	168.5	2	127	8	166	78
4"	150	230	24	20	190.5	2	158	8	166	102.3
	300	255	32	22	200	2	158	8	166	102.3

1) WIKA standard diameter, other pipe diameters and nominal sizes on request.

## Ordering information

Model / Process connection (standard, nominal size, pressure rating, sealing face form) / Material of wetted parts / Instrument connection: direct assembly or via capillary, capillary length / System fill fluid / Assembly on pressure measuring instrument model... / Process conditions: application, process temperature max. and min., ambient temperature max. and min.

