

# Diaphragm-Type Flange Seal Type L990.27

WIKA Data Sheet L990.27

## Applications

Process industry chemical seal to combine with pressure transmitters and Bourdon tube pressure gauges. Intended for corrosive, contaminated, hot or viscous pressure media.

## Description

### Design

Flange with integral diaphragm, which requires hydraulic fluid to transmit pressure to instrument.

### Process Connection

2" to 4" per ASME/ANSI B16.5

### Instrument Connection

Capillary, 1/4" or 1/2" NPT-female

### Suitable Pressure Ranges

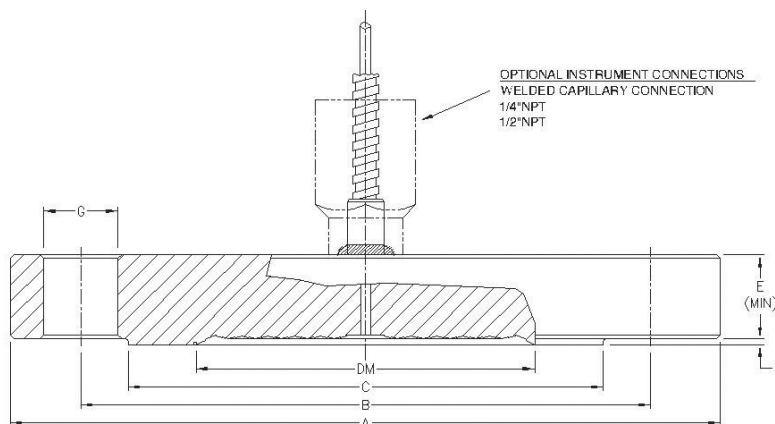
10 inH<sub>2</sub>O to class 2500, depending on flange and diaphragm size and process conditions

### Available Options (connections, materials, etc.)

See Selection Guide (over)



L990.27 Flange Seal



X=NUMBER OF BOLT HOLES  
DN=NOMINAL PIPE SIZE  
DM=EFFECTIVE DIAPHRAGM DIAMETER  
CLASS=FLANGE RATING PER ASME B16.5  
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED

SIZE DN	CLASS	A	B	C	DM	E	F	G	X	WEIGHT lbs
1.5"	150	5.00	3.55	2.88	1.9	0.69	0.06	0.62	4	3.5
	300	6.12	4.50	2.88	1.9	0.81	0.06	0.88	4	5.5
	600	6.12	4.50	2.88	1.9	1.13	0.25	0.88	4	7.3
	1500	7.00	4.88	2.88	1.9	1.50	0.25	1.12	4	13.0
	2500	8.00	5.75	2.88	1.9	2.00	0.25	1.25	4	22.9
2"	150	6.00	4.75	3.62	2.4	0.75	0.06	0.75	4	5.9
	300	6.50	5.00	3.62	2.4	0.88	0.06	0.75	8	8.1
	600	6.50	5.00	3.62	2.4	1.25	0.25	0.75	8	12.5
	1500	8.50	6.50	3.62	2.4	1.75	0.25	1.00	8	29.0
	2500	9.25	6.75	3.62	2.4	2.25	0.25	1.12	8	43.6
3"	150	7.50	6.00	5.00	3.5	0.94	0.06	0.75	4	11.7
	300	8.25	6.62	5.00	3.5	1.12	0.06	0.88	8	17.2
	600	8.25	6.62	5.00	3.5	1.50	0.25	0.88	8	24.2
	900	9.50	7.50	5.00	3.5	1.75	0.25	1.00	8	36.7
	1500	10.53	8.00	5.00	3.5	2.13	0.25	1.25	8	53.9
2500	12.01	9.00	5.00	3.5	2.87	0.25	1.38	8	93.9	
4"	150	9.00	7.50	6.19	3.5	0.94	0.06	0.75	8	16.9
	300	10.04	7.88	6.19	3.5	1.25	0.06	0.88	8	27.9
	400	10.04	7.88	6.19	3.5	1.63	0.25	1.00	8	38.3
	600	10.83	8.50	6.19	3.5	1.75	0.25	1.00	8	47.3
	900	11.51	9.25	6.19	3.5	2.00	0.25	1.25	8	60.9
	1500	12.30	9.50	6.19	3.5	2.37	0.25	1.38	8	81.4
2500	14.00	10.75	6.19	3.5	3.25	0.25	1.62	8	144.5	

DWG.#2211823-5

To determine the effects of temperature and response time in a specific application, contact the factory for an **Application Questionnaire**. The information provided will allow WIKA Technical Support to accurately model your application parameters using state-of-the-art computer simulation techniques.

# Selection Guide - Type L990.27

L990.27,1/4X3.0-150R,SS,SS,AXL

## Instrument Connection Location

**AXL = Axial**  
RAD = Radial

## Wetted Material

**SS = 316 stainless steel**

**MO = Monel® 400 (See note 1)**

HB = Hastelloy® B-2 (See note 1)

**HC = Hastelloy® C-276 (See note 1)**

TF = 316 stainless steel, white Teflon® lined (See note 1)

PF = 316 stainless steel, Teflon® coated

IN = Inconel® 600 (See note 1)

IC = Incoloy® 825 (See note 1)

CA = Carpenter® 20 (See note 1)

**TA = Tantalum (See note 1)**

TI = Titanium, grade 2 (See note 2)

NI = Nickel 200 (See note 1)

SA = 316 stainless steel, gold-plated

## Flange Material

**SS = 316 stainless steel**

TI = Titanium, grade 2

## Flange Rating (Other facings available)

**150R = 150#RF**

**300R = 300#RF**

**600R = 600#RF**

900R = 900#RF

15XR = 1500#RF

25XR = 2500#RF

XXXX = Other (Define flange connection on purchase order)

## Process Connection

1.5 = 1.5" Pipe

**2.0 = 2" Pipe**

**3.0 = 3" Pipe**

4.0 = 4" Pipe

5.0 = 5" Pipe

## Instrument Connection

1/4F = 1/4" NPT female

**1/2F = 1/2" NPT female**

**CPL = Capillary connection (To weld capillary directly to seal)**

## Diaphragm Seal Design

Type L990.27 = Flanged Type, Flush Diaphragm

## Notes

1. Supplied with a smooth raised face finish.
2. When used with a stainless steel flange, diaphragm is bonded to flange (max. 300°F media temperature).

Items in **bold** are available from stock (subject to prior sales).  
For optional items, consult factory for current lead-time.

Options not listed may be available, please consult factory.  
Fill fluids & mounting options: please reference datasheet ACS 99.MO

Specifications given in this price list represent the state of engineering at the time of printing.  
Modifications may take place and the specified materials may change without prior notice



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