



Diaphragm-Type Diaphragm Seal

Flange-Type Diaphragm Seal

Type L990.FR

Diaphragm Seals

Application

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

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

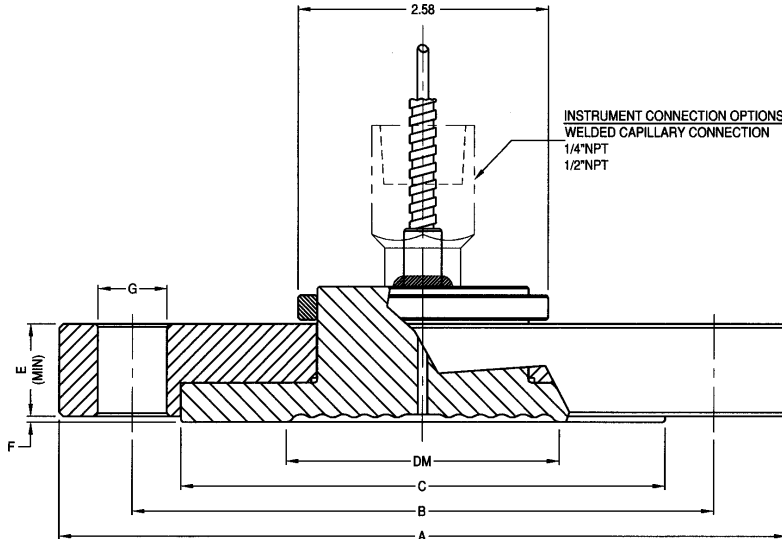
Capillary, 1/4" or 1/2" NPT-female

Suitable Pressure Ranges

10" H2O to class 2500, depending on flange and diaphragm size and process conditions

Available Options (connections, materials, etc.)

See Selection Guide (over)



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 |
| 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 |

DWG.#2212145-5

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.

ACS L990.FR
 (ACS 99.04)

Selection Guide - L990.FR

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

Instrument Connection Location

AXL = Axial

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

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

L990.FR = Rotatable Flange-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

THE MEASURE OF
Total Performance™

Ordering Information:

State computer part number (if available) / type number / size / range / connection size and location / options required.

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

03/07



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