



# Diaphragm-Type Diaphragm Seal

## Standard Clamped Diaphragm Flanged Diaphragm Seal

Type L990.FA

### Diaphragm Seals

#### Application

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

#### Design

Internal clamped diaphragm with threaded process connection; requires hydraulic fluid to transmit pressure to instrument

#### Process Connection

1/2" to 1 1/2" per ASME B16.5

#### Instrument Connection

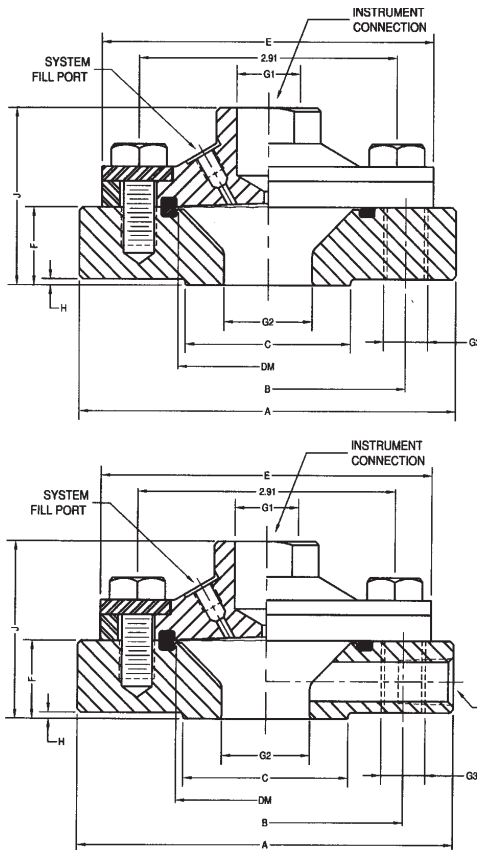
Capillary, 1/4" or 1/2" NPT-female

#### Suitable Pressure Ranges

15 PSI to Class 1500

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

See Selection Guide (over)



G1	G2	G3	A	B	C	DM	E	F		J		WEIGHT
			in	in				in	in	in	in	
1/4" NPT OR 1/2" NPT	1/2" 150#	4x1/2"-13UNC	3.50	2.38	1.38	2.1	3.74	1.10	0.06	2.20	4.3	
	1/2" 300#	4x1/2"-13UNC	3.75	2.62				1.10	0.06	2.20	4.3	
	1/2" 600#	4x1/2"-13UNC	3.75	2.62				1.26	0.25	2.36	4.4	
	1" 150#	4x1/2"-13UNC	4.25	3.12	0.87			0.06	1.97	4.4		
	1" 300#	4x5/8"-11UNC	4.88	3.50	0.87			0.06	1.97	8.5		
	1" 600#	4x5/8"-11UNC	4.88	3.50	1.26			0.25	2.36	8.5		
	2" 150#	4x5/8"-11UNC	6.00	4.75	0.87			0.06	1.97	6.1		
	2" 300#	8x0.75	6.50	5.00	0.89			0.06	1.99	8.5		
	2" 600#	8x0.75	6.50	5.00	1.28			0.25	2.38	10.0		

G1: INSTRUMENT CONNECTION  
G2: PROCESS CONNECTION

DWG.#2211785-5

OPTIONAL  
1/8" NPT OR 1/4" NPT  
FLUSHING CONNECTION

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.

**ACSL990.FA**  
(ACS 99.01F)

# Selection Guide - L990.FA

L990.FA,1/4X1.0-150R,CS,CS-0,CS,SS,VI

## Gasket Material (See note 7)

VI = Viton®  
BN = Buna "N"  
TF = Teflon®, virgin  
NA = None (See note 6)

## Diaphragm Material

SS = 316 stainless steel  
MO = Monel® 400  
HB = Hastelloy® B-2  
HC = Hastelloy® C-276  
PF = 316 stainless steel, Teflon® coated  
TF = 316 stainless steel, virgin Teflon® lined  
TA = Tantalum  
TI = Titanium, grade 2 (See note 5)  
NI = Nickel 200  
IN = Inconel® 600  
IC = Incoloy® 825  
CA = Carpenter® 20  
SA = 316 SS, gold-plated  
VI = Viton® (See note 4)

## Clamp & Support Material (Including bolts)

CS = Carbon Steel, zinc-plated  
SS = Stainless steel  
NA = None (See note 3)

## Flushing Connection (See note 2)

0 = None  
1 = 1/8" NPT female  
2 = 1/4" NPT female

## Lower Housing Material

CS = Carbon steel, nickel-plated  
SS = 316 stainless steel  
MO = Monel® 400  
HB = Hastelloy® B-2  
HC = Hastelloy® C-276  
CC = Carbon steel, nickel-plated Teflon® lined, carbon  
CW = Carbon steel, nickel-plated Teflon® lined, virgin  
SC = 316 stainless steel, Teflon® lined, carbon  
SW = 316 stainless steel, Teflon® lined, white  
TC = Carbon steel, nickel-plated, Teflon® coated  
TS = 316 stainless steel, Teflon® coated  
TA = Tantalum  
TI = Titanium, grade 2  
NI = Nickel 200  
IN = Inconel® 600  
IC = Incoloy® 825  
CA = Carpenter® 20

## Upper Housing Material

CS = Carbon steel, nickel-plated  
SS = 316 stainless steel  
TI = Titanium, grade 2

## Flange Rating (Other facings available)

150R = 150#RF  
300R = 300#RF  
600R = 600#RF  
15XR = 900#/1500#RF  
XXXX = Other ( Define flange connection on purchase order)

## Process Connection (per ASME B16.5)

1.0 = 1" Pipe  
1/2 = 1/2" Pipe  
3/4 = 3/4" Pipe  
1.5 = 1.5" Pipe  
2.0 = 2" Pipe

## Instrument Connection

1/4 = 1/4" NPT female  
1/2 = 1/2" NPT female

## Diaphragm Seal Design

990.FA = Clamped Diaphragm (See note 1)

## Notes

1. Includes previous type 990.12.606.
2. Includes previous type 990.12.602.
3. Capillary connection requires a stainless steel upper housing.
4. Available with solid lower housing only.
5. For all welded design 990.12.620 only.
6. Viton® diaphragm is available for clamped design only.
7. For titanium diaphragm welded to upper housing, a titanium upper housing is required.
8. For Teflon® lower housing and all welded design (990.12.620) only. All other lower housings require gaskets.
9. Standard material for stainless steel and carbon steel wetted parts is Viton® (400°F max.). Teflon® is standard for all other wetted parts (500°F max.). Silver-plated stainless steel gasket is used for high temperature applications (752°F max.).

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 Fluid & Mounting options: Please reference data sheet ACS 99.MO

## 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

05/01



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