

# Diaphragm-Type Seals

## Clamped Diaphragm Flanged Seal

### Type L990.FC

WIKA Datasheet L990.FC

### Applications

- For use in corrosive, contaminated, hot or viscous media
- Combines with Bourdon tube pressure gauges

### Special features

- Assembly does not allow access to diaphragm seal system fill fluid (tamper-proof)
- No threaded connections among pressure containing components
- 316L stainless steel, Monel® or Hastelloy® C276 process wetted materials

### Standard version

#### Design

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

#### Process Connection

1" to 1½" per ASME B16.5



Diaphragm Seal L990.FC

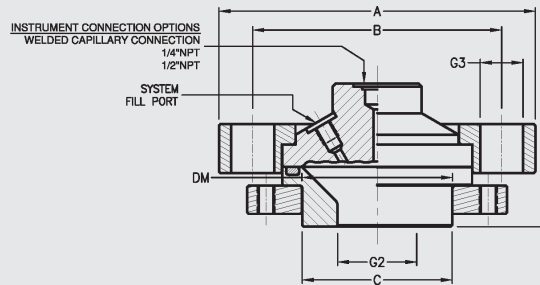
#### Suitable Pressure Ranges

15 PSI to Class 300

#### Instrument Connection

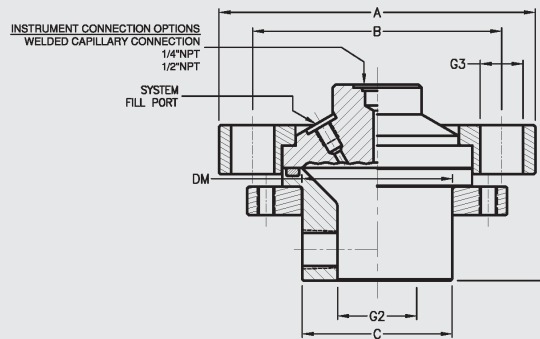
Capillary, 1" or ½" NPT-female

Available Options (Connections, materials, flushing ports, etc.)  
See Selection Guide (over)



CLASS=FLANGE RATING PER ASME B16.5  
G2: PROCESS CONNECTION  
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED

G2 SIZE / CLASS	G3 BOLT HOLE	CLASS				DM
		A	B	C	F	
1" 150#	0.62	4.25	3.12	2.00	1.36	2.1
1" 300#	0.75	4.88	3.50	2.00		
1-1/2" 150#	0.62	5.00	3.88	2.88	1.36	2.1
1-1/2" 300#	0.88	6.12	4.50	2.88		



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1-1/2" 300#	0.88	6.12	4.50	2.88		

DWG.#2212285-5

# Selection Guide - L990.FC

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

Gasket Material (See note 3)

VI = Viton®  
BN = Buna "N"  
TF = Teflon®, virgin  
NA = None

## 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 2)**  
**NI = Nickel 200**  
**IN = Inconel® 600**  
**IC = Incoloy® 825**  
**CA = Carpenter® 20**

Clamp & Support Material (Including bolts)

CS = Carbon Steel, zinc-plated  
SS = Stainless steel

Flushing Connection (See note 1)

**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, Teflon® lined, carbon**  
**CW = Carbon steel, Teflon® lined, virgin**  
**SC = 316 stainless steel, Teflon® lined, carbon**  
**SW = 316 stainless steel, Teflon® lined, white**  
**TC = Carbon steel, 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

Flange Rating (Other facings available)

150R = 150#RF  
300R = 300#RF  
**XXXX = Other ( Define flange connection on purchase order)**

Process Connection (per ASME B16.5)

1.0 = 1" Pipe  
**1.5 = 1.5" Pipe**

Instrument Connection

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

Diaphragm Seal Design  
L990.FC = Clamped Diaphragm

## Notes

1. Available with solid lower housing only.
2. For titanium diaphragm welded to upper housing, a titanium upper housing is required.
3. 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.).

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



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