



# Diaphragm-Type Diaphragm Seal

## Standard Clamped Diaphragm Seal

### Type L990.TC

## 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

1/4" to 1" NPT-female or 1/4" to 3/4" NPT male

### Instrument Connection

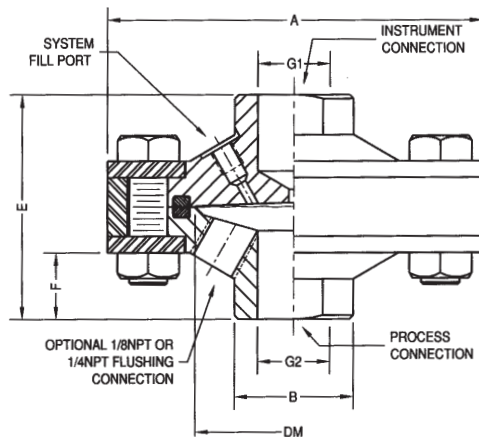
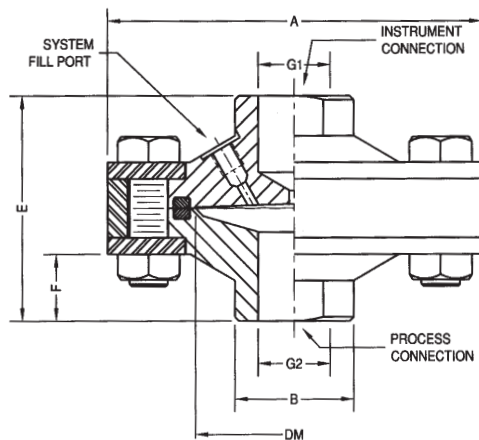
1/4" or 1/2" NPT-female

### Suitable Pressure Ranges (MWP 2500PSI @250°F)

15 psi to 2500 psi

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

See Selection Guide (over)



G1: INSTRUMENT CONNECTION  
G2: PROCESS CONNECTION  
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED

| G1                       | G2                       | A    | B    | DM  | E    | F    | WEIGHT |
|--------------------------|--------------------------|------|------|-----|------|------|--------|
|                          |                          |      |      |     |      |      | lbs    |
| 1/4"NPT<br>OR<br>1/2"NPT | 1/4"NPT<br>OR<br>1/2"NPT | 3.74 | 1.18 | 2.1 | 2.20 | 0.63 | 3.0    |
|                          | 3/4"NPT                  |      | 1.41 |     |      |      | 3.4    |
|                          | 1"NPT                    |      | 1.77 |     |      |      | 3.6    |

DWG.#2211777-5

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.TC**  
(ACS 99.01.T)

# Selection Guide - 990.TC

990.TC,1/4X1/4F,CS,CS-0,CS,SS,VI

## Notes

1. Includes previous type 990.10.506.
2. Includes previous type 990.10.502.
3. Teflon® lower housing available in welded diaphragm (type 990.10.501) design only. (MWP 200 PSI @ 200°F) Available with 1/4" or 1/2" NPT female process connections only.
4. Customer to supply flushing plug.
5. For all welded design (990.10.520) 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 (990.10.520) 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.*

## Gasket Material (See note 8)

**VI = Viton®**  
BN = Buna "N"  
TF = Teflon®, virgin  
NA = None (See note 7)

## Diaphragm Material

**SS = 316L 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 6)  
NI = Nickel 200  
IN = Inconel® 600  
IC = Incoloy® 825  
CA = Carpenter® 20  
VI = Viton® (See note 5)

## Clamp & Support Material (Including nuts and bolts)

**CS = Carbon Steel, zinc-plated**  
**SS = Stainless steel**  
**NA = None (See note 4)**

## Flushing Connection (See note 3)

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**  
**TF = Teflon®, virgin (See note 2)**  
TI = Titanium, grade 2  
NI = Nickel 200  
IC = Inconel® 800  
IC = Incoloy® 825  
CA = Carpenter® 20

## Upper Housing Material

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

## Process Connection

**1/4F = 1/4" NPT female**  
**1/2F = 1/2" NPT female**  
**3/4F = 3/4" NPT female**  
**1.0F = 1" NPT female**  
1/4M = 1/4" NPT male  
1/2M = 1/2" NPT male  
3/4M = 3/4" NPT male

## Instrument Connection

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

## Diaphragm Seal Design

**990.TC = Clamped Diaphragm (Pressure rating up to 2500PSI, see note 1)**

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



**WIKAL Instrument Corporation**

1000 Wiegand Boulevard

Lawrenceville, Georgia 30043-5868

Tel: 770-513-8200 Fax: 770-338-5118

http://www.wika.com e-mail: chemseal@wika.com