

# **Diaphragm-Type Chemical Seals**

Standard Welded Diaphragm Chemical Seal

Type L990.10

## **Chemical Seals**

#### **Application**

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

#### Design

Internal welded 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

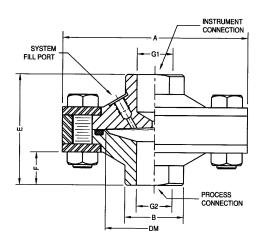
#### **Instrument Connection**

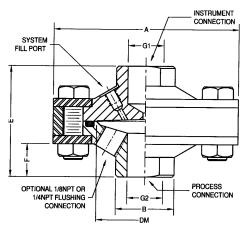
Capillary, 1/4" or 1/2" NPT-female

Suitable Pressure Ranges (MWP 3675PSI @250°F)

15 PSI to 3675 PSI

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





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 stateof-the-art computer simulation techniques.



DM: EFFECTIVE DIAPHRAGM DIAMETER G1: INSTRUMENT CONNECTION

G2: PROCESS CONNECTION
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED

G1	G2	A	В	DM	Е	F	WEIGHT
							lbs
1/4"NPT OR 1/2"NPT	1/4"NPT OR 1/2"NPT	3.74	1.18	2.1	2.20	0.63	3.0
	3/4"NPT		1.41	2.1	2.36	0.79	3.4
	1"NPT		1.77	2.1	3.46	1.89	3.6

DWG.#2211769-5

Notes

990.10.502.

upper housing.

available in welded

diaphragm (type

1. Includes previous type

requires a stainless steel

3. Teflon® lower housing

990.10.501) design only.

(MWP 200 PSI @ 200°F) Available with 1/4" or 1/2"

NPT female process

4. Customer to supply

6. Nuts and bolts only

and washers are 316

7. Viton® diaphragm is

8. For titanium diaphragm

welded to upper housing,

a titanium upper housing

9. For Teflon® lower

housing and all welded

design (990.10.520) only.

10. 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

applications (752°F max.).

high temperature

All other lower housings require gaskets.

available for clamped

5. For all welded design (990.10.520) only.

Clamp rings, support ring

stainless steel. Requires silver-plated stainless

connections only.

flushing plug.

steel gasket.

design only.

is required.

2. Capillary connection

#### L990.10,1/4X1/4F,CS,CS-0,CS,SS,VI Gasket Material (See note 10) VI = Viton® BN = Buna "N TF = Teflon®, virgin AS = Stainless steel, silver-plated NA = None (See note 9) 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 8) NI = Nickel 200 IN = Inconel® 600 IC = Incoloy® 825 CA = Carpenter® 20 SA = 316 stainless steel, gold-plated VI = Viton® (See note 7) Clamp & Support Material (Including nuts and bolts) CS = Carbon Steel, zinc-plated SS = Stainless steel HS = High temperature stainless steel (See note 6) NA = None (See note 5) Flushing Connection (See note 4) 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 3) 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

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

1/2 = 1/2" NPT female

CPL = Capillary connection (To weld capillary directly to seal, see note 2)

### Diaphragm Seal Design

L990.10 = Welded Diaphragm (Pressure rating up to 3675PSI, 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



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