Diaphragm-Type Diaphragm Seal

Large Volume Threaded Diaphragm Seals

Type L990.40

Diaphragm Seals

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

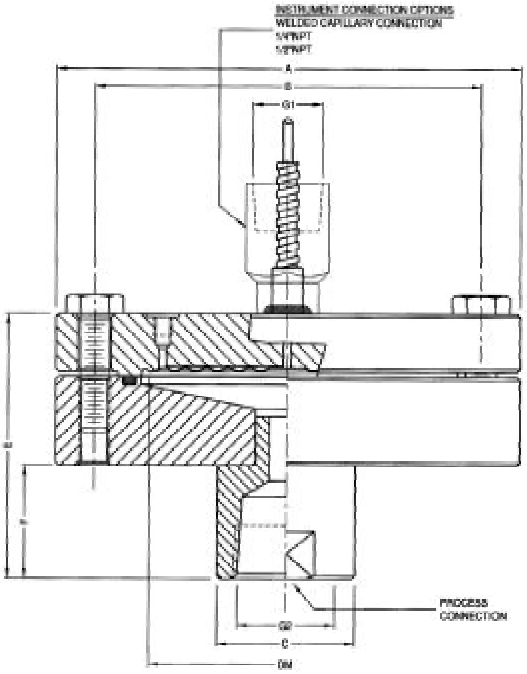
Design
Internal 3.5" diaphragm with larger displacement and improved Sensitivity to lower pressure ranges; requires hydraulic fluid to transmit pressure to instrument

Process Connection
¼" to 1" NPT-female, others see options

Instrument Connection
Capillary, ¼" or ½" NPT-female

Suitable Pressure Ranges (MWP 1500PSI @250°F)
10" H2O to 1500 PSI

Available Options
See Selection Guide (over)



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

G1	G2	A	B	C	DM	E	F	WEIGHT lbs
1/4"NPT OR 1/2"NPT	1/4"NPT	5.91	4.83	1.25	3.5	3.00	0.00	14.0
	1/2"NPT			1.25		3.00	0.00	14.0
	3/4"NPT			1.38		3.20	1.10	14.2
	1"NPT			1.75		3.50	1.40	14.5

DWG #2211607-5

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.

Selection Guide - Type L990.40

Type L990.40,1/4X1/4F,SS,SS-0,SS,SS,VI,3.5

Diaphragm Size
3.5 = 3.5" effective diaphragm diameter
4.9 = 4.9" effective diaphragm diameter (See note 9)

Gasket Material (See notes 3 & 8)
VI = Viton®
TF = Teflon®
AS = Alloy 718, silver-plated (See note 7)

Diaphragm Material
SS = 316 stainless steel
MO = Monel® 400 (See note 5)
HB = Hastelloy® B-2 (See note 5)
HC = Hastelloy® C-276 (See note 5)
TF = 316 stainless steel, virgin Teflon® lined
PF = 316 stainless steel, Teflon® coated
EC = 316 stainless steel, ECTFE (Halar®) coated
TA = Tantalum (See note 5)
TI = Titanium (See note 6)
NI = Nickel 200 (See note 5)
IN = Inconel® 600 (See note 5)
IC = Incoloy® 825 (See note 5)
SA = 316 stainless steel, gold plated

Bolts
CS = Carbon steel, zinc-plated
SS = Stainless steel
HS = High temperature stainless steel

Flushing Connection (See note 4)
0 = None
1 = 1/8" NPT female
2 = 1/4" NPT female
3 = 2x1/8" NPT female
4 = 2x1/4" NPT female

Lower Housing Material (See note 3)
CS = Carbon steel, nickel-plated
SS = 316 stainless steel
MO = Monel® 400
HB = Hastelloy® B-2
HC = Hastelloy® C-276
TI = Titanium
NI = Nickel 200
IN = Inconel® 600
IC = Incoloy® 825

Upper Housing Material (See note 2)
CS = Carbon steel, nickel-plated
SS = 316 stainless steel
TI = Titanium

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
1.0M = 1" NPT male

Instrument Connection
1/4 = 1/4" NPT female
1/2 = 1/2" NPT female
CPL = Capillary connection (To weld capillary directly to seal, see note 1)

Diaphragm Seal Design (MWP = 1500 PSI)
Type L990.40 = Threaded Process Connection, Large Diaphragm

Notes
1. Capillary connection is available with a stainless steel upper housing only.
2. Bolting material supplied will match upper housing material, except stainless steel bolts with titanium upper housing.
3. Lower housing and gasket are a process wetted part.
4. Customer to supply flushing plug.
5. Special material metal bonded to stainless steel upper housing.
6. Upper housing must be titanium.
7. Supplied with high temperature stainless steel bolts.
8. 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 Alloy 718 gasket is used for high temperature applications (752°F max.).
9. Maximum working pressure 200 PSI.

Options not listed may be available, please consult factory!
Fill Fluid & Mounting options: Please reference data sheet ACS 99.MO.

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

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