

Small Displacement Volume Mini Diaphragm Seal Type L990.TA

WIKA Datasheet L990.TA

Application

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

Design

- Upper and lower housing welded with integral diaphragm. It requires hydraulic fluid to transmit pressure to instrument

Process Connection

¼" or ½" NPT-female, other see options

Instrument Connection

¼" or ½" NPT-female

Suitable Pressure Ranges (MWP 2500PSI @100°F)

2 ½" gauge: 100 PSI to 2500 PSI

4 or 4 ½" gauge: 400 PSI to 2500 PSI

Available Options

See Selection Guide (over)

Volumetric Data

Displacement typically for 1.3" SS diaphragm

$\Delta V = 0.51 \text{ cm}^3$ [0.0311 in³]

Total cavity volume max $V_0 = 0.7 \text{ cm}^3$ [0.0427 in³]



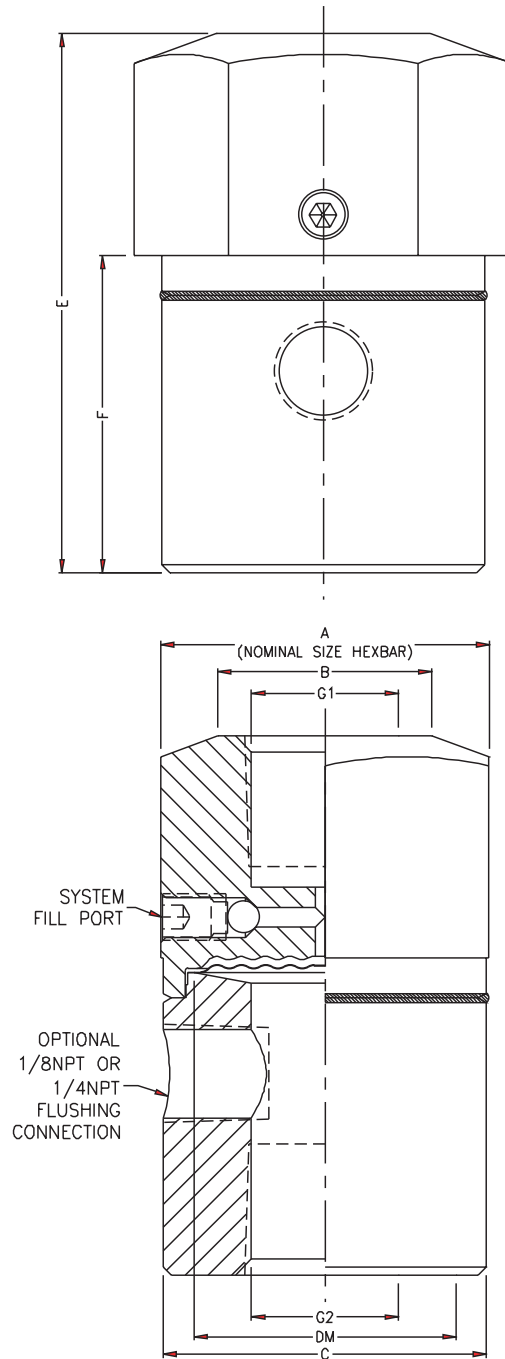
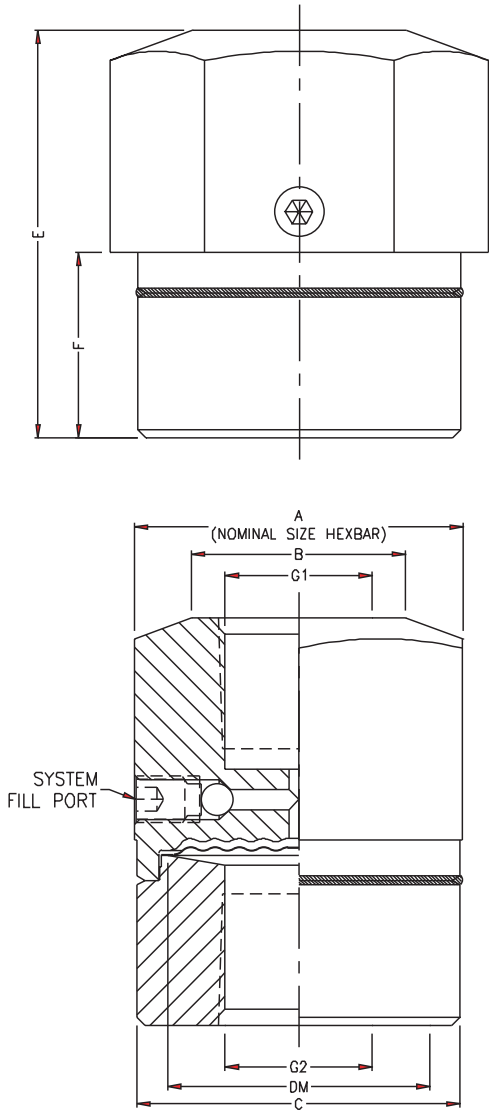
Mini Diaphragm Seal Model L990.TA

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.

DM: Effective Diaphragm Diameter
 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 or 1/2" NPT	1.63 Across Flats	1.06	1.60	1.3	2.05	0.95	0.7

G1	G2	A	B	C	DM	E	F	Weight lbs
1/4" NPT or 1/2" NPT	1/4" NPT or 1/2" NPT	1.63 Across Flats	1.06	1.60	1.3	2.68	1.58	1.0



L990.TA Selection Guide

Field no.	Code	Description - Small Mini Diaphragm Seal, Threaded	Field no.	Code	Description - Small Mini Diaphragm Seal, Threaded
1	Instrument Connection		6	Diaphragm Material	
	N4F	1/2" NPT female		SS	Stainless steel 316L (1.4435)
	N2F	1/4" NPT female		HC	Hastelloy C276 (2.4819)
CPL	Capillary (Axial weld-in) connection - (see note 1)	MO		Monel 400 (2.4360)	
2	Process Connection			IC	Incoloy 825 (2.4858)
	N2F	1/4" NPT female		TI	Titanium Grade 2 (3.7035) - (see note 2)
	N4F	1/2" NPT female		CA	Carpenter 20 (2.4660)
	N2	1/4" NPT male		DP	Duplex 2205 (1.4462)
	N4	1/2" NPT male		S4	Stainless steel 304L (1.4304)
3	Upper Housing Material (Instrument Side)			XX	Other - consult factory
	SS	Stainless steel 316L (1.4435)	Pressure Rating @ 250°F		
	TI	Titanium Grade 2 (3.7035) - (see note 2)	2500	2500 psi MWP	
	MO	Monel 400 (2.4360)	5000	5000 psi MWP	
	HC	Hastelloy C276 (2.4819)	7	Options - (see note 4)	
	CA	Carpenter 20 (2.4660)		XMT	Material Certificate 3.1 EN10204 (metal only)
	XX	Other - consult factory		XNC	Wetted Parts NACE (MR0175/ MR0103 Year 2009) compliant
4	Lower Housing Material		CE4	4" Cooling element - (see note 1, 5)	
	SS	Stainless steel 316L (1.4435)	8	PLG	Provide flushing port plugs - 1/8 & 1/4 male
	HC	Hastelloy C276 (2.4819)			
	MO	Monel 400 (2.4360)			
	IC	Incoloy 825 (2.4858)			
	TI	Titanium Grade 2 (3.7035) - (see note 2)			
	CA	Carpenter 20 (2.4660)			
	DP	Duplex 2205 (1.4462)			
	XX	Other - consult factory			
5	Flushing Connection Lower Housing (see note 3)				
	-0	Without			
	-1	1 X 1/8 NPT			
	-2	1 X 1/4 NPT			

Notes:

- 1) Axial weld-in connections and cooling elements are only available on 316L stainless steel upper housings.
- 2) Titanium is not offered with any other materials other than itself for this seal model.
- 3) Plugs are not supplied with flushing ports as standard.
- 4) List options in alphabetical order at the end of the configuration code.
- 5) Cooling elements are welded to the diaphragm seal.

Order Sample

MODEL	INSTRUMENT CONNECTION	PROCESS CONNECTION	UPPER HOUSING MATERIAL	LOWER HOUSING MATERIAL	FLUSHING CONNECTION	DIAPHRAGM MATERIAL	PRESSURE RATING
L990.TA	N4F X	N4F	SS	SS	-0	SS	2500
Field no.	1	2	3	4	5	6	7

Ordering information

Pressure gauge model / Nominal size / Scale range / Size of connection / Optional extras required. Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.



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