

Large (Bar Stock) Connections

Chemical Specification

Type LF

Application

Flange type diaphragm seals are commonly used in applications which involve processing of Chemicals, Petroleum products, Slurries and Pulp and Paper etc. This seal is used when a flush diaphragm seal is needed.

Configuration

Differential or Gauge pressure. In all cases a Low Volume cover flange must be fitted to all D.P type transmitters to reduce fill quantities and therefore reduce errors induced by ambient temperature change. Gauge pressure transmitters require a G-1/2" process connection.

Process Connection

ANSI raised face ANSI B16.5, ANSI RTJ
Din BS 4504 1993, ANSI Large Groove Male
Large Tongue, Large Groove, Table & JIS

Process Connection Size

2" (50mm), 3" (80mm) & 4" (100mm)
For smaller sizes refer to **GS SF** (Small Flange)

Seal Construction

Flange machined from bar stock.
Welded Diaphragm. (Except Tantalum Diaphragm)

Packing Surface Finish:

To connection standard.

Wetted Materials

316L Stainless Steel (standard)
304 Stainless Steel
Hastelloy C-276
Monel 400
Titanium
Tantalum
PFA (316L Stainless Steel Coated)
Duplex 2205 (Only available with a Hastelloy C-276 Diaphragm)
For other wetted materials contact our sales office.

Capillary

Available in 1 to 10 metre lengths. Capillaries must be of matching lengths for differential systems.

Capillary Armour

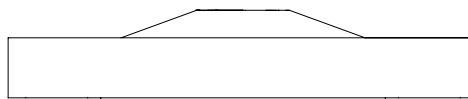
PVC coated 304 Stainless Steel standard.
For processes with temperatures over 100°C spiral wound 304 Stainless Steel.

Zero Stability

Stability will be affected by the instrument configuration, ambient temperature, process temperature, connection size (diaphragm size) and the measuring range. For information regarding the diaphragm performance refer to **GS sheet: GS Diaphragm Performance**

Flange Identification

Refer to flange data at; www.benney.com.au



Example; "LF" series seal



How To Order - Large Flange Seals (Bar Stock)

Transmitter Manufacturer

ALF=ABB
 ELF= Endress & Hauser
 FLF=Foxboro
 HLF = Honeywell
 JLF=Fuji
 MLF=Yamatake
 RLF=Emerson
 SLF=Siemens
 YLF=Yokogawa
 XLF=Special

Connection Type

AR = ANSI raised face ANSI B16.5
 RT = ANSI RTJ
 DN = Din BS 4504 1993
 AG = ANSI Large Groove Male
 AT = Large Tongue
 AM = Large Groove
 JI = JIS
 TB = Table
 XX = Special

Connection Size

16 = 2" (Diaphragm Size 60mm see [Diaphragm Performance](#) for Specification) *Note: For 900lb (ANSI) use code 5*
 24 = 3" (Diaphragm Size 90mm see [Diaphragm Performance](#) for Specification)
 32 = 4" (Diaphragm Size 90mm see [Diaphragm Performance](#) for Specification)
 XX = Special

Connection Rating

1 = 150lb (ANSI), E (Table)
 2 = 300lb (ANSI), Pn 10-16 (Din), 10K (JIS), F (Table)
 3 = 600lb (ANSI), Pn 25-40 (Din), 16K (JIS), H (Table)
 4 = 900lb (ANSI), Pn 64 (Din), 20K (JIS), J (Table) *Note: 900lb (ANSI) only for 3" & 4"*
 5 = 1500lb (ANSI), Pn 100 (Din), 30K (JIS), K (Table)
 6 = 2500lb (ANSI), Pn 160 (Din), R (Table)

Diaphragm Material

S = 316L Stainless Steel
 A = 304 Stainless Steel
 H = Hastelloy C-276
 M = Monel 400
 I = Titanium *Note: Only available with Titanium wetted parts and Backing Flange*
 T = Tantalum
 F = PFA (316L Stainless Steel Coated) *Note: Diaphragm Size for 2" 40mm 3&4" 70mm*
 G = Gold Plated 316L Stainless Steel
 D = Double Gold Plated 316L Stainless Steel & PFA Coated *Note: Diaphragm Size for 2"40mm 3&4"70mm*
 N = Nickel 200
 X = Special

Wetted Parts

S = 316L Stainless Steel
 A = 304 Stainless Steel
 H = Hastelloy C-276
 M = Monel 400
 I = Titanium *Note: Only available with Titanium Diaphragm and Backing Flange*
 T = Tantalum
 F = PFA (316L Stainless Steel Coated)
 U = Duplex 2205 *Note: Only available with a Hastelloy C-276 Diaphragm*
 X = Special

Backing Flange Material

S = 316L Stainless Steel
 A = 304 Stainless Steel
 H = Hastelloy C-276
 I = Titanium *Note: Only available with Titanium wetted parts and Diaphragm*
 X = Special

System Configuration

G = Gauge Pressure System with G-1/2" Connection Direct Mounted TX
 S = Gauge Pressure System with G-1/2" Connection Capillary mounted TX
 M = Gauge Pressure System with DP Type TX Direct Mounted
 P = Gauge pressure System with DP Type TX Capillary Mounted
 D = Differential Pressure System with Capillary

Capillary / Standoff

AA = Standoff (System Config "M") / Heat Neck (System Config "G")
 00 = None *Note: Only available with System Configuration "G"*
 01 = 1 Metre
 02 = 2 Metres etc..

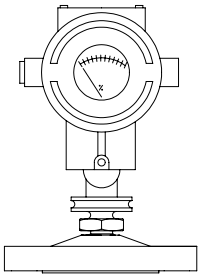
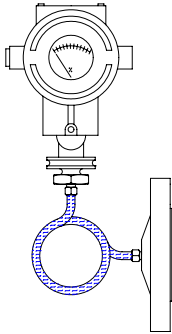
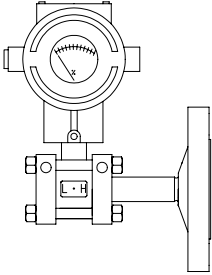
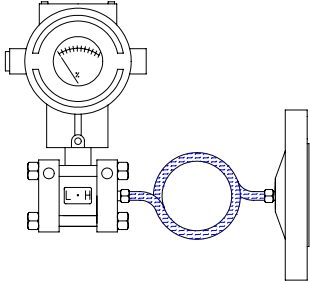
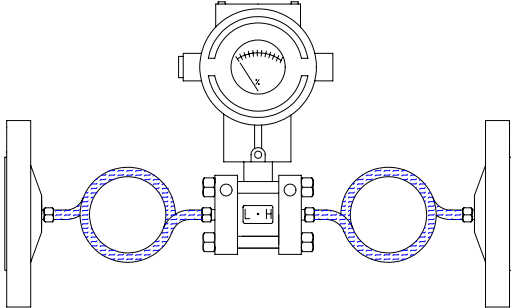
Fill Liquid

A = 704 Grade Silicon Oil (20°C to 250°C)
 B = Silicon Oil 100cs (-30°C to 180°C)
 C = 705 Grade Silicon Oil (10°C to 300°C)
 D = Fluorolube (-20°C to 120°C)
 E = Ethylene Glycol (-50°C to 100°C)
 F = Neobee (Food) (10°C to 160°C)
 X = Special

Drip (Flushing) Ring

0 = None
 1 = 1 X 1/4" NPT = 2 ports supplied with 1 plug
 2 = 2 X 1/4" NPT ports
 3 = 1 X 1/2" NPT 2 ports supplied with 1 plug
 4 = 2 X 1/2" NPT port

Available configurations

	<p>Configuration "G" G= Gauge pressure transmitter direct mounted to Seal</p>
	<p>Configuration "S" S= Gauge pressure transmitter Seal connected via capillary.</p>
	<p>Configuration "M" M= DP Type transmitter with seal direct mounted</p>
	<p>Configuration "P" P= DP Type pressure transmitter Seal connected via capillary.</p>
	<p>Configuration "D" D= DP Type pressure transmitter and Seals.</p>