

Tri-Clamp Sanitary Pressure Diaphragm Seals



TYPE 12

- Features a flush mount diaphragm and all welded construction, ideal for food & beverage, pharmaceutical and sanitary markets
- Wetted parts and all welded housing are constructed of 316 stainless steel for greater strength and durability
- Minimum working pressure 0 to 30 psi through -30 inHg to 600 psig
- Accommodates process connection pipes from 1-1/2 inch through 3 inch sizes
- Accommodates 2-1/2, 4, 4-1/2 and 6 inch gauge sizes
- Clamped connection allows ease of installation and removal of seal for maintenance and cleaning
- Wetted materials polished to Ra 32 or better
- Consider gauge size, pressure range, media composition, ambient and operating temperature, and maximum working pressure when selecting
- For process temperatures over 212° F a capillary or cooling element is recommended, contact factory to order
- Fill fluid must be compatible with process media; i.e. Glycerine may become volatile in conjunction with a strong oxidizing agent such as chlorine, forms of oxygen or peroxide and nitric acids

PRODUCT SPECIFICATIONS

Suitable Pressure Gauge Sizes	2-1/2, 4, 4-1/2 and 6 Inch Will also operate with most transducers, transmitters and pressure switches
Minimum Working Pressure	0 psig to 30 psig through -30 inHg to 600 psig
Maximum Working Pressure	Maximum Operating Pressure is Determined by the Clamping Device and Piping System – Please Consult Factory
Operating Temperature	Refer to fill fluid expansion factors table below

Note: NOSHOK pressure transmitters or transducers are not to be used in heat sterilization systems as stated in 3A Standard 74-03 paragraph D10.1.2

Diaphragm seal must be installed facing downward or in a vertical position for drainability. Do not install diaphragm seal facing in an upward position.

Fill Fluid Temperature Table

Fill Fluid	Temperature Range (°F)
Glycerine*	30 - 300
Silicone 200-10	-35 - 450
Silicone 704	30 - 520
Silicone 710	30 - 650
Silicone 550	-40 - 600
Silicone 510	-60 - 400
Fluorolube FS-5	-40 - 500
Silicone 200-350	0 - 300
Halocarbon Oil 6.3	-40 - 400
Ethylene Glycol	-30 - 300
Propylene Glycol	-50 - 200
Syltherm 800	-40 - 450
Mineral Oil	Note 1
Neobee M-20	-40 - 320

*Not recommended for use on vacuum applications
Note 1. To be advised

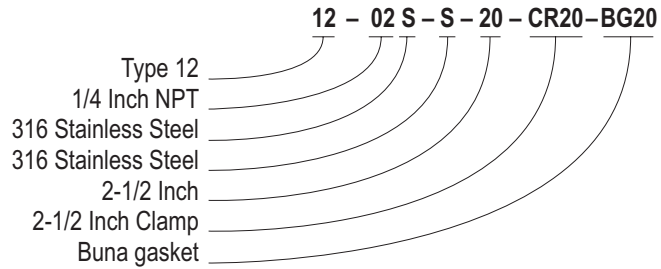
ORDERING INFORMATION				
TYPE	12*			
INSTRUMENT CONNECTION SIZES	02	1/4 inch NPT		
	04	1/2 inch NPT		
UPPER HOUSING MATERIAL	S 316 Stainless Steel			
DIAPHRAGM MATERIAL	S 316 Stainless Steel			
SANITARY PIPE SIZES	12	1-1/2 Inch	16	2 Inch
			20	2-1/2 Inch
			24	3 Inch
SANITARY SEAL CLAMPS & GASKETS				
SS LADISH TRI-CLAMP	CR12	1-1/2 Inch	CR16	2 Inch
			CR20	2-1/2 Inch
			CR24	3 Inch
BUNA GASKET	BG12	1-1/2 Inch	BG16	2 Inch
			BG20	2-1/2 Inch
			BG24	3 Inch
TEFLON GASKET	TG12	1-1/2 Inch	TG16	2 Inch
			TG20	2-1/2 Inch
			TG24	3 Inch

NOTE: For process temperatures over 212°F, a capillary or cooling element is recommended. Contact NOSHOK factory to order.

*Operating pressure is determined by the clamping device and piping system — Please consult factory.

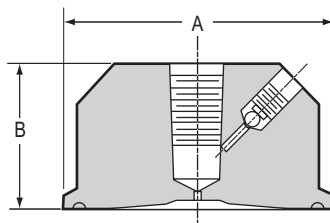
EXAMPLE

- Model Selection
- Instrument Connection Size
- Upper Housing Material
- Diaphragm Material
- Sanitary Pipe Size
- SS Ladish Tri-Clamp (Optional)
- Gasket Material (Optional)



OUTLINE DIMENSIONS

Type 12 Ladish Tri-Clamp Sanitary Seal



Nominal pipe size	1.5	2	3
Diaphragm Diameter Inches	1.4	1.9	2.4
A	1.984	2.516	3.579
B	1.25	1.25	1.25