

#80 Flanged Diaphragm Seal



CRN

Description

Winters Instruments Flanged Diaphragm Seal is used in industrial applications such as oil refineries, pulp and paper mills and chemical plants. The flanged diaphragm seal is available in a wide range of materials such as 316 stainless steel, Monel, Hastelloy B & C, Titanium, Tantalum, PVC, Carbon Steel, Teflon and Teflon-lined, 316 stainless steel, and Alloy 20. The diaphragm seals are available in all sizes from 1" (25 mm), 1.5" (40mm) and 2" (50mm) pipe size and #150 and #300 pressure rating standard. (Other configurations available upon request). The flanged diaphragm seal have NPTF available in $1/4''$, $1/2''$, $3/4''$, and 1" connections and are also available with flushing. Saddle diaphragms available upon request.

The flanged diaphragm seals feature continuous use and clean out type for easy cleaning and calibrating. Also, the flanged seals are CRN registered.



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Specifications

Materials:	316 Stainless Steel, Teflon lined 316 Stainless Steel, Monel, Hastelloy C, Tantalum, (Other materials available upon request)
Housing:	Upper housing - Carbon Steel or 316 Stainless Steel - Lower housing wetted parts as indicated
Diaphragm:	316 St/St, Tantalum, Hastelloy C (other material available upon request)
Minimum Operating Pressure:	21" Hg vacuum
Maximum Operating Pressure:	Limited by the pressure rating of the ANSI flange being utilized
Gauge Connection:	1/4" and 1/2" NPT standard
Process Connection:	1", 1.5" & 2" Pipe size
Flushing Connection:	Available upon request
Process Temperature:	Up to 500° F/C

How to order: Specify product code

PRODUCT CODES

Type* Process Conn / Press. Rating	Instrument Connection	Diaphragm Material	Lower Housing Wetted Parts	Carbon Steel	Stainless Steel
				Upper Housing Non-Wetted Parts	Upper Housing Non-Wetted Parts
1" - 150#RF					
Welded Diaphragm	1/2" NPT	316 S/S	316 S/S	D1150SS5CS	D1150SS5SS
Welded Diaphragm	1/2" NPT	Tantalum	Teflon Lined - 316 S/S	D1150UL5CS	D1150UL5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Monel	D1150HM5CS	D1150HM5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Hastelloy C	D1150HH5CS	D1150HH5SS
Welded Diaphragm	1/4" NPT	316 S/S	316 S/S	D1150SS25CS	D1150SS25SS
Welded Diaphragm	1/4" NPT	Tantalum	Teflon Lined - 316 S/S	D1150UL25CS	D1150UL25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Monel	D1150HM25CS	D1150HM25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Hastelloy C	D1150HH25CS	D1150HH25SS
1" - 300#RF					
Welded Diaphragm	1/2" NPT	316 S/S	316 S/S	D1300SS5CS	D1300SS5SS
Welded Diaphragm	1/2" NPT	Tantalum	Teflon Lined - 316 S/S	D1300UL5CS	D1300UL5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Monel	D1300HM5CS	D1300HM5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Hastelloy C	D1300HH5CS	D1300HH5SS
Welded Diaphragm	1/4" NPT	316 S/S	316 S/S	D1300SS25CS	D1300SS25SS
Welded Diaphragm	1/4" NPT	Tantalum	Teflon Lined - 316 S/S	D1300UL25CS	D1300UL25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Monel	D1300HM25CS	D1300HM25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Hastelloy C	D1300HH25CS	D1300HH25SS



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Type* Process Conn / Press. Rating	Instrument Connection	Diaphragm Material	Lower Housing Wetted Parts	Carbon Steel	Stainless Steel
				Upper Housing Non-Wetted Parts	Upper Housing Non-Wetted Parts
1.5" - 150#RF					
Welded Diaphragm	1/2" NPT	316 S/S	316 S/S	D15150SS5CS	D15150SS5SS
Welded Diaphragm	1/2" NPT	Tantalum	Teflon Lined - 316 S/S	D15150UL5CS	D15150UL5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Monel	D15150HM5CS	D15150HM5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Hastelloy C	D15150HH5CS	D15150HH5SS
Welded Diaphragm	1/4" NPT	316 S/S	316 S/S	D15150SS25CS	D15150SS25SS
Welded Diaphragm	1/4" NPT	Tantalum	Teflon Lined - 316 S/S	D15150UL25CS	D15150UL25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Monel	D15150HM25CS	D15150HM25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Hastelloy C	D15150HH25CS	D15150HH25SS
1.5" - 300#RF					
Welded Diaphragm	1/2" NPT	316 S/S	316 S/S	D15300SS5CS	D15300SS5SS
Welded Diaphragm	1/2" NPT	Tantalum	Teflon Lined - 316 S/S	D15300UL5CS	D15300UL5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Monel	D15300HM5CS	D15300HM5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Hastelloy C	D15300HH5CS	D15300HH5SS
Welded Diaphragm	1/4" NPT	316 S/S	316 S/S	D15300SS25CS	D15300SS25SS
Welded Diaphragm	1/4" NPT	Tantalum	Teflon Lined - 316 S/S	D15300UL25CS	D15300UL25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Monel	D15300HM25CS	D15300HM25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Hastelloy C	D15300HH25CS	D15300HH25SS
Type* Process Conn / Press. Rating	Instrument Connection	Diaphragm Material	Lower Housing Wetted Parts	Carbon Steel	Stainless Steel
				Upper Housing Non-Wetted Parts	Upper Housing Non-Wetted Parts
2" - 150#RF					
Welded Diaphragm	1/2" NPT	316 S/S	316 S/S	D2150SS5CS	D2150SS5SS
Welded Diaphragm	1/2" NPT	Tantalum	Teflon Lined - 316 S/S	D2150UL5CS	D2150UL5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Monel	D2150HM5CS	D2150HM5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Hastelloy C	D2150HH5CS	D2150HH5SS
Welded Diaphragm	1/4" NPT	316 S/S	316 S/S	D2150SS25CS	D2150SS25SS
Welded Diaphragm	1/4" NPT	Tantalum	Teflon Lined - 316 S/S	D2150UL25CS	D2150UL25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Monel	D2150HM25CS	D2150HM25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Hastelloy C	D2150HH25CS	D2150HH25SS
2" - 300#RF					
Welded Diaphragm	1/2" NPT	316 S/S	316 S/S	D2300SS5CS	D2300SS5SS
Welded Diaphragm	1/2" NPT	Tantalum	Teflon Lined - 316 S/S	D2300UL5CS	D2300UL5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Monel	D2300HM5CS	D2300HM5SS
Welded Diaphragm	1/2" NPT	Hastelloy C	Hastelloy C	D2300HH5CS	D2300HH5SS
Welded Diaphragm	1/4" NPT	316 S/S	316 S/S	D2300SS25CS	D2300SS25SS
Welded Diaphragm	1/4" NPT	Tantalum	Teflon Lined - 316 S/S	D2300UL25CS	D2300UL25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Monel	D2300HM25CS	D2300HM25SS
Welded Diaphragm	1/4" NPT	Hastelloy C	Hastelloy C	D2300HH25CS	D2300HH25SS

*Replaceable and Teflon Diaphragms available • Other materials, pipe size and pressure ratings available upon request



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All Winters Flanged Diaphragm seals are continuous type for safety. This feature is critical especially when a diaphragm seal is utilized in a hazardous location. With the flange seal construction, the diaphragm seal will aid in containing the process media should the pressure instrument be accidentally broken or removed. This is very important, should the process media be either a corrosive or a harmful gas. With continuous use diaphragm seals, you decide when is a convenient time to shut down the process line and replace the damaged pressure instrument.

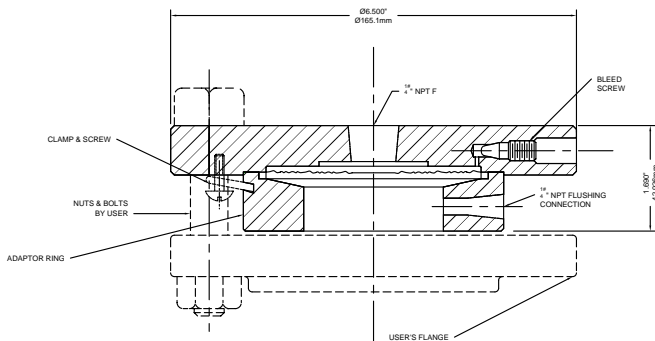
Also, the flanged diaphragm seals are clean out types meaning the bolts can be removed and separated at the flanges for cleaning, liquid filling, calibrating and welding, etc without the loss of liquid fill fluid.

All Winters Flanged Diaphragm seals are welded at its periphery to the instrument flange in order to retain the liquid fill fluid and reduce the risk of leakage.

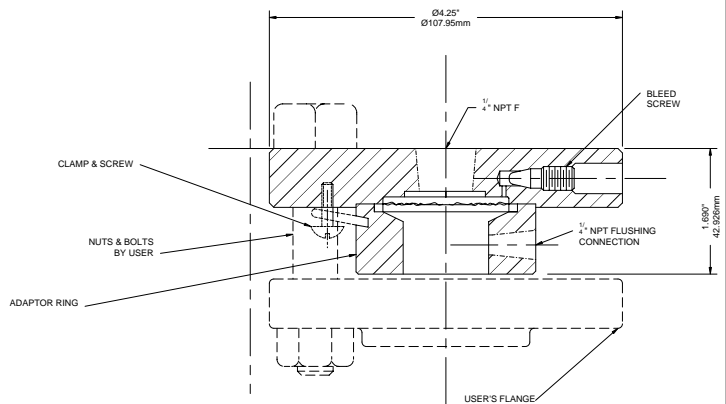
Unique Features

- Addition of spoke corrugations to the radial corrugations. The spoke corrugations reduce hoop stress in the metal thus enabling the metal diaphragm to flex more readily and allow more displacement of the liquid fill fluid (i.e. the diaphragm seal is more sensitive)
- O-ring gasket of the diaphragm insures minimal possibility of leakage of the liquid fill fluid when properly installed, operated and maintained
- Flange is recessed for gasket, so the gasket cannot be damaged
- A self energized gasket is utilized to pressure load the process gasket surface; the greater the process pressure, the greater the sealing pressure
- Due to high pressure, flanges may separate slightly from stretch of bolts; the process flange gasket pressure on sealing surfaces remains constant thus preventing leakage

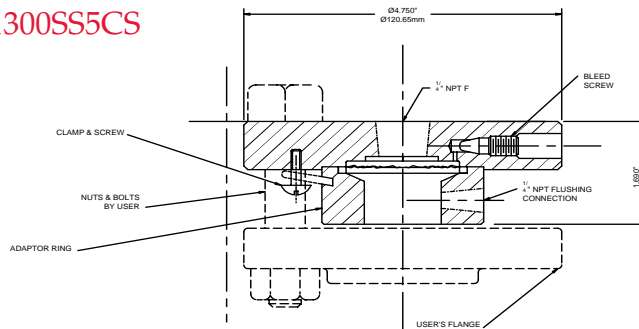
Model Number: D2300SS5CS



Model Number: D1150SS5CS



Model Number: D1300SS5CS



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