

HAWK

Diaphragm Seal(Chemical Seal) Sanitary Tri-Clamped (ISO 2852)

DS800 to DS808



Diaphragm seals are used to isolate pressure measuring element of pressure gauges, pressure switches, pressure transmitters, pressure transducers and any other pressure instruments from pressure media which may be corrosive, viscous, contaminated, hot or sedimentary. The sanitary diaphragm face design enables deep cleaning of the surface.

The quick-connection Tri-Clamp(ISO2852) enables frequent removal from the process when cleaned in place(CIP) or steamed in place(SIP). These diaphragm seals are popular for hygienic process media applications.

- All Welded-Design Construction including Flushing Diaphragm and Housing
- Available to fit 3/4", 1", 1 1/2", 2", 3", 4" Piping System
- Tri-Clamp(ISO2852) Connection
- 316L Stainless Steel Diaphragm
- Cleaned in Place (CIP), Steamed in Place (SIP)

Typical Applications:

Food and beverage industries , Mike and dairy industries , medicines , cometics , Sterilizing cycle , pharmaceutical and biotechnology industries , Autoclave , Steam Flushing , brewery fishery , confectionary , chemical products , ice cream , yoghurt , soft drink , beer and wine edible oil , soy sauce , fruit juice , meat processing , froze food

Specifications :

Suitable Pressure Range:

DS800: 300 to 1000 PSI
DS801: 300 to 1000 PSI
DS803: 300 to 1000 PSI
DS804: 60 to 1000 PSI
DS805: 15 to 600 PSI
DS806: 5 to 400 PSI
DS808: 100 inH₂O to 200 PSI

The size of the diaphragm will effect the accuracy, please contact with the factory for detailed information in order to satisfy your requested accuracy.

Temperature limit:

-90 to 400°C depending on various sealing liquid.

Standard-Silicon...-50 to 300°C . In order to reduce the temperature effect for the instrument, the cooling tower is recommended for the directly mounted instrument when temperature of the media > 120°C and capillary remote mounted instrument when temperature of the media > 180°C.

Body Material:

316L Stainless Steel, 316SS, Hastelloy C, Hastelloy B, Monel, Nickel, Titanium, Tantalum

Diaphragm Material:

316L Stainless Steel, Hastelloy C, Hastelloy B, Monel, Nickel, Titanium, Tantalum

Instrument Connection:

1/2" or 1/4"NPT, G 1/2", G 1/4" R 1/2", R 1/4", M20*1.5, M14*1.0, Capillary

Process Connection:

3/4", 1", 1-1/2", 2", 2-1/2", 3", 4" Tri-Clamp(ISO2852) Piping

Filling Liquid:

USP grade Glycerine(Food grade)-Standard, Synthetic Oil KN 77 FDA approved, Mineral Oil, Neobee 20, others on request

Mounting:

Direct or Remote capillary mounting

Capillary:

316 SS Tube with 304 SS armour

Clamp

(Accessories) :

316 Stainless Steel-Standard, 316LSS

Ferrule Packing Gasket

(Accessories) :

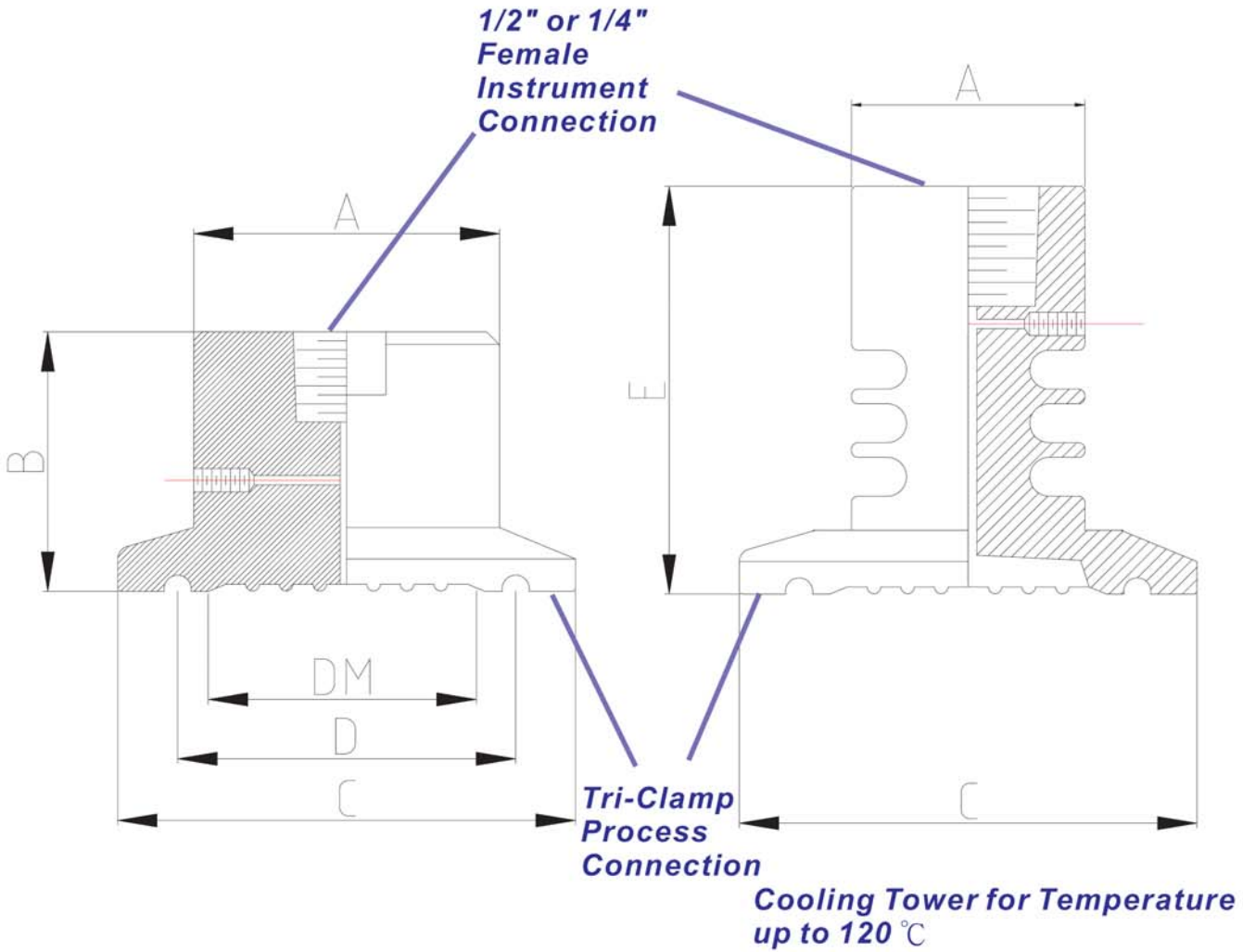
EPDM-Standard, Viton, NBR

Welding Clamp Liner

(Accessories) :

316L Stainless Steel-Standard, 316SS, Hastelloy C, Hastelloy B, Monel, Nickel, Titanium, Tantalum

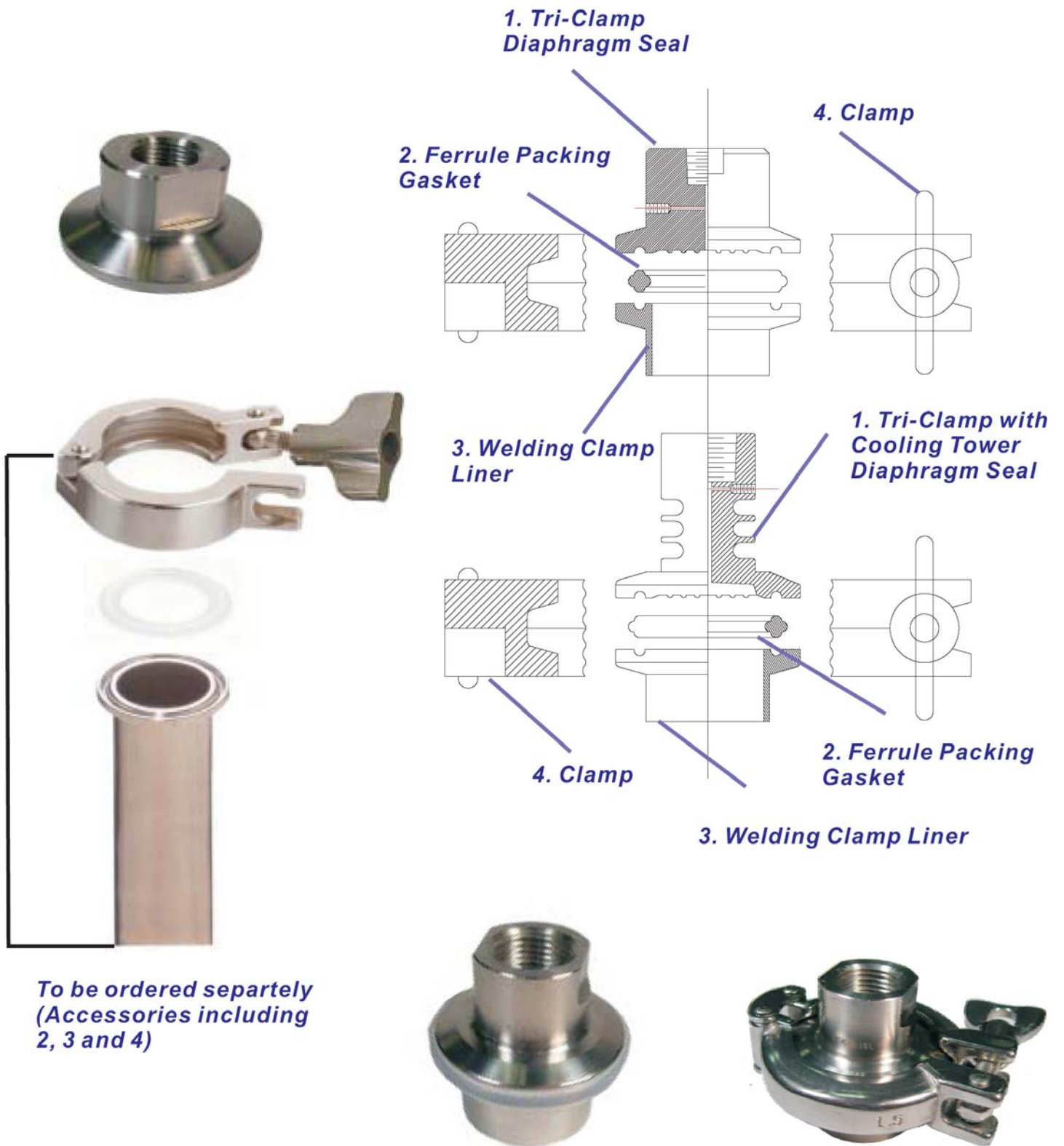
Dimensions :



Type No:	Instrument Connection	DM	A	D	C	Process Connection
DS800	1/2"NPT, 1/4 NPT, G 1/2", G1/4", R 1/2", R 1/4", M20*1.5, M14*1.0 Female	0.70"(18mm)	0.80"(20mm)	0.79"(20mm)	0.98"(25mm)	3/4" Tri-Clamp
DS801		0.90"(23mm)	1.50"(38mm)	1.71"(43.5mm)	1.98"(50mm)	1" Tri-Clamp
DS803		1.26"(32mm)	1.50"(38mm)	1.71"(43.5mm)	1.98"(50mm)	1 1/2" Tri-Clamp
DS804		1.89"(48mm)	1.50"(38mm)	2.22"(56.5mm)	2.51"(64mm)	2" Tri-Clamp
DS805		2.28"(58mm)	2.50"(64mm)	2.78"(70.5mm)	3.05"(75mm)	2 1/2" Tri-Clamp
DS806		2.90"(72mm)	2.30"(58mm)	3.28"(83.5mm)	3.58"(91mm)	3" Tri-Clamp
DS808		3.90"(99mm)	2.30"(58mm)	4.34"(110mm)	4.68"(119mm)	4" Tri-Clamp

Note: B=25mm to 33mm, E=50mm to 68mm for Standard Cooling Tower.
The longer tower is available on request.

Mounting Example :



Applications :



Pressure Gauge with Diaphragm Seal

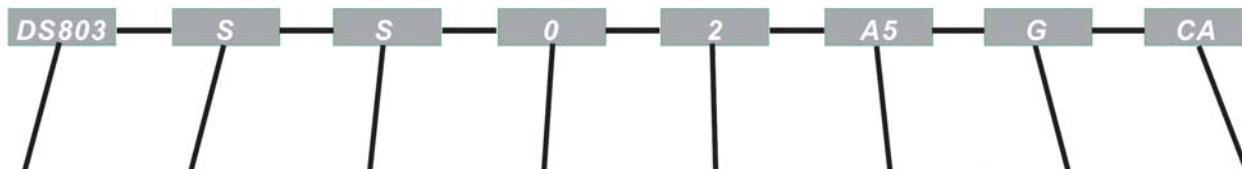


Pressure Switch with Diaphragm Seal



Pressure Transmitter with Diaphragm Seal

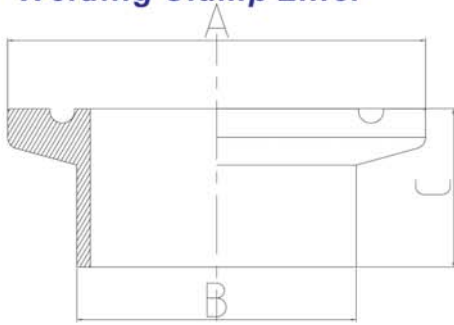
Order Information :



Diaphragm Size:	Diaphragm Material:	Body Material:	Flushing Connection:	Instrument Connection:	Process Connection:	Sealing Liquid:	Accessories:
DS800..... 18mm(0.7") Diaphragm DS801..... 23mm(0.9") Diaphragm DS803..... 32mm(1.3") Diaphragm DS804..... 48mm(1.9") Diaphragm DS805..... 58mm(2.3") Diaphragm DS806..... 72mm(2.9") Diaphragm DS808..... 99mm(3.9") Diaphragm	H...Hastelloy C E...Hastelloy B S...SS 316L M...Monel N...Nickel T...Titanium U...Tantalum	H...Hastelloy C E...Hastelloy B S...SS 316 SL...SS 316L M...Monel N...Nickel T...Titanium U...Tantalum	0...Non	2...1/2"NPT Female Thread 4-1/4"NPT Female Thread D-G 1/2" Female Thread E-G 1/4" Female Thread J-M20*1.5 Female Thread K-M14*1.0 Female Thread GX-Capillary Connection X= Length such as 1m capillary=G1 2m capillary=G2 3m capillary=G3	Tri-Clamp A2-3/4" Pipe A3-1" Pipe A5-1 1/2" Pipe A6-2" Pipe A7-2 1/2" Pipe A8-3" Pipe A9-4" Pipe	G...USP Grade Glycerine I...FDA approved White Oil M...Mineral Oil N...Neobee 20 Y...Synthetic Oil KN 77 FDA	CT-Cooling Tower CA-Complete Accessories 2+3+4 (Clamp+ Gasket+Welding Liner)

Accessories :

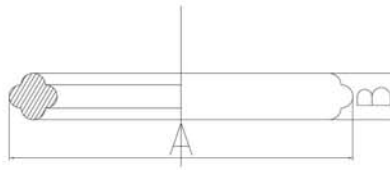
**Code SF01
Welding Clamp Liner**



	3/4"	1"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"
A	34	50.5	50.5	64	77.5	91	106	119
B	19	25.4	38.1	50.8	63.5	76.2	88.9	101.6
C	17	21.5	21.5	21.5	21.5	21.5	21.5	21.5

mm

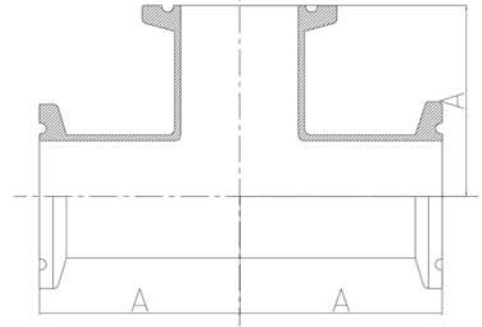
**Code SF02
Ferrule Packing**



	3/4"	1"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"
A	34	50.5	50.5	64	77.5	91	106	119
B	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5

mm

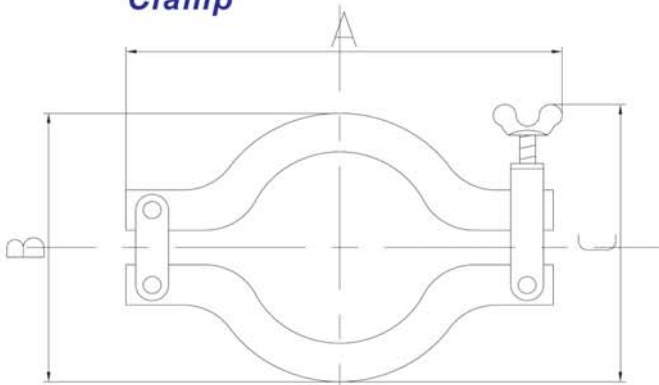
**Code SF05
Ferrule Tee**



	1"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"
A	55	70	82	105	110	125	155

mm

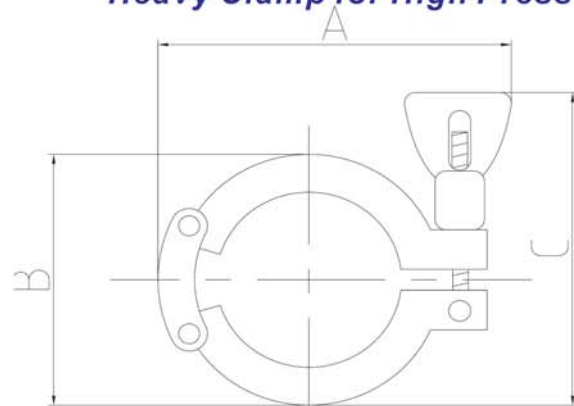
**Code SF03
Clamp**



	1"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"
A	98	98	113	135	148	163	182
B	65	65	75	88	106	118	131
C	94	94	93	102	112	127	133

mm

**Code SF04
Heavy Clamp for High Pressure**



	1"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"
A	97	97	110	126	140	155	168
B	67	67	79	95	108	123	136
C	85	85	88	100	110	120	125

mm

How to order accessories:

