
HAWK

Diaphragm Seal(Chemical Seal) Hygienic IDF Thread

DS-831 to DS-835



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 hygienic diaphragm face design enables deep cleaning of the surface to prevent bacteria developing inside the pressure sensing element. The quick-connection IDF female or male 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 1", 1 1/2", 2", 2 1/2 3 4" Piping System
- IDF Hygienic Female or Male Connection
- 316L Stainless Steel Diaphragm
- Cleaned in Place(CIP), Steamed in Place(SIP)

Typical Applications:

* Food and beverage industries * Milk and dairy industries * Medicines * Cosmetics * Sterilizing cycle * Pharmaceutical and biotechnology industries * Autoclave * Steam Flushing

Suitable Pressure Range:

- Ds831: 60 to 1000 PSI (2" to 6")
30 to 1000 PSI (2" to 3 1/2")
Ds833: 30 to 1000 PSI (4" to 6")
15 to 1000 PSI (2" to 3 1/2")
Ds834: 30 to 600 PSI (4" to 6")
15 to 600 PSI (2" to 3 1/2")
Ds835: 30 to 600 PSI (4" to 6")
5 to 600 PSI (2" to 3 1/2")
Ds836: 15 to 600 PSI (2" to 6")
Vacuum, Compound
Ds838: 100 inH₂O to 600 PSI (2" to 6")
Vacuum, Compound

Temperature limit:

- 20 to 120 °C depending on various sealing liquid
-20 to 180 °C for cooling tower depending on various sealing liquid

Body Material:

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

Diaphragm Material:

316L Stainless Steel, Hastelloy C, Hastelloy, 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:

1", 1 1/2", 2", 2 1/2", 3", 4"
IDF-Female with union nut or Male

Filling Liquid:

USP grade Glycerine (Food grade)
Synthetic Oil KN 77, FDA approved

Mounting:

Direct or Remote capillary mounting

Capillary:

316 SS Tube with 304 SS Armour

Welding Clamp Liner

(Accessories) :

316L Stainless steel, Hastelloy C, Hastelloy, Monel, Nickel, Titanium, Tantalum

Welding Male

(Accessories) :

316L Stainless steel, Hastelloy C, Hastelloy, Monel, Nickel, Titanium, Tantalum

Ferrule Packing Gasket

(Accessories) :

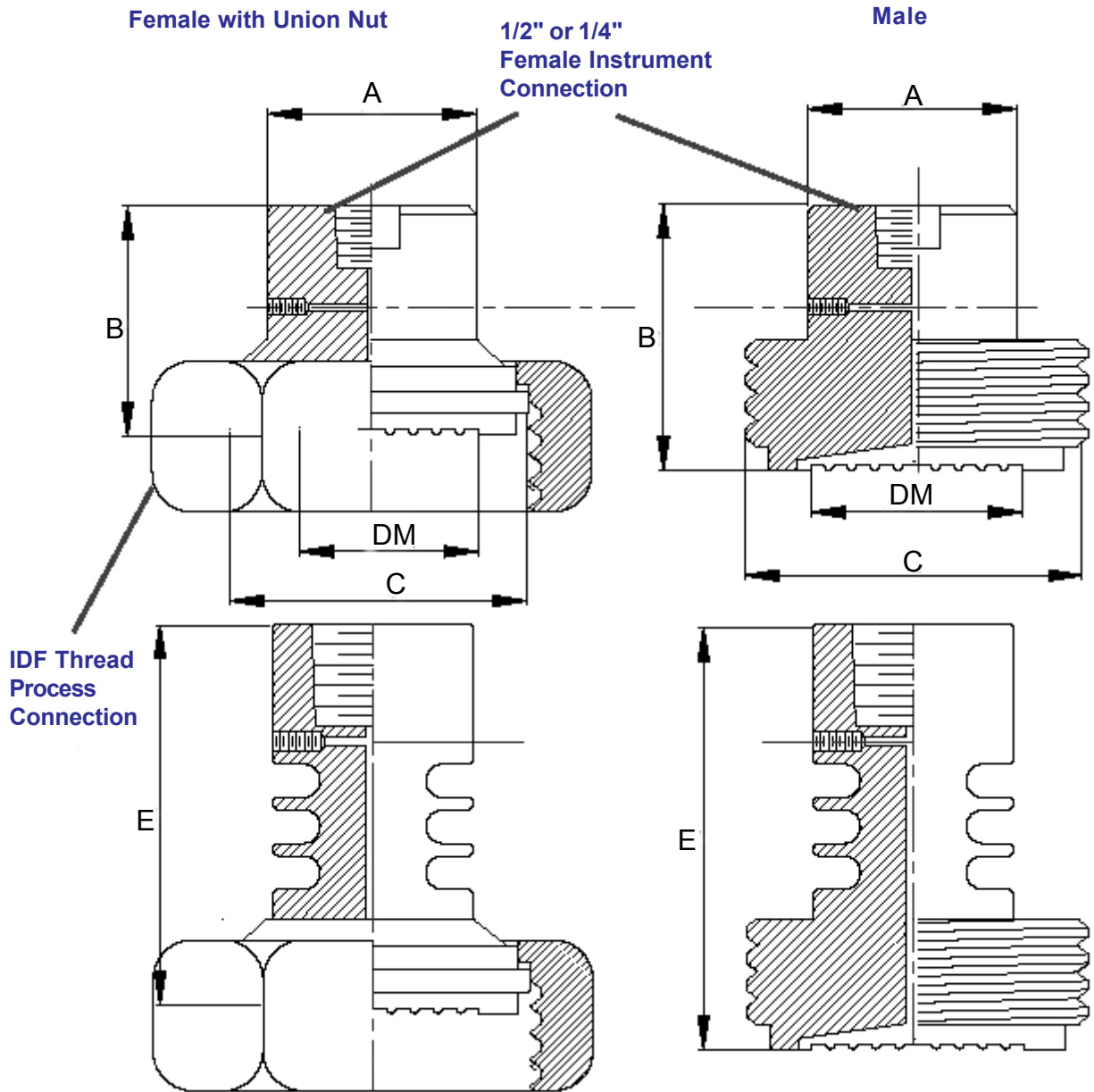
EPDM, Buna N, Viton, Silicone, PTFE

Hexagon Nut

(Accessories) :

316L Stainless steel, Hastelloy C, Hastelloy, Monel, Nickel, Titanium, Tantalum

Dimensions:



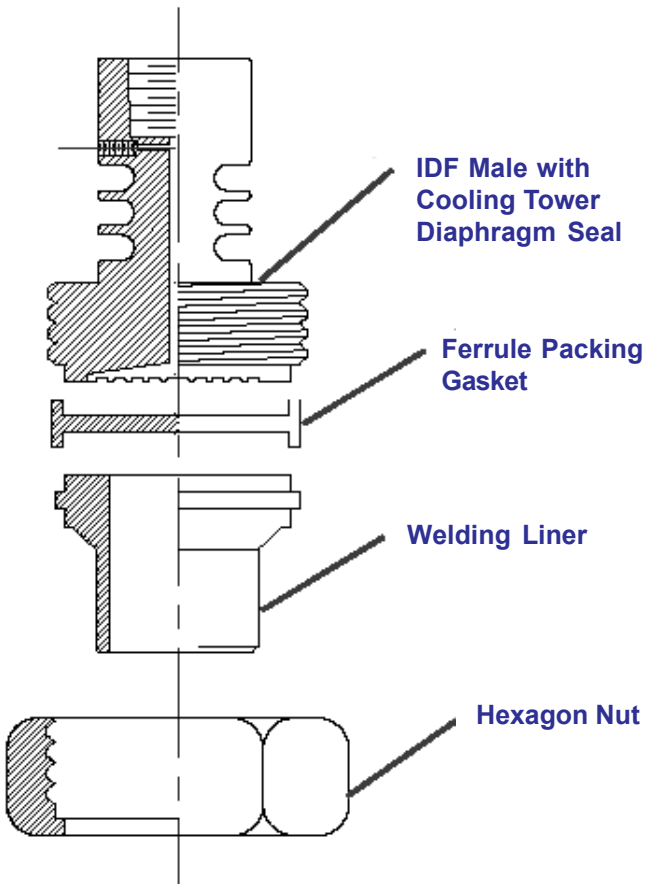
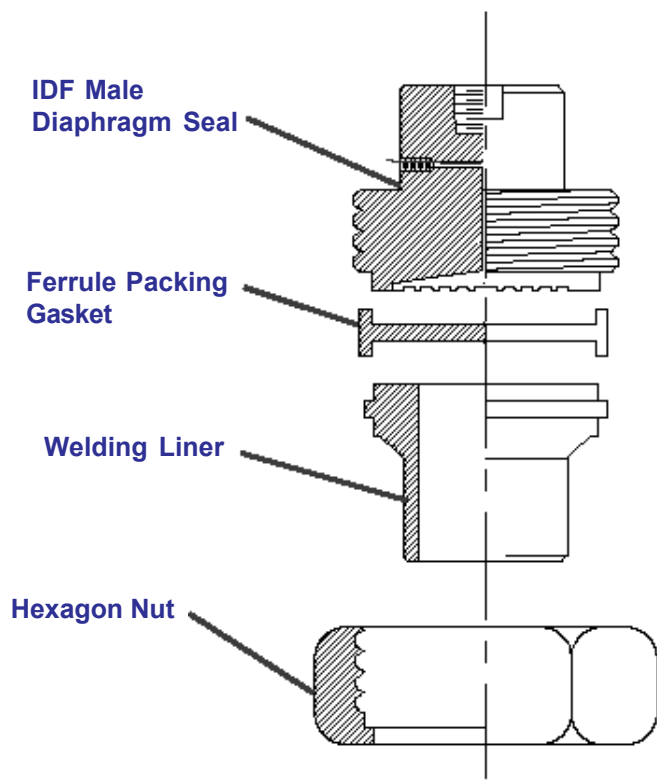
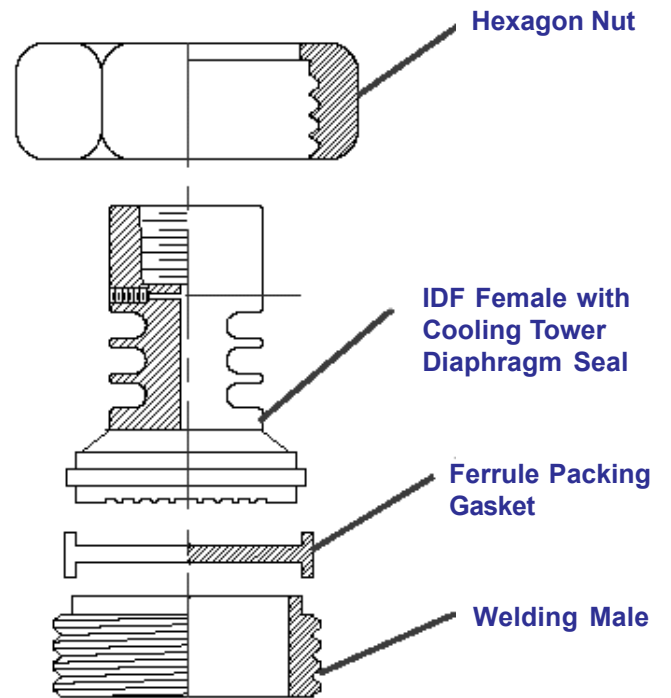
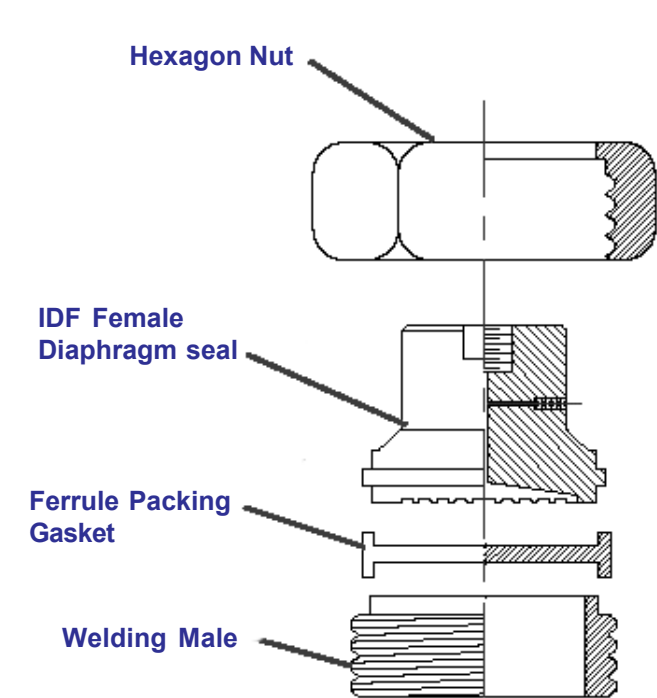
Cooling Tower for Temperature up to 180 °C

Type No:	Instrument Connection	DM	A	D	C	Process Connection
Ds831	1/2"NPT,	0.90"(23mm)	1.00"(25mm)	1.3"(33mm)	1.98"(37mm)	1" IDF Male or Female
Ds833	1/4 NPT,	1.26"(32mm)	1.50"(38mm)	1.3"(33mm)	1.98"(50.5mm)	1 1/2" IDF Male or Female
Ds834	G 1/2", G1/4", R 1/2", R 1/4",	1.89"(48mm)	1.50"(38mm)	1.3"(33mm)	2.51"(64mm)	2" IDF Male or Female
Ds835	M20*1.5,	2.28"(58mm)	2.50"(64mm)	1.3"(33mm)	3.05"(77.5mm)	2 1/2" IDF Male or Female
Ds836	M14*1.0	2.90"(72mm)	2.30"(58mm)	1.3"(33mm)	3.58"(91mm)	3" IDF Male or Female
Ds838	Female	3.90"(99mm)	2.30"(58mm)	1.3"(23mm)	4.68"(119mm)	4" IDF Male or Female

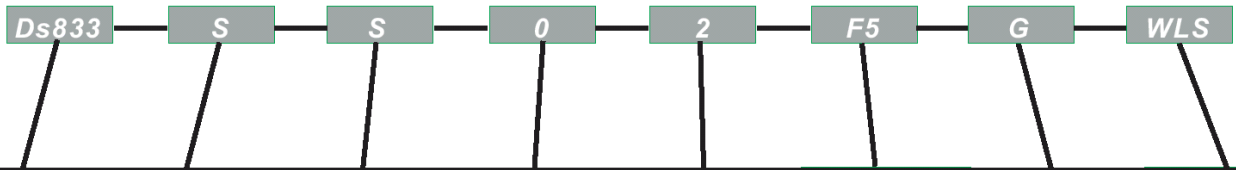
Note : E = 2.29" (58mm) for Cooling Tower

Applications :

Female with Union Nut



Order Information :



Diaphragm Size:	Diaphragm Material:	Body Material:	Flushing Connection:	Instrument Connection:	Process Connection:	Sealing Liquid:	Accessories:
Ds831..... 23mm(0.9") Diaphragm Ds833..... 32mm(1.3") Diaphragm Ds834..... 48mm(1.9") Diaphragm Ds835..... 58mm(2.3") Diaphragm Ds836..... 72mm(2.9") Diaphragm Ds838..... 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 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*1.5 Female Thread GX-Capillary Connection X= Length such as 1m capillary=G1 2m capillary=G2 3m capillary=G3	IDF Male M3-1" (DN25) M5-1 1/2" (DN40) M6-2" (DN50) M7-2 1/2" (DN65) M8-3" (DN80) M9-4" (Dn100) IDF Female with Union Nut F3-1" (DN25) F5-1 1/2" (DN40) F6-2" (DN50) F7-2 1/2" (DN65) F8-3" (DN80) F9-4" (DN100)	G...USP Grade Glycerine I...FDA approved White Oil	CT-Cooling Tower Welding Liner: WLE-Hastelloy B WLS-SS 316L WLM-Monel WLN-Nickel WLT-Titanium WLU-Tantalum Welding Male: WME-Hastelloy B WMS-SS 316L WMM-Monel WMN-Nickel WMT-Titanium WMU-Tantalum Ferrule Packing Gasket: FPGE-EPDM FPGB-Buna N FPGS-Silicone FPGV-Viton FPGF-PTFE Hexagon Nut: HNE-Hastelloy B HNS-SS 316L HNM-Monel HNN-Nickel HNT-Titanium HNU-Tantalum