



# DDS

Diaphragm Sealed Direct Coupled type

#### Special Features

- Robust two piece design
- The diaphragm is welded to the body to ensure separation of the filling fluid from the process medium
- All SS construction

#### Application

 Diaphragm seals are designed to isolate the sensing element of pressure gauges and pressure switches from process fluids that they may be corrosive, viscous, sedimentous and / or with a high temperature.





CE

### **Specifications**

#### Standard Version

(Compatible models: PPS, SF6, WP6, WP4, DD1, DD2, DB, BEC, DEC

Seal type & Range : D85 = -1 to 0 kg/cm<sup>2</sup> & 0 to 70 kg/cm<sup>2</sup> (Standard)

Process temperature

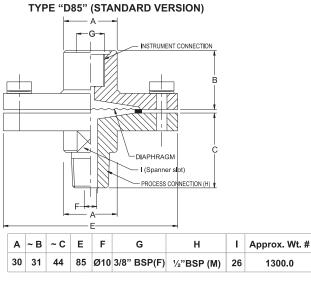
D65 = 100 kg/cm² to 250 kg/cm²

-40°C to 200°C or as per fill fluid

Instrument connection
Process connection
Fill fluid
Mounting
Silicon Oil - DC 200
Direct (without capillary)

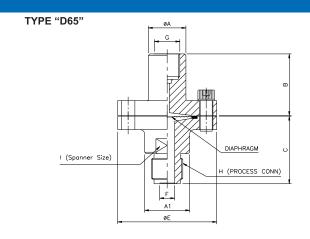
Diaphragm : AISI 316L SS
Top chamber : AISI 304 SS
Bottom chamber : AISI 316 SS
Nuts / bolts : AISI 304 SS
Sealing gasket : PTFE

#### **Dimensions - Standard Version**



(# Weight in grams with box for Standard Model.)

Notes: • Drawings are not to scale. • All Dimensions are in mm.



Α	A1	~ B	~ C	Е	F	G	Н	ı	Approx. Wt. #
25	30	41	45	66	Ø10	3/8" BSP(F)	1/2"BSP (M)	25	900.0

(# Weight in grams with box for Standard Model.)



# DDS Diaphragm Sealed Direct Coupled type

Basic Model Code Optional Extras [It is recommended that the MOC of Diaphragm should be equivalent or superior than the MOC of Bottom chamber.] Type	DDS  XXX									
Code Optional Extras [It is recommended that the MOC of Diaphragm should be equivalent or superior than the MOC of Bottom chamber.]  Type  D85 -1 to 0 kg/cm² & 0 to 70 kg/cm² (Standard) D65 100 kg/cm² to 400 kg/cm²										
Optional Extras  [It is recommended that the MOC of Diaphragm should be equivalent or superior than the MOC of Bottom chamber.]  Type  D85 -1 to 0 kg/cm² & 0 to 70 kg/cm² (Standard) D65 100 kg/cm² to 400 kg/cm²	XXX									
[It is recommended that the MOC of Diaphragm should be equivalent or superior than the MOC of Bottom chamber.]  Type  D85 -1 to 0 kg/cm² & 0 to 70 kg/cm² (Standard) D65 100 kg/cm² to 400 kg/cm²	XXX									
Type  D85 -1 to 0 kg/cm² & 0 to 70 kg/cm² (Standard)  D65 100 kg/cm² to 400 kg/cm²	XXX									
	XXX									
Instrument Connection (Select this option when dry seal is required)										
<b>2BF</b> ¼" BSP (F) <b>3BF</b> 3/8" BSP (F) (Standard) <b>4BF</b> ½" BSP (F) <b>4NF</b> ½" NPT (F) <b>2NF</b> ¼" NPT (F)	XXX									
Top Chamber										
<b>S4</b> AISI 304 SS (Standard) <b>SL</b> AISI 316L SS <b>S6</b> AISI 316 SS	XX									
Diaphragm (*Range up to 21 kg/cm²)										
SL AISI 316L SS (Standard) HC Hastelloy 'C' TI Titanium IN Inconel 600  MO MONEL Si Silver* TN Tantalum	XX									
Sealing Gasket										
TF PTFE (Standard) MT Metal	XX									
Bottom Chamber (* Refer Pressure v/s Temperature table below.)										
S4 AISI 304 SS HC Hastelloy 'C' MOC OF PRESSURE VIS TEMPERATURE  S6 AICI 316 SS (Standard) TN Totalum BOTTOM CHAMBER 2005 4005 2005 4005 4005 4005										
S6         AISI 316 SS (Standard)         TN         Tantalum         BOTTOM CHAMBER         20°C         40°C         60°C         80°C         100°C         120°C           SL         AISI 316L SS         PV         PVC*         PVDF         10 kg/cm²         10 kg/cm²         10 kg/cm²         7 kg/cm²         4 kg/cm²         2 kg/cm²         2 kg/cm²	XX									
TI TITANIUM PD PVDF* PP 10 kg/cm² 10 kg/cm² 6 kg/cm² 4 kg/cm² 1 kg/cm² NA										
MO MONEL         PP Polypropelene*         PVC         10 kg/cm²         10 kg/cm²         4 kg/cm²         1 kg/cm²         NA         NA										
Process Connection										
2BF ¼" BSP (F)       2NF ½" NPT (F)       2NM ½" NPT (M)       2BM ½" BSP (M)       M20 M20 x 1.5 (M)         3BF 3/8" BSP (F)       4NF ½" NPT (F)       4NM ½" NPT (M)       3BM 3/8" BSP (M)       M33 M33 x 1.5 (M)         4BF ½" BSP (F)       5NF ¾" NPT (F)       5NM ¾" NPT (M)       4BM ½" BSP (M) (Standard)         5BF ¾" BSP (F)       5BM ¾" BSP (M)										
Protection On Wetted Parts (* With bore diameter 10 mm minimum & for connection size ½"& above only.)										
PL PTFE Lining On Bottom Chamber - 2 mm THICK (Max. Up to 150°C)* PT PTFE Protection For Diaphragm (Max. Up to 150°C) (Suitable for Pressure Ranges only) PC PTFE Coating On Diaphragm (Max. Up to 315°C) BC PTFE Coating On Bottom Chamber & Diaphragm (Max. Up to 315°C)	xx									
Filling Fluids (*Consult factory for specifications, price and delivery.)										
S1       Silicon DC 200 [-40 to 205°C] (Standard)       SY       Syltherm 800 [-40 to 315°C]         FG       Food Grade OIL [-20 to 140°C]       SIlicon DC 550 [10 to 400°C]	XX									
Remote Mounting (With capillary of Max. Up to 6 Mtrs.) Please Consult Factory if Required Length Above 6 Meter )										
Specify In Meters (e.g. 1.5 = 1.5 METERS 2.0 = 2 METERS)	01.7									
Capillary	3Mtr.									
<b>S4</b> AISI 304 SS <b>S6</b> AISI 316 SS	XX									
Capillary Covered With Armour (Applicable with Capillary is Selected )										
S4 AISI 304 SS S6 AISI 316 SS PC PVC (Ambient Temp. Max. 60°C)	XX									
Other Options										
HLT Helium Leak Test  CNS Conformity as per NACE Standard  FCG Filling & Calibration Charge For Pressure Gauge  WOI Dry Seal Only Without Instrument  MTC Material Test Certificates*  FCT Filling & Calibration Charge For Pressure Transducer (Small)	XXX									

<sup>\*</sup> Material test certificates will be provided for wetted parts only with chemical composition testing. For others, please consult factory.

Refer Datasheet EE for selection of Flushing Rings.

## Ordering Example: DDS - XXX - XXX - XX - XX - XX - XXX - XX - XXX - XX - XXX -

For Other Optional Items, Please Contact Factory For Delivery And Minimum Quantity Of Order.

Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.