

DS SMS

All SS Diaphragm Sealed Pressure Gauge
Sanitary Process Connection (SMS THREADED)



Special Features

- Stainless steel case & measuring system
- Laser welded diaphragm
- Dry or liquid filled
- Diaphragm seal integrally built with gauge.
- Reduces the effect of vibration / pulsation
- Polished diaphragm provides best hygiene factor
- Standard followed EN 837-3

Application

- Especially designed for sanitary application
- Pharmaceutical
- Paint industry
- Bacterial & fungal accumulates which contaminate the process are eliminated
- The mirror finishing of the components assures the best hygiene.

Specifications

Standard Version : 50 mm, 63 mm & 100mm

Accuracy	: ±1.0% of F.S.
Ambient temperature	: 10 to 60°C
Process temperature	: 10 to 150°C
Operating pressure range	: 75% of Scale Value
Over pressure limit	: 130% of Scale Value

Case & Bezel	: AISI 304 SS (Polished Bayonet Type)
Socket	: AISI 316 SS
Bourdon	: AISI 316L SS
Movement	: AISI 304 SS
Body	: AISI 316 SS
Joints	: Tig Argon Arc Welding
Diaphragm	: AISI 316L SS (Polished) Laser Welded
Sanitary Seal	: SMS Thread (Type SDF & SDM) Types Shown on Page No 2.

Protection	: IP 68 as per IS/IEC 60529:2001
Dial	: Aluminum, black graduation on white background
Pointer	: Aluminum, black coloured, fixed
Window	: Toughened Glass
Gasket	: Silicon rubber
Filling Plug	: Neoprene
Sealing Fluid	: Glycerin

Dry but fillable version (option DFG)

Fillable Dampening Liquid	: Glycerine 99.7%
Ambient Temperature	: Maximum 65°C
Process Temperature	: Maximum 65°C
Other Features	: Refer Specification of Standard Version

Glycerine filled version (option LGF)

Accuracy	: ±1.6% of F. S.
Process Temperature	: Maximum 65°C
Ambient Temperature	: Maximum 65°C
Window	: Toughened Glass
Dampening Liquids	: Glycerine 99.7%
Other Features	: Refer Specification of Standard Version

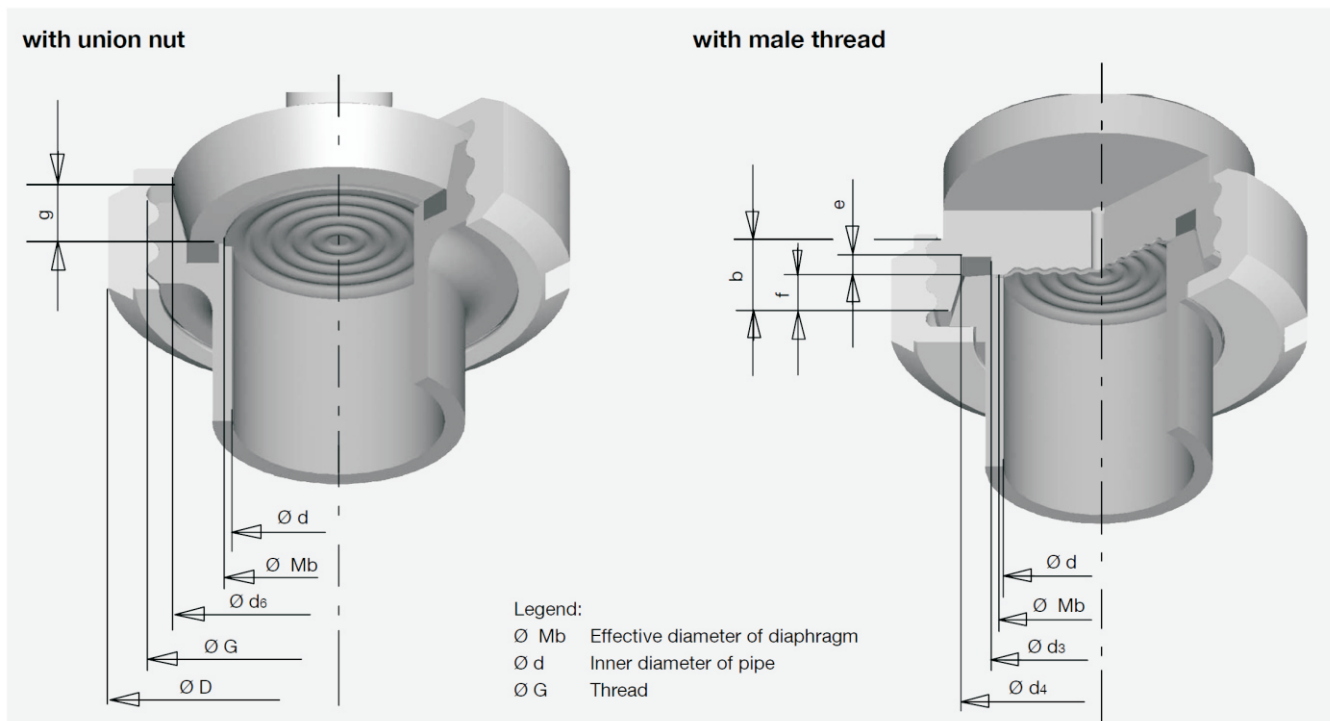
Temperature effect :

The variation of indication caused by effects of temperature is to be calculated by below formula; which is to be added in the specified accuracy while measurement :- Formula : $\pm 0.08 \times (t_2 - t_1) \% \text{ of F. S.}$ where t_1 = reference temperature (+20°C) and t_2 = ambient temperature in °C.

Dimensions - Standard Version

TYPE : SDF (SMS Thread DIN 11851)

TYPE : SDM (SMS Thread DIN 11851)



DN	For pipe Outside Ø x thickness	PN	Dimensions in mm											Weight in kg
			G	b	d	Mb	D	d ₃	d ₄	d ₆	e	f	g	
20	23 x 1.5	40	Rd 44 x 1/8	14	20	22	54	23	32.8	36.5	3	6	8	0.4
25	29 x 1.5	40	Rd 52 x 1/8	14	26	25	63	30	39.8	44	3.5	7	10	0.4
32	35 x 1.5	40	Rd 58 x 1/8	14	32	32	70	36	45.8	50	3.5	7	10	0.5
40	41 x 1.5	40	Rd 65 x 1/8	14	38	40	78	42	51.8	56	3.5	7	10	0.75
50	53 x 1.5	25	Rd 78 x 1/8	14	50	52	92	54	63.8	68.5	3.5	7	11	0.8
80	85 x 2	25	Rd 110 x 1/4	20	81	71	127	85	94.8	100	3.5	8	12	1.25

Notes : • Drawings are not to scale. • All Dimensions are in mm. • NS = Nominal Size. • For Gauge Dimensions, Please Refer Catalogue of WP4

Range Table

Note : We offer National / International Scales like kPa, MPa, bar, psi, kg/cm² & Dual Scale like kPa with psi, kPa with bar, bar with psi or Equivalent scales as per the requirement can be provided on request. Following are the example tables for kg/cm² with psi scales.

Pressure range

Range (psi with kg/cm ²)					
psi	kg/cm ²	psi	kg/cm ²	psi	kg/cm ²
0/30	0/2	0/150	0/10	0/400	0/28
0/60	0/4	0/220	0/16	0/500	0/35
0/100	0/7	0/300	0/20	0/600	0/40

Compound range

Range (mmHg with kg/cm ² & inHg with psi)			
mmHg with kg/cm ²	inHg with psi	mmHg with kg/cm ²	inHg with psi
-760/2	-30/ 30	-760/10	-30/ 150
-760/4	-30/60	-760/14	-30/200
-760/7	-30/100	-760/20	-30/300

How To Order					Example	
Basic Model					DSSMS	
Code						
Nominal Size		20	25	40	XX	
Type of Mounting		50 mm	63 mm	100 mm		
2 Direct bottom entry	4 Direct center back entry				X	
Connection Type & Size						
SDF20 DN 20 SMS Thread With Union Nut	SDM20 DN 20 SMS Male Thread				XXXXX	
SDF25 DN 25 SMS Thread With Union Nut	SDM25 DN 25 SMS Male Thread					
SDF32 DN 32 SMS Thread With Union Nut	SDM32 DN 32 SMS Male Thread					
SDF40 DN 40 SMS Thread With Union Nut	SDM40 DN 40 SMS Male Thread					
SDF50 DN 50 SMS Thread With Union Nut	SDM50 DN 50 SMS Male Thread					
SDF80 DN 80 SMS Thread With Union Nut	SDM80 DN 80 SMS Male Thread					
If Standard Options use from below Coding then Please USE "STD" in Model Code						STD
if any Other option select from below then please DO NOT USE "STD" in Code and use related code form below						
SMS Body						
S6 AISI 316 SS (Standard)	SL AISI 316L SS				XX	
Diaphragm						
SL AISI 316L (Standard)					XX	
Filling fluids						
GF Glycerin [10 to 150°C / 50 to 302°F] (Standard)	FG Food grade oil [-20 to 140°C / -4 to 284°F]				XX	
LP Liquid paraffin [10 to 200°C / 50 to 392°F]						
Range						
Refer range table					0/10 kg/cm ²	
Optional extras						
CDD Custom designed dial	STG Shatterproof / safety glass				XX	
OXC Oxygen service (for dry version)	TOG Toughened glass					
CB6 AISI 316 SS case & bezel	STP SS tag plate					
LGF Dampening liquid glycerine filled	FGF Fillable liquid glycerine					
MTC Material test certificates*	HLT Helium leak test					
CRB Case with rolling type bezel#	EPC Electro polished case & bezel					
# For mounting type 4 only						
* Material test certificates will be provided for wetted parts only with chemical composition testing. For others, please consult factory.						

Ordering Example: DSSMS - XX - X - XXXXX - STD - 0/10kg/cm² + Options if any required

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.