

# CDS

All SS Pressure Gauge  
Compact Diaphragm Type (50 mm, 63 mm & 100mm)



CE

## Special Features

- Stainless steel case & measuring system
- Dry or liquid filled
- Diaphragm seal integrally built with gauge.
- Reduces the effect of vibration / pulsation
- Standard followed en 837-3

## 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.
- Especially designed for Low Cost

## Specifications

### Standard Version : 50 mm, 63 mm & 100mm

Accuracy	: ±1.6% 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 (Bayonet Type)
Socket	: AISI 304 SS
Bourdon	: AISI 316L SS
Movement	: AISI 304 SS
Body	: AISI 304 SS
Joints	: Tig Argon Arc Welding
Diaphragm	: AISI 316L SS
Process Connection	: ¼" BSP (M) Standard Other on Request..

Protection	: IP 68
Dial	: Aluminum, black graduation on white background
Pointer	: Aluminum, black coloured, fixed
Window	: Plexi Glass
Gasket	: Neoprene 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

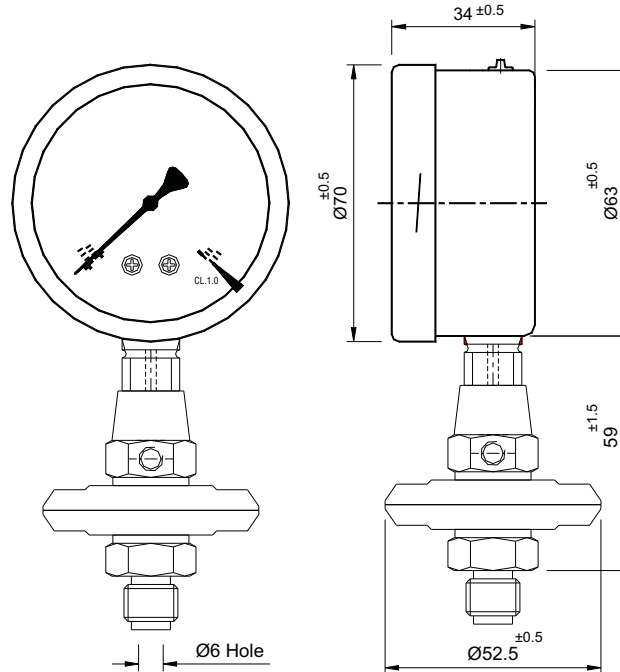
### Glycerine filled version (option LFG)

Accuracy	: ±1.6% of F. S.
Process Temperature	: Maximum 65°C
Ambient Temperature	: Maximum 65°C
Window	: Plexi 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



63mm Dial Size Gauge Dimensions

## Range Table

Note : We offer National / International Scales like kPa, MPa, bar, psi, kg/cm<sup>2</sup> & 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/cm<sup>2</sup> with psi scales.

### Pressure range

Range (psi with kg/cm <sup>2</sup> )			
psi	kg/cm <sup>2</sup>	psi	kg/cm <sup>2</sup>
0/30	0/2	0/300	0/21
0/60	0/4	0/400	0/28
0/100	0/7	0/500	0/35
0/150	0/10	0/600	0/42
0/220	0/16	0/1000	0/70

### Compound range

Range (mmHg with kg/cm <sup>2</sup> & inHg with psi)			
mmHg with kg/cm <sup>2</sup>	inHg with psi	mmHg with kg/cm <sup>2</sup>	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	
<b>Basic Model</b>				CDS	
<b>Code</b>					
<b>Nominal Size</b>		<b>20</b>	<b>25</b>	<b>40</b>	XX
<b>Type of Mounting</b>		50 mm	63 mm	100 mm	
<b>2</b> Direct bottom entry	<b>4</b> Direct center back entry				X
<b>Diaphragm Sealed Chamber</b>				XX	
<b>S4</b> AISI 304 SS (Standard)	<b>S6</b> AISI 316 SS				
<b>Diaphragm</b>				XX	
<b>SL</b> AISI 316L (Standard)					
<b>Filling fluids</b>				XX	
<b>S1</b> Silicon DC 200 [-40 to 205°C] (Standard)		<b>S3</b> Silicon DC 710 [7 to 371°C]			
<b>FG</b> Food Grade OIL [-20 to 140°C]		<b>SY</b> Syltherm 800 [-40 to 315°C]			
<b>S2</b> Silicon DC 704 [10 to 337°C]					
<b>End connection of bottom mating part (* Bore size will be 6 to 8 mm )</b>				XXX	
<b>2BM</b> ¼" BSP (M)*	<b>3BM</b> 3/8" BSP (M)				
<b>4BM</b> ½" BSP (M)*	<b>4NM</b> ½" NPT (M)				
<b>Range</b>				0/10 kg/cm <sup>2</sup>	
Refer range table					
<b>Optional extras</b>				XX	
<b>CDD</b> Custom designed dial	<b>STG</b> Shatterproof / safety glass				
<b>OXS</b> Oxygen service (for dry version)	<b>TGS</b> Toughened glass				
<b>CBS</b> AISI 316 SS case & bezel	<b>STP</b> SS tag plate				
<b>LGF</b> Dampening liquid glycerine filled	<b>FLG</b> Fillable liquid glycerine				
<b>MTC</b> Material test certificates*	<b>HLT</b> Helium leak test				
<b>CRP</b> Case with rolling type bezel#	<b>EPC</b> Electro polished case & bezel				

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

## Ordering Example: CDS - XX - X - XX - XX - XX - XXX - 0/10kg/cm<sup>2</sup> - 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.