

INDUSTRIAL AND PROCESS APPLICATIONS**MODEL : CSF16 SERIES**

Sealed diaphragm pressure gauges are designed for use in process applications where

- Process element materials capable of withstanding corrosive effects of certain fluids are not available.
- The process fluid being measured would normally clog the pressure measuring device or
- The process fluid in the measuring element might freeze due to changes in ambient temperatures.

SPECIAL FEATURES

- Flush type welded construction, standard model
- Flanged process connection for direct mounting
- Whether proof to IP68 per IS/IEC 60529:2001
- Diaphragm material, SS316
- Scale ranges from 5...210 kg/cm²
- Also available with flexible stainless steel armored capillary assembly.

DESIGN

EN837-1

NOMINAL DIAL SIZE

NS 100, 150 & 250mm

ACCURACY

As per EN837-1

SCALE RANGES

0...5 kg/cm² to 0...200 kg/cm² (Single range)
0...7 kg/cm² / 15 psi to 0...210 kg/cm² / 1000 psi (Dual range)
or other equivalent units of pressure

WORKING PRESSURE

Steady : 75% of FSD
Fluctuating : 66% of FSD
Short Time : FSD

OPERATING TEMPERATURE

Ambient : -40 to 60°C without liquid filling
-20 to 60°C gauge with glycerine filling
Medium : 80°C max.

TEMPERATURE EFFECT

When temperature of the pressure element deviates from reference temperature (+30°C) : Max. $\pm 0.4\%$ / 10K of true scale value

**PRIMARY SENSING ELEMENT**

Diaphragm, SS316

UPPER DIAPHRAGM HOUSING

SS304

SEAL FLUID

Silicon oil

SECONDARY SENSING ELEMENT

Bourdon tube, SS316L

MOVEMENT

SS304

DIAL

Off-white aluminum with black lettering

POINTER

Black aluminum, Zero-adjustment pointer

CASE & BEZEL

Case & Bezel : SS304 Bayonet type

INGRESS PROTECTION

IP68 per IS/IEC 60529:2001

BOD (VENT PLUG)

Neoprene

PROCESS CONNECTION

Material : SS316 / SS304
Standard flange : ASME B16.5 (ANSI)
Size : 25 NB

WINDOW

Toughened glass

MOUNTING

NS 100 & 150mm

Direct Bottom (20)
Back Eccentric Mount (30)

NS 250mm

Direct Bottom (20)

ACCESSORIES

DAMPING LIQUID

Glycerine 99.7%

EXTENSION CAPILLARY

Flexible stainless steel armored capillary assembly with flush mounting bracket / surface mounting flange



Standard lengths of capillary : 1.5mtr, 3mtr and 5mtr

OPTIONAL EXTRA

- Other process connection, DIN, BS, JIS (contact factory)
- Other lengths of capillary
- Silicon oil filling
- Flange size smaller than 25 NB see model CSE08
- Alarm contacts see model EOC.XXX



ADAPTORS



PULSATION DAMPENER



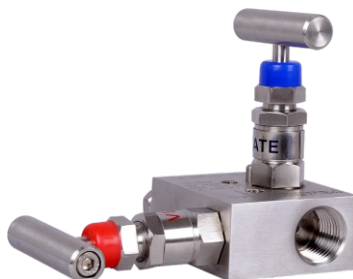
ISOLATION VALVE



GAUGE COCK



GAUGE SAVER



MANIFOLD VALVE

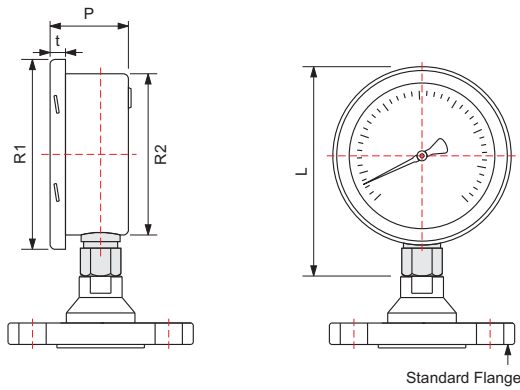


SYPHON

A. DIRECT MOUNTING

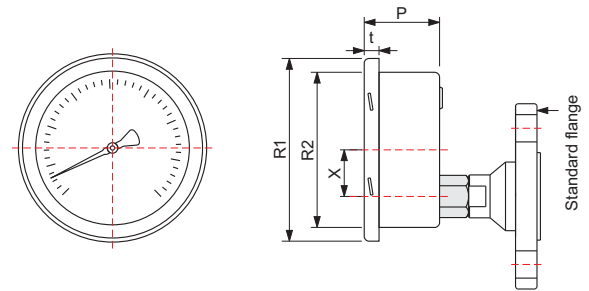
DIRECT BOTTOM

20



BACK ECCENTRIC MOUNT

30



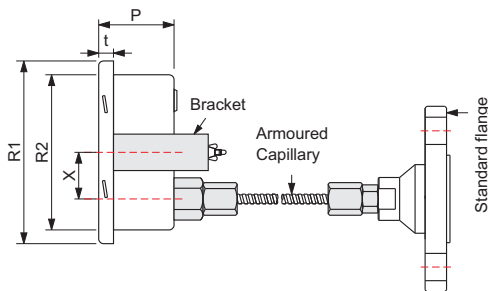
DIAL SIZE	R1	R2	t	P	L	X
100	110	100	15	50	126	30
150	165	150	15	50	181	48
250	270	250	15	50	286	-

*All dimensions are in mm

B. REMOTE MOUNTING WITH CAPILLARY

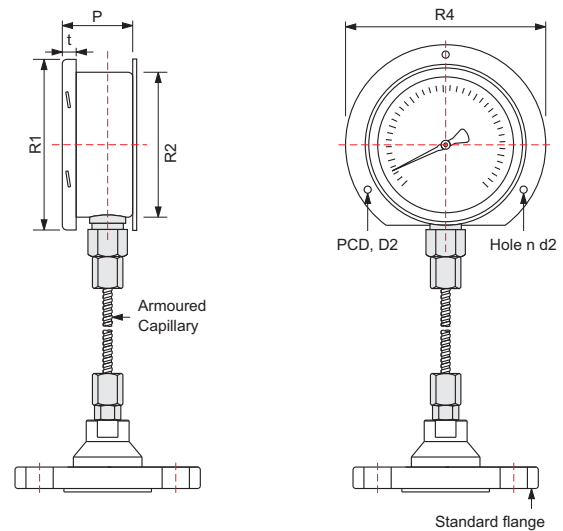
FLUSH PANEL WITH BRACKET

40



SURFACE MOUNT

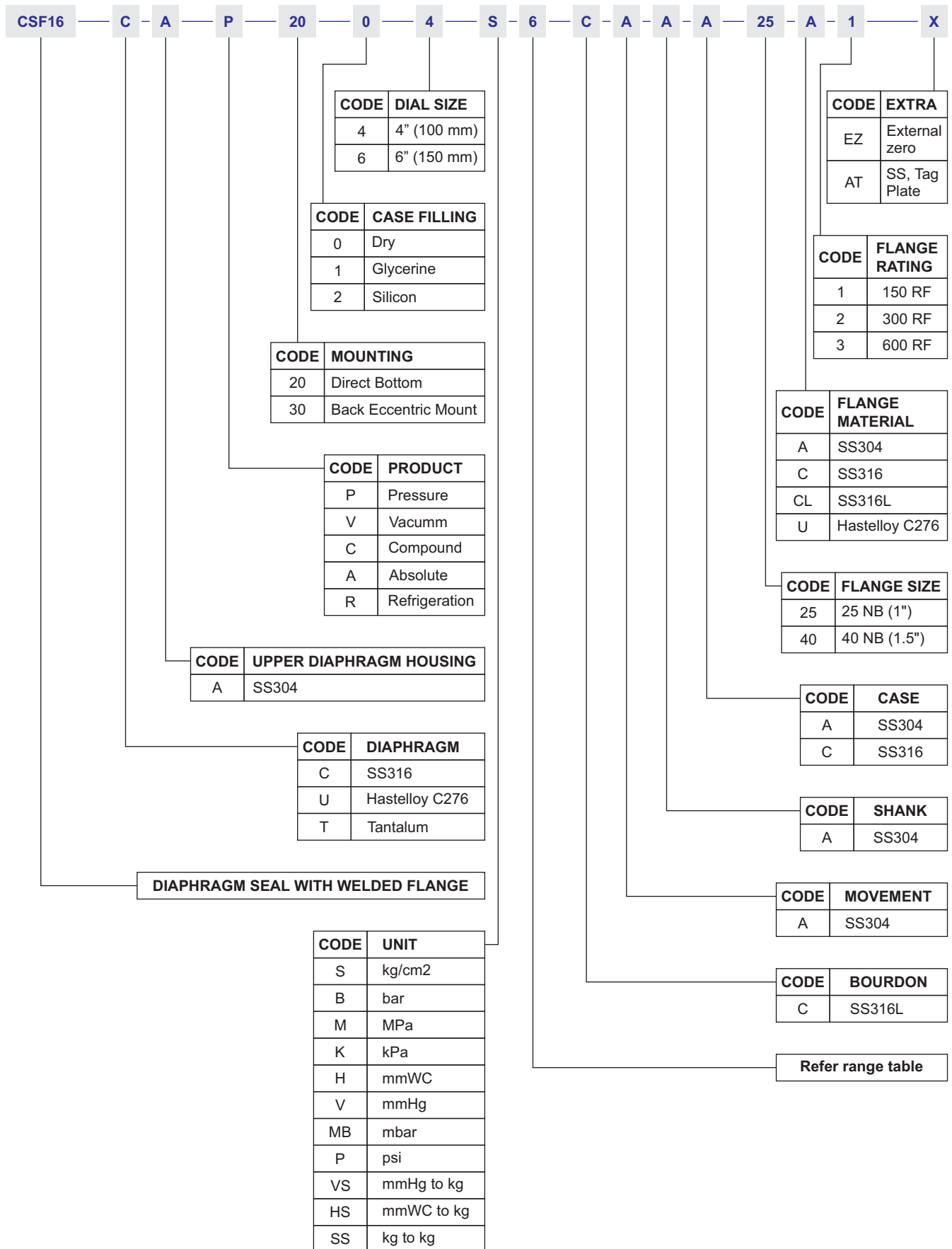
60



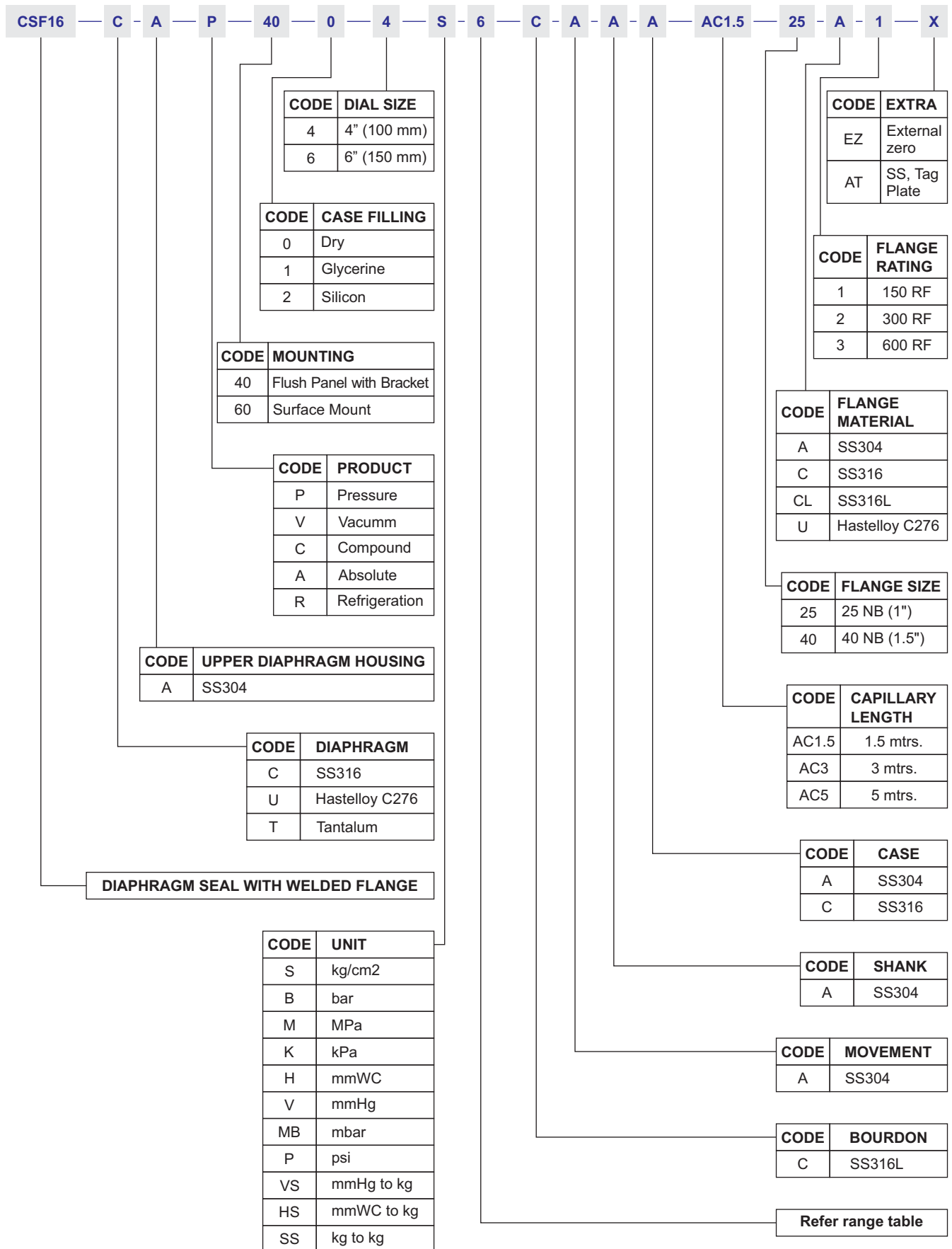
DIAL SIZE	R1	R2	t	P	L	X	R4	D2	d2
100	110	100	15	50	126	30	128	116	5.4
150	165	150	15	50	181	48	198	171	5.4
250	270	250	15	50	286	-	-	-	-

*All dimensions are in mm

HOW TO ORDER - WITHOUT CAPILLARY



HOW TO ORDER - WITH CAPILLARY



STANDARD RANGES & LEAST COUNT

CODE	RANGE	LEAST COUNT
(SINGLE SCALE)		
S4	0 to 4 kg/cm ²	0.1 kg/cm ²
S6	0 to 6 kg/cm ²	0.1 kg/cm ²
S10	0 to 10 kg/cm ²	0.1 kg/cm ²
S16	0 to 16 kg/cm ²	0.2 kg/cm ²
S20	0 to 20 kg/cm ²	0.5 kg/cm ²
S25	0 to 25 kg/cm ²	0.5 kg/cm ²
S40	0 to 40 kg/cm ²	1 kg/cm ²
S60	0 to 60 kg/cm ²	1 kg/cm ²
S100	0 to 100 kg/cm ²	1 kg/cm ²
S160	0 to 160 kg/cm ²	2 kg/cm ²
S200	0 to 200 kg/cm ²	5 kg/cm ²

CODE	RANGE	LEAST COUNT
(DUAL SCALE)		
D4.2	0 to 4.2 kg/cm ² (60psi)	0.1 kg/cm ² (1psi)
D7	0 to 7 kg/cm ² (100psi)	0.1 kg/cm ² (1psi)
D10.6	0 to 10.6 kg/cm ² (150psi)	0.2 kg/cm ² (2psi)
D14	0 to 14 kg/cm ² (200psi)	0.2 kg/cm ² (2psi)
D21	0 to 21 kg/cm ² (300psi)	0.5 kg/cm ² (5psi)
D28	0 to 28 kg/cm ² (400psi)	0.5 kg/cm ² (5psi)
D35	0 to 35 kg/cm ² (500psi)	1 kg/cm ² (10psi)
D42	0 to 42 kg/cm ² (600psi)	1 kg/cm ² (10psi)
D70	0 to 70 kg/cm ² (1000psi)	1 kg/cm ² (10psi)
D106	0 to 106 kg/cm ² (1500psi)	2 kg/cm ² (25psi)
D140	0 to 140 kg/cm ² (2000psi)	2 kg/cm ² (20psi)
D210	0 to 210 kg/cm ² (3000psi)	5 kg/cm ² (50psi)