

INDUSTRIAL AND PROCESS APPLICATIONS**MODEL : CSA02 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

- Low pressure bolted construction, economy model
- Threaded process connection for direct mounting
- Whether proof to IP68 per IS/IEC 60529:2001
- Diaphragm material, SS316 with Teflon protection
- Scale ranges upto 0...10.6 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...1 kg/cm² to 0...10 kg/cm² (Single range)
0...1.06 kg/cm² / 15 psi to 0...10.6 kg/cm² / 150 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. ±0.4% / 10K of true scale value

PRIMARY SENSING ELEMENT

Diaphragm, SS316, Teflon protected

**UPPER DIAPHRAGM HOUSING**

SS304

LOWER DIAPHRAGM HOUSING

SS304 / SS316

TENSION FLANGE

SS304

GASKET

Acid proof

SEAL FLUID

Silicon oil

SECONDARY SENSING ELEMENT

Bourdon tube, SS316L

MOVEMENT

SS304

DIAL

Off-white aluminum with black / red lettering

POINTER

Black aluminum, Zero-adjustment pointer

CASE & BEZEL

Case & Bezel : SS304 Bayonet type

INGRESS PROTECTION

IP68 per IS/IEC 60529:2001

PROCESS CONNECTION

Material : SS316 / SS304

Standard Threads : 3/8" or 1/2" BSP (M) / NPT (M)

WINDOW

Toughened glass

BOD (VENT PLUG)

Neoprene

MOUNTING

NS 100 & 150mm

Direct Bottom

Back Eccentric Mount

NS 250mm

Direct Bottom

ACCESSORIES

DAMPING LIQUID (FOR MODEL CSA02)

Glycerine 99.7%

EXTENSION CAPILLARY (FOR MODEL CSA02)

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
- Other lengths of capillary
- PTFE lined wetted parts
- Teflon gasket
- Silicon oil filling
- Alarm contacts see model EOC.XXX



ADAPTORS



PULSATION DAMPENER



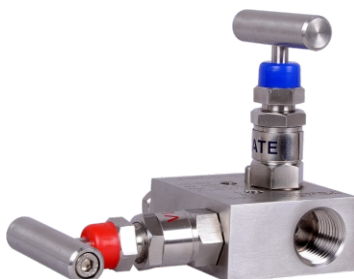
ISOLATION VALVE



GAUGE COCK



GAUGE SAVER



MANIFOLD VALVE

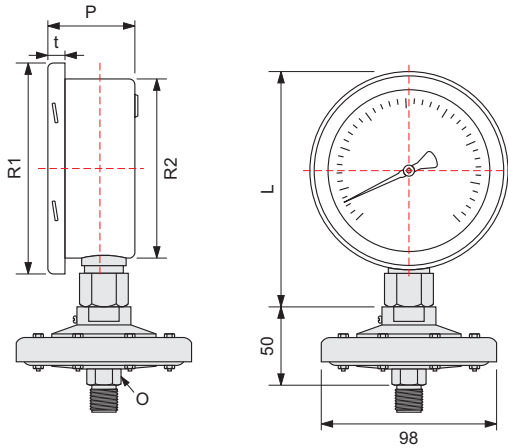


SYPHON

A. DIRECT MOUNTING

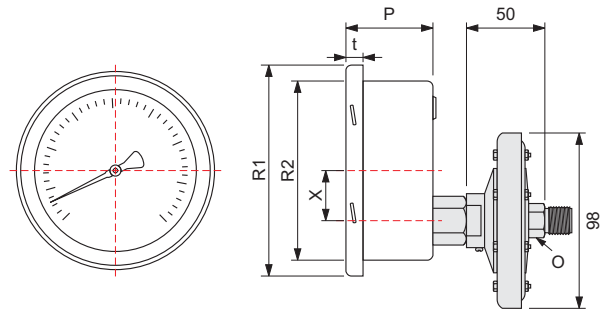
DIRECT BOTTOM

20



BACK ECCENTRIC MOUNT

30



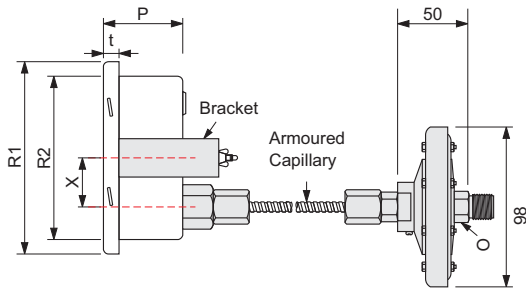
DIAL SIZE	R1	R2	t	P	L	O	X
100	110	100	15	50	126	22	30
150	165	150	15	50	181	22	48
250	270	250	15	50	286	22	-

*All dimensions are in mm

B. REMOTE MOUNTING WITH CAPILLARY

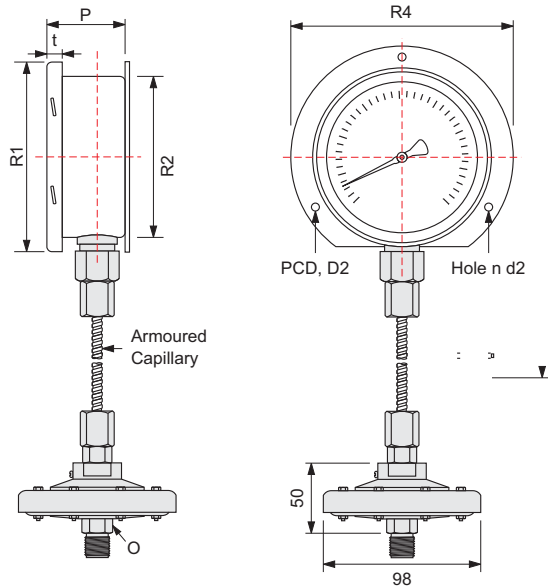
FLUSH PANEL WITH BRACKET

40



SURFACE MOUNT

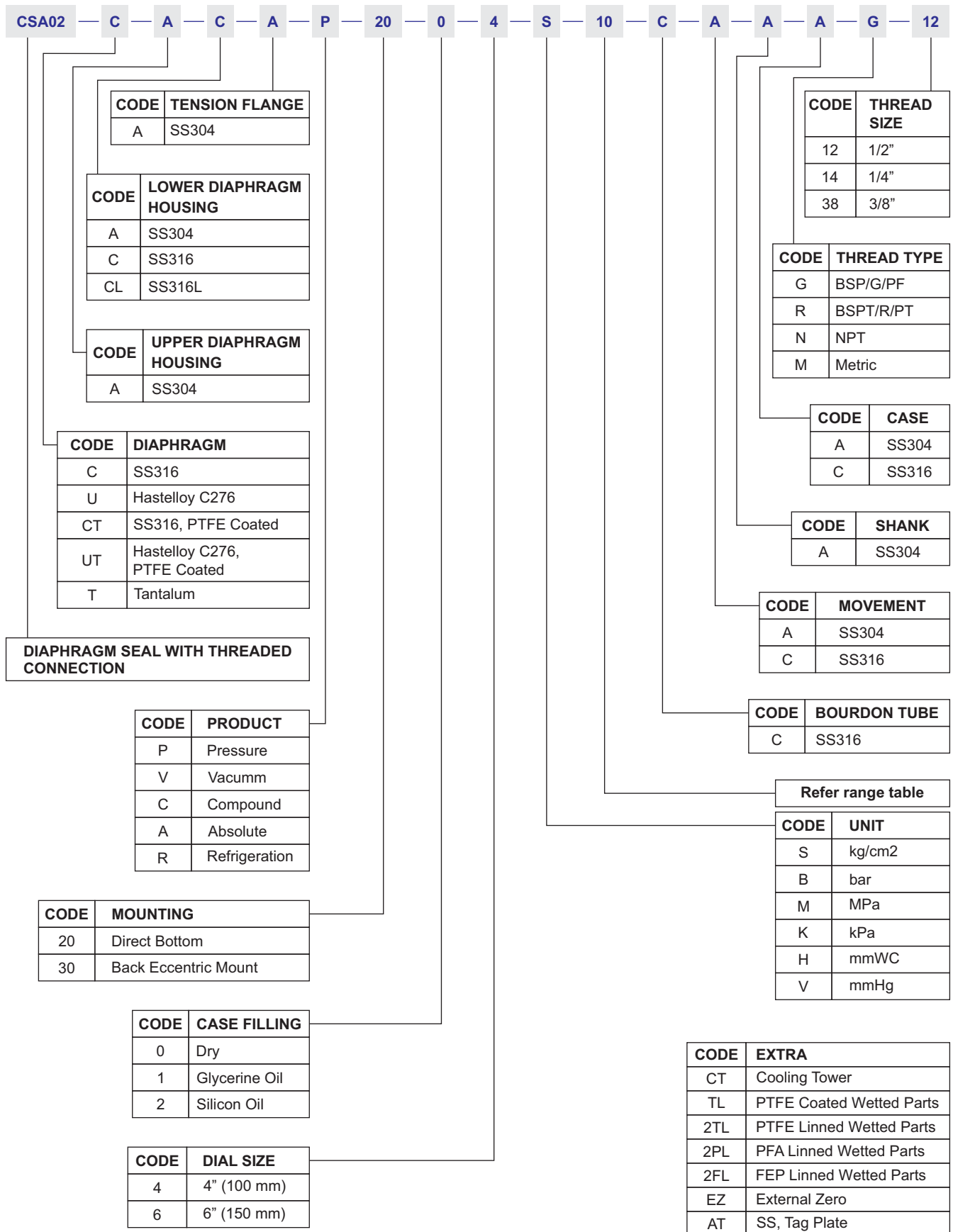
60



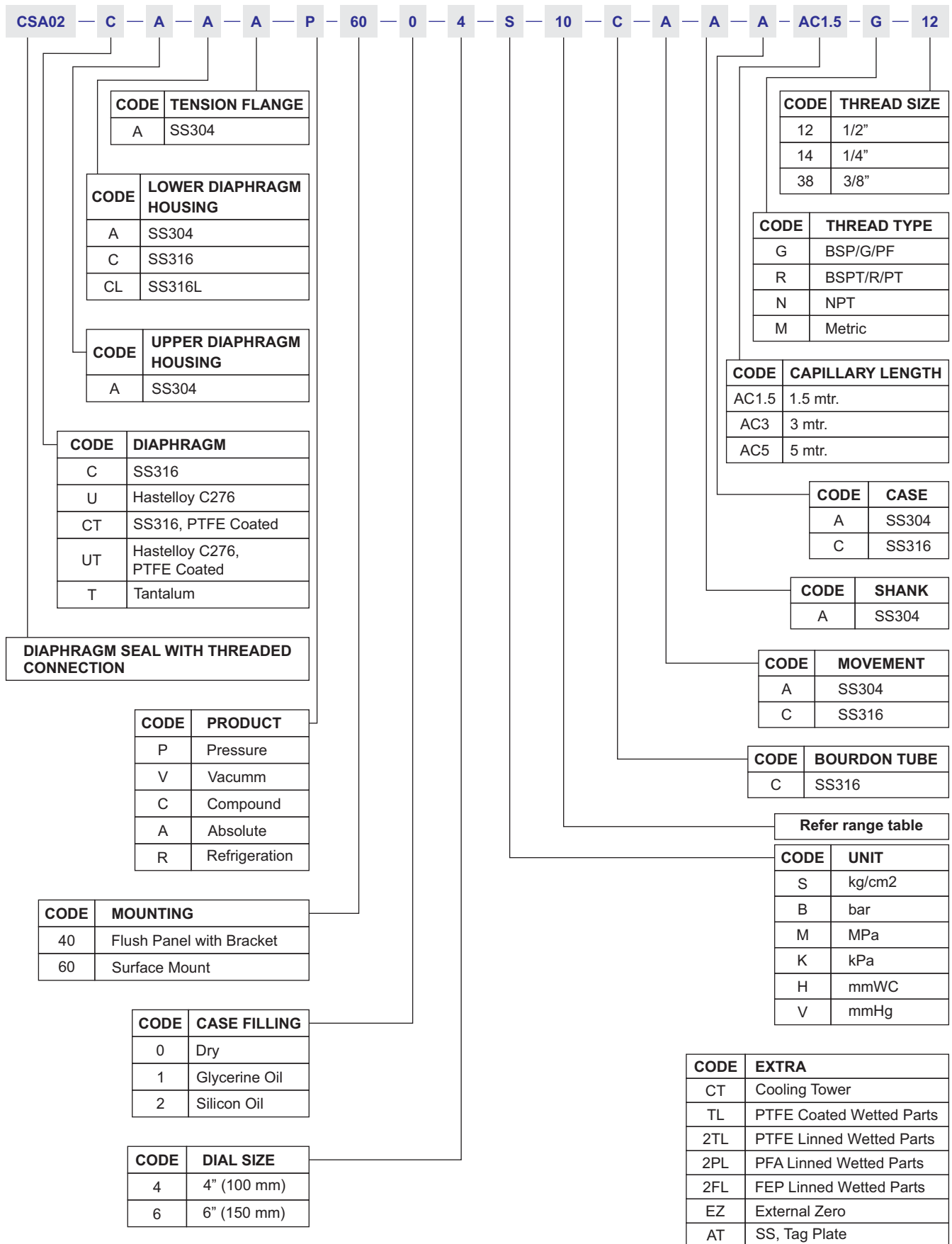
DIAL SIZE	R1	R2	t	P	L	O	X	R4	D2	d2
100	110	100	15	50	126	22	30	128	116	5.4
150	165	150	15	50	181	22	48	198	171	5.4
250	270	250	15	50	286	22	-	-	-	-

*All dimensions are in mm

HOW TO ORDER



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STANDARD RANGES & LEAST COUNT

CODE	RANGE	LEAST COUNT
(SINGLE SCALE)		
S1	0 to 1 kg/cm ²	0.01 kg/cm ²
S1.6	0 to 1.6 kg/cm ²	0.02 kg/cm ²
S2	0 to 2 kg/cm ²	0.05 kg/cm ²
S2.5	0 to 2.5 kg/cm ²	0.05 kg/cm ²
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

CODE	RANGE	LEAST COUNT
(DUAL SCALE)		
D1.06	0 to 1.06 kg/cm ² (15psi)	0.02 kg/cm ² (0.2psi)
D2.1	0 to 2.1 kg/cm ² (30psi)	0.05 kg/cm ² (0.5psi)
D2.8	0 to 2.8 kg/cm ² (40psi)	0.05 kg/cm ² (0.5psi)
D3.5	0 to 3.5 kg/cm ² (50psi)	0.1 kg/cm ² (1psi)
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)