

INDUSTRIAL AND PROCESS APPLICATIONS

MODEL : CSA05

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

- High pressure welded construction, economic model
- Threaded process connection for direct mounting
- Whether proof to IP68 per IS/IEC 60529:2001
- Diaphragm material, SS316
- Scale ranges upto 0...420 kg/cm²
- Also available with flexible stainless steel armored capillary assembly.

DESIGN

EN837-1

NOMINAL DIAL SIZE

NS 63, 100, 150 & 250mm

ACCURACY

As per EN837-1

SCALE RANGES

NS 63mm

0...1 kg/cm² to 0...400 kg/cm² (Single range)
0...1.06 kg/cm² / 15 psi to 0...350 kg/cm² / 5000 psi (Dual range)

NS 100, 150 & 250mm

0...1 kg/cm² to 0...400 kg/cm² (Single range)
0...1.06 kg/cm² / 15 psi to 0...350 kg/cm² / 5000 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

UPPER DIAPHRAGM HOUSING

SS304

LOWER DIAPHRAGM HOUSING

SS304 / SS316

SEAL FLUID

Silicon oil

SECONDARY SENSING ELEMENT

Bourdon tube, SS316L

MOVEMENT

SS304

DIAL

Off-white aluminum with pointer, with black / red lettering

POINTER

Black aluminum fixed pointer for NS 63
Black aluminum Zero-adjustment pointer for NS 100 & above

CASE & BEZEL

Case & Bezel : SS304 Bayonet type

INGRESS PROTECTION

IP68 per IS/IEC 60529:2001

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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

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

ACCESSORIES



ADAPTORS



PULSATION DAMPENER



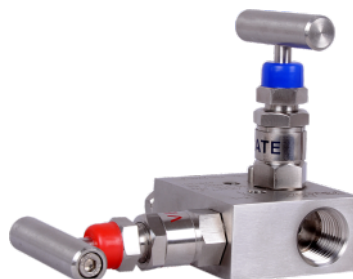
ISOLATION VALVE



GAUGE COCK



GAUGE SAVER



MANIFOLD VALVE



SYPHON

A. DIRECT MOUNTING

DIRECT BOTTOM				BACK ECCENTRIC MOUNT					
20				30					
DIAL SIZE	R1	R2	t	P	L	O	X	H	W
63	73	64	12.5	33	78	14	0	45	49
100	110	100	15	50	126	22	30	48	63
150	165	150	15	50	181	22	48	48	63
250	270	250	15	50	286	22	-	48	63

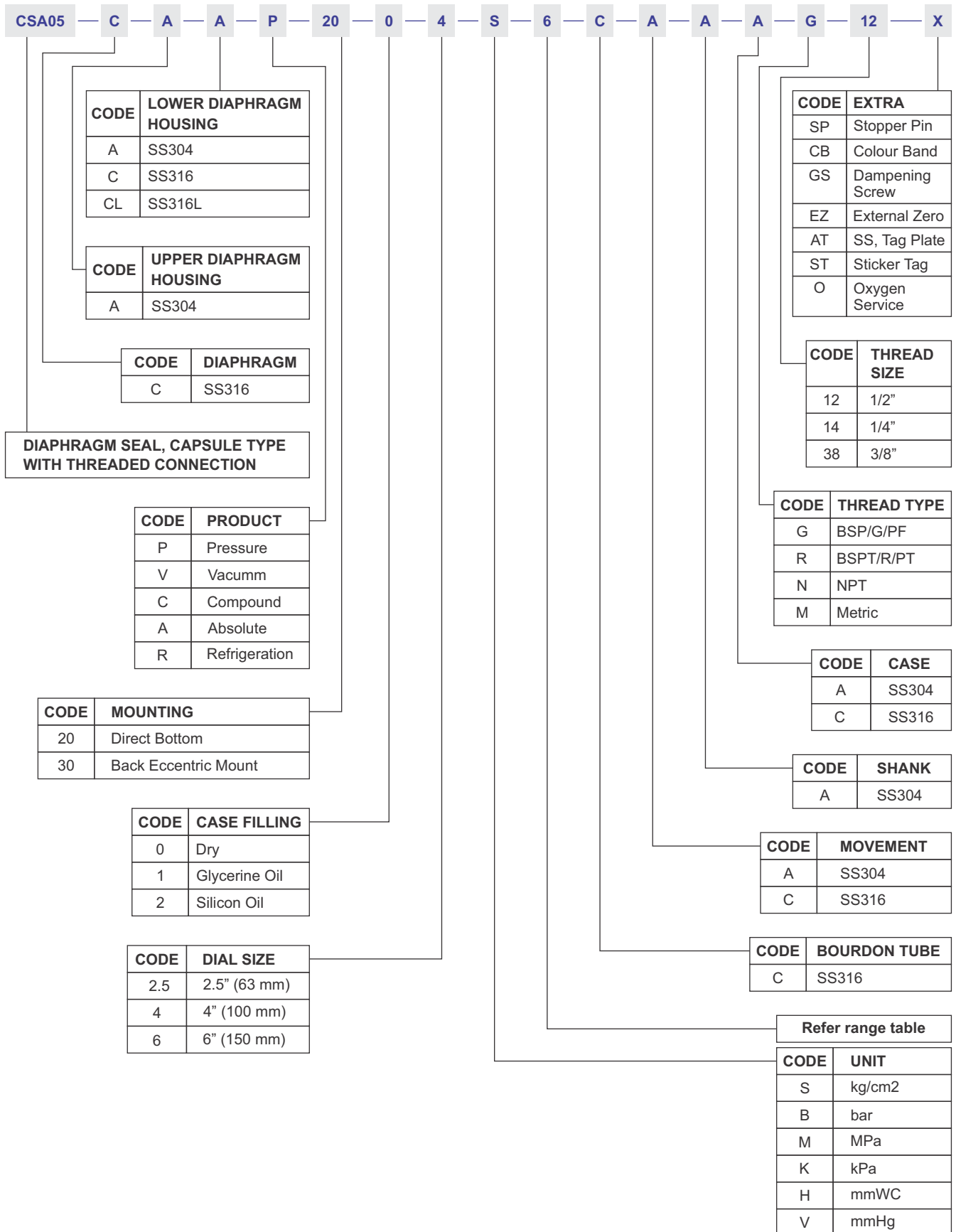
*All dimensions are in mm

B. REMOTE MOUNTING WITH CAPILLARY

FLUSH PANEL WITH BRACKET						SURFACE MOUNT						
40						60						
DIAL SIZE	R1	R2	t	P	L	O	X	R4	D2	d2	H	W
100	110	100	15	50	126	22	30	128	116	5.4	48	63
150	165	150	15	50	181	22	48	198	171	5.4	48	63
250	270	250	15	50	286	22	-	-	-	-	48	63

*All dimensions are in mm

HOW TO ORDER



HOW TO ORDER

CSA05 — C — A — A — P — 40 — 0 — 4 — S — 6 — C — A — A — A — AC1.5 — G — 12 — X

CODE	LOWER DIAPHRAGM HOUSING
A	SS304
C	SS316
CL	SS316L

CODE	UPPER DIAPHRAGM HOUSING
A	SS304

CODE	DIAPHRAGM
C	SS316

DIAPHRAGM SEAL, CAPSULE TYPE WITH THREADED CONNECTION

CODE	PRODUCT
P	Pressure
V	Vacumm
C	Compound
A	Absolute
R	Refrigeration

CODE	MOUNTING
40	Flush Panel with Bracket
60	Surface Mount

CODE	CASE FILLING
0	Dry
1	Glycerine Oil
2	Silicon Oil

CODE	DIAL SIZE
2.5	2.5" (63 mm)
4	4" (100 mm)
6	6" (150 mm)

CODE	UNIT
S	kg/cm ²
B	bar
M	MPa
K	kPa
H	mmWC
V	mmHg

CODE	EXTRA
SP	Stopper Pin
CB	Colour Band
GS	Dampening Screw
EZ	External Zero
AT	SS, Tag Plate
ST	Sticker Tag
O	Oxygen Service

CODE	THREAD SIZE
12	1/2"
14	1/4"
38	3/8"

CODE	THREAD TYPE
G	BSP/G/PF
R	BSPT/R/PT
N	NPT
M	Metric

CODE	CAPILLARY LENGTH
AC1.5	1.5 mtr.
AC3	3 mtr.
AC5	5 mtr.

CODE	CASE
A	SS304
C	SS316

CODE	SHANK
A	SS304

CODE	MOVEMENT
A	SS304
C	SS316

CODE	BOURDON TUBE
C	SS316

Refer range table