

# SS Case Process Pressure Gauge (SP)

## Catalogue and offer manual

### Introduction

The SS Case Bourdon Pressure Gauge (SP) model is designed for measuring pressure in tough conditions, for example in chemical manufacturing plants.

This gauge offers glycerin filling as an option. The glycerin fill ensures ease of readability even in applications with high vibration levels and extreme loads. Glycerin lubricates the gauge internals and also protects the gauge from wear and tear.

The fully welded construction guarantees long service life and stable operation of the gauge, along with tried and tested safety.



### This gauge is available in

Nominal Sizes:	4" (100mm), 6" (150mm), 8" (200mm), 10" (250mm)
Ranges:	-15 to 0 Psi 10 Psi to 10,000 Psi

### Features

- Compliance with latest EN837-1
- Standard ranges : 0 to 10 Psi upto 10,000 Psi
- Overload capacity 130 % of FSD
- Protection to IP67\*\*\*
- Accuracy class  $\pm 1.0\%$  of FS
- Stainless steel casing
- Dry or liquid filled version
- External zero adjustment (optional)
- Socket to case - TIG argon welded
- CE marking as per PED 97/23/EC

### Applications

- Chemical and fertilizer industries
- Petrochemical industries
- Thermal, nuclear and hydroelectric power stations
- Pharmaceutical industries
- Food process industries
- Water treatment plants
- Iron and steel industries
- Rubber molding / processing plants
- Hydraulics and pneumatics
- Sugar industries
- Refineries
- Hydraulic power packs
- Cryogenics

\*\*\* Enclosure Protection to IP67 for 4" & 6" Dial Sizes

## Specifications

Standards	Description
Reference standard	EN837-1
Mounting	Direct bottom
Connection	½" NPT (M) (as standard)
Case and bezel	SS 304 (Bayonet type bezel)
Bourdon	SS 316
Socket	SS 316 L
Movement	SS 304
Dial	Aluminum, white background with black marking
Pointer	Aluminum, black color micrometer pointer with zero adjustable
Accuracy	±1% of FS (as standard.)
	± 0.5% of FS *
Dampening liquid	Glycerin up to 149°F**
	Silicon oil -40 to 392°F**
Over pressure limit	As per EN standard
	From 0 to 1500 Psi, 125% of maximum scale
	From 1500 to 8550 Psi, 115% of maximum scale value
Window	Toughened glass
Protection	IP67 ***
Blow off disc and filling plug	Neoprene
Gasket	Silicon
Ambient temperature	-40° F to 140° F (for dry version)
	-4° F to 190° F (for glycerin filled version)
Process temperature	Max. 392°F (for dry gauge)
	Max. 149°F (for glycerin filled gauges)

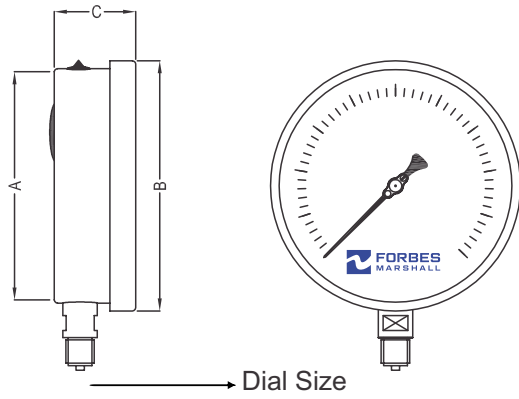
\* On customer request, consult factory / engineering team

\*\* Applicable for 4" and 6" dial size only. Consult factory / engineering team

\*\*\* Enclosure protection to IP67 for dial sizes 4" and 6" only  
Enclosure protection to IP65 for 8" and 10" and above dial sizes respectively

**Direct Bottom**

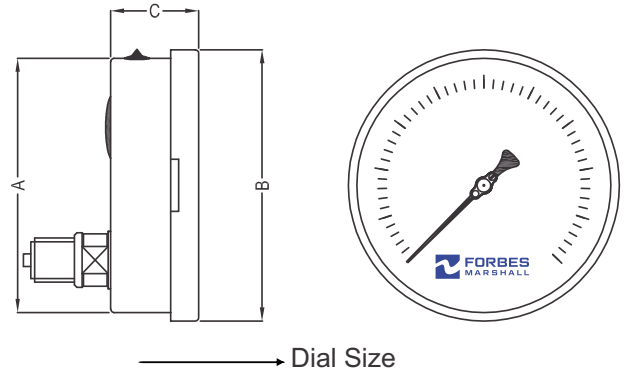
**Mounting - 1**



		4	6	8	10
Parameters	A	Ø3.94	Ø5.90	Ø7.95	Ø9.84
	B	Ø4.33	Ø6.3	Ø8.47	Ø10.4
	C	2.05	2.05	2.05	2.09

**Lower Back**

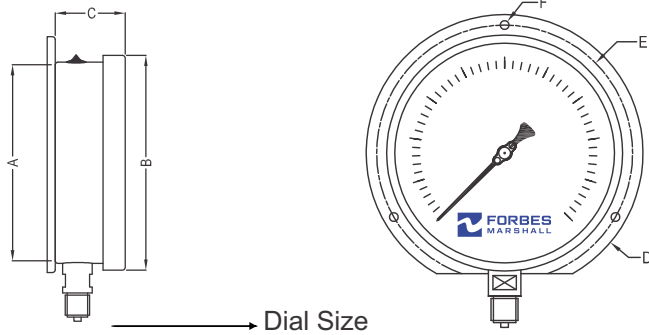
**Mounting - 2**



		4	6	8	10
Parameters	A	Ø3.94	Ø5.90	Ø7.95	Ø9.84
	B	Ø4.33	Ø6.3	Ø8.47	Ø10.4
	C	2.05	2.05	2.05	2.09

**Surface Bottom**

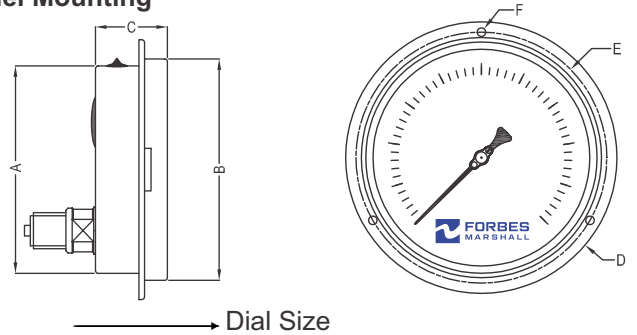
**Mounting - 4**



		4	6	8	10
Parameters	A	Ø3.94	Ø5.90	Ø7.95	Ø9.84
	B	Ø4.33	Ø6.3	Ø8.47	Ø10.4
	C	2.05	2.05	2.05	2.09
	D	Ø5.28	Ø7.32	Ø9.45	Ø11.42
	E	Ø4.65	Ø6.62	Ø8.9	Ø10.87
	F	Ø0.236	Ø0.236	Ø0.275	Ø0.275

**Lower Back Panel Mounting**

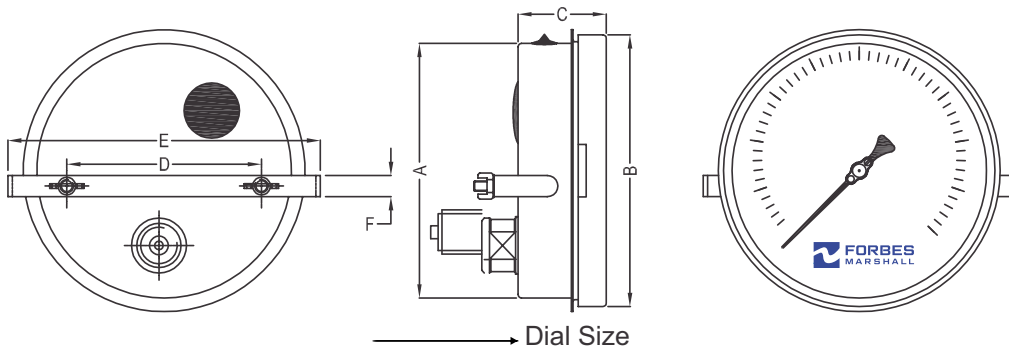
**Mounting - 5**



		4	6	8	10
Parameters	A	Ø3.94	Ø5.90	Ø7.95	Ø9.84
	B	Ø4.33	Ø6.3	Ø8.47	Ø10.4
	C	2.05	2.05	2.05	2.09
	D	Ø5.28	Ø7.32	Ø9.45	Ø11.42
	E	Ø4.65	Ø6.62	Ø8.9	Ø10.87
	F	Ø0.236	Ø0.236	Ø0.275	Ø0.275

**Center Back Flush Mounting**

**Mounting - 6**



		4	6	8	10
Parameters	A	Ø3.94	Ø5.90	Ø7.95	Ø9.84
	B	Ø4.33	Ø6.3	Ø8.47	Ø10.4
	C	2.05	2.05	2.05	2.09
	D	2.86	4.18	5.70	7.28
	E	4.57	6.24	9.49	10.4
	F	0.67	0.63	1.58	1.58

\*All Dimensions are in inches and standard tolerances are applicable.

Code	PSI (Lb/sq.in) (code 6)	Code	PSI (Lb/sq.in) (code - 6)	Code	Dual Scale PSI with KPA (code 3)	Code	Dual Scale PSI with KPA (code 3)
LA	-15 + 0	AQ	0 + 600	HA	-15 + 0 / -100 + 0	HM	0 + 600 / 0 + 4200
AH	0 + 10	LH	0 + 800	HB	0 + 10 / 0 + 70	HN	0 + 800 / 0 + 5600
LD	0 + 15	AY	0 + 1000	HC	0 + 15 / 0 + 100	HO	0 + 1000 / 0 + 7000
LE	0 + 30	LI	0 + 1500	HD	0 + 30 / 0 + 210	HP	0 + 1500 / 0 + 10000
AL	0 + 60	LJ	0 + 2000	HE	0 + 40 / 0 + 280	HQ	0 + 2000 / 0 + 1400
AM	0 + 100	LK	0 + 3000	HF	0 + 60 / 0 + 420	HR	0 + 3000 / 0 + 210
AN	0 + 160	BB	0 + 4000	HG	0 + 100 / 0 + 700	HS	0 + 4000 / 28000
LF	0 + 200	LL	0 + 5000	HH	0 + 160 / 0 + 1100	HT	0 + 5000 / 0 + 35000
LG	0 + 300	BC	0 + 6000	HI	0 + 200 / 0 + 1400	HU	0 + 6000 / 42000
AP	0 + 400	BD	0 + 10000	HK	0 + 300 / 0 + 2100	HV	0 + 10000 / 70000
				HL	0 + 400 / 0 + 2800		

Code	Dual scale inHg+PSI/ mmHg+Kg/Sq.cm (code H)	Dual Scale inHg+PSI/ mmHg+Bar (code I)	Code	Dual scale inHg+PSI/ Kg/Sq.cm (code J)	Dual scale inHg+PSI/ Bar (code K)
DC	-30 + 20/-760 + 1.5	-30 + 20/-760 + 1.5	FA	-30 + 20/-1 + 1.5	-30 + 20/-1 + 1.5
DD	-30 + 42/-760 + 3.0	-30 + 42/-760 + 3.0	FB	-30 + 42/-1 + 3.0	-30 + 42/-1 + 3.0
DE	-30 + 70/-760 + 5.0	-30 + 70/-760 + 5.0	FC	-30 + 70/-1+ 5.0	-30 + 70/-1+ 5.0
DF	-30 + 85/-760 + 6.0	-30 + 85/-760 + 6.0	FD	-30 + 85/-1 + 6.0	-30 + 85/-1 + 6.0
DG	-30 + 100/-760 + 7.0	-30 + 100/-760 + 7.0	FE	-30 + 100/-1 + 7.0	-30 + 100/-1 + 7.0
DH	-30 + 125/-760 + 9.0	-30 + 125/-760 + 9.0	FF	-30 + 125/-1 + 9.0	-30 + 125/-1 + 9.0
DI	-30 + 210/-760 + 15.0	-30 + 210/-760 + 15.0	FG	-30 + 210/-1 + 15.0	-30 + 210/-1 + 15.0
DJ	-30 + 340/-760 + 24.0	-30 + 340/-760 + 24.0	FH	-30 + 340/-1 + 24.0	-30 + 340/-1 + 24.0

Code	Dual scale kg/sq.cm & PSI (code D)	Dual scale Bar & PSI (code E)	Code	Dual scale kg/sq.cm & PSI (code D)	Dual scale Bar & PSI (code E)
BI	-1 + 0/-15 + 0	-1 + 0/-15 + 0	BZ	0 + 2.1/0 + 30	0 + 2.1/0 + 30
BJ	0 + 0.6/0 + 9	0 + 0.6/0 + 9	CA	0 + 4.2/0 + 60	0 + 4.2/0 + 60
BK	0 + 1/0 + 15	0 + 1/0 + 15	CB	0 + 7.0/0 + 100	0 + 7.0/0 + 100
BL	0 + 1.6/0 + 23	0 + 1.6/0 + 23	CC	0 + 14.0/0 + 200	0 + 14.0/0 + 200
BM	0 + 2.5/0 + 36	0 + 2.5/0 + 36	CD	0 + 21.0/0 + 300	0 + 21.0/0 + 300
BN	0 + 4/0 + 60	0 + 4/0 + 57	CE	0 + 28.0/0 + 400	0 + 28.0/0 + 400
BO	0 + 6.0/0 + 86	0 + 6.0/0 + 86	CF	0 + 42.0/0 + 600	0 + 42.0/0 + 600
BP	0 + 10/0 + 143	0 + 10/0 + 143	CG	0 + 70.0/0 + 1000	0 + 70.0/0 + 1000
BQ	0 + 16.0/0 + 230	0 + 16.0/0 + 230	CH	0 + 140/0 + 2000	0 + 140/0 + 2000
BR	0 + 25/0 + 356	0 + 25/0 + 356	CI	0 + 210/0 + 3000	0 + 210/0 + 3000
BS	0 + 40/0 + 600	0 + 40/0 + 570	CJ	0 + 280/0 + 4000	0 + 280/0 + 4000
BT	0 + 60/0 + 854	0 + 60/0 + 854	CK	0 + 420/0 + 6000	0 + 420/0 + 6000
BU	0 + 100/0 + 1500	0 + 100/0 + 1500	CL	0 + 700/0 + 10000	0 + 700/0 + 10000
BV	0 + 160/0 + 2300	0 + 160/0 + 2300			
BW	0 + 250/0 + 3560	0 + 250/0 + 3560			
BX	0 + 400/0 +5670	0 + 400/0 +5670			
BY	0 + 600/0 + 8550	0 + 600/0 + 8550			

## Ordering Information

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<b>Model</b>	SP
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<b>Dial Size</b>	
4" (100 mm)	E
6" (150 mm)	F
8" (200 mm)	G
10" (250 mm)	H

<b>Mountings</b>	
Direct bottom	1
Lower back	2
Surface bottom	4
Lower back panel mounting	5
Lower back flush mounting	6

<b>Connection Size</b>	
1/4"	A
3/8"	B
1/2"	C
M20x1.5P	1

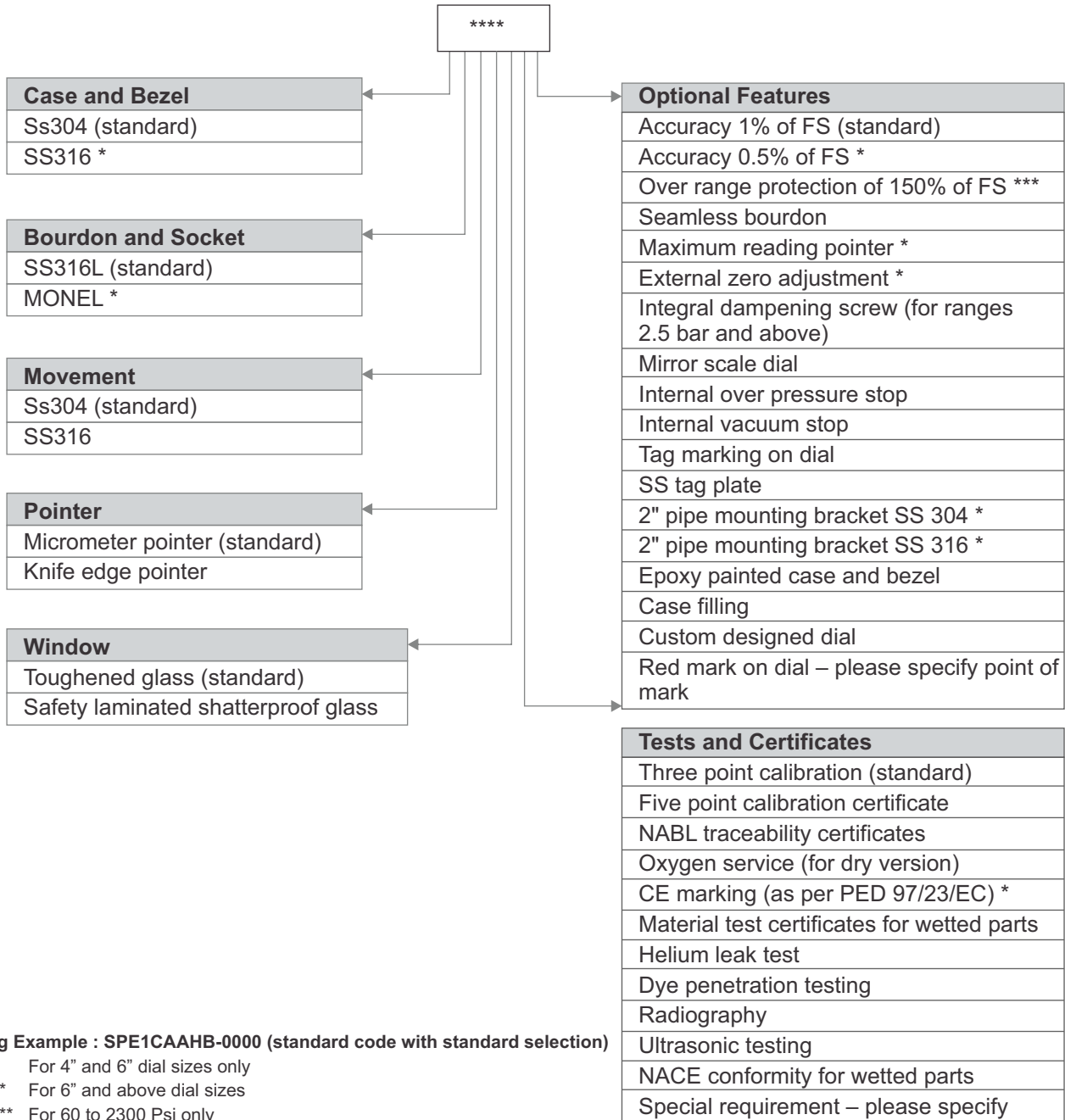
<b>Connection Type</b>	
NPT (M)	A
BSP (M)	B
BSPT (M)	C
Metric Thread (M)	M

<b>Range</b>	**
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<b>Engineering Unit*</b>	
Psi	6
Kg / Sq. cm with Psi	D
Bar with Psi	E
Psi dual scale with Kpa	3
Psi dual scale with Mpa	4

\* We offer other scales like MPA/mmWc or equivalent scales on request.  
 \*\* For Ranges, please refer Pressure Range Tables.

### Configurator generated code.



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