

# Bourdon Sensing Pressure Gauges

**MODEL : BSPG (Dry Case)**

**LFBSPG (Liquid Filled Case)**

## Features

- Compliance to latest EN-837 standard
  - Range : (-)1 to 1600 kg/cm<sup>2</sup>
  - Bourdon in SS316 Ti as standard providing better mechanical properties guaranteeing repeatability and accuracy
  - Accuracy ±1% FSD (Standard), ± 0.5% FSD on request
  - Unit of measurement - kg/cm<sup>2</sup>, bar, psi, kPa, MPa
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- Pressure Gauges intended for Process Industries such as Chemicals, Petro-chemicals, Energy or Gas industry, Food processing, Nuclear etc.
  - These pressure gauges have been designed to satisfy requirements to operate in aggressive environment.



## Specifications

<b>Ref. Standard</b>	EN-837
<b>Dial</b>	100 mm / 150 mm in Aluminium, white background, black markings
<b>Case</b>	SS304 / SS316 with bayonet bezel Phenol with screwed bezel
<b>Protection</b>	IP-68 (IS:13947 part I / IEC:60529)
<b>Window</b>	Safety glass (Shatter proof / Toughened glass)
<b>Bourdon</b>	SS316, SS316 Ti, SS316L, Monel
<b>Socket</b>	22mm Square in SS316, SS316 Ti, SS316L, Monel
<b>Movement</b>	SS304, SS316
<b>Range</b>	As per EN 837 (refer table) minimum span 0.6 kg/cm <sup>2</sup> , maximum 1600 kg/cm <sup>2</sup>
<b>Connection</b>	1/2" NPT (M) as standard* (other optional**)
<b>Accuracy</b>	±1% FSD (0.5% on request)
<b>Over range</b>	As per EN 837
<b>Zero adjustment</b>	Micrometer Pointer
<b>Blow out disc</b>	Provided (on top)
<b>Temperature suitability</b>	Ambient (-)20°C to 60°C, Media 200°C
<b>Temperature Effect</b>	Within ±0.4% FSD/10°C, when temperature changes from reference temperature of 20°C (as per EN-837 standard)
<b>Optional</b>	IBR certification Maxima pointer NACE compliance External Knob for zero setting Built in Snubber Built in Gauge Saver Liquid filled Case (SS case only) Vacuum Protection CE Atex

\* For ranges above 1000 bar, connection shall be 1/2"BSP(M) with Bottom Entry only

\*\* Autoclave connection available on request

## Ranges

Gauge	bar, kg/cm <sup>2</sup>	Least count
Vacuum	(-)1 to 0	0.02
	-760 to 0mmHg	20
Compound	(-)1 to 0.6	0.05
	(-)1 to 1.5	0.05
	(-)1 to 3	0.10
	(-)1 to 5	0.10
	(-)1 to 9	0.20
	(-)1 to 15	0.50
	(-)1 to 24	0.50
Pressure Gauge ('C' shaped Bourdon)	(-)1 to 39	1.0
	0 to 0.6	0.01
	0 to 1	0.02
	0 to 1.6	0.05
	0 to 2.5	0.05
	0 to 4	0.10
	0 to 6	0.10
	0 to 10	0.20
	0 to 16	0.50
	0 to 25	0.50
	0 to 40	1.0
	0 to 60	1.0
	0 to 100	2.0
	0 to 160	5.0
0 to 250	5.0	
Bourdon	0 to 400	10.0
	0 to 600	10.0
	0 to 800	20.0
	0 to 1000	20.0
	0 to 1600	50.0
	0 to 2000	50.0
	0 to 2500	50.0

For range other than above please contact our design dept.

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement. For higher temperature services above 100°C, we recommend to provide suitable cooling arrangement (Syphon, Cooling Tower, Impulse Tubing, Diaphragm Seal etc.)

Under Technical Collaboration with M/s. Gauges Bourdon, France

# Ordering Information

## MODEL



### BASIC MODEL CODE

**BSPG** Dry Case  
**LFBSPG** Liquid Filled Case

### MOUNTING

**V** Bottom Entry, Local Mounting  
**S** Bottom Entry, Surface Mounting  
**Y** Bottom Entry, 2" Pipe Mounting  
**C** Back Entry, Local Mounting  
**P** Back Entry, Flush Panel Mounting (with front Flange having 3 holes)  
**B** Back Entry, Flush Panel Mounting (with Bracket from back side)

### DIAL SIZE

**100** - 100 mm    **150** - 150 mm

### CASE

**S4S** SS 304  
**S6S** SS 316  
**PHN** Phenolic

### BOURDON

**S6S** SS 316  
**S6L** SS 316L  
**S6T** SS 316Ti  
**MN4** Monel

### SOCKET

**S6S** SS 316  
**S6L** SS 316L  
**S6T** SS 316Ti  
**MN4** Monel

### MOVEMENT

**S4S** SS 304  
**S6S** SS 316

### CONNECTION\*

Conn	Code	Size	Code	Type	Code	Male/ Female	Code
Thread	T	1/4"	<b>06</b>	NPS	<b>NS</b>	Male	<b>M</b>
		3/8"	<b>10</b>	NPT	<b>NT</b>	Female	<b>F</b>
	M20	1/2"	<b>15</b>	BSP	<b>BP</b>		
		3/4"	<b>20</b>	BSPT	<b>BT</b>		
		1"	<b>25</b>	JIS-PF	<b>PF</b>		
			<b>M20</b>	JIS-PT	<b>PT</b>		
				Gas	<b>GS</b>		
				R	<b>RR</b>		
		Rp	<b>RP</b>				
		Pitch 1.5	<b>C</b>				

e.g. For 1/2"NPT(M), Code: **T15NTM**  
 For M20x1.5 (F), Code: **TM20CF**

\* For Autoclave connection, please contact our design department

### OPTION

**A05** Accuracy  $\pm 0.5\%$ FSD  
**ATX** Atex  
**BGS** Built In Gauge Saver  
**BOB** Blow out disc at back  
**BSN** Built In Snubber  
**CLB** Colour Band  
**CEM** CE marking  
**DC2** Silicone Oil Filled Case  
**DUS** Dual Scale  
**EXZ** External Knob for Zero Adjustment  
**FLG** Flanged Process Conn  
**GLY** Glycerine filled Case  
**IBR** IBR  
**MXP** Maxima pointer with Acrylic Window  
**NAC** NACE  
**OXY** O2 Cleaning  
**OR5** 150% FSD Over range  
**PHD** Phenolic / Plastic Dial  
**S4D** SS DIAL (SS304)  
**S6D** SS DIAL (SS316)  
**VCP** Vacuum Protection  
**L** Nil  
**CSU** Chemical Seal  
**ACC** Accessory  
**XXX** Other

### UNIT

**KSC** kg/cm2(g)  
**BAR** bar(g)  
**PSI** psi(g)  
**KPA** kPa(g)  
**MPA** MPa(g)  
**MBR** mbar(g)  
**MMW** mm WC(g)  
**CMW** cm WC(g)  
**MWC** m WC(g)  
**INW** inch WC(g)  
**MMH** mm Hg(g)  
**CMH** cm Hg(g)  
**INH** inch Hg(g)  
**XXX** Other (Please specify)

### RANGE

Please select from Table

### FLG - FLANGE

Conn	Code	Size	Code	Rating#	Code	Facing	Code
Flange	<b>F</b>	1/2"	<b>15</b>	150	<b>A</b>	RF	<b>RF</b>
		3/4"	<b>20</b>	300	<b>B</b>	FF	<b>FF</b>
		1"	<b>25</b>	600	<b>C</b>	RTJ	<b>RJ</b>
		1-1/2"	<b>40</b>	900	<b>D</b>	LT	<b>LT</b>
		2"	<b>50</b>	1500	<b>E</b>	LG	<b>LG</b>
		3"	<b>80</b>	2500	<b>F</b>		

**Sample Model Code: BSPG-V-150-S4S-S6S-S6S-S4S-T15NTM-(0-10)-BAR-BOB**

e.g. For 40 NB 300# RF flange, Model Code: **F40BRF**