

# General Purpose Pressure Gauge (GP)

## Introduction

The GP model pressure gauges, with glycerin filling, are particularly suitable for measuring jobs where mechanical vibrations or pressure pulses may arise.

The glycerin filling ensures a vibration display and smooth pointer movement even in extreme load and strong vibration conditions. The lubricating effect of the glycerin also provides protection against mechanical wear. The casing is hermetically sealed by crimping the bezel.

The gauges are designed and manufactured on the basis of a module construction system, associated with increased reliability and extended service life.



## This Gauge is Available in

Nominal sizes: 1½" (40mm), 2" (50mm),  
2½" (63mm)

Ranges: -15 to 0 Psi  
16 Psi to 10,000 Psi

## Features

Compliance to latest EN837-1

Standard range: -15 to 0 Psi and 16 Psi to 10,000 Psi

Overload capacity 130 % of FSD

Protection to IP67\*\*

Accuracy class ±1.6% of FS

Stainless steel casing

Dry or liquid filled version\*

Socket to case - TIG argon welded

## Applications

Chemical and fertilizer industries

Petrochemical industry

Thermal, nuclear and hydroelectric power stations

Pharmaceutical industry

Food processing industry

Water treatment plants

Iron and steel industry

Rubber molding / processing plants

Hydraulics and pneumatics

Sugar industry

Refineries

Hydraulic power packs

Cryogenics

\*\* Enclosure protection of IP67 for 2½"mm dial size only

## Standard Product Specifications

Standards	Description
Reference standard	EN837-1
Mounting	Direct bottom
Connection	1/4" NPT (M)**
Case and bezel	AISI 304 SS (bayonet type bezel)
Bourdon	AISI 316 SS
Socket	AISI 316 SS
Movement	AISI 304 SS
Dial	Aluminum, white background with black marking
Pointer	Aluminum, black color micrometer with zero adjustable
Accuracy	±1.6% of FS (as standard.)
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 value
	From 1500 to 8550 Psi, 115% of maximum scale value
Window	Polycarbonate glass
Blow off disc and filling plug	Neoprene
Gasket	Silicon
Ambient temperature	-13° F to 149° F
Process temperature	Max. 392° F (for dry gauge)
	Max. 149° F (for glycerin filled gauges)

\*For customer requests, please consult Forbes Marshall. dampening liquid for only 2 1/2" dial size gauges

\*\* 1/4" connection size for dial sizes 2 1/2" and 2". 1/8" connection size for 1 1/2" dial sizes

## Standard Pressure Table Chart

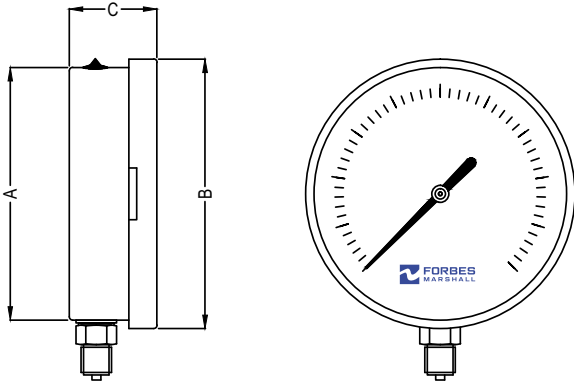
Code	PSI (Lb/sq.in) (Code 6)	Code	PSI (Lb/sq.in) (Code - 6)	Code	Dual Scale PSI with KPA (CodeE 3)	Code	Dual Scale PSI with KPA (Code 3)
LA	-15 + 0	AQ	0 + 600	HA	-15 + 0 / -100 + 0	HM	0 + 600 / 0 + 4200
AH	0 + 10	LH	0 + 800	HB	0 + 10 / 0 + 70	HN	0 + 800 / 0 + 5600
LD	0 + 15	AY	0 + 1000	HC	0 + 15 / 0 + 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 + 14000
AM	0 + 100	LK	0 + 3000	HF	0 + 60 / 0 + 420	HR	0 + 3000 / 0 + 21000
AN	0 + 160	BB	0 + 4000	HG	0 + 100 / 0 + 700	HS	0 + 4000 / 0 + 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 / 0 + 42000
AP	0 + 400	BD	0 + 10000	HK	0 + 300 / 0 + 2100	HV	0 + 10000 / 0 + 70000
				HL	0 + 400 / 0 + 2800		

Code	Dual Scale in Hg+Psi/ mmHg+Kg/Sq.cm (Code H)	Dual Scale in Hg+Psi/ mmHg+Bar (Code I)	Code	Dual Scale in Hg+Psi/ Kg/Sq.cm (Code J)	Dual Scale in Hg+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.
DH	-30 + 125/-760 + 9.0	-30 + 125/-760 + 9.0	FF	-30 + 125/-1 + 9.0	-30 + 125/-1 + 9.
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			

**Direct Bottom**

**Mounting - 1**

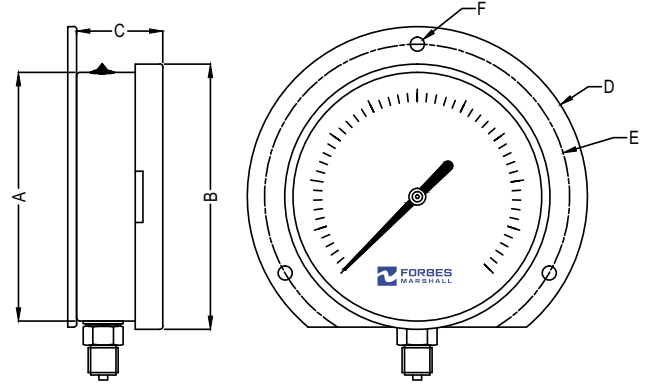


→ Parameters

Dial Size ↓	A	B	C
2.5	Ø2.40	Ø2.76	1.30

**Surface Bottom**

**Mounting - 4**

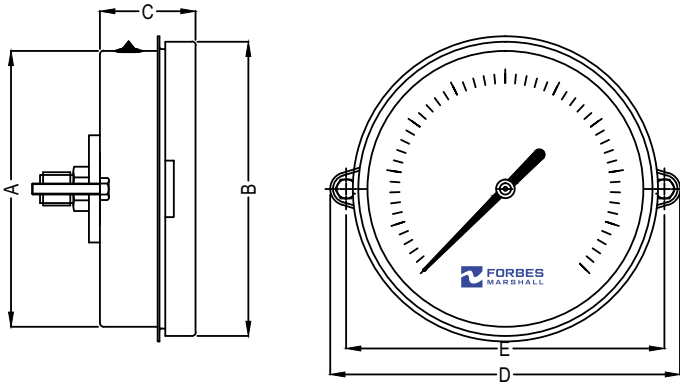


→ Parameters

Dial Size ↓	A	B	C	D	E	F
2.5	Ø2.40	Ø2.76	1.30	Ø3.39	Ø2.95	Ø0.236

**Center Back  
Flush Mounting**

**Mounting - 8**

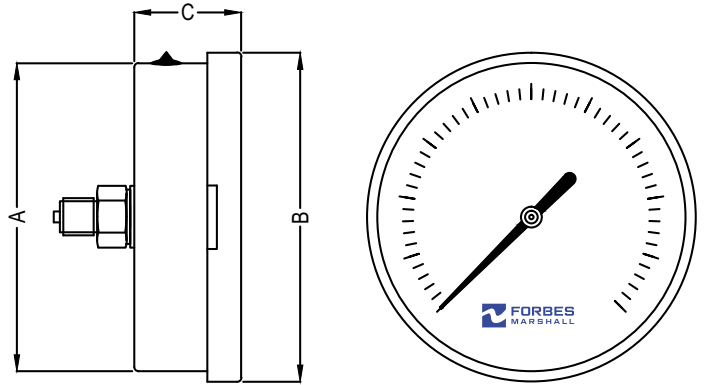


→ Parameters

Dial Size ↓	A	B	C	D	E
2.5	Ø2.40	Ø2.76	1.30	3.50	2.94

**Center Back**

**Mounting - 3**

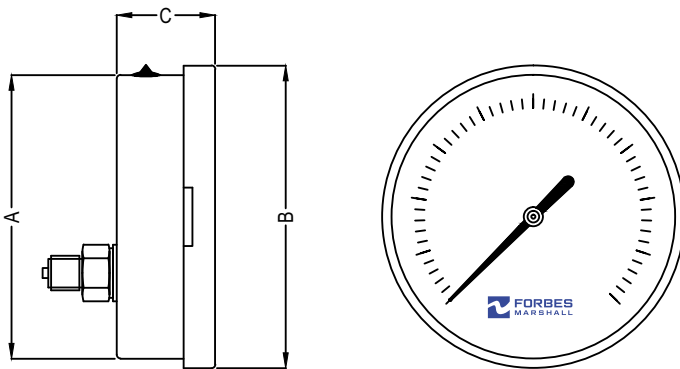


→ Parameters

Dial Size ↓	A	B	C
2.5	Ø2.40	Ø2.76	1.30

**Lower Back**

**Mounting - 2**

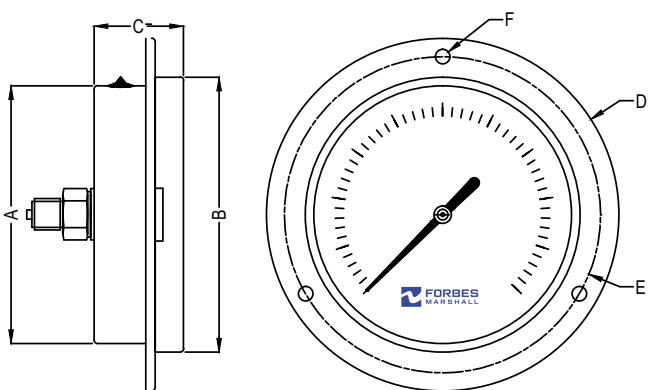


→ Parameters

Dial Size ↓	A	B	C
2.5	Ø2.40	Ø2.76	1.30

**Center Back  
Panel Mounting**

**Mounting - 7**



→ Parameters

Dial Size ↓	A	B	C	D	E	F
2.5	Ø2.40	Ø2.76	1.30	Ø3.39	Ø2.95	Ø0.236

\*All Dimensions are in inches and Standard Tolerances are applicable.

## Ordering Information

## Configuration Generation Code

<b>Model</b>	GP	**	*	*	*	*	**	*
<b>Dial Size</b>								
1½" (40 mm)	B							
2" (50 mm)	C							
2½" (63 mm)	D							
<b>Mountings ****</b>								
Direct bottom	1							
Lower back	2							
Center back	3							
Surface bottom	4							
Center back panel mounting	7							
Center back flush mounting	8							
<b>Connection Size</b>								
1/8"	K							
1/4"	A							
<b>Connection Type</b>								
NPT (M)	A							
BSP (M)	B							
<b>Range</b>	**							
<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							

<b>Case and Bezel</b>	SS 304 (standard)	****
<b>Bourdon and Socket</b>	SS316 (standard)	
	SS316L	
	Brass	
<b>Movement</b>	SS304 (standard)	
	SS316	
	Brass	
<b>Pointer</b>	Micrometer pointer (standard)	
	Knife edge pointer	
<b>Window</b>	Polycarbonate (standard)	

\*We offer other scales like MPA/mmWc or equivalent scales, on request

\*\*For ranges, please refer to pressure range tables

<b>Tests and Certificates</b>
Three point calibration certificate (standard)
Five point calibration certificate
Oxygen service (for dry version and 63 mm dial)
Special requirement – please specify

<b>Optional Features</b>
Accuracy 1.6% of FS (standard)
Accuracy 2% of FS
Over range protection of 150% of FS***
Epoxy painted case and bezel
SS tag plate
Case filling
Custom designed dial

\*\*\*\* Direct bottom and Center back mounting are applicable with 1½" and 2" dial sizes, whereas, Direct bottom, Surface bottom, Center back with panel and flush mounting are to be selected with 2½" dial size gauges.

**Ordering example : GPD1AAHB-0000 (Standard)**

Note: \*\*\*For 60 to 2330 Psi



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