



# McDANIEL

## Process Gauges

### When Durability Matters.

McDaniel designed the model MPB/S to meet and exceed the rigorous and harsh requirements of the process, petrochemical, and power industries.

With safety also a major consideration, McDaniel developed the MPB/S with a **solid front and hinged blow-out back**. The case is turret-style. Featuring a 4 mm thick **laminated safety glass lens** which also resists scratching; and will not craze or discolor.

The **elastomer compensating diaphragm** on the inside of the hinged blow-out back equalizes case pressure. It insures a quality seal against fill fluid leakage and corrosive atmospheric intrusions, while maintaining gauge accuracy.

Designed to withstand 300% full-scale pressure without bourdon tube rupture; and 130% full scale pressure without loss of accuracy!

Watertight, fillable, and trusted McDaniel heavy-duty construction make the MPB/S your first and **"lasting"** choice when it comes to process gauges.



MPB/S

## SPECIFICATIONS

### **Accuracy:**

0.5% full scale to ASME B40.1 standard (Grade 2A)

### **Dial:**

Aluminum alloy, black figures, white background.

### **Case:**

Molded fiberglass reinforced thermoplastic. PBTP (Fire retardant and impact resistant)

Case with integral rear flange.

### **Pointer:**

Aluminum alloy, painted black. Micrometer adjustable.

### **Lens:**

Laminated safety glass (4 mm / .16" thick).

### **Lens Ring:**

Molded fiberglass reinforced thermoplastic. PBTP

### **Movement**

Precision stainless steel. (mechanical over range stop)

### **Bourdon Tube:**

316 Stainless steel (C Form 600 PSI & Below).  
(Spiral 800 PSI & Above).

### **Liquid Fillable:**

Glycerin (GF)

### **Blow-out Back:**

Molded fiberglass reinforced thermoplastic. PBTP  
Hinged for safety (will not become a projectile).

### **Compensating Diaphragm:**

Unique **elastomer** with integral "O" ring seal.  
(Field ready for filling, hermetically sealed, weatherproof. No fill kit required.)

### **Stem and Socket:**

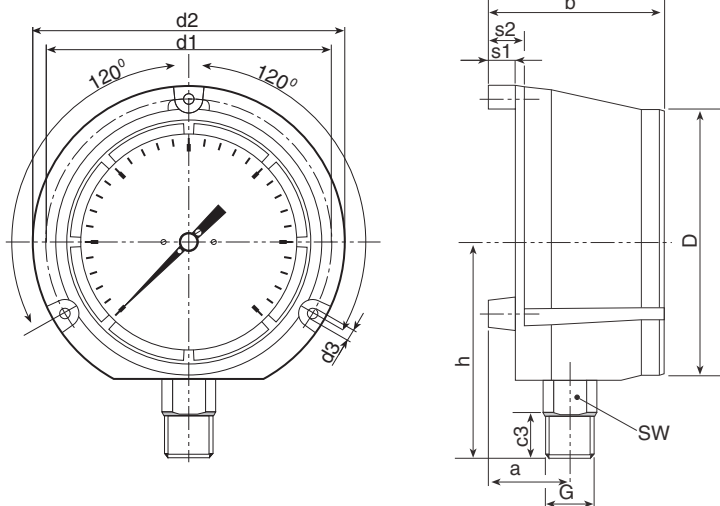
316 Stainless steel (7/8" / 22mm wrench flats)  
Bottom connection (1/4", 1/2" NPT or Metric)  
High quality **"rolled"** threads  
(Helps to prevent galling).

## McDaniel Controls, Inc.

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[www.mcdanielcontrols.com](http://www.mcdanielcontrols.com)

# DIMENSIONAL DATA



Size	a	b	c3	D	d1
130	mm 37.5	80	19	129	137
4 1/2	in. 1.48	3.15	.75	5.08	5.39

d2	d3	G	h	s1	s2	SW
148	6.1	1/2"	102	12.5	17	22
5.83	.24	NPT	4.02	.49	.67	.87

**Weight Dry** - 0.85 kilo., 1.88 lbs.  
**Weight Filled** - 1.25 kilo., 2.76 lbs.

\* See website for dimensional data and downloadable auto cad files:  
[www.mcdanielcontrols.com](http://www.mcdanielcontrols.com)

*McDaniel also makes gauges in other materials; in sizes and ranges to fit a wide variety of applications, and in many special configurations.*

*Ask your representative about McDaniel gauges with brass or Monel® internals, all brass or all stainless steel gauges, test gauges, or other requirements.*

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## HOW TO ORDER

- Select the model number (**MPB/S**)
  - Specify connection code ("**A**" = 1/4" NPT) ("**C**" = 1/2" NPT)
  - Specify range code from list at left.
  - Specify mounting code (**\*Not applicable on model MPB/S, bottom mount only available**)
  - Specify special configurations or options. (Special scales, dual ranges, O<sub>2</sub> cleaned, etc.)
  - Add choice of filling, if appropriate. (**GF** = Glycerin Filled) (**SF** = Silicone Filled)
- Model #**  
 (Example: **MPB/SAE-GF** - "MPB/S" = Model - "**A**" = (1/4" NPT) - "**E**" = (0-160psi) - "**GF**" = (Glycerin Filled)  
**MPB/SC6** - "MPB/S" = Model - "**C**" = (1/2" NPT) - "**6**" = (0-6psi) - (Dry, not Filled)

## OPTIONS:

**Liquid Filled - Monel® Internals - Plastic Lens - SS Tags**  
**Colored Cases, Yellow • Red • Blue**  
**Glow Dial & Reflective Indicators - Panel Flange Kit**

### Warranty

McDaniel warrants our pressure gauges to be free of defects in material and workmanship: Replacement of any defective gauge will be made at no cost to the purchaser. Gauge failures determined to be caused by abuse, over-range and incompatibility with environment or process media will not be considered under this warranty.

### Repair

We will REPAIR and/or REFURBISHED any regular stock McDaniel gauge for a charge to be determined after the gauge is examined by our Quality Control department. Damaged sockets or bourdon tubes cannot be repaired. Special units contact McDaniel for pricing. Prices are F.O.B. Boutte, Louisiana 70039 U.S.A.

Range code	Range psi	Minor Increments
6	0 - 6	.1
10	0 - 10	.1
A	0 - 15	.25
B	0 - 30	.5
C	0 - 60	1
D	0 - 100	1
E	0 - 160	2
F	0 - 200	2
G	0 - 300	5
H	0 - 400	5
I	0 - 600	10
J	0 - 800	10
K	0 - 1000	10
L	0 - 1500	25
M	0 - 2000	20
N	0 - 3000	50
4k	0 - 4000	50
O	0 - 5000	50
6k	0 - 6000	100
P	0 - 10000	100
Q	0 - 15000	250
R	0 - 20000	200
<b>VACUUM</b>	<b>VACUUM</b>	<b>VACUUM</b>
S	VAC 30"Hg - 0	.5
<b>RECEIVER</b>	<b>RECEIVER</b>	<b>RECEIVER</b>
T	REC 3 - 15**	2
<b>COMPOUND</b>	<b>COMPOUND</b>	<b>COMPOUND</b>
U	30"Hg + 15	1-0-5
V	30"Hg + 30	1-0-5
W	30"Hg + 60	2-0-2
X	30"Hg + 100	5-0-2
Y	30"Hg + 160	5-0-5
Z	30"Hg + 300	10-0-5
2k	30"Hg + 200	10-0-5

\*\* Receiver gauge is dual scale.  
 (0 - 100% primary, 0 - 10 square root secondary)

## DISTRIBUTED BY:

It is recommended that users of pressure gauges become familiar with American National Standard ASME B40.1, entitled Gauges, Pressure and Vacuum - Indicating Dial Type - Elastic Element. This specification is available from:

**American Society of Mechanical Engineers**  
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