



# McDANIEL

## Process Gauges

### When Durability Matters.

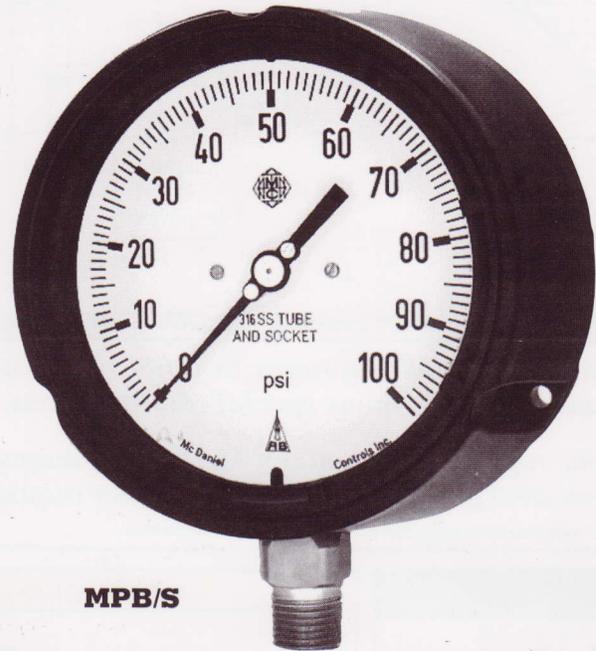
McDaniel designed the model **MPB/S** to meet and exceed the rigorous and harsh requirements of the process, petrochemical, and power industries.

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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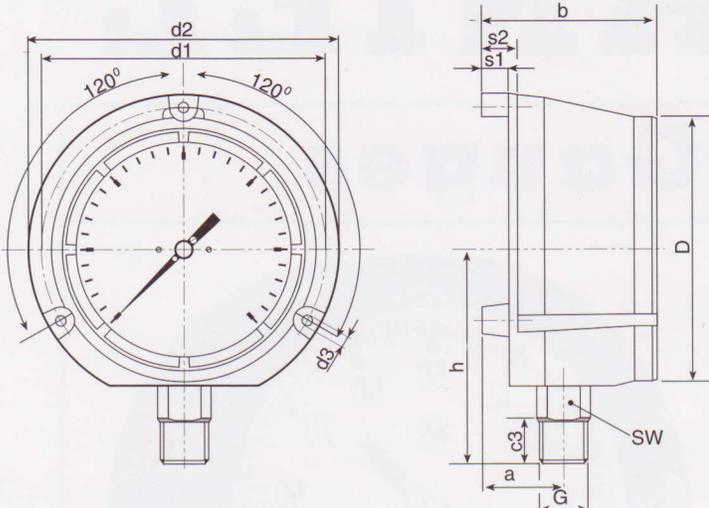
[www.mcdanielcontrols.com](http://www.mcdanielcontrols.com)  
**Houston Hydraulic**

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

713-692-4421

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# 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 AutoCAD 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.*

® Monel is a registered trademark of INCO family of companies.

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)

## HOW TO ORDER

- 1 - Select the model number (MPB/S)
- 2 - Specify connection code ("A" = 1/4" NPT) ("C" = 1/2" NPT)
- 3 - Specify range code from list at left.
- 4 - Specify mounting code (\*Not applicable on model MPB/S, bottom mount only available)
- 5 - Specify special configurations or options. (Special scales, dual ranges, O<sub>2</sub> cleaned, etc.)
- 6 - 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 any McDaniel gauge for a cost of \$15.00 on 4" and larger sizes; \$7.50 on 2 1/2" and smaller. Damaged sockets or bourdon tubes cannot be repaired. Prices are F.O.B. Boutte, Louisiana. U.S.A.

## 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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New York, New York 10016  
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