

# McDANIEL

## **Process Gauges**

#### When Durability Matters.

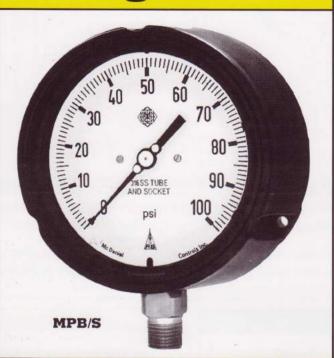
McDaniel designed the model MPB/S to meet and exceed the rigorous and harsh requirements of the process, petrochemical, and power industries.

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.



#### **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.)

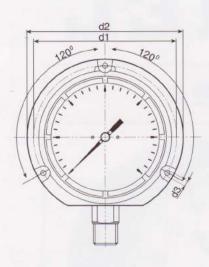
#### Stem and Socket:

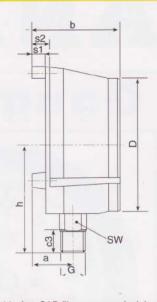
316 Stainless steel (7/8" / 22mm wrench flats)
Bottom connection (1/4", 1/2" NPT or Metric)
High quality "rolled" threads
(Helps to prevent galling).

### **McDaniel Controls, Inc.**

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#### 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.

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
В	0 - 30	.5
C	0 - 60	1
D	0 - 100	1
E	0 - 160	1 2 2
F	0 - 200	2
G	0 - 300	5
Н	0 - 400	5
1	0 - 600	10
J	0 - 800	10
К	0 - 1000	10
L	0 - 1500	25
M	0 - 2000	20
N	0 - 3000	50
4k	0 - 4000	50
0	0 - 5000	50
6k	0 - 6000	100
P	0 - 10000	100
Q	0 - 15000	250
R	0 - 20000	200
VACUUM	VACUUM	VACUUM
S	VAC 30"Hg - 0	.5
RECEIVER	RECEIVER	RECEIVER
T	REC 3 - 15**	2
COMPOUND	COMPOUND	COMPOUND
U	30'Hg + 15	1-05
٧	30'Hg + 30	1-05
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.

MPB/SC6

- 4 Specify mounting code (\*Not applicable on model MPB/S, bottom mount only available)
- 5 Specify special configurations or options. (Special scales, dual ranges, O2 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/S" = Model - "C" = (1/2" NPT) - "6" = (0-6psi)

Liquid Filled - Monel<sup>®</sup> 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

3 Park Avenue New York, New York 10016 Phone: 212-591-7722

- (Dry, not Filled)

<sup>\*</sup> See website for dimensional data and downloadable AutoCAD files: www.mcdanielcontrols.com