

# Accessories



Value Series Gauges

Diaphragm Seals



Pressure Indicators



# MPS 8

## Manual Panel Station

### Description

Marsh Bellofram's Manual Panel Stations offer a precision high flow regulator with a quality gauge in a space saving package for ease of installation and versatility. Most often found in laboratory panels, and control rooms, they are ideally suited for applications that require maintaining and monitoring critical pressures in a system. The addition of a three-way valve allows for operation in either a manual mode where the pressure is set and monitored at the panel, or automatic mode where the pressure is established from a remote location but monitored at the panel.

### Standard Features

- Uses a Marsh Bellofram Type 41 Precision Regulator
- Self Relieving
- High flow capacity
- Direct or reverse acting styles
- Clockwise or counterclockwise adjustment rotation



### MPS 8 Ordering Information

MPS8					
	▲	▲▲▲	▲▲▲▲	▲▲▲▲▲	Regulator
	<b>41</b>				Type 41
	<b>44</b>				Type 41 Left Hand Thread*
					Regulator Range
		<b>315</b>			3-15 PSIG
		<b>630</b>			6-30 PSIG
		<b>153**</b>			15 to 3 PSIG*
		<b>306**</b>			30 to 6 PSIG*
					Gauge Style
				<b>DPG</b>	Dual Plain Gauge Direct Acting
				<b>DRG</b>	Dual Receiver Gauge Direct Acting
				<b>DPR</b>	Dual Plain Gauge Reverse Acting
				<b>DRR</b>	Dual Receiver Gauge Reverse Acting
					Pressure Gauge Range
				<b>015</b>	15 PSI
				<b>030</b>	30 PSI

\* Type 44 is used to decrease pressure with clockwise knob rotation

\*\* Must order either DPR or DRR Reverse Acting Receiver Gauges

### MPS 8

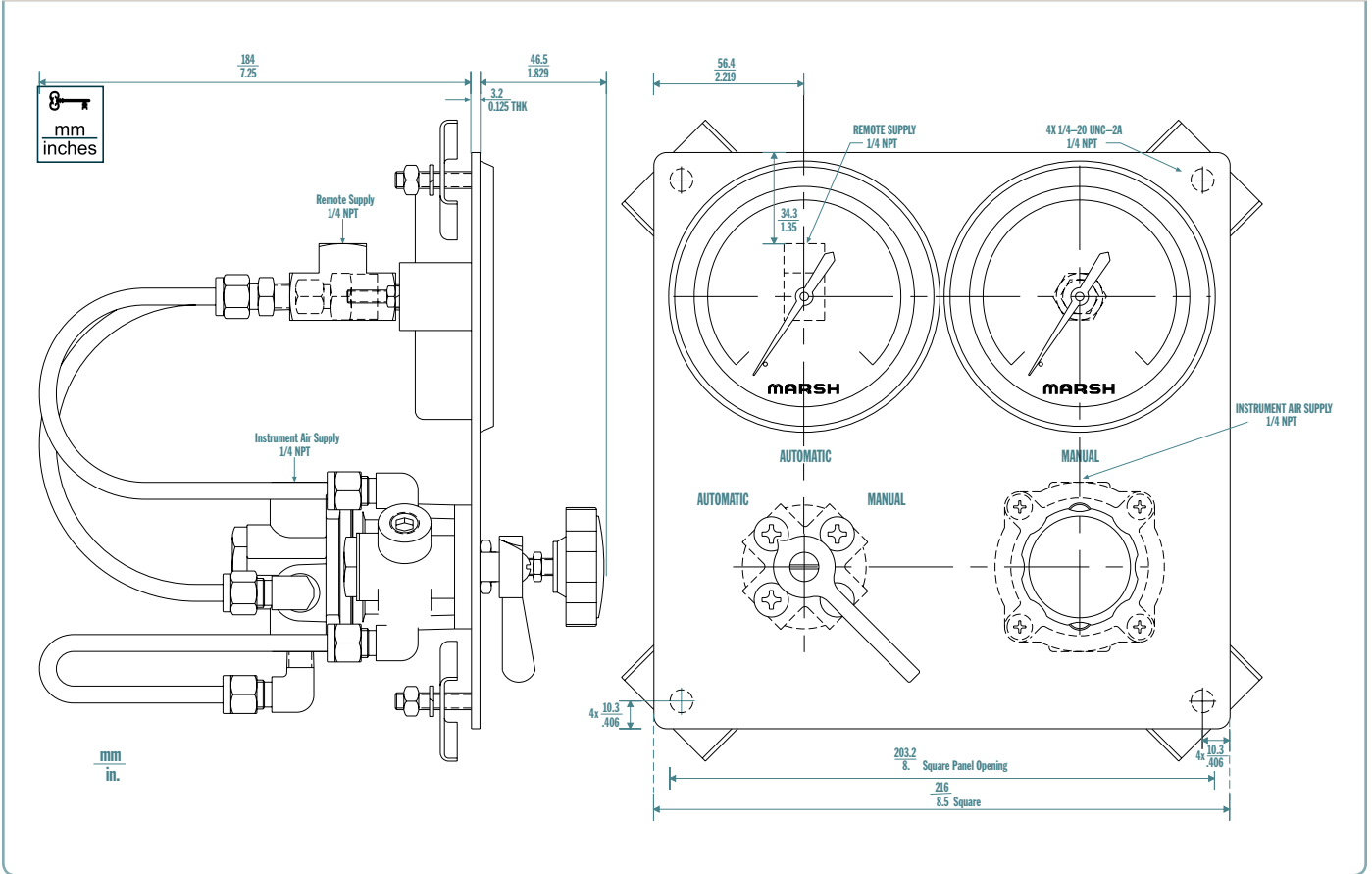
#### Regulator Specifications

Ranges	0-15 PSIG	0-1 BAR
	0-30 PSIG	0-2.1 BAR
Flow Capacity	25 SCFM	700 LPM
Sensitivity	1" w.c.	25 mm
Port size	1/4 NPT	
Supply Pressure (max)	250 PSIG	17.2 BAR
Temperature Range	-20 to 160 °F	-29 to 71 °C

#### Gauge Specifications

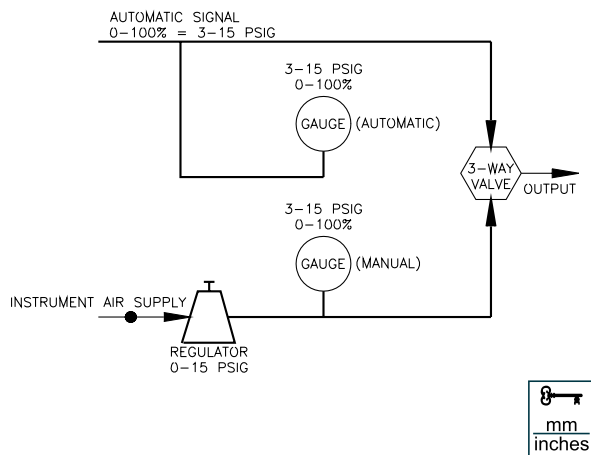
Accuracy	ASME Grade B or $\pm 3/2/3\%$ ( $\pm 2\%$ of range across middle half of scale)
Case	3-1/2" rust resistant drawn steel, acrylic window, brass tube, socket and movement.
Dial Face	Black markings on white background, dual scale psi and kPa, or 0-100% linear

## MPS 8 Dimensional Drawings



## MPS 8 Principles of Operation

Panel Loading Station MPS 8 consists of a T41 regulator and a standard 3-1/2" gauge configured as shown. The three-way valve allows switching the load to a panel-mounted regulator which is manually adjusted or to a controller external to the panel loading station. In either case, the regulated output to the load is monitored.



**Type 41**  
Pressure Regulator Series

See Page 10

# Marshalltown

## Value Series Gauges

### Features

- ASME Grade B Accuracy
- Extra Savings with Quantity Pricing
- 4 Standard Mounting Options: LM, CB, Right and Left

Marshalltown Value Series are the most economical, general purpose gauge in the Marshalltown gauge line. Suited for use with water, oil, air, gas, and other non-corrosive media. Typical applications include FRL's, compressors, pumps, boilers, regulators, dryers as well as commercial and industrial equipment.

### Specifications

#### Accuracy

ASME Grade B =  $\pm 3/2/3\%$   
( $\pm 2\%$  of range across middle half of scale)

#### Case Material

Steel, black painted

#### Tube and Socket

Copper alloy

#### Movement

Brass

#### Ranges

15 to 160 PSI

#### Dial Standard

Dual scale PSI and kPa standard

#### Dial

Black markings on white

#### Pointer

Aluminum, black painted

#### Window

Flat plastic with steel friction ring



## Value Series Gauges

# MARSHALLTOWN

*Value Series*

### Marshalltown Value Series Standard Ranges and Part Numbers

Size	1-1/2"				2"			
	LM	CB	Right	Left	LM	CB	LM	CB
Mounting								
Connection NPT	1/8	1/8	1/8	1/8	1/4	1/4	1/8	1/8
0 to 15 PSI		GG1515C8						
0 to 30 PSI	GG1530L8	GG1530C8	GG1530G8	GG1530F8	GG2030L4	GG2030C4	GG2030L8	GG2030C8
0 to 60 PSI	GG1560L8	GG1560C8	GG1560G8	GG1560F8	GG2060L4	GG2060C4		
0 to 100 PSI	GG15100L8	GG15100C8			GG20100L4	GG20100C4	GG20100L8	GG20100C8
0 to 160 PSI	GG15160L8	GG15160C8			GG20160L4	GG20160C4	GG20160L8	GG20160C8
0 to 200 PSI		GG15200C8				GG20200C4		GG20200C8
0 to 300 PSI						GG20300C9		

# Diaphragm Seals

### Features

Diaphragm seals are isolation devices which separate pressure gauges and other instruments from the process media while allowing the instrument to measure the process pressure. The service life of the instrument is greatly extended, because it is protected from corrosion, clogging, freezing, and pulsation.

### Liquid Fillings

The selection of the fill depends on the temperature expected in any given application. Temperature ratings for available fillings are listed below.

Glycerine	0 to 400 °F
Silicone	-40 to 600 °F



## Diaphragm Seals

Filled and Calibrated  
to your specifications

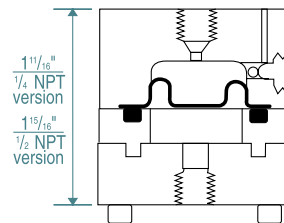
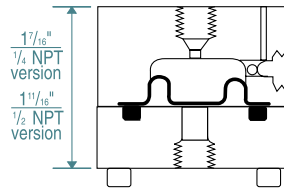
# Model 12000

## Mini Serviceable Rubber Diaphragm Seal

### Description

The Model 12000 Serviceable Mini Diaphragm Seal is designed for gauges and instruments with operating pressure to 2500 psi with stainless and 500 PSI with PVC models. Ideally suited for small applications and corrosive installations. The optional 'Easy Clean Out' feature allows the removal of the process side housing without losing the instrument side fill fluid. Fill/bleed screw port in the instrument side housing, and stainless steel build screws are standard.

Filled and calibrated to Gauges only.



### Model 12000 Ordering Info

12000					
▲▲	▲▲	▲	▲	Upper Housing	
22				1/4	316SS
24				1/2	PVC
52				1/4	PVC
54				1/2	PVC
				Lower Housing	
22				1/4	316SS
24				1/2	PVC
52				1/4	PVC
54				1/2	PVC
				Diaphragm	
3				Nitrile	
4				Fluorocarbon	
5				Neoprene	
				Easy Clean Out	
0				None	
2				Clean Out	
				Fill	
0				No Fill	
G				Glycerine	
S				Silicone	

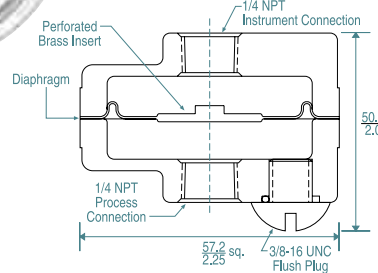
# Model B8498

## Gauge Protector with Rubber Diaphragm Seal

### Description

The Model B8498 Gauge Protector is designed for extremely high volume displacement. Ideally suited for gauges and instruments with operating pressures up to 200 psi and vacuum applications. Available in 1/4 NPT threaded connections and chrome plated zinc construction. A 3/8" flush plug is standard in the process side housing.

Filled and calibrated to gauges only.



### Model B8498 Ordering Info

B8498					
▲▲	▲▲	▲	▲	Assembly	
22				1/4	
				Diaphragm	
3				Nitrile	
4				Fluorocarbon	
5				Neoprene	
				Fill	
0				No Fill	
G				Glycerine	
S				Silicone	

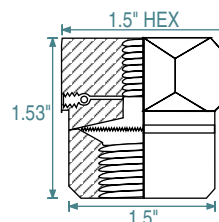
# Model 13000

## Mini / All Welded Diaphragm Seal

### Description

The Model 13000 Mini Welded Seal is designed for 2" to 3-1/2" bourdon tube gauges with a minimum pressure of 100 PSI. The maximum operating pressure is 2000 PSI at 100° F. Available in all 316 SS or Hastelloy C process housing and diaphragm.

Filled and calibrated to gauges only.



### Model 13000 Ordering Info

13000					
▲▲	▲▲	▲	▲	Upper Housing	
22				1/4	316SS
				Lower Housing	
22				1/4	316SS
24				1/2	316SS
42				1/4	Hastelloy C
44				1/2	Hastelloy C
				Diaphragm	
1				316SS	
2				Hastelloy C	
				Fill	
0				No Fill	
G				Glycerine	
S				Silicone	

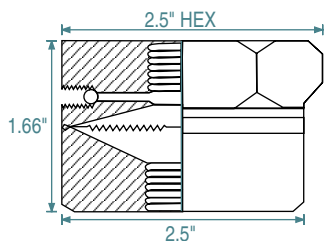
# Model 13040

## All Welded Diaphragm Seal

### Description

The Model 13040 All Welded Seal is designed for 2" to 4-1/2" bourdon tube gauges with pressure ranges from vacuum to 1000 psi. Available in all 316SS or Hastelloy C process housing and diaphragm, with threaded connections. Optional flushing connections also available.

Filled and calibrated to gauges only.



### Model 13040 Ordering Info

13040						
▲	▲	▲	▲	▲	▲	Upper Housing
22						1/4
24						1/2
						Lower Housing
22						1/4
24						1/2
26						3/4
28						1
42						1/4
44						1/2
46						3/4
48						1
						Diaphragm
1						316SS
2						Hastelloy C
						Flush Connection
0						None
2						1/4
						Fill
0						No Fill
G						Glycerine
S						Silicone

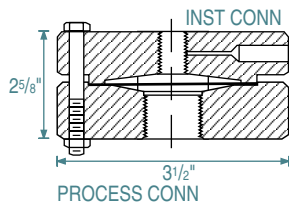
# Model 14000

## Diaphragm Seal

### Description

The Model 14000 Diaphragm Seal is a clamped metal design featuring interlocking construction inside of the bolt circle for perfect alignment. The upper and lower housings clamp the diaphragm in place and allow for field servicing. The 14000 is available in threaded connections for pressures vacuum to 2500 PSI. Fill/bleed port screw in the upper is standard and an optional flush connection is available.

Filled and calibrated to gauges only.



### Model 14000 Ordering Info

14000						
▲	▲	▲	▲	▲	▲	Upper Housing
12						1/4
14						1/2
22						1/4
24						1/2
						Lower Housing
12						1/4
14						1/2
16						3/4
18						1
22						1/4
24						1/2
26						3/4
28						1
						Diaphragm
1						316SS
2						Hastelloy C
3						Tantalum
						Flush Connection
0						None
2						1/4"
						Bolts and Nuts
0						Steel
1						Stainless
						Fill
0						No Fill
G						Glycerine
S						Silicone

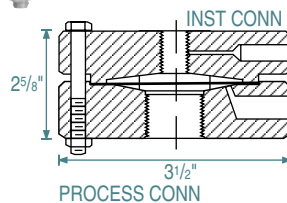
# Model 14040

## Removable Diaphragm Seal

### Description

The Model 14040 Removable Diaphragm Seal is a welded diaphragm-to-upper design allowing the upper housing to be removed with the instrument in place without losing fill. The same interlocking feature as the 14000 is used to assure alignment of the upper to the lower. Available in threaded connections for pressures vacuum to 2500 PSI. Fill/bleed port screw in the upper is standard and an optional flush connection is available.

Filled and calibrated to gauges only



### Model 14040 Ordering Info

14040		Upper Housing	
12		1/4	Steel
14		1/2	
22		1/4	316SS
24		1/2	
		Lower Housing	
12		1/4	Steel
14		1/2	
16		3/4	
18		1	
22		1/4	316SS
24		1/2	
26		3/4	
28		1	
		Diaphragm	
1		316SS	
2		Hastelloy C	
3		Tantalum	
		Flush Connection	
0		None	
2		1/4	
		Bolts and Nuts	
0		Steel	
1		Stainless	
		Fill	
0		No Fill	
G		Glycerine	
S		Silicone	

# Hand Held Digital Pressure Indicator

### Features

- Converts Pressure Input to LCD Digital Readout
- High Accuracy in Lightweight, Portable Package
- State of the Art Semi-Conductor

Marsh Instruments offers the Handheld Digital Pressure Indicator and Calibrator ideal for calibrating DP cells, I/P's and P/I's. The indicator tests installed instruments and transmitters, verifies operation and settings of valves and switches, detects system leaks, and is used for other testing or maintenance applications.

### Specifications

#### Pneumatic Range

Range: -14.7 to 200 psig; with corresponding inches of water column and inches of mercury

#### Wetted Material

Brass fitting, silicone wafer diaphragm, suitable for instrument air (clean and dry) or any clean, non-conductive fluid

#### Pressure Fitting

5/16" quick-connect tube fitting standard, with mating nickel-plated brass locking quick-connector and 8" of 1/4" O.D. plastic tubing.

#### Display

3-1/2 digit LCD, 1/2" high black numerals on light background, with polarity and low battery indicators

### Accuracy

±0.5% of reading ±1 count, must be zeroed at barometric pressure

### Temperature

Calibration range: 50°-90°F.

Operating range: 30°-130°F.

Effect of temperature outside calibration range is ±0.01% per degree F

### Power

Internal: 9-volt transistor battery Ni-Cad chargeable. External: 12-volt adapter will power unit or charge battery in approx. 14 hours. Approximate operation is 8-10 hours per charge

### Case Size

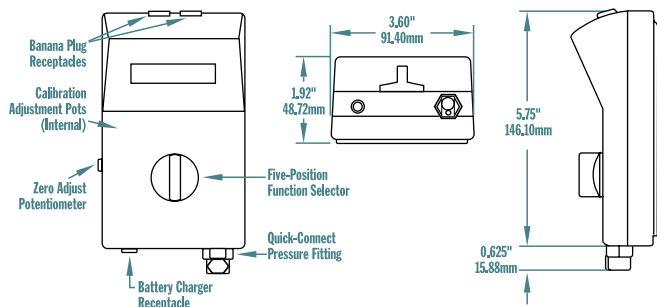
3.60" wide x 5-3/4" long x 1.92" high, ABS plastic

### Includes

Carrying case, battery charger, 8" plastic hose, quick-connect fitting, and technical manual



Hand Held Digital Pressure Indicator



### 4-DP Series Master Test Digital Pressure Indicator

Connection	5/16" quick connect tube fitting
<b>Range</b>	
-14.7 to 50psi	4-DPP-20050-BBC
-14.7 to 60psi	4-DP-20060-B3
-14.7 to 200psi	4-DPP-20200-BBC