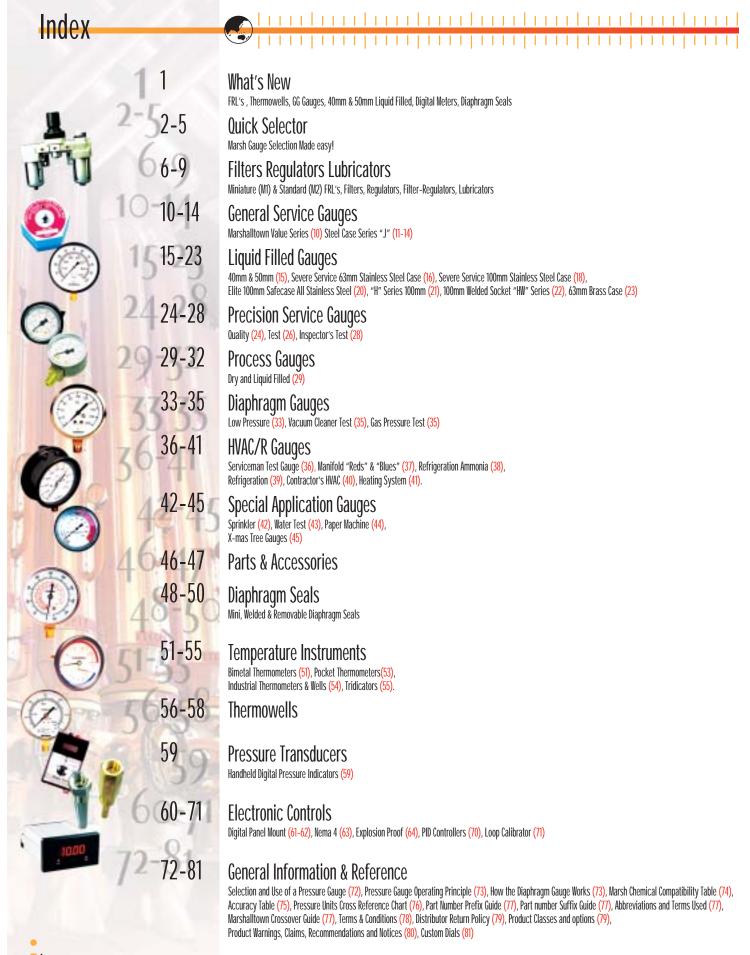


MARSH<sup>®</sup>
INSTRUMENTS

PSI SAFECASE

Product

www.marshbellofram.com









The 1 <sup>st</sup> choice for accuracy, safety & reliability!		30 400 400 400 400 400 400 400 400 400 4		Sandar - Co
GAUGE SERIES	"GG" VALUE SERIES GAUGES	GENERAL SERVICE "J" GAUGE	40/50MM LIQUID FILLED	SEVERE SERVICE 63MM
	pg. 10	pg. 11	pg. 15	pg. 16
ACCURACY ASME	Grade B = $\pm 3/2/3$ ( $\pm 2\%$ of range across middle half of scale)	Grade B = $\pm 3/2/3$ ( $\pm 2\%$ of range across middle half of scale)	±2.5% of range across full scale	Grade B = $\pm 3/2/3$ ( $\pm 2\%$ of range across middle half of scale)
CASE SIZE	1½" & 2" diameter	1½", 2", 2½", 3½", & 4½" diameter	40mm & 50mm diameter	63mm diameter
CASE MATERIAL	Drawn steel, pretreated for rust resistance & black enamel finish	Drawn steel pretreated for rust resistance and black enamel finish	304 Stainless steel	304 Stainless steel
CASE STYLES	Lower Mount, Center Back Mount, Right & Left Mounts	Lower Mount, Center Back, U-Clamp & Front Flange Mounts	Center Back Mount	Rolled ring, hermetically sealed case; Lower Mount, Center Back, U-Clamp & Front Flange Mount
TUBE & SOCKET	Copper Alloy	Copper alloy	Copper alloy tube with nickel plated brass socket	Copper alloy tube & socket or 316 stainless steel tube & socket
MOVEMENT	Brass sector and pinion	Brass sector and pinion	Brass sector and pinion	Brass sector and pinion
CONNECTIONS	%"- ¼" NPT	⅓" & ¼" NPT	40mm: 1/8" NPT 50mm: 1/4" NPT	¼" NPT
RANGES	15 to 160 psi	0-30" Hg vacuum; compound ranges 30" Hg vacuum to 400 psi; and 15 to 5,000 psi	15 to 160 psi	0-30" Hg vacuum; compound ranges 30" Hg vacuum to 400 psi; and 15-10,000 psi
STANDARD DIAL	Dual Scale psi and kPa	Dual scale psi and kPa	Triple scale psi/BAR/kPa	Dual scale psi and kPa
DIAL COLOR	Black markings on white	Black markings on white	Black markings on white	Black markings on white
POINTER	Aluminum, black painted	Aluminum, black painted	Aluminum, black painted	Aluminum, black painted
WINDOW	Flat plastic window with steel friction ring	1½", 2", 2½", 3½" flat twist in clearlok; 4½" flat glass window w/friction ring	Acrylic	Polycarbonate
FILL MEDIUM	N/A	N/A	Glycerine	Dry, glycerin, or silicone
VENT	N/A	N/A	Filler/Pressure relief plug	Rubber plug with snip-off feature



<u>                                     </u>	<u> </u>	<u></u>		Quick Selector
World Class Instrumentation	1100 120 12 12 12 12 12 12 12 12 12 12 12 12 12	10 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m		THE PARTY OF THE P
GAUGE SERIES	severe service 100mm "x" series pg. 18	ELITE 100MM "W" GAUGES	LIQUID FILLED 100MM H SERIES Pg. 21	WELDED SOCKET 100MM HW SERIES Pg. 22
ACCURACY ASME	Grade 1A = ±2/1/2 (±1% of range across middle half of scale)	Grade 1A = ±1% full scale	Grade 1A = ±1% full scale	Grade 1A = ±1% full scale
CASE SIZE	100mm diameter	100mm diameter	100mm diameter	100mm diameter
CASE MATERIAL	304 Stainless steel	304 Stainless steel	304 Stainless steel	304 Stainless steel
CASE STYLES	Rolled ring, hermetically sealed case; Lower mount, Center Back, U-Clamp & Front Flange Mount	Safecase with blow-out back construction; Lower Mount	Lower Mount, Panel Mount with U-Clamp and three hole Front Flange Mount	Lower Mount
TUBE & SOCKET	Copper alloy tube & socket or 316 stainless steel tube & socket	316 Stainless steel	316 Stainless steel	316 Stainless steel tube with socket welded to the case
MOVEMENT	Brass sector and pinion	Stainless steel rotary movement	Stainless steel	Stainless steel
CONNECTIONS	¼" NPT	½" NPT	¼" NPT	½" NPT
RANGES	0-30" Hg vacuum; compound ranges 30" Hg vacuum to 300 psi; 15-10,000 psi	0-30" Hg vacuum 30-10,000 psi	30-10,000 psi	15-20,000 psi
STANDARD DIAL	Dual scale psi and kPa	Dual scale psi and kPa	Dual scale psi and kPa	Dual scale psi and kPa
DIAL COLOR	Black markings on white	Black markings on white	Black markings on white	Black markings on white
POINTER	Aluminum, black painted	Aluminum, black painted	Aluminum, black painted	Aluminum, black painted
WINDOW	Polycarbonate	Safety glass	Acrylic	Safety glass
FILL MEDIUM	Dry, glycerin, or silicone	Dry, glycerin or silicone	Dry, glycerin, or silicone	Dry, glycerin, or silicone
VENT	Rubber plug with snip-off feature	Internal compensating diaphragm	Rubber plug with snip-off feature	Rubber plug with snip-off feature



The world's broadest line of liquid filled gauges!	100 120 100 100 100 100 100 100 100 100	To the second se	180 - 180 -	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
GAUGE SERIES	QUALITY GAUGE "H" SERIES PS- 24	pg. 26	pg. 28	PROCESS GAUGE "P" SERIES PS. 29
ACCURACY ASME	Grade $A = \pm 2/1/2 (\pm 1\% \text{ of }$ range across middle half of scale)	Grade 3A = $\pm 0.25\%$ full scale	Grade 2A = ±0.50% full scale	Grade 2A = ±0.50% full scale
CASE SIZE	3½" & 4½" diameter	4½" diameter	3" diameter	4½" & 6" diameter
CASE MATERIAL	Black painted steel	Black painted steel	Nickel plated brass	Safecase polypropylene (turret style only) & aluminum
CASE STYLES	Lower Mount, Flush case (Front Flange w/U-Clamp), Back Flange with Lower or Lower Back Mounts	Lower Mount, Flush Mount (Front Flange w/U-clamp & hinged ring)	Lower Mount	Turret, Back Flange case, Front Flange Mount, Lower or Lower Back Mount
TUBE & SOCKET	Copper alloy socket and tube up to 1,000 psi. Stainless steel tube, tip & socket above 1,000 psi	Copper alloy tube & socket or 316 stainless steel tube & socket	Copper alloy tube and socket	Copper alloy or 316 stainless steel
MOVEMENT	Stainless steel	Stainless steel	Brass	Stainless steel
CONNECTIONS	¼" or ½" NPT	¼" or ½" NPT	¼" NPT	¼" or ½" NPT
RANGES	0-30" Hg vacuum; compound ranges 30" Hg vacuum to 300 psi; 15-20,000 psi	0 to 30" Hg vacuum; com- pound ranges 30" Hg vacuum to 300 psi; 15-10,000 psi	0 to 30" Hg vacuum; 15 to 1,000 psi	0 to 30" Hg vacuum; compound 30" Hg vacuum to 300 psi; 15 to 20,000 psi
STANDARD DIAL	Single scale psi only	Single scale psi only	Dual scale psi and kPa	Single scale psi
DIAL COLOR	Black markings on white	Black markings on white with mirrored dial to avoid parallax	Black markings on white	Black markings on white
POINTER	3½" Recalibrator 4½" Adjustable micrometer	Knife-edge micrometer- adjustable, Aluminum, black painted	Aluminum, black painted, knife edge	Adjustable micrometer, black painted
WINDOW	Glass	Glass	Beveled glass	Acrylic
FILL MEDIUM	N/A	N/A	N/A	Dry, glycerin, or silicone
VENT	N/A	Blowout disc	N/A	Internal compensating diaphragm



Superior Quality, ideal for Medical applications!		THE STATE OF THE S	THE THE TOTAL PARTY OF THE PART	
GAUGE SERIES	DIAPHRAGM GAUGE "G" SERIES	SPRINKLER GAUGE	PAPER MACHINE GAUGE	BI-METAL THERMOMETERS
	pg. 33	pg. 42	Pg⋅ 44	pg. 51
ACCURACY ASME	Grade A = $\pm 2/1/2$ ( $\pm 1\%$ of range across middle half of scale) and Grade B = $\pm 3/1/3$ ( $\pm 2\%$ of range for ranges below 30" H <sub>2</sub> 0)	Grade B = $\pm 3/2/3$ ( $\pm 2\%$ of range across middle half of scale)	Grade $A = \pm 2/1/2$ ( $\pm 1\%$ of range across middle half of scale)	±1% of span
CASE SIZE	2½", 3½", & 4½" diameter	3½" diameter	3½" diameter	2", 3" & 5" standard stem lengths of 2½" to 24"
CASE MATERIAL	Drawn steel pretreated for rust resistance & black enamel finish	Polished brass	Chrome plated steel case	Stainless steel
CASE STYLES	Lower Mount, Center Back, U- Clamp & Front Flange Mount	Lower Mount	Lower Back Mount; Hinged ring case & moisture-proof with weep hole	Hermetically sealed; Center Back or Adjustable
TUBE & SOCKET	Phosphor bronze diaphragm soft-soldered to brass socket	Copper alloy	Copper Alloy	Stainless steel stems
MOVEMENT	Brass sector and pinion	Copper alloy	Stainless steel	Bi-metal sensing element with external reset feature
CONNECTIONS	%" & ¼" NPT and special connections	¼" NPT	¼" NPT	¼" NPT (2" case only); ½" NPT (3"& 5" cases)
RANGES	Dual scale with kPa; 0 to 200" H <sub>2</sub> 0 vacuum; 0 to 300" H <sub>2</sub> 0, 0 to 10 psi, 0 to 160 oz/in². Triple scale 0-58 oz/in², inches H <sub>2</sub> 0 & kPa	O to 300 psi; or O to 80 psi retard to 250 psi	30 to 1,000 psi	11 dual scale ranges from - 120° F through 1000°F (-50° C through 550° C)
STANDARD DIAL	Dual scale in. H <sub>2</sub> O & kPa, psi & kPa, or Triple scale oz/in² in. H <sub>2</sub> O, & kPa	Dual scale psi and kPa, all dials are marked AIR/WATER	Single Scale psi	Standard dual scale in degrees, Celsius & Fahrenheit
DIAL COLOR	Black markings on white	Black markings on white	Black markings on white	Black markings on white
POINTER	Aluminum, black painted	Aluminum, black painted	Aluminum, black painted w/recalibrator	Aluminum, black painted
WINDOW	2½" & 3½": Twist-on clearlok acrylic window 4½": Flat acrylic window with friction ring	One piece impact plastic screw-on lens	Glass lens, chrome plated brass ring with weather-tight seal	Glass
FILL MEDIUM	N/A	N/A	N/A	N/A
VENT	N/A	N/A	N/A	N/A







M1	&	M2	<b>FEATURES</b>
	$\sim$	1414	LITTOILE

- Modular design for service & interchangeability
- Miniature (M1) & Standard (M2)
- Small package size and light weight construction
- Competitively priced

#### **FILTERS**

- M1 has polycarbonate bowl, M2 has polycarbonate bowl with metal guard
- Stock Elements 5, 25 or 50 micron
- Manual, semi-auto or auto drain available

#### REGULATORS

- Bellofram<sup>®</sup> Rolling Diaphragm for superior regulator performance
- Panel, pipe, or bracket (included) mounting
- Metal body, polycarbonate bonnet and knob
- Non-rising adjustment knob with push-pull lock ring feature

#### FILTER REGULATORS

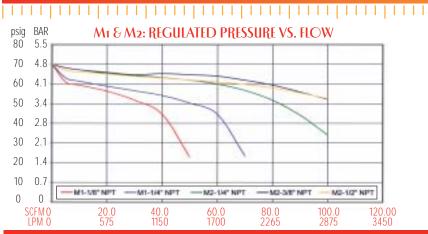
- Aluminum and polycarbonate construction
- Manual, semi-auto or autodrain available
- M1 has polycarbonate bowl;
   M2 has polycarbonate bowl with metal guard
- Non-rising adjustment knob with push-pull lock ring feature
- For panel or bracket mounting, knob is easily removed by unscrewing retaining flange
- Bellofram<sup>®</sup> Rolling Diaphragm for superior regulator performance

## LUBRICATORS

See details on page 7.

		7 4
	TYPE M 1	TYPE M2
FILTERS		
Port Size	%", ¼" NPT	¼", %", ½" NPT
Filtration (micron)	5μ, 25μ, 50μ	5μ, 25μ, 50μ
Maximum Supply Pressure	1.1 MPa 11.4 BAR 165 psi	1.1 MPa 11.4 BAR 165 psi
Temperature Range	41°-140° F / 5°-60° C	41°-140° F / 5°-60° C
Drain	Manual / Semi-Auto	Manual / Semi-Auto / Auto
Bowl Capacity	0.75 inch³	2.75 inch³
Flow (based on 100 psi inlet pressure with 50 micron filter)	55, 85 SCFM	120, 120, 120 SCFM
REGULATORS		
Effect of Supply Pressure variation (25 psig) on Outlet Pressure	< 0.2 psig (13.8 mBAR)	< 0.2 psig (13.8 mBAR)
Exhaust Capacity (5 psig above	< 0.25 SCFM	< 0.25 SCFM
20 psig set point) Max. Supply Pressure	( < 7 LPM) 165 psig (11.4 BAR)	( < 7 LPM) 165 psig (11.4 BAR)
Flow Capacity at 100 psig (6.9 BAR) supply and 70 psig (4.8 BAR) outlet	40, 60 SCFM	90, 120, 120 SCFM
Output Pressure Ranges	0-10 psig (0-0.69 BAR) 0-30 psig (0-2.1 BAR) 0-60 psig (0-4.1 BAR) 0-120 psig (0-8.3 BAR)	0-10 psig (0-0.69 BAR) 0-30 psig (0-2.1 BAR) 0-60 psig (0-4.1 BAR) 0-120 psig (0-8.3 BAR)
Total Air Consumption @ Maximum Output	0.3 SCFH (0.14 LPM)	0.3 SCFH (0.14 LPM)
Port Size	¼" , ¼" NPT	¼", %", ½" NPT
Mounting Options	Pipe, Panel or Bracket	Pipe, Panel or Bracket
FILTER-REGULATORS		-
Port Size	1/4", 1/4" NPT	¼", %", ½" NPT
Filtration (micron)	5μ, 25μ, 50μ	5μ, 25μ, 50μ
Maximum Supply Pressure	1.1 MPa 11.4 BAR 165 psi	1.1 MPa 11.4 BAR 165 psi
Temperature Range	41°-140° F / 5°-60° C	41°-140° F / 5°-60° C
Drain	Manual / Semi-Auto	Manual / Semi-Auto / Auto
Bowl Capacity	0.75 inch³	2.75 inch <sup>3</sup>
Regulator Output Range	0-10, 0-30, 0-60, 0-120 psi	0-10, 0-30, 0-60, 0-120 psi
Flow (based on 100 psi supply/70 psi out)	40, 60 SCFM	90, 120, 120 SCFM
LUBRICATORS		
Port Size	½", ¼" NPT	¼", %", ½" NPT
Lubrication	Mist	Mist
Maximum Supply Pressure	1.1 MPa 11.4 BAR 165 psi	1.1 MPa 11.4 BAR 165 psi
Temperature Range	41°-140° F / 5°-60° C	41°-140° F / 5°-60° C
Bowl Capacity	1.22 inch <sup>3</sup>	5.18 inch <sup>3</sup>
Flow (based on 100 psi inlet pressure)	55, 115 SCFM	125, 125, 125 SCFM







TYPE M1 & M2 OKDERING INF	ORMAIION
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	II

M1

Standard Series	M2
DESCRIPTION	
Filter	F
Regulator	R
Lubricator	L
Filter Regulator	FR
Filter Regulator	FRP
PLUS Lubricator	
Filter, Regulator,	FRL

Miniature Series

Lubricator

PORT SIZE	
½" NPT (M1 only)	1 N
¼" NPT	2N
%" NPT (M2 only)	3N
½" NPT (M2 only)	4N

PRESSURE RANGES		
0-10 psi, Optional	Α	
0-30 psi, Optional	L	
0-60 psi, Optional	M	
0-120 psi, Standard	Н	
Omit for Filters & Lubricators		

FILTERS	
50 Micron Filter,	50
Standard	
25 Micron Filter	25
5 Micron Filter	5
Omit for Regulators & Lubrica	tors

DRAIN Manual Drain, Standard M Semi-Automatic Drain S

Omit for Regulators & Lubricators NOTE: Individual regulators, FRs, filters, and lubricators

come complete with bracket.

Auto Drain (M2 only)

- FRL assemblies come complete with all bracket/connectors.
- For 3/4" & 1" Port sizes, We have a larger M3 series available, please consult the factory.

#### LUBRICATORS

- M1 has polycarbonate bowl; remove bowl for filling.
- M2 has polycarbonate bowl with metal guard; top plug permits filling without removing bowl or shutting off air
- Adjust drip rate by hand, using graduated ring on M1, with screwdriver on M2





Α



#### REPLACEMENT PARTS

DESCRIPTION MODEL #



Miniature Size Connector Kit

M1K



Miniature Size Connector Kit FR+L

M1K2



Standard Size Connector Kit
Standard Size Connector Kit FR+L

M2K2



Miniature Size Filter or Lubricator Bracket
Standard Size Filter or Lubricator Bracket

M1FB M2FB



Miniature Size Regulator or Filter Regulator Bracket

M1RB



Standard Size Regulator or Filter Regulator Bracket

M2RB

#### DESCRIPTION MODEL #



Miniature 5 micron Filter Element	M1FK05
Miniature 25 micron Filter Element	M1FK25
Miniature 50 micron Filter Element	M1FK50



Standard 5 micron Filter Element	M2FK05
Standard 25 micron Filter Element	M2FK25
Standard 50 micron Filter Element	M2FK50



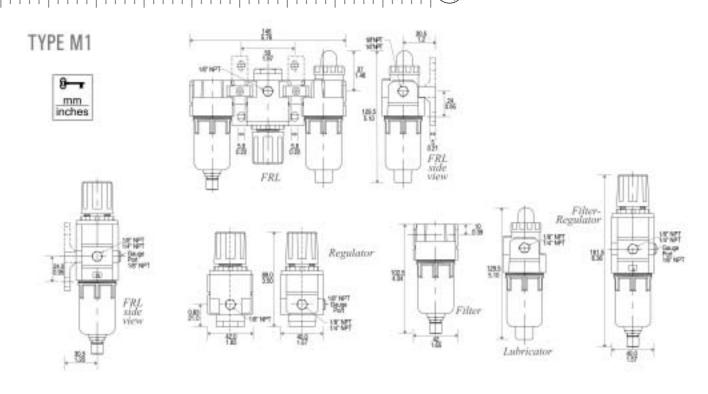
Miniature Bowl	Manual Drain Assembly	M1DM
Miniature Bowl	Semi-Automatic Drain Assembl	v M1DSA

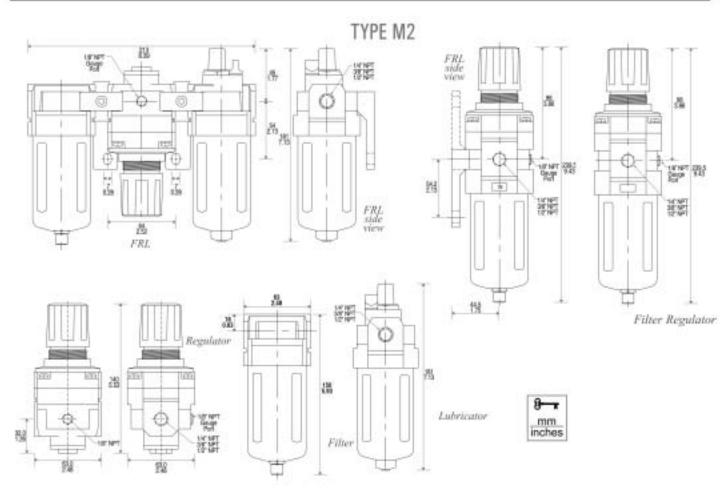


Standard Bowl / Manual Drain Assembly	M2DM
Standard Bowl / Semi-Automatic Drain Assembly	M2DSA
Standard Bowl / Automatic Drain Assembly	M2DA

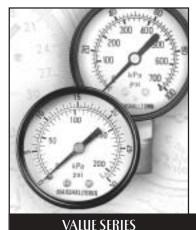
PRESSURE GAUGES - "GG" Series Gauges pg. 10











ASME Grade B Accuracy

• Extra Savings with Quantity Pricing

• 4 Standard Mounting Options: LM, CB, Right & Left

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

#### STANDARD RANGES & PART NUMBERS

## **SPECIFICATIONS**

ACCURACY

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

CASE MATERIAL

Drawn steel, pretreated for rust resistance and black enamel finish

#### CASE STYLE

LM - Lower Mount

CB - Center Back Mount

Right Mount Left Mount

TUBE & SOCKET

Copper alloy tube soft soldered to

brass socket

MOVEMENT Brass sector and pinion

RANGES

15 to 160 psi

DIAL STANDARD

Dual scale psi and kPa

DIAL COLOR

Black markings on white

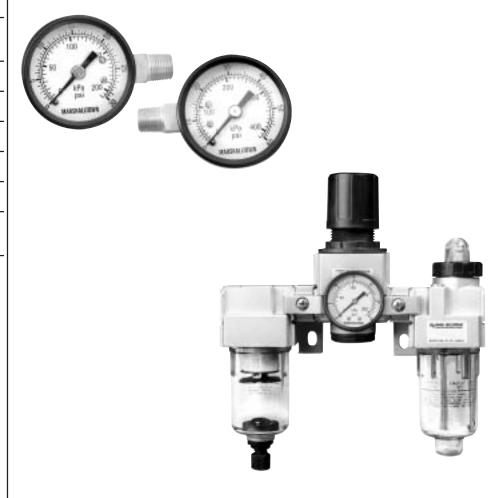
POINTER

Aluminum, Black painted

WINDOW

Flat plastic window with steel friction ring

MARSHALLTOWN VALUE SERIES									
Size	1½"				2"				
Mounting	LM	СВ	Right	Left	LM	СВ	LM	СВ	
Connection	1/8"	1/8"	1/8 <b>"</b>	1/8"	1/4"	1/4"	1/8 <b>"</b>	1/8"	
0 to 15 psi		GG1515C8							
0 to 30 psi	GG1530L8	GG1530C8	GG1530G8	GG1530F8	GG2030L4	GG2030C4	GG2030L8	GG2030C8	
0 to 60 psi				GG1560F8	GG2060L4	GG2060C4			
		GG15100C8				GG20100C4			
0 to 160 psi	GG15160L8	GG15160C8			GG20160L4	GG20160C4	GG20160L8	GG20160C8	
0 to 200 psi		GG15200C8				GG20200C4		GG20200C8	



Dial Sizes: 1½", 2", 2½", 3½" & 4½"
Superb Quality, Economical Price
Pressure Ranges to 5000 psi

Marsh Instruments GENERAL SERVICE STEEL CASE GAUGES are an economical, general purpose gauge for pressure measurement from vacuum/compound through 5,000 psi. Suited for use with water, oil, air, gas, or other non-corrosive media. Typical applications include FRLs, compressors, pumps, boilers, regulators, dryers as well as commercial and industrial equipment.

## 300 400 300 400 500 8 100 600 100 600 100 Fai

#### STANDARD RANGES & PART NUMBERS

TYPE	GENERAL SERVICE (SERIES "J") STEEL CASE GAUGE								
Internals	Copper	Copper Alloy							
Case Material	Steel	Steel							
Dual Scale Standard	psi/kPa								
Size	1½"			2"					
Mounting / Case Style	LM	UC	СВ	LM	LM	CB	CB		
Connection (NPT)	1/8"	1/8"	1/8"	1/8"	1/4"	1/8"	1/4"		
O to 30" Hg VAC	J0405	J0505	J0605	J1105	J1405	J1805	J2005		
30" Hg VAC to 15psi									
30" Hg VAC to 30psi					J1412				
30" Hg VAC to 60psi					J1414				
30" Hg VAC to 100psi									
30" Hg VAC to 150psi	J0418	J0518	J0618	J1118	J1418	J1818	J2018		
30" Hg VAC to 200psi	J0420	J0520	J0620	J1120	J1420	J1820	J2020		
30" Hg VAC to 300psi	J0424	J0524	J0624	J1124	J1424	J1824	J2024		
30" Hg VAC to 400psi				J1126	J1426	J1826	J2026		
O to 15psi	J0440	J0540	J0640	J1140	J1440	J1840	J2040		
O to 30psi	J0442	J0542	J0642	J1142	J1442	J1842	J2042		
O to 60psi	J0446	J0546	J0646	J1146	J1446	J1846	J2046		
0 to 100psi	J0448	J0548	J0648	J1148	J1448	J1848	J2048		
0 to 160psi	J0452	J0552	J0652	J1152	J1452	J1852	J2052		
0 to 200psi	J0454	J0554	J0654	J1154	J1454	J1854	J2054		
0 to 300psi	J0458	J0558	J0658	J1158	J1458	J1858	J2058		
0 to 400psi				J1160	J1460	J1860	J2060		
0 to 600psi					J1464	J1864			
0 to 1,000psi									
0 to 1,500psi									
0 to 2,000psi									
0 to 3,000psi					J1478	J1878	J2078		
0 to 5,000psi					J1482				

NOTE: Items are available on special order. However, minimums and lead times apply. Consult factory.

## SERIES "J" STEEL CASE

### SPECIFICATIONS

ACCURACY

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

CASE SIZES

1½", 2", 2½", 3½", 4½" diameter

CASE MATERIAL

Drawn steel, pretreated for rust resistance and black enamel finish

#### CASE STYLE

LM – Lower Mount

UC - U-Clamp Mount

CB - Center Back Mount

See option tables for Front Flange

TUBE & SOCKET

Copper alloy tube & socket

MOVEMENT

Brass sector and pinion

CONNECTION

½" & ¼" NPT

RANGES

0 to 30" Hg VAC; Compound 30" Hg vac to 400 psi; 15 to 5,000 psi

DIAL STANDARD

Dual scale psi and kPa

DIAL COLOR

Black markings on white

POINTER

Aluminum, black painted

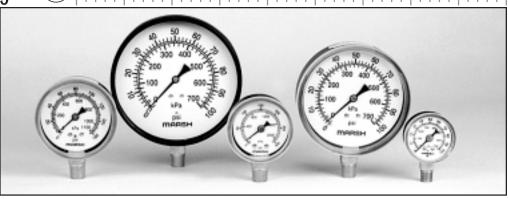
#### WINDOW

 $1\frac{1}{2}$ ", 2",  $2\frac{1}{2}$ ",  $3\frac{1}{2}$ ": flat, twist-in Clearlok  $4\frac{1}{2}$ ": flat glass window with steel friction ring

RESTRICTOR

Standard for ranges 1,000 psi and above





STANDARD RANGES & PART NUMBERS

	STANDA	AND NAM	ulo a r	ANI NUN	IDENO							
ТҮРЕ	GENEF	GENERAL SERVICE (SERIES "J")										
Internals	Copper	Copper Alloy										
Case Material	Steel											
Dual Scale Standard	psi/kPa											
Size	2"		2½"						3½"			4½"
Mounting / Case Style	UC	UC	LM	LM	СВ	СВ	UC	UC	LM	СВ	UC	LM
Connection (NPT)	1/8"	1/4"	1/8"	1/4"	1/8"	1/4"	1/8"	1/4"	1/4"	1/4"	1/4"	1/4"
O to 30" Hg VAC	J2405	J2605	J4005	J4605	J5005	J5405	J6005	J6205	J8005	J8605	J8805	J9005
30" Hg VAC to 15psi												
30" Hg VAC to 30psi				J4612					J8012			
30" Hg VAC to 60psi				J4614					J8014			J9014
30" Hg VAC to 100psi												
30" Hg VAC to 150psi	J2418	J2618	J4018	J4618	J5018	J5418	J6018	J6218	J8018	J8618	J8818	J9018
30" Hg VAC to 200psi	J2420	J2620	J4020	J4620	J5020	J5420	J6020	J6220	J8020	J8620	J8820	J9020
30" Hg VAC to 300psi	J2424	J2624	J4024	J4624	J5024	J5424	J6024	J6224	J8024	J8624	J8824	J9024
30" Hg VAC to 400psi	J2426	J2626	J4026	J4626	J5026	J5426	J6026	J6226	J8026	J8626	J8826	J9026
O to 15psi	J2440	J2640	J4040	J4640		J5440		J6240	J8040	J8640	J8840	J9040
O to 30psi	J2442	J2642	J4042	J4642	J5042	J5442	J6042	J6242	J8042	J8642	J8842	J9042
O to 60psi	J2446	J2646	J4046	J4646	J5046	J5446	J6046	J6246	J8046	J8646	J8846	J9046
0 to 100psi	J2448	J2648	J4048	J4648	J5048	J5448	J6048	J6248	J8048	J8648	J8848	J9048
0 to 160psi	J2452	J2652	J4052	J4652	J5052	J5452	J6052	J6252	J8052	J8652	J8852	J9052
0 to 200psi	J2454	J2654	J4054	J4654	J5054	J5454	J6054	J6254	J8054	J8654	J8854	J9054
0 to 300psi	J2458	J2658	J4058	J4658	J5058	J5458	J6058	J6258	J8058	J8658	J8858	J9058
0 to 400psi	J2460	J2660	J4060	J4660	J5060	J5460	J6060	J6260	J8060	J8660	J8860	J9060
0 to 600psi				J4664					J8064	J8664	J8864	J9064
0 to 1,000psi			J4072	J4672		J5472		J6272		J8672	J8872	J9072
0 to 1,500psi				J4674					J8074			
0 to 2,000psi				J4676		J5476		J6276				J9076
0 to 3,000psi	J2478	J2678		J4678	J5078	J5478	J6078	J6278				
0 to 5,000psi				J4682						J8682	J8882	J9082

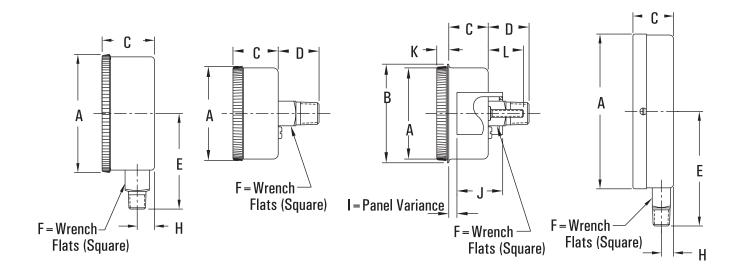
NOTE: Items are available on special order. However, minimums and lead times apply. Consult factory.





GENERAL SERVIC	CE GAUGE OPTIONS					
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS			
Restrictors	Add restrictor	Н	All models — Consult factory for other sizes			
Catalog Dials	psi only	E	See Marsh Price List for minimums			
	bar only	L1	1			
	kg/cm <sup>2</sup> only	L2	1			
	kPa only	L3	1			
	psi & bar	W1	1			
	psi & kg/cm <sup>2</sup>	W2	]			
	psi & MPa	W4	1			
Custom Dials	Custom face	М	See Marsh Price List for minimums			
Window	Instrument glass w/ring (GS)	F1	1½"- 3½" Consult factory for availability			
	Acrylic	F2	4½" Consult factory for availability			
Pointer	Adjustable (slotted) pointer (AD)	Z1	2"- 4½" Consult factory for availability			
	Max. Hand Assembly (MX)	Z2	2"- 4½" Consult factory for availability			
Increased	Accuracy Grade A: (2/1/2%)	В	All models - 10 piece minimum order			
Cases	3 hole front flange (FF)		1½" - 3½" See below for part number			
	[Part Numbers: 1½"x ½" (J07XX), 2"x ½" (J25XX), 2"x ½" (J29XX), 2½" x ½" (J61XX), 2½"x ½" (J63XX), 3½"x ½" (J85XX), 3½"x ½" (J89XX)]. Consult factory for availability.					
	Stainless steel (SS)	J1	Consult factory for availability			
	Brass (BR)	J2	1			
Rings	Friction ring (external), (FC)	A1	1½" to 3½" CB or LM only			
	Polished Stainless Steel					
	Friction ring (external), black (FB)	A2	1½" to 3½" CB or LM only			
	Press ring, black (PB)	А3	2" to 3½" [Panel mount]			
	Press ring, chrome (PC)	A4	2" to 3½" [Panel mount]			
Special Connections			Consult Factory for availability			

Dial Divisions	General Service Series "J"							
מווחופותות ופוחו	3/	Series "J" 3/2/3% of Span						
Ranges		ure rvals	Gra	nor dua- ons				
Vacuum		5	1					
COMPOUND								
30" Hg VAC to 15 psi	10	5	2	1				
30" Hg VAC to 30 psi	10	10	2	1				
30" Hg VAC to 60 psi	10	10	2	2				
30" Hg VAC to 150 psi	30	30	5	5				
30" Hg VAC to 300 psi	30	50	-	10				
PRESSURE								
0 to 15 psi	3		0.2					
0 to 30 psi		•	1					
O to 60 psi	1	-	1					
0 to 100 psi	1	•	2					
0 to 160 psi	2	-	2					
0 to 200 psi	5	-	4					
0 to 300 psi	5	-	Ę					
0 to 400 psi	5	-						
0 to 600 psi	5	U	10					
HIGH PRESSURE								
0 to 1,000 psi	20	-	2	_				
0 to 1,500 psi	30		2	-				
0 to 2,000 psi	40		4	-				
0 to 3,000 psi		500 1,000		00				
0 to 4,000 psi			100					
0 to 5,000 psi	1,0	UU	100					



SERIES"J"	STEEL CAS	SE DIMEN	SIONS										
Part#	Dial Size	Mount	Α	В	С	D	E	F	Н	I	J	К	L
J04xx	1½	1/4" LM	1.67		.90		1.50	7/16"	.26				
J05xx	1½	%" UC	1.60	1.75	.71	.72		<sup>7</sup> / <sub>16</sub> "		.0637	.81	.19	.63
J06xx	1½	%" CB	1.67		.90	.72		7/16"					
J11xx	2.0	1/4" LM	2.20		1.22		1.82	9/16 <b>"</b>	.40				
J14xx	2.0	1/4" LM	2.20		1.22		1.82	9/16 <b>"</b>	.40				
J18xx	2.0	%" CB	2.20		1.22	.82		9/16 <b>"</b>					
J20xx	2.0	1/4" CB	2.20		1.22	.82		9/16 <b>"</b>					
J24xx	2.0	%" UC	2.06	2.25	.94	.88		%16 <b>"</b>		0-0.43	1.22	.20	.92
J26xx	2.0	¼" UC	2.06	2.25	.94	.88		%16 <b>"</b>		0-0.43	1.22	.20	.92
J40xx	2½	1/4" LM	2.73		1.22		2.10	%16 <b>"</b>	.40				
J46xx	2½	1/4" LM	2.73		1.22		2.10	%16 <b>"</b>	.40				
J50xx	2½	%" CB	2.73		1.23	.82		%16 <b>"</b>					
J54xx	2½	1/4" CB	2.73		1.23	.82		%16 <b>"</b>					
J60xx	2½	%" UC	2.58	2.81	.94	.88		%16 <b>"</b>		0-0.43	1.22	.20	.92
J62xx	2½	¼" UC	2.58	2.81	.94	.88		%16 <b>"</b>		0-0.43	1.22	.20	.92
J80xx	3½	1/4" LM	3.71		1.22		2.77	%16 <b>"</b>	.40				
J86xx	3½	1/4" CB	3.71		1.15	.80		%16 <b>"</b>					
J88xx	3½	¼" UC	3.65	3.98	.91	.87		%16 <b>"</b>		0-0.49	1.10	.24	.92
J90xx	4½	1/4" LM	4.53		1.22		3.16	9/16 <b>"</b>	.40				



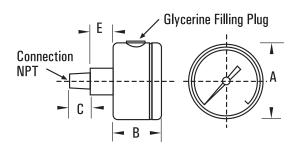
- 40mm & 50mm Liquid Fills
- Copper Alloy Internals
- Glycerine Filled
- Center Back Mount Only

Marsh Instruments Liquid-Filled Gauges are designed to perform in rugged and harsh environmental conditions - especially where pulsation and vibration is a problem. Liquid Filled Gauges offer a significant cushioning and dampening effect, reducing pointer flutter and internal gauge damage. Liquid Filled Gauges feature a ventable top fill plug and can be mounted on a horizontal or vertical plain. The hermetically sealed construction reduces the chance of leaks and makes field filling an easy option.

#### STANDARD RANGES & PART NUMBERS

TYPE	SEVERE SERVICE GAUGES	
Size	40mm	50mm
Case Material	304 Stainless Steel	· ·
Internals	Copper Alloy	
Mounting / Case Style	СВ	
Connection (NPT)	⅓" NPT	1/4" NPT
Triple Scale Standard	psi/BAR/kPa	
O to 15psi	M4040P	M5040P
O to 30psi	M4042P	M5042P
O to 60psi	M4046P	M5046P
0 to 100psi	M4048P	M5048P
0 to 160psi	M4052P	M5052P

40mm and 50mm GAUGE OPTIONS								
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS					
Custom Dials	Custom face	M	See Marsh Price List for minimums					
Other Ranges			Consult factory for availability					
Fill Medium	Silicone (SL)	ĺ	Consult factory					



A-Size	В	C	E	
40mm Dia	27.00mm	11.5mm	13.00mm	
	1.06"	0.45"	0.51"	
50mm Dia	30.00mm	11.5mm	10.00mm	
	1.18"	0.45"	0.39"	



49/3911111
SPECIFICATIONS
ACCURACY
±2.5% of range across full scale
CASE SIZES
40 or 50 mm diameter
CASE MATERIAL
304 Stainless Steel
CASE STYLE
CB – Center Back mount
TUBE & SOCKET
Copper Alloy tube
with nickel plated brass socket
MOVEMENT
Brass
CONNECTION
<u>%" NPT &amp; ¼" NPT</u>
RANGES
15 to 160 psi
DIAL STANDARD
Triple scale psi/BAR/kPa
DIAL COLOR
Black markings on white
POINTER
Aluminum, black painted
WINDOW
Acrylic
FILL MEDIUM
Glycerin
RESTRICTOR
Standard, all ranges
VENT PLUG
Filler/pressure relief plug
TEMPERATURE LIMITS
<u>0 – 140° F (filled)</u>





- Field Fillable
- Ranges to 10,000 psi

Marsh Instruments Liquid-Filled Gauges are designed to perform in rugged applications and harsh environmental conditions - especially where pulsation and vibration are a problem. Liquid Filled Gauges offer a significant cushioning and dampening effect, reducing pointer flutter and internal gauge damage; also lubricating the internals, and reducing corrosion.

All stainless steel Liquid Filled Gauges feature a ventable top fill plug for pressure relief and ease of venting after installation. Pressure ranges are available through 10,000 psi, with high pressure ranges offering a Helical Bourdon Tube for longer gauge life and increased durability. The hermetically sealed construction reduces the chance of leaks, and makes field filling an easy option.

#### STANDARD RANGES & PART NUMBERS

0.0	
	2 mm mm 2
	8 1 mm 8 mm 8
1	3 7
	маявн
	11/64
700	- CTAINITES STITL CAUCE

### 6zmm STAINLESS STEEL GAUGE

SF	PE	CI	FI	C/	١T	101	NS	

ACCURACY

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

CASE SIZES

63mm diameter (2.47")

CASE MATERIAL 304 Stainless Steel

CASE STYLE

Rolled ring, hermetically sealed case

LM - Lower Mount

CB - Center Back Mount

UC - U-Clamp Mount

**TUBE & SOCKET** 

Copper alloy or 316 stainless steel

MOVEMENT

Brass sector and pinion

CONNECTION

1/4"

RANGES

0 to 30" Hg VAC; Compound 30" Hg to 400 psi; 15 to 10,000 psi

DIAL STANDARD

Dual scale psi and kPa standard

DIAL COLOR

Black markings on white

**POINTER** 

Aluminum, Black painted

WINDOW

Polycarbonate

FILL MEDIUM

Glycerin standard

RESTRICTOR

Standard for all ranges

VENT PLUG

Removable tip for venting

TYPE		SERVICE (	GAUGES					
Size	63mm							
Case Material	Stainless Steel							
Internals	Copper All	оу		Stainless S	Steel			
Mounting / Case Style	LM	UC	СВ	LM	UC	CB		
Connection (NPT)	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"		
Dual Scale Standard	psi/kPa	•		•	•	·		
O to 30" Hg VAC	J7605P	J7205P	J6405P	J7805P	J7405P	J6605P		
30" Hg VAC to 15psi								
30" Hg VAC to 30psi	J7612P							
30" Hg VAC to 60psi	J7614P							
30"Hg VAC to 100psi								
30" Hg VAC to 150psi	J7618P	J7218P	J6418P	J7818P	J7418P	J6618P		
30" Hg VAC to 200psi	J7620P	J7220P	J6420P	J7820P	J7420P	J6620P		
30" Hg VAC to 300psi	J7624P	J7224P	J6424P	J7824P	J7424P	J6624P		
30" Hg VAC to 400psi	J7626P	J7226P	J6426P	J7826P	J7426P	J6626P		
O to 15psi	J7640P	J7240P	J6440P	J7840P	J7440P	J6640P		
O to 30psi	J7642P	J7242P	J6442P	J7842P	J7442P	J6642P		
O to 60psi	J7646P	J7246P	J6446P	J7846P	J7446P	J6646P		
0 to 100psi	J7648P	J7248P	J6448P	J7848P	J7448P	J6648P		
0 to 160psi	J7652P	J7252P	J6452P	J7852P	J7452P	J6652P		
0 to 200psi	J7654P	J7254P	J6454P	J7854P	J7454P	J6654P		
0 to 300psi	J7658P	J7258P	J6458P	J7858P	J7458P	J6658P		
0 to 400psi	J7660P	J7260P	J6460P	J7860P	J7460P	J6660P		
0 to 600psi	J7664P	J7264P	J6464P	J7864P	J7464P	J6664P		
0 to 1,000psi	J7672P	J7272P	J6472P	J7872P	J7472P	J6672P		
0 to 1,500psi	J7674P	J7274P	J6474P	J7874P	J7474P	J6674P		
0 to 2,000psi	J7676P	J7276P	J6476P	J7876P	J7476P	J6676P		
0 to 3,000psi	J7678P	J7278P	J6478P	J7878P	J7478P	J6678P		
0 to 5,000psi	J7682P	J7282P	J6482P	J7882P	J7482P	J6682P		
0 to 6,000psi	J7684P	J7284P	J6484P	J7884P	J7484P	J6684P		
0 to 10,000psi				J7890P	J7490P	J6690P		
NOTE D					_			

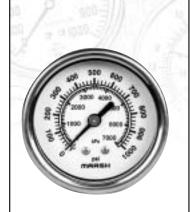
NOTE: Items are available on special order. However, minimums and lead times apply. Consult factory.

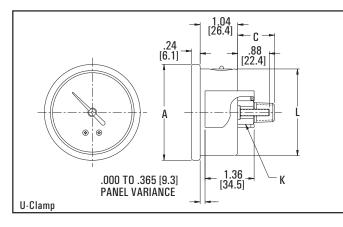


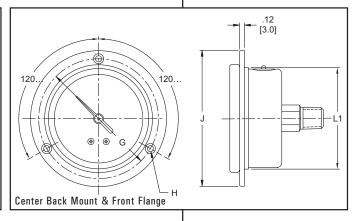
63mm SEVERE SE	RVICE GAUGE OPTIONS		
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS
Fill Medium	Dry (no fill)	Delete suffix P	All models
	Silicone option (SL)	1	All models
Front Flange	Adaptor ring (3 hole)	R1	Center Back & U-Clamp only (factory Installed)
	Adaptor ring (no holes)	R2	U-Clamp only (factory Installed)
Bayonet Case & Ring	w/Safety Glass	J	Center Back or Lower Mount (consult factory)
Catalog Dials	psi only	E	See Marsh Price List for minimum
	bar only	L1	
	kg/cm <sup>2</sup>	L2	1
	kPa only	L3	1
	psi & bar	W1	1
	psi & kg/cm <sup>2</sup>	W2	
	psi & MPa	W4	
Custom Dials	Logo or Custom face	М	Consult factory for colors and minimums
Restrictor	Special restrictor	Н	All models - See Marsh Price List for minimum
	Restrictor removed	H1	1
Increased Accuracy	Grade A (2/1/2%)	В	All models - See Marsh Price List for minimum
Special Connections			Consult Factory



### FRONT FLANGE MOUNT







#### Dimension

Table

1 "	Conn- ection	Ι Δ	С	G	Н	K	J	L	L1
63mm	1/4"			2.95" 75mm					2.5" 64mm





- Brass or Stainless Steel Internals
- Ranges to 10,000 psi
- Hermetically Sealed Field Fillable

Marsh Instruments Liquid Filled Gauges are designed to perform in rugged applications and harsh environmental conditions - especially where pulsation and vibration are a problem. Liquid Filled Gauges offer a significant cushioning and dampening effect, reducing pointer flutter and internal gauge damage; also lubricating the internals, and reducing corrosion.

All stainless steel Liquid Filled Gauges feature a vent top fill plug for pressure relief and ease of venting after installation. The hermetically sealed construction reduces the chance of leaks, and makes field filling an easy option.

#### STANDARD RANGES & PART NUMBERS

THE STATE OF THE S
100mm STAINLESS STEEL GAUGE
SPECIFICATIONS ACCURACY ASME Grade A - ±2/1/2% (±1%
of range across middle half of scale) CASE SIZES 100mm diameter (3.89")
CASE MATERIAL 304 Stainless Steel
CASE STYLE Rolled ring, hermetically sealed case LM – Lower Mount CB – Center Back Mount UC– U-Clamp Mount
TUBE & SOCKET
Copper alloy or stainless steel  MOVEMENT Brass sector and pinion  CONNECTION ¼" NPT
RANGES O to 30" Hg VAC Compound 30" Hg VAC to 300 psi 15 to 10,000 psi
DIAL STANDARD Dual scale psi & kPa
DIAL COLOR Black markings on white
POINTER Aluminum, black painted
WINDOW Polycarbonate
FILL MEDIUM Glycerin standard

TYPE	SEVERE S	SERVICE (	GAUGES				
Internals	Copper Allo	у		Stainless Steel			
Case Material	Stainless S	teel		Stainless S	teel		
Dual Scale Standard	psi/kPa			psi/kPa			
Size	100mm			100mm			
Mounting / Case Style	LM	СВ	UC	LM	СВ	UC	
Connections (NPT)	1/4"	•	•	1/4"	-	•	
O to 30" Hg VAC	X32965P			X32967P			
30" Hg VAC to 30psi	X32501P						
30" Hg VAC to 60psi	X32502P						
30" Hg VAC to 100psi							
30" Hg VAC to 150psi	X32887P	X32901P	X32899P	X32929P	X32941P	X32935P	
30" Hg VAC to 200psi	X32888P	X32902P	X32895P	X32930P	X32942P	X32936P	
30" Hg VAC to 300psi	X32889P	X32903P	X32896P	X32931P	X32943P	X32937P	
O to 15psi	X32504P	X32546P	X32525P	X32630P	X32678P	X32654P	
O to 30psi	X32505P	X32547P	X32526P	X32631P	X32679P	X32655P	
O to 60psi	X32506P	X32548P	X32527P	X32632P	X32680P	X32656P	
0 to 100psi	X32507P	X32549P	X32528P	X32633P	X32681P	X32657P	
0 to 160psi	X32508P	X32550P	X32529P	X32634P	X32682P	X32658P	
0 to 200psi	X32509P	X32551P	X32530P	X32635P	X32683P	X32659P	
0 to 300psi	X32510P	X32552P	X32531P	X32636P	X32684P	X32660P	
0 to 400psi	X32511P	X32553P	X32532P	X32637P	X32685P	X32661P	
0 to 600psi	X32512P	X32554P	X32533P	X32638P	X32686P	X32662P	
0 to 1,000psi	X32513P	X32555P	X32534P	X32639P	X32687P	X32663P	
0 to 1,500psi	X32514P	X32556P	X32535P				
0 to 2,000psi	X32515P	X32557P	X32536P	X32641P	X32689P	X32665P	
0 to 3,000psi	X32516P	X32558P	X32537P	X32642P	X32690P	X32666P	
0 to 5,000psi	X32518P	X32560P	X32539P	X32644P	X32692P	X32668P	
0 to 6,000psi	X32519P	X32561P	X32540P	X32645P	X32693P	X32669P	
0 to 10,000psi				X32647P	X32695P	X32671P	

NOTE: Items are available on special order. However, minimums and lead times apply. Consult factory.

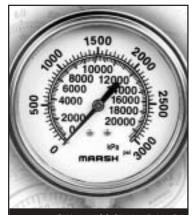
RESTRICTOR

Standard for all ranges

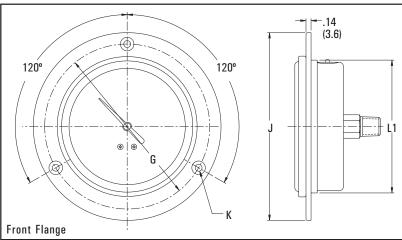
Removable tip for venting

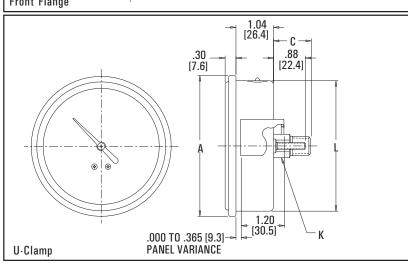


100mm SEVERE SI	ERVICE OPTIONS		
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS
Fill Medium	Dry (no fill)	Delete suffix P	All models
	Silicone option (SL)	I	All models
Front Flange	Adaptor Ring (3 hole)	R	U-Clamp & Center Back only (factory installed)
Catalog Dials	psi only	E	See Marsh Price List for minimum
	bar only	L1	1
	kg/cm <sup>2</sup>	L2	]
	kPa only	L3	1
	psi & bar	W1	1
	psi & kg/cm <sup>2</sup>	W2	]
	psi & MPa	W4	1
Custom Dials	Logo or custom face	M	Consult factory for colors and minimums.
Restrictor	Special restrictor	Н	All models - See Marsh Price List for minimum
	Restrictor removed	H1	All models - See Marsh Price List for minimum
Increased Accuracy	Grade 1A ±1% full scale	В	All models - See Marsh Price List for minimum
Special Connections			Consult factory for Availability

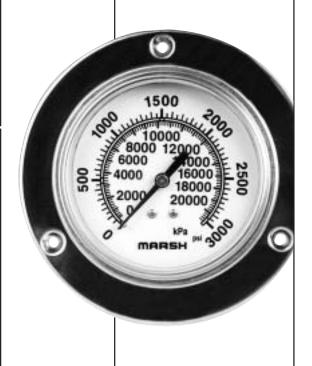








Dimension Table	Gauge Size	Conn- ection	А	С	G	Н	К	J	L	L1
	100mm	1/4"			4.57" 116mm					







- All Stainless Steel
- Field Fillable
- Ranges to 10,000 psi
- Liquid Filled or Dry
- Solid Front Design Safecase

Marsh Instruments All Stainless Steel Gauges are built for extended life, and designed for harsh and corrosive environments. These stainless steel gauges feature top fill plugs and are field fillable. Marsh Liquid Filled Gauges offer significant cushioning and dampening which reduces pointer flutter and internal gauge damage. Suitable applications include: Refineries, chemical plants, offshore platforms, oil rigs, marine applications, general industrial application and OEM processes.

#### STANDARD RANGES & PART NUMBERS

· · · · · · · · · · · · · · · · · · ·	OTANDAND NAMED C	LIAILI NOND
100mm ELITE STAINLESS STEEL	TYPE	1001
ODEOLEIOATIONO	Internals	316 S
SPECIFICATIONS	Case Material	Stainl
ACCURACY 100%	Dual Scale Standard	psi/kP
ASME Grade 1A - ± 1.0% of range across full scale	Size	Elite 1
CASE SIZES	Mounting/Case Style	LM
100mm (4")	Connection (NPT)	1/2"
CASE MATERIAL	O to 30" Hg VAC	W960
304 Stainless Steel	O to 30psi	W964
CASE STYLE	O to 60psi	W964
Solid front & blow-out back	0 to 100psi	W964
Safecase construction	0 to 200psi	W965
LM – Lower Mount	0 to 300psi	W965
TUBE & SOCKET	0 to 600psi	W966
316 SST tube welded to 316 SST socket	0 to 1,000psi	W967
MOVEMENT	0 to 1,500psi	W967
Stainless Steel	0 to 2,000psi	W967
CONNECTION	0 to 3,000psi	W967
½" NPT	0 to 5,000psi	W968
RANGES	0 to 10,000psi	W969
30 to 10,000 psi	NOTE: To order filled, consult	filling chart helow
and O to 30" VAC Hg		-
DIAL STANDARD	100mm ELITE OPTI	ONS
Dual scale psi and kPa	OPTION	TYPE
DIAL COLOR	Fill Medium	Dry (no fill)
Black markings on white		Glycerin (GL)

TYPE	100mm ELITE STAINLESS STEEL
Internals	316 SS
Case Material	Stainless Steel
Dual Scale Standard	psi/kPa
Size	Elite 100mm
Mounting/Case Style	LM
Connection (NPT)	1/2"
O to 30" Hg VAC	W9605
O to 30psi	W9642
0 to 60psi	W9646
0 to 100psi	W9648
0 to 200psi	W9654
0 to 300psi	W9658
0 to 600psi	W9664
0 to 1,000psi	W9672
0 to 1,500psi	W9674
0 to 2,000psi	W9676
0 to 3,000psi	W9678
0 to 5,000psi	W9682
0 to 10,000psi	W9690

100mm ELITE OPTIONS					
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS		
Fill Medium	Dry (no fill)	Standard	All ranges		
	Glycerin (GL)	Add suffix P	All ranges		
	Silicone (SL)	Add suffix PI	All ranges		

POINTER

WINDOW Safety glass FILL MEDIUM See Options VENT

Aluminum, black painted

Internal compensating diaphragm



- Liquid Filled or Dry
- Field Fillable
- Ranges to 10,000 psi
- Heavy Duty Stainless Steel

Marsh Instruments Stainless Steel Gauges are built for extended life, and designed for harsh and corrosive environments. These stainless steel gauges feature top fill plugs and are field fillable. Pressure ranges are available to 10,000 psi. Marsh Liquid Filled Gauges offer significant cushioning and dampening which reduces pointer flutter and internal gauge damage. Suitable applications include: Refineries, chemical plants, offshore platforms, oil rigs, marine applications, general industrial application and OEM processes.

#### STANDARD RANGES & PART NUMBERS

TYPE	'H' SERIES 10	omm STAINLESS ST	TEEL
Internals	316 SS		
Case Material	Stainless Steel		
Size	100mm (4")		
Dual Scale Standard	psi/kPa		
Mounting / Case Style	LM	UC	FF
Connection (NPT)	1/4"	1/4"	1/4"
O to 30psi	H10742	H10842	H10842R
O to 60psi	H10746	H10846	H10846R
0 to 100psi	H10748	H10848	H10848R
0 to 160psi	H10752	H10852	H10852R
0 to 200psi	H10754	H10854	H10854R
0 to 300psi	H10758	H10858	H10858R
0 to 400psi	H10760	H10860	H10860R
0 to 600psi	H10764	H10864	H10864R
0 to 1,000psi	H10772	H10872	H10872R
0 to 1,500psi	H10774	H10874	H10874R
0 to 2,000psi	H10776	H10876	H10876R
0 to 3,000psi	H10778	H10878	H10878R
0 to 5,000psi	H10782	H10882	H10882R
0 to 10,000psi	H10790	H10890	H10890R

To order filled, see filling chart below.

100mm "H" GAUGE	OPTIONS		
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS
Fill Medium	Dry (no fill)	Standard	All ranges
	Glycerin (GL)	Add suffix P	
	Silicone (SL)	Add suffix PI	

### 'H' SERIES 100mm

#### ACCURACY ASME Grade $1A - \pm 1.0\%$ of range across full scale

#### CASE SIZES 100mm (4")

### CASE MATERIAL

## 304 Stainless Steel

**SPECIFICATIONS** 

#### CASE STYLES

#### LM - Lower Mount

#### UC - U-Clamp Mount FF - Front Flange Mount

### TUBE & SOCKET

### 316 SST tube welded to 316 SST socket

### MOVEMENT

### Stainless Steel

#### CONNECTION

#### 1/4" NPT lower or

#### lowerback connection

#### **RANGES**

#### 30 to 10,000 psi

### DIAL STANDARD

#### <u>Dual scale psi</u> and kPa

#### DIAL COLOR Black markings on white

### POINTER

## Aluminum, black painted

### WINDOW

## Acrylic

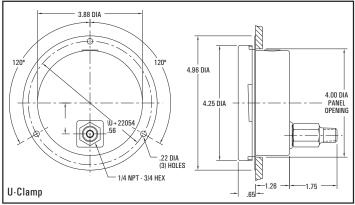
#### FILL MEDIUM

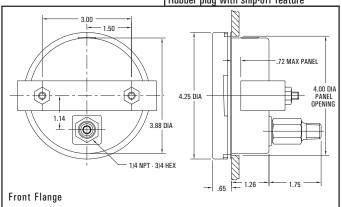
### See options

#### VENT

Rubber plug with snip-off feature

# **DIMENSIONS**









- Liquid Filled or Dry Field Fillable
- Socket Welded to the Case
- Ranges to 10,000 psi
- Heavy Duty All Stainless Steel

Marsh Instruments Stainless Steel Gauges are built for extended life, and designed for harsh and corrosive environments. These stainless steel gauges feature top fill plugs and are field fillable. Pressure ranges are available to 10,000psi. Marsh Liquid Filled Gauges offer significant cushioning and dampening which reduces pointer flutter and internal gauge damage. Suitable applications include: Refineries, chemical plants, offshore platforms, oil rigs, marine applications, general industrial application and OEM processes.

#### STANDARD RANGES & PART NUMBERS

TYPE	'HW' 100mm STAINLESS STEEL GAUGES
Internals	316 SS
Case Material	Stainless Steel
Dual Scale Standard	psi/kPa
Size	100mm (4")
Mounting /Case Style	LM
Connection	½" NPT
0 to 15psi	
O to 30psi	HW10942
O to 60psi	HW10946
0 to 100psi	HW10948
0 to 160psi	HW10952
0 to 200psi	HW10954
0 to 300psi	HW10958
0 to 400psi	HW10960
0 to 600psi	HW10964
0 to 1,000psi	HW10972
0 to 1,500psi	HW10974
0 to 2,000psi	HW10976
0 to 3,000psi	HW10978
0 to 5,000psi	HW10982
0 to 10,000psi	HW10990
0 to 20,000psi	HW10994

NOTE: Items are available on special order. However, minimums and lead times apply. Consult factory.

NOTE: To order filled, consult filling chart below.

100mm "HW" GAUGE OPTIONS						
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS			
Fill Medium	Dry (no fill)	Standard	All ranges			
	Glycerin (GL)	Add suffix P	]			
	Silicone (SL)	Add suffix PI	1			

500
100mm STAINLESS STEEL
SPECIFICATIONS
ACCURACY
ASME Grade 1A $-\pm 1.0\%$ of range
across full scale
CASE SIZES
100mm (4")
CASE MATERIAL
304 Stainless Steel
CASE STYLES
LM - Lower Mount
TUBE & SOCKET
316 Stainless steel welded to the case
MOVEMENT
Stainless Steel
CONNECTION
½" NPT
RANGES
15 to 10,000 psi
DIAL STANDARD
Dual scale psi and kPa
DIAL COLOR
Black markings on white
POINTER
Aluminum, black painted
WINDOW
Safety glass
FILL MEDIUM
See options
VENT
Rubber plug with snip-off feature



- Ranges to 10,000 psi
- Field Fillable
- Rugged One Piece Construction
- 63mm Case Size

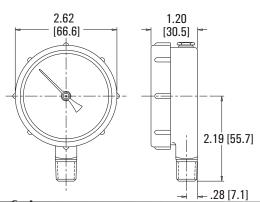
Marsh Instruments Brass Case liquid filled gauges are designed to perform in severe applications. When pulsation and vibration are a problem, this one piece forged brass gauge is up to the task. Liquid filled lubricates the movement, protects the gauge internals, and reduces pointer flutter. The hermetically sealed construction reduces the chance for leaks, and makes field filling an easy option. This product features a vented top fill plug for continuous pressure relief.

Suitable applications include power units, robotics, pumps, compressors, hydraulics, as well as die cast machinery, marine, and automotive applications.

#### STANDARD RANGES & PART NUMBERS

TYPE	63mm LIQUID FILLED BRASS
Internals	Copper Alloy
Case Material	Brass Forged
Size	63mm
Dual Scale Standard	psi/kPa
Mounting / Case Style	LM
Connection	¼" NPT
O to 30" Hg VAC	W9005
30" Hg VAC to 30psi	W9012
30" Hg VAC to 60psi	W9014
30" Hg VAC to 100psi	W9016
O to 15psi	W9040
O to 30psi	W9042
O to 60psi	W9046
0 to 100psi	W9048
0 to 160psi	W9052
0 to 200psi	W9054
0 to 300psi	W9058
0 to 400psi	W9060
0 to 600psi	W9064
0 to 1,000psi	W9072
0 to 1,500psi	W9074
0 to 2,000psi	W9076
0 to 3,000psi	W9078
0 to 5,000psi	W9082
0 to 6,000psi	W9084
0 to 7,500psi	W9086
0 to 10,000psi	W9090

63mm LIQUID FILLED BRASS GAUGE OPTIONS					
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS		
Fill Medium	Dry (no fill)	Standard	All ranges		
	Glycrine	Add suffix P			
	Silicone (SL)	Add suffix PI			
Window	Safety Glass (SG)	F3	All ranges		



## BRASS GAUGE

5	٢	Ł	Ü	lŀ.	IU	Α	Щ	U	NS	

ACCURACY

ASME Grade  $\pm 2/1/2\%$  (1% of range across middle half of scale)

CASE SIZES

63mm (2.47")

CASE MATERIAL

Forged Brass (one piece case & socket)

CASE STYLES

LM - Lower Mount with screw on

brass ring

TUBE & SOCKET

Copper alloy

MOVEMENT

Brass sector and pinion

CONNECTION

½" NPT RANGES

O to 30" Hg VAC, Compound

30" to 100 psi, 15 to 10,000 psi

DIAL STANDARD

Dual scale psi and kPa

DIAL COLOR

Black markings on white

POINTER

Aluminum, black painted

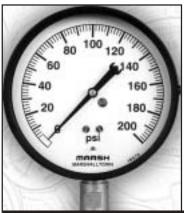
WINDOW

Acrylic FILL MEDIUM

See Options

VENT

Rubber plug with snip-off feature



• Dial Sizes:  $3\frac{1}{2}$ " and  $4\frac{1}{2}$ "

Stainless Steel Movement

3 Case Styles

• Recalibrator Standard

• Ranges to 20,000 psi

Marsh Quality Gauges feature the exclusive recalibrator and are used on air compressors, reciprocating pumps, boilers, engines, hydraulic presses and countless other industrial and OEM applications. Our Quality Gauges provide continuous service at an economical price. Accuracy is within  $\pm\,1\%$  in the middle half of span.

#### STANDARD RANGES & PART NUMBERS

QUALITY GAUGES (SERIES 'H')
SPECIFICATIONS
ACCURACY ASME Grade A - ± 2/1/2% (±1% of range in middle half of scale)
CASE SIZES 3½" and 4½" diameter 6" diameter (see options)
CASE MATERIAL Steel, Painted Black
CASE STYLE P - Plain Case, Lower Mount G - Back Flanged case F - Front Flanged, Lower Back Mount with U-Clamp; 4½" has Hinged Ring (LBM)
TUBE & SOCKET Copper alloy
MOVEMENT Stainless Steel
RECALIBRATOR Standard 3½" only, 4½" has adjustable pointer
CONNECTION ¼" or ½" NPT
RANGES O to 30" Hg VAC; Compound 30" Hg VAC to 300 psi; 15 to 20,000 psi
DIAL STANDARD single scale psi
DIAL COLOR Black markings on white

TYPE	QUALITY GAUGES						
	With Recalibrator				With Adjustable Pointer		
Size	3½"			4½"			
Internals	Copper Alloy	1			Copper Alloy	1	
Case Material	Steel				Steel		
Mounting	LM	LM	LBM	LBM	LM	LM	LBM
Connection (NPT)	1/4"	1/4"	1/4"	1/4"	1/4"	1/2"	1/4"
Style	Р	G	G	F	Р	Р	F
Scale Standard	psi	psi	psi	psi	psi	psi	psi
O to 30" Hg VAC	H0205	H1205	H1805	H2005	H4205	H4805	H6005
30" Hg VAC to 30psi	H0212	H1212	H1812	H2012	H4212	H4812	H6012
30" Hg VAC to 60psi	H0214	H1214	H1814	H2014	H4214	H4814	H6014
30" Hg VAC to 150psi	H0218	H1218	H1818	H2018	H4218	H4818	H6018
30" Hg VAC to 300psi	H0224	H1224	H1824	H2024	H4224	H4824	H6024
O to 15psi	H0240						
O to 30psi	H0242	H1242	H1842	H2042	H4242	H4842	H6042
O to 60psi	H0246	H1246	H1846	H2046	H4246	H4846	H6046
0 to 100psi	H0248	H1248	H1848	H2048	H4248	H4848	H6048
0 to 160psi	H0252	H1252	H1852	H2052	H4252	H4852	H6052
0 to 200psi	H0254	H1254	H1854	H2054	H4254	H4854	H6054
0 to 300psi	H0258	H1258	H1858	H2058	H4258	H4858	H6058
0 to 400psi	H0260	H1260	H1860	H2060	H4260	H4860	H6060
0 to 600psi	H0264	H1264	H1864	H2064	H4264	H4864	H6064
0 to 1,000psi	H0272	H1272	H1872	H2072	H4272	H4872	H6072
0 to 1,500psi	H0274	H1274	H1874	H2074		H4874	
0 to 2,000psi	H0276	H1276	H1876	H2076		H4876	
0 to 3,000psi	H0278	H1278	H1878	H2078		H4878	
0 to 4,000psi	H0280	H1280	H1880	H2080			
0 to 5,000psi	H0282	H1282	H1882	H2082		H4882	
0 to 6,000psi	H0284	H1284	H1884	H2084			
0 to 10,000psi	H0290	H1290	H1890	H2090		H4890	
0 to 15,000psi	H0292	H1292	H1892	H2092			
0 to 20,000psi	H0294	H1294	H1894	H2094			
			•	•			

NOTE: Items are available on special order. However, minimums and lead times apply. Consult factory.

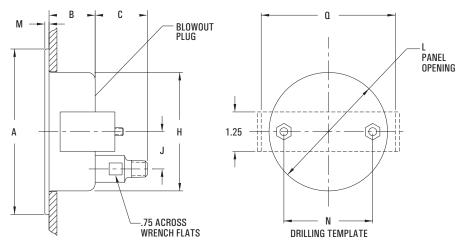
POINTER

WINDOW Instrument Glass

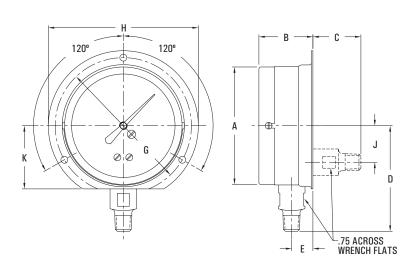
Aluminum, black painted

QUALITY GAUGE	OPTIONS						
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS				
Restrictors	Add restrictor	Н	All ranges				
Catalog Dials	bar only	L1	See Marsh Price List for minimum				
	kg/cm <sup>2</sup> only	L2	1				
	kPa only	L3	1				
	psi & bar	W1	1				
	psi & kg/cm <sup>2</sup>	W2	1				
	psi & kPa	W3	1				
	psi & MPa	W4	1				
Custom Dials	Logo or Custom Face	M	All models - consult factory				
Window	Acrylic (AY)	F2	3½" - 4½"				
	Safety Glass (SG)	F3	3½" - 4½"				
Increased Accuracy	Grade 1A: ±1% full scale	В	All models				
	Grade 2A: ±0.5% full scale	В	All models				
Cases	Aluminum Back Flange	J	4½"- 6" consult factory				
	Steel Hinged Ring Case	J	6" consult factory				

#### Case Patterns & Dimensions



Size	Α	В	С	Н	J	L	M	N	0
3½"	4.86	1.66	1.55	3.75	1.16	3.75	.11	2.81	4.25
41/2"	6.31	1.39	2.15	4.81	1.27	4.88	.11	3.88	5.31



3½" 3.72 1.69 1.55 3.34 .67 4.31 1.16 2.00 .22		Size	Α	В	С	D	E	G	٦	K	Panel Mounting
	I		3.72	1.69	1 1 5 5	3.34		1 431		2.00	. // .



### **QUALITY GAUGES (SERIES 'H')**

Quality Gauge

Dial Divisions	Series "H"					
	2/	1/2%	of Span			
Ranges		ure vals	Minor Gradua- tions			
Vacuum	3	3	0	.2		
COMPOUND						
30" Hg VAC	5	3	0.5	0.2		
to 15 psi	ິ່ນ	י	0.5	0.2		
30" Hg VAC	10	5	1	0.5		
to 30 psi		Ů	L.	0.0		
30" Hg VAC	10	10	1	0.5		
to 60 psi			L.	0.0		
30" Hg VAC	30	30	2	1		
to 150 psi				<u> </u>		
30" Hg VAC	30	30	5	2		
to 300 psi						
PRESSURE						
O to 15 psi		<u> </u>	0.1			
0 to 30 psi	5		0.2			
0 to 60 psi	5		0.5 1			
0 to 100 psi		0				
0 to 160 psi	2			1		
0 to 200 psi	2		2			
0 to 300 psi		0	2			
0 to 400 psi	_	0	2			
0 to 600 psi	5	0	5			
HIGH PRESSURE						
0 to 1,000 psi		00	10			
0 to 1,500 psi	300		20			
0 to 2,000 psi	200			0		
0 to 3,000 psi		00		0		
0 to 4,000 psi		00		0		
0 to 5,000 psi	50			00		
0 to 6,000 psi		00		00		
0 to 10,000 psi		100		00		
0 to 15,000 psi		00	200			
0 to 20,000 psi	2,0	00	20	00		



- Adjustable Micrometer Knife-Edge Pointer with Mirror Dial
- Stainless Steel Movement
- Dial Size: 4½"
- Ranges to 10,000 psi

Marsh Test Gauges are used in precision laboratory applications and industrial environments where precise accuracy is demanded. Accuracy is  $\pm 0.25\%$  of full span.

#### STANDARD RANGES & PART NUMBERS

TEST GAUGE SERIES 'D'
SPECIFICATIONS
ACCURACY
ASME Grade $3A - \pm 0.25\%$ of
range across full scale
CASE SIZE
4½" diameter
CASE MATERIAL
Steel, Black Painted
CASE STYLE
P – Plain Case Lower Mount (LM)
F – Front Flanged with U-clamp
and hinged ring (LBM)
PRESSURE RELIEF
Blowout plug
TUBE & SOCKET
Copper alloy or 316 Stainless Steel
MOVEMENT
Stainless Steel
CONNECTION
¼" or ½" NPT
RANGES
O to 30" Hg VAC; Compound 30"
Hg to 60 psi; 15 to 10,000 psi
DIAL STANDARD
single scale psi
DIAL COLOR
Black markings on white aluminum

with mirror dial to avoid parallax

Knife-edge micrometer Aluminum,

**POINTER** 

black painted
WINDOW
Instrument Glass

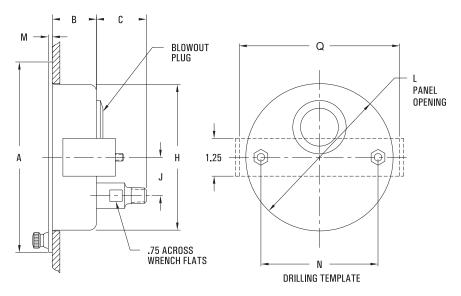
TYDE							
TYPE	TEST G	AUGES					
Size	4½"			4½"			
Internals	Copper Al	loy		Stainless	Steel		
Case Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel
Mounting	LM	LM	LBM	LM	LM	LBM	LBM
Connection (NPT)	1/4"	1/2"	1/4"	1/4"	1/2"	1/4"	1/2"
Style	P	P	F	P	P	F	F
O to 30" Hg VAC	D0205	D0605	D1205	D5205	D5605	D6105	D6405
30" Hg VAC to 15psi	D0210	D0610	D1210	D5210	D5610	D6110	D6410
30" Hg VAC to 30psi	D0212	D0612	D1212	D5212	D5612	D6112	D6412
30" Hg VAC to 60psi	D0214	D0614	D1214	D5214	D5614	D6114	D6414
O to 15psi	D0240	D0640	D1240	D5240	D5640	D6140	D6440
O to 30psi	D0242	D0642	D1242	D5242	D5642	D6142	D6442
O to 60psi	D0246	D0646	D1246	D5246	D5646	D6146	D6446
0 to 100psi	D0248	D0648	D1248	D5248	D5648	D6148	D6448
0 to 160psi	D0252	D0652	D1252	D5252	D5652	D6152	D6452
0 to 200psi	D0254	D0654	D1254	D5254	D5654	D6154	D6454
0 to 300psi	D0258	D0658	D1258	D5258	D5658	D6158	D6458
0 to 400psi	D0260	D0660	D1260	D5260	D5660	D6160	D6460
0 to 600psi	D0264	D0664	D1264	D5264	D5664	D6164	D6464
0 to 1,000psi				D5272	D5672	D6172	D6472
0 to 1,500psi				D5274	D5674	D6174	D6474
0 to 2,000psi				D5276	D5676	D6176	D6476
0 to 3,000psi				D5278	D5678	D6178	D6478
0 to 5,000psi				D5282	D5682	D6182	D6482
0 to 10,000psi				D5290	D5690	D6190	D6490

NOTE: For test gauge in aluminum case, consult factory.

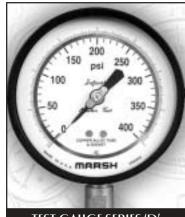
For 6" test gauge; consult factory for availability.

TEST GAUGE C	OPTIONS		
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS
Restrictors	Add restrictor	Н	All ranges
Catalog Dials	bar only	L1	See Marsh Price List for minimum
	kg/cm² only	L2	
	kPa only	L3	7
	psi & bar	W1	
	psi & kg/cm <sup>2</sup>	W2	7
	psi & kPa	W3	_
	psi & MPa	W4	7
Custom Dials	Logo or Custom Face	M	All models - consult factory
Window	Acrylic (AY)	F2	41/2"
	Safety Glass (SG)	F3	41/2"
Cases	4½" Polypropylene (TR)	J1	Consult Factory
	4½" Aluminum Back Flange	J2	1
	•		•

#### Case Patterns & Dimensions



I	Size	А	В	С	Н	J	L	М	N	Q
	41/2"	6.31	1.39	2.31	4.81	1.27	4.88	.11	3.88	5.31



TEST GAUGE SERIES 'D'					
Dial Divisions	Test Gauge Series "D" 0.25% of Span				
Ranges	Inte	ure rvals	Gra	nor dua- ins	
Vacuum	- 2	2	0	.1	
COMPOUND					
30" Hg VAC to 15 psi	5	3	0.2	0.1	
30" Hg VAC to 30 psi	10	5	0.5	0.1	
30" Hg VAC to 60 psi	10	5	1	0.2	
30" Hg VAC to 150 psi	30	10	2	0.5	
30" Hg VAC to 300 psi	30	30	5	1	
PRESSURE					
0 to 15 psi	·	1	0	.5	
0 to 30 psi	2	2	0	.1	
O to 60 psi	į	5	0.2		
0 to 100 psi		0	0	.5	
0 to 160 psi	1	0	0	.5	
0 to 200 psi	2	0		1	
0 to 300 psi	5	0		1	
0 to 400 psi	_	50		2	
0 to 600 psi	5	0	:	2	
HIGH PRESSURE					
0 to 1,000 psi		00		5	
0 to 1,500 psi		100		5	
0 to 2,000 psi		00		0	
0 to 3,000 psi	_	00		0	
0 to 4,000 psi		00		0	
0 to 5,000 psi		00		0	
0 to 6,000 psi		00		0	
0 to 10,000 psi		000	_	0	
0 to 15,000 psi		000	100 200		
0 to 20,000 psi	2,0	000	20	JU	



- 3" Dial
- Vacuum to 1,000 psi Range
- Recalibrator on Dial Face
- ASME Grade 2A Accuracy

Marsh Inspector's Test Gauges are specifically designed for use by steam boiler, air brake and pressure system inspectors. The rugged 3" Inspector's Test Gauge features a nickel-plated case and an accuracy of  $\pm 0.5\%$  of span.

#### STANDARD RANGES & PART NUMBERS

22.0	
INSPECTORS TEST GAUGE	
SPECIFICATIONS	_
ACCURACY	
ASME Grade 2A $ \pm0.5\%$ of span	
across full scale	_
CASE SIZES	
3" diameter	_
CASE MATERIAL	
Nickel Plated Brass	_
CASE STYLE	
Lower Mount with threaded ring	_
TUBE & SOCKET	
Copper alloy tube and socket	_
MOVEMENT	
All Brass	_
RECALIBRATOR	
Adjustable dial screw	_
CONNECTION	
½" NPT	_
RANGES	
0 to 30" Hg VAC; 15 to 1,000 psi	_
DIAL STANDARD	
Single Scale psi	_
DIAL COLOR	
Black markings on white POINTER	_
Knife-edge, Aluminum,	
black painted	
WINDOW	-
Beveled glass	
PROTECTIVE COVER	-
Opaque plastic lens cover	
opaquo piuotio iono oovoi	-

STANDARD RANGES &	TANT NOWIDENS
TYPE	INSPECTOR'S TEST GAUGES
Size	3"
Internals	Copper Alloy
Mounting	LM
Connection (NPT)	\( \lambda'' \)
Case	Nickel Plated Brass
Scale Standard	psi
O to 30" Hg VAC	D1505
O to 15psi	D1540
O to 30psi	D1542
O to 60psi	D1546
0 to 100psi	D1548
0 to 160psi	D1552
0 to 200psi	D1554
0 to 300psi	D1558
0 to 600psi	D1564
0 to 1,000psi	D1572

INSPECTOR'S TEST GAUGE OPTIONS							
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS				
Restrictors	Add restrictor	Н	All ranges				
Catalog Dials	bar only	L1	See Marsh Price List for minimum				
	kg/cm <sup>2</sup> only	L2					
	kPa only	L3					
	psi & bar	W1					
	psi & kg/cm <sup>2</sup>	W2					
	psi & kPa	W3					
	psi & MPa	W4	]				
Custom Dials	Logo or Custom Face	M	All models - consult factory				



- 4½" and 6" Dials
- 4 Safecase Designs
- Pressure Ranges Vacuum to 20,000 psi
- Dry or Liquid Filled
- Micrometer Pointer

Marsh Process Gauges are first in performance. With over 125 years of proven experience, Marsh offers the most complete line of process instrumentation in the industry. An extensive list of designs and options makes the Marsh line of Process Gauges the intelligent and practical choice in process instrumentation. All case styles feature safecase solid-front construction.

#### STANDARD RANGES & PART NUMBERS

ТҮРЕ	PROCESS	GAUGES				
Size	4½"					
Material	Polypropylene	case Case				
Internals	Copper Alloy			Stainless S	teel	
Mounting	LM	LBM	LM	LBM	LM	LBM
Connection (NPT)	1/4"	1/4"	1/2"	1/2"	1/4"	1/4"
Case Style	T	T	T	T	T	T
Scale Standard	psi	psi	psi	psi	psi	psi
O to 30" Hg VAC	P0105	P0205	P0505	P0605	P5105	P5205
30" Hg VAC to 15psi	P0110	P0210	P0510	P0610	P5110	P5210
30" Hg VAC to 30psi	P0112	P0212	P0512	P0612	P5112	P5212
30" Hg VAC to 60psi	P0114	P0214		P0614	P5114	P5214
30" Hg VAC to 100psi	P0116	P0216	P0516	P0616	P5116	P5216
30" Hg VAC to 200psi	P0120	P0220	P0520	P0620	P5120	P5220
30" Hg VAC to 300psi	P0124	P0224	P0524	P0624	P5124	P5224
O to 15psi	P0140	P0240	P0540	P0640	P5140	P5240
O to 30psi	P0142	P0242	P0542	P0642	P5142	P5242
O to 60psi	P0146	P0246	P0546	P0646	P5146	P5246
0 to 100psi	P0148	P0248	P0548	P0648	P5148	P5248
0 to 160psi	P0152	P0252	P0552	P0652	P5152	P5252
0 to 200psi	P0154	P0254	P0554	P0654	P5154	P5254
0 to 300psi	P0158	P0258	P0558	P0658	P5158	P5258
0 to 400psi	P0160	P0260	P0560	P0660	P5160	P5260
0 to 600psi	P0164	P0264	P0564	P0664	P5164	P5264
0 to 1,000psi	P0168	P0268	P0568	P0668	P5168	P5268
0 to 1,500psi		P0574		P5174	P5274	
0 to 2,000psi		P0576		P5176	P5276	
0 to 3,000psi		P0578		P5178	P5278	
0 to 5,000psi		P0582		P5182	P5282	
0 to 10,000psi		P0590		P5190	P5290	
0 to 15,000psi					P5192	P5292
0 to 20,000psi					P5194	P5294

Add "P" Suffix to P/N for Liquid Filling with Glycerine, add "PI" for Silicone.

NOTE: Lower back mount gauges are not fillable

NOTE: Items are available on special order. However, minimums and lead times apply. Consult factory.



#### POLYPROPYLENE CASE

#### **SPECIFICATIONS**

**ACCURACY** ASME Grade  $2A - \pm 0.5\%$  of full

scale

CASE SIZES

4%" and 6" diameter

CASE MATERIAL

Safecase polypropylene (turret style only) & safecase aluminum

CASE STYLE

 $4\frac{1}{2}$ ": T - Turret (polypropylene), G - Back flanged case (aluminum) or H - Front flange hinged ring

(aluminum) 6": G - Back flanged case.

TUBE & SOCKET

Copper alloy or 316 stainless steel

MOVEMENT

Stainless Steel

CONNECTION

1/4" or 1/2" NPT

LM -Lower Mount

LBM - Lower Back Mount

RANGES

0 to 30" Hg VAC; Compound 30" Hg VAC to 300 psi; 15 to 20,000 psi

DIAL STANDARD

Single Scale psi

DIAL COLOR

Black markings on white

**POINTER** 

Aluminum Adjustable Micrometer, black painted

WINDOW

Acrylic

FILL MEDIUM

Dry or filled. Note: ALL 4½" lower mount Process Gauges are field-fillable. Optional factory filled glycerin or silicone

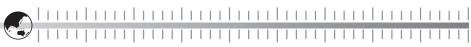
SAFECASE

Safecase construction standard on

all Process Gauges

VENT

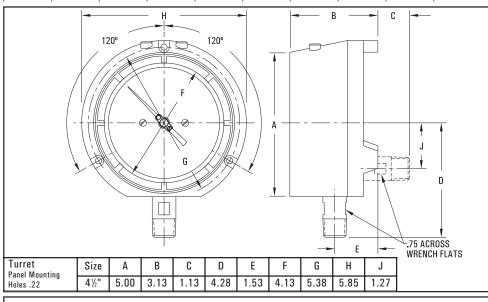
Internal compensating diaphragm



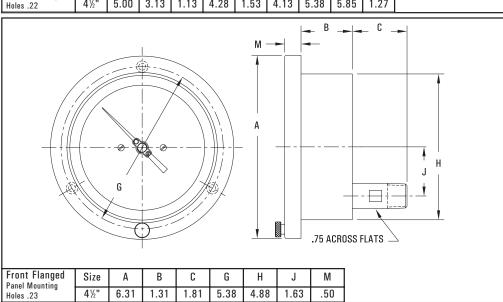
Size 4½"				
Case Polypropylene Aluminum	Al	luminum		
Internals Stainless Steel Copper Alloy	St	tainless Stee	el	
	LBM LE	BM I	LM	LM
Connection (NPT) ½" ½" ½" ½" ½" ½"	1/4" 1/2"	" }	V4"	1/2"
Case Style T T G G G G	H H	(	G	G
Scale Standard psi psi psi psi psi psi	psi ps	si p	psi	psi
			P14005	P14505
			P14010	P14510
			P14012	P14512
			P14014	P14514
			P14016	P14516
		16520		
· · ·		16524	244242	544540
			P14040	P14540
			P14042	P14542
			P14046	P14546
			P14048	P14548
			P14052	P14552
			P14054 P14058	P14554 P14558
			P14058 P14060	P14558 P14560
<u> </u>			P14064	P14564
			P14068	P14568
0 to 1,500p P5674 P5774	110000	10300	1 14000	P14574
0 to 2,000p P5676 P5776				P14576
0 to 3,000p P5678 P5778				P14578
0 to 5,000p P5682 P5782				P14582
0 to 10,000p P5690 P5790				P14590
1 to 10,000p				
0 to 15,000n P5692 P5792				P14592 I
0 to 15,000p P5692 P5792 P5792 P5694 P5794				P14592 P14594
0 to 20,000p P5694 P5794	16"			P14594
0 to 20,000p         P5694         P5794           Size         4½"         6"	6"	num		
0 to 20,000p         P5694         P5794           Size         4½"         6"           Case         Aluminum         Aluminum	Alumin			
O to 20,000p         P5694         P5794           Size         4½"         6"           Case         Aluminum         Aluminum           Internal         Stainless Steel         Copper Alloy	Alumin Stainle	ess Steel	ILBM	P14594
O to 20,000p         P5694         P5794         6"           Case         Aluminum         Aluminum           Internal         Stainless Steel         Copper Alloy           Mounting         LBM         L	Alumin Stainle M LM	ess Steel LM	LBM	P14594
O to 20,000p         P5694         P5794         6"           Case         Aluminum         Aluminum           Internal         Stainless Steel         Copper Alloy           Mounting         LBM         L	Alumin Stainle	ess Steel		P14594
O to 20,000p         P5694         P5794         6"           Case         Aluminum         Aluminum           Internal         Stainless Steel         Copper Alloy           Mounting         LBM         LBM         LBM         LBM         LM         LM         LM         LBM         LBM         LBM         Copper Alloy         LBM         LBM	Alumin Stainle M LM ¼" G	ess Steel LM ½" G	¼" G	LBM ½" G
O to 20,000p	Alumin Stainle M LM 1/4" G	ess Steel LM ½" G psi	¼" G psi	P14594 LBM ½"
O to 20,000p         P5694         P5794         6"           Case         Aluminum         Aluminum           Internal         Stainless Steel         Copper Alloy           Mounting         LBM         L	Alumin Stainle M LM ¼" G	ess Steel	¼" G psi	LBM ½" G psi
O to 20,000p         P5694         P5794         6"           Case         Aluminum         Aluminum           Internal         Stainless Steel         Copper Alloy           Mounting         LBM         L	Alumin Stainle M LM ¼" G psi 1505 P2400	ess Steel	½" G psi P25005 P25010	LBM %" G psi P25505
O to 20,000p         P5694         P5794         6"           Case         Aluminum         Aluminum           Internal         Stainless Steel         Copper Alloy           Mounting         LBM         L	Alumin Stainle M LM ¼" G psi 1505 P2400 1510 P2401	ess Steel	%" G psi P25005 P25010 P25012	LBM ½" G psi P25505 P25510 P25512
O to 20,000p         P5694         P5794         6"           Case         Aluminum         Aluminum           Internal         Stainless Steel         Copper Alloy           Mounting         LBM         L	Alumin Stainle M LM ¼" G psi 1505 P2400 1510 P2401 1512 P2401	ess Steel	%" G psi 5 P25005 P25010 2 P25012 4 P25014	LBM ½" G psi P25505 P25510 P25512
O to 20,000p         P5694         P5794         6"           Case         Aluminum         Aluminum           Internal         Stainless Steel         Copper Alloy           Mounting         LBM         L	Alumin Stainle M LM ¼" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401	ess Steel	%" G psi 5 P25005 P25010 2 P25012 4 P25014	LBM ½" G psi P25505 P25510 P25512 P25514
Size	Alumin Stainle M LM ¼" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401	ess Steel  LM  ½"  G  psi  05 P24505  0 P24512  4 P24516	%" G psi 5 P25005 P25010 2 P25012 4 P25014 6 P25016	LBM ½" G psi P25505 P25510 P25512 P25514 P25516
Size	Alumin Stainle M LM ¼" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401	ess Steel	%" G psi 5 P25005 P25010 2 P25012 4 P25014 6 P25016	LBM   ½"   G   psi   P25505   P25510   P25512   P25514   P25516   P25540   P255540   P25554
Size	Alumin Stainle M LM ¼" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401	ess Steel  LM  ½"  G  psi  05 P24505  0 P24512  4 P24514  6 P24516  10 P24540	%" G psi 5 P25005 P25010 2 P25012 4 P25014 6 P25016 0 P25040 2 P25042	P14594    LBM   ½"   G   psi   P25505   P25510   P25512   P25514   P25516   P25540   P25542
Size	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1540 P2404 1542 P2404 1546 P2404	ess Steel  LM  ½"  G  psi  05 P24505  0 P24516  4 P24516  P24516  P24546  P24546  P24546  P24546  P24546	%" G psi 5 P25005 P25010 2 P25012 4 P25014 6 P25016 0 P25040 2 P25042 6 P25046	P14594  LBM ½" G psi P25505 P25510 P25512 P25514 P25516  P25540 P25542 P25546
Size	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1540 P2404 1542 P2404 1546 P2404 1548 P2404	ess Steel  LM  ½"  G  psi  05 P24505  0 P24516  4 P24516  P24516  P24546  P24546  P24546  P24548  P24548	%" G psi 5 P25005 P25010 2 P25012 4 P25014 6 P25016 0 P25040 2 P25042 6 P25048	P14594    LBM   ½"   G   psi   P25505   P25510   P25512   P25514   P25516   P25540   P25542   P25546   P25548
Size	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1540 P2404 1542 P2404 1546 P2404 1548 P2404 1552 P2405	ess Steel  LM  ½"  G  psi  05 P24505  0 P24516  4 P24516  6 P24516  10 P24540  12 P24540  14 P24540  15 P24540  16 P24540  17 P24540  18 P24548	%"   G   psi   5   P25005   P25010   2   P25014   P25016	LBM   ½"   G   psi   P25505   P25510   P25512   P25514   P25516   P25540   P25542   P25546   P25548   P25552
O to 20,000p	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1540 P2404 1542 P2404 1546 P2404 1548 P2404 1552 P2405	ess Steel  LM  ½"  G  psi  05 P24505  0 P24516  4 P24516  6 P24516  10 P24546  12 P24546  14 P24546  15 P24546  16 P24546  17 P24546  18 P24546  18 P24546  18 P24546	¼"   G   psi   5   P25005   P25010   2   P25014   P25016	P14594    LBM   ½"   G   P25505   P25510   P25512   P25514   P25516   P25542   P25546   P25548   P25552   P25554
O to 20,000p	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1540 P2404 1542 P2404 1546 P2404 1548 P2404 1552 P2405 1554 P2405	ess Steel  LM  ½"  G  psi  05 P24505  0 P24516  4 P24516  6 P24516  10 P24546  12 P24546  12 P24546  13 P24546  14 P24546  15 P24546  16 P24546  17 P24546  18 P24548  18 P24548  18 P24548	%"   G   psi   5   P25005   P25010   2   P25014   P25016	LBM   %"   G   psi   P25505   P25510   P25512   P25514   P25516   P25540   P25542   P25546   P25548   P25552   P25554   P25558
O to 20,000p	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1540 P2404 1542 P2404 1546 P2404 1548 P2404 1552 P2405 1554 P2405 1558 P2406	ess Steel  LM  ½"  G  psi  05 P24505  0 P24516  4 P24516  6 P24516  10 P24540  12 P24540  14 P24540  15 P24540  16 P24540  17 P24540  18 P24546  18 P24546  18 P24558  18 P24560  18 P24560  18 P24560	%"   G   psi   5   P25005   P25010   2   P25014   P25016   P25016   P25046   B   P25048   P25048   P25054   P25054   P25054   P25058   P25060   P	P14594    LBM   ½"   G   P25505   P25510   P25512   P25514   P25516   P25542   P25546   P25548   P25552   P25554   P25558   P25560
Size	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1540 P2404 1542 P2404 1546 P2404 1554 P2405 1554 P2405 1558 P2405 1560 P2406	ess Steel  LM  ½"  G  psi  05 P24505  0 P24516  4 P24514  6 P24516  P24546  12 P24546  14 P24546  15 P24546  16 P24546  17 P24546  18 P24546	%"   G   psi   5   P25005   P25010   2   P25014   P25016	P14594  LBM  ½"  G  psi  P25505  P25510  P25512  P25514  P25516  P25542  P25546  P25548  P25554  P25554  P25554  P25556  P25560
O to 20,000p	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1540 P2404 1542 P2404 1546 P2404 1554 P2405 1554 P2405 1558 P2405 1560 P2406 1564 P2406	ess Steel  LM  ½"  G  psi  05	%"   G   psi   5   P25005   P25010   2   P25014   P25016   P25016   P25046   B   P25048   P25054   P25054   P25054   P25054   P25054   P25066   P	LBM   ½"   G   psi   P25505   P25510   P25512   P25514   P25516   P25542   P25546   P25548   P25552   P25554   P25568   P25564   P25568   P2568   P
O to 20,000p	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1540 P2404 1542 P2404 1546 P2404 1554 P2405 1558 P2405 1560 P2406 1564 P2406 1568 P2406	ess Steel  LM  ½"  G  psi  05	%"   G   psi   5   P25005   P25010   2   P25014   P25016   P25016   P25046   B   P25048   P25054   P25054   P25054   P25054   P25054   P25064   P25064   P25064   P25064   P25064   P25064   P25064   P25068   P	P14594  LBM  ½"  G  psi  P25505  P25510  P25512  P25514  P25516  P25542  P25546  P25548  P25554  P25554  P25558  P25560  P25564  P25568  P25574
O to 20,000p	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1542 P2404 1542 P2404 1546 P2404 1552 P2405 1558 P2405 1560 P2406 1564 P2406 P2407 P2407	ess Steel  LM  ½"  G  psi  05  p24505  0  p24516  4  P24516  6  P24516  2  P24546  4  P24546  8  P24546  8  P24546  6  P24566  6  P24566  6  P24566  6  P24576  6  P24576  6  P24576	%"   G   psi   5   P25005   P25010   2   P25014   P25016   P25016   P25046   P25048   P25054   P25054   P25054   P25054   P25054   P25054   P25054   P25054   P25064   P25064   P25064   P25064   P25068   P25068   P25074   P25076   P25076   P25076	LBM   %"   G   psi   P25505   P25510   P25512   P25514   P25516   P25542   P25546   P25548   P25554   P25558   P25560   P25564   P25568   P25576   P25576
O to 20,000p	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1542 P2404 1548 P2404 1554 P2405 1558 P2405 1560 P2406 1568 P2406 P2407 P2407	ess Steel  LM  ½"  G  psi  D5 P24505  00 P24516  4 P24516  6 P24516  2 P24540  4 P24546  6 P24546	%"   G   psi   5   P25005   P25010   2   P25014   P25016   P25016   P25046   P25048   P25054   P25054   P25054   P25054   P25054   P25054   P25064   P25064   P25064   P25064   P25064   P25066   P25076   P2507	P14594  LBM  ½"  G  psi  P25505  P25510  P25512  P25514  P25516  P25542  P25546  P25548  P25548  P25554  P25560  P25564  P25568  P25574  P25576  P25576
O to 20,000p	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1516 P2404 1542 P2404 1548 P2404 1552 P2405 1558 P2405 1560 P2406 1564 P2406 1568 P2407 P2407 P2407	ess Steel  LM  ½"  G  psi  D5	%"   G   psi   5   P25005   P25010   2   P25014   P25016   P25016   P25046   P25048   P25054   P25056   P25060   P25060   P25060   P25060   P25068   P25074   P25074   P25074   P25076   P25076   P25078   P2507	P14594  LBM  ½"  G  psi  P25505  P25510  P25512  P25514  P25516  P25542  P25546  P25548  P25548  P25554  P25560  P25564  P25568  P25574  P25576  P25578  P25578
O to 20,000p	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1516 P2404 1542 P2404 1548 P2404 1552 P2405 1558 P2405 1560 P2406 1564 P2406 1568 P2407 P2407 P2407 P2408	ess Steel  LM  ½"  G  psi  D5	%"   G   psi   5   P25005   P25010   2   P25014   P25016   P25016   P25046   P25048   P25054   P25056   P25060   P25060   P25060   P25060   P25074   P25074   P25074   P25074   P25075   P25076   P25076   P25076   P25078   P25078   P25078   P25078   P25078   P25090   P25090	P14594  LBM  ½"  G  psi  P25505  P25510  P25512  P25514  P25516  P25542  P25546  P25548  P25548  P25554  P25560  P25564  P25568  P25574  P25576  P25578  P25582  P25582  P25582
O to 20,000p	Alumin Stainle M LM %" G psi 1505 P2400 1510 P2401 1512 P2401 1514 P2401 1516 P2401 1516 P2404 1542 P2404 1548 P2404 1552 P2405 1558 P2405 1560 P2406 1564 P2406 1568 P2407 P2407 P2407	ess Steel  LM  ½"  G  psi  D5	%"   G   psi   5   P25005   P25010   2   P25014   P25016   P25016   P25046   P25048   P25054   P25054   P25054   P25054   P25054   P25054   P25054   P25054   P25054   P25064   P25064   P25064   P25064   P25066   P25066   P25074   P25074   P25074   P25074   P25076   P25076   P25078   P25078   P25078   P25078   P25078   P25090   P2509	P14594  LBM  ½"  G  psi  P25505  P25510  P25512  P25514  P25516  P25542  P25546  P25548  P25548  P25554  P25560  P25564  P25568  P25574  P25576  P25578  P25578

Add "P" Suffix to P/N for Liquid Filling with Glycerine, add "PI" for Silicone. NOTE: Lower back mount Gauges are not fillable NOTE:



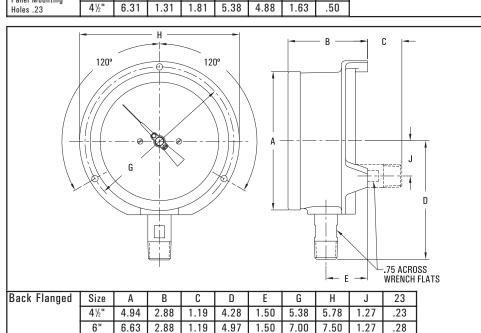








FRONT FLANGE CASE







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	118							
ALUMIN	NUM	CAS	SE					
Dial Divisions	Process Gauge Series "P" 0.5% of Span							
Ranges		ure rvals	Minor Gradua- tions					
Vacuum		3	0	.2				
COMPOUND								
30" Hg VAC to 15 psi	5	3	0.5	0.2				
30" Hg VAC to 30 psi	10	5	1	0.5				
30" Hg VAC to 60 psi	10	10	1	0.5				
30" Hg VAC to 150 psi	30	30	2	1				
30" Hg VAC to 300 psi	30	30	5	2				
PRESSURE								
0 to 15 psi		1	0					
0 to 30 psi		5		.2				
0 to 60 psi		ō	0	.5				
0 to 100 psi	1	0		1				
0 to 160 psi	_	0		1				
0 to 200 psi	2	0	:	2				
0 to 300 psi	5	0	- :	2				
0 to 400 psi	5	0	- :	2				
0 to 600 psi	5	0	ļ	5				
HIGH PRESSURE								
0 to 1,000 psi	10	00	1	0				
0 to 1,500 psi	30	00	1	0				
0 to 2,000 psi	20	00		0				
0 to 3,000 psi		00		0				
0 to 4,000 psi		00		0				
0 to 5,000 psi		00		0				
0 to 6,000 psi		000	50					
0 to 10,000 psi		000	100					
0 to 15,000 psi		000	100					
0 to 20,000 psi	2,0	000	200					

PROCESS GAUC	GE OPTIONS		
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS
Restrictors	Add restrictor	Н	All ranges
Fill Medium	Glycerin (GL)	P	4½" Lower Mount only (all ranges)
	Silicone option (SL)	PI	4½" Lower Mount only (all ranges)
Catalog Dials	bar only	L1	See Marsh Price List for minimum
	kg/cm <sup>2</sup> only	L2	1
	kPa only	L3	1
	psi & bar	W1	1
	psi & kg/cm <sup>2</sup>	W2	1
	psi & kPa	W3	
	psi & MPa	W4	1
Window	Instrument Glass (GS)	F1	4½" & 6"
	Safety Glass (SG)	F3	4½" & 6"
Cases	Phenolic Turret (PH)	J1	4½"
	4½" Steel Case (LM or LBM)	J	4½" (Adjustable pointer only)
	6" Hinged Ring Steel Case with U-Clamp	J	6" (Adjustable pointer only)
Custom Dials	Logo or Custom Face	М	Consult factory for colors and minimums.

NOTE: 4%" Lower back mount, 6" Lower mount and 6" Lower back are not fillable (only available dry).



## Diaphragm Gauges

• Dial Sizes: 2½", 3½", 4½"

• Four Case Styles

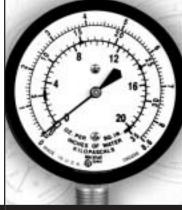
Accuracy: ASME B40.1 - 2/1/2%

Marsh Instruments Low Pressure Diaphragm Gauges are universally known for their dependable performance and accuracy. Incorporating a unique design feature, the diaphragm element allows accurate low pressure readings in a variety of applications. Featuring a bronze diaphragm element, the gauge is capable of ASME Grade A-1% accuracy for ranges above 30" of water. Ranges are available in vacuum and pressure in inches of water, ounces per square inch and millimeters of mercury.

#### STANDARD RANGES & PART NUMBERS

TYPE	DIAPI	HRAG <i>N</i>	A GAUC	GES					
Size	2½"							3½"	4½"
Pressure Element	Phosphor	Bronze						•	
Dual Standard Scale	psi/kPa								
Case	LM	LM	U	U	СВ	СВ	FF	LM	LM
Mounting	1/4"	1/8"	1/4"	1/8"	1/4"	1/8"	1/4"	1/4"	1/4"
0 to 10" H <sub>2</sub> 0	G22675	G22711	G11181	G11248	G22747	G27110	G11578	G24608	G25756
0 to 15" H <sub>2</sub> 0	G24500	G24503	G11246	G11313	G26504	G30237	G11642	G24631	G25981
0 to 30" H <sub>2</sub> 0	G22704	G22740	G11189	G11256	G22776	G11652	G11586	G24625	G25749
0 to 60" H <sub>2</sub> 0	G22705	G22741	G11208	G11314	G22777	G11671	G11605	G24626	G25844
0 to 100" H <sub>2</sub> 0	G22687	G22723	G11217	G11284	G22759	G11675	G11609	G24613	G25982
0 to 160" H <sub>2</sub> 0	G22695	G22731	G11232	G11299	G22767	G11695	G11628	G24617	G25980
0 to 200" H <sub>2</sub> 0	G22696	G22732	G11233	G11300	G22768	G11696		G24618	G26021
0 to 300" H <sub>2</sub> 0	G22697	G22733	G11236	G11303	G22769	G11699		G24619	G25755
O to 3 psi	G22685	G22721	G11215	G11282	G22757	G11678	G11612	G24612	
O to 5 psi	G22702	G22738	G10623	G11310	G22774	G22810	G10619	G24624	G26018
0 to 10 psi	G22699	G22735	G11239	G11306	G22771	G11702	G11635	G24621	G25754
O to 10 oz/in²	G22677	G22713	G11186	G11253	G22749	G11649	G11583	G24609	
O to 15 oz/in²	G22680	G22716	G11194	G11261	G22752	G11657	G11591	G24610	G25753
O to 30 oz/in²	G24501		G11206	G11273	G24504	G11669	G11603	G24632	G25750
O to 60 oz/in²	G22684	G22720	G11213	G11280	G22756	G11676	G11610	G24611	G25757
0 to 100 oz/in²	G22691	G22727	G11226	G11293	G22763		G11622	G24615	G26025
0 to 160 oz/in²	G26062		G11237	G11304		G11700	G11633	G26894	
8.75 oz/in² and 15" H <sub>2</sub> 0	G22706	G22742	G11185	G11252	G22778	G11648	G11582	G24627	
20 oz/in² and 35" H <sub>2</sub> 0	G22709	G22745	G11200	G11267	G22781	G11663	G11597	G24629	G25748
32 oz/in² and 55" H <sub>2</sub> 0	G22707	G22743	G11195	G11262	G22779	G11658	G11592	G24628	G25984
58 oz/in² and 100" H <sub>2</sub> 0	G22710	G22746	G11214	G11281	G22782	G22947	G11611	G24630	
0 to 15" H <sub>2</sub> O VAC	G22912		G11873	G11906	G22942	G12104	G12071	G24708	G26023
0 to 30" H <sub>2</sub> 0 VAC	G22914	G29804	G11876	G11909	G22944	G12107	G12074	G24709	G26020
0 to 60" H <sub>2</sub> 0 VAC	G22918		G11884	G11917	G22948	G12115	G12082	G24710	G26020
0 to 100" H <sub>2</sub> 0 VAC	G24502	G26962	G11885	G11918	G22949	G12116	G12083	G24716	G26016
0 to 200" H <sub>2</sub> 0 VAC	G22921		G11892	G11925	G22951	G12123	G12090	G24711	G26019

NOTE: Items are available on special order. However, minimums and lead times apply. Consult factory.



#### DIAPHRAGM GAUGE

#### **SPECIFICATIONS**

### ACCURACY

For ranges 30"  $H_20$  & above: ASME Grade A =  $\pm 2/1/2\%$  ( $\pm 1\%$  of range across middle half of scale). For ranges below 30"  $H_20$ :  $\pm 3/1/3\%$  ( $\pm 1\%$  of range across middle half of scale)

#### CASE SIZES

2½", 3½", 4½" diameter

#### CASE MATERIAL

Drawn steel pretreated for rust resistance and black enamel finish

#### CASE STYLE

LM – Lower Mount

CB – Center Back Mount

UC - U-Clamp Mount

FF - Three-holed Front Flanged Mount

## DIAPHRAGM & SOCKET

Phosphor bronze diaphragm soft-soldered to brass socket

#### MOVEMENT

Brass sector and pinion with polycarbonate top & bottom plates

#### CONNECTION

1/8" & 1/4" NPT

### DIAL STANDARD

Dual Scale with kPa

Triple Scale: oz/in2, in H<sub>2</sub>0, & kPa

#### DIAL COLOR

Black markings on white

#### POINTER

Aluminum, black painted

#### WINDOW

2½" & 3½": twist-on Clearlok acrylic window.

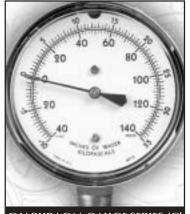
4½": flat acrylic window with steel friction ring

#### RESTRICTOR

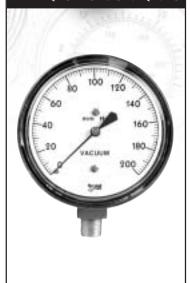
0.013" standard. No restrictor on 0 to 10" H<sub>2</sub>O range

## Diaphragm Gauges

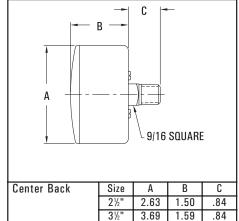


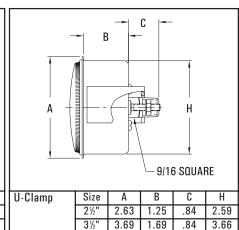


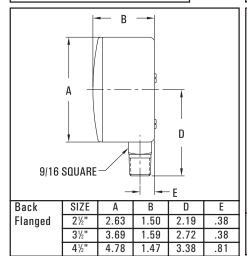
### DIAPHRAGM GAUGE SERIES 'G'

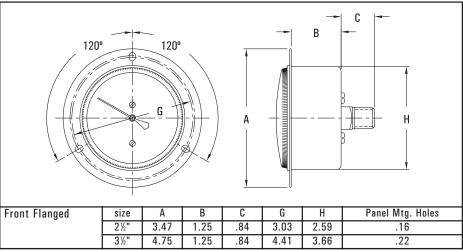


DIAPHRAGM G	AUGE OPTIONS		
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS
Window	Acrylic (knurled edge)		all models
Restrictors	.008 Restrictor		all models
	.016 Restrictor		1
	.018 Restrictor		1
	.025 Restrictor		1
Ring	Press ring, chrome		2½" to 3½" Panel Mount
Ring / Window	Glass & Black Steel Ring		2½" to 3½" all models
Cases	Stainless Steel		2½"- Panel Mount
	Brass		2½"- Lower Mount or Centerback
	Chrome plated		Lower Mount or Centerback
3½" Case	Center Back (CB)		3½"
	U-Clamp (UC)		3½"
Connections	Hose Barb (1/8" OD & 1/4" OD)		All models (10 pc. minimum)
Compound Ranges	Vacuum & Pressure with front zero adjustment		All models (10 pc. minimum)
Custom Dials	Logo or custom face	М	Consult factory for colors and minimums.











# Diaphragm Gauges

## VACUUM CLEANER TEST GAUGE

- Includes 2½" dial size gauge
- Dual Scale: in. H<sub>2</sub>O & kPa vacuum
- Complete with rubber plug to fit vacuum cleaner intake opening

Туре	82K
Range	Part No.
0 to 60" H20	G32426
0 to 100" H20	G24505
0 to 160" H20	G25759
0 to 200" H20	G26098

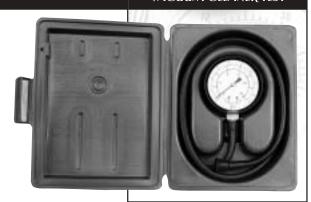


VACUUM CLEANER TEST

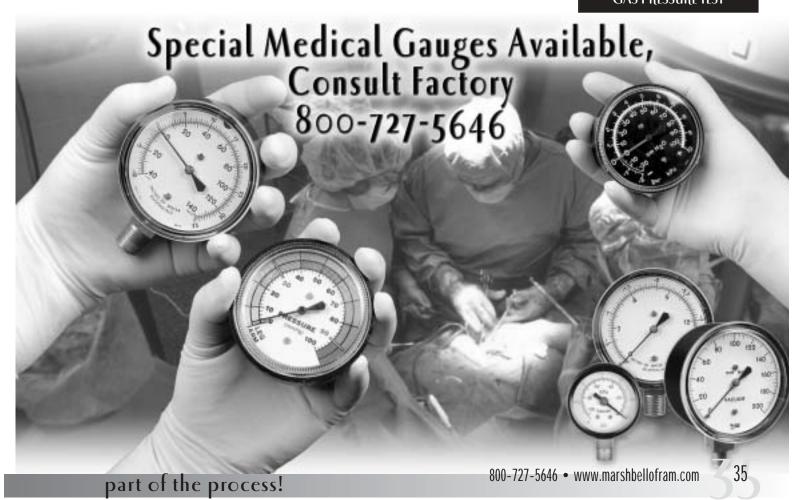
## GAS PRESSURE TEST SET

- Includes 2½" dial size gauge
- Triple Scale: Oz./in2, in. H2O & kPa
- Provided in grey polyethylene case with 3 ft. of rubber tubing

Туре		84K
Range		Part No.
0 to 8.75 oz/in <sup>2</sup>	0 to 15" H <sub>2</sub> 0	G28145
O to 20 oz/in²	0 to 35" H <sub>2</sub> 0	G24507
O to 58 oz/in <sup>2</sup>	0 to 100" H <sub>2</sub> 0	G27038



GAS PRESSURE TEST







- Recalibrator and Restrictor Standard
- Heavy Duty Brass Case
- Clam Shell Packaging Optional

Marsh Instruments Deluxe Serviceman Test Gauge is designed to assure the modern serviceman the best possible gauge for testing refrigeration equipment. Corresponding, easy-to-read temperature scales for R-12, R-22 or R-502 are printed in red on the inner arcs of the dial face.

#### STANDARD RANGES & PART NUMBERS

The state of the s	
SERVICEMAN TEST GAUGE	TYPE
SPECIFICATIONS	Size
ACCURACY	Mounting
ASME Grade B - ±3/2/3% (±2% of	Connection (NPT)
range across middle half of scale)	Case Material
CASE SIZE	Internals
2½" diameter	Scale
CASE MATERIAL	30" X 350 psi
Polished brass	30" X 350 psi
CASE STYLE	0 to 500 psi
LM - Lower Mount	0 to 500 psi
TUBE & SOCKET	Set of (2) W0070 & W0072
Copper Alloy	30" X 350 psi
MOVEMENT	30" X 350 psi
1	0 to 500 psi
Brass sector and pinion with recalibrator	0 to 500 psi
CONNECTION	

TYPE	SERVICEMAN'S TEST GAUGE			
Size	2½"			
Mounting	LM			
Connection (NPT)	1/8"			
Case Material	Brass			
Internals	Copper Alloy			
Scale	Temperature & Pressure			
30" X 350 psi	W0070 R-12, 22, 502 Carton			
30" X 350 psi	W00700	R-12, 22, 502	Clam Shell	
0 to 500 psi	W0072	R-12, 22, 502	Carton	
0 to 500 psi	W00720 R-12, 22, 502 Clam Shell			
Set of (2) W0070 & W0072	W0074 R-12, 22, 502 Carton Only			
30" X 350 psi	W8070	R-134a, 404A, 507	Carton	
30" X 350 psi	W80700	R-134a, 404A, 507	Clam Shell	
0 to 500 psi	W8072 R-134a, 404A, 507 Carton			
0 to 500 psi	W80720 R-134a, 404A, 507 Clam Shell			

POINTER
Aluminum, black painted
WINDOW
Beveled glass
PACKAGING
Optional clam shell packed gauges
are on 4¼" x 6%" cards,
prepunched for pegboard hanging

0-500 psi, 30" Hg VAC to 120 psi

psi with corresponding tempera-

Black markings on white with red

retarded to 350 psi DIAL STANDARD

temperature scales

½" NPT RANGES

ture scales
DIAL COLOR



- Recalibrator and Restrictor Standard
- Color Coded Cases, "Reds" & "Blues"
- Overpressure Protection to 350 psi

Marsh Instruments Manifold Gauges are used in refrigeration applications for testing, servicing, and recharging AC Systems. Dials feature R-12, R-22, and R-502.



#### STANDARD RANGES & PART NUMBERS

TYPE	HIGH-SIDE & LOW-SIDE MANIFOLD GAUGES				
Size	2½"				
Mounting	LM				
Connection (NPT)	1/8"				
Case Material	Steel				
Internals	Copper Alloy				
Scale	Temperature & Pressu	ire			
30" X 350 psi	W0011	W0011 R-12, 22, 502 Blue Carton			
30" X 350 psi	W00110	W00110 R-12, 22, 502 Blue Clam Shell			
0 to 500 psi	W0023	W0023 R-12, 22, 502 Red Carton			
0 to 500 psi	W00230 R-12, 22, 502 Red Clam Shell				
30" X 350 psi	W8011 R-134a, 404A & 507 Blue Carton				
30" X 350 psi	W8011Q R-134a, 404A & 507 Blue Clam Shell				
0 to 500 psi	W8023 R-134a, 404A & 507 Red Carton				
0 to 500 psi	W80230	R-134a, 404A & 507	Red	Clam Shell	

## MANIFOLD GAUGE

## **SPECIFICATIONS**

## ACCURACY

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

#### CASE SIZE

2½" diameter

#### CASE MATERIAL

Drawn steel, pretreated for rust resistance, red or blue enamel finish

# TUBE & SOCKET

Copper alloy

#### MOVEMENT

Brass sector and pinion with recalibrator

## CONNECTION

<u>%" NPT</u>

## RANGES

0-500 psi, 30" Hg VAC to 120 psi retarded to 350 psi

#### DIAL STANDARD

psi with corresponding temperature scales\_\_\_\_

## DIAL COLOR

Black markings on white with red temperature scales

## POINTER

Aluminum, black painted

## WINDOW

Impact resistant plastic

#### PACKAGING

Optional clam shell packed gauges are on 4¼" x 65%" cards,

prepunched for pegboard hanging





• Range 30" Hg to 150 psi or 300 psi

• Case Sizes: 63mm and 3½"

ASME Grade B

Marsh Refrigeration Ammonia Gauges are designed for use on ammonia compressors and other ammonia refrigeration equipment. Marsh Ammonia Gauges include a restrictor that protects the gauge against sudden shock or pulsating pressure. The inner dial arc shows pressure (psi/kPa), outer arc shows the corresponding temperature scale. Marsh Refrigeration Ammonia Gauges are available in plain stainless steel case.

# STANDARD RANGES & PART NUMBERS

TYPE	REFRIGERATION AMMONIA HVAC/R GAUGES			
Case Material	Stainless Steel			
Internals	Stainless Steel	Stainless Steel		
Size	63mm 3½"			
Mounting / Case Style	LM LM			
Connection (NPT)	1/4"	1/4"		
30" Hg VAC to 150psi	W0104	W0112		
30" Hg VAC to 150psi	W0104Q			
30" Hg VAC to 300psi	W0108 W0116			
30" Hg VAC to 300psi	W0108Q			

NOTE: \_\_\_\_\_Items are available on special order. However, minimums and lead times apply. Consult factory.

REFRIGERATION AMMONIA GAUGE OPTIONS			
OPTION	TYPE	SUFFIX	
Fill Medium	Glycerin (GL)	Р	All Models
	Silicone (SL)	PI	All Models
Custom Dials	Logo or Custom face	М	Consult factory for colors and minimums

# REFRIGERATION AMMONIA

# SPECIFICATIONS

ACCURACY

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

CASE SIZES

63mm and 3½" diameter

CASE MATERIAL

304 Stainless steel

CASE STYLE

LM - Lower Mount

TUBE & SOCKET

Stainless steel

MOVEMENT

Brass sector and pinion

CONNECTION

<u>1/4" NPT</u>

RANGES

Compound 30" Hg Vac to 150 psi or 30" Hg Vac to 300 psi

DIAL STANDARD

Dual scale psi and kPa with corresponding Ammonia

temperature scales

DIAL COLOR

Black markings on white

POINTER

Aluminum, black painted

WINDOW

Polycarbonate

RESTRICTORS

Standard

**PACKAGING** 

Optional clam shell packed gauges are on  $4\,\%$  X  $6\,\%$  " cards,

prepunched for pegboard hanging



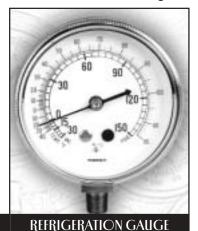
- Color Coded Dial
- Adjustable Pointer Standard

Marsh Refrigeration Gauges are designed specifically for use on refrigeration systems. Gauges are sturdily constructed and tested to give long, continuous, accurate service. In addition to the standard pressure or compound scale, dials also show the corresponding temperature scales for R-12, R-22, and R-502, in the various combinations shown in the chart below. Dial markings are sharp, clear and easy to read. Pressure and vacuum scales are printed in red.

# STANDARD RANGES & PART NUMBERS

TYPE	REFRIGERATION GAUGES	
Case Material	Plain Case	
Size	2½"	3½"
Connection (NPT)	1/8"	1/4"
Mounting	LM	LM
R-12		
30" Hg VAC 150psi	W0002	W0030
0 to 300psi	W0016	W0034
R-22		
30" Hg VAC to 150psi		W0032
R-12 & R-22		
30" Hg VAC 150psi		W0004
30" Hg VAC 300psi		W0012
0 to 300psi		W0018

NOTE: Items are available on special order. However, minimums and lead times apply. Consult factory.



**SPECIFICATIONS** 

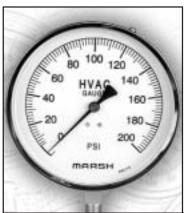
ACCURACY

ASME Grade B - ±3/2/3% (2% of range across middle half of scale) CASE SIZES 2½" and 3½" diameter CASE MATERIAL Drawn steel, pretreated for rust resistance, black enamel finish CASE STYLE LM - Lower Mount TUBE & SOCKET Copper alloy MOVEMENT Brass sector and pinion CONNECTION ½" or ¼" NPT RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR Black markings on white with red	AGGUKAGY
CASE SIZES 2½" and 3½" diameter  CASE MATERIAL Drawn steel, pretreated for rust resistance, black enamel finish  CASE STYLE LM - Lower Mount  TUBE & SOCKET Copper alloy  MOVEMENT Brass sector and pinion  CONNECTION ½" or ½" NPT  RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi  DIAL STANDARD psi with corresponding temperature scales  DIAL COLOR	ASME Grade B $-\pm 3/2/3\%$ (2% of
2½" and 3½" diameter  CASE MATERIAL Drawn steel, pretreated for rust resistance, black enamel finish  CASE STYLE LM - Lower Mount TUBE & SOCKET Copper alloy MOVEMENT Brass sector and pinion  CONNECTION ½" or ½" NPT  RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	range across middle half of scale)
CASE MATERIAL Drawn steel, pretreated for rust resistance, black enamel finish CASE STYLE LM - Lower Mount TUBE & SOCKET Copper alloy MOVEMENT Brass sector and pinion CONNECTION %" or %" NPT RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	CASE SIZES
Drawn steel, pretreated for rust resistance, black enamel finish  CASE STYLE  LM - Lower Mount  TUBE & SOCKET  Copper alloy  MOVEMENT  Brass sector and pinion  CONNECTION  %" or ¼" NPT  RANGES  Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi  DIAL STANDARD psi with corresponding temperature scales  DIAL COLOR	2½" and 3½" diameter
resistance, black enamel finish CASE STYLE LM - Lower Mount TUBE & SOCKET Copper alloy MOVEMENT Brass sector and pinion CONNECTION %" or ¼" NPT RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	CASE MATERIAL
CASE STYLE LM - Lower Mount TUBE & SOCKET Copper alloy MOVEMENT Brass sector and pinion CONNECTION %" or ¼" NPT RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	Drawn steel, pretreated for rust
LM - Lower Mount TUBE & SOCKET Copper alloy MOVEMENT Brass sector and pinion CONNECTION %" or ¼" NPT RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	resistance, black enamel finish
TUBE & SOCKET Copper alloy MOVEMENT Brass sector and pinion CONNECTION %" or ¼" NPT RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	CASE STYLE
Copper alloy MOVEMENT Brass sector and pinion CONNECTION ½" or ¼" NPT RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, O to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	LM – Lower Mount
MOVEMENT Brass sector and pinion CONNECTION ½" or ¼" NPT RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, O to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	TUBE & SOCKET
Brass sector and pinion  CONNECTION  "" or "" NPT  RANGES  Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi  DIAL STANDARD psi with corresponding temperature scales  DIAL COLOR	Copper alloy
CONNECTION %" or %" NPT  RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, O to 300 psi  DIAL STANDARD psi with corresponding temperature scales  DIAL COLOR	MOVEMENT
½" or ½" NPT RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	Brass sector and pinion
RANGES Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	CONNECTION
Compound 30" Hg Vac to 150 psi, 30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	<u>%" or 4" NPT</u>
30" Hg Vac to 300 psi, 0 to 300 psi DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	RANGES
O to 300 psi  DIAL STANDARD psi with corresponding temperature scales  DIAL COLOR	Compound 30" Hg Vac to 150 psi,
DIAL STANDARD psi with corresponding temperature scales DIAL COLOR	
psi with corresponding temperature scales DIAL COLOR	<u>0 to 300 psi</u>
scales DIAL COLOR	DIAL STANDARD
DIAL COLOR	psi with corresponding temperature
	scales
Black markings on white with red	DIAL COLOR
Diddik mannings on minis minis	Black markings on white with red

temperature scales

Aluminum, black painted,

**POINTER** 





- 4½" Dial
- Polished Stainless Steel Case
- Adjustable Pointer
- 1% Accuracy

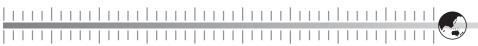
Marsh Instruments Contractor's HVAC Service Gauge is a newly redesigned gauge with a long-life movement to meet the needs of contractors in air conditioning, heating, plumbing and refrigeration. This rugged and reliable gauge is economically priced and offers many features normally found on more expensive gauges such as adjustable pointer, acrylic lens and polished stainless steel case.

#### STANDARD RANGES & PART NUMBERS

CONTRACTOR'S GAUGE "W"
SPECIFICATIONS
ACCURACY
ASME Grade A $-\pm 2/1/2\%$ (1% of
range across middle half of scale)
CASE SIZE
4½" diameter
CASE MATERIAL
Polished stainless steel
CASE STYLE
LM – Lower Mount
TUBE & SOCKET
Copper alloy
MOVEMENT
Brass sector and pinion
CONNECTION
<u>¼" NPT</u>
RANGES
Compound 30" Hg Vac to 160 psi;
30 to 600 psi
DIAL STANDARD
Single scale psi
DIAL COLOR
Black markings on white
POINTER
Aluminum, black painted,
adjustable
WINDOW
Acrylic

STANDARD RANGES & PART NUMBERS		
TYPE	CONTRACTOR'S HVAC GAUGES	
Size	41/2"	
Internals	Copper Alloy	
Mounting / Case Style	LM	
Connection (NPT)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Case Material	Polished Stainless Steel	
30" Hg VAC to 30psi	W0480	
30" Hg VAC to 160psi	W0487	
O to 30psi	W0481	
O to 60psi	W0483	
0 to 100psi	W0484	
0 to 160psi	W0486	
0 to 200psi	W0488	
0 to 300psi	W0490	
0 to 600psi	W0492	

CONTRACTOR GAUGE OPTIONS				
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS	
Restrictors	Push Fit .008 or .018	Н	all models	
Catalog dials	psi and kPa	W3	all models	
All other dials - consult factory for lead time			25 Piece minimum	



- Adjustable Set Hand
- Ranges to 300 psi and 690 Feet of Water
- 3½" and 4½" Dials

Marsh Instruments Heating System Gauges provide accurate psi and feet-of-water measurements in elevated tanks, reservoirs, standpipes, and similar applications where reliability and dependability are crucial in heating system equipment.



#### STANDARD RANGES & PART NUMBERS

ТҮРЕ	HEATING SYSTEM HVAC/R	GAUGES
Size	3½"	4½"
Mounting / Case Style	LM	LM
Connection (NPT)	1/4"	1/4"
0 to 30 ft H <sub>2</sub> 0		W0456
0 to 70 ft H <sub>2</sub> 0	W0450	W0457
0 to 100psi and 0 to 230 ft H <sub>2</sub> 0	W0451	W0458
0 to 150psi and 0 to 345 ft H <sub>2</sub> 0		W0459
0 to 160psi and 0 to 370 ft H <sub>2</sub> 0	W0452	
0 to 200psi and 0 to 460 ft H <sub>2</sub> 0	W0453	
0 to 300psi and 0 to 690 ft H <sub>2</sub> 0	W0454	W0460

NOTE: Items are available on special order. However, minimums and lead times apply. Consult factory.

STOCK OPTIONS			
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS
Restrictors	Special Restrictor	Н	All models
Custom Dials	Logo or Custom face	M	Consult factory for colors and minimums

## **HEATING SYSTEM SERIES "W"**

# SPECIFICATIONS ACCURACY

 $3\frac{1}{2}$ " ASME Grade B  $-\pm 3/2/3\%$  (2% of range across middle half of scale)

 $4\frac{1}{2}$ " ASME Grade A  $-\pm 2/1/2\%$  (1% of range across middle half of scale)

CASE SIZE

3% and 4% diameter

#### CASE MATERIAL

3½": Drawn steel pretreated for rust resistance, black enamel finish 4½": Aluminum back flange case, black enamel finish

## CASE STYLE

LM <u>- Lower Mount</u>

TUBE & SOCKET

# Copper alloy MOVEMENT

3½": Brass sector & pinion 4½": Stainless steel

#### CONNECTION

1/4" NPT

#### RANGES

Single Scale 30 to 70 ft.  $\rm H_2O$  Dual Scale 100 to 300 psi and 230 to 690 ft.  $\rm H_2O$ 

#### DIAL STANDARD

psi, ft. H<sub>2</sub>O and metric

#### DIAL COLOR

Black markings on white

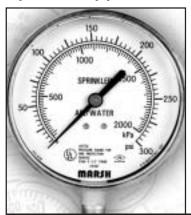
#### **POINTER**

Aluminum, black painted with red set hand

#### WINDOW

3½": Acrylic Clearlok 4½": Instrument Glass





- Polished Brass Case
- Dials Marked AIR/WATER
- UL Listed and FM Approved

Marsh Sprinkler Gauges offer outstanding dependability, and value. The Marsh Sprinkler Gauge is available in both dial ranges, O to 300 psi, and O to 80 retarded to 250 psi. Both ranges are available with the dial marked AIR or WATER for instant line identification by inspection and maintenance personnel.

#### STANDARD RANGES & PART NUMBERS

NKLER GAUGES
r Alloy
3

SPRINKLER GAUC	GE OPTIONS		
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS
Custom Dials	Logo or Custom face	M	Consult factory for colors and minimums

# SPRINKLER GAUGE

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

CASE SIZES 3½" diameter

CASE MATERIAL Polished brass

CASE STYLE

LM – Lower Mount

TUBE & SOCKET

Copper alloy

MOVEMENT

Brass CONNECTION

1/4" NPT

**RANGES** 

0 to 300 psi and 0 to 80 psi Retard to 250 psi

DIAL STANDARD Dual scale psi and kPa

All dials are marked AIR/WATER

DIAL COLOR

Black markings on white

POINTER

Aluminum, black painted

WINDOW

Impact resistant plastic



- Connects Directly to Standard Water Faucet or Hose
- Measures Commercial & Residential Water Pressure
- Dual Scale Dial is Standard

Marsh Water Test Gauge is designed to connect directly to a standard %" water faucet or hose. It is used to measure residential and commercial water pressure, also for selection and adjustment of valves, regulators, and other controls.

# TEST THE STATE OF THE STATE OF

## STANDARD RANGES & PART NUMBERS

TYPE	WATER TEST GAUGE
Size	2½"
Connection	Top hosebib
Range	0 · 300 psi & kPa
Part Number	G24545

## WATER TEST GAUGE

SPECIFICATIONS
ACCURACY ASME
Grade B $-\pm 3/2/3\%$ ( $\pm 2\%$ of range
across middle half of scale)
CASE SIZES
2½" diameter
CASE MATERIAL
Drawn steel case with baked black
enamel finish
CASE STYLE
Top mount
TUBE & SOCKET
Copper alloy
MOVEMENT
Brass sector and pinion with
CONNECTION
½" - 11½" NH Female hosebib
RANGES
<u>0 to 300 psi</u>
DIAL STANDARD
Dual scale psi and kPa
DIAL COLOR
Black markings on white
POINTER
Aluminum, black painted
WINDOW
Acrylic
OPTIONS
Other ranges are available - 25

piece minimum, Consult factory



- Hinged Ring Chrome Plated Steel Case
- Protective Weather Tight Seal
- Restrictor is Standard

Marsh Instrument Chrome Plated Paper Machine Gauges are available in nine ranges and fit existing panel cutouts. The heavy duty case features a front flanged/ hinged ring design which allows easy access to the recalibrator and a weephole that prevents condensation buildup. A restrictor is standard. The Marsh Paper Machine Gauge is available in 3½" size only. Each gauge has a weather-tight seal to protect against dust and atmospheric contaminates.

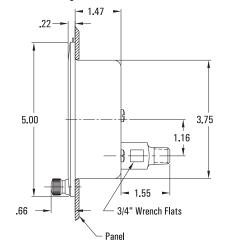
#### STANDARD RANGES & PART NUMBERS

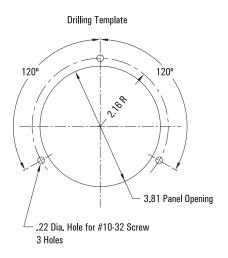
# PAPER MACHINE GAUGES **SPECIFICATIONS** ACCURACY ASME Grade A $-\pm 2/1/2\%$ ( $\pm 1\%$ of range across middle half of scale) CASE SIZES 3½" diameter CASE MATERIAL Chrome plated steel CASE STYLE LBM - Lower Back Mount TUBE & SOCKET Copper alloy MOVEMENT Stainless Steel with recalibrator CONNECTION 1/4" NPT RANGES 30 to 1,000 psi DIAL STANDARD Single scale psi DIAL COLOR Black markings on white POINTER Aluminum, black painted WINDOW Glass lens, chrome plated brass ring with weather-tight seal RESTRICTOR

STANDAND NANGES	& LANT NOMBERS
TYPE	PAPER MACHINE GAUGES
Size	3½"
Mounting / Case Style	LBM
Internals	Copper Alloy
Connection (NPT)	\( \lambda'' \)
Scale Standard	psi
O to 30psi	W6042
O to 60psi	W6046
0 to 100psi	W6048
0 to 160psi	W6052
0 to 200psi	W6054
0 to 300psi	W6058
0 to 400psi	W6060
0 to 600psi	W6064
0 to 1,000psi	W6072

PAPER MACI	HINE GAUGE OPTIONS		
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS
Restrictor	Special Restrictor	Н	
	No restrictor	H1	
Catalog Dials	bar only	L1	See Marsh Price List for minimum
	kg/cm <sup>2</sup> only	L2	
	kPa only	L3	1
	psi & bar	W1	1
	psi & kg/cm <sup>2</sup>	W2	]
	psi & kPa	W3	
	psi & MPa	W4	1
Custom Dials	Logo or custom face	M	Consult factory for colors and minimums

Paper Machine Gauge Dimensions





Standard



- Accuracy ±1%
- Polished Stainless Steel Case
- Ranges to 10,000 psi
- Adjustable Micrometer Pointer

Marsh Instruments has been on top of Xmas Trees and well-heads much longer than any other name. Marsh offers the same high-performance gauge for replacement. Other gauge manufacturers can state Xmas Tree Gauge on their products but only Marsh Instruments can offer you all the special features, and dependability, that you expect! Features include a polished stainless steel case with stainless steel tube, tip, and socket, and an easy to adjust micrometer pointer.

## STANDARD RANGES & PART NUMBERS

TYPE	X-TREE GAUGE
Size	4½"
Mounting / Case Style	LM
Connection (NPT)	\h <u>'</u> "
Case Material	Stainless Steel
Internals	Stainless Steel
Scale Standard	psi
0 to 1,000psi	W0574
0 to 1,500psi	W0578
0 to 2,000psi	W0582
0 to 3,000psi	W0586
0 to 5,000psi	W0590
0 to 10,000psi	W0594



A-MA3 IILL OAUGL
SPECIFICATIONS
ACCURACY
ASME Grade 1A $-\pm1\%$ ( $\pm1\%$ of
range across full scale)
CASE SIZES
4½" diameter
CASE MATERIAL
Polished stainless steel
CASE STYLE
LM – Lower Mount
with blowout plug
TUBE & SOCKET
Stainless Steel
MOVEMENT
Stainless Steel
CONNECTION
½" NPT
RANGES
1,000 to 10,000 psi
DIAL STANDARD
Single scale psi
DIAL COLOR
Black markings on white
POINTER
Aluminum, adjustable micrometer,
black painted
WINDOW & RING
Acrylic window with bayonet ring

# Parts & Accessories



#### PART# DESCRIPTION GAUGE COCK AND SYPHONS 111025 ¼" F x ¼"F Brass Gauge Cock (T-Handle #123) 111028 ¼" M union x ¼" F Brass Gauge Cock (Lever Handle #125) 111029 ¼"M x ¼"M Steel Straight Syphon (600psi @ 400°F) 111030 ¼"M x ¼"M Brass Straight Syphon (250psi @ 400°F) ¼"M x ¼"M Steel Angle Type Syphon (600psi @ 400°F) 111031 ¼"M x ¼"M Brass Angle Type Syphon (250psi @ 400°F) 111032 CLEARLOK (ACRYLIC) CONVEX WINDOW INTERNAL THREAD "G" Series Fig. 83 Diaphragm Gauges 124602 2½" for 83K & 83KC 127985 2½" for 83KB & 83KD 125448-001 3½" for all models (knurled edge) CLEARLOK (ACRYLIC) WINDOWS (INTERNAL THREAD) "J" SERIES 1½" for LM or CB W15CL 2" for LM or CB W20CL W20CLUC 2" for U-Clamp or Front Flange W25CL 2½" for LM or CB W25CLUC 2½" for U-Clamp or Front Flange W35CL 3½" for LM or CB W35CLUC 3½" for U-Clamp or Front Flange RESTRICTOR SCREWS A) %" & ¼" NPT Threaded Brass 8-40 100116-008 AIR (.008) 100116-013 WATER (.013) 100116-016 OIL (.016) RESTRICTOR SCREWS LARGE DIAL (D, E, H, & P) B) %" & %" NPT Threaded Brass M5 X 0.8 RESOO8BRLD AIR (.008) RES013BRLD WATER (.013) RES016BRLD OIL (.016) RESTRICTOR SCREWS LARGE DIAL (D, E, H, & P) C) $\frac{1}{4}$ " & $\frac{1}{2}$ " NPT Threaded 316 SST M5 X 0.8 All Apps. (.018) RES018SSLD RESTRICTOR SCREWS SERIES J, W, & X D) %", ¼" & ½" NPT Push-In Brass RES018PB "Standard" (.018) RES013PB AIR (.013) RES025PB WATER (.025) RESO40PB OIL (.040) RESTRICTOR SCREWS SERIES J, W, & X E) 1/4", 1/4" & 1/2" Push-In 316 SST RES018PBSS "Standard" (.018)

	PART#	DESCRIPTION			
_					
	FRONT FLA	NGE (3-HOLE) CASE & WINDOW ASS'Y FOR BACK			
	000555	CONNECT (CB) "J" Series Gauge			
	CS25FF W25CLUC				
	CS35FF				
	W35CLUC	3½" Window Assembly			
		en massamany			
		LIQUID FILL CONVERSION KIT			
	9-79999-93	Liquid Fill Kit			
e #125)	127656	Silicone, 1000 cs, 1 quart			
°F)	133426	Glycerin, 1 quart			
1°F)	<u> </u>				
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EDIEO					
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	MAX. HAND ASSEMBLY WITH THUMB SCREW				
	128300-001	2" Steel Case (J)			
	128300-004	2½" Steel Case (J)			
	128300-005	3½" Steel Case (J&W)			
	128311-001	3½" Large Dial (H)			
	128311-002	4½" Large Dial (D, H, & P)			
	1				
	<del> </del>	ALC: N			
	(A)				
		HAND JACK & DUPLEX HAND JACK			
	110983	Duplex Hand Jack/Driver Set			
	110983	I :			
	110985	Hand Jack (Pointer Remover)			
		AD HISTARIE (SLOTTER) ROLLITER			
	DTD20AD1	ADJUSTABLE (SLOTTED) POINTER			
	PTR20ADJ	Adjustable Pointer - 2"			
	PTR25ADJ	Adjustable Pointer - 2½"			
	PTR35ADJ	Adjustable Pointer - 3½"			
	PTR45ADJ	Adjustable Pointer - 4½"			
	1 1				

MICROMETER POINTER, LARGE DIAL SERIES

4½" Dial (D, H & P)

6" Dial (D, H & P)

PTRP45

PTRP60



#### PART# **DESCRIPTION** SEVERE SERVICE GAUGE ACCESSORIES 127794 Adapter ring, 63mm to 2½" Flange63 Front Flange for 63mm: C Case Flange 100 Front Flange for 100mm: C Case **CERTIFICATION FORMS** 134476 Material Certification 134477 Certificate of Conformance 134478 Certificate of Compliance 134479 Certificate of Origin 134480 Certificate of Calibration 134481 Certificate of Accuracy

PART#	DESCRIPTION	MEDIA	MAXIMUM PRESSURES
	IND	USTRIAL PRESSURE SNUBBEF	RS
S20BD	1/4" NPT, Brass	Heavy Oil	10,000 PSI
S20BE	1/4" NPT, Brass	Water & Light Oil	10,000 PSI
S20BG	1/4" NPT, Brass	Air & Gases	10,000 PSI
S20SD	1/4" NPT, 316SS	Heavy Oil	15,000 PSI
S20SE	1/4" NPT, 316SS	Water & Light Oil	15,000 PSI
S20SG	1/4" NPT, 316SS	Air & Gases	15,000 PSI
S40BD	1/2" NPT, Brass	Heavy Oil	10,000 PSI
S40BE	1/2" NPT, Brass	Water & Light Oil	10,000 PSI
S40BG	1/2" NPT, Brass	Air & Gases	10,000 PSI
S40SD	1/2" NPT, 316SS	Heavy Oil	15,000 PSI
S40SE	1/2" NPT, 316SS	Water & Light Oil	15,000 PSI
S40SG	1/2" NPT, 316SS	Air & Gases	15,000 PSI

# Diaphragm Seals



20-65-T HOOEL

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, or 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.

## 12000 DIAPHRAGM SEAL

## MODEL 12000 MINI SERVICEABLE RUBBER DIAPHRAGM SEAL

The Model 12000 Serviceable Mini Diaphragm Seal is designed for gauges and instruments with operating pressure of 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.

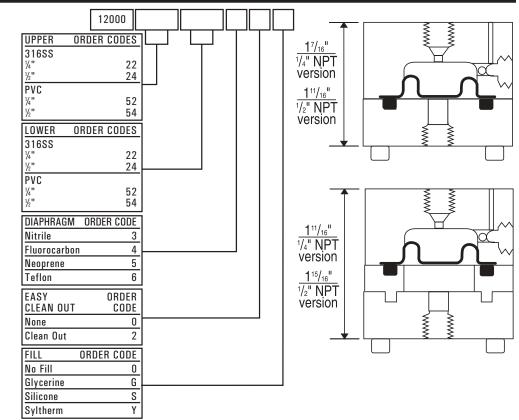


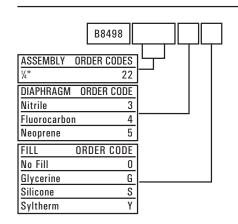
MODEL B8498 GAUGE PROTECTOR WITH RUBBER

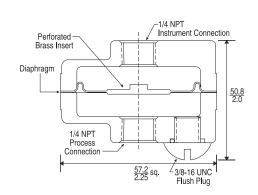
DIAPHRAGM SEAL

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  $\mbedsize{10}{10}^{10}$  threaded connections and chrome plated zinc construction. A  $\mbedsize{10}{10}^{10}$  flush plug is standard in the process side housing.

FILLED AND CALIBRATED TO GAUGES ONLY.

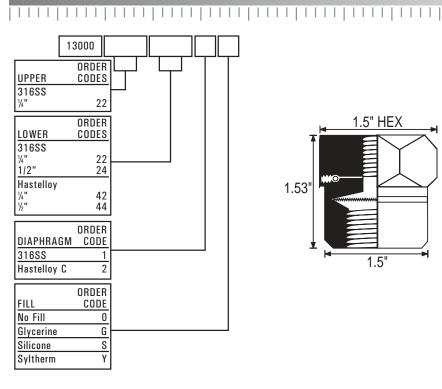


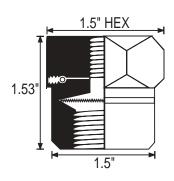


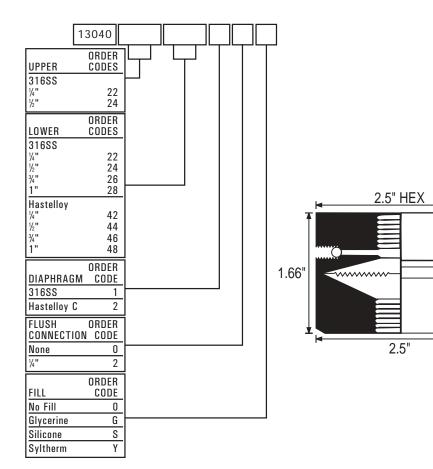


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# Diaphragm Seals









## 13000 DIAPHRAGM SEAL

## MODEL 13000 MINI / ALL WELDED DIAPHRAGM SEAL

The Model 13000 Mini Welded Seal is designed for 2" to 3½" bourdon tube gauges with a minimum pressure of 60 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.





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.

# Diaphragm Seals



# 14000 DIAPHRAGM SEAL

# MODEL 14000 REMOVABLE DIAPHRAGM SEAL

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.

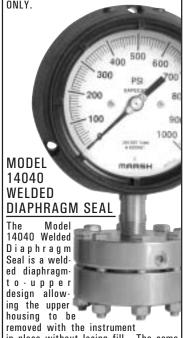
FILLED AND CALIBRATED TO GAUGES

No Fill

Glycerine

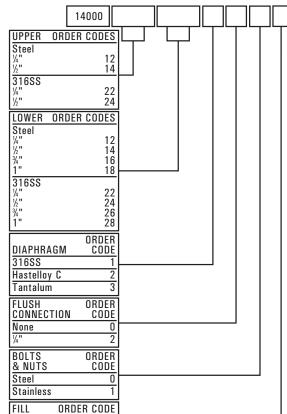
Silicone

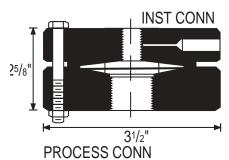
Syltherm



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





25/8" INST CONN
31/2"
PROCESS CONN

U

G

S

14040	
UPPER ORDER CODES Steel ¼" 12 ½" 14	
316SS ¼" 22 ½" 24	
LOWER ORDER CODES   Steel   12   14   3   16	
1" 18 316SS ¼" 22 ½" 24	
%" 26 1" 28 ORDER	
DIAPHRAGM         CODE           316SS         1           Hastelloy C         2           Tantalum         3	
FLUSH ORDER CONNECTION CODE None 0	
½"2BOLTS & NUTSORDER CODE	
Steel 0 Stainless 1	
No Fill 0 Glycerine G Silicone S	
Syltherm Y	