

# Process Gauges



## PROCESS GAUGE

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

Marsh Process Gauges are the industry standard 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.

Typical applications include chemical and petroleum chemical processes, compressors, power plants and oil platforms.



### SPECIFICATIONS

#### ACCURACY

ASME Grade 2A – ±0.5% of full scale

#### CASE SIZES

4½" and 6" diameter

#### CASE MATERIAL

Safecase polypropylene (turret style only) & safecase aluminum

#### CASE STYLE

4½": G – Back flanged case (aluminum)

H – Front flange hinged ring (aluminum)

T – Turret (polypropylene)

6": G – Back flanged case

#### TUBE & SOCKET

Copper alloy or 316 stainless steel

#### MOVEMENT

Stainless Steel

#### CONNECTION

¼" or ½" 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, black painted, micro-adjustable

#### 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

### STANDARD RANGES & PART NUMBERS

TYPE	PROCESS GAUGES					
	4½"			4"		
Size						
Case Material	Polypropylene			Polypropylene		
Internals	Copper Alloy			Stainless Steel		
Mounting	LM	LBM	LM	LBM	LM	LBM
Case Style	T	T	T	T	T	T
Connection	¼" NPT	¼" NPT	½" NPT	½" NPT	¼" NPT	¼" NPT
Scale Standard	psi	psi	psi	psi	psi	psi
0 to 30" Hg VAC	P0105	P0205	P0505	P0605	P5105	P5205
30" Hg VAC to 15 psi	P0110	P0210	P0510	P0610	P5110	P5210
30" Hg VAC to 30 psi	P0112	P0212	P0512	P0612	P5112	P5212
30" Hg VAC to 60 psi	P0114	P0214		P0614	P5114	P5214
30" Hg VAC to 100 psi	P0116	P0216	P0516	P0616	P5116	P5216
30" Hg VAC to 200 psi	P0120	P0220	P0520	P0620	P5120	P5220
30" Hg VAC to 300 psi	P0124	P0224	P0524	P0624	P5124	P5224
0 to 15 psi	P0140	P0240	P0540	P0640	P5140	P5240
0 to 30 psi	P0142	P0242	P0542	P0642	P5142	P5242
0 to 60 psi	P0146	P0246	P0546	P0646	P5146	P5246
0 to 100 psi	P0148	P0248	P0548	P0648	P5148	P5248
0 to 160 psi	P0152	P0252	P0552	P0652	P5152	P5252
0 to 200 psi	P0154	P0254	P0554	P0654	P5154	P5254
0 to 300 psi	P0158	P0258	P0558	P0658	P5158	P5258
0 to 400 psi	P0160	P0260	P0560	P0660	P5160	P5260
0 to 600 psi	P0164	P0264	P0564	P0664	P5164	P5264
0 to 1,000 psi	P0168	P0268	P0568	P0668	P5168	P5268
0 to 1,500 psi			P0574		P5174	P5274
0 to 2,000 psi			P0576		P5176	P5276
0 to 3,000 psi			P0578		P5178	P5278
0 to 5,000 psi			P0582		P5182	P5282
0 to 10,000 psi			P0590		P5190	P5290
0 to 15,000 psi					P5192	P5292
0 to 20,000 psi					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.





PROCESS GAUGES - STANDARD RANGES & PART NUMBERS												
TYPE	4½"				4½"				4½"			
Size	4½"				4½"				4½"			
Case Material	Polypropylene				Aluminum				Aluminum			
Internals	Stainless Steel				Copper Alloy				Stainless Steel			
Mounting	LM	LBM	LM	LM	LBM	LBM	LBM	LBM	LM	LM	LM	
Case Style	T	T	G	G	G	G	H	H	G	G	G	
Connection	½" NPT	½" NPT	¼" NPT	½" NPT	¼" NPT	½" NPT	¼" NPT	½" NPT	¼" NPT	½" NPT	½" NPT	
Scale Standard	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	
0 to 30" Hg VAC	P5605	P5705	P10005	P10505	P11005	P11505	P16005	P16505	P14005	P14505		
30" Hg VAC to 15 psi	P5610	P5710	P10010	P10510	P11010	P11510	P16010	P16510	P14010	P14510		
30" Hg VAC to 30 psi	P5612	P5712	P10012	P10512	P11012	P11512	P16012	P16512	P14012	P14512		
30" Hg VAC to 60 psi	P5614	P5714	P10014	P10514	P11014	P11514	P16014	P16514	P14014	P14514		
30" Hg VAC to 100 psi	P5616	P5716	P10016	P10516	P11016	P11516	P16016	P16516	P14016	P14516		
30" Hg VAC to 200 psi	P5620	P5720	P10020	P10520	P11020	P11520	P16020	P16520				
30" Hg VAC to 300 psi	P5624	P5724	P10024	P10524	P11024	P11524	P16024	P16524				
0 to 15 psi	P5640	P5740	P10040	P10540	P11040	P11540	P16040	P16540	P14040	P14540		
0 to 30 psi	P5642	P5742	P10042	P10542	P11042	P11542	P16042	P16542	P14042	P14542		
0 to 60 psi	P5646	P5746	P10046	P10546	P11046	P11546	P16046	P16546	P14046	P14546		
0 to 100 psi	P5648	P5748	P10048	P10548	P11048	P11548	P16048	P16548	P14048	P14548		
0 to 160 psi	P5652	P5752	P10052	P10552	P11052	P11552	P16052	P16552	P14052	P14552		
0 to 200 psi	P5654	P5754	P10054	P10554	P11054	P11554	P16054	P16554	P14054	P14554		
0 to 300 psi	P5658	P5758	P10058	P10558	P11058	P11558	P16058	P16558	P14058	P14558		
0 to 400 psi	P5660	P5760	P10060	P10560	P11060	P11560	P16060	P16560	P14060	P14560		
0 to 600 psi	P5664	P5764	P10064	P10564	P11064	P11564	P16064	P16564	P14064	P14564		
0 to 1,000 psi	P5668	P5768	P10068	P10568	P11068	P11568	P16068	P16568	P14068	P14568		
0 to 1,500 psi	P5674	P5774									P14574	
0 to 2,000 psi	P5676	P5776									P14576	
0 to 3,000 psi	P5678	P5778									P14578	
0 to 5,000 psi	P5682	P5782									P14582	
0 to 10,000 psi	P5690	P5790									P14590	
0 to 15,000 psi	P5692	P5792									P14592	
0 to 20,000 psi	P5694	P5794									P14594	

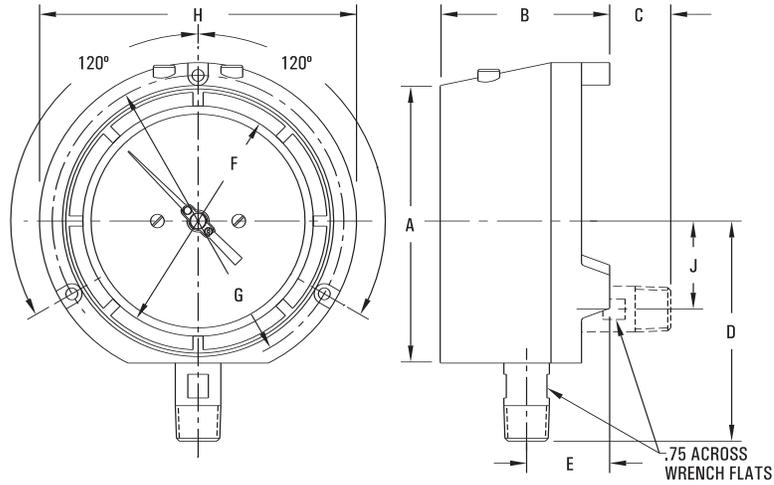
Size	4½"				6"				6"			
Case Material	Aluminum				Aluminum				Aluminum			
Internals	Stainless Steel				Copper Alloy				Stainless Steel			
Mounting	LBM	LBM	LBM	LBM	LM	LM	LBM	LBM	LM	LM	LBM	LBM
Case Style	G	G	H	H	G	G	G	G	G	G	G	G
Connection	¼" NPT	½" NPT	¼" NPT	½" NPT	¼" NPT	½" NPT	¼" NPT	½" NPT	¼" NPT	½" NPT	¼" NPT	½" NPT
Scale Standard	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi
0 to 30" Hg VAC	P15005	P15505	P18005	P18505	P20005	P20505	P21005	P21505	P24005	P24505	P25005	P25505
30" Hg VAC to 15 psi	P15010	P15510	P18010	P18510	P20010	P20510	P21010	P21510	P24010		P25010	P25510
30" Hg VAC to 30 psi	P15012	P15512	P18012	P18512	P20012	P20512	P21012	P21512	P24012	P24512	P25012	P25512
30" Hg VAC to 60 psi	P15014	P15514	P18014	P18514	P20014	P20514	P21014	P21514	P24014	P24514	P25014	P25514
30" Hg VAC to 100 psi	P15016	P15516	P18016	P18516	P20016	P20516	P21016	P21516	P24016	P24516	P25016	P25516
30" Hg VAC to 200 psi	P15020	P15520	P18020	P18520								
30" Hg VAC to 300 psi	P15024	P15524	P18024	P18524								
0 to 15 psi	P15040	P15540	P18040	P18540	P20040	P20540	P21040	P21540	P24040	P24540	P25040	P25540
0 to 30 psi	P15042	P15542	P18042	P18542	P20042	P20542	P21042	P21542	P24042	P24542	P25042	P25542
0 to 60 psi	P15046	P15546	P18046	P18546	P20046	P20546	P21046	P21546	P24046	P24546	P25046	P25546
0 to 100 psi	P15048	P15548	P18048	P18548	P20048	P20548	P21048	P21548	P24048	P24548	P25048	P25548
0 to 160 psi	P15052	P15552	P18052	P18552	P20052	P20552	P21052	P21552	P24052	P24552	P25052	P25552
0 to 200 psi	P15054	P15554	P18054	P18554	P20054	P20554	P21054	P21554	P24054	P24554	P25054	P25554
0 to 300 psi	P15058	P15558	P18058	P18558	P20058	P20558	P21058	P21558	P24058	P24558	P25058	P25558
0 to 400 psi	P15060	P15560	P18060	P18560	P20060	P20560	P21060	P21560	P24060	P24560	P25060	P25560
0 to 600 psi	P15064	P15564	P18064	P18564	P20064	P20564	P21064	P21564	P24064	P24564	P25064	P25564
0 to 1,000 psi	P15068	P15568	P18068	P18568	P20068	P20568	P21068	P21568	P24068	P24568	P25068	P25568
0 to 1,500 psi	P15074	P15574	P18074	P18574					P24074	P24574	P25074	P25574
0 to 2,000 psi	P15076	P15576	P18076	P18576					P24076	P24576	P25076	P25576
0 to 3,000 psi	P15078	P15578	P18078	P18578					P24078	P24578	P25078	P25578
0 to 5,000 psi	P15082	P15582	P18082	P18582					P24082	P24582	P25082	P25582
0 to 10,000 psi	P15090	P15590	P18090	P18590					P24090	P24590	P25090	P25590
0 to 15,000 psi	P15092	P15592	P18092	P18592					P24092	P24592	P25092	P25592
0 to 20,000 psi	P15094	P15594	P18094	P18594					P24094	P24594	P25094	P25594



# Process Gauges



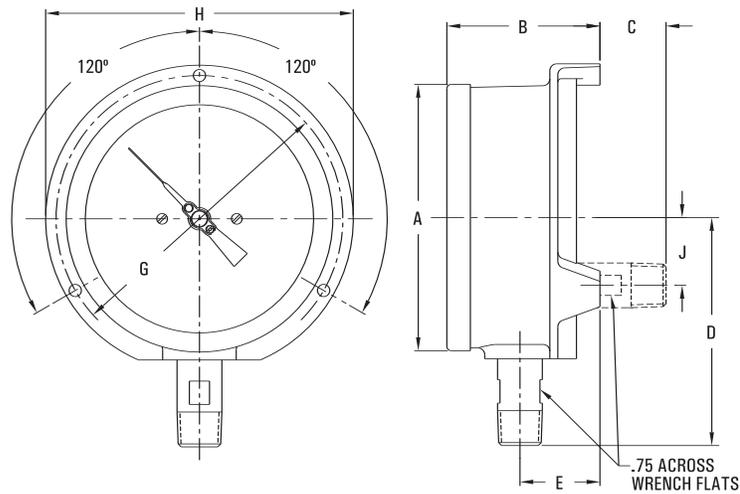
TURRET CASE



Turret Panel Mounting Holes	Size	A	B	C	D	E	F	G	H	J
0.22	4 1/2"	5.00	3.13	1.13	4.28	1.53	4.13	5.38	5.85	1.27



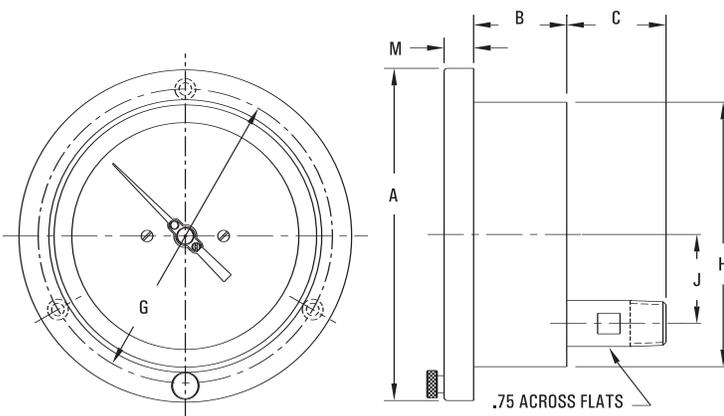
BACK FLANGE CASE



Back Flanged	Size	A	B	C	D	E	G	H	J	23
	4 1/2"	4.94	2.88	1.19	4.28	1.50	5.38	5.78	1.27	.23
	6"	6.63	2.88	1.19	4.97	1.50	7.00	7.50	1.27	.28



FRONT FLANGE CASE



Front Flanged Panel Mounting Holes	Size	A	B	C	G	H	J	M
0.23	4 1/2"	6.08	1.70	1.88	5.38	4.88	1.27	0.54





PROCESS GAUGE OPTIONS			
OPTION	TYPE	SUFFIX	AVAILABLE ON MODELS
Restrictors	Add restrictor	H	All ranges
Fill Medium	Glycerine (GL)	P	4½" Lower Mount only (all ranges)
	Silicone (SL)	PI	4½" Lower Mount only (all ranges)
Catalog Dials	bar only	L1	See Marsh Price List for minimum
	kg/cm² only	L2	
	kPa only	L3	
	MPa only	L4	
	psi & bar	W1	
	psi & kg/cm²	W2	
	psi & kPa	W3	
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	M	Consult factory for colors and minimums.

NOTE: 4½" Lower back mount, 6" Lower mount and 6" Lower back are not fillable (only available dry).



Dial Divisions	Process Gauge Series "P" 0.5% of Span		
Ranges	Figure Intervals	Minor Graduations	
Vacuum	3	0.2	
<b>COMPOUND</b>			
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
<b>PRESSURE</b>			
0 to 15 psi	1	0.1	
0 to 30 psi	5	0.2	
0 to 60 psi	5	0.5	
0 to 100 psi	10	1	
0 to 160 psi	20	1	
0 to 200 psi	20	2	
0 to 300 psi	50	2	
0 to 400 psi	50	2	
0 to 600 psi	50	5	
<b>HIGH PRESSURE</b>			
0 to 1,000 psi	100	10	
0 to 1,500 psi	300	10	
0 to 2,000 psi	200	20	
0 to 3,000 psi	500	20	
0 to 4,000 psi	500	20	
0 to 5,000 psi	500	50	
0 to 6,000 psi	1,000	50	
0 to 10,000 psi	1,000	100	
0 to 15,000 psi	3,000	100	
0 to 20,000 psi	2,000	200	