

We've been in the pressure gauge business for more than 35 years, so we've learned a trick or two! Special dials, ranges, case materials... No Problem! We work with a network of gauge manufacturers, each with their particular expertise to complement our own.



	Prices Start at	See Page
<b>Differential Pressure Gauges</b>		
Dwyer Magnehelic® Ultra Low Differential Pressure Gauges	\$63.50	437
Dwyer Photohelic® Indicating DP Gauges with High and Low Alarm	\$247.00	437
Mid-West Instrument Differential Pressure Gauges	\$215.00	439
Mid-West Instrument Differential Pressure Indicators for OEM Use	Call	438
Mid-West Instrument Model 120/122 Filter Minder Gauges	\$119.00	438
WIKA Air2Guide Low Pressure Differential Pressure Gauges	\$65.00	440
<b>General Service Pressure Gauges</b>		
U S Gauge P500 Low Cost Drawn Steel and Brass Gauges	\$5.20	420
U S Gauge P590 ABS Plastic and Brass Gauges	\$18.72	421
U S Gauge P844U/P845FF/P562U Panel Mount Gauges	\$20.93	422
WIKA 111.10 General Service Drawn Steel Case Gauges	\$11.11	421
<b>Liquid-Filled/Liquid Fillable Pressure Gauges</b>		
U S Gauge 1550 Series 1.5" to 4" Stainless Steel Liquid Filled Gauges	\$21.72	424
U S Gauge 656 Series 2.5" or 4" Stainless Steel Liquid Fillable Gauges	\$45.05	425
WIKA 213.53 2.5" Liquid Fillable Industrial Gauges	\$17.91	426
<b>Process Gauges</b>		
U S Gauge 1929, 1931, 1980 Series Solid Front Process Gauges	\$100.30	427
<b>Sanitary Gauges</b>		
Chicago Stainless Equipment 3.5" and 5" Sanitary Gauges	\$292.00	428
<b>Special Service Gauges</b>		
Cecomp DPG1000 Series High Accuracy Digital Pressure Gauges	\$279.00	429
U S Gauge 1409 Series Portable 3" Test Gauges	\$169.26	430
U S Gauge 5105 HVAC Contractor's Gauge	\$21.96	431
U S Gauge P601/P612 Welding and Compressed Gas Regulator Gauges	\$29.85	430
U S Gauge P734 Low Pressure Diaphragm Gauges	\$58.90	431
U S Gauge P1521/1522 Miniature Stainless Steel Gauges for Harsh Media	\$47.10	423
U S Gauge P1535 Stainless Steel Pressure Gauges	\$133.71	430
U S Gauge PT1088 Pressure/Temperature Gauges for Boiler Service	\$34.26	430
WIKA 111.10SP Sprinkler System Gauges	\$9.51	431
WIKA 611.10 Low Pressure Diaphragm Gauges	\$39.81	431
WIKA CPG1000 Digital High Accuracy Test Gauge	\$745.00	433
WIKA DG-10 Digital Gauges for General Industrial Applications	\$300.00	429
WIKA PGT23 Stainless Steel IntelliGauge with Electrical Output	\$292.37	432
<b>Accessories</b>		
Anderson Greenwood H7 Metal Seat Hand Valves	\$26.87	436
Capillary and Coil Syphons	\$4.42	436
Mid-West Instrument Pressure Snubbers and Limiting Valves	\$30.00	436
WIKA Liquid Filled Chemical Seals for Pressure Gauges	Call	434



Prices in this catalog are current at the publication date, and are subject to change without notice.

Combustion Safety and Efficiency

Process Control Accessories

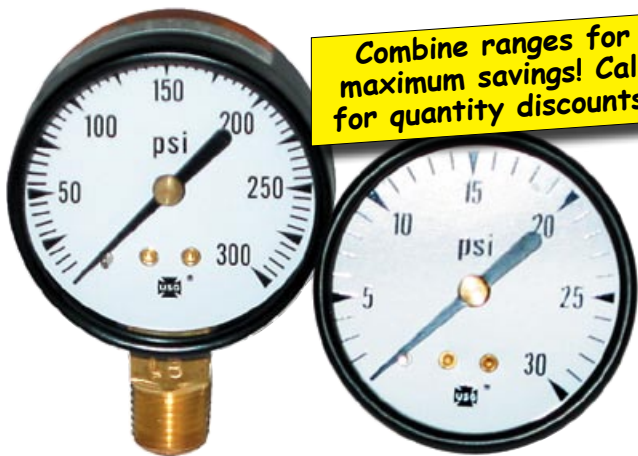
Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

Thermometers

# 500 Series General Service Pressure Gauges



**Combine ranges for maximum savings! Call for quantity discounts!**

### Specifications

- Accuracy:** ±3-2-3% of span
- Window:** Flat glass, except 1.5" (plastic); Plastic lenses available for all sizes
- Case and Ring (friction fit):** Drawn steel, black corrosion-resistant paint
- Socket and Movement:** Brass
- Bourdon Tube:** Phosphor bronze, soft soldered
- Connection:** 1/8" or 1/4" ANPT



Range	Dial Size	Catalog Number	1-11	Quantity 12-24	Quantity 25+
<b>1/4" NPT Bottom Connection</b>					
30"HgVac	2.5"	171222A	\$8.52	\$8.22	\$7.61
30"-15 PSI	2.5"	47001A	8.52	8.22	7.61
30"-30 PSI	2.5"	47105A	8.52	8.22	7.61
30"-60 PSI	2.5"	46646A	8.52	8.22	7.61
30"-150 PSI	2.5"	47411A	8.52	8.22	7.61
30"-300 PSI	2.5"	58156A	8.52	8.22	7.61
0-15 PSI	2.5"	47102A	8.52	8.22	7.61
0-30 PSI	2.5"	163278	8.52	8.22	7.61
0-60 PSI	2.5"	163279	8.52	8.22	7.61
0-100 PSI	2.5"	163280	8.52	8.22	7.61
0-160 PSI	2.5"	163281	8.52	8.22	7.61
0-200 PSI	2.5"	163282	8.52	8.22	7.61
0-300 PSI	2.5"	163283	8.52	8.22	7.61
0-400 PSI	2.5"	49611A	8.52	8.22	7.61
0-600 PSI	2.5"	46648A	8.52	8.22	7.61
0-1000 PSI	2.5"	47496A	8.52	8.22	7.61
30"HgVac	3.5"	171223A	9.57	9.23	8.55
30"-15 PSI	3.5"	5493A	9.57	9.23	8.55
30"-30 PSI	3.5"	5495A	9.57	9.23	8.55
30"-150 PSI	3.5"	5499A	9.57	9.23	8.55
30"-300 PSI	3.5"	15936A	9.57	9.23	8.55
0-15 PSI	3.5"	5502A	9.57	9.23	8.55
0-30 PSI	3.5"	168536	9.57	9.23	8.55
0-60 PSI	3.5"	168537	9.57	9.23	8.55
0-100 PSI	3.5"	168538	9.57	9.23	8.55
0-160 PSI	3.5"	168539	9.57	9.23	8.55
0-200 PSI	3.5"	168540	9.57	9.23	8.55
0-300 PSI	3.5"	168541	9.57	9.23	8.55
0-400 PSI	3.5"	5515A	9.57	9.23	8.55
0-600 PSI	3.5"	5516A	9.57	9.23	8.55
0-1000 PSI	3.5"	5519A	9.57	9.23	8.55
30"HgVac	4.5"	5333A	15.57	15.02	13.90
30"-30 PSI	4.5"	5549A	15.57	15.02	13.90
30"-60 PSI	4.5"	12290A	15.57	15.02	13.90
30"-150 PSI	4.5"	12292A	15.57	15.02	13.90
0-30 PSI	4.5"	5804A	15.57	15.02	13.90
0-60 PSI	4.5"	5551A	15.57	15.02	13.90
0-100 PSI	4.5"	5554A	15.57	15.02	13.90
0-160 PSI	4.5"	5559A	15.57	15.02	13.90
0-200 PSI	4.5"	5561A	15.57	15.02	13.90
<b>1/4" NPT Center Back Connection</b>					
0-15 PSI	2"	46987A	5.20	5.02	4.64
0-30 PSI	2"	163949	5.20	5.02	4.64
0-60 PSI	2"	163272	5.20	5.02	4.64
0-100 PSI	2"	163273	5.20	5.02	4.64
0-160 PSI	2"	163274	5.20	5.02	4.64
0-200 PSI	2"	163275	5.20	5.02	4.64
0-300 PSI	2"	163276	5.20	5.02	4.64
0-60 PSI	2.5"	165214	8.52	8.22	7.61
0-100 PSI	2.5"	163284	8.52	8.22	7.61
0-160 PSI	2.5"	163285	8.52	8.22	7.61
0-200 PSI	2.5"	163286	8.52	8.22	7.61
0-600 PSI	2.5"	50851A	8.52	8.22	7.61
0-1000 PSI	2.5"	50870A	8.52	8.22	7.61

Range	Dial Size	Catalog Number	1-11	Quantity 12-24	Quantity 25+
<b>1/8" NPT Bottom Connection</b>					
30"HgVac	1.5"	146020A	\$6.60	\$6.36	\$5.89
0-15 PSI	1.5"	146000A	6.60	6.36	5.89
0-30 PSI	1.5"	166327	6.60	6.36	5.89
0-60 PSI	1.5"	146002A	6.60	6.36	5.89
0-100 PSI	1.5"	166318	6.60	6.36	5.89
0-160 PSI	1.5"	146004A	6.60	6.36	5.89
0-200 PSI	1.5"	166777	6.60	6.36	5.89
0-300 PSI	1.5"	146006A	6.60	6.36	5.89
30"HgVac	2"	47225A	5.20	5.02	4.64
30"HgVac-15 PSI	2"	66662A	5.20	5.02	4.64
30"HgVac-60 PSI	2"	47925A	5.20	5.02	4.64
30"HgVac-150 PSI	2"	49609A	5.20	5.02	4.64
0-15 PSI	2"	52420A	5.20	5.02	4.64
0-30 PSI	2"	163931	5.20	5.02	4.64
0-60 PSI	2"	164005	5.20	5.02	4.64
0-100 PSI	2"	163271	5.20	5.02	4.64
0-160 PSI	2"	48302A	5.20	5.02	4.64
0-200 PSI	2"	46645A	5.20	5.02	4.64
0-300 PSI	2"	48363A	5.20	5.02	4.64
0-160 PSI	2.5"	48536A	8.52	8.22	7.61
0-200 PSI	2.5"	50852A	8.52	8.22	7.61
0-300 PSI	2.5"	46647A	8.52	8.22	7.61
<b>1/8" NPT Center Back Connection</b>					
30"HgVac	1.5"	146021A	6.60	6.36	5.89
0-15 PSI	1.5"	146010A	6.60	6.36	5.89
0-30 PSI	1.5"	166320	6.60	6.36	5.89
0-60 PSI	1.5"	166321	6.60	6.36	5.89
0-100 PSI	1.5"	166322	6.60	6.36	5.89
0-160 PSI	1.5"	166323	6.60	6.36	5.89
0-200 PSI	1.5"	146015A	6.60	6.36	5.89
0-30 PSI	2"	163930	5.20	5.02	4.64
0-60 PSI	2"	55155A	5.20	5.02	4.64
0-100 PSI	2"	46776A	5.20	5.02	4.64
0-160 PSI	2"	70791A	5.20	5.02	4.64
0-200 PSI	2"	102673A	5.20	5.02	4.64
0-300 PSI	2"	51805A	5.20	5.02	4.64
<b>1/4" NPT Bottom Connection</b>					
30"HgVac	2"	163712	5.20	5.02	4.64
30"HgVac-30 PSI	2"	167218	5.20	5.02	4.64
0-15 PSI	2"	47615A	5.20	5.02	4.64
0-30 PSI	2"	163149	5.20	5.02	4.64
0-60 PSI	2"	163269	5.20	5.02	4.64
0-100 PSI	2"	162988	5.20	5.02	4.64
0-160 PSI	2"	163270	5.20	5.02	4.64
0-200 PSI	2"	163147	5.20	5.02	4.64
0-300 PSI	2"	163148	5.20	5.02	4.64
0-1000 PSI	2"	47494A	5.20	5.02	4.64

Combustion Safety and Efficiency

Process Control Accessories

Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

Thermometers

# 111.10 Steel Case General Service Gauges

## Specifications

**Accuracy:** ±3-2-3% of span per ASME B40.100 Grade B

**Window:** Crystal-clear plastic, snap-fit

**Case:** Black painted steel

**Dial:** White plastic with stop pin, black lettering (dual scale black/red lettering)

**Movement:** Copper alloy

**Bourdon Tube:** Copper alloy; 30" HgVac – 600 PSI: C-type; 800–6000 PSI: Helical type

**Connection:** 1/8" or 1/4" NPT copper alloy bottom stem or center back mount

**Operating Temperature:** Ambient: -40° to 140°F; Media: 140°F max.

## Model Selection Guide

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>111.10 Series: 1/8" NPT Bottom Stem Mount, Single Scale (PSI)</b>				
30" Hg	1.5"	50331841	\$13.38	\$12.55
15 PSI	1.5"	50630695	11.11	10.42
30 PSI	1.5"	50331787	11.11	10.42
60 PSI	1.5"	50331761	11.11	10.42
100 PSI	1.5"	50331884	11.11	10.42
160 PSI	1.5"	50331698	11.11	10.42
200 PSI	1.5"	50369377	11.11	10.42
30" Hg	2"	4302141	12.63	11.84
15 PSI	2"	4302150	11.16	10.46
30 PSI	2"	4302168	11.16	10.46
60 PSI	2"	9835695	11.16	10.46
100 PSI	2"	9798331	11.16	10.46
160 PSI	2"	8991669	11.16	10.46
200 PSI	2"	4302176	11.16	10.46
300 PSI	2"	4302184	11.16	10.46

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>111.10 Series: 1/4" NPT Bottom Stem Mount, Single Scale (PSI)</b>				
30" Hg	2"	4302192	12.63	11.84
15 PSI	2"	4302206	11.16	10.46
30 PSI	2"	4302214	11.16	10.46
60 PSI	2"	4302222	11.16	10.46
100 PSI	2"	4302231	11.16	10.46
160 PSI	2"	4302249	11.16	10.46
200 PSI	2"	4302257	11.16	10.46
300 PSI	2"	4302265	11.16	10.46
400 PSI	2"	4302273	11.16	10.46
600 PSI	2"	4302281	11.16	10.46
30" Hg	2.5"	4302397	14.67	13.75
15 PSI	2.5"	4302401	12.36	11.58
30 PSI	2.5"	4302443	12.36	11.58
60 PSI	2.5"	8991138	12.36	11.58
100 PSI	2.5"	8991146	12.36	11.58
160 PSI	2.5"	4302419	12.36	11.58
200 PSI	2.5"	8991162	12.36	11.58
300 PSI	2.5"	4302427	12.36	11.58
400 PSI	2.5"	4302435	12.36	11.58
600 PSI	2.5"	8991189	12.36	11.58



**2.5" bottom stem mount models also available in dual scale ranges.**

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>111.11 Series: 1/8" NPT Center Back Stem Mount, Single Scale (PSI)</b>				
30" Hg	1.5"	4301838	14.14	13.25
15 PSI	1.5"	4301846	11.56	10.83
30 PSI	1.5"	4234090	11.56	10.83
60 PSI	1.5"	4301854	11.56	10.83
100 PSI	1.5"	4301862	11.56	10.83
160 PSI	1.5"	4233395	11.56	10.83
200 PSI	1.5"	4301871	11.56	10.83
30" Hg	2"	4301927	13.60	12.75
15 PSI	2"	4301935	11.29	10.58
30 PSI	2"	4301943	11.29	10.58
60 PSI	2"	4301951	11.29	10.58
100 PSI	2"	4301960	11.29	10.58
160 PSI	2"	4301978	11.29	10.58
200 PSI	2"	4301986	11.29	10.58
300 PSI	2"	4301994	11.29	10.58
<b>111.11 Series: 1/4" NPT Center Back Stem Mount, Single Scale (PSI)</b>				
30" Hg	2"	4302001	13.60	12.75
15 PSI	2"	4302010	11.29	10.58
30 PSI	2"	4302028	11.29	10.58
60 PSI	2"	4302036	11.29	10.58
100 PSI	2"	4302044	11.29	10.58
160 PSI	2"	4302052	11.29	10.58
200 PSI	2"	4302061	11.29	10.58
300 PSI	2"	4302079	11.29	10.58
400 PSI	2"	4302087	11.29	10.58
600 PSI	2"	4302095	11.29	10.58
30" Hg	2.5"	4302290	15.38	14.42
15 PSI	2.5"	4302303	13.07	12.25
30 PSI	2.5"	4302311	13.07	12.25
60 PSI	2.5"	4302320	13.07	12.25
100 PSI	2.5"	4302338	13.07	12.25
160 PSI	2.5"	4302346	13.07	12.25
200 PSI	2.5"	4302354	13.07	12.25
300 PSI	2.5"	4302362	13.07	12.25
400 PSI	2.5"	4302371	13.07	12.25
600 PSI	2.5"	4302389	13.07	12.25

## P590 ABS Plastic Case Gauges



### Specifications

**Accuracy:** ±3-2-3% span

**Materials:** ABS plastic weather-resistant case, polycarbonate lens; brass movement; Beryllium copper or phosphor bronze bourdon tube

**Call for P590 gauges with center back connections.**

### Model Selection Guide

Range	Dial Size	Process Connection	Catalog Number	Quantity	
				1-11	12-24
<b>P590 ABS Plastic Case Gauge: Lower Male Brass Connection</b>					
0-15 PSI	1.5"	1/8" ANPT	146989A	\$22.59	\$21.09
0-30 PSI	1.5"	1/8" ANPT	146990A	22.59	21.09
0-60 PSI	1.5"	1/8" ANPT	146991A	22.59	21.09
0-100 PSI	1.5"	1/8" ANPT	146992A	22.59	21.09
0-160 PSI	1.5"	1/8" ANPT	146993A	22.59	21.09
0-30 PSI	2"	1/4" ANPT	160652A	18.72	17.47
0-60 PSI	2"	1/4" ANPT	160653A	18.72	17.47
0-100 PSI	2"	1/4" ANPT	160654A	18.72	17.47
0-160 PSI	2"	1/4" ANPT	160655A	18.72	17.47
0-200 PSI	2"	1/4" ANPT	160656A	18.72	17.47
0-300 PSI	2"	1/4" ANPT	160657A	18.72	17.47

# Panel Mount Gauges



### Specifications

**Dial Size:** 2", 2.5", 3.5"

**Case:** P844U: Drawn steel with studs, U-clamp and nuts; black corrosion-resistant paint, furnished with 2-piece U-clamp and nuts. P845FF: Drawn steel with 3-hole flange, black corrosion-resistant paint.

**Ring and Window:** Threaded, polycarbonate

**Movement:** Brass

**Bourdon Tube:** Pressure ranges above 15 PSI up to and including 1000 PSI are phosphor bronze, soft soldered. Vacuum, 15 PSI and ranges above 1000 PSI are beryllium copper, soft soldered up to and including 2000 PSI and silver brazed above 2000 PSI.

**Accuracy:** ±3-2-3% of span

### Model Selection Guide

Range	Dial Size	Catalog Number	1-4	5-11	12+
<b>P845FF Front Flange Panel Mount: 1/8" NPT Center Back Connection</b>					
30" HgVac-0	2"	164439	\$21.78	\$20.33	\$18.88
0-30 PSI	2"	164441	21.78	20.33	18.88
0-60 PSI	2"	164442	21.78	20.33	18.88
0-100 PSI	2"	164443	21.78	20.33	18.88
0-160 PSI	2"	164445	21.78	20.33	18.88
0-300 PSI	2"	164446	21.78	20.33	18.88
0-600 PSI	2"	164448	21.78	20.33	18.88
30" HgVac-0	2.5"	164449	25.01	23.34	21.67
0-15 PSI	2.5"	164450	25.01	23.34	21.67
0-30 PSI	2.5"	164451	25.01	23.34	21.67
0-60 PSI	2.5"	164452	25.01	23.34	21.67
0-100 PSI	2.5"	164453	25.01	23.34	21.67
0-160 PSI	2.5"	164454	25.01	23.34	21.67
0-200 PSI	2.5"	164455	25.01	23.34	21.67
0-300 PSI	2.5"	164456	25.01	23.34	21.67
0-600 PSI	2.5"	164458	25.01	23.34	21.67
<b>P845FF Front Flange Panel Mount: 1/4" NPT Center Back Connection</b>					
30" HgVac-0	3.5"	138052A	51.21	47.79	44.38
0-15 PSI	3.5"	138053A	51.21	47.79	44.38
0-30 PSI	3.5"	138054A	51.21	47.79	44.38
0-60 PSI	3.5"	138055A	51.21	47.79	44.38
0-100 PSI	3.5"	138056A	51.21	47.79	44.38
0-200 PSI	3.5"	138057A	51.21	47.79	44.38
0-300 PSI	3.5"	138058A	51.21	47.79	44.38
0-600 PSI	3.5"	138059A	51.21	47.79	51.21

Range	Dial Size	Catalog Number	1-4	5-11	12+
<b>P844U U-Clamp Panel Mount: 1/8" NPT Center Back Connection</b>					
30" HgVac-0	2"	164415	\$20.93	\$19.53	\$18.14
0-15 PSI	2"	164416	20.93	19.53	18.14
0-30 PSI	2"	164417	20.93	19.53	18.14
0-60 PSI	2"	164418	20.93	19.53	18.14
0-100 PSI	2"	164419	20.93	19.53	18.14
0-160 PSI	2"	164420	20.93	19.53	18.14
0-300 PSI	2"	164422	20.93	19.53	18.14
0-600 PSI	2"	164424	20.93	19.53	18.14
30" HgVac-0	2.5"	164425	24.53	22.89	21.26
0-15 PSI	2.5"	164426	24.53	22.89	21.26
0-30 PSI	2.5"	164427	24.53	22.89	21.26
0-60 PSI	2.5"	164428	24.53	22.89	21.26
0-100 PSI	2.5"	164429	24.53	22.89	21.26
0-160 PSI	2.5"	164430	24.53	22.89	21.26
0-200 PSI	2.5"	164431	24.53	22.89	21.26
0-300 PSI	2.5"	164432	24.53	22.89	21.26
0-600 PSI	2.5"	164434	24.53	22.89	21.26
<b>P844U U-Clamp Panel Mount: 1/4" NPT Center Back Connection</b>					
0-1000 PSI	2.5"	164435	24.53	22.89	21.26
0-3000 PSI	2.5"	164437	24.53	22.89	21.26
30" HgVac-0	3.5"	138024A	51.05	47.64	44.24
0-15 PSI	3.5"	138025A	51.05	47.64	44.24
0-30 PSI	3.5"	138026A	51.05	47.64	44.24
0-60 PSI	3.5"	138027A	51.05	47.64	44.24
0-100 PSI	3.5"	138028A	51.05	47.64	44.24
0-200 PSI	3.5"	138029A	51.05	47.64	44.24
0-300 PSI	3.5"	138030A	51.05	47.64	44.24
0-600 PSI	3.5"	138031A	51.05	47.64	44.24

**Need a range not shown? Just call.**

## Miniature Panel Mount Gauges

### Specifications

**Accuracy:** ±3-2-3% of span

**Movement:** Brass

**Window:** Polycarbonate

**Case:** Drawn steel with studs, black corrosion-resistant paint, with zinc-plated U-clamp and nuts. Breakaway clamp permits adjustment for panel thickness up to 0.14"

**Dial:** 1.5", steel, cupped, white background with black markings. Aluminum pointer with black finish

**Ring:** Brass, threaded, chrome-plated finish

**Bourdon Tube:** Vacuum to 15 PSI: Beryllium copper, soft soldered; 15 to 600 PSI: Phosphor bronze, soft soldered; 600 PSI and Higher: Beryllium copper, silver brazed



### Model Selection Guide

Range	Dial Size	Catalog Number	1-11	12-24
<b>P562 U-Clamp Panel Mount: 1/8" ANPT Center Back Mount, Brass</b>				
30" HgVac-0	1.5"	146245A	\$42.28	\$39.46
0-15 PSI	1.5"	146243A	42.28	39.46
0-30 PSI	1.5"	146244A	42.28	39.46
0-60 PSI	1.5"	146246A	42.28	39.46
0-100 PSI	1.5"	146259A	42.28	39.46
0-160 PSI	1.5"	146260A	42.28	39.46
0-300 PSI	1.5"	146291A	42.28	39.46
0-600 PSI	1.5"	266296A	42.28	39.46
0-2000 PSI	1.5"	146900A	42.28	39.46

# Miniature Stainless Steel Pressure Gauges for Harsh Media



## Features

- Withstands corrosive media and atmospheres
- Pressure ranges up to 6000 PSI
- Withstands media temperatures to 185°F
- All stainless steel wetted parts

## Specifications

**Accuracy:** ±3-2-3% span per ASME B40 Grade B

**Materials:** Case: P1521: 304 stainless steel; P1522: Chrome-plated steel (304 polished stainless steel available on OEM quantities); Window: P1521: Snap-in style polycarbonate; P1522: Twist-on style polycarbonate; Bourdon tube: 316 stainless steel; Movement: 304 stainless steel; Dial: P1521: White ABS with black printing; P1522: White aluminum with black printing; Pointer: Black painted aluminum

**Temperature:** Media: 185°F maximum; Ambient: -4° to 140°F

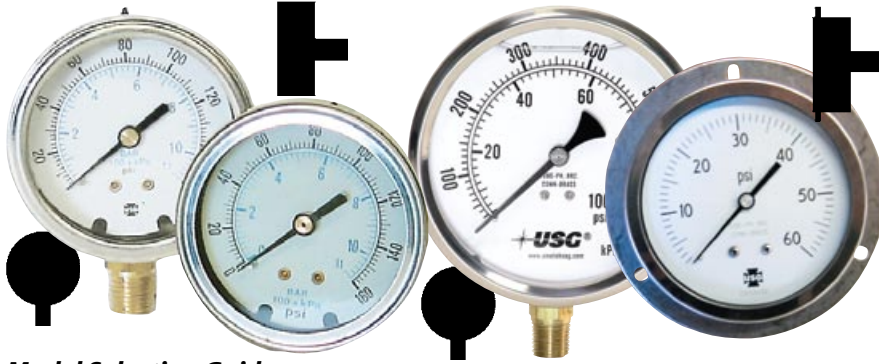
**Available Options:** Oxygen cleaning, SST restrictor, custom dials, special connections. Call Lesman for details.

## Model Selection Guide

Range	Dial Size	Catalog Number	Quantity	
			1-5	6+
<b>P1521 Gauge: 1/8" NPT Bottom Stem Mount</b>				
30" HgVac	1.5"	266252A	\$47.10	\$40.37
30" HgVac-0-15 PSI	1.5"	266253A	47.10	40.37
30" HgVac-0-30 PSI	1.5"	266254A	47.10	40.37
30" HgVac-0-60 PSI	1.5"	266255A	47.10	40.37
30" HgVac-0-100 PSI	1.5"	266256A	47.10	40.37
0-15 PSI	1.5"	266257A	47.10	40.37
0-30 PSI	1.5"	266258A	47.10	40.37
0-60 PSI	1.5"	266259A	47.10	40.37
0-100 PSI	1.5"	266260A	47.10	40.37
0-160 PSI	1.5"	266261A	47.10	40.37
0-200 PSI	1.5"	266262A	47.10	40.37
0-300 PSI	1.5"	266263A	47.10	40.37
0-400 PSI	1.5"	266264A	47.10	40.37
0-600 PSI	1.5"	266265A	47.10	40.37
0-800 PSI	1.5"	266266A	47.10	40.37
0-1000 PSI	1.5"	266267A	47.10	40.37
0-1500 PSI	1.5"	266268A	47.10	40.37
0-2000 PSI	1.5"	266269A	47.10	40.37
0-3000 PSI	1.5"	266270A	47.10	40.37
0-5000 PSI	1.5"	266271A	47.10	40.37
0-6000 PSI	1.5"	266272A	47.10	40.37
<b>P1521 Gauge: 1/8" NPT Center Back Stem Mount</b>				
30" HgVac	1.5"	266273A	47.10	40.37
30" HgVac-0-15 PSI	1.5"	266274A	47.10	40.37
30" HgVac-0-30 PSI	1.5"	266275A	47.10	40.37
30" HgVac-0-60 PSI	1.5"	266276A	47.10	40.37
30" HgVac-0-100 PSI	1.5"	266277A	47.10	40.37
0-15 PSI	1.5"	266278A	47.10	40.37
0-30 PSI	1.5"	266279A	47.10	40.37
0-60 PSI	1.5"	266280A	47.10	40.37
0-100 PSI	1.5"	266281A	47.10	40.37
0-160 PSI	1.5"	266282A	47.10	47.10
0-200 PSI	1.5"	266283A	47.10	40.37
0-300 PSI	1.5"	266284A	47.10	40.37
0-400 PSI	1.5"	266285A	47.10	40.37
0-600 PSI	1.5"	266286A	47.10	40.37
0-800 PSI	1.5"	266287A	47.10	40.37
0-1000 PSI	1.5"	266288A	47.10	40.37
0-1500 PSI	1.5"	266289A	47.10	40.37
0-2000 PSI	1.5"	266290A	47.10	40.37
0-3000 PSI	1.5"	266291A	47.10	40.37
0-5000 PSI	1.5"	266292A	47.10	40.37
0-6000 PSI	1.5"	266293A	47.10	40.37

Range	Dial Size	Catalog Number	Quantity	
			1-5	6+
<b>P1522 Gauge: 1/4" NPT Bottom Stem Mount</b>				
30" HgVac	2"	172028A	\$51.86	\$44.45
30" HgVac-0-15 PSI	2"	172029A	51.86	44.45
30" HgVac-0-30 PSI	2"	172030A	51.86	44.45
30" HgVac-0-60 PSI	2"	172031A	51.86	44.45
30" HgVac-0-100 PSI	2"	172032A	51.86	44.45
0-15 PSI	2"	172033A	51.86	44.45
0-30 PSI	2"	172034A	51.86	44.45
0-60 PSI	2"	172035A	51.86	44.45
0-100 PSI	2"	172036A	51.86	44.45
0-160 PSI	2"	172037A	51.86	44.45
0-200 PSI	2"	172038A	51.86	44.45
0-300 PSI	2"	172039A	51.86	44.45
0-400 PSI	2"	172040A	51.86	44.45
0-600 PSI	2"	172041A	51.86	44.45
0-800 PSI	2"	172042A	51.86	44.45
0-1000 PSI	2"	172043A	51.86	44.45
0-1500 PSI	2"	172044A	51.86	44.45
0-2000 PSI	2"	172045A	51.86	44.45
0-3000 PSI	2"	172046A	51.86	44.45
0-4000 PSI	2"	172047A	51.86	44.45
0-5000 PSI	2"	172048A	51.86	44.45
0-6000 PSI	2"	172049A	51.86	44.45
<b>P1522 Gauge: 1/4" NPT Center Back Stem Mount</b>				
30" HgVac	2"	172050A	51.86	44.45
30" HgVac-0-15 PSI	2"	172051A	51.86	44.45
30" HgVac-0-30 PSI	2"	172052A	51.86	44.45
30" HgVac-0-60 PSI	2"	172053A	51.86	44.45
30" HgVac-0-100 PSI	2"	172054A	51.86	44.45
0-15 PSI	2"	172055A	51.86	44.45
0-30 PSI	2"	172056A	51.86	44.45
0-60 PSI	2"	172057A	51.86	44.45
0-100 PSI	2"	172058A	51.86	44.45
0-160 PSI	2"	172059A	51.86	44.45
0-200 PSI	2"	172060A	51.86	44.45
0-300 PSI	2"	172061A	51.86	44.45
0-400 PSI	2"	172062A	51.86	44.45
0-600 PSI	2"	172063A	51.86	44.45
0-800 PSI	2"	172064A	51.86	44.45
0-1000 PSI	2"	172065A	51.86	44.45
0-1500 PSI	2"	172066A	51.86	44.45
0-2000 PSI	2"	172067A	51.86	44.45
0-3000 PSI	2"	172068A	51.86	44.45
0-4000 PSI	2"	172069A	51.86	44.45
0-5000 PSI	2"	172070A	51.86	44.45
0-6000 PSI	2"	172071A	51.86	44.45

# Economical Stainless Steel Liquid Fillable Pressure Gauges



**Specifications**

**Size:** 1.5" to 4"

**Accuracy:** 2.5% of full scale

**Materials:** Case and ring: 304 stainless steel; Window: Polycarbonate; Seals: Buna-N; Pointer: Black-finished Galvalume; Dial: Galvalume, white background with blue and black markings; Movement: Brass; Bourdon Tube: Phosphor bronze

**Connections:** Brass; 1.5" Dial: 1/8" NPT center back mount; 2" and 2.5" Dial: 1/4" NPT lower or center back mount

**Standard Fill Fluid:** Glycerine

**Model Selection Guide**

Range	Dial Size	Catalog Number	Quantity	
			1-4	5-11
<b>Series 1559: 1/8" NPT Center Back Stem Mount</b>				
0-30 PSI	1.5"	166664	\$23.46	\$21.50
0-60 PSI	1.5"	166665	23.46	21.50
0-100 PSI	1.5"	166666	23.46	21.50
0-160 PSI	1.5"	166667	23.46	21.50
0-300 PSI	1.5"	166668	23.46	21.50
<b>Series 1555: 1/4" NPT Lower Stem Mount</b>				
0-30 PSI	2"	165282	21.72	19.91
0-60 PSI	2"	165283	21.72	19.91
0-100 PSI	2"	165284	21.72	19.91
0-160 PSI	2"	165285	21.72	19.91
0-300 PSI	2"	165286	21.72	19.91
0-600 PSI	2"	165287	21.72	19.91
30" HgVac-0 PSI	2.5"	171722A	24.91	22.83
30" HgVac-30 PSI	2.5"	171724A	24.91	22.83
30" HgVac-60 PSI	2.5"	171725A	24.91	22.83
30" HgVac-100 PSI	2.5"	171726A	24.91	22.83
0-15 PSI	2.5"	171728A	24.91	22.83
0-30 PSI	2.5"	165296	24.91	22.83
0-60 PSI	2.5"	165297	24.91	22.83
0-100 PSI	2.5"	165298	24.91	22.83
0-160 PSI	2.5"	165299	24.91	22.83
0-200 PSI	2.5"	171729A	24.91	22.83
0-300 PSI	2.5"	165300	24.91	22.83
0-400 PSI	2.5"	171730A	24.91	22.83
0-600 PSI	2.5"	165301	24.91	22.83
0-1000 PSI	2.5"	165302	24.91	22.83
0-1500 PSI	2.5"	171731A	24.91	22.83
0-2000 PSI	2.5"	165377	24.91	22.83
0-3000 PSI	2.5"	165378	24.91	22.83
0-5000 PSI	2.5"	171732A	24.91	22.83
30" HgVac-0 PSI	4"	171967A	60.06	55.05
30"-0-15 PSI	4"	171968A	60.06	55.05
30"-0-30 PSI	4"	171969A	60.06	60.06
30"-0-60 PSI	4"	171970A	60.06	55.05
30"-0-100 PSI	4"	171971A	60.06	55.05
0-15 PSI	4"	171972A	60.06	55.05
0-30 PSI	4"	171973A	60.06	55.05
0-60 PSI	4"	171974A	60.06	55.05
0-100 PSI	4"	171975A	60.06	55.05
0-160 PSI	4"	171976A	60.06	55.05
0-200 PSI	4"	171977A	60.06	55.05
0-300 PSI	4"	171978A	60.06	55.05
0-600 PSI	4"	171979A	60.06	55.05
0-1000 PSI	4"	171980A	60.06	55.05
0-1500 PSI	4"	171981A	60.06	55.05
0-2000 PSI	4"	171982A	60.06	55.05
0-3000 PSI	4"	171983A	60.06	55.05
0-6000 PSI	4"	171984A	60.06	55.05

Dial Range	Catalog Size	Number	Quantity	
			1-4	5-11
<b>Series 1559: 1/4" NPT Center Back Stem Mount</b>				
0-30 PSI	2"	165289	\$21.72	\$19.91
0-60 PSI	2"	165290	21.72	19.91
0-100 PSI	2"	165291	21.72	19.91
0-160 PSI	2"	165292	21.72	19.91
0-1000 PSI	2"	165295	21.72	19.91
30" HgVac-0 PSI	2.5"	171733A	24.91	22.83
30" HgVac-30 PSI	2.5"	171735A	24.91	22.83
30" HgVac-100 PSI	2.5"	171737A	24.91	22.83
0-15 PSI	2.5"	171739A	24.91	22.83
0-30 PSI	2.5"	165303	24.91	22.83
0-60 PSI	2.5"	165304	24.91	22.83
0-100 PSI	2.5"	165305	24.91	22.83
0-160 PSI	2.5"	165306	24.91	22.83
0-200 PSI	2.5"	171740A	24.91	22.83
0-300 PSI	2.5"	165307	24.91	22.83
0-600 PSI	2.5"	165308	24.91	22.83
0-1000 PSI	2.5"	165309	24.91	22.83
0-2000 PSI	2.5"	165380	24.91	22.83
0-3000 PSI	2.5"	165381	24.91	22.83
0-5000 PSI	2.5"	165382	24.91	22.83
<b>Series 1558: 1/4" NPT Center Back Stem, Front Flange Panel Mount</b>				
30" HgVac-0 PSI	2.5"	172317A	27.68	25.37
30" HgVac-30 PSI	2.5"	172319A	27.68	25.37
30" HgVac-100 PSI	2.5"	172321A	27.68	25.37
0-15 PSI	2.5"	172323A	27.68	25.37
0-30 PSI	2.5"	172324A	27.68	25.37
0-60 PSI	2.5"	172325A	27.68	25.37
0-100 PSI	2.5"	172326A	27.68	25.37
0-160 PSI	2.5"	172327A	27.68	25.37
0-200 PSI	2.5"	172328A	27.68	25.37
0-300 PSI	2.5"	172329A	27.68	25.37
0-400 PSI	2.5"	172330A	27.68	25.37
0-600 PSI	2.5"	172331A	27.68	25.37
0-1000 PSI	2.5"	172332A	27.68	25.37
0-2000 PSI	2.5"	172334A	27.68	25.37
0-3000 PSI	2.5"	172335A	27.68	25.37
0-5000 PSI	2.5"	172336A	27.68	25.37
30" HgVac-0 PSI	4"	171985A	61.93	56.77
30"-0-30 PSI	4"	171987A	61.93	56.77
30"-0-100 PSI	4"	171989A	61.93	56.77
0-15 PSI	4"	171990A	61.93	56.77
0-30 PSI	4"	171991A	61.93	56.77
0-60 PSI	4"	171992A	61.93	56.77
0-100 PSI	4"	171993A	61.93	56.77
0-160 PSI	4"	171994A	61.93	56.77
0-200 PSI	4"	171995A	61.93	56.77
0-300 PSI	4"	171996A	61.93	56.77
0-600 PSI	4"	171997A	61.93	56.77
0-1000 PSI	4"	171998A	61.93	56.77
0-2000 PSI	4"	172000A	61.93	56.77
0-3000 PSI	4"	172001A	61.93	56.77
0-6000 PSI	4"	172002A	61.93	56.77

**Don't see the pressure range you need?  
Need a different fill fluid? Call Lesman.**

Combustion Safety and Efficiency

Process Control Accessories

Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

Thermometers

# High Accuracy Stainless Steel Liquid Fillable Pressure Gauges



USG 656 series gauges are ideal for corrosive environments or for use on equipment subject to excessive vibration and pulsation. The liquid fill minimizes the effects of severe environments, protects the gauge internals and provides continuous lubrication on the mechanism, all adding up to extended service life.

## Specifications

- Accuracy:** 63mm: ±1.6% full scale; 100mm: ±1.0% full scale
- Overrange Protection:** 125% full scale
- Working Temperature:** Ambient: -40°F to 140°F (-40°C to 60°C); Fluid: -4°F to 176°F (-20°C to 80°C) Pressure Connection: 316L stainless steel; Element: 316L stainless steel, C-type or Helical-type Bourdon tube; 100mm C type
- Case Pressure Relief:** Top: Rubber Disc; Back: Rubber disc
- Case and Bezel Ring:** 304 stainless steel; bayonet type
- Movement:** 304 stainless steel
- Window:** 63mm: Polycarbonate; 100mm: Laminated shatter-resistant glass
- Dial:** White aluminum with black lettering
- Pointer:** Aluminum alloy, black painted
- Standard Fill Fluid:** Glycerine



## Model Selection Guide

Range	Catalog Number	Quantity Pricing	
		1 to 4	5 to 11
<b>2.5" (63mm) Dial, 1/4" NPT Center Back Connection</b>			
0-30 IN HG	256024	\$50.21	\$46.62
30-0-15 PSI	256025	50.21	46.62
30-0-30 PSI	256026	50.21	46.62
30-0-60 PSI	256027	50.21	46.62
30-0-100 PSI	256028	50.21	46.62
30-0-150 PSI	256029	50.21	46.62
0-15 PSI	256031	50.21	46.62
0-30 PSI	256032	50.21	46.62
0-60 PSI	256033	50.21	46.62
0-100 PSI	256034	50.21	46.62
0-160 PSI	256035	50.21	46.62
0-200 PSI	256036	50.21	46.62
0-300 PSI	256037	50.21	46.62
0-400 PSI	256038	50.21	46.62
0-600 PSI	256039	50.21	46.62
0-1000 PSI	256040	50.21	46.62
0-1500 PSI	256041	50.21	46.62
0-2000 PSI	256042	50.21	46.62
0-3000 PSI	256043	50.21	46.62
0-4000 PSI	256044	50.21	46.62
0-5000 PSI	256045	50.21	46.62
0-6000 PSI	256046	50.21	46.62
0-10000 PSI	256047	50.21	46.62

Range	550 Series Equivalent	Catalog Number	Quantity Pricing	
			1 to 4	5 to 11
<b>2.5" (63mm) Dial, 1/4" NPT Bottom Connection</b>				
0-30 IN HG	153000	256000	\$45.05	\$41.84
30-0-15 PSI	153001	256001	45.05	41.84
30-0-30 PSI	153002	256002	45.05	41.84
30-0-60 PSI	153003	256003	45.05	41.84
30-0-100 PSI	153004	256004	45.05	41.84
30-0-150 PSI	153005	256005	45.05	41.84
0-15 PSI	153006	256007	45.05	41.84
0-30 PSI	153007	256008	45.05	41.84
0-60 PSI	153008	256009	45.05	41.84
0-100 PSI	153009	256010	45.05	41.84
0-160 PSI	153010	256011	45.05	41.84
0-200 PSI	153011	256012	45.05	41.84
0-300 PSI	153012	256013	45.05	41.84
0-400 PSI	153013	256014	45.05	41.84
0-600 PSI	153014	256015	45.05	41.84
0-1000 PSI	153016	256016	45.05	41.84
0-1500 PSI	153017	256017	45.05	41.84
0-2000 PSI	153018	256018	45.05	41.84
0-3000 PSI	153019	256019	45.05	41.84
0-4000 PSI	153020	256020	45.05	41.84
0-5000 PSI	153021	256021	45.05	41.84
0-6000 PSI	153022	256022	45.05	41.84
0-10000 PSI	153023	256023	45.05	41.84

Range	550 Series Equivalent	Catalog Number	Quantity Pricing	
			1 to 4	5 to 11
<b>4" (100mm) Dial, 1/4" NPT Bottom Connection</b>				
0-30 IN HG		356000	\$93.09	\$86.44
30-0-100 PSI		356004	93.09	86.44
30-0-150 PSI		356005	93.09	86.44
0-15 PSI		356007	93.09	86.44
0-30 PSI		356008	93.09	86.44
0-60 PSI		356009	93.09	86.44
0-100 PSI		356010	93.09	86.44
0-160 PSI		356011	93.09	86.44
0-200 PSI		356012	93.09	86.44
0-300 PSI		356013	93.09	86.44
0-400 PSI		356014	93.09	86.44
0-600 PSI		356015	93.09	86.44
0-800 PSI		356016	93.09	86.44
0-1000 PSI		356017	93.09	86.44
0-1500 PSI		356018	93.09	86.44
0-2000 PSI		356019	93.09	86.44
0-3000 PSI		356020	93.09	86.44
0-6000 PSI		356021	93.09	86.44
0-10000 PSI		356022	93.09	86.44
0-14500 PSI		356023	93.09	86.44
0-23000 PSI		356024	93.09	86.44

Range	550 Series Equivalent	Catalog Number	Quantity Pricing	
			1 to 4	5 to 11
<b>4" (100mm) Dial, 1/2" NPT Bottom Connection</b>				
0-30 IN HG		356025	\$93.09	\$86.44
30-0-100 PSI		356029	93.09	86.44
30-0-150 PSI		356030	93.09	86.44
0-15 PSI		356032	93.09	86.44
0-30 PSI		356033	93.09	86.44
0-60 PSI		356034	93.09	86.44
0-100 PSI		356035	93.09	86.44
0-160 PSI		356036	93.09	86.44
0-200 PSI		356037	93.09	86.44
0-300 PSI		356038	93.09	86.44
0-400 PSI		356039	93.09	86.44
0-600 PSI		356040	93.09	86.44
0-800 PSI		356041	93.09	86.44
0-1000 PSI		356042	93.09	86.44
0-1500 PSI		356043	93.09	86.44
0-2000 PSI		356044	93.09	86.44
0-3000 PSI		356045	93.09	86.44
0-6000 PSI		356046	93.09	86.44
0-10000 PSI		356047	93.09	86.44
0-14500 PSI		356048	93.09	86.44
0-23000 PSI		356049	93.09	86.44

# 213.53 Liquid-Filled Stainless Steel Industrial Gauges

WIKA liquid-filled 213.53 gauges feature a stainless steel case for protection in harsh environments. They are ideal for high vibration and pulsation applications.

**Specifications**

**Accuracy:** ±2-1-2% span

**Working Temperature:** Ambient: -40° to 140°F dry or silicone filled; -4° to 140°F Glycerine filled; Media temperature: 140°F max.

**Case:** 304 stainless steel

**Wetted Parts:** Copper alloy

**Window:** Polycarbonate

**Dial:** White ABS with black aluminum non-adjustable pointer; Single scale has PSI in black, dual scale has PSI values outside in black, BAR values inside in red.

**Bezel Ring:** Crimp-on stainless steel

**Case-to-Socket O-ring:** Dry or Silicone-filled: Viton; Glycerine-filled: EPDM

**Standard Fill Fluid:** Glycerine

*Call for Buna-N o-ring or silicone fill.*



**Buy dry and liquid-filled gauges online at Lesman.com**

**Need a stainless steel solid front process gauge?**



- 2.5" and 4" dial sizes available
- Dry or liquid filled (glycerin, mineral oil, or silicone DC-200)
- Accuracy ±1.6% or ±1% full scale, depending on size
- 125% full scale overrange protection
- 304 stainless case, ring, and movement, 16L stainless pressure connection and Bourdon tube
- Prices start at \$58 (dry)
- Shown here with optional pulsation dampener

**Call 800-953-7626 for availability.**

**Model Selection Guide**

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>Type 213.53, Single Scale (PSI), 1/4" NPT Bottom Connection</b>				
30" Hg	2.5"	9767002	\$18.69	\$17.52
30"-0-30 PSI	2.5"	9767010	18.69	17.52
30"-0-60 PSI	2.5"	9767029	18.69	17.52
0-15 PSI	2.5"	9767037	17.91	16.79
0-30 PSI	2.5"	9767045	17.91	16.79
0-60 PSI	2.5"	9767053	17.91	16.79
0-100 PSI	2.5"	9767061	17.91	16.79
0-160 PSI	2.5"	9767070	17.91	16.79
0-200 PSI	2.5"	9767088	17.91	16.79
0-300 PSI	2.5"	9767096	17.91	16.79
0-400 PSI	2.5"	9767100	17.91	16.79
0-600 PSI	2.5"	9767118	17.91	16.79
0-1000 PSI	2.5"	9767126	17.91	16.79
0-1500 PSI	2.5"	9767134	19.94	18.69
0-2000 PSI	2.5"	9767142	19.94	18.69
0-3000 PSI	2.5"	9767150	19.94	18.69
0-5000 PSI	2.5"	9767169	19.94	18.69
0-10000 PSI	2.5"	9767177	25.86	24.24

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>Type 213.53, Dual Scale (PSI/BAR), 1/4" NPT Bottom Connection</b>				
30" Hg	2.5"	9691957	\$18.69	\$17.52
30"-0-30 PSI	2.5"	9691965	18.69	17.52
30"-0-60 PSI	2.5"	9691974	18.69	17.52
0-15 PSI	2.5"	9691982	17.91	16.79
0-30 PSI	2.5"	9691990	17.91	16.79
0-60 PSI	2.5"	9692007	17.91	16.79
0-100 PSI	2.5"	9692015	17.91	16.79
0-160 PSI	2.5"	9692024	17.91	16.79
0-200 PSI	2.5"	9692032	17.91	16.79
0-300 PSI	2.5"	9692040	17.91	16.79
0-400 PSI	2.5"	9692058	17.91	16.79
0-600 PSI	2.5"	9692066	17.91	16.79
0-1000 PSI	2.5"	9692075	17.91	16.79
0-1500 PSI	2.5"	9692083	19.94	18.69
0-2000 PSI	2.5"	9692091	19.94	18.69
0-3000 PSI	2.5"	9692105	19.94	18.69
0-5000 PSI	2.5"	9692113	19.94	18.69
0-6000 PSI	2.5"	9748207	19.94	18.69
0-10000 PSI	2.5"	9692121	25.86	24.24

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>Type 213.53, Single Scale (PSI), 1/4" NPT Center Back Mount</b>				
30" Hg	2.5"	9767185	19.48	18.26
0-30 PSI	2.5"	9767193	18.69	17.52
0-60 PSI	2.5"	9767202	18.69	17.52
0-100 PSI	2.5"	9767215	18.69	17.52
0-160 PSI	2.5"	9767223	18.69	17.52
0-200 PSI	2.5"	9767231	18.69	17.52
0-300 PSI	2.5"	9767240	18.69	17.52
0-600 PSI	2.5"	9768947	18.69	17.52
0-1000 PSI	2.5"	9767258	18.69	17.52
0-1500 PSI	2.5"	9768165	20.72	19.42
0-2000 PSI	2.5"	9768939	20.72	19.42
0-3000 PSI	2.5"	9767266	20.72	19.42
0-5000 PSI	2.5"	9767274	20.72	19.42
0-10000 PSI	2.5"	9767282	26.65	24.98

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>Type 213.53, 2.5" Dial, Dual Scale (PSI/BAR), 1/4" NPT Center Back Mount</b>				
30" Hg	2.5"	9692139	19.48	18.26
0-30 PSI	2.5"	9692147	18.69	17.52
0-60 PSI	2.5"	9692155	18.69	17.52
0-100 PSI	2.5"	9692164	18.69	17.52
0-160 PSI	2.5"	9692172	18.69	17.52
0-200 PSI	2.5"	9692180	18.69	17.52
0-300 PSI	2.5"	9792198	18.69	17.52
0-600 PSI	2.5"	9692202	18.69	17.52
0-1000 PSI	2.5"	9692210	18.69	17.52
0-1500 PSI	2.5"	9692228	20.72	19.42
0-2000 PSI	2.5"	9692236	20.72	19.42
0-3000 PSI	2.5"	9692245	20.72	19.42
0-5000 PSI	2.5"	9692253	20.72	19.42
0-10000 PSI	2.5"	9692261	26.65	24.98

Combustion Safety and Efficiency

Process Control Accessories

Pressure and Temperature Switches

ASCO Solenoid Valves

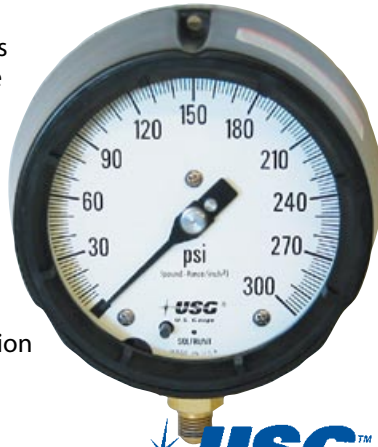
Pressure Gauges

Thermometers

## Solid Front Process Gauges

### 1980 Series High Accuracy Gauges

- ARC-LOC® corrosion-resistant, 300 series stainless steel movement, removable *without* span and scale recalibration; override limit
- Long-life, seamless bourdon tubes
- Heavy-wall sockets for corrosive applications
- Pointer adjustment
- Solid front blowout protection



#### Specifications

**Accuracy:** ±0.5% span

**Dial:** White aluminum, black markings.

**Window:** Heat-resistant acrylic

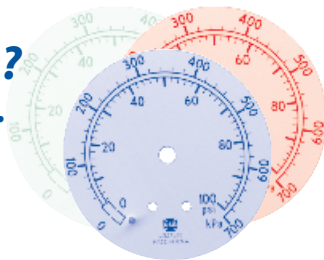
**Case:** Solid front blowout protection construction; PETRA turret, threaded phenolic ring, black finish; stainless steel pressure-relieving back.

### Need special dials?

Colors, brands, ranges...

We can get them all!

Call for details.



### 1931 Series Aluminum Case Gauges

**Accuracy:** ±0.5% of span (Grade 2A)

**Movement:** Geared ARC-LOC with 300 series stainless steel components.

**Pointer:** Anodized aluminum, black finish

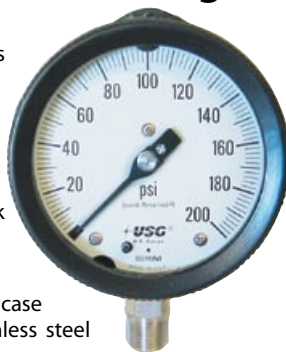
**Bourdon Tube:** 316 SS /TIG welded

**Window:** High-temperature acrylic

**Dial:** Aluminum, white background with black markings

**Connection:** 316 stainless steel

**Case and Ring:** Cast aluminum, back-flanged case with bayonet ring, black finish, and stainless steel pressure-relieving back



#### Model Selection Guide

Dial Size	Range	Catalog Number	Quantity	
			1	2-5
4.5"	30" Hg Vac- 0 PSI	150215X	\$138.78	\$130.10
4.5"	30" Hg Vac-30 PSI	150217X	138.78	130.10
4.5"	30" Hg Vac-100 PSI	150219X	138.78	130.10
4.5"	0-15 PSI	150220X	138.78	130.10
4.5"	0-30 PSI	150221X	138.78	130.10
4.5"	0-60 PSI	150222X	138.78	130.10
4.5"	0-100 PSI	150223X	138.78	130.10
4.5"	0-160 PSI	150224X	138.78	130.10
4.5"	0-200 PSI	150225X	138.78	130.10
4.5"	0-300 PSI	150226X	138.78	130.10
4.5"	0-400 PSI	150227X	138.78	130.10
4.5"	0-600 PSI	150228X	138.78	130.10
4.5"	0-1000 PSI	150230X	138.78	130.10

#### Model Selection Guide

Dial Size	Range	Catalog Number	Quantity	
			1-4	5-11
<b>Series 1980: Phosphor Bronze Tube, Brass Socket, 1/2" NPT Stem Mount</b>				
4.5"	30" HgVac- 0 PSI	150000	\$100.30	\$95.14
4.5"	30" HgVac- 30 PSI	150002	100.30	95.14
4.5"	0- 15 PSI	150006	100.30	95.14
4.5"	0- 30 PSI	150007	100.30	95.14
4.5"	0- 60 PSI	150008	100.30	95.14
4.5"	0- 100 PSI	150009	100.30	63.43
4.5"	0- 160 PSI	150010	100.30	95.14
4.5"	0- 200 PSI	150011	100.30	95.14
4.5"	0- 300 PSI	150012	100.30	95.14
4.5"	0- 400 PSI	150013	100.30	95.14
4.5"	0- 600 PSI	150014	100.30	95.14
<b>Series 1981: 316 Stainless Steel Tube and Socket, 1/2" NPT Stem Mount</b>				
4.5"	30" HgVac- 0 PSI	150016	\$100.31	\$95.15
4.5"	30" HgVac- 15 PSI	150017	100.31	95.15
4.5"	30" HgVac- 30 PSI	150018	100.31	95.15
4.5"	30" HgVac- 60 PSI	150019	100.31	95.15
4.5"	30" HgVac- 100 PSI	150020	100.31	95.15
4.5"	30" HgVac- 150 PSI	150021	100.31	95.15
4.5"	0- 15 PSI	150022	100.31	95.15
4.5"	0- 30 PSI	150023	100.31	95.15
4.5"	0- 60 PSI	150024	100.31	95.15
4.5"	0- 100 PSI	150025	100.31	95.15
4.5"	0- 160 PSI	150026	100.31	95.15
4.5"	0- 200 PSI	150027	100.31	95.15
4.5"	0- 300 PSI	150028	100.31	95.15
4.5"	0- 400 PSI	150029	100.31	95.15
4.5"	0- 600 PSI	150030	100.31	95.15
4.5"	0- 800 PSI	150031	100.31	95.15
4.5"	0- 1000 PSI	150032	100.31	95.15
4.5"	0- 1500 PSI	150033	100.31	95.15
4.5"	0- 2000 PSI	150523	100.31	95.15

For 1/4" NPT LM, order Catalog No. 155 \_\_\_\_.  
For EZ-Fill, order Catalog No. 17 \_\_\_\_\_. Add \$15 to price.

### 1929 Series Low Pressure Gauges

**Accuracy:** ±1% of span (Grade A)

**Movement:** Heavy brass U-frame, nickel silver rocker arm, stainless steel pivots. Brass sector/nickel silver pinion on brass bearings. Min./max. stops prevent segment, pinion disengagement.

**Pointer:** Knife-edged, adjustable, black finish

**Diaphragm:** 316 stainless steel, heli-arc welded

**Window:** Acrylic

**Dial:** Aluminum, white face with black markings

**Connection:** 316 stainless steel, 1/2" NPT

**Case and Ring:** Black Petra turret case with glass-filled, threaded, polypropylene ring, plastic pressure-relieving back



#### Model Selection Guide

Dial Size	Range	Catalog Number	Quantity	
			1	2-5
4.5"	30"-0-30"	132787	\$504.95	\$473.36
4.5"	0-60" H <sub>2</sub> O	132785	504.95	473.36
4.5"	0-100" H <sub>2</sub> O	132786	504.95	473.36
4.5"	0-5 PSI	132792	504.95	473.36



**Don't see the range you need?  
Need brass connection?  
No problem! Just call!**

# Sanitary Pressure Gauges for Food and Pharmaceutical Use



**Quick Delivery and Low Cost from Chicago Stainless Equipment!**



**Features**

- **316L Stainless Steel Sanitary Fittings and Diaphragm or Electropolished Welded Diaphragm:** Maximum corrosion resistance and the most sanitary construction available
- **304 Stainless Steel Case:** For durability even in the roughest environments
- **Lexan® Lens:** Impervious to cracks and breakage
- **CIP and Waterproof:** Gauges can be safely submersed or cleaned in place. CIP eliminates the possibility of damage from mishandling
- **Pressure Ranges:** From 30" Hg vacuum to 1000 PSI
- **Unique Pulsation Dampening System:** Insulates the gauge movement from pulsations that shorten the life of an ordinary pressure gauge
- **Glycerine Fill:** Available to protect the gear mechanism against vibration
- **500° F (260° C) Maximum Temperature Range**

The Sani-Flow pressure gauge is designed specifically for food processing applications, and the Pharma-Flow pressure gauge is designed for pharmaceutical applications. These gauges are built to withstand harsh environments, to meet the strict requirements of food and pharmaceutical plants, and to function for many years with little or no maintenance.

**Looking for a 4" dial welded sanitary gauge?**

*Call for pricing and availability.*

**Specifications**

- Accuracy:** Sani-Flow: ±1.5% full scale; Pharma-Flow: ±0.75% full scale
- Overrange Capability:** Sani-Flow only: 25%
- Wetted Surfaces:** Sani-Flow: 316L stainless steel; Pharma-Flow: 316L stainless steel (electropolished)
- Surface Finish (Wetted Parts):** Sani-Flow: R<sub>a</sub>max = 25 micro-inches; Pharma-Flow: R<sub>a</sub>max = 8 micro-inches
- Temperature Limits:** 0° to 250° F standard (models available for high temperature applications)
- Re-Zero Feature:** Standard on pointer

**Ordering Instructions**

Make one selection from each table section below. Follow the availability column down to be sure the unit is available. A finished model number looks like this: 3S-E-2U-GF-BT-SS

**Model Selection Guide**

Description	Catalog Number	Availability	Price
3-1/2" Sani-Flow Gauge	3S	↓	\$292.00
5" Sani-Flow Gauge	5S	↓	372.00
3-1/2" Pharma-Flow Gauge	3P	↓	332.00
5" Pharma-Flow Gauge	5P	↓	412.00
<b>Range*</b>			
0-30 PSI	2 Bar	B	0.00
0-60 PSI	4 Bar	C	0.00
0-100 PSI	7 Bar	D	0.00
0-160 PSI	11 Bar	E	0.00
0-200 PSI	14 Bar	F	0.00
0-300 PSI	21 Bar	G	0.00
0-400 PSI	28 Bar	H	0.00
0-600 PSI	41 Bar	I	0.00
0-1000 PSI	70 Bar	K	0.00
30" Hg to 30 PSI	1-2 Bar	M	0.00
30" Hg to 60 PSI	1-4 Bar	N	0.00
30" Hg to 100 PSI	1-7 Bar	O	0.00
30" Hg to 150 PSI	1-10 Bar	P	0.00
30" Hg to 200 PSI	1-14 Bar	Q	0.00
30" Hg to 300 PSI	1-21 Bar	R	0.00
<b>Adapter Size</b>			
1 1/2" Tri-Clamp Adapter for Sani-Flow	1.5U	•	0.00
1 1/2" Tri-Clamp Adapter for Pharma-Flow	1.5U	•	0.00
2" Tri-Clamp Adapter for Sani-Flow	2U	•	0.00
2" Tri-Clamp Adapter for Pharma-Flow	2U	•	0.00
2 1/2" Tri-Clamp Adapter for Sani-Flow	2.5U	•	40.00
2 1/2" Tri-Clamp Adapter for Pharma-Flow	2.5U	•	72.00
3" Tri-Clamp Adapter for Sani-Flow	3U	•	40.00
3" Tri-Clamp Adapter for Pharma-Flow	3U	•	72.00
<b>Liquid Fill</b>			
None	NF	•	0.00
Glycerine Fill for 3 1/2" Case	GF	•	0.00
Glycerine Fill for 5" Case	GF	•	0.00
Special (Call Lesman)	04	•	0.00
<b>Mount</b>			
Bottom	BT	•	0.00
Right Side	RT	•	0.00
Left Side	LF	•	0.00
Back	BK	•	0.00
Top	TP	•	0.00
<b>Diaphragm Material</b>			
Stainless Steel	SS	•	0.00
Teflon	TF	•	0.00

\* Standard scales in PSI only. Dual PSI/Bar and other scales also available.

Combustion Safety and Efficiency

Process Control Accessories

Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

Thermometers



## **WIKAI** DG-10 Digital Industrial Gauges

**Left: DG-10-S;  
Right: DG-10-E;  
Center: DG-10-E  
with rubber boot**

A digital display is ideal for precise and fast pressure readings. WIKAI's DG-10 features a durable stainless steel housing and integral battery power supply making it suitable for a wide range of applications and industries. The multi-function display features a bargraph with a drag pointer function and a MIN/MAX memory feature for later recall of minimum and maximum pressure readings.

### Specifications

**Accuracy:**  $\leq 0.25\%$  span BFS/L; *Hysteresis, non-repeatability, long-term drift:*  $\leq 0.1\%$  span; *Long-term stability:*  $\leq 0.2\%$  span per year

**Operating Temperature:** 32° to 140°F (0° to 60°C)

**Material:** 304 stainless steel case, 316Ti stainless steel pressure connection, Ceramic or XM-13 pressure sensor (depending on range); DG-10-E includes removable black protective rubber boot

**Display:** *DG-10-S:* Four 0.43" tall digits, seven segment LCD, displays -999 to 9999; *DG-10-E: Display 1:* Seven segments, 4.5 digits, 0.43" tall, displays -1999 to 19999; *Display 2:* 14 segments, 4.5 digits, 0.28" tall; Backlight included

**Power:** Two 1.5V AA batteries, 4000 hour operating time

**Case Rotation:** 300°, available only on DG-10-E

### Model Selection Guide

Pressure Range	Catalog Number	Price Each
<b>DG-10-S Standard Digital Gauge, 3.5" Dial, 1/4" NPT Bottom Stem Mount</b>		
-30" Hg - 29 PSI	50365444	\$300.00
-30" Hg - 72 PSI	50365452	300.00
-30" Hg - 145 PSI	50365461	300.00
0-30 PSI	50365479	275.00
0-60 PSI	50365487	275.00
0-145 PSI	50365495	275.00
0-300 PSI	50365509	275.00
0-600 PSI	50365517	275.00
0-1540 PSI	50365525	300.00
0-2000 PSI	50365584	300.00
0-3000 PSI	50365592	300.00
0-5000 PSI	50365614	300.00
<b>DG-10-E Enhanced Backlit Digital Gauge, 3.5" Dial, 1/4" NPT Bottom Stem Mount</b>		
-30" Hg - 29 PSI	50365657	373.00
-30" Hg - 72 PSI	50365673	373.00
-30" Hg - 145 PSI	50365690	373.00
0-30 PSI	50365720	348.00
0-60 PSI	50365771	348.00
0-145 PSI	50365789	348.00
0-300 PSI	50365797	348.00
0-600 PSI	50365819	348.00
0-1540 PSI	50365827	373.00
0-2000 PSI	50365835	373.00
0-3000 PSI	50365843	373.00
0-5000 PSI	50365851	373.00

*Call for higher pressure ranges.*

## High Accuracy Digital Pressure Gauges for Liquids and Gases

### Specifications

**Accuracy:**  $\pm 0.25\%$  full scale or better,  $\pm 1$  least significant digit

**Operating Temperature:** -20° to 85°C; *Temperature Stability:*  $\pm 0.003\%$  of span per degree C (typical);  $\pm 0.01\%$  of span per degree C (max) 0° to 70°C

**Material:** Extruded aluminum case, Epoxy powder coated, polycarbonate cover, front and rear gaskets. Light gray body, light gray/blue front; *Pressure/Vacuum Connection:* 1/4" NPT male; *Wetted parts:* 316 stainless steel

**Overpressure:** 5000 PSIG for 3000 PSIG range, 7500 PSIG for 5000 PSIG range all others. 2x rated pressure minimum.

**Burst Pressure:** Lesser of 4x rated pressure min. or 10000 PSI

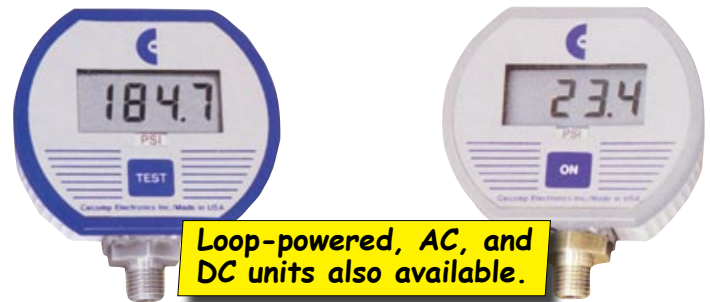
**Display:** 3-1/2 digit LCD, 1/2" height; for ranges up to 1999; 4 digit LCD, 0.4" height, for ranges 2000+; 3 readings per second nominal display update rate; *DPG1000BBL:* Red LCD backlight activated by holding ON button

**Controls and Location:** Display zero/span; non-interactive,  $\pm 15\%$  range. Top-accessible multi-turn potentiometers.

**Auto Shutoff:** 5 minutes standard; factory settable to 1, 5, or 10 minutes

**Battery:** *DPG1000B:* 3V lithium coin cell CR2354 or equivalent/1000 hours; 2 AAA alkaline for ranges 2000 and higher/500 hours; *DPG1000BBL:* Two replaceable 1.5 volt AAA alkaline/Ranges to 1999: 75 to 1000 hours; Ranges 2000+: 75 to 500 hours. (Depends on backlight usage)

**Low Battery Indication:** Ranges up to 1999: LOBAT displays when battery must be replaced; Ranges 2000+: LOW BAT displays when battery is more than 60% depleted. Decimal points flash when battery must be replaced.



### Model Selection Guide

Description	Catalog Number	Price
<b>DPG1000 Digital Pressure Gauge: <math>\pm 0.25\%</math> Accuracy, 316SS Connection</b>		
Battery Powered, 0-15.00 PSIG	DPG1000B-15PSIG-5	\$279.00
Battery Powered, 0-100.0 PSIG	DPG1000B-100PSIG-5	279.00
Battery Powered, 0-200 PSIG	DPG1000B-200PSIG-5	279.00
Battery Powered, 0-500 PSIG	DPG1000B-500PSIG-5	279.00
Battery Powered, 0-1000 PSIG	DPG1000B-1000PSIG-5	279.00
Battery Powered, 0-3000 PSIG	DPG1000B-3000PSIG-5	279.00
Battery Powered, 0-5000 PSIG	DPG1000B-5000PSIG-5	279.00
Backlit, Battery Powered, 0-15.00 PSIG	DPG1000BBL-15PSIG-5	309.00
Backlit, Battery Powered, 0-100.0 PSIG	DPG1000BBL-100PSIG-5	309.00
Backlit, Battery Powered, 0-200 PSIG	DPG1000BBL-200PSIG-5	309.00
Backlit, Battery Powered, 0-500 PSIG	DPG1000BBL-500PSIG-5	309.00
Backlit, Battery Powered, 0-1000 PSIG	DPG1000BBL-1000PSIG-5	309.00
Backlit, Battery Powered, 0-3000 PSIG	DPG1000BBL-3000PSIG-5	309.00
Backlit, Battery Powered, 0-5000 PSIG	DPG1000BBL-5000PSIG-5	309.00

## Special Service Gauges

### Portable 3" Test Gauges

#### Specifications

**Accuracy:** ±0.5% span or ±1% span (0-1500 PSI to 0-5000 PSI).

**Arc of Calibration:** 300° on 1409

**Connection:** 1/4" ANPT lower male, brass

**Materials:** *Case/Threaded ring:* Chrome-plated high-impact ABS case; *Window:* Beveled glass; *Pointer:* Knife-edged, black, adjustable; *Dial:* Steel, white background, black markings.



#### Model Selection Guide

Range	Figure Interval	Smallest Interval	Catalog Number	Price Each
<b>P1409 3" Test Gauge: 1/4" NPT Bottom Stem Mount</b>				
0-30 PSI	2 PSI	0.1 PSI	161947	\$169.26
0-60 PSI	5 PSI	0.2 PSI	161948	169.26
0-100 PSI	10 PSI	0.5 PSI	161949	169.26
0-160 PSI	10 PSI	1 PSI	161950	169.26
0-200 PSI	20 PSI	1 PSI	161951	169.26
0-300 PSI	20 PSI	1 PSI	161952	169.26
0-600 PSI	50 PSI	2 PSI	161953	169.26
0-1000 PSI	100 PSI	5 PSI	161954	169.26
0-3000 PSI	500 PSI	20 PSI	161957	169.26
P1409 Optional Protective Cover			161959	10.62

**Need high accuracy test gauges?**  
Call for WIKA/Wallace & Tiernan precision test gauges with accuracies to ±0.066%.

## Stainless Steel Pressure Gauges

These gauges are ideal when corrosion is a problem, and you need accurate readings. These heavy duty pressure gauges are designed to withstand corrosive atmospheres like salt air, sour gas, and other industrial gases, and are ideally suited for use with corrosive process media.



#### Specifications

**Accuracy:** ±1% of span

**Size:** 2", 2.5", and 3.5"

**Materials:** *Case:* Drawn stainless steel satin finish, pressure relief in case back; *Window and threaded ring:* Polycarbonate; *Bourdon tube:* 316 stainless steel, heli-arc welded

#### Model Selection Guide

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>P1535 Gauge: 1/4" NPT Bottom Stem Mount, 316 Stainless Steel</b>				
0-15 PSI	2.5"	110792A	\$133.71	\$124.80
0-30 PSI	2.5"	110793A	133.71	124.80
0-60 PSI	2.5"	110794A	133.71	124.80
0-100 PSI	2.5"	110690A	133.71	124.80
0-160 PSI	2.5"	110795A	133.71	124.80
0-200 PSI	2.5"	110796A	133.71	124.80
0-300 PSI	2.5"	110797A	133.71	124.80
0-400 PSI	2.5"	110798A	133.71	124.80
0-600 PSI	2.5"	110799A	133.71	124.80
0-1000 PSI	2.5"	110800A	133.71	124.80



## Welding and Compressed Gas Regulator Gauges

#### Specifications

**Connection:** 1/4" NPT bottom brass

**Accuracy:** ±3-2-3% of span

**Approvals:** UL approved for compressed gas services. Cleanliness in accordance with ANSI B40.1-1980.

**Materials:** *Case:* Drawn brass, polished finish, with pressure relief in back of case; *Ring and window:* Polycarbonate; *Dial:* Steel, white background, black markings. Major graduations and "USE NO OIL" in red; *Movement:* Brass; *Bourdon tube:* P601: Phosphor bronze, silver brazed; P612: Admiralty brass 30, phosphor bronze 100, all soft-soldered.



#### Model Selection Guide

Figure Number	Dial Size	Pressure Range	Catalog Number	Quantity	
				1-4	5+
P612	2"	0-30 PSI	165509A	\$29.85	\$27.86
	2"	0-60 PSI	165567A	29.85	27.86
	2"	0-100 PSI	164257A	29.85	27.86
	2"	0-200 PSI	164259A	29.85	27.86
	2"	0-400 PSI	164261A	29.85	27.86
	2"	0-600 PSI	164262A	29.85	27.86
	2.5"	0-30 PSI	165616A	38.51	35.94
	2.5"	0-60 PSI	165660A	38.51	35.94
	2.5"	0-100 PSI	164285A	38.51	35.94
	2.5"	0-200 PSI	164287A	38.51	35.94
	2.5"	0-400 PSI	164289A	38.51	35.94
	2.5"	0-500 PSI	165064A	38.51	35.94
	2.5"	0-600 PSI	164290A	38.51	35.94
	P601	2"	0-3000 PSI	144202A	29.85
2"		0-4000 PSI	143403A	29.85	27.86
2.5"		0-3000 PSI	144203A	54.92	51.25
2.5"		0-4000 PSI	143404A	54.92	51.25

## Boiler Service Gauges

Specially constructed for use on all hot water heating boilers, these combination gauges give accurate indication of both temperature and pressure.

#### Specifications

**Accuracy:** *Pressure:* ±3-2-3% span; *Temperature:* ±3% span

**Materials:** *Case:* Drawn steel, friction fit, black corrosion-resistant paint; *Window:* Acrylic; *Movement and socket:* Brass



#### Model Selection Guide

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>1/4" NPT Center Back Connection</b>				
0-75 PSI/60-320°F	2.5" (0.78" shank)	199960	\$34.26	\$31.97
0-75 PSI/60-320°F	2.5" (2.02" shank)	199961	37.12	34.64

## Low Pressure Diaphragm Gauges

Designed for pressures below 15 PSI, U.S. Gauge P734 diaphragm gauges combine rugged construction and high sensitivity.

### Specifications

**Accuracy:** ±3-2-3% of span

**Materials:** Case: Drawn steel, black corrosion resistant paint; Window: Acrylic, screw-in; Movement: Brass sector, nickel silver pinion, arbor, and pivots; Diaphragm: Phosphor bronze

**Connection:** Brass, 1/4" NPT bottom



### Model Selection Guide

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>P734 Gauge: 1/4" NPT Bottom Stem Mount</b>				
0-15" H <sub>2</sub> O	2.5"	L 161963A	\$58.90	\$54.97
0-35" H <sub>2</sub> O	2.5"	L 161964A	58.90	54.97
0-60" H <sub>2</sub> O	2.5"	L 162787A	58.90	54.97
0-100" H <sub>2</sub> O	2.5"	161965A	58.90	54.97
0-200" H <sub>2</sub> O	2.5"	161966A	58.90	54.97
0-20 Oz.	2.5"	161967A	58.90	54.97
0-32 Oz.	2.5"	161968A	58.90	54.97
0-36 Oz.	2.5"	161969A	58.90	54.97
0-5 PSI	2.5"	L 161970A	58.90	54.97
0-10 PSI	2.5"	L 161971A	58.90	54.97
0-20 Oz./0-35" H <sub>2</sub> O	2.5"	L 161972A	58.90	54.97



## HVAC Contractor's Gauge

### Specifications

**Size:** 4.5"

**Accuracy:** 1.5-1-1.5% of span (exceeds Grade A ANSI-ASME B40.1)

**Materials:** Ring: Aluminum; Case: Black finished aluminum, pressure relief grommet; Window: Acrylic; Dial: White steel background with black markings; Pointer: Black finished aluminum, adjustable; Movement: Precision geared brass; Bourdon tube: Phosphor bronze or Beryllium copper.



### Model Selection Guide

Range	Catalog Number	Quantity	
		1-4	5+
<b>USG 5105 Contractor's Gauge: 1/4" ANPT Bottom Male Brass Connection</b>			
30" HgVac	160803A	\$21.96	\$20.49
0-15 PSI	160808A	21.96	20.49
0-30 PSI	160809A	21.96	20.49
0-60 PSI	160810A	21.96	20.49
0-100 PSI	160811A	21.96	20.49
0-160 PSI	160812A	21.96	20.49
0-200 PSI	160813A	21.96	20.49
0-300 PSI	160814A	21.96	20.49

## 611.10 Low Pressure Gauges

These extremely sensitive and highly accurate WIKA gauges are designed to measure gaseous media as low as 10" H<sub>2</sub>O.

### Specifications

**Accuracy:** ±1.5% span

**Materials:** Case: Black painted steel; Window: Acrylic; Movement: Brass with highly polished bearing surfaces; Dial: Aluminum, white face, black pointer, zero adjustment screw; Wetted parts: Copper alloy



### Model Selection Guide

Range	Dial Size	Catalog Number	Quantity	
			1-4	5+
<b>611.10 Single Scale, 1/4" NPT Bottom Stem Mount</b>				
0-3 PSI	2.5"	9851925	\$39.81	\$37.31
0-5 PSI	2.5"	9851933	39.81	37.31
0-10 PSI	2.5"	4204212	39.81	37.31
<b>611.10 Single Scale, 1/4" NPT Center Back Mount</b>				
0-3 PSI	2.5"	9851836	41.76	39.15
0-5 PSI	2.5"	9851844	41.76	39.15
0-10 PSI	2.5"	4204221	41.76	39.15
<b>611.10 Dual Scale ("H<sub>2</sub>O/mmH<sub>2</sub>O), 1/4" NPT Bottom Stem Mount</b>				
0-30" Vac / 0-760mm Vac H <sub>2</sub> O	2.5"	9852344	39.81	37.31
0-60" Vac / 0-1500mm Vac H <sub>2</sub> O	2.5"	9748321	39.81	37.31
0-100" Vac / 0-2500mm Vac H <sub>2</sub> O	2.5"	9747473	39.81	37.31
0-15" / 0-380mm H <sub>2</sub> O	2.5"	9851682	39.81	37.31
0-30" / 0-760mm H <sub>2</sub> O	2.5"	9851690	39.81	37.31
0-60" / 0-1500mm H <sub>2</sub> O	2.5"	9851704	39.81	37.31
0-100" / 0-2500mm H <sub>2</sub> O	2.5"	9851810	39.81	37.31
0-200" / 0-5000mm H <sub>2</sub> O	2.5"	9851828	39.81	37.31
<b>611.10 Dual Scale ("H<sub>2</sub>O/mmH<sub>2</sub>O), 1/4" NPT Center Back Mount</b>				
0-30" Vac / 0-760mm Vac H <sub>2</sub> O	2.5"	9851852	41.76	39.15
0-60" Vac / 0-1500mm Vac H <sub>2</sub> O	2.5"	9748339	41.76	39.15
0-100" Vac / 0-2500mm Vac H <sub>2</sub> O	2.5"	9747465	41.76	39.15
0-15" / 0-380mm H <sub>2</sub> O	2.5"	9851860	41.76	39.15
0-30" / 0-760mm H <sub>2</sub> O	2.5"	9855785	41.76	39.15
0-60" / 0-1500mm H <sub>2</sub> O	2.5"	9803432	41.76	39.15
0-100" / 0-2500mm H <sub>2</sub> O	2.5"	9851879	41.76	39.15
0-200" / 0-5000mm H <sub>2</sub> O	2.5"	9851887	41.76	39.15

## Sprinkler System Gauge

### Specifications

**Accuracy:** ±3-2-3% span per ASME B40.1 Grade B

**Connection:** 1/4" NPT bottom, brass

**Materials:** Case: Black polycarbonate; Window: Snap-in clear polycarbonate; Movement/Connection: Copper alloy; Bourdon tube: C-type copper alloy; Dial: White aluminum with stop pin. Black and red markings; Pointer: Black aluminum

**Approvals:** UL listed UL-393, FM approved



### Model Selection Guide

Figure Number	Dial Size	Range	Quantity	
			Catalog Number	1-4 5+
111.10SP	4"	300 PSI (Water)	4233761	\$9.51 \$8.87

Combustion Safety and Efficiency

Process Control Accessories

Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

Thermometers

# Stainless Steel Pressure Gauge with 4–20 mA Output



## Features

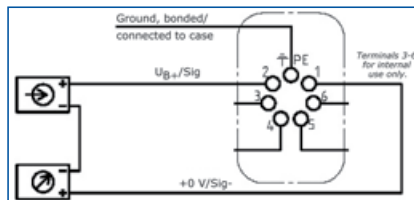
- Easy-to-read, local analog display needs no power supply
- Transmission of process value to the control room, 4 to 20 mA; 0 to 20 mA; 0 to 10 V
- Solid-front, blow-out back safety design

WIKA's PGT23 IntelliGauge can be used in any application where you want local indication of process pressure plus the ability to transmit a 4–20 mA signal to a central controller or remote control room.

The durable, fully-welded Bourdon tube measuring system produces a pointer rotation proportional to the pressure. An electronic angle encoder, proven in safety-critical automotive applications, determines the position of the pointer shaft. The encoder is a non-contact sensor and is completely free from wear and friction. From this, the pressure-proportional, 4 to 20 mA electrical output signal is generated.

## Specifications

- Accuracy:** ±1% of span (ASME B40.100 Grade 1A)
- Case:** 304 stainless steel
- Window:** Laminated safety glass
- Dial:** White aluminum with black lettering and black aluminum pointer; Dual scale gauges have red inner range and lettering for second scale
- Pressure Connection:** 316L stainless steel bottom stem mount
- Bourdon Tube:** 316L stainless steel; <1500 PSI: C-type; >1500 PSI: helical-
- Electrical Connections:** 2.5" dial: 2 meter cable with free ends; 4" dial: L plug, similar to DIN 43651
- Output:** 4 to 20 mA, 2-wire, passive, per NAMUR NE 43; *Load effect:* <0.1% FS; *Linearity:* <1% span (limit point calibration)
- Power Supply:** 14 to 30 VDC
- Long-Term Stability:** <0.3% full scale per year
- Damping:** For dynamic pressure: Restrictor in the pressure channel; For vibration: Fluid filling of case
- Pressure Limitation:** Steady: Full scale value; Fluctuating: 0.9 x full scale value; Short time: 1.3 x full scale value.
- Temperature:** Media: -40° to 212°F; Ambient: -40° to 140°F. 180°F max for safety glass.
- Approvals:** CE-Conformity: ATEX 94/4; Pressure Equipment Directive: 97/23/EC; EMC Directive: 2004/108/EC Interference emission (Limit Class B) and immunity to EN 61 326-1



## Model Selection Guide

Range	Dial Size	Catalog Number	Price Each
<b>PGT23 IntelliGauge, 1/4" NPT Bottom Stem Mount</b>			
30"Hg	2.5"	50706527	\$292.37
15 PSI	2.5"	50706543	292.37
30 PSI	2.5"	50706560	292.37
60 PSI	2.5"	50706578	292.37
100 PSI	2.5"	50706594	292.37
160 PSI	2.5"	50628836	292.37
200 PSI	2.5"	50706632	292.37
300 PSI	2.5"	50706721	292.37
400 PSI	2.5"	50706748	292.37
600 PSI	2.5"	50706772	292.37
800 PSI	2.5"	50706781	327.29
1000 PSI	2.5"	50706799	327.29
1500 PSI	2.5"	50706802	327.29
2000 PSI	2.5"	50706811	327.29
3000 PSI	2.5"	50706829	327.29
5000 PSI	2.5"	50706845	327.29
10000 PSI	2.5"	50706853	327.29
<b>PGT23 IntelliGauge, 1/2" NPT Bottom Stem Mount</b>			
30"Hg	4"	50706861	643.66
15 PSI	4"	50706870	643.66
30 PSI	4"	50706888	643.66
60 PSI	4"	12936392	643.66
100 PSI	4"	50706900	643.66
160 PSI	4"	12939499	643.66
200 PSI	4"	50567756	643.66
300 PSI	4"	50706942	643.66
400 PSI	4"	50706951	643.66
600 PSI	4"	50536991	643.66
800 PSI	4"	50706977	680.03
1000 PSI	4"	50706985	680.03
1500 PSI	4"	50706993	680.03
2000 PSI	4"	50707001	680.03
3000 PSI	4"	12851150	680.03
5000 PSI	4"	50707019	680.03
10000 PSI	4"	50707027	680.03

## IntelliGauge PTG11C Gauge with Electrical Output

- ±3-2-3% span accuracy
- 1.5" dial, stainless steel case
- Ranges from 0–30 to 0–6000 PSI or equivalent pressure or vacuum units
- Choice of output signal: 0.5–2.5 to 0.5–4.5 V or 4–20 mA
- 5 VDC/12–32 VDC supply voltage

Prices as low as \$81.00 each for large quantity orders.



Single scale available from WIKAI factory stock. Call for pricing on dual scale gauges.



# CPG1000 Digital Test Gauge



## Features

- Accuracy  $\pm 0.05\%$  full scale; Temperature compensated
- Backlit, 5½" digit display with 0.65" tall digits and 20 segment bargraph
- Adjustable TARE zeros large system offsets
- Configurable damping
- CSA intrinsically safe, Class 1, Div. 2 Groups A-D; CE approved
- 24 VDC external power input optional
- Rugged NEMA 4/IP65 stainless steel case
- Rubber boot standard on stand-alone bottom mount gauges



WIKA's CPG1000 digital pressure test gauge brings the analog test gauge to a new level. It combines the accuracy of digital technology with the simplicity of an analog gauge, and achieves performance, ease-of-use, and a feature set unmatched in the pressure measurement world.

CPG1000 setup is fast and straightforward, using a menu-driven display with intuitive functions. It's so simple that the gauge can be used anywhere in the world, without needing a multilingual display.

Readings can be displayed in any one of 18 standard engineering units, or in custom units you define, to eliminate tedious conversion calculations.

Launch password-protected field calibration through the keypad. An RS232 port lets you move data to a PC for off-line analysis. A Zero function compensates for sensor drift, and TARE adjustment nulls large residential system pressures.

## Specifications

- Accuracy:**  $\pm 0.05\%$  full scale positive pressure;  $\pm 0.1\%$  full scale for 1.0 psi
- Standard Engineering Units:** PSI, Bar, Kg/cm<sup>2</sup>, In or Ft H<sub>2</sub>O (4°, 20°C or 60°F), cm or m H<sub>2</sub>O (4° and 20° C), kpa, mBAR, inHg, mmHg, TORR
- Case:** Stainless Steel with 1/4" NPT male threaded connection
- Operating Temperature:** -10° to +55° C
- Approvals:** CSA intrinsically safe Class I, Div 2, Groups A-D; CE approved
- Display:** Five Digits, 0.65" tall with 20-segment bargraph (0 to 100%)
- Media Compatibility:** Liquids and gases compatible with 316 stainless steel. Some exceptions apply.
- Power:** Three AA alkaline batteries, 1500 hour battery life without backlight; 2000 hours at slow sample rate; Battery life can be displayed on bargraph to indicate the amount of time left; *Low Battery Indicator:* Displayed icon near the end of battery life

## IntelliGauge PTG21 Gauge with Electrical Output

- $\pm 3-2-3\%$  span accuracy
- 2" dial, stainless steel case
- Ranges from 0–30 to 0–6000 PSI or equivalent pressure or vacuum units
- Output signal: 0.5–2.5 to 0.5–4.5 V or 4–20 mA
- 5 VDC/12–32 VDC supply voltage



**Prices as low as \$90.00 each for large quantity orders.**

## Model Selection Guide

Pressure Range	Gauge Only Bottom Stem Mount		Gauge Only Lower Back Mount		Gauge with 24 VDC External Power Input Bottom Stem Mount		Gauge with 24 VDC External Power Input Lower Back Mount		Digital Test Gauge Kit (Pump, Hose, and Case) Bottom Stem Mount	
	Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each	Catalog Number	Price Each
15 PSIA	50579525	\$745.00	50579827	\$810.00	50579860	\$810.00	50579908	\$845.00		
30 PSIA	50579533	745.00	50579835	810.00	50579878	810.00	50579916	845.00		
100 PSIA	50579541	745.00	50579843	810.00	50579886	810.00	50579924	845.00		
300 PSIA	50579819	745.00	50579851	810.00	50579894	810.00	50579932	845.00		
-15 to 15 PSI	50577964	750.00	50578405	810.00	50578553	810.00	50579304	840.00	50579428	\$1690.00
-15 to 30 PSI	50577972	750.00	50578421	810.00	50578561	810.00	50579312	840.00	50579436	1690.00
30" WC	50577930	850.00	50578367	905.00	50578529	905.00	50578669	940.00		
15 PSI	50577948	750.00	50578383	810.00	50578537	810.00	50579282	840.00	50579401	1690.00
30 PSI	50577956	750.00	50578391	810.00	50578545	810.00	50579291	840.00	50579410	1690.00
100 PSI	50577981	750.00	50578448	810.00	50578570	810.00	50579321	840.00	50579444	1690.00
300 PSI	50577999	750.00	50578456	810.00	50578596	810.00	50579339	840.00	50579452	1690.00
500 PSI	50578006	750.00	50578464	810.00	50578600	810.00	50579347	840.00	50579461	1690.00
1000 PSI	50578014	750.00	50578472	810.00	50578618	810.00	50579355	840.00	50579479	1850.00
2000 PSI	50578022	750.00	50578481	810.00	50578626	810.00	50579363	840.00	50579487	1850.00
3000 PSI	50578341	750.00	50578499	810.00	50578634	810.00	50579371	840.00	50579509	1850.00
5000 PSI	50578359	750.00	50578502	810.00	50578642	810.00	50579380	840.00	50579517	1850.00
10000 PSI	50578375	825.00	50578511	880.00	50578651	880.00	50579398	920.00	50579495	2060.00

**Looking for a WIKA or Wallace & Tiernan 4" or 6" high accuracy mechanical pressure test gauge? Call Lesman.**

# Chemical Seals for Pressure Gauges

## Where should you install chemical seals?

- Where the process medium would corrode the instrument connection and pressure sensing element. Chemical “attacks” cause costly instrument failures and unscheduled downtime.
- Where the process medium contains suspended solids or is viscous enough to clog the instrument connection and the pressure sensing element. Blocked pressure ports prevent accurate measurement.
- Where the process medium might freeze or solidify in the instrument connection and sensing element due to temperature changes. Solid media can block pressure ports, preventing accurate measurement, or distort the diaphragm of your measuring instrument.
- Where changing process medium requires flushing the system to prevent contamination.
- Where the process application requires sanitary connections. Most measuring instruments cannot meet 3A sanitary standards due to crevices inherent to their design. Or they can’t withstand the temperature requirements of steam cleaning. A diaphragm seal provides a sanitary connection and allows easy cleaning between batches.
- Where your measuring instrument has to be remote mounted to protect it from high ambient temperatures, vibration, harsh environments, or accessibility problems. A diaphragm seal ensures reliable and accurate pressure measurements.



*Trained factory technicians use special equipment to avoid damaging gauge and seal components during assembly and testing. Call Lesman for assistance in selecting the right combination of gauge, seal, and fill fluid to suit your application.*

## What do you need to know to pick the **RIGHT** chemical seal?

**A. Mounting Type.** Your options include threaded (NPT), flange attached, pancake mounting between two flanges, weld attached and sanitary clamp attached. See the next page for samples of the seals we offer.

**B. Material Compatibility.** The proper selection of wetted parts ensures the application compatibility of your diaphragm seal. Consider all chemicals the seal will be exposed to during service. You’ll pick the seal material that will best stand up to corrosion, pitting, stress cracking, embrittlement, and hydrogen permeation.

If you have an extremely caustic media, look at an all-Teflon insert, flange attached seal or a pancake-style ring seal. By using elastomers, you can drastically reduce seal cost and maintenance.

**C. Process Working Pressures.** This is important for extremely low or high pressures. Between 100 and 1000 PSI, almost any seal will suit. It is best to use elastomer seals for low pressure so the diaphragm will flex enough to transmit the pressure to your instrument. For high pressures, it is best to use a metal diaphragm. In most applications, they will last longer.

**D. Attachment to Compatible Instruments.** Each seal has a different volumetric displacement or sensitivity. If the displacement of the seal is less than that of the sensing instrument, they will not work. Seal displacement **MUST** be greater than that of the instrument.

**E. Process Temperatures.** In order to transmit the process pressure through the seal to the sensing instrument, you must fill the sensor with a fill fluid. All fill fluids have different stable operating temperature ranges. If you exceed the fluids’ temperature limits, they can boil and destroy the seal, the instrument, or both.

### Specifications of Fill Fluids

Application	Fill Fluid	Suitable Temperature Range	
		Pressures < 15 PSI	Pressures > 15 PSI
General Service	Silicone Oil DC 200/50	-4° to 250° F	-4° to 392° F
	Silicone Oil DC 200/10	-40° to 250° F	-40° to 400° F
Low Temp.	Silicone Oil (4 cSt)	-130° to 176° F	-130° to 356° F
High Temp./ High Vacuum	High-Temperature Oil (All threads welded during assembly)	4° to 392° F	-4° to 750° F (14° to 750° F with transmitters)
Oxygen/ Chlorine Service	Halocarbon 6.3	-40° to 176° F	-40° to 347° F
	Fluorolube FS-5	—	-40° to 392° F
Food and Beverage	Glycerine*	—	60° to 462° F
	Glycerine/Water*	—	14° to 248° F
	Mineral Oil	-4° to 338° F	-4° to 482° F
	Food-Grade Silicone Oil	—	0° to 572° F
	Neobee M20	-10° to 200° F	-10° to 400° F

\* (Not suited for vacuum/compound ranges)

**Call for pricing and delivery on all seal assemblies and fill fluids.**

## Welded Metal Seals

- Welded diaphragm and body
- Threaded and flanged process connections
- Materials available for use in both general service and corrosive applications

### Specifications

**Pressure Ratings:** *Threaded:* 15 PSI to 3675 PSI; *Flanged:* 150#, 300#, 600#

**Operating Temperature:** Up to 752°F, dependent on materials

**Gasket:** Viton (good to 400°F); Teflon (good to 500°F)

### Clamp, Support Ring, Nuts, and Bolts:

Carbon steel, zinc-plated (good to 400°F), 300 series SS (good to 500°F)

**Need welded diaphragms for large volumes? Call us!**



## Saddle Flange Welded Diaphragm

### Specifications

**Operating Temperature:** 0° to 482° F

**Pressure Rating:** 1500 PSI, depending on pipe size; *Suitable pressure ranges:* 15 PSI to 1500 PSI

**Construction:** *Upper housing and saddle flange:* 316 stainless steel or nickel-plated carbon steel; *Clamping materials (bolts and washers):* 316 stainless steel; *Diaphragm:* 316 stainless steel; *Gasket:* Viton (max. temp. 400°F) or Teflon (max. temp. 500°F)



## Flanged-Type Flush Diaphragm

L990.27

### Specifications

**Pressure Rating:** 150#, 300#, 600#

**Suitable Pressure Ranges:** 10" H<sub>2</sub>O to maximum flange rating, depending on diaphragm size and process conditions

**Operating Temperature:** -130° to 752°F

**Minimum Pressure Span:**

Nominal Size	Gauge Pressure	Differential Pressure
1"	400 PSI	200" H <sub>2</sub> O
2"	350 PSI	160" H <sub>2</sub> O
3"	50 PSI	10" H <sub>2</sub> O



## Miniature Diaphragm Seal

- For 2.5", 4" and 4.5" dial pressure gauges
- Welded 316 stainless steel, Monel, or Hastelloy C-276 construction
- Good from 100 PSI to 2500 PSI



## Low Pressure Welded Diaphragms

### Specifications

**Range:** *Threaded:* 10" H<sub>2</sub>O to 1500 PSI; *Flanged:* 10" H<sub>2</sub>O to max. flange rating

**Construction:** *Housing/diaphragm:* 316 SS; *Gasket:* Viton (max. temperature 400°F); *Bolts:* 300 series stainless steel (max. temperature 500°F)

**Operating Temperature:** -40° to 752° F



## Pancake Diaphragm

### Specifications

L990.28

**Pressure Rating:** 150# to 2500#

**Operating Temperature:** -40° to 752°F

**Minimum Span, "H<sub>2</sub>O:** *Nominal size:* 3"; *Gauge pressure:* 50; *Differential pressure:* 10; *Suitable Ranges:* 10" H<sub>2</sub>O to max. flange rating, depending on diaphragm size and process conditions



## Flanged-Type Extended Diaphragm

### Specifications

L990.29

**Suitable Pressure Ranges:** 10" H<sub>2</sub>O to flange rating (max 1500 PSI), depending on diaphragm size and process conditions

**Pressure Rating:** 150#, 300#

**Operating Temperature:** -130° to 752°F

**Minimum Pressure Span:**

Nominal Size	Gauge Pressure	Differential Pressure
3"	200 PSI	50" H <sub>2</sub> O
4"	50 PSI	10" H <sub>2</sub> O



## Inline Chemical Seal

Mounts directly into the process line to reduce damage caused by media that clog or foul Bourdon tubes. Helps eliminate all corners or obstructions to media flow. The 360° polyurethane liner provides repeatable, accurate pressure readings. Other liner materials available.

### Specifications

**Suitable Ranges:** 50 PSI to CI 150# per ASME B16.5

**Construction:** *Body:* Black-painted carbon steel; *Flange:* Carbon steel; *Bolting Hardware:* Carbon steel; *Diaphragm:* PU/80 shore polyurethane



## Sanitary Application Seals

- Welded diaphragm and body
- Fits Tri-Clamp® systems; Call for others
- Special materials or electropolishing available on request



## Flushing Ring

WIK's flushing ring is used with a flanged pancake and INLINE SEAL™ chemical seals. It contains two lateral NPT ports that flush out the collected process medium adjacent to the diaphragm. It is excellent for use when there is potential of deposits from the process medium blocking access to the diaphragm.



## Gauge Accessories

### Vari-Damp Pulsation Dampener

- Reduces instrument damage
- Controls pulsation and shock
- Broad adjustable dampening range and positive shutoff
- Stops pointer oscillation, chart painting



The Vari-Damp pulsation dampener has a ball check cutoff to block line surges, shock waves, and fluid hammer and an adjustable, fine-thread choke valve to tune out line pulses.

The combination of the ball check and a tunable choke valve makes the Model 150 ideal for use on low-displacement instruments that require heavy dampening (Bourdon tubes); and with high-displacement instruments such as diaphragm-, piston- and bellows-operated gauges, recorders and controllers, which require moderate to heavy dampening.

The choke valve throttles and dampens out pulsations and cyclic pressure waves, and can be adjusted to dampen out to any level desired to prevent pointer oscillation on gauges, chart painting on recorders, instability in controllers, or damage to instruments.

#### Model Selection Guide

Working Pressure	Materials		Connections NPT (F)	Catalog Number	Price Each
	Body	Trim			
Model 150 Vari-Damp pulsation dampener. Viton O-Ring and Teflon® seals.					
3000 PSI	Brass	316 SS	1/4"	150-BO-10	\$30.00
5000 PSI	Brass	316 SS	1/2"	150-BH-10	37.50
		316 SS	1/4"	150-SO-10	70.00
10000 PSI	316 SS	316 SS	1/2"	150-SH-10	96.00

### Gauge Minder Limiting Valve

- Eliminates damage caused by overpressure
- Includes automatic shutoff
- Adjustable damping



The Model 200 Gauge Minder automatically shuts off a pressure instrument when a shock pulse or an overpressure occurs. A needle valve is built in for pulsation dampening and manual shutoff.

The pulsation dampener snubs out instrument oscillations, improves the readability, and extends the life of the instruments. The manual shutoff valve eliminates the need for a gauge cock or block valve at the instruments. Gauge Minder comes with range springs for setting the shutoff pressure point at any pressure from 50 to 5000 PSI. The automatic shutoff valve is non-chattering and positive on closing.

#### Model Selection Guide

Working Pressure	Materials		Connections NPT (F)	Catalog Number	Price Each
	Body	Trim			
Model 200 Gauge Minder pressure limiting valve with adjustable dampening. Buna-N O-ring and Teflon® Seals. 200-BH-10 has Viton O-ring.					
5,000 PSI	Aluminum	316 SS	1/4"	200-AO-00	\$120.00
		316 SS	1/4"	200-SO-00	195.00
10,000 PSI	316 SS	316 SS	1/2"	200-SH-00	220.00
		Brass	1/2"	200-BH-10	191.50
These range springs are furnished with each unit.		<b>Spring Color</b>	<b>Shutoff Range</b>		
		Silver	50 to 120 PSI		
		Black	100 to 1,100 PSI		
		Gold	1,000 to 5,000 PSI		

### Metal Seat Hand Valves

- Designed for safe, repetitive closure, simple maintenance, and a long trouble-free life
- Ball end stem provides bubble-tight shutoff. Hardened, non-rotating ball ensures perfect alignment closure
- Carbon steel or 316 stainless steel bodies; Models below have Teflon bonnet packing
- See more on page 196



**ANDERSON GREENWOOD INSTRUMENTATION PRODUCTS**

#### Model Selection Guide

Body Material	Connection		Catalog Number	Price Each
	Inlet	Outlet		
Carbon Steel	1/2" NPTM	1/2" NPTF	H7VIC-44Q	\$26.87
Carbon Steel	1/2" NPTF	1/2" NPTF	H7VIC-4Q	26.87
Stainless Steel	1/2" NPTM	1/2" NPTF	H7VIS-44Q	70.22
Stainless Steel	1/2" NPTF	1/2" NPTF	H7VIS-4Q	70.22

### Coil Syphons

Normally used in high-temperature applications to protect the pressure gauge from damaging process fluids. Syphons are added between the gauge and line to cool steam or other hot vapors before they enter the gauge and cause permanent damage.



#### Model Selection Guide

Material	Loop Style	Pipe Thread	Maximum		Catalog Number	Price Each
			Temp.	Pressure		
Schedule 40 Construction (Temperature dissipates at a rate approximately 100° per 100 foot of 1/2" pipe)						
Carbon Steel	180°	1/4"	400°F	250 PSI	Syphon-12	\$4.42
Carbon Steel	180°	1/2"	400°F	250 PSI	Syphon-16	17.36
Carbon Steel	90°	1/2"			Syphon-19	17.36
316 SS	180°	1/4"	400°F	500 PSI	Syphon-14	23.92
316 SS	180°	1/2"			Syphon-09	50.00
316 SS	360°	1/2"			Syphon-18	60.00
Schedule 80 Construction						
Carbon Steel	180°	1/4"	400°F	500 PSI	Syphon-02	5.64
Carbon Steel	180°	1/4"	400°F		Syphon-15*	11.12
Carbon Steel	180°	1/2"	400°F	500 PSI	Syphon-08	16.60

\* Seamless construction.

### Armored Capillary



For remote mounting a pressure gauge or transmitter for easy reading. Available in 304 and 316 stainless steel, it's compatible with most process environments.

#### Specify with Order:

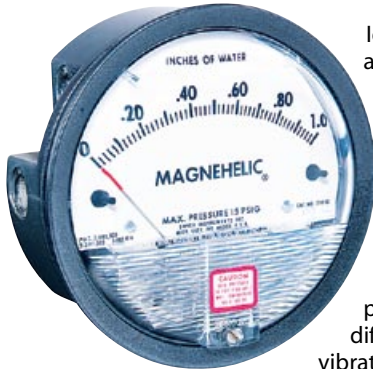
1. Tubing Material
2. Tubing Length **LL**
3. Fitting NPT Thread Size
4. Fitting Configuration **c** (male or female thread)

#### Model Selection Guide

Tubing Material	Fitting Size	Catalog Number	Std. Assembly Price (5 Ft.)	Adder/ +5 Ft.
Armored Capillary. Replace <b>LL</b> with desired length. Replace <b>c</b> with M or F.				
304 SS	1/4" x 1/4"	CA-304- <b>LL</b> - 1/4 <b>c</b> x 1/4 <b>c</b>	\$86.43	\$25.00
304 SS	1/2" x 1/2"	CA-304- <b>LL</b> - 1/2 <b>c</b> x 1/2 <b>c</b>	100.71	25.00
316 SS	1/4" x 1/4"	CA-316- <b>LL</b> - 1/4 <b>c</b> x 1/4 <b>c</b>	93.57	17.85
316 SS	1/2" x 1/2"	CA-316- <b>LL</b> - 1/2 <b>c</b> x 1/2 <b>c</b>	107.86	17.85

# Dwyer® Ultra Low Differential Pressure Gauge

## For Sensing Low Air or Gas Positive, Negative, or Differential Pressure



Ideal for both portable and stationary applications — measuring fan, blower, and fluid system pressures, filter resistance, air velocity, furnace draft, pressure drop across orifice plates, liquid levels with bubblers.

Using simple, frictionless Magnehelic® movement, it quickly indicates low air or noncorrosive gas pressures — positive, negative, or differential. The design resists shock, vibration, and overpressures. No manometer fluid to evaporate, freeze, or cause toxic or leveling problems.

A single case size is used for most Magnehelic gauges. Can be flush or surface mounted with standard hardware. With an optional pipe-mounting kit, they may be conveniently installed on horizontal or vertical 1-1/4" to 2" pipe. Although calibrated for vertical position, many ranges above 1" can be used at any angle by simply re-zeroing. For maximum accuracy, they must be calibrated in the same position in which they are used. A 4-1/2" hole is required for flush panel mounting. Includes complete mounting and connection fittings and instructions.

### Specifications

- Ambient Temperature:** 20° to 140°F. Low temperature models available.
- Rated Total Pressure:** -20" Hg. to 15 PSIG. For high cycle rate within total pressure rating, next higher range is recommended.
- Connections:** 1/8" NPT high and low pressure taps, duplicated — one pair side and one pair on back.
- Housing:** Diecast aluminum, Iridite-dipped to withstand 168 hour salt spray test. Exterior finish is baked dark gray hammerloid.
- Accuracy:** ±2% full scale (3% on -0 and 4% on -00 models, vertical scale position only), throughout range at 70°F.
- Accessories:** Two 1/8" NPT plugs for duplicate pressure taps, two 1/8" pipe thread to rubber tubing adaptors, and three flush mounting adaptors with screws. (Mounting ring and snap ring retainer substituted for 3 adaptors in MP and HP accessories.)

### Model Selection Guide

Range ("WC)	Catalog Number	Price Each	Range ("WC)	Catalog Number	Price Each
0-0.25	2000-00*	\$73.00	0.25-0-0.25	2300-0*	\$74.00
0-0.50	2000-0*	63.50	0.5-0-0.5	2301	74.00
0-1.0	2001	63.50	1-0-1	2302	74.00
0-2.0	2002	63.50	2-0-2	2304	74.00
0-5.0	2005	63.50	5-0-5	2310	74.00
0-6.0	2006	63.50			
0-8.0	2008	63.50			
0-10	2010	63.50	10-0-10	2320	74.00
Options	Adjustable Signal Flag		-ASF		18.50
	High Pressures (to 80PSIG)		-HP		108.00
	Low Temperatures (to -20°F)		-LT		5.70

\* Accuracies (vertical scale position only): -00 Model: 4%. -0 Model: 3%.

## Combination Indicating Differential Pressure Gauge, High/Low Alarm



Photohelic® switch/gauges can control pressures in air conditioning systems, clean rooms, fluidic and pneumatic control systems, materials handling equipment and control pressure in air structures; and monitor respiratory and blood pressures.

Photohelics function like precise pressure switches combined with time-proven Magnehelic®-design pressure gauges.

Gauge reading is unaffected by switch operation. Easy-to-adjust setpoints with knob controls. Applied pressure and switch setpoints are fully visible. Deadband is one pointer width — less than 1% of full scale. DPDT relays can be easily interlocked to provide variable deadband control. Two photo-actuated circuits and two DPDT relays permit both high and low alarms or limit controls.

Photohelic switch/gauges can be wired for high-latching, low-latching, or combination high-low latching circuits. The equipment will hold in these respective positions once activated and until manually reset. Particularly useful for alarm and signal applications where you're controlling with another Photohelic switch/gauge or other means. Complete wiring and operational instructions are included. Relay transformer features a translucent Styrene Acrylonitrile housing to protect electronic components. Solid state and integrated circuit electronics are on glass-epoxy printed circuit boards and self-extinguishing terminal boards.

### Specifications

- Ambient Temperature:** 20° to 120°F. Low temperature models available.
- Rated Pressure:** 20" Hg to 25PSIG total on either side of diaphragm.
- Accuracy:** ±2% full scale at 70°F. (3% on -0 and 4% on -00 models).
- Gauge Connections:** 1/8" NPTF.
- Electrical Rating (of Relays):** 10A @ 28 VDC, 10A @ 120, 240 VAC.
- Power Required:** 120 VAC, 50/60 Hz; 240 VAC and 24 VAC power optional
- Setpoint Adjustment:** Adjustable knobs on front face.
- Finish:** Case exterior is baked, dark gray hammerloid.

### Model Selection Guide

Range ("WC)	Catalog Number	Price Each	Range ("WC)	Catalog Number	Price Each
0-0.25	A3000-00*	\$261.00	0-8.0	A3008	\$247.00
0-0.50	A3000-0*	247.00	0-10	A3010	247.00
0-1.0	A3001	247.00	0-20	A3020	247.00
0-2.0	A3002	247.00	0-25	A3025	247.00
0-5.0	A3005	247.00	0-50	A3050	247.00
0-6.0	A3006	247.00	0-80	A3080	247.00
Options	Remote Mounted Relay		-RMR		43.75
	Low Temperatures (to -20°F)		-LT		5.70

\* Accuracies (vertical scale position only): -00 Model: 4%. -0 Model: 3%.

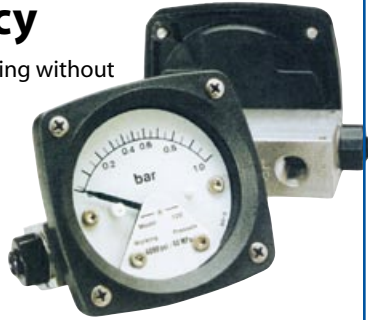
**Need a pressure alarming monitor with a digital display? See page 382. Just \$255!**

**Call Lesman for other pressure measurement ranges and engineering units.**

# Differential Pressure Gauges

## Model 120 Filter-Minder ±2% Accuracy

- Weatherproof for outdoor mounting without damage to dial or working parts.
- Solid front engineering plastic case, shatter-resistant lens
- Aluminum or 316 stainless steel pressure housing



### Specifications

- Dial Size:** 2.5"  
**Accuracy:** ±2% full scale, ascending per B40.100 Grade B  
**Pressure:** Working: 6,000 PSIG; Proof: 12,000 PSIG  
**Temperature:** -40° to 200°F  
**Pressure Connections:** 1/4" NPTF back connections  
**Materials:** Case and lens: Engineering plastic; Body: Aluminum or 316 stainless steel; Seals: Buna-N O-rings  
**Leakage Across Piston:** Will not exceed 15 SCFM air at 100 PSID, ambient.

### Model Selection Guide

Material	Catalog Number and Range	Price
Aluminum	120-AA-00-00 25 PSID	\$135.00
Aluminum	120-AA-00-00 50 PSID	135.00
Aluminum	120-AA-00-00 75 PSID	135.00
Aluminum	120-AA-00-00 100 PSID	135.00
316 Stainless Steel	120-SA-00-00 25 PSID	265.00
316 Stainless Steel	120-SA-00-00 50 PSID	265.00
316 Stainless Steel	120-SA-00-00 75 PSID	265.00
316 Stainless Steel	120-SA-00-00 100 PSID	265.00

### Options

- Pipe Mounting Kit — Back Connection Only 35.00  
 Maximum Indicator Follower Pointer 25.00  
 Liquid Fill (Dial Chamber Only) 30.00

**Call Lesman For ...** Alarming Reed Switches

**All Mid-West DP indicators below are available to our OEM customers in quantities of 100 or more. Please call for pricing.**

## DP Indicators for OEM Use

**Model 126/127:** Low cost piston-type differential pressure indicator. For reliably measuring pressure drop across filters, strain-ers, and separators.



- Range:** 126: 0-5 PSID through 0-20 PSID; 127: 0-25 PSID through 0-100 PSID  
**Accuracy:** ±5% full scale  
**Materials:** Aluminum body, 316SS internals, Buna-N elastomer, 1/8" NPTF bottom process connection

**Model 146:** Diaphragm-type differential pressure indicator. Features total separation between high and low sides.



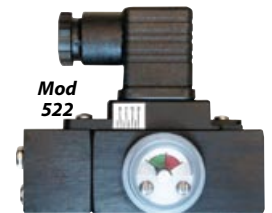
- Range:** 0-50" H<sub>2</sub>O to 0-30 PSID  
**Accuracy:** ±5% full scale  
**Materials:** Aluminum, brass, or 316 SS body; 316SS internals; Buna-N elastomer; 1/8" NPTF bottom process connection

**Model 444:** The ideal differential pressure indicator when readability, small size, and low price are your main concerns. Features a directional flow arrow and green-to-red sliding indication



- Range:** 0-5 PSID to 0-25 PSID  
**Accuracy:** ±5% full scale  
**Materials:** Glass-filled Nylon body; GFN and stainless steel internals; Buna-N and Viton elastomers; Direct-mounting slotted hex bolt 3/8"-24 process connection, UNF 1.75" spacing

**Model 522:** This differential pressure indicator has a rubber rolling diaphragm and metal body. Suitable for use in hose down applications. The rolling diaphragm sensing element isolates the high and low sides of the indicator.



- Range:** 0-5 PSID to 0-50 PSID  
**Accuracy:** ±5% full scale  
**Materials:** Aluminum or 316/316L SS body; 316SS, ceramic, and acetal moving parts; Buna-N, Viton, or EPDM elastomers; 1/4" NPTF process connection

**Model 555:** This DP gauge offers dual color-coded dials for easier installation regardless of flow direction. The rolling diaphragm sensing element isolates the high and low side of the indicator, assuring filter efficiency.

- Range:** 0-5 PSID to 0-50 PSID  
**Accuracy:** ±5% full scale  
**Materials:** Glass-filled Nylon (GFN) body; Stainless steel, ceramic, and GFN internals; Buna-N elastomers; 3/8"-24" molded bolt process connections, 1.75" spacings



## Model 122 Filter Minder ± 5% Accuracy

### Specifications

- Dial Size:** 2.5"  
**Accuracy:** ±5% full scale  
**Pressure:** Working: 5000 PSIG; Proof: 10,000 PSIG  
**Temperature:** -40° to 200°F  
**Pressure Connections:** 1/4" NPTF back connections  
**Materials:** Case and Lens: Engineering plastic; Body: Aluminum or 316 stainless steel; Seals: Buna-N O-rings  
**Leakage Across Piston:** Will not exceed 15 SCFM air at 100 PSID, ambient.



### Model Selection Guide

Material	Catalog Number and Range	Price
Aluminum	122-AA-00-00 25 PSID	\$119.00
Aluminum	122-AA-00-00 50 PSID	119.00
Aluminum	122-AA-00-00 75 PSID	119.00
Aluminum	122-AA-00-00 100 PSID	119.00

Combustion Safety and Efficiency

Process Control Accessories

Pressure and Temperature Switches

ASCO Solenoid Valves

Pressure Gauges

Thermometers

## Mid-West Instrument

### Model 130 Delta Gauge

**Diaphragm-type DP gauge for  
low differential pressures**

- $\pm 2\%$  full scale accuracy,  $\pm 5\%$  full scale for 5" to 9.9" H<sub>2</sub>O
- 4.5" dial, aluminum body, 316 stainless steel internals, Buna-N seal and diaphragm
- Available ranges from 0–5" H<sub>2</sub>O to 0–400" H<sub>2</sub>O differential; Static working pressures to 300 PSIG
- Flexible elastomer diaphragm provides total separation of high and low pressure signals
- Hermetically sealed reed switches, max. indicator follower pointer, mounting kits, and alternative body material options

**Prices start at \$425.00**



### Models 105-106

**6" Dial, 0-10" to 0-400" WCD Range**

- $\pm 1\%$  full scale accuracy ( $\pm 0.5\%$  optional)
- Available ranges from 10" WCD to 400" WCD; 1500 PSIG working pressure
- 6" dial, aluminum (105) body with copper alloy sensing element, or 316 stainless steel (106) body and internals, Buna-N seal

**Prices start at \$805.00**



### Model 140 Harsh Service Gauge

- Ideal for use on dissimilar fluids, wet gas, or fluids with high concentration of suspended solids
- $\pm 2\%$  full scale accuracy
- Ranges from 50" H<sub>2</sub>O to 100 PSID (140), 20" H<sub>2</sub>O to 25 PSID (142); Working pressures to 3000 PSIG.
- Sensor magnetically coupled to pointer and switches
- 2.5" or 4" dial, aluminum or 316 stainless steel body, 316 stainless steel internals, Buna-N diaphragm and seal
- Overrange protection to rated working pressures
- Weatherproof plastic dial chamber with shatter-resistant lens
- Optional hermetically sealed reed switches, mounting kits

**Prices start at \$215.00**



### Model 109

**6" Dial, 0-15 to 0-6000 PSID Range**

- $\pm 1\%$  full scale accuracy ( $\pm 0.5\%$  optional)
- Available ranges from 15 PSID to 6000 PSID
- 6" dial with high-impact plastic housing, aluminum or 316 stainless steel body, brass or 316 stainless steel bourdon tube, Buna-N seals, brass or stainless steel overrange valves
- 10 cc volume Bourdon tube, 140 cc capsule, displacement 0.02 cc full scale

**Prices start at \$820.00**



### Model 220 Hazardous Location Piston-Type DP Gauge

- $\pm 3-2-3\%$  accuracy
- 4.5" dial, aluminum or 316 stainless steel body, 316SS internals, Buna-N diaphragm and seal
- Available ranges from 0-5 PSID to 0-100 PSID; Static working pressures to 4000 PSIG
- CSA, UL, and ATEX approvals

**Prices start at \$460.00**



### Model 240 Hazardous Location Diaphragm Isolated DP Gauge

- $\pm 3-2-3\%$  accuracy
- Available ranges from 20" WCD to 1000 PSID; 1500 PSIG working pressure
- 4.5" dial, aluminum or 316/316L stainless steel body, 316SS internals, ceramic magnets, Buna-N diaphragm and seal
- CSA, UL, and ATEX approvals

**Prices start at \$630.00**



**Call 800-9LESMAN to order. (That's 800-953-7626)**

# WIKAI® Low Pressure Differential Pressure Gauge



## Features

- Easy to install without tools
- Membrane sensing element with two fully enclosed measuring chambers
- Non-contact magnetic movement
- Available as DP gauge only, with two-wire 4–20 mA output, or with three-wire 0–10 VDC output
- FREE custom dial and faceplate — Add your company name, address, logo, website and more! All with no setup fee or special production costs!

WIKAI's new value-innovated air2guide low pressure DP gauge is designed to measure dry, clean non-aggressive gases and air. It is ideal for filtration systems, pressure monitoring for HVAC, air handlers and ventilation systems and for overpressure monitoring of clean rooms, gas scrubbers and dust collection systems.

WIKAI air2guide gauges feature a two-part assembly design that separates the measuring system from case components, making it easy to install without tools. It also gives you the ability to replace only the measuring system or the case, providing significant cost savings for repairs.

In addition to the analog display, an air2Guide model is available with an electronic output signal for remote indication. It can be used for data collection, controllers, indications, and processing signals with electronically integrated systems. Two-wire 4–20 mA models are shown below. Call Lesman for 0–10V outputs.

## Specifications

**Accuracy:** ±3.0% span

**Zero Adjustment:** External zero-point adjustment through window

**Temperature:** Ambient: -22° to 176°F; Media: 3° to 122°F

**Dial:** 4.5" aluminum, two-part with white and blue background with ABS plastic pointer and set pointer

**Case:** Fiberglass reinforced, high-impact polycarbonate case with polycarbonate window

**Movement:** Magnetic assist, non-contact

**Diaphragm:** Silicone

**Models:** *Panel mount version:* Comes with two sets of 1/8" – 3/16" hose barb fittings, straight and angle; *Surface mount version:* Comes standard with one set of 1/8" – 3/16" hose barb fittings, straight

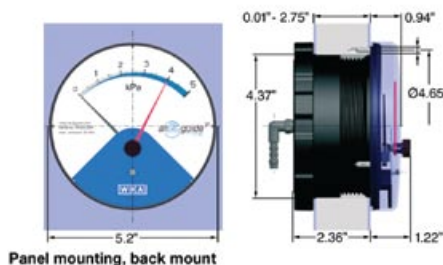
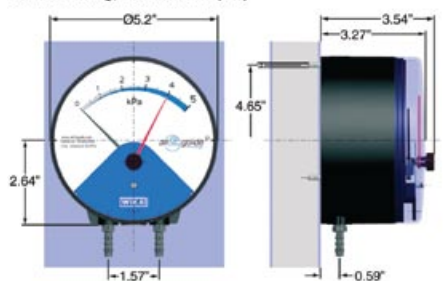
**Process Connection:** Two G-1/8 female center or lower back mount

**Standard Accessories:** Three self-tapping mounting screws

**Weather Protection:** NEMA 3/IP54 standard, NEMA 4/IP65 optional

**Optional Pressure Units:** Pa, kPa, mmWC, cmWC, mBar

Wall mounting, lower mount (LM)



Panel mounting, back mount

## Model Selection Guide

Mounting Output	Panel Mount			Surface Mount				
	None, Gauge Only	Two-wire 4–20 mA		None, Gauge Only	Two-wire 4–20 mA			
±0.1" WC	50676814	\$74.50	50692798	\$221.50	50677012	\$74.50	50693522	\$221.50
±0.2" WC	50676822	74.50	50692801	221.50	50677039	74.50	50693531	221.50
±0.5" WC	50676831	74.50	50692810	221.50	50677055	74.50	50693549	221.50
±1" WC	50807099	74.50	50807218	221.50	50807132	74.50	50807366	221.50
±2" WC	50807102	74.50	50807226	221.50	50807145	74.50	50807374	221.50
±4" WC	50807111	74.50	50807234	221.50	50807153	74.50	50807382	221.50
±6" WC	50807129	74.50	50807242	221.50	50807161	74.50	50807391	221.50
0–0.25" WC	50676857	65.00	50692828	205.00	50677063	65.00	50693557	205.00
0–0.4" WC	50676865	65.00	50692836	205.00	50677098	65.00	50693565	205.00
0–0.5" WC	50676873	65.00	50692844	205.00	50677080	65.00	50693573	205.00
0–1" WC	50676881	65.00	50692852	205.00	50556673	65.00	50693581	205.00
0–2" WC	50676890	65.00	50692861	205.00	50556681	65.00	50693590	205.00
0–3" WC	50676903	65.00	50692879	205.00	50556690	65.00	50693603	205.00
0–4" WC	40246582	65.00	50692887	205.00	50556703	65.00	50693611	205.00
0–5" WC	50676911	65.00	50692895	205.00	50686178	65.00	50693620	205.00
0–6" WC	40214583	65.00	50692909	205.00	50556738	65.00	50693638	205.00
0–8" WC	50676920	65.00	50692917	205.00	50556746	65.00	50693646	205.00
0–10" WC	50676938	65.00	50692925	205.00	50556754	65.00	50693794	205.00
0–12" WC	50676946	65.00	50692933	205.00	40214605	65.00	50693808	205.00
0–15" WC	40246604	65.00	50692941	205.00	50556762	65.00	50693816	205.00
0–20" WC	50676954	65.00	50692950	205.00	50556771	65.00	50693841	205.00
0–25" WC	50676962	65.00	50692968	205.00	50556789	65.00	50693859	205.00
0–30" WC	50676971	65.00	50692976	205.00	50677101	65.00	50693867	205.00
0–40" WC	50676989	65.00	50692984	205.00	50677110	65.00	50693875	205.00
0–50" WC	50676997	65.00	50692992	205.00	50677128	65.00	50693883	205.00
Compression fitting, brass 1/8"NPT to 1/4" metal tubing							40232867	12.30

Looking for a low pressure DP gauge with 0–10V output? Call Lesman.