



LIQUID FILLED GAUGES – OPEN FRONT STYLE

Model 656 2-1/2" (63mm) and 4" (100mm) Open Front Stainless Steel Gauges

DESCRIPTION

The 656 Series are suitable for corrosive environments in chemical, petrochemical, refining, power, marine, and food and pharmaceutical processing applications. Liquid filled pressure gauges provide users with a number of advantages in certain measurement applications. They are ideally suited for uses on equipment where excessive vibration and pulsation are encountered, such as pumps, compressors, machine tools, etc. The liquid fill minimizes the effect of these severe environments, protects the gauge internals, and provides continuous lubrication on the mechanism, all adding up to extended service life. Liquid filling also provides greater protection of the gauge internals from corrosive atmospheres.

AMETEK liquid filled gauges can be used with a variety of fill fluids including glycerin, mineral oil, and silicone oil. These gauges are available in 63 and 100mm sizes.



Model 656
with front flange

Model 656

SPECIFICATIONS

SIZES: 2-1/2" (63mm) and 4" (100mm)

RANGES: 63mm – 30" Hg-0 psi through 0 to 10000 psi
(0 psi to 6000 psi on the lower back mount model)
100mm – 30" Hg-0 psi through 0 psi to 23000 psi

ACCURACY:

Model 6562 (63mm) – $\pm 1.6\%$ of full scale (Grade B)

Model 6566 (100mm) – $\pm 1.0\%$ of full scale (Grade 1A)

BOURDON TUBE: 316L stainless steel

Model 6562 (63mm) – Less than or equal to 800 psi, C type Bourdon tube; greater than or equal to 1000 psi, helical type Bourdon tube

Model 6566 (100mm) – Less than or equal to 1000 psi, C type Bourdon tube; greater than or equal to 1500 psi, helical type Bourdon tube

WINDOW: 63mm – Polycarbonate (laminated shatter-resistant glass window optional)

100mm – Laminated shatter-resistant glass window

MOVEMENT: 304 stainless steel

DIAL: White aluminum with black lettering*

POINTER: 63mm aluminum alloy, black painted; adjustable pointer on 100mm, aluminum black

CASE AND BEZEL RING: 304 stainless steel, bayonet type

CASE PRESSURE RELIEF:

Top – Rubber disc for 63mm; Back – Rubber disc for 100mm

PROCESS CONNECTION: 316L stainless steel

63mm – 1/4-18 NPT standard

100mm – Lower mount 1/4-18 NPT or 1/2-14 NPT standard; Lower back mount 1/4-18 NPT standard

WORKING PRESSURE: Steady – 50% of full scale; over range protection – 125% of 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)

* Single scale psi dials are standard, but dials can be changed out at the factory for kPa/psi, kPa, psi/bar, or bar

WARNING:

Fill fluids can combine with strong oxidizing agents, including (but not limited to) chlorine, nitric acid, and hydrogen peroxide and result in an explosion which can cause property damage and personal injury or bodily harm. If gauges are to be used in such hazardous service, consult factory for other liquid filling and product alternatives.

In order to correctly use these gauges, it is recommended that users of pressure gauges become familiar with American National Standard ASME B40.100-2005 entitled "Pressure Gauges and Gauge Attachments." This specification is available from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, NY 10017.

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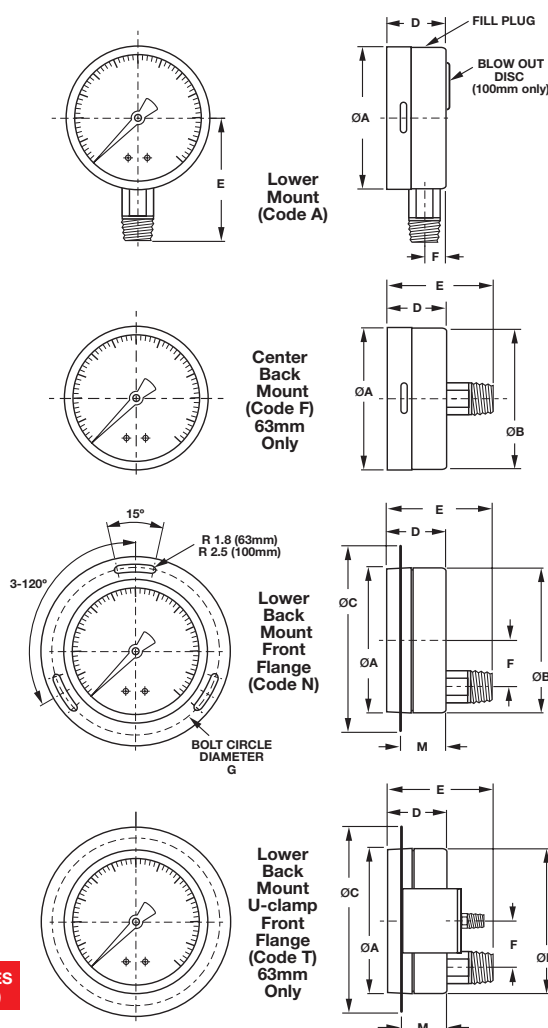
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Pressure Ranges

Ranges**
30" Hg-0
30" Hg-0-15
30" Hg-0-30
30" Hg-0-60
30" Hg-0-100
30" Hg-0-150
0-15 psi
0-30 psi
0-60 psi
0-100 psi
0-160 psi
0-200 psi
0-300 psi
0-400 psi
0-600 psi
0-800 psi
0-1000 psi
0-1500 psi
0-2000 psi
0-3000 psi
0-6000 psi
0-10000 psi
0-14500 psi
0-23000 psi*

* Not available in 63mm

** Metric and dual scale dials are available. Please call Customer Service at +1 215-293-4100 for more information.



Dimensions

Dial Sizes	Mounting	Unit	A	B	C	D	E	F	G	M
63mm	LM LM	inches	2.51	—	—	1.30	2.15	0.44	—	—
		mm	63.8	—	—	33.0	54.6	11.2	—	—
63mm	CBM CBM	inches	2.51	2.44	—	1.30	2.24	—	—	—
		mm	63.8	62.0	—	33.0	56.9	—	—	—
63mm	LBM/FF LBM/FF	inches	2.51	2.61	3.39	1.30	2.24	0.51	2.95	1.10
		mm	63.8	66.3	86.1	33.0	56.9	13.0	74.9	27.9
63mm	LBM/U-clamp LBM/U-clamp	inches	2.54	2.64	2.99	1.30	2.24	0.51	—	1.10
		mm	64.5	67.1	76.0	33.0	56.9	13.0	—	27.9
100mm	LM LM	inches	3.99	—	—	1.97	3.27	0.63	—	—
		mm	101.3	—	—	50.0	83.0	16.0	—	—
100mm	LBM/FF LBM/FF	inches	3.99	4.06	5.16	1.97	3.27	1.14	4.57	1.77
		mm	101.4	103.1	131.1	50.0	83.1	29.0	116.1	45.0

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Spec Number Selection Chart – 63mm

Model 656 (63mm)	Stem Mounting	
Model Number	6562 Lower Mount, 1/4-18 NPT	6562 Center Back Mount, 1/4-18 NPT
Bourdon Tube	316L Stainless Steel	316L Stainless Steel
Connection	316L Stainless Steel	316L Stainless Steel
Ranges*	Spec No.	Spec No.
0-30" Hg VAC	256000	256024
30"-0-15 psi	256001	256025
30"-0-30 psi	256002	256026
30"-0-60 psi	256003	256027
30"-0-100 psi	256004	256028
30"-0-150 psi	256005	256029
0-15 psi	256007	256031
0-30 psi	256008	256032
0-60 psi	256009	256033
0-100 psi	256010	256034
0-160 psi	256011	256035
0-200 psi	256012	256036
0-300 psi	256013	256037
0-400 psi	256014	256038
0-600 psi	256015	256039
0-1000 psi	256016	256040
0-1500 psi	256017	256041
0-2000 psi	256018	256042
0-3000 psi	256019	256043
0-4000 psi	256020	256044
0-5000 psi	256021	256045
0-6000 psi	256022	256046
0-10000 psi	256023	256047

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Model 656 2-1/2" (63mm) and 4" (100mm) Open Front Stainless Steel Gauges

Spec Number Selection Chart – 63mm

Model 656 (63mm)	Front Flange Panel Mounting	U-clip Panel Mounting
Model Number	6562 Lower Back Mount, 1/4-18 NPT	6562 Lower Back Mount, 1/4-18 NPT
Bourdon Tube	316L Stainless Steel	316L Stainless Steel
Connection	316L Stainless Steel	316L Stainless Steel
Ranges*	Spec No.	Spec No.
0-30" Hg VAC	256048	256072
30"-0-15 psi	256049	256073
30"-0-30 psi	256050	256074
30"-0-60 psi	256051	256075
30"-0-100 psi	256052	256076
30"-0-150 psi	256053	256077
0-15 psi	256055	256079
0-30 psi	256056	256080
0-60 psi	256057	256081
0-100 psi	256058	256082
0-160 psi	256059	256083
0-200 psi	256060	256084
0-300 psi	256061	256085
0-400 psi	256062	256086
0-600 psi	256063	256087
0-1000 psi	256064	256088
0-1500 psi	256065	256089
0-2000 psi	256066	256090
0-3000 psi	256067	256091
0-4000 psi	256068	256092
0-5000 psi	256069	256093
0-6000 psi	256070	256094
0-10000 psi	256071	256095

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Spec Number Selection Chart – 100mm

Model 656 (100mm)	Stem Mounting		Front Flange Panel Mounting
Model Number	6566 Lower Mount, 1/4-18 NPT	6566 Lower Mount, 1/2-14 NPT	6566 Lower Back Mount, 1/4-18 NPT
Bourdon Tube	316L Stainless Steel	316L Stainless Steel	316L Stainless Steel
Connection	316L Stainless Steel	316L Stainless Steel	316L Stainless Steel
Ranges*	Spec No.	Spec No.	Spec No.
0-30" Hg VAC	356000	356025	356050
30"-0-15 psi	356001	356026	356051
30"-0-30 psi	356002	356027	356052
30"-0-60 psi	356003	356028	356053
30"-0-100 psi	356004	356029	356054
30"-0-150 psi	356005	356030	356055
0-15 psi	356007	356032	356057
0-30 psi	356008	356033	356058
0-60 psi	356009	356034	356059
0-100 psi	356010	356035	356060
0-160 psi	356011	356036	356061
0-200 psi	356012	356037	356062
0-300 psi	356013	356038	356063
0-400 psi	356014	356039	356064
0-600 psi	356015	356040	356065
0-800 psi	356016	356041	356066
0-1000 psi	356017	356042	356067
0-1500 psi	356018	356043	356068
0-2000 psi	356019	356044	356069
0-3000 psi	356020	356045	356070
0-6000 psi	356021	356046	356071
0-10000 psi	356022	356047	356072
0-14500 psi	356023	356048	356073
0-23000 psi	356024	356049	356074

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