Stainless Steel Case Wetted Pressure Gauges

Liquid Filled Case Lower Mount

Liquid Filled Case Center Back Mount

Features

- SS wetted parts for use with air, oil, water and non-corrosive liquids
- Restricted orifice to dampen pressure surges
- Crimp-on bezel
- Dual scale (psig/kPa)
- Glycerin filled case to reduce needle fluctuations due to vibration
- ±1.5% of full scale value accuracy
- 5 year warranty

Applications

Ideal for pumps, compressors,

- hydraulic presses, machinery, pneumatic equipment and motors in harsh environments

SRS 2.5" Stainless Steel Case Wetted Glycerin Filled Pressure Gauges				
Part Number	***Description***	***Pcs/Pkg***	***Wt(lb)***	***Price***
SRS-G25-SLV	Gauge, 2.5 in., SS Case, liquid fill, -30 to 0 inHg vacuum/-100 to 0 kPa vacuum, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL30	Gauge, 2.5 in., SS Case, liquid fill, 0-30 psig/0-200 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL60-	Gauge, 2.5 in., SS Case, liquid fill, 0-60 psig/0-420 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL100	Gauge, 2.5 in., SS Case, liquid fill, 0-100 psig/0-700 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL160	Gauge, 2.5 in., SS Case, liquid fill, 0-160 psig/0-1,100 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL200	Gauge, 2.5 in., SS Case, liquid fill, 0-200 psig/0-1,400 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL300	Gauge, 2.5 in., SS Case, liquid fill, 0-300 psig/0-2,000 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL600-	Gauge, 2.5 in., SS Case, liquid fill, 0-600 psig/0-4,200 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL1000	Gauge, 2.5 in., SS Case, liquid fill, 0-1000 psig/0-7,000 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL1500	Gauge, 2.5 in., SS Case, liquid fill, 0-1500 psig/0-10,000 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL2000	Gauge, 2.5 in., SS Case, liquid fill, 0-2000 psig/0-14,000 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL3000	Gauge, 2.5 in., SS Case, liquid fill, 0-3000 psig/0-21,000 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SL6000	Gauge, 2.5 in., SS Case, liquid fill, 0-6000 psig/0-42,000 kPa, SS-1/4 NPT, lower mount	1	0.5	$29.00
SRS-G25-SLV	Gauge, 2.5 in., SS Case, liquid fill, -30 to 0 inHg vacuum/-100 to 0 kPa vacuum, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL30	Gauge, 2.5 in., SS Case, liquid fill, 0-30 psig/0-200 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL60	Gauge, 2.5 in., SS Case, liquid fill, 0-60 psig/0-420 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL100	Gauge, 2.5 in., SS Case, liquid fill, 0-100 psig/0-700 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL160	Gauge, 2.5 in., SS Case, liquid fill, 0-160 psig/0-1,100 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL200	Gauge, 2.5 in., SS Case, liquid fill, 0-200 psig/0-1,400 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL300	Gauge, 2.5 in., SS Case, liquid fill, 0-300 psig/0-2,000 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL600	Gauge, 2.5 in., SS Case, liquid fill, 0-600 psig/0-4,200 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL1000	Gauge, 2.5 in., SS Case, liquid fill, 0-1000 psig/0-7,000 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL1500	Gauge, 2.5 in., SS Case, liquid fill, 0-1500 psig/0-10,000 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL2000	Gauge, 2.5 in., SS Case, liquid fill, 0-2000 psig/0-14,000 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL3000	Gauge, 2.5 in., SS Case, liquid fill, 0-3000 psig/0-21,000 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00
SRS-G25-SL6000	Gauge, 2.5 in., SS Case, liquid fill, 0-6000 psig/0-42,000 kPa, SS-1/4 NPT, center back mount	1	0.5	$29.00

See our website www.SRSIntlDirect.com for complete Engineering drawings.

Stainless Steel Case Wetted Pressure Gauges

Stainless Steel Case / SS Wetted Glycerin-filled Gauges Specifications	
Dial Size	2.5" [63.5 mm]
Case	AISI 304 SS
Lens	Polycarbonate
Ring	AISI 304 SS, Crimp-On
Socket	SS
Connection	1/4" NPT
Fill Liquid	Glycerin
Bourdon Tube	Phosphor C-shaped for pressures up to and including 600 psig (4,147 kPa), AISI 316 SS C-shaped for 1000 psig (6,895 kPa), AISI 316 SS spiral for pressures above 1000 psig (6,895 kPa)
Movement	SS
Pointer	Aluminum, anodized black
Welding	Tin/cooper alloy for pressures up to 600 psig (4,147 kPa), 316 SS TIG Argon arc for pressures 600 psig (4,147 kPa) and above
Over Pressure Limit	125% of full scale up to 1,400 psig (9,653 kPa), 115% of full scale over 1,400 psig (9,653 kPa)
Gasket Material	Silicone rubber for socket; EPDM for lens, filling plug and blow-out vent
Working Pressure	Maximum 75% of full scale value
Ambient/Process Temperature	-4 °F to 150 °F (-20 °C to 65 °C)
Accuracy	±1.5% of full scale value
Enclosure Rating	IP65

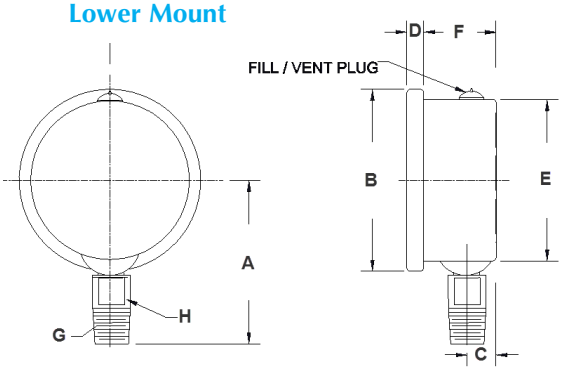
**Leaded not suitable for use in drinking water or other food & beverage applications.*

Warning: CHECK THE CHEMICAL COMPATIBILITY OF THE GAUGE'S WETTED PARTS WITH THE MEDIUM TO BE MEASURED. Use a suitable thread sealant such as Teflon® tape. Always tighten with an open end or adjustable wrench on the wrench flats. Never use any part of the pressure gauge to tighten other than the wrench flats that are on the gauge socket. Failure to do so will severely damage the pressure gauge.

Due to pressure buildup, some gauges (usually lower pressure ranges such as vacuum, up to 100 psig) may reflect a reading that is slightly "off zero". To properly "vent" the pressure gauge to atmosphere, make a small hole in the fill plug after you have installed the instrument.

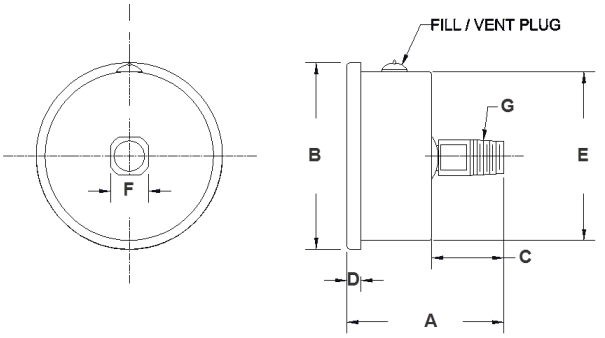
Dimensions

Lower Mount



Dimensions - Lower Mount Gauge	
A	2.190" [55.6 mm]
B	2.700" [68.5 mm]
C	0.433" [11.0 mm]
D	0.250" [6.3 mm]
E	2.440" [61.9 mm]
F	1.035" [26.3 mm]
G	1/4" NPT
H	0.551" [14.0 mm]

Center Back Mount



Dimensions - Center Back Mount Gauge	
A	2.264" [57.5 mm]
B	2.7" [68.5 mm]
C	1.175" [29.8 mm]
D	0.210" [5.3 mm]
E	2.445" [62 mm]
F	0.551" [14.0 mm]
G	1/4" NPT

See our website www.SRSIntlDirect.com for complete Engineering drawings.

Pressure Gauges

Bourdon Tube Pressure Gauges

SRS mechanical dial pressure gauges are available in a variety of configurations for use in most pneumatic, hydraulic, HVAC, plumbing, industrial and commercial applications. These high quality gauges use Bourdon tube sensing elements and do not require any external power sources to operate other than the media being sensed. Cases are available in durable steel or stainless steel and in either dry or liquid filled to dampen vibration and pulsations. Brass wetted parts are suitable for air, oil, or water applications while stainless steel wetted parts are available for corrosive applications. Dual marked dial faces (psig/kPa or inHg/kPa) are available in pressure ranges from vacuum up to 6000 psig.

The Bourdon tube pressure gauge applies the principle that a flattened tube will change to a more circular cross-section when pressurized. These tubes are then bent into a C-shape with one end crimped close and the other connected to the process. When the pressure inside the tube becomes greater than the ambient pressure the tube tries to straighten; this elongation is converted to a rotational motion with the use of a pinion gear attached to the pointer.

bourdon tubes are calibrated at the factory for a specific range known as gauge pressure*. This pressure is relative to ambient atmospheric pressure.

Pressure Gauge Terms:

- **Atmospheric Pressure:** The weight of a column of air measuring one square inch from sea level to the top of the atmosphere. Sea level pressure = 29.92 inHg / 101.325 kPa / 14.696 psig / 1.0132 bar
- **Absolute Pressure:** Zero (0) in reference to a perfect vacuum "Absolute Pressure" = gauge pressure (+) atmospheric pressure.
- ***Gauge Pressure:** Zero (0) in reference to "Atmospheric Pressure". "Gauge Pressure"= absolute pressure (-) atmospheric pressure.
- **Differential Pressure:** Is the difference in pressure between two measuring points.

Gauge Accuracy and Grade

Gauge accuracy and grade categorized by ASME (ANSI) Standard B40.1	
Gauge Accuracy	***ANSI Grade***
±5% Full Scale	D
±3% lower ¼ Scale; ±2% middle ½ scale; ±3% upper ¼ scale	B
±2% lower ¼ Scale; ±1% middle ½ scale; ±2% upper ¼ scale	A
±1% Full Scale	1A
±0.5% Full Scale	2A
±0.25% Full Scale	3A

Gauge Selection Considerations

Environment and Application

As the Bourdon tube is in direct contact with the medium being measured, the characteristics of the medium must be considered. If the medium is corrosive, stainless steel internals and casing should be chosen over brass. Brass is more suitable for general applications. The effects of moisture and weather conditions may also be harmful to the gauge and should be considered when selecting a gauge. Liquid filled gauges help prevent moisture build-up. Medium that will leave a deposit, clog or solidify in the Bourdon tube should be avoided.

For applications that produce harmful pulsation, vibration or pressure spikes, a liquid filled gauge will minimize the effects of vibration and provide a more accurate pressure reading.

Gauge Size

SRS gauges are available with dial sizes of 1.5, 2 or 2.5 inches.

Connection

SRS gauges offer lower and center back connections. The standard threads are ⅛" and ¼" NPT.

Accuracy

The degree of accuracy required should be determined to ensure that the proper gauge is used. ProSense gauges offer accuracies of +/- 1.5% or +/- 3-2-3% (ANSI/ASME Grade B). Generally, the more critical the application, the higher the accuracy required.

Gauge Mounting

SRS pressure gauges can be mounted in a variety of ways. For direct stem mount, we offer lower and center back connections. Bear in mind that if a piece of equipment produces heavy vibration making pressure reading difficult due to needle fluctuations, consider a liquid-filled gauge or remote mounting.

Pressure Range

It is important to select a pressure range that is approximately twice the normal operating pressure of the media. The maximum operating pressure should not exceed 75% of the full scale range. If a gauge is not selected considering these criteria, it may result in fatigue of the Bourdon tube.

Temperature Range

The normal temperature ranges for dry gauges are between -40°C to 65°C (-40°F to 150°F). The normal temperature ranges for glycerin-filled gauges are -20°C to 65°C (-4°F to 150°F). It is important to know the normal operating temperature of the environment for proper gauge use.