

# All Stainless Steel, Dry & Liquid Filled



## 400/500 SERIES

- Corrosion-resistant fillable dry or liquid-filled gauge
- Vacuum and compound ranges through 0 psi to 20,000 psi
- 1-1/2", 2-1/2", 4 and 6" gauge sizes
- Stainless Steel case
- 316 Stainless Steel wetted parts
- ECE-R110 Certification for CNG/LNG Pressure Gauge Component (Part number 25-410-300-psi/bar only)

### OPERATING SPECIFICATIONS

#### 1. Working Pressure Limitations

##### a. Dynamic Pressure

The working pressure should be limited to 60% of the dial range.

##### b. Static Pressure

The working pressure, where no sharp fluctuations occur, should be limited to 90% of the dial range

### APPLICATIONS

- Chemical processing
- Oil field & offshore
- Paper mills
- Agriculture plants
- Marine
- Water & wastewater

\* For every 18 °F (10 °C) shift in temperature from which the gauge is calibrated, the user can experience up to ±0.4% additional error.

\*\* See page 51 for gauge fill options.

	SERIES	SPECIFICATIONS
Pressure ranges	400/500 Series (all)	Vacuum and compound ranges through 0 psi to 20,000 psi
Accuracy	15-401, 15-411	±2.5% full scale
	25-400, 25-410, 25-500, 25-510	±1.6% full scale
	40-400, 40-410, 40-500, 40-510, 60-400, 60-410, 60-500, 60-510	±1% full scale
Temperature ranges*	15-401, 15-411	Media -40 °F to 212 °F (-40 °C to 100 °C) Ambient -40 °F to 140 °F (-40 °C to 60 °C)
	25-400, 25-410, 40-400, 40-410, 60-400, 60-410	Media -40 °F to 392 °F (-40 °C to 200 °C) Ambient -40 °F to 140 °F (-40 °C to 60 °C)
	500 Series (all)	Media -4 °F to 212 °F (-20 °C to 100 °C) Glycerin fill -40 °F to 212 °F (-40 °C to 100 °C) Special fill Ambient -4 °F to 140 °F (-20 °C to 60 °C) Glycerin fill -40 °F to 140 °F (-40 °C to 60 °C) Special fill
Measuring element	15-401, 15-411, 25-400, 25-410, 25-500, 25-510, 40-400, 40-410, 40-500, 40-510, 60-400, 60-410, 60-500, 60-510 (up to 600 psi)	316 Stainless Steel C-Type Bourdon tube
	25-400, 25-410, 25-500, 25-510, 40-400, 40-410, 40-500, 40-510, 60-400, 60-410, 60-500, 60-510 (greater than 600 psi)	Coiled safety tube
Connection	15-401, 15-411	1/8" NPT, 316 Stainless Steel
	25-400, 25-410, 25-500, 25-510	1/4" NPT, 316 Stainless Steel
	40-400, 40-410, 40-500, 40-510, 60-400, 60-410, 60-500, 60-510	1/2" NPT, 316 Stainless Steel. 9/16" – 18 high pressure connections are standard on 0 - 30,000 psi and higher
Case	15-401, 15-411, 40-400, 40-410, 60-400, 60-410, 60-500, 60-510	304 Stainless Steel (Optional 316 Stainless Steel) with safety relief plug
	25-400, 25-410, 25-500, 25-510, 40-500, 40-510	Polished 304 Stainless Steel with safety relief plug
Cover ring	15-401, 15-411, 25-400, 25-410, 25-500, 25-510, 40-400, 40-410, 40-500, 40-510	Polished 304 Stainless Steel
	60-400, 60-410, 60-500, 60-510	Polished 304 Stainless Steel bayonet ring
Lens	15-401, 15-411, 40-400, 40-410, 40-500, 40-510	Instrument glass
	25-400, 25-410, 25-500, 25-510	Trogamide
	60-400, 60-410, 60-500, 60-510	Laminated safety glass
Pointer	115-401, 15-411	Black finished Aluminum
	25-400, 25-410, 25-500, 25-510, 40-400, 40-410, 40-500, 40-510	Balanced Aluminum, black finish
	60-400, 60-410, 60-500, 60-510	Balanced micro-adjustable Aluminum, black finish
Dial	15-401, 15-411	Aluminum, white background with black scale. Single scale psi. UV resistant
	25-400, 25-410, 25-500, 25-510, 40-400, 40-410, 40-500, 40-510, 60-400, 60-410, 60-500, 60-510	Aluminum, white background with black scale. UV resistant.
Movement	15-401, 15-411, 25-400, 25-410, 25-500, 25-510	Stainless Steel with highly polished bearing surfaces
	40-400, 40-410, 40-500, 40-510	All Stainless Steel with internal zero stop and highly polished bearing surfaces
	60-400, 60-410, 60-500, 60-510	Stainless Steel with highly polished bearing surfaces An internal zero stop is standard
Fill liquid**	25-500, 25-510, 40-500, 40-510, 60-500, 60-510	Glycerin

For details on accuracy/standard dial configuration and dial layouts, see pages 56-61.



ORDERING INFORMATION				
GAUGE SIZE	15 1-1/2"	25 2-1/2"	40 4"*	60 6"*
<b>CASE TYPES</b>	<b>400</b> All SS, dry/fillable, bottom connection <b>401</b> All SS, dry, bottom connection <b>402</b> SS case, solid front, dry, bottom connection	<b>410</b> All SS, dry/fillable, back connection <b>411</b> All SS, dry, back connection <b>500</b> SS case, liquid filled, bottom connection		<b>502</b> SS case, solid front, liquid filled, bottom connection <b>510</b> SS case, liquid filled, back connection
<b>PRESSURE RANGES</b>	<b>30vac</b> -30 inHg to 0 psi *** <b>30/15</b> -30 inHg to 0 psi to 15 psi *** <b>30/30</b> -30 inHg to 0 psi to 30 psi *** <b>30/60</b> -30 inHg to 0 psi to 60 psi *** <b>30/100</b> -30 inHg to 0 psi to 100 psi *** <b>30/160</b> -30 inHg to 0 psi to 160 psi *** <b>30/200</b> -30 inHg to 0 psi to 200 psi *** <b>30/300</b> -30 inHg to 0 psi to 300 psi *** <b>15</b> 0 psi to 15 psi	<b>30</b> 0 psi to 30 psi <b>60</b> 0 psi to 60 psi <b>100</b> 0 psi to 100 psi <b>160</b> 0 psi to 160 psi <b>200</b> 0 psi to 200 psi <b>300</b> 0 psi to 300 psi <b>400</b> 0 psi to 400 psi <b>600</b> 0 psi to 600 psi <b>800</b> 0 psi to 800 psi		<b>1000</b> 0 psi to 1,000 psi <b>1500</b> 0 psi to 1,500 psi <b>2000</b> 0 psi to 2,000 psi <b>3000</b> 0 psi to 3,000 psi <b>5000</b> 0 psi to 5,000 psi <b>6000</b> 0 psi to 6,000 psi <b>10000</b> 0 psi to 10,000 psi <b>15000</b> 0 psi to 15,000 psi <b>20000</b> 0 psi to 20,000 psi **
<b>SCALE OPTIONS</b>	<b>psi</b> psi single scale <b>psi/kPa</b> psi/kPa dual scale	<b>psi/kg/cm<sup>2</sup></b> psi/kg/cm <sup>2</sup> dual scale <b>psi/bar</b> psi/bar dual scale		
<b>CONNECTION SIZES</b>	<b>1/8</b> 1/8" NPT <b>1/4</b> 1/4" NPT	<b>1/2</b> 1/2" NPT <b>9/16-18</b> 9/16"-18 UNF 2B high pressure cone		<b>SST</b> SAE J1926-3:7/16-20 Adjustable
<b>OPTIONS</b>	<b>SSFF</b> 304SS Front Flange <b>SSRF</b> 304SS Rear Flange <b>SSBU</b> Stainless Steel Bezel & U-Clamp <b>SPMC</b> 304SS Panel Mount Clamp <b>PMC</b> Steel Panel Mount Clamp	<b>SSFR</b> 304SS Flange Ring <b>AP</b> Adjustable Pointer <b>SG</b> Safety Glass Lens <b>MIP</b> Maximum Indicating Pointer <b>SP</b> Red Set Pointer		<b>LM</b> Laser Marking <b>ST</b> Stainless Steel Tagging <b>ST5</b> Stainless Steel Threaded Orifice 0.5 mm <b>ST8</b> Stainless Steel Threaded Orifice 0.8 mm

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

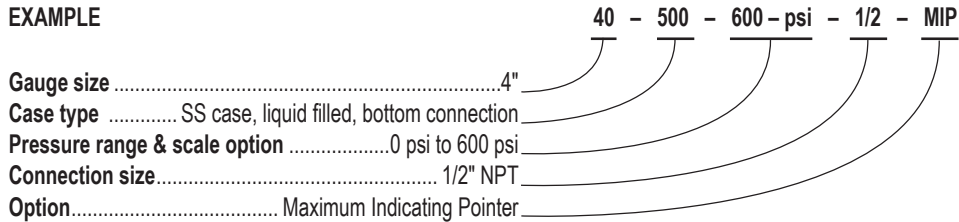
**NOTE:** Refer to 400/500 Series options & Accessories chart on page 52 for availability by part number.

\* On 40-400, 40-410, 40-500, 40-510, 60-400, 60-410, 60-500, and 60-510 models with 20,000 psi, the accuracy is ±1.5% or 1.6%

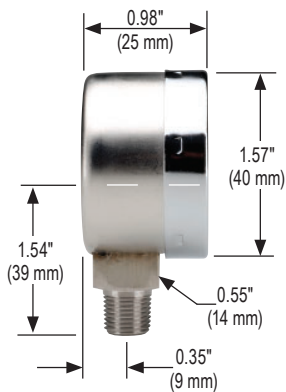
\*\* 4" model only available with solid front case types

\*\*\* Ammonia gauges are available in these ranges. To order, add " - AMMONIA" at the end of the part number.

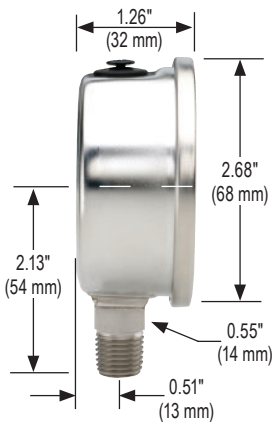
**EXAMPLE**



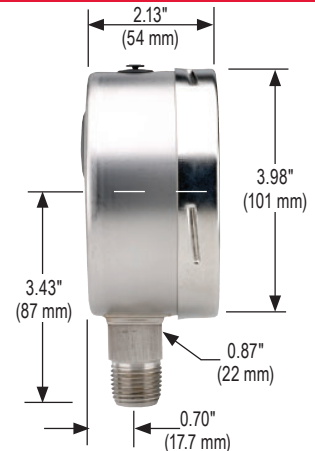
15-401



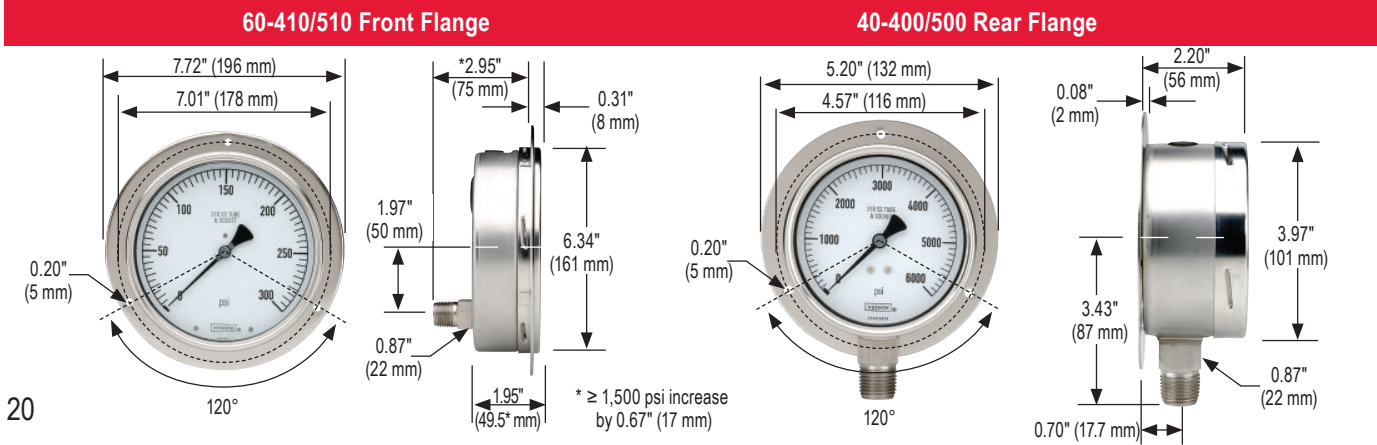
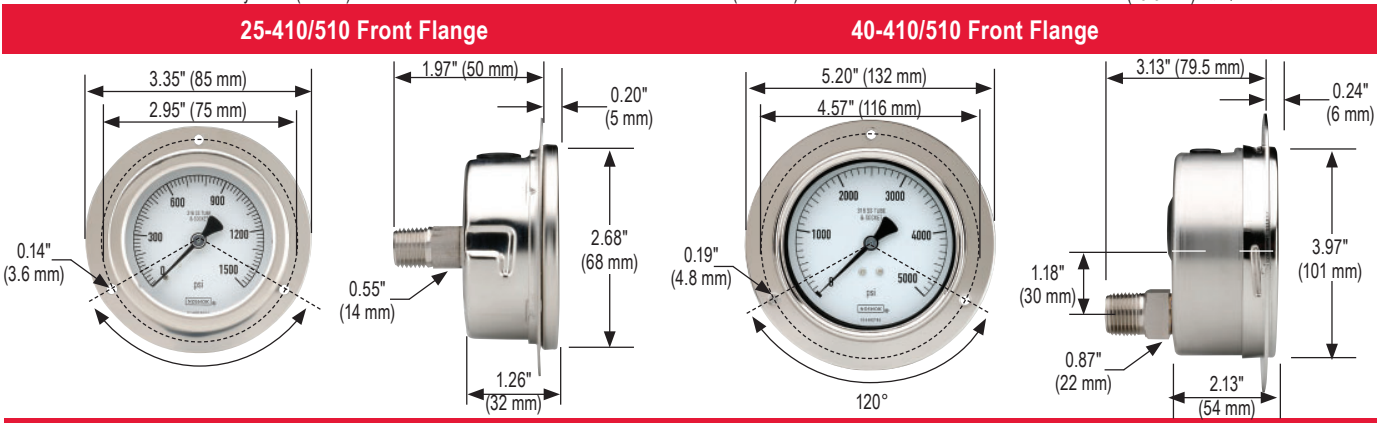
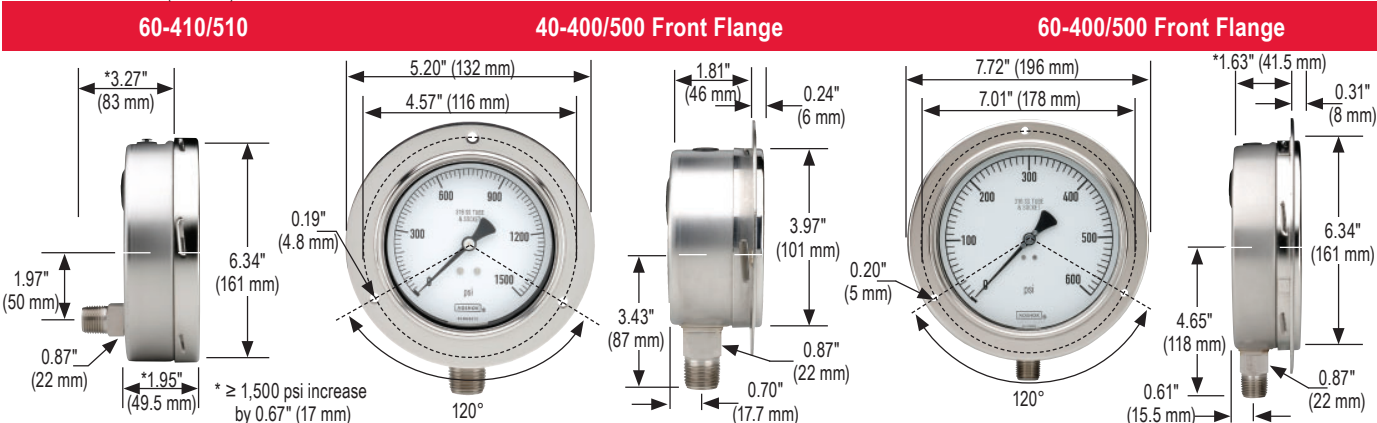
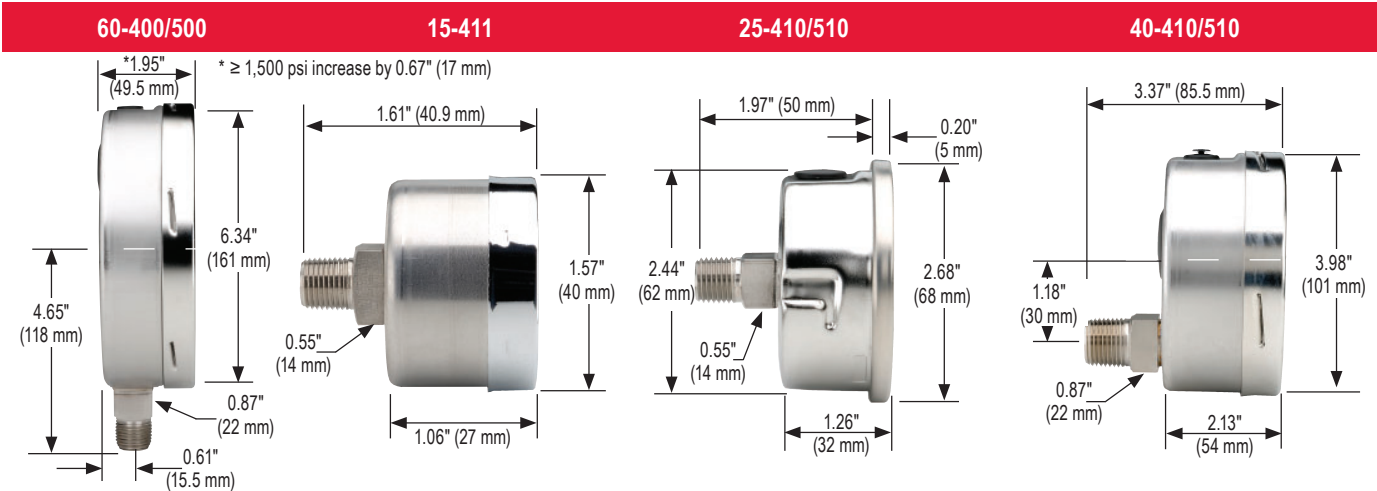
25-400/500



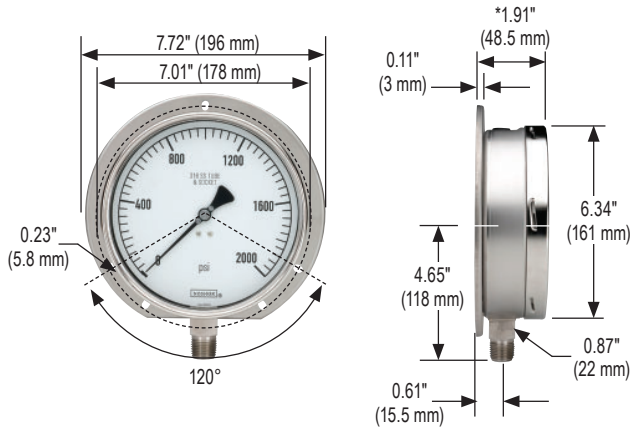
40-400/500



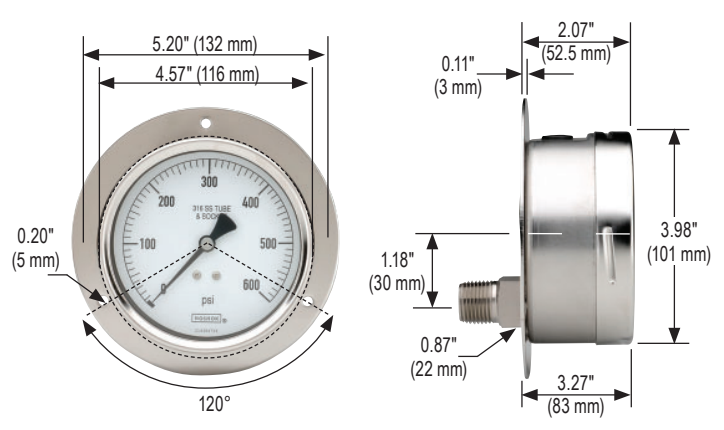
# Dimensions



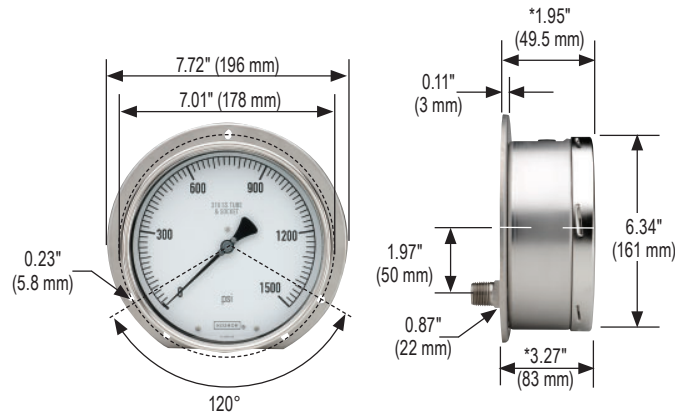
## 60-400/500 Rear Flange



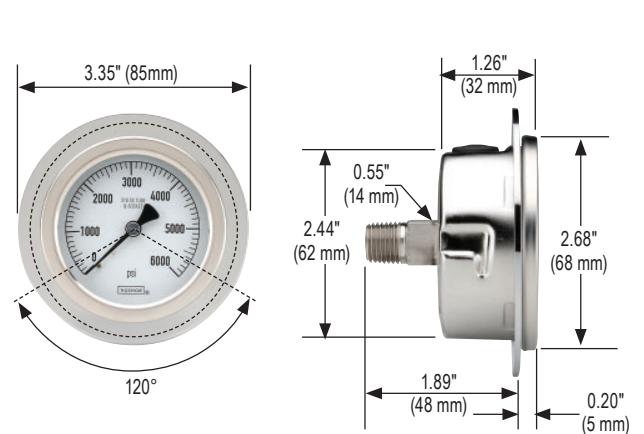
## 40-410/510 Rear Flange



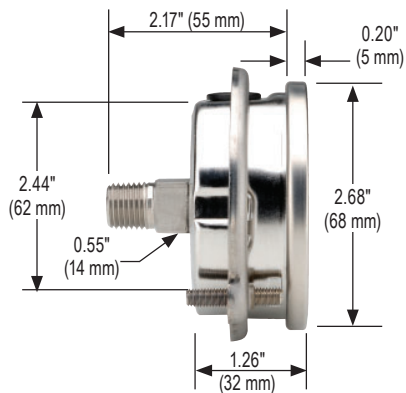
## 60-410/510 Rear Flange



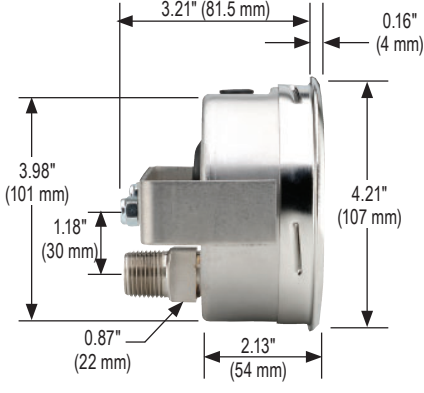
## 25-410/510 Flange Ring



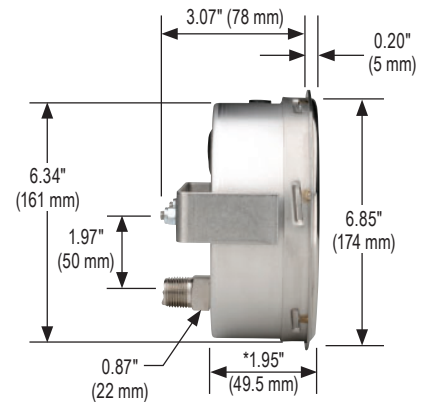
## 25-410/510 Panel Mount Clamp



## 40-410/510 SS Narrow Bezel w/U-Clamp



## 60-410/510 SS Narrow Bezel w/U-Clamp



\* Dimension will be 0.67" (17 mm) for pressure ranges above 1,500 psi.