

# 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

### 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:  
 ≤15,000 psi: 90% of the dial range  
 >15,000 psi: 75% 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.

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

	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 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

**WARNING:** This product can expose you to chemicals including Lead and Nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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.

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

Cleaning for Oxygen Service (O2) is available only for dry or HL filled gauges

\* 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%

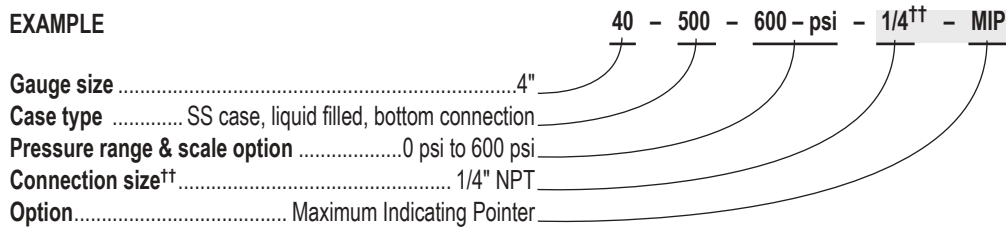
\*\* 4" model only available with solid front case types

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

† GY40 fill is standard for liquid filled gauges

††† Size only available for the 401/411 Series

**EXAMPLE**

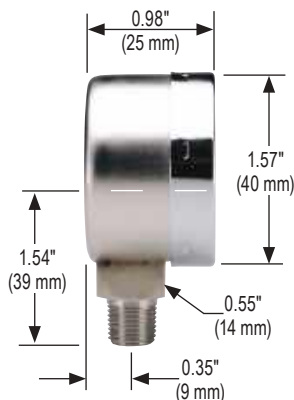


†† Only include in part number if non-standard connection size is ordered.

**NOTES:** See standard connection sizes chart on page 49.

Shaded portions of this part number example are not required unless a non-standard connection size or an option is needed.

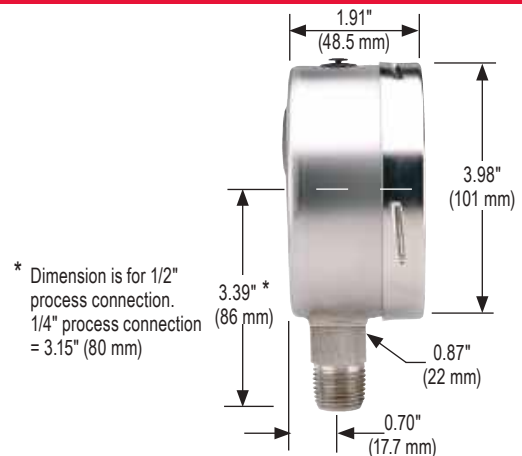
**15-401**

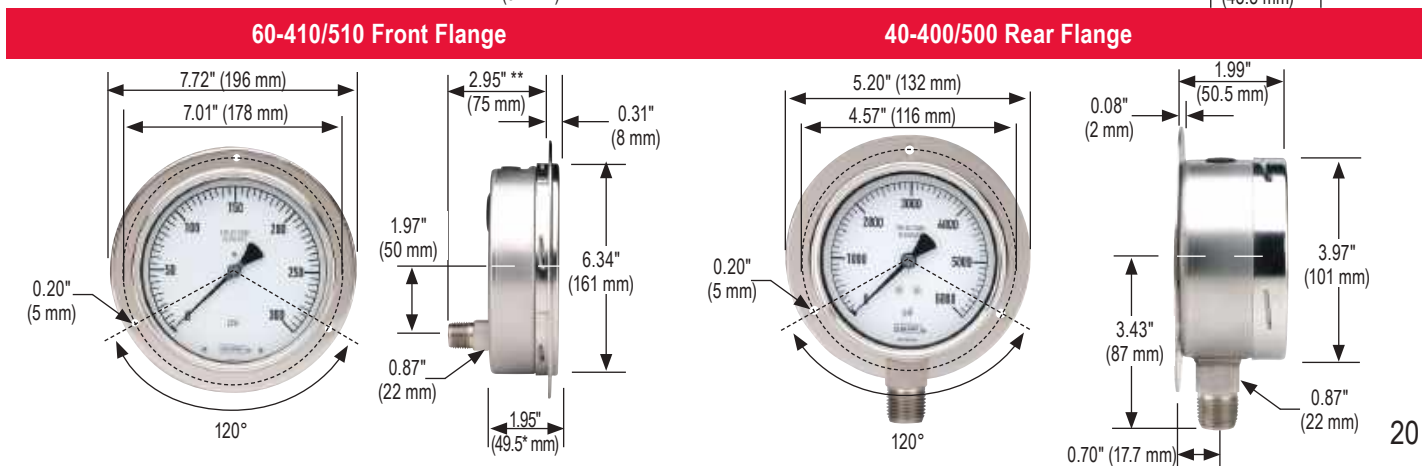
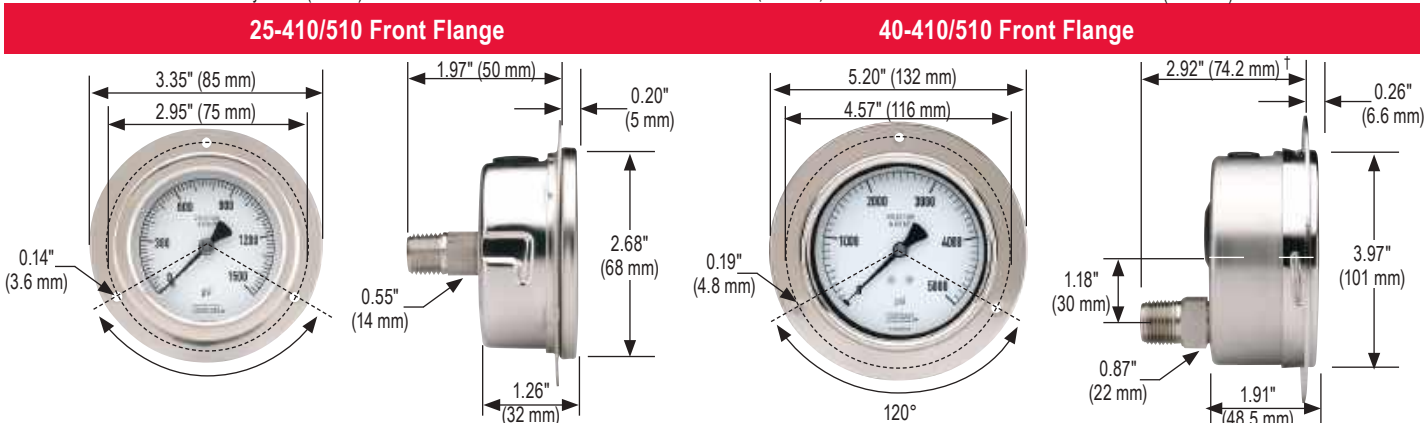
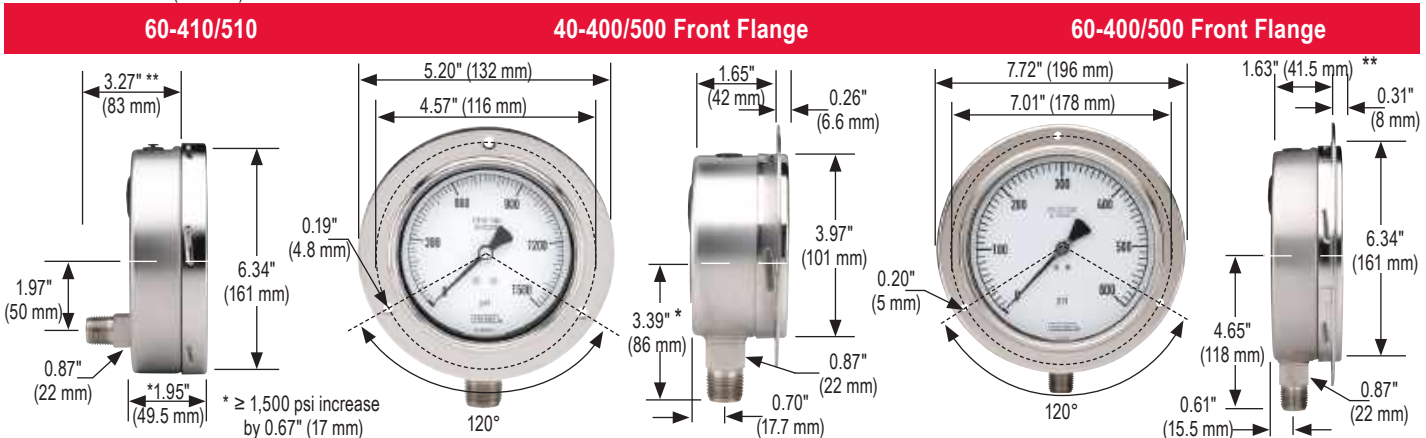
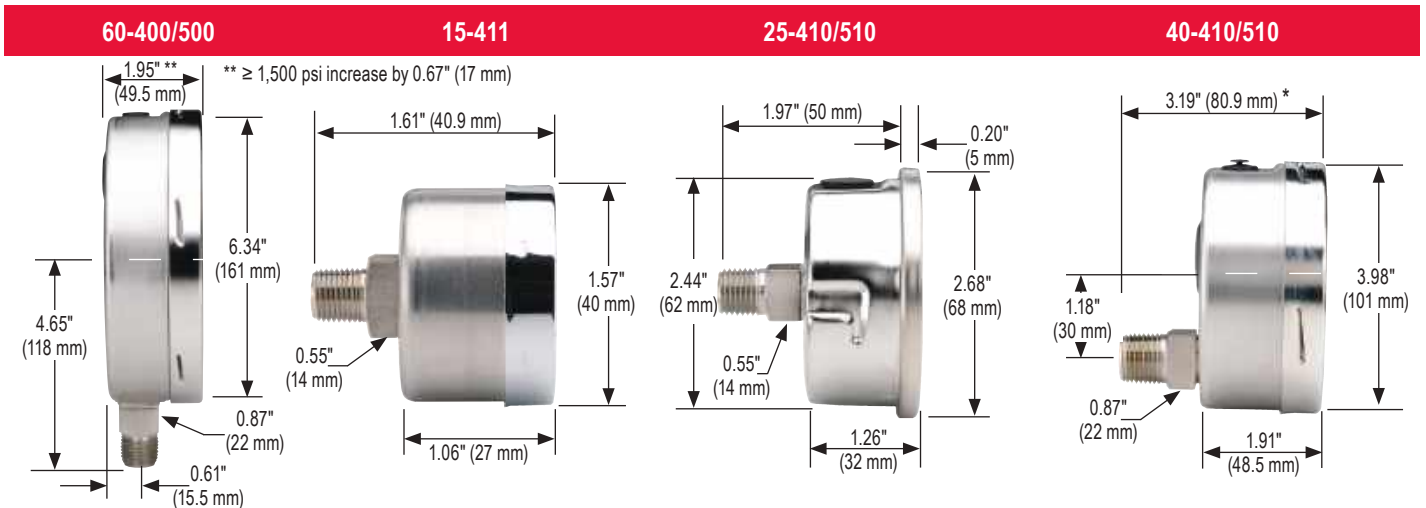


**25-400/500**

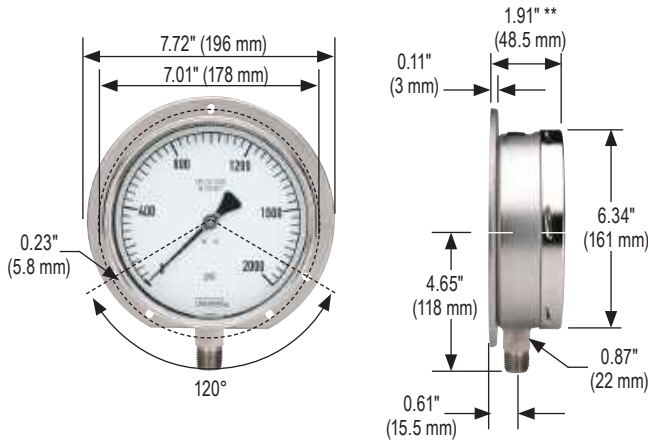


**40-400/500**

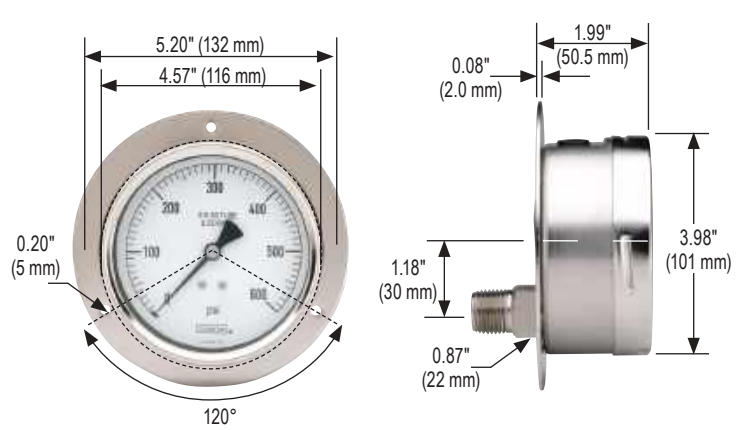




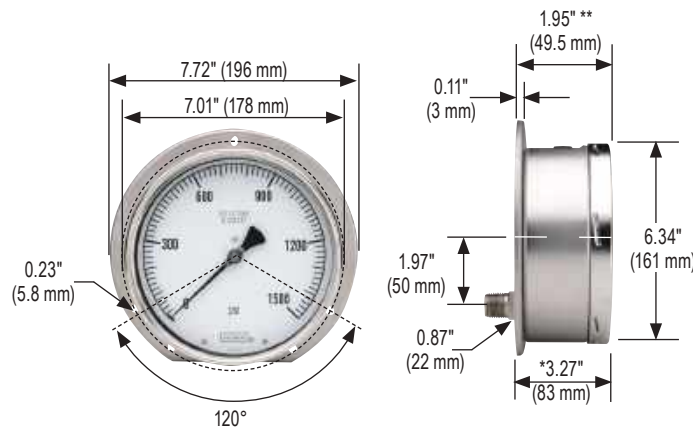
**60-400/500 Rear Flange**



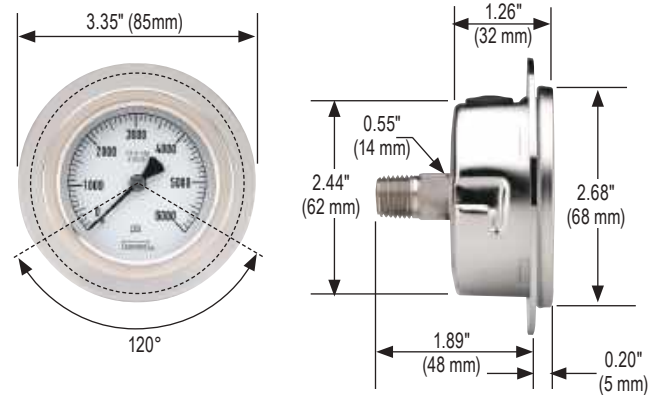
**40-410/510 Rear Flange**



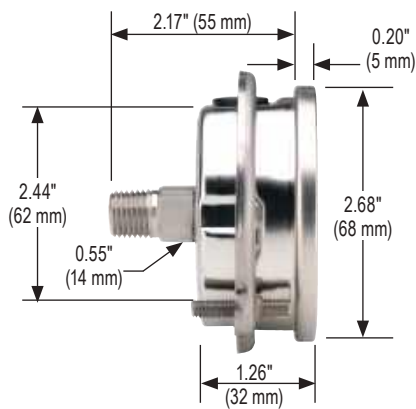
**60-410/510 Rear Flange**



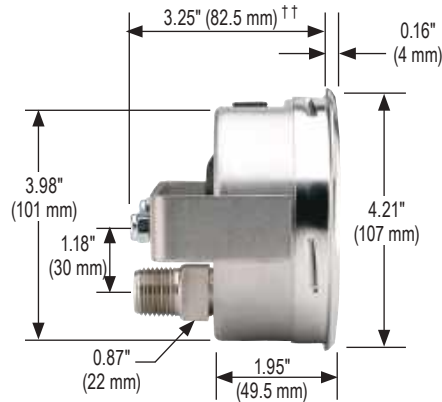
**25-410/510 Flange Ring**



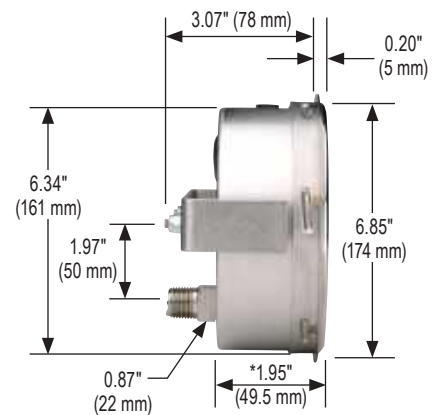
**25-410/510 Panel Mount Clamp**



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



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



\* Dimension is for 1/2" process connection, 1/4" process connection = 3.15" (80 mm)

† Dimension is for 1/2" process connection, 1/4" process connection = 2.91" (74 mm)

\*\* ≥ 1,500 psi increase by 0.67" (17 mm)

†† Dimension is for 1/2" process connection, 1/4" process connection = 2.99" (76 mm)