

# 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 100,000 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 53 for gauge fill options.

For details on accuracy/standard dial configuration and dial layouts, see pages 54-59.

	SERIES	SPECIFICATIONS
Pressure ranges	400/500 Series (all)	Vacuum and compound ranges through 0 psi to 100,000 psi
Accuracy	15-401, 15-411	±2.5% full scale
	25-400, 25-410, 25-406, 25-500, 25-506, 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, 25-400, 25-406, 25-410	Media -40 °F to 212 °F (-40 °C to 100 °C) Ambient -40 °F to 140 °F (-40 °C to 60 °C)
	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) Glycerine fill -40 °F to 212 °F (-40 °C to 100 °C) Special fill Ambient -4 °F to 140 °F (-20 °C to 60 °C) Glycerine fill -40 °F to 140 °F (-40 °C to 60 °C) Special fill
Measuring element	15-401, 15-411, 25-400, 25-406, 25-410, 25-500, 25-506, 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, 25-406, 25-410, 25-500, 25-506, 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
	25-406, 25-506	1/4" NPT, nickel-plated brass
	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, 25-406, 25-410, 25-500, 25-506, 25-510, 40-500, 40-510	Polished 304 stainless steel with safety relief plug
Cover ring	15-401, 15-411, 25-400, 25-406, 25-410, 25-500, 25-506, 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, 25-406, 25-410, 25-500, 25-506, 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, 25-406, 25-410, 25-500, 25-506, 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, 25-406, 25-410, 25-500, 25-506, 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	Glycerine

ORDERING INFORMATION			
GAUGE SIZES	15 1-1/2"	25 2-1/2"	40 *** 4" 60 *** 6"
CASE TYPES	400 All SS, dry/fillable, bottom connection 401 All SS, dry, bottom connection 402 SS case, solid front, dry, bottom connection** 406 Ammonia, dry/fillable, bottom connection	410 All SS, dry/fillable, back connection 411 All SS, dry, back connection 500 SS case, liquid filled, bottom connection 502 SS case, solid front, liquid filled, bottom connection**	506 Ammonia, liquid filled, bottom connection 510 SS case, liquid filled, back connection
PRESSURE RANGES	30vac -30 inHg to 0 psi 30/15 -30 inHg to 0 psi to 15 psi 30/30 -30 inHg to 0 psi to 30 psi 30/60 -30 inHg to 0 psi to 60 psi 30/100 -30 inHg to 0 psi to 100 psi 30/160 -30 inHg to 0 psi to 160 psi 30/200 -30 inHg to 0 psi to 200 psi 30/300 -30 inHg to 0 psi to 300 psi 15 0 psi to 15 psi 30 0 psi to 30 psi 60 0 psi to 60 psi	100 0 psi to 100 psi 160 0 psi to 160 psi 200 0 psi to 200 psi 300 0 psi to 300 psi 400 0 psi to 400 psi 600 0 psi to 600 psi 800 0 psi to 800 psi 1000 0 psi to 1,000 psi 1500 0 psi to 1,500 psi 2000 0 psi to 2,000 psi 3000 0 psi to 3,000 psi	5000 0 psi to 5,000 psi 6000 0 psi to 6,000 psi 10000 0 psi to 10,000 psi 15000 0 psi to 15,000 psi 20000 0 psi to 20,000 psi 30000 0 psi to 30,000 psi 40000 0 psi to 40,000 psi 60000 0 psi to 60,000 psi 80000 0 psi to 80,000 psi 100000 0 psi to 100,000 psi
SCALE OPTIONS	psi psi single scale psi/kPa psi/kPa dual scale	psi/kg/cm <sup>2</sup> psi/kg/cm <sup>2</sup> dual scale psi/bar psi/bar dual scale	
CONNECTION SIZES	1/8 1/8" NPT 1/4 1/4" NPT	1/2 1/2" NPT 9/16-18 9/16"-18 UNF 2B high pressure cone*	SST SAE J1926-3:7/16-20 Adjustable
OPTIONS	SSFF 304SS Front Flange SSRF 304SS Rear Flange SSBU Stainless Steel Bezel & U-Clamp SPMC 304SS Panel Mount Clamp PMC Steel Panel Mount Clamp	SSFR 304SS Flange Ring FR Flange Ring AP Adjustable Pointer SG Safety Glass Lens MIP Maximum Indicating Pointer	SP Red Set Pointer LM Laser Marking ST Stainless Steel Tagging ST5 Stainless Steel Threaded Orifice 0.5 mm ST8 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.

\* Connection size for pressures 30,000 psi and above. Equivalent to F250C Parker Autoclave.

\*\* 6" solid front, safety case and blowout back is standard for pressures 80,000 psi and above.

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

### EXAMPLE

40 - 500 - 600 - psi - 1/2" - MIP

Gauge size .....4"

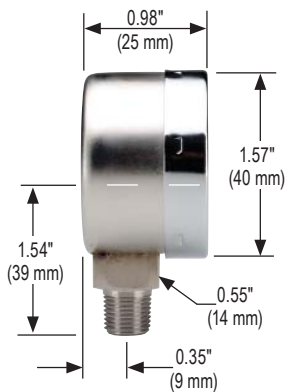
Case type ..... SS case, liquid filled, bottom connection

Pressure range & scale option .....0 psi to 600 psi

Connection size..... 1/2" NPT

Option..... Maximum Indicating Pointer

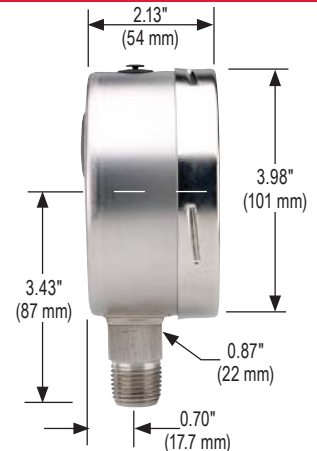
15-401



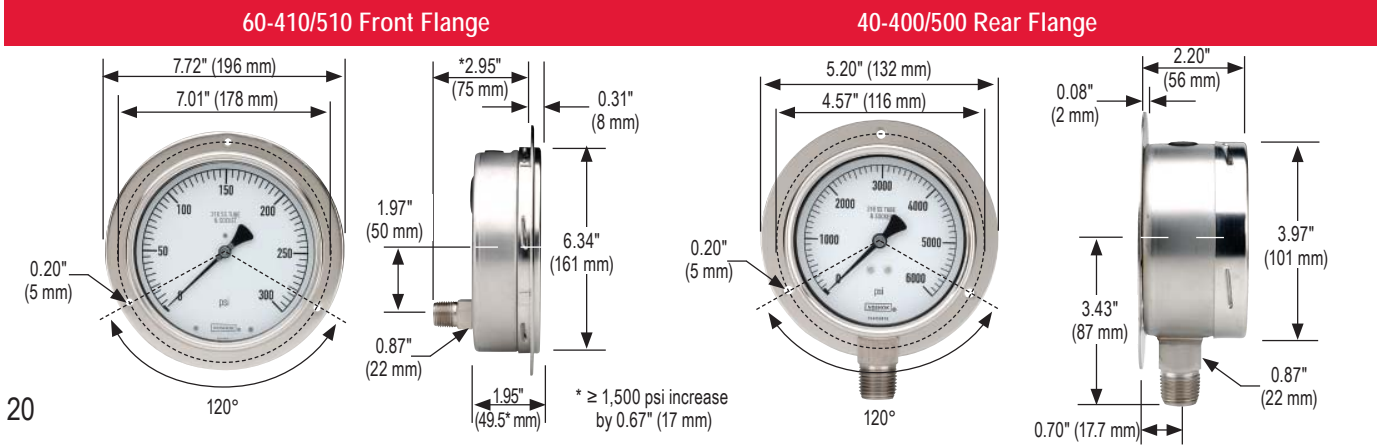
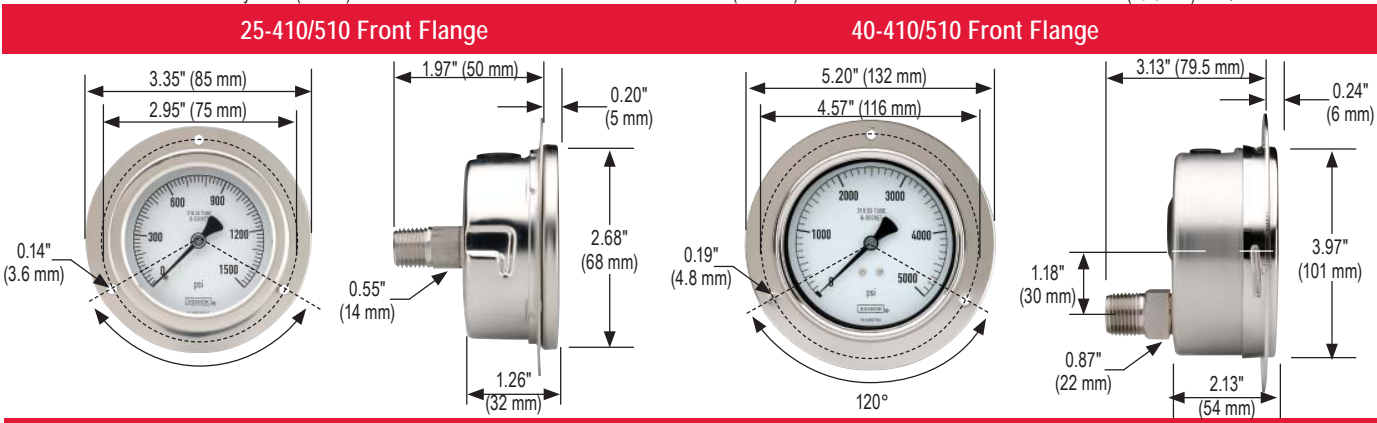
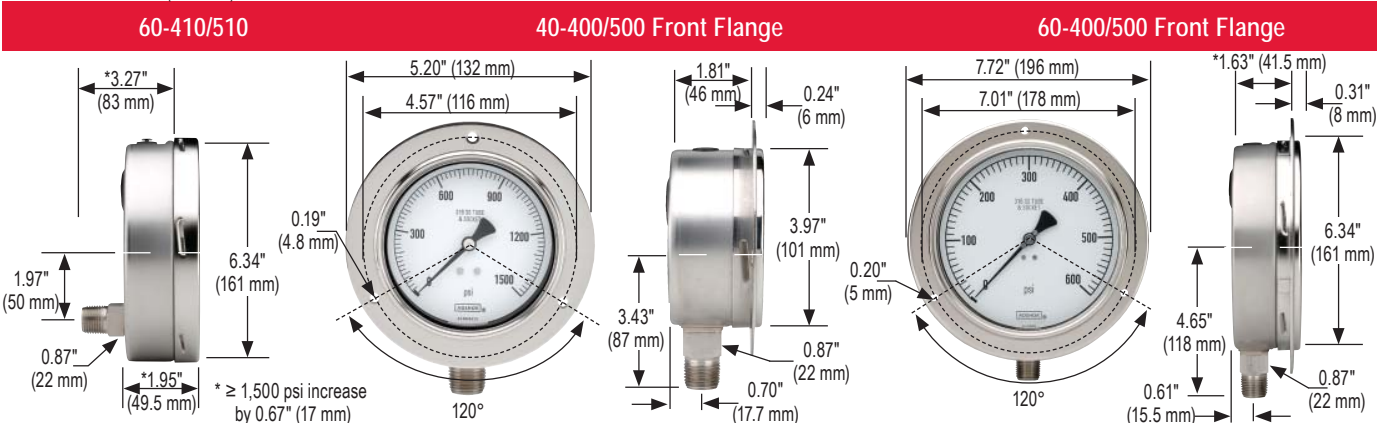
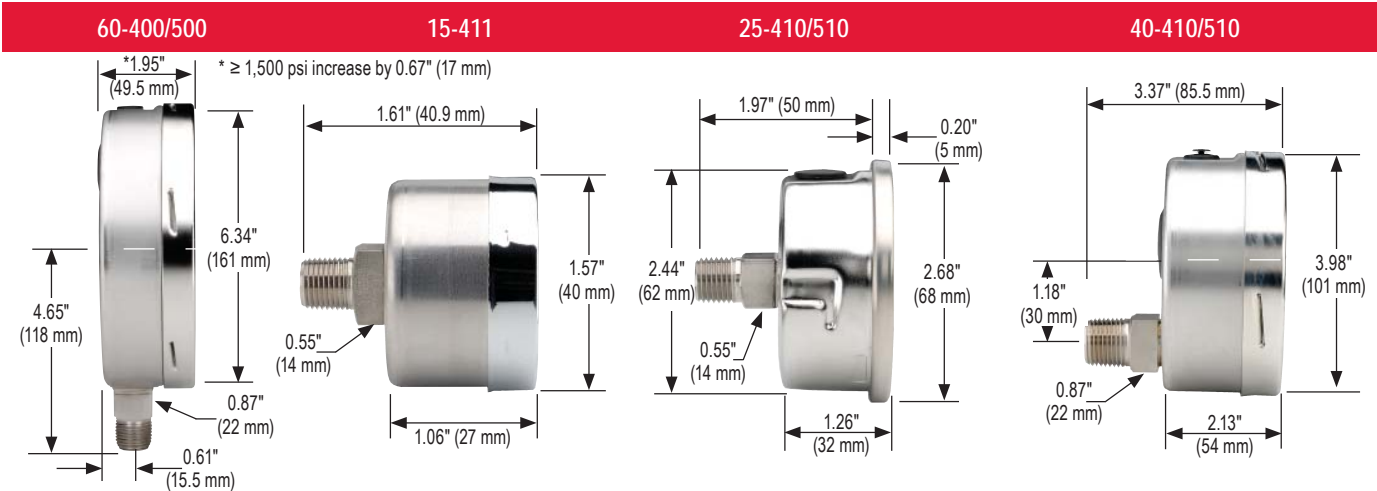
25-400/500



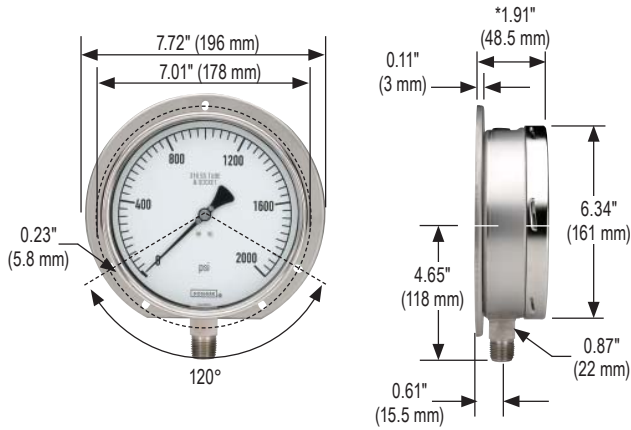
40-400/500



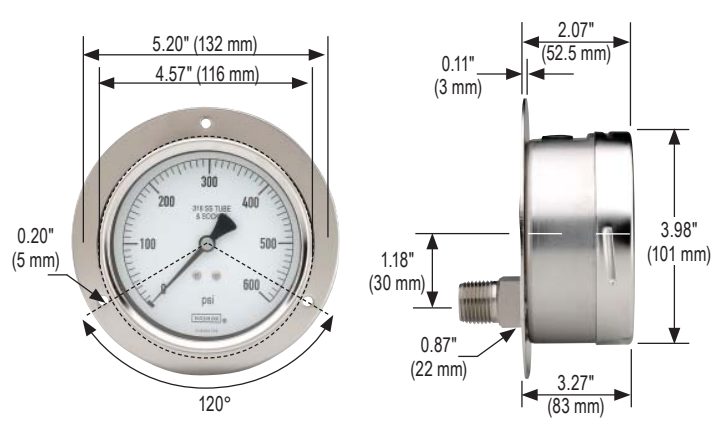
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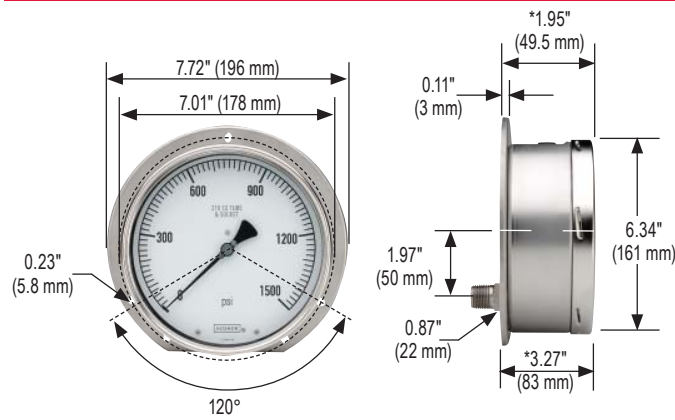
## 60-400/500 Rear Flange



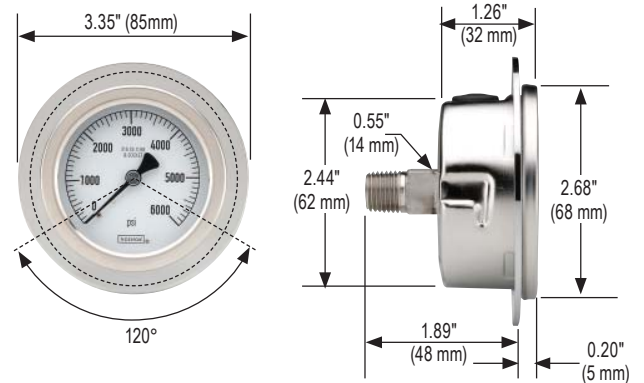
## 40-410/510 Rear Flange



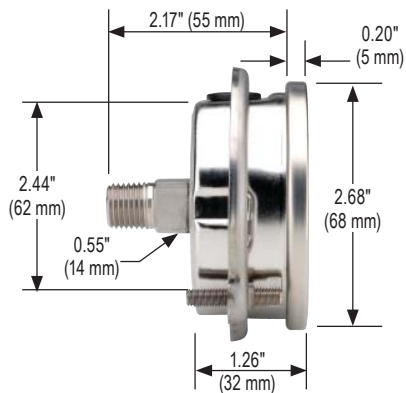
## 60-410/510 Rear Flange



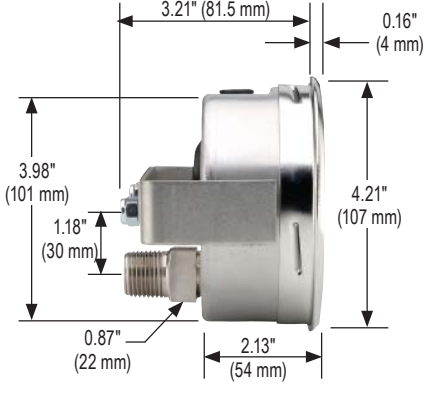
## 25-410/510 Flange Ring



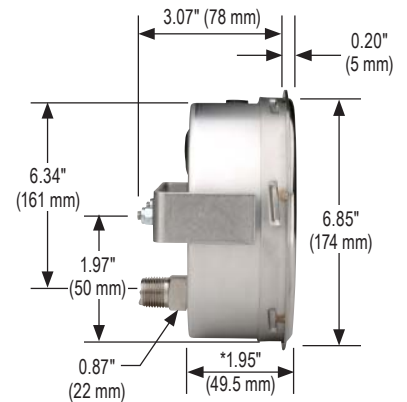
## 25-410/510 Panel Mount Clamp



## 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.