

All Stainless Steel Dry & Liquid-Filled



400/500 SERIES

- The ultimate corrosion-resistant heavy-duty vacuum and pressure gauges
- **Extreme high pressure** ranges available from vacuum through 100,000 psi
- 1-1/2", 2", 2-1/2", 4" and 6" sizes – bottom or back connected
- Cases and polished bezels are constructed of solid 304 stainless steel, with 316 stainless steel internals
- Vacuum, compound and zero based ranges
- Bourdon tubes are matched to stainless steel precision movements and balanced pointers for smooth, accurate indication
- Glycerine filling (in the 500 Series) further enhances gauge life by constantly lubricating the movement and dampening the effects of vibration, pulsation and shock.
- NOSHOK's agriculture ammonia gauges (25-406 and 25-506) feature a nickel-plated brass connection with a 316 stainless steel Bourdon tube
- Stock availability

OPERATING SPECIFICATIONS

1. Working Pressure Limitations

a. Dynamic Pressure

The working pressure should be limited to 60% of the dial range for long service life.

b. Static Pressure

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

2. Ambient Temperature

a. 400 Series

-40 °F to 140 °F (-40 °C to 60 °C)

b. 500 Series

-4 °F to 140 °F (-20 °C to 60 °C)
glycerine fill
-40 °F to 140 °F (-40 °C to 60 °C)
special fill

3. Media Temperature

a. 400 Series

-40 °F to 212 °F (-40 °C to 100 °C)
1-1/2" and 2-1/2" sizes
-40 °F to 392 °F (-40 °C to 200 °C)
4" and 6" sizes

b. 500 Series

-4 °F to 212 °F (-20 °C to 100 °C)
glycerine fill
-40 °F to 212 °F (-40 °C to 100 °C)
special fill

APPLICATIONS

- Chemical plants
- Petrochemical refineries
- Pharmaceutical
- Food and beverage processing
- Offshore oil platforms
- Paper mills
- Salt mines
- Fertilizer plants
- Shipboard

ACCURACY

- 1-1/2" 400 Series gauges: ±2.5%
- 2-1/2" 400 Series gauges: ±1.5%
- 4 and 6" 400 Series gauges: ±1.0%
- 2-1/2" 500 Series gauges: ±1.5%
- 4 and 6" 500 Series gauges: ±1.0%

For details on accuracy/standard dial configuration and dial layouts, see pages 76-81.

	MODELS	SPECIFICATIONS
Case	15-400, 15-410, 40-400, 40-410, 60-400, 60-410, 60-500, 60-510	304 Stainless steel (Optional 316 Stainless steel)
	25-400, 25-410, 25-500, 25-510, 40-500, 40-510	Polished 304 Stainless steel
Cover ring	15-400, 15-410, 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	15-400, 15-410, 40-400, 40-410, 40-500, 40-510	Instrument glass
	25-400, 25-410, 25-500, 25-510	Trogamide
Bourdon tube	60-400, 60-410, 60-500, 60-510	Laminated safety glass
	15-400, 15-410, 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 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	15-400, 15-410	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
Movement	15-400, 15-410, 25-400, 25-410, 25-500, 25-510	Stainless steel and nylon 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.
Safety protection	15-400, 15-410, 25-400, 25-410, 25-500, 25-510	Safety relief disc on the top of the case
	40-400, 40-410, 40-500, 40-510, 60-400, 60-410, 60-500, 60-510	Safety relief disc on the back and top of the case
Accuracy	15-400, 15-410	± 2.5% full scale ASME B40.1 Grade B
	25-400, 25-410, 25-500, 25-510	± 1.5% full scale ASME B40.1 Grade A
	40-400, 40-410, 40-500, 40-510, 60-400, 60-410, 60-500, 60-510	± 1% full scale ASME B40.1 Grade 1A
Pointer	15-400, 15-410	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	15-400, 15-410	Aluminum, white background with black markings. 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 markings. Single scale psi is standard. psi/bar, psi/kPa, or psi/Kg/cm² dual scale are available as stock options. On dual scale dials, the outer scale is psi in black and the inner metric scale is red. UV resistant.
Fill liquid	25-500, 25-510, 40-500, 40-510, 60-500, 60-510	Glycerine and water

ORDERING INFORMATION						
SERIES	400/500					
SIZE	15	1-1/2"	25	2-1/2"	40 4"	60 6"
CASE TYPE	400	All SS, dry/fillable, bottom connection		410	All SS, dry/fillable, back connection	
	401	All SS, dry, bottom connection		411	All SS, dry, back connection	
	402	SS case, solid front, dry, bottom connection**		500	SS case, liquid filled, bottom connection	
	406	Ammonia, dry/fillable, bottom connection		502	SS case, solid front, liquid filled, bottom connection**	
PRESSURE RANGES	30vac	-30 inHg to 0 psi		100	0 to 100 psi	
	30/15	-30 inHg to 0 to 15 psi		160	0 to 160 psi	
	30/30	-30 inHg to 0 to 30 psi		200	0 to 200 psi	
	30/60	-30 inHg to 0 to 60 psi		300	0 to 300 psi	
	30/100	-30 inHg to 0 to 100 psi		400	0 to 400 psi	
	30/160	-30 inHg to 0 to 160 psi		600	0 to 600 psi	
	30/200	-30 inHg to 0 to 200 psi		800	0 to 800 psi	
	30/300	-30 inHg to 0 to 300 psi		1000	0 to 1,000 psi	
	15	0 to 15 psi		1500	0 to 1,500 psi	
	30	0 to 30 psi		2000	0 to 2,000 psi	
60	0 to 60 psi		3000	0 to 3,000 psi		
SCALE OPTION	psi	psi single scale		psi/kg/cm ²	psi/kg/cm ² dual scale	
	psi/kPa	psi/kPa dual scale		psi/bar	psi/bar dual scale	
CONNECTION SIZE	1/8	1/8" NPT		1/2	1/2" NPT	
	1/4	1/4" NPT		9/16-18	9/16"-18 UNF 2B high pressure cone*	
OPTIONS	SSFF	304SS Front Flange		SSFR	304SS Flange Ring	
	SSRF	304SS Rear Flange		FR	Flange Ring	
	SSBU	Stainless Steel Bezel & U-Clamp		AP	Adjustable Pointer	
	SPMC	304SS Panel Mount Clamp		SGL	Safety Glass Lens	
	PMC	Steel Panel Mount Clamp		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 68 for availability by model number.

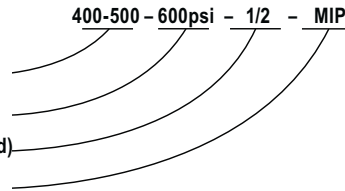
* Connection size for pressures 30,000 psi and above. Equivalent to F250C Parker Autoclave.

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

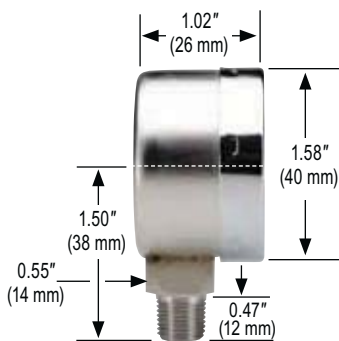
EXAMPLE

1. Select model number (size & case type)
2. Select pressure range & scale option
3. Select connection size (if more than one is offered)
4. Select any required accessory or option

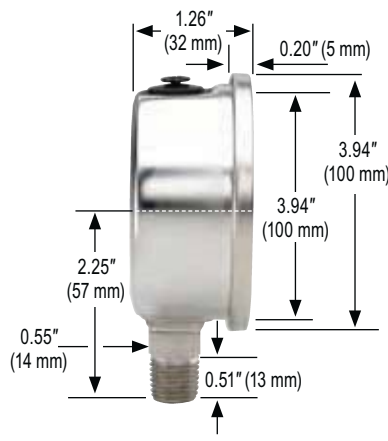
400-500 - 600psi - 1/2 - MIP



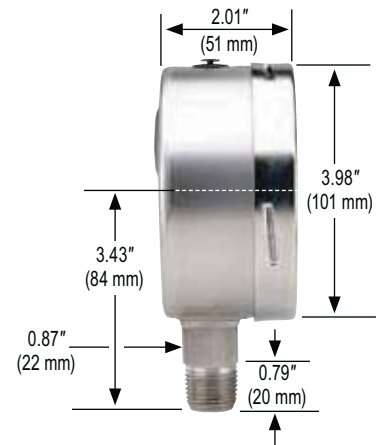
15-401



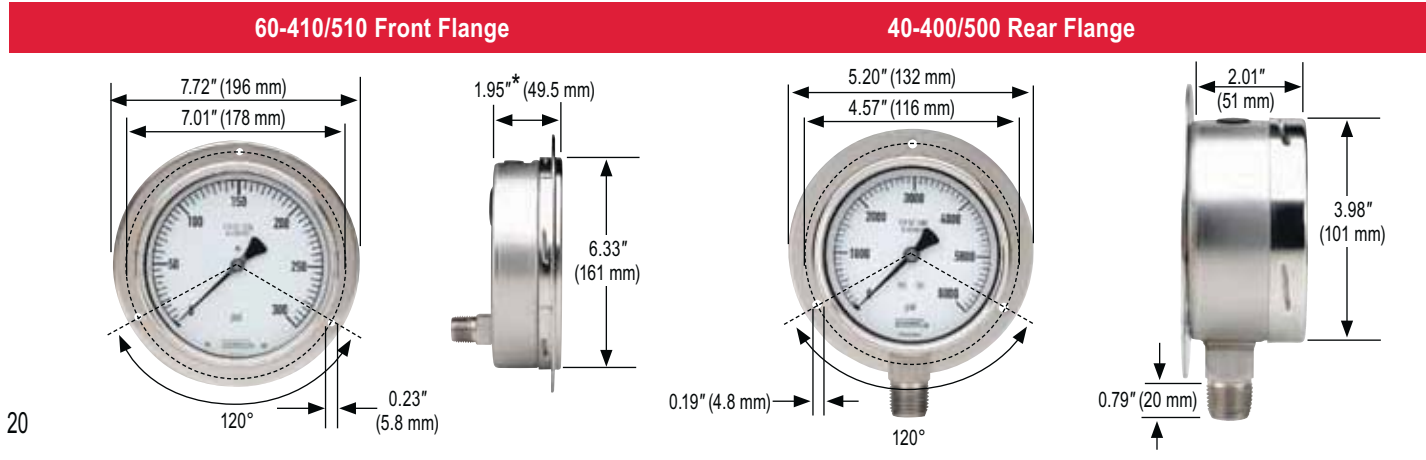
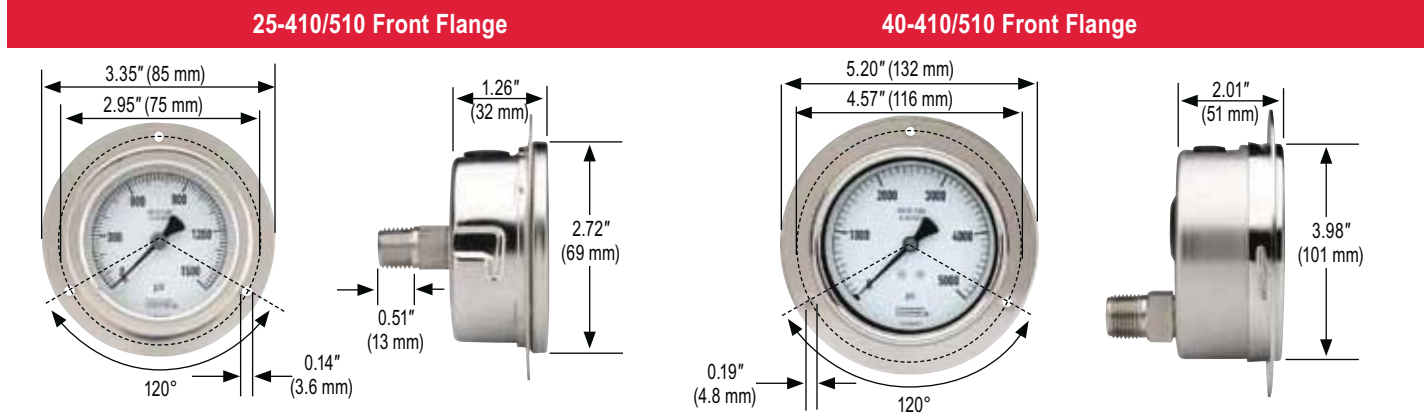
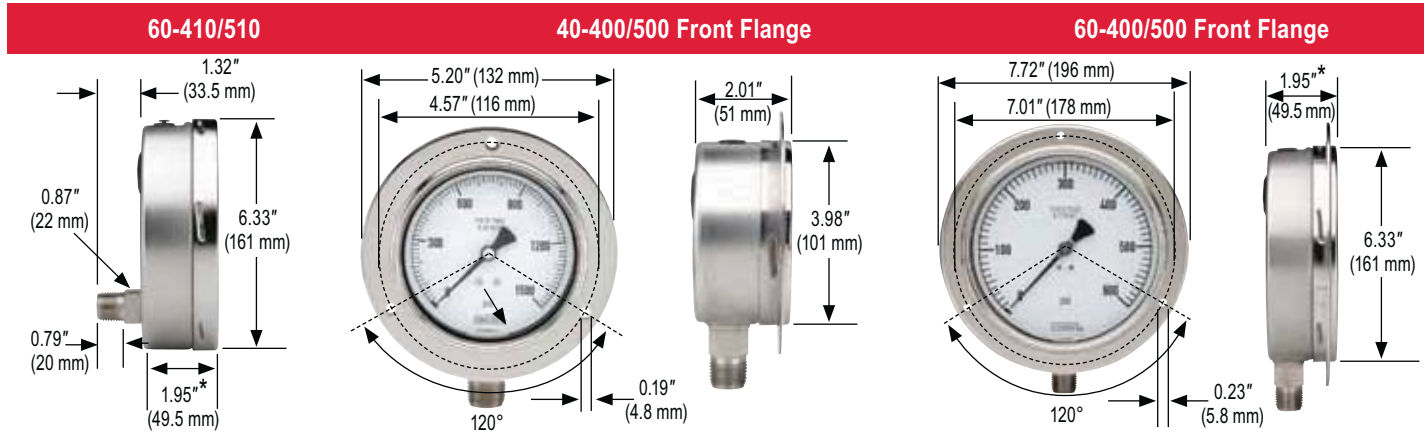
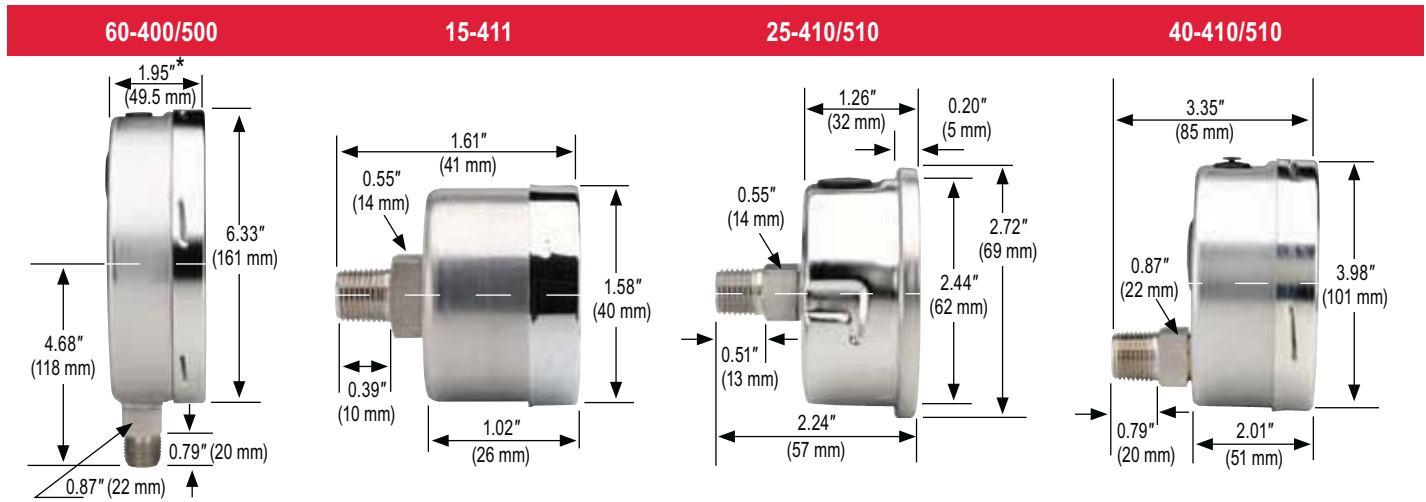
25-400/500



40-400/500

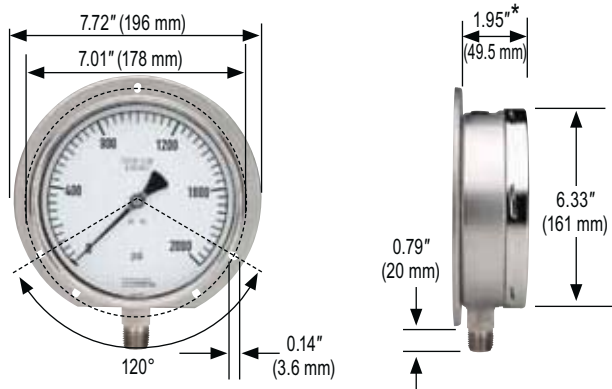


Dimensions

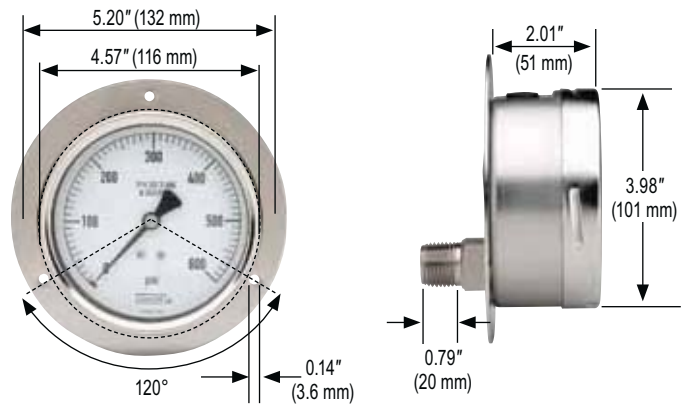


400/500 SERIES DIMENSIONS

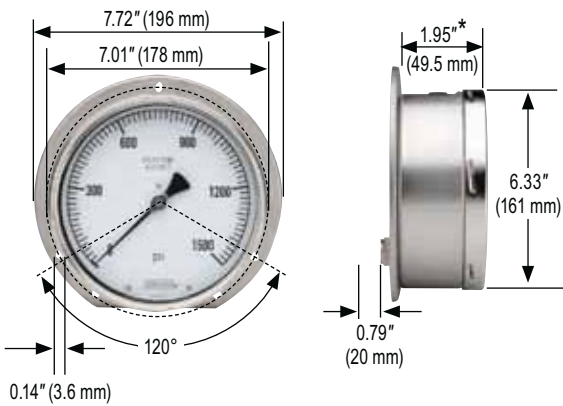
60-400/500 Rear Flange



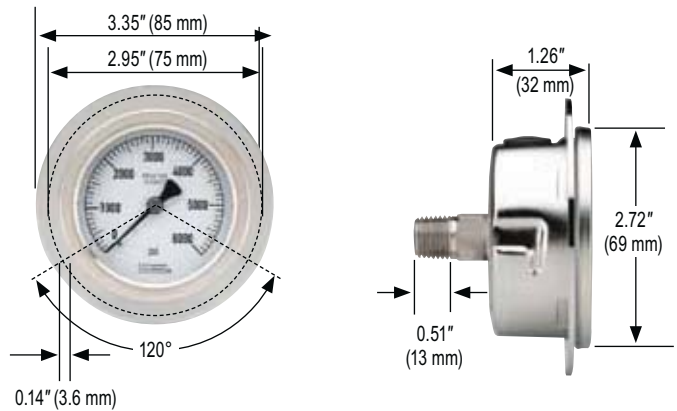
40-410/510 Rear Flange



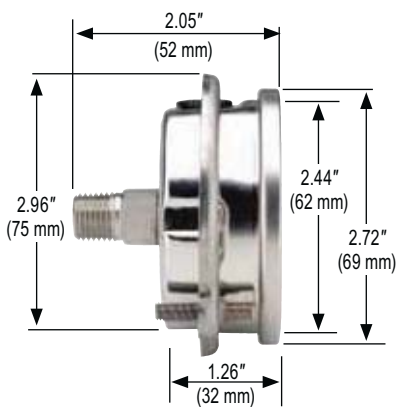
60-410/510 Rear Flange



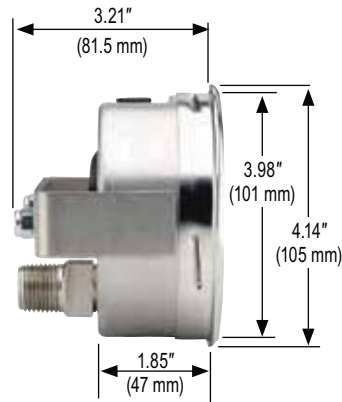
25-410/510 Flange Ring



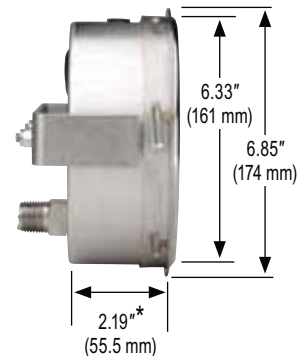
25-410/510 Panel Mount Clamp



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



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



* Dimension will be 2.58" (65.5 mm) for pressure ranges above 1,500 psi.