

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
Case	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
	15-401, 15-411, 40-400, 40-410, 60-400, 60-410, 60-500, 60-510	304 Stainless Steel with safety relief plug
Cover ring	25-400, 25-410, 25-500, 25-510, 40-500, 40-510	Polished 304 Stainless Steel with safety relief plug
	15-401, 15-411, 25-400, 25-410, 25-500, 25-510, 40-400, 40-410, 40-500, 40-510	Polished 304 Stainless Steel
Lens	60-400, 60-410, 60-500, 60-510	Polished 304 Stainless Steel bayonet ring
	15-401, 15-411, 40-400, 40-410, 40-500, 40-510	Instrument glass
	25-400, 25-410, 25-500, 25-510	Trogamide
Pointer	60-400, 60-410, 60-500, 60-510	Laminated safety glass
	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
Dial	60-400, 60-410, 60-500, 60-510	Balanced micro-adjustable Aluminum, black finish
	15-401, 15-411	Aluminum, white background with black scale. Single scale psi. UV resistant
Movement	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.
	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
Fill liquid**	60-400, 60-410, 60-500, 60-510	Stainless Steel with highly polished bearing surfaces An internal zero stop is standard
	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

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

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

EXAMPLE

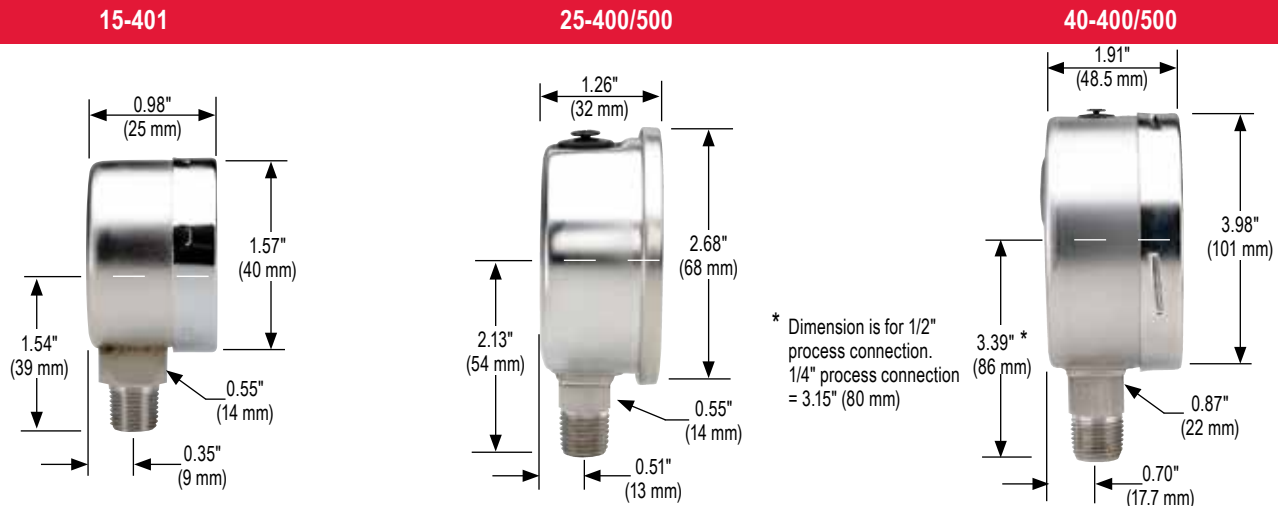
Gauge size 4"
Case type SS case, liquid filled, bottom connection
Pressure range & scale option 0 psi to 600 psi
Connection size^{††} 1/4" NPT
Option Maximum Indicating Pointer

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

NOTES: See standard connection sizes chart on page 49.

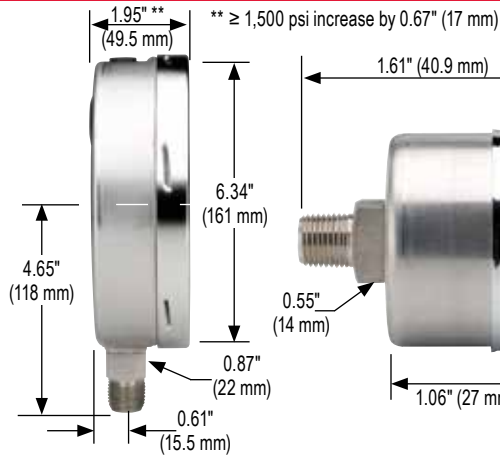
Shaded portions of this part number example are not required unless a non-standard connection size or an option is needed.

40 - 500 - 600 - psi - 1/4^{††} - MIP

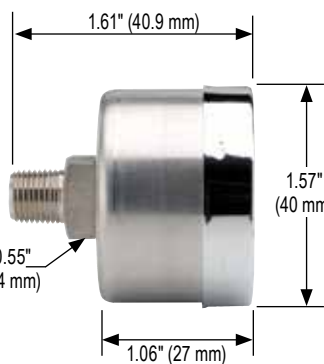


Dimensions

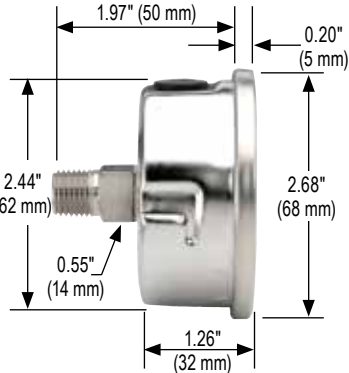
60-400/500



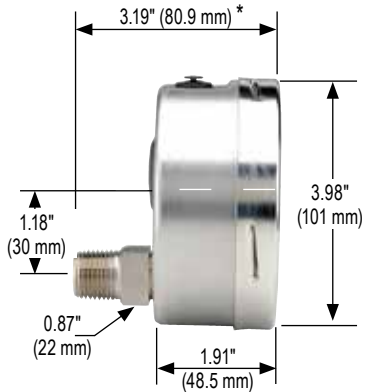
15-411



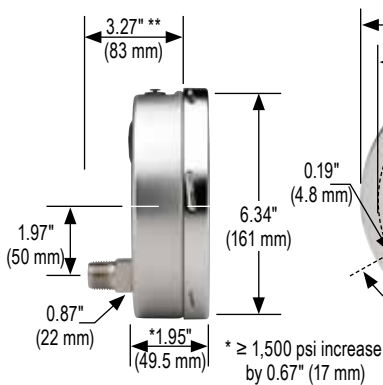
25-410/510



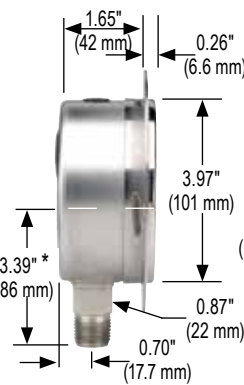
40-410/510



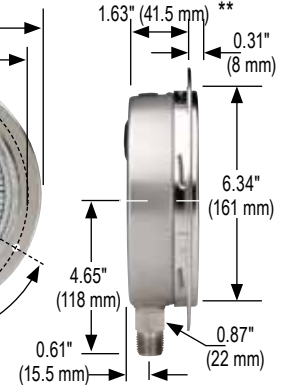
60-410/510



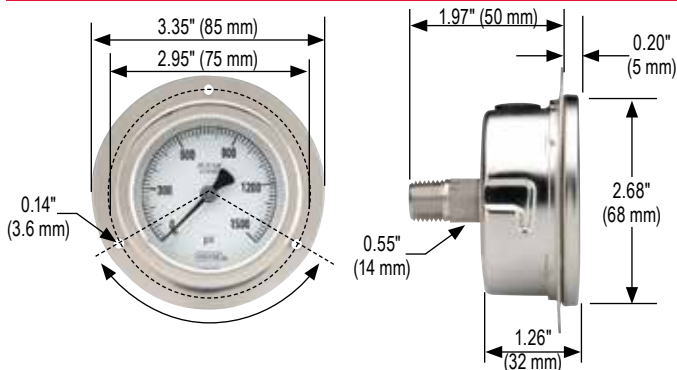
40-400/500 Front Flange



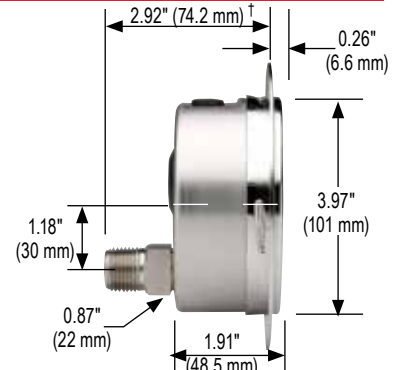
60-400/500 Front Flange



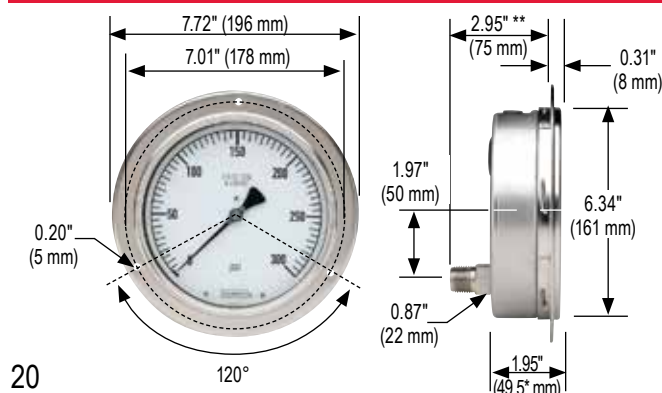
25-410/510 Front Flange



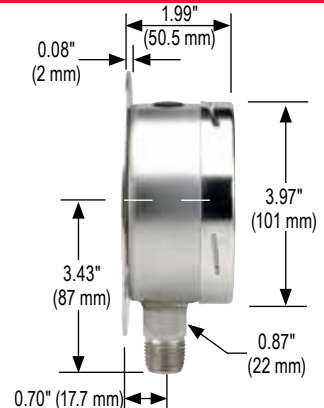
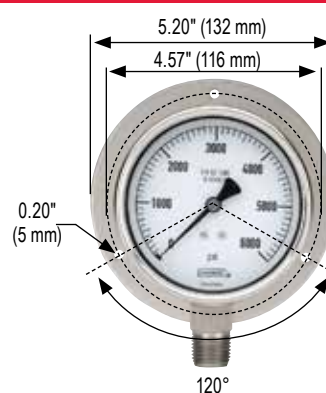
40-410/510 Front Flange



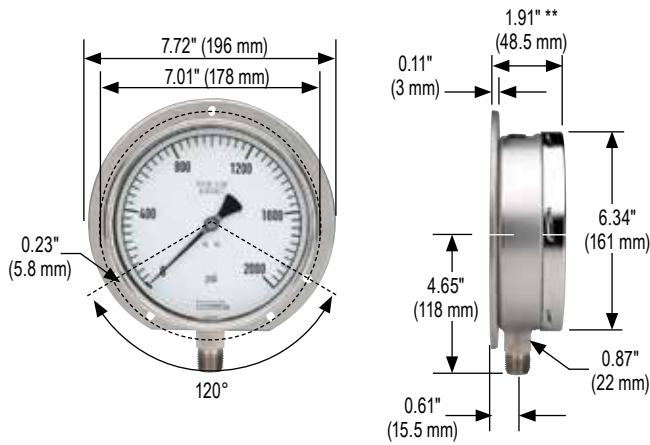
60-410/510 Front Flange



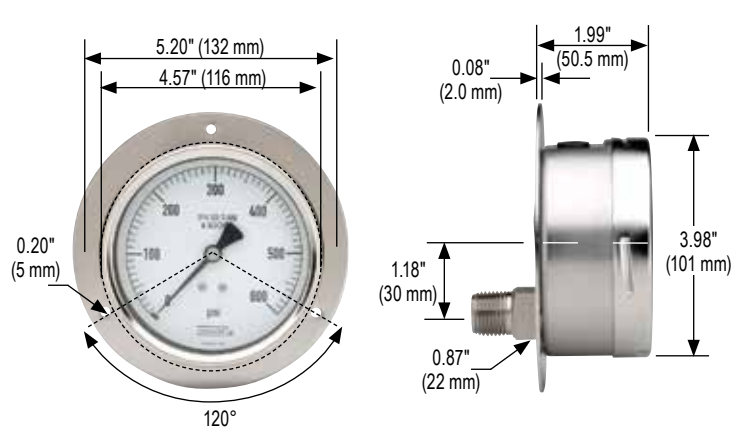
40-400/500 Rear Flange



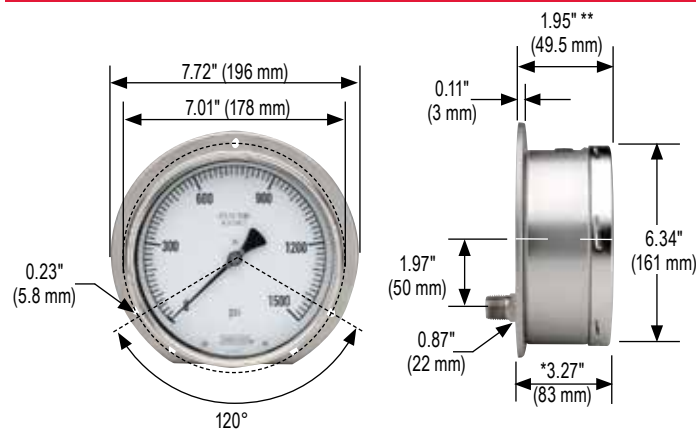
60-400/500 Rear Flange



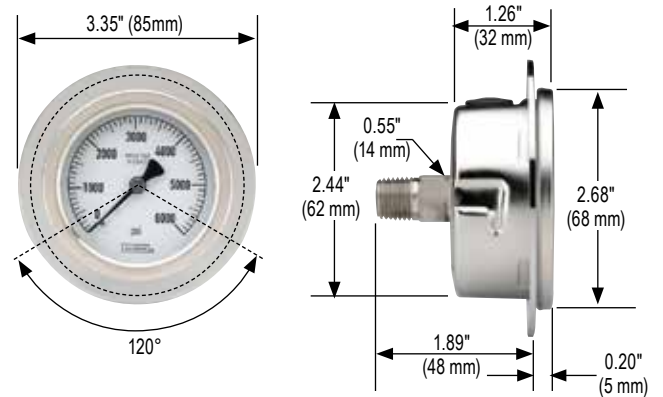
40-410/510 Rear Flange



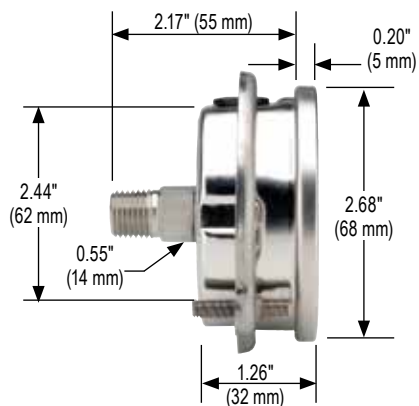
60-410/510 Rear Flange



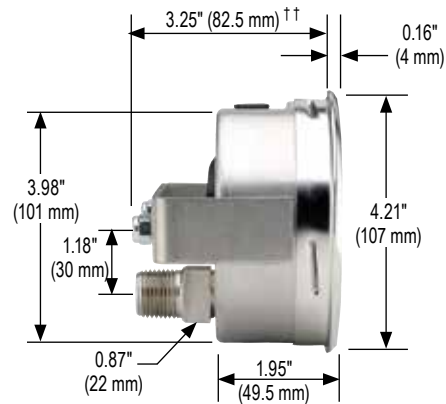
25-410/510 Flange Ring



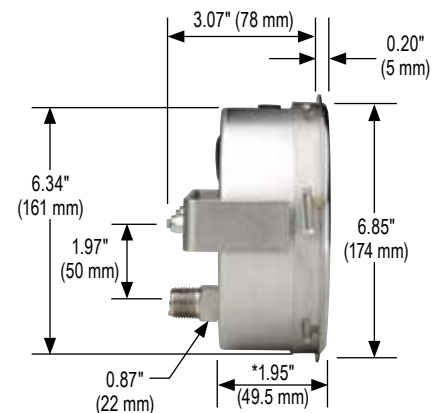
25-410/510 Panel Mount Clamp



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)

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

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

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