

# 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, 25-500, 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

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			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			510	SS case, liquid filled, back connection	
	402	SS case, solid front, dry, bottom connection**			500	SS case, liquid filled, bottom connection					
PRESSURE RANGES	30vac†	-30 inHg to 0 psi			100	0 psi to 100 psi			5000	0 psi to 5,000 psi	
	30/15†	-30 inHg to 0 psi to 15 psi			160	0 psi to 160 psi			6000	0 psi to 6,000 psi	
	30/30†	-30 inHg to 0 psi to 30 psi			200	0 psi to 200 psi			10000	0 psi to 10,000 psi	
	30/60†	-30 inHg to 0 psi to 60 psi			300	0 psi to 300 psi			15000	0 psi to 15,000 psi	
	30/100†	-30 inHg to 0 psi to 100 psi			400	0 psi to 400 psi			20000	0 psi to 20,000 psi	
	30/160†	-30 inHg to 0 psi to 160 psi			600	0 psi to 600 psi			30000	0 psi to 30,000 psi	
	30/200†	-30 inHg to 0 psi to 200 psi			800	0 psi to 800 psi			40000	0 psi to 40,000 psi	
	30/300†	-30 inHg to 0 psi to 300 psi			1000	0 psi to 1,000 psi			60000	0 psi to 60,000 psi	
	15	0 psi to 15 psi			1500	0 psi to 1,500 psi			80000	0 psi to 80,000 psi	
	30	0 psi to 30 psi			2000	0 psi to 2,000 psi			100000	0 psi to 100,000 psi	
	60	0 psi to 60 psi			3000	0 psi to 3,000 psi					
SCALE OPTIONS	psi	psi single scale			psi/kg/cm <sup>2</sup>	psi/kg/cm <sup>2</sup> 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			SP	Red Set Pointer	
	SSRF	304SS Rear Flange			FR	Flange Ring			LM	Laser Marking	
	SSBU	Stainless Steel Bezel & U-Clamp			AP	Adjustable Pointer			ST	Stainless Steel Tagging	
	SPMC	304SS Panel Mount Clamp			SG	Safety Glass Lens			ST5	Stainless Steel Threaded Orifice 0.5 mm	
	PMC	Steel Panel Mount Clamp			MIP	Maximum Indicating Pointer			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.

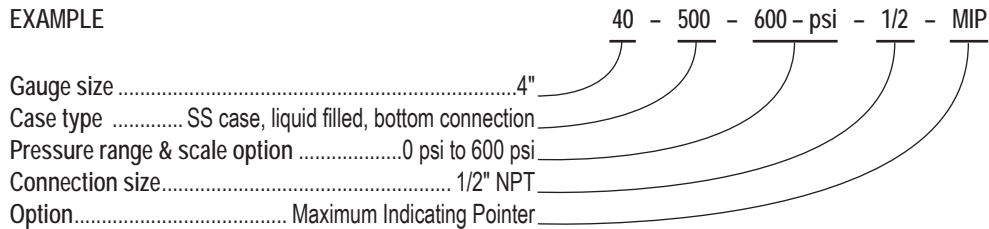
\* Connection size for pressures 30,000 psi and above. Equivalent to F250C Parker Autoclave.

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

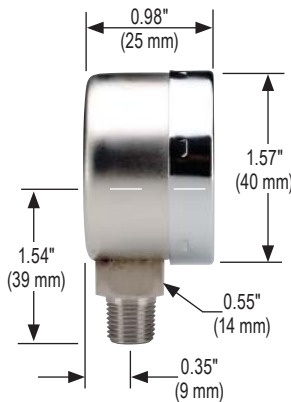
\*\*\* On 40-400, 40-410, 40-500, 40-510, 60-400, 60-410, 60-500, and 60-510 models with pressure ranges between 20,000 and 60,000 psi, the accuracy is ±1.5% or 1.6%.

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

### EXAMPLE



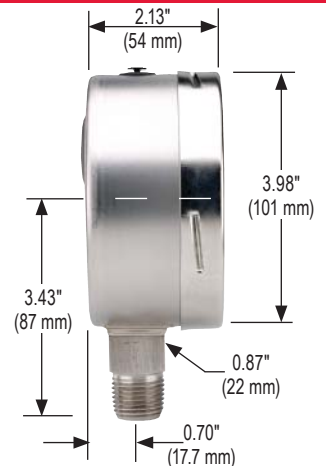
15-401



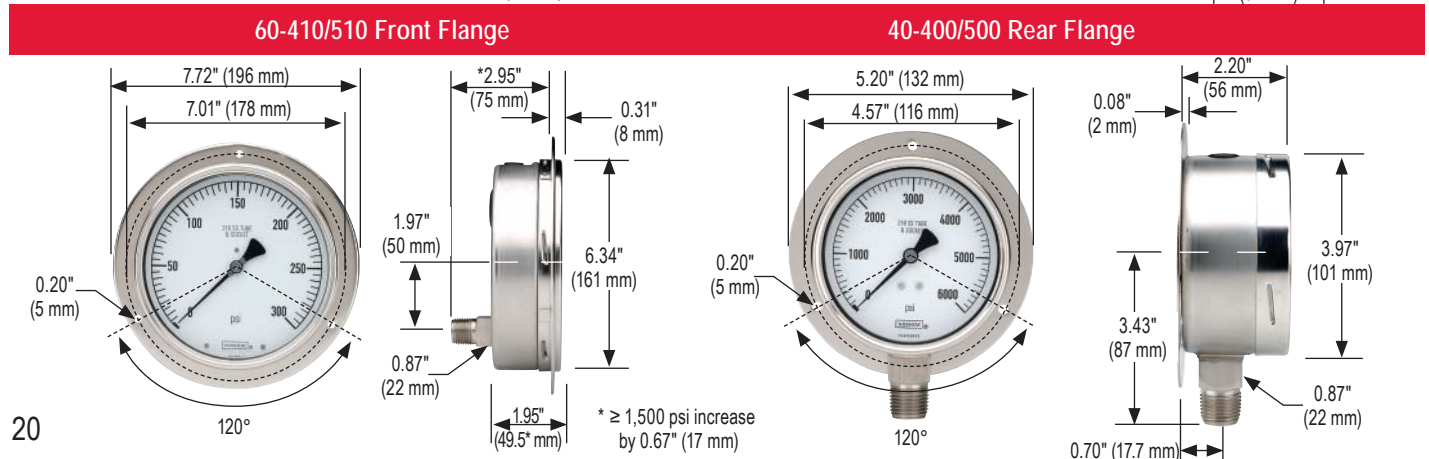
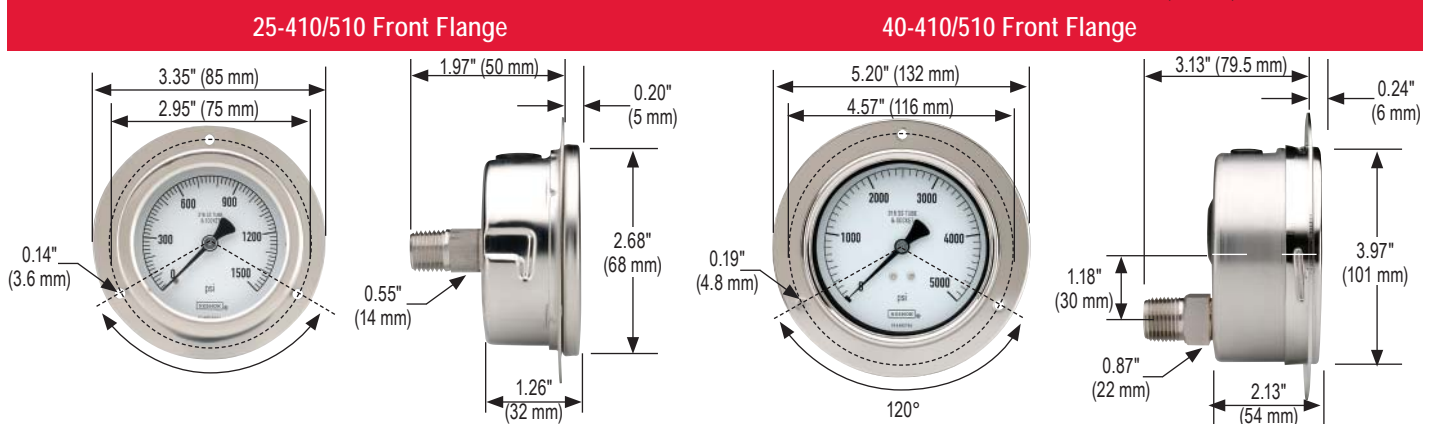
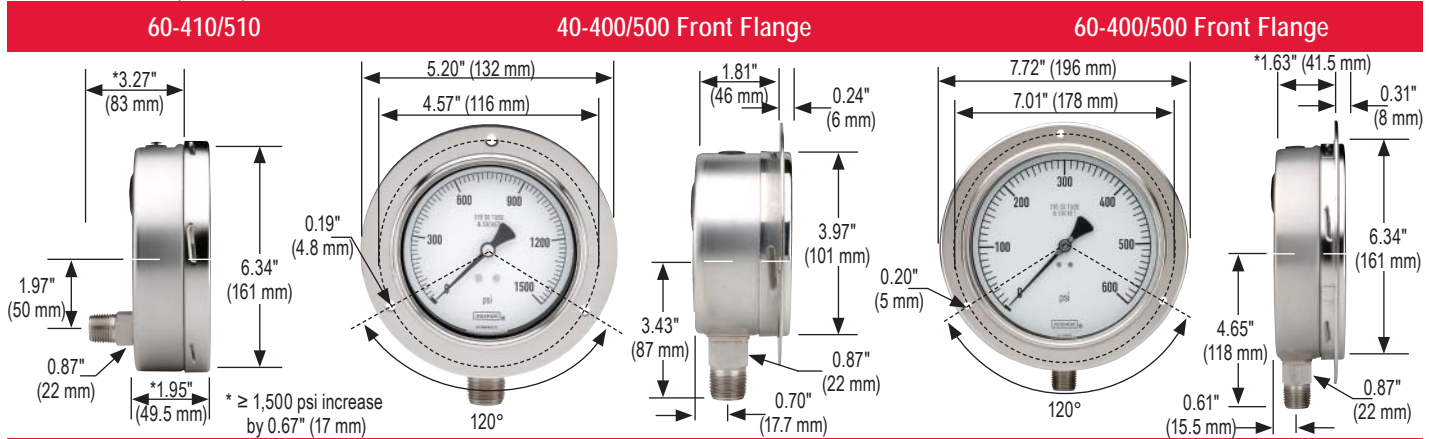
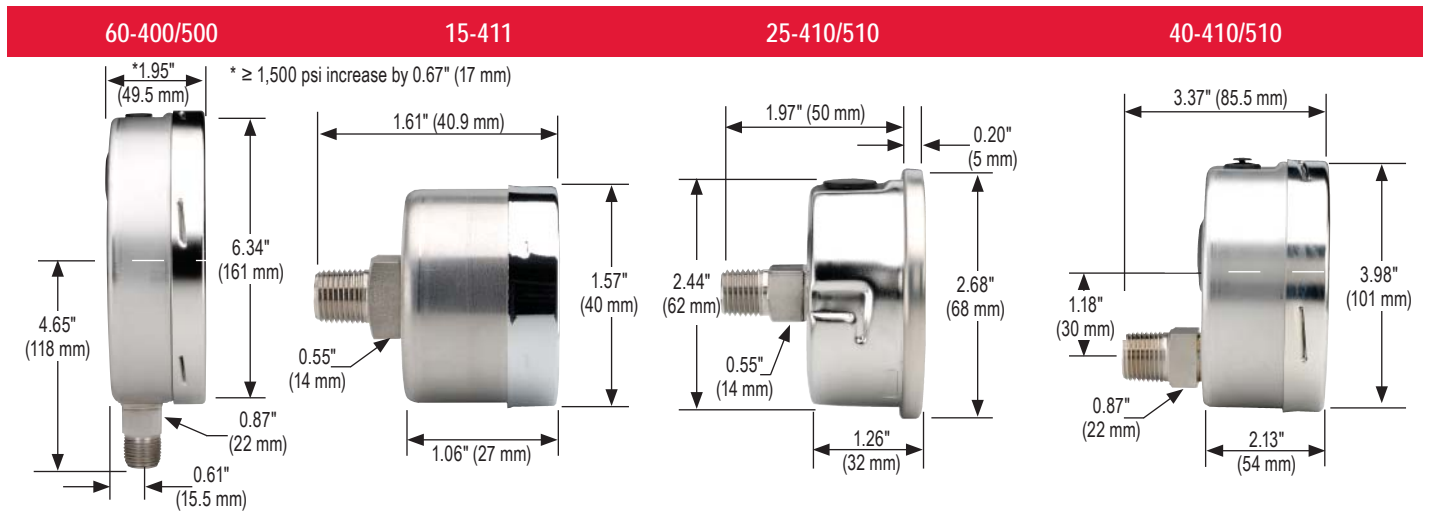
25-400/500



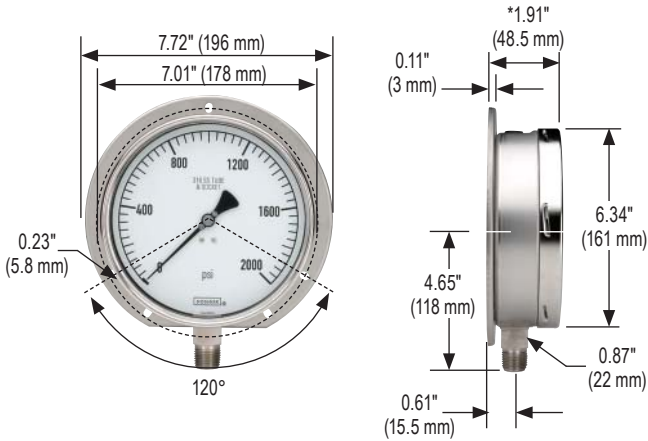
40-400/500



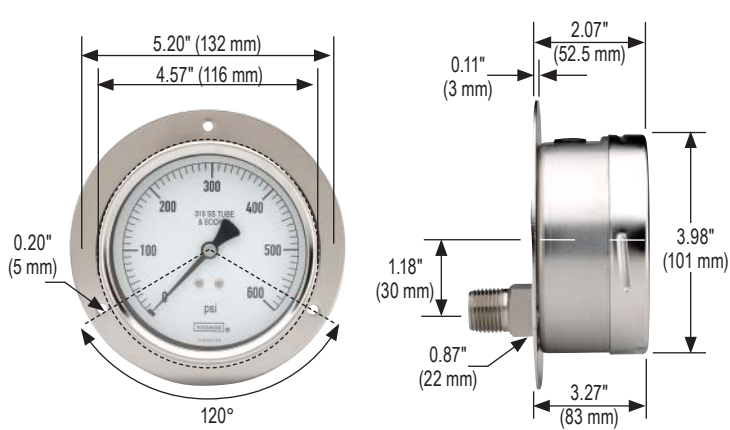
# Dimensions



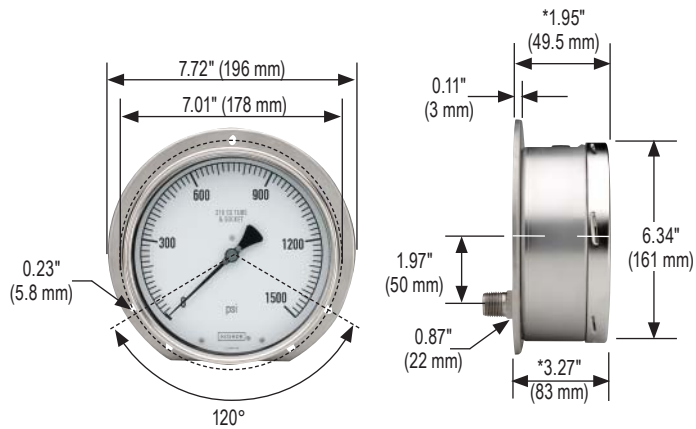
60-400/500 Rear Flange



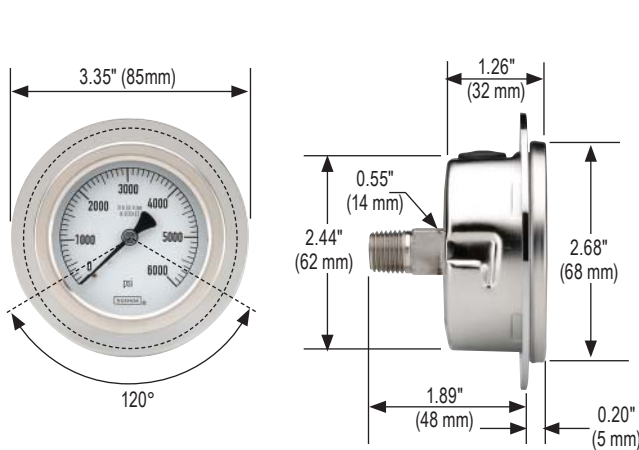
40-410/510 Rear Flange



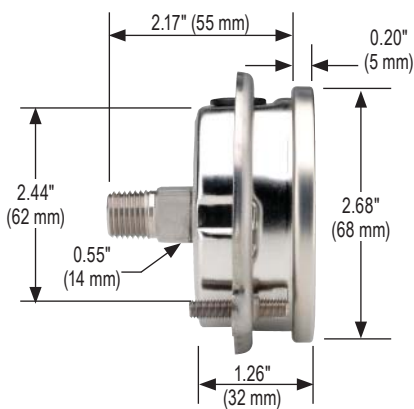
60-410/510 Rear Flange



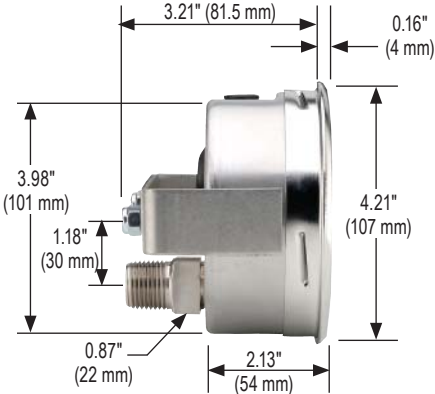
25-410/510 Flange Ring



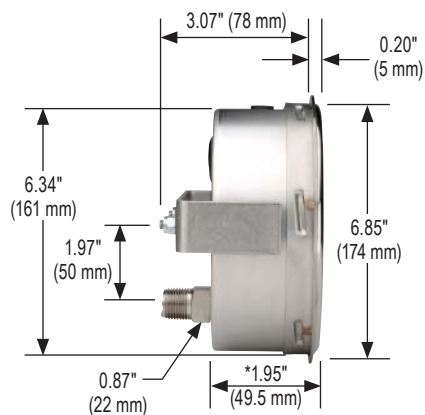
25-410/510 Panel Mount Clamp



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.