

Pressure & Level Measurement Solutions



Pressure Gauges
Dial Indicating
Differential
Sanitary
Digital



Pressure & Level
Transducers &
Transmitters

Industrial
OEM
Hazardous Location
Sanitary



Pressure Switches

Options & Accessories



ABS & Steel Case, Dry



100 SERIES

- General purpose non-fillable dry gauge
- Vacuum and compound ranges through 0 psi to 15,000 psi
- 1-1/2", 2", 2-1/2" and 4" gauge sizes
- Standard impact-resistant ABS & Steel case
- Copper alloy and Brass 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 90% of the dial range

APPLICATIONS

- Hydraulics & pneumatics
- Medical
- Pumps & compressors
- Refrigeration controls
- Utilities
- Water management

	SERIES	SPECIFICATIONS
Pressure ranges	100 Series (all)	Vacuum and compound ranges through 0 psi to 15,000 psi
Accuracy	15-100, 15-110, 15-120, 20-100, 20-110, 20-120, 20-148, 25-100, 25-110, 25-120	±2.5% full scale
	40-100	±1.6% full scale
Temperature ranges*	100 Series (all)	Media -4 °F to 140 °F (-20 °C to 60 °C) Ambient -40 °F to 140 °F (-40 °C to 60 °C)
Measuring element	100 Series (all)	Copper alloy Bourdon tube
Connection	15-100, 15-110, 15-120, 20-100, 20-110	1/8" NPT, Brass
	20-148	1/8" NPT/10-32 Female, Brass
	20-100, 20-110, 20-120, 25-100, 25-110, 25-120, 40-100	1/4" NPT Brass SAE J1926-3:7/16-20
Case	15-100, 15-110, 20-100, 20-110, 20-148, 25-100, 40-100	ABS (Acryl Nitril Butadien Styrol)
	15-120, 20-120, 25-120	Black painted Steel with chrome triangular bezel and U-clamp
Bezel	15-110, 20-110, 25-110	Built-in bezel, molded as an integral part of the case for ease of panel mounting.
	15-120, 20-120, 25-120	Chrome-plated Steel triangular bezel
Lens	100 Series (all)	Acrylic
Pointer	100 Series (all)	Molded plastic
Dial	100 Series (all)	White background with black primary scale & red secondary scale. UV resistant.
Movement	100 Series (all)	Brass & nylon, or all-Brass with highly polished bearing surfaces

* 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.

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



ORDERING INFORMATION																
GAUGE SIZES	15	1-1/2"		20	2"		25	2-1/2"		40	4"					
CASE TYPES	100	ABS, bottom connection			120	Steel case panel mount			110	ABS, back connection			148	Square ABS, panel mount (2" only)		
PRESSURE RANGES	30vac	-30 inHg vacuum to 0 psi			30/300	-30 inHg to 0 to 300 psi			200	0 psi to 200 psi			2000	0 psi to 2,000 psi		
	30/15	-30 inHg to 0 to 15 psi			15	0 psi to 15 psi			300	0 psi to 300 psi			3000	0 psi to 3,000 psi		
	30/30	-30 inHg to 0 to 30 psi			30	0 psi to 30 psi			400	0 psi to 400 psi			5000	0 psi to 5,000 psi		
	30/60	-30 inHg to 0 to 60 psi			60	0 psi to 60 psi			600	0 psi to 600 psi			6000	0 psi to 6,000 psi		
	30/100	-30 inHg to 0 to 100 psi			100	0 psi to 100 psi			1000	0 psi to 1,000 psi			10000	0 psi to 10,000 psi		
	30/160	-30 inHg to 0 to 160 psi			160	0 psi to 160 psi			1500	0 psi to 1,500 psi			15000	0 psi to 15,000 psi		
	30/200	-30 inHg to 0 to 200 psi			Other ranges available on request											
SCALE OPTIONS***	psi	psi single scale			psi/kPa	psi/kPa dual scale			psi/kg/cm²	psi/kg/cm ² dual scale			psi/bar	psi/bar dual scale		
CONNECTION SIZES	1/8	1/8" NPT			SST	SAE J1926-3:7/16-20 Adjustable			1/4	1/4" NPT						
OPTIONS	PMC	Panel Mount Clamp			SSC	Stainless Steel Case			LL	Polycarbonate Lens			ST	Stainless Steel Tagging		
	SSB	Polished Stainless Steel Bezel			CRC	Chrome Case			GL	Glass Lens*			CPO	Brass Sintered Orifice 20 Micron		
	BLRF	Black Rear Flange			FAC	Flat Sided ABS Case			SG	Safety Glass Lens*			BP1	Brass Press Fit Orifice 0.1 mm		
	BLFF	Black Front Flange – ABS Case			BCR	Black Cover Ring**			HL	Homalite Lens*			BP3	Brass Press Fit Orifice 0.3 mm		
	CFF	Chrome Front Flange – ABS Case			SSCR	Stainless Steel Cover Ring**			SP	Red Set Pointer**			BP8	Brass Press Fit Orifice 0.8 mm		
	SBFF	Black Front Flange – Steel Case			CCR	Chrome Cover Ring**			MIP	Maximum Indicating Pointer						
	SCFF	Chrome Front Flange – Steel Case			PCCR	Polished Chrome Cover Ring**			SDM	Silicone Dampened Movement						
	BSC	Black Steel Case			CAR	Chrome Adapter Ring*			LM	Laser Marking						

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

NOTES: Refer to 100 Series options & accessories chart on page 50 for availability by part number.
Cleaning for Oxygen Service (O2) is available only for dry or HL filled gauges

- * A Steel, Stainless or chrome case & cover ring must be additionally ordered when lenses other than acrylic are utilized on all 100 Series.
- ** Only 110 Series require a Steel, Stainless or chrome case & cover ring to be additionally ordered when utilizing a set pointer or cover ring.
Please consult factory when a set pointer is to be utilized on a 120 Series.
- *** Other scales available on request

EXAMPLE

25 - 110 - 100 - psi - 1/8"† - BSC

Gauge size 2-1/2"
 Case type ABS, back connection
 Pressure range & scale option 0 psi to 100 psi
 Connection size† 1/8" NPT
 Option Black Steel Case

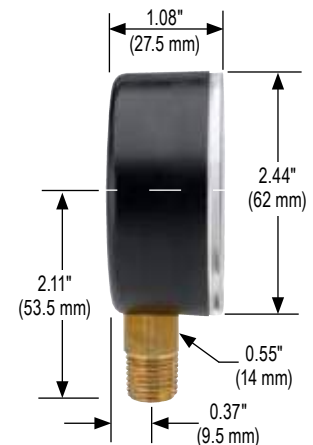
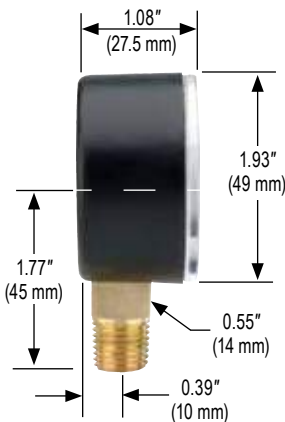
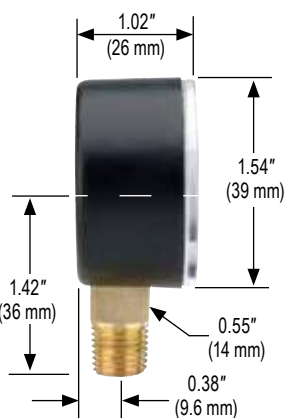
† Only include in part number if non-standard connection size is ordered.

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.

15-100

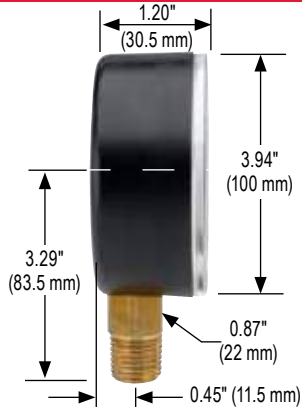
20-100

25-100

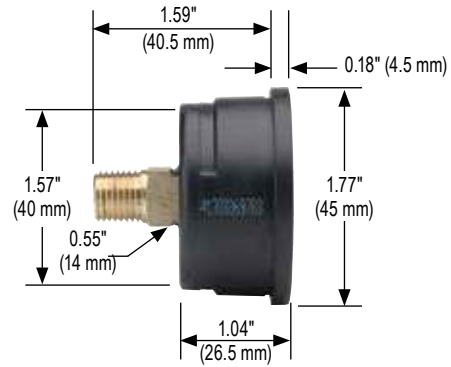


Dimensions

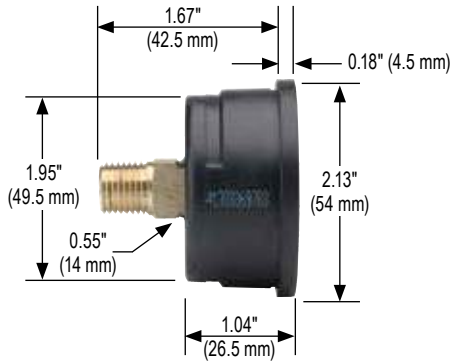
40-100



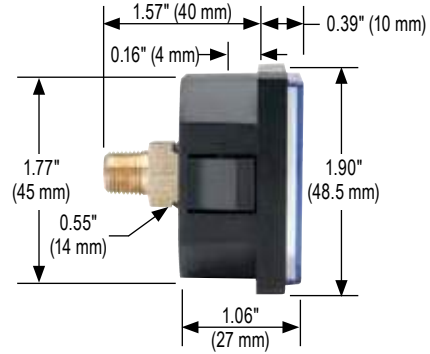
15-110



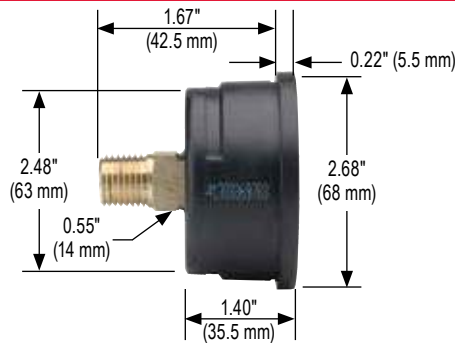
20-110



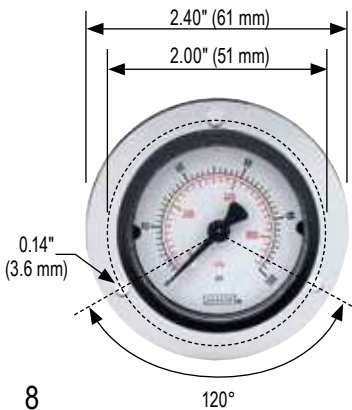
20-148



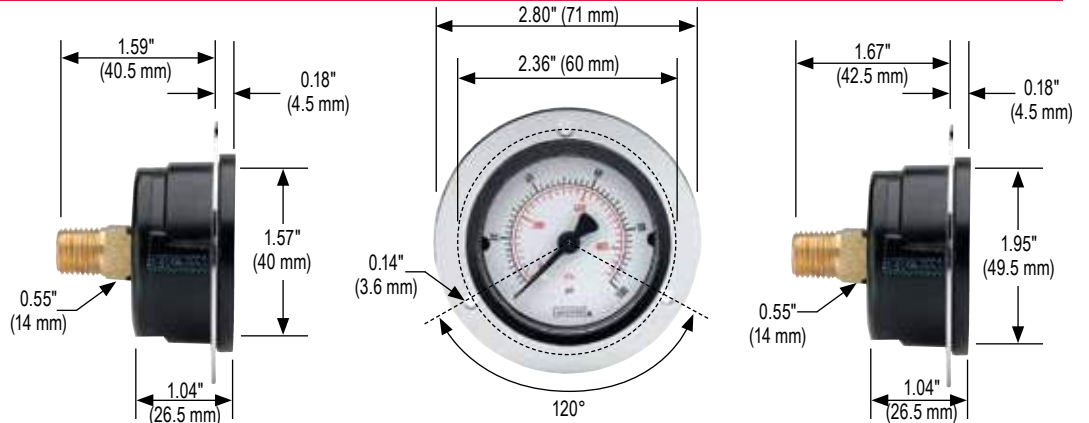
25-110



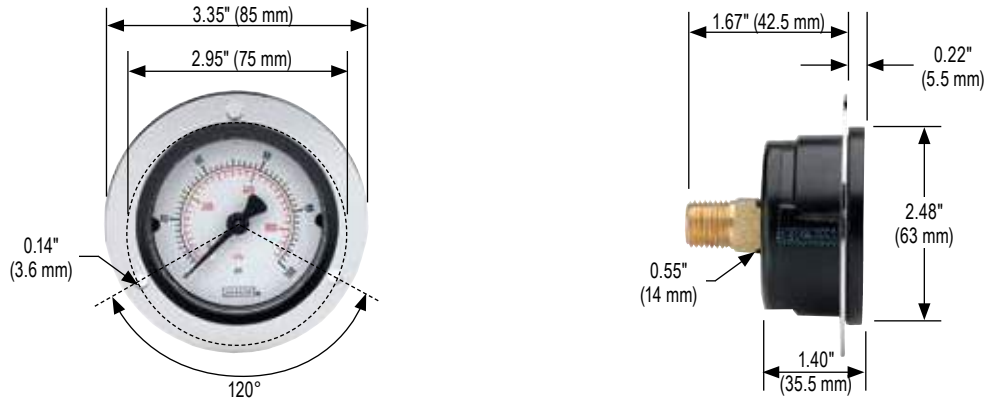
15-110 Front Flange



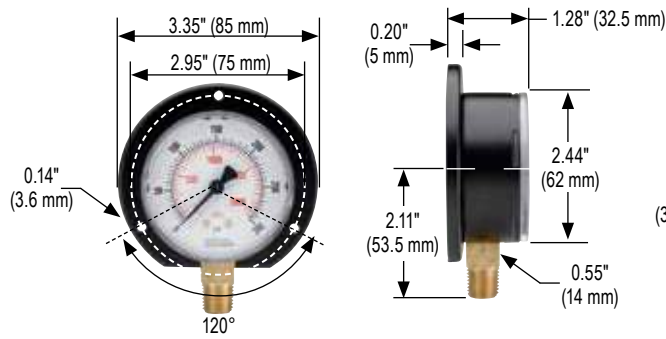
20-110 Front Flange



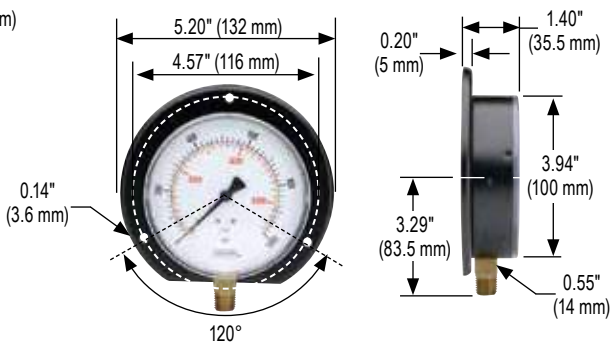
25-110 Front Flange



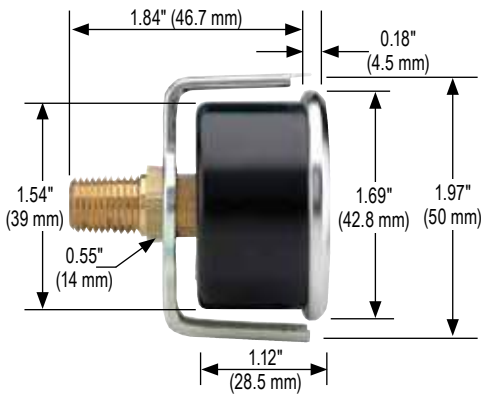
25-100 Rear Flange



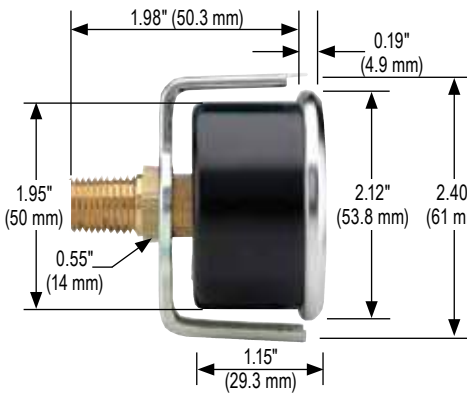
40-100 Rear Flange



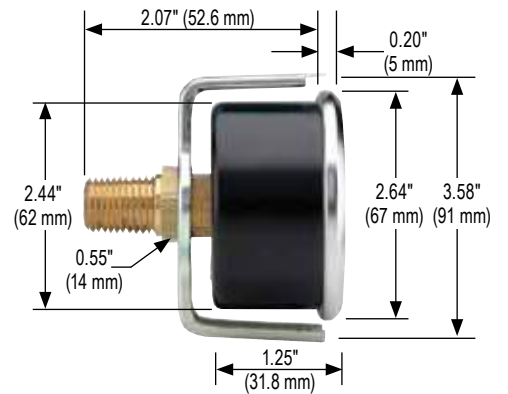
15-120 Chrome Bezel With U-Clamp



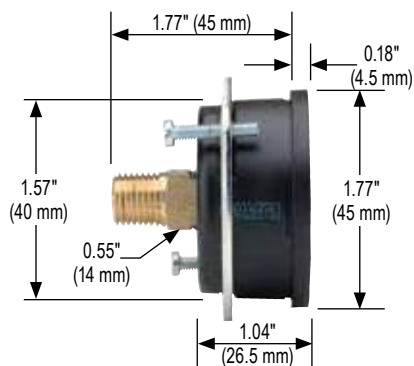
20-120 Chrome Bezel With U-Clamp



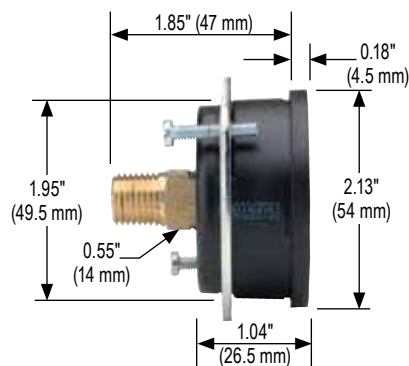
25-120 Chrome Bezel With U-Clamp



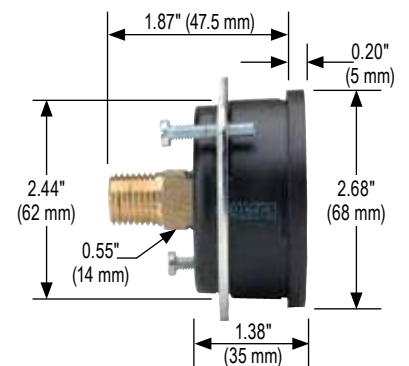
15-110 Panel Mount Clamp



20-110 Panel Mount Clamp



25-110 Panel Mount Clamp



Low Pressure Diaphragm



200 SERIES

- Sensitive capsule-type, non-fillable dry gauge
- Vacuum ranges through 0 psi to 10 psi
- 2-1/2" and 4" gauge sizes
- Black painted Steel, Stainless Steel and impact-resistant ABS case
- Copper alloy and Brass 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 90% of the dial range

APPLICATIONS

- Filter monitoring
- Gas distribution
- HVAC
- Leak detection
- Level indication
- Medical

	SERIES	SPECIFICATIONS
Pressure ranges	200 Series (all)	Extreme low pressure vacuum ranges through 0 psi to 10 psi
Accuracy	25-200, 25-210, 25-224	±1.6% full scale
	25-206, 25-216	±2.5% full scale
	40-200	±1.6% full scale
Temperature ranges*	200 Series (all)	Media -4 °F to 176 °F (-20 °C to 80 °C) Ambient -4 °F to 140 °F (-20 °C to 60 °C)
Measuring element	25-200, 25-210, 25-224, 40-200	Copper alloy diaphragm capsule
Connection	200 Series (all)	1/4" NPT, Brass
Case	25-200, 25-210	Black painted Steel
	25-206, 25-216, 25-224	Black ABS (Acryl Nitril Butadien Styrol) with 25-224 includes zinc-plated Steel panel mount clamp
	40-200	304 Stainless Steel
Bezel	40-200	304 Stainless Steel
Lens	25-200, 25-206, 25-210, 25-216, 25-224	Acrylic
	40-200	Instrument glass
Pointer	200 Series (all)	Black finished Aluminum
Dial	200 Series (all)	Aluminum, white background with black scale. UV resistant.
Movement	25-200, 25-210, 25-224, 40-200	Brass and Nickel-silver with highly polished bearing surfaces
	25-206, 25-216	Cu-Alloy

* 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.

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



WARNING: This product can expose you to chemicals including Lead, which is 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 SIZES	25 2-1/2"		40 4"			
CASE TYPES	200 Steel, bottom connection (304SS for 4")			224 ABS, panel mount		
	210 Steel, back connection			234 Gas pressure test kit**		
PRESSURE RANGES	15 inH₂O Vac	-15 inH ₂ O to 0 inH ₂ O	100 inH₂O	0 inH ₂ O to 100 inH ₂ O	100 oz/in²	0 oz/in ² to 100 oz/in ²
	30 inH₂O Vac	-30 inH ₂ O to 0 inH ₂ O	160 inH₂O	0 inH ₂ O to 160 inH ₂ O	160 oz/in²	0 oz/in ² to 160 oz/in ²
	60 inH₂O Vac	-60 inH ₂ O to 0 inH ₂ O	200 inH₂O	0 inH ₂ O to 200 inH ₂ O	20 oz/ in²/inH₂O	0 oz/in ² /inH ₂ O to 20 oz/in ² /inH ₂ O
	100 inH₂O Vac	-100 inH ₂ O to 0 inH ₂ O	10 oz/in²	0 oz/in ² to 10 oz/in ²	32 oz/ in²/inH₂O	0 oz/in ² /inH ₂ O to 32 oz/in ² /inH ₂ O
	10 inH₂O	0 inH ₂ O to 10 inH ₂ O	15 oz/in²	0 oz/in ² to 15 oz/in ²	3 psi	0 psi to 3 psi
	15 inH₂O	0 inH ₂ O to 15 inH ₂ O	30 oz/in²	0 oz/in ² to 30 oz/in ²	5 psi	0 psi to 5 psi
	30 inH₂O	0 inH ₂ O to 30 inH ₂ O	35 oz/in²	0 oz/in ² to 35 oz/in ²	10 psi	0 psi to 10 psi
	60 inH₂O	0 inH ₂ O to 60 inH ₂ O	60 oz/in²	0 oz/in ² to 60 oz/in ²	40 mbar	0 mbar to 40 mbar
CONNECTION SIZE	1/4 1/4" NPT					
OPTIONS	BLRF	Black Rear Flange	GL	Glass Lens*	OP	Over Pressure Protection
	SSRF	304SS Rear Flange	SG	Safety Glass Lens*	SSBU	Stainless Steel Bezel & U-Clamp
	BLFF	Black Front Flange***	PL	Acrylic Lens	BBU	Black Bezel & U-Clamp
	SSFF	304SS Front Flange	RL	Recalibrator Lens	BCR	Black Cover Ring
	CFF	Chrome Front Flange***	SP	Red Set Pointer	SSCR	Stainless Steel Cover Ring
	SSC	Stainless Steel Case	MIP	Maximum Indicating Pointer	LM	Laser Marking
					ST	Stainless Steel Tagging
					BP3	Brass Press Fit Orifice 0.3 mm
					BT3	Brass Threaded Orifice 0.3 mm

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

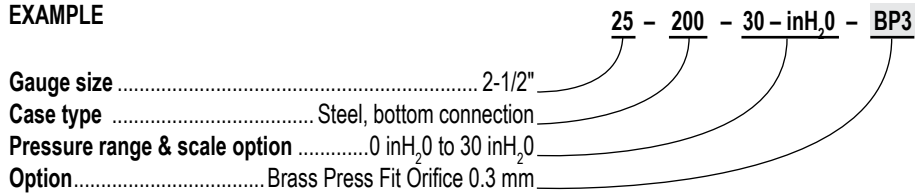
NOTES: Refer to 200 Series Options & Accessories chart on page 51 for availability by part number.
O₂ cleaning is not available for 200 Series gauges.

* A Steel, Stainless or chrome cover ring must be additionally ordered when lenses other than acrylic are utilized on all 200 Series

** Only available in 2-1/2" size, 20 oz/35 inH₂O

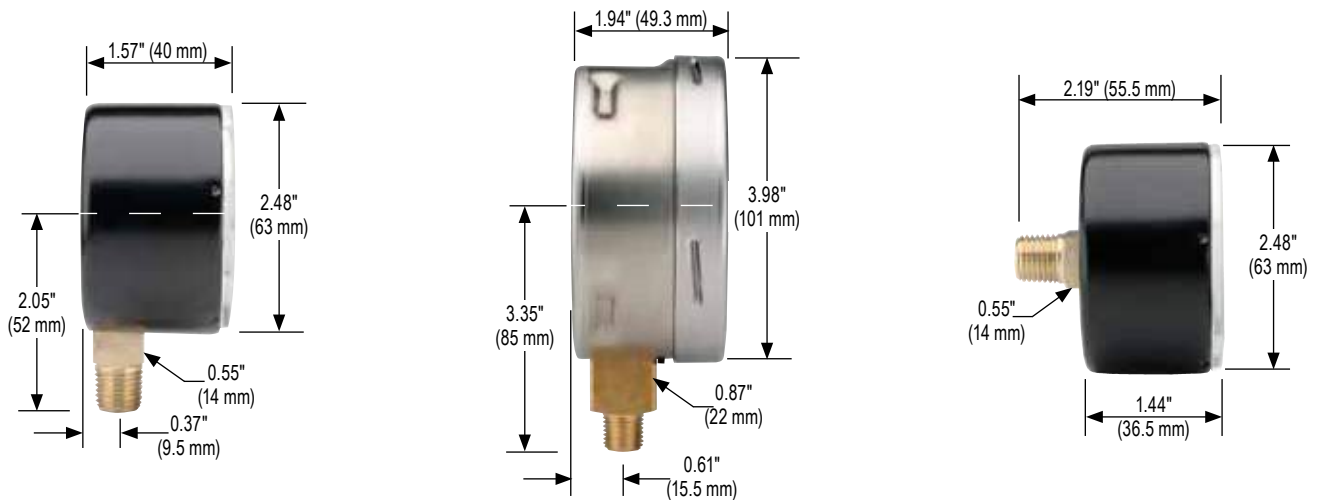
*** Not available on 25-200 model

EXAMPLE



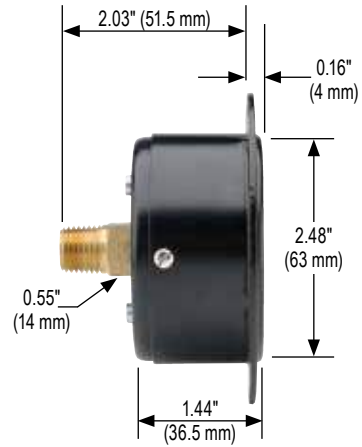
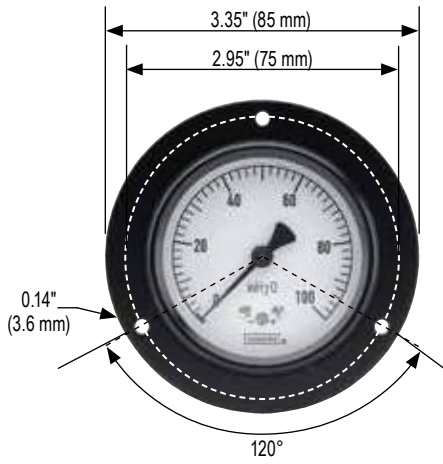
NOTES: See standard connection sizes chart on page 49.
Shaded portions of this part number example are not required unless a non-standard connection size or an option is needed.

25-200
40-200
25-210

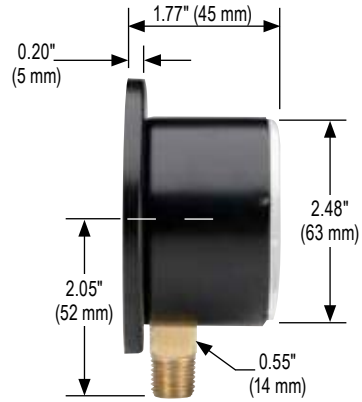
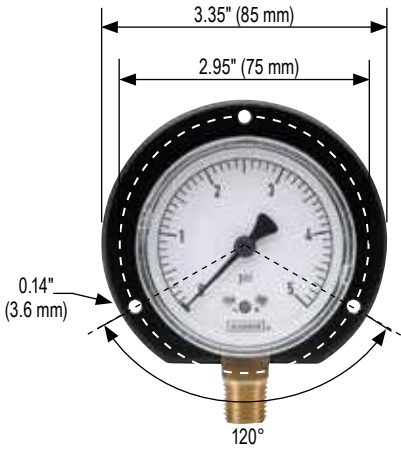


Dimensions

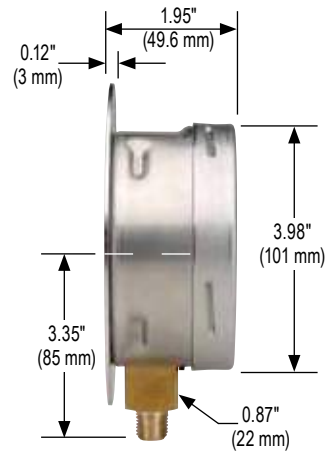
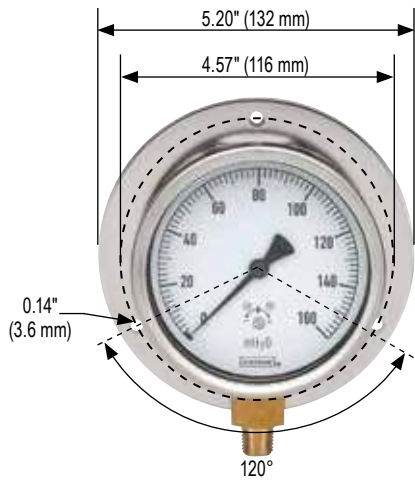
25-210 Front Flange



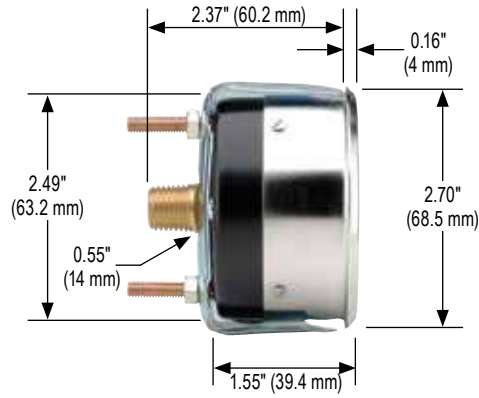
25-200 Rear Flange



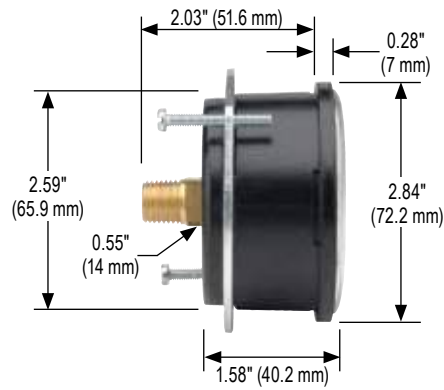
40-200 Rear Flange



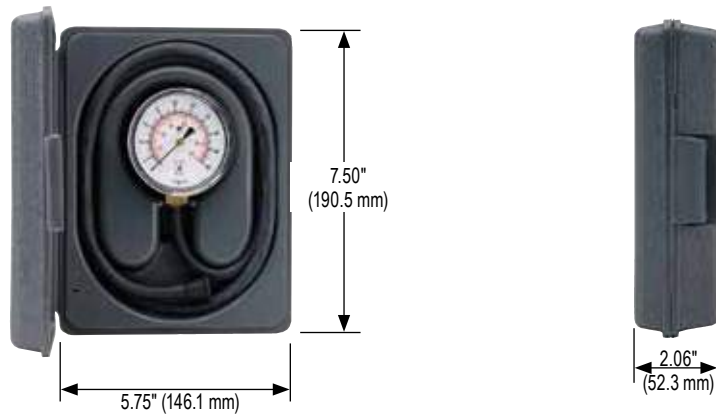
25-210 Triangular Bezel w/U-Clamp



25-224 with Panel Mount Clamp



25-234



Brass Case, Liquid Filled



300 SERIES

- High quality, heavy-duty liquid filled gauge
- Vacuum and compound ranges through 0 psi to 15,000 psi
- 2-1/2" and 4" gauge sizes
- Die cast Brass case with natural Brass finish
- Copper alloy or 316 Stainless Steel and Brass 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 90% of the dial range.

APPLICATIONS

- Automotive
- Construction
- Hydraulics & pneumatics
- Mining
- Stamping & forming presses
- Transportation

	SERIES	SPECIFICATIONS
Pressure ranges	300 Series (all)	Vacuum and compound ranges through 0 psi to 15,000 psi
Accuracy	25-300, 25-310	±1.6% full scale
	40-300, 40-310	± 1% full scale
Temperature ranges*	300 Series (all)	Media -4 °F to 140 °F (-20 °C to 60 °C) Ambient 0 °F to 160 °F (-18 °C to 71 °C) Optional temperature ratings available from -40 °F to 212 °F (-40 °C to 100 °C)
Measuring element	25-300, 25-310 (≤ 600 psi)	Copper alloy "C" tube
	25-300, 25-310 (800 psi to 6,000 psi)	Copper alloy coiled safety tube
	25-300, 25-310 (7,500 psi to 15,000 psi)	316 Stainless Steel coiled safety tube
	40-300, 40-310 (≤ 1,000 psi)	Copper alloy "C" tube
	40-300, 40-310 (15,000 psi)	316 Stainless Steel coiled safety tube
Connection	25-300, 25-310	1/4" NPT die-cast Brass with the case. 7/16" – 20 SAE adjustable type straight thread with FKM O-ring is also available as a stock option on many ranges (-4 SAE).
	40-300, 40-310	1/4" NPT die-cast Brass with the case. 1/2" NPT is available on certain 40-300 ranges as a stock option, and on all other 40-300 and 40-310's as a non-stock option.
Case	300 Series (all)	Die cast Brass (natural Brass finish) with safety relief plug
Cover ring	300 Series (all)	Polished Brass
Lens	300 Series (all)	Acrylic with o-ring seal
Pointer	300 Series (all)	Balanced Aluminum, black finish
Dial	300 Series (all)	Aluminum, white background with black scale. UV resistant.
Movement	300 Series (all)	Brass and Nickel-silver with highly polished bearing surfaces
Fill liquid**	300 Series (all)	Glycerin

* 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.



WARNING: This product can expose you to chemicals including Lead, which is 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

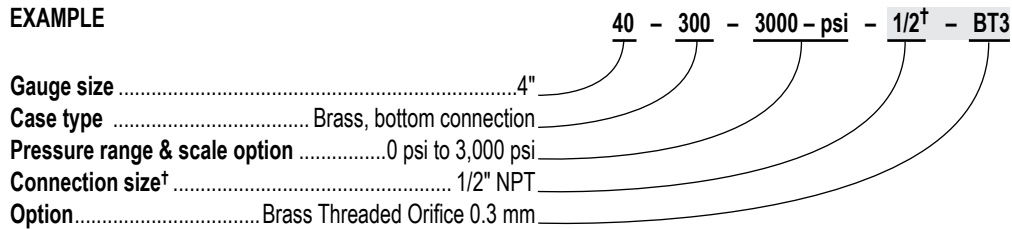
ORDERING INFORMATION								
GAUGE SIZES	25 2-1/2"		40 4"					
CASE TYPES	300 Brass, bottom connection		310 Brass, back connection					
PRESSURE RANGES	30vac	-30 inHg to 0 psi	30/300	-30 inHg to 0 to 300 psi	300	0 psi to 300 psi	3000	0 psi to 3,000 psi
	30/15	-30 inHg to 0 to 15 psi	15	0 psi to 15 psi	400	0 psi to 400 psi	5000	0 psi to 5,000 psi
	30/30	-30 inHg to 0 to 30 psi	30	0 psi to 30 psi	600	0 psi to 600 psi	6000	0 psi to 6,000 psi
	30/60	-30 inHg to 0 to 60 psi	60	0 psi to 60 psi	800	0 psi to 800 psi	7500	0 psi to 7,500 psi
	30/100	-30 inHg to 0 to 100 psi	100	0 psi to 100 psi	1000	0 psi to 1,000 psi	10000	0 psi to 10,000 psi
	30/160	-30 inHg to 0 to 160 psi	160	0 psi to 160 psi	1500	0 psi to 1,500 psi	15000	0 psi to 15,000 psi
	30/200	-30 inHg to 0 to 200 psi	200	0 psi to 200 psi	2000	0 psi to 2,000 psi		
SCALE OPTIONS	psi	psi single scale	psi/kPa	psi/kPa dual scale	psi/kg/cm ²	psi/kg/cm ² dual scale	psi/bar	psi/bar dual scale
CONNECTION SIZES	1/4	1/4" NPT	1/2	1/2" NPT	SST	SAE J1926-3.7/16-20 Adjustable		
OPTIONS	CFF	Chrome Front Flange	RF	Rear Flange	GLO	Glass Lens Overlay	BT3	Brass Threaded Orifice 0.3 mm
	CFFN	Chrome Front Flange w/o holes	CCR	Chrome Cover Ring	SGO	Safety Glass Overlay	BT4	Brass Threaded Orifice 0.4 mm
	BFF	Brass Front Flange	CBU	Chrome Bezel & U-Clamp	AR	Adapter Ring	BT8	Brass Threaded Orifice 0.8 mm
	BLFF	Black Front Flange	MIP	Maximum Indicating Pointer*	LM	Laser Marking	RCP	Rubber Case Protector
	SSRF	304SS Rear Flange	LL	Polycarbonate Lens	ST	Stainless Steel Tagging		

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

NOTES: Refer to 300 Series Options & Accessories chart on page 51 for availability by part number.
Cleaning for Oxygen Service (O2) is available only for dry or HL filled gauges

* GY40 fill is standard for liquid filled gauges

EXAMPLE

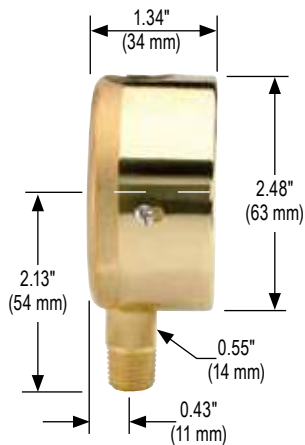


[†] Only include in part number if non-standard connection size is ordered.

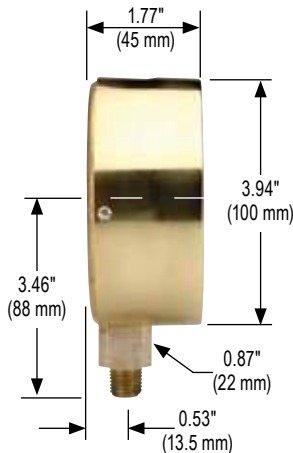
NOTES: See standard connection sizes chart on page 49.

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

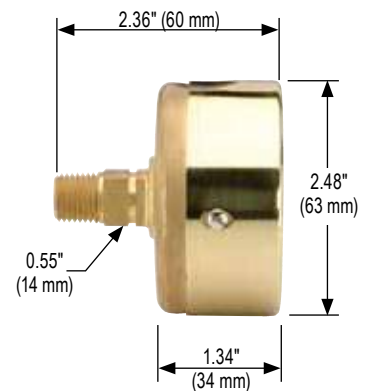
25-300



40-300



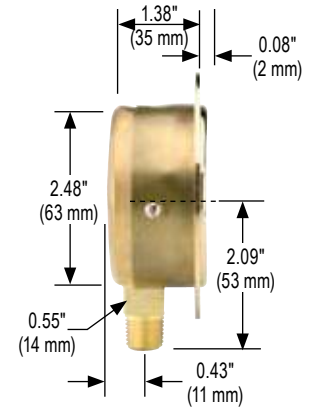
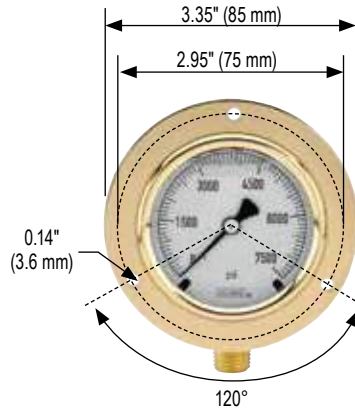
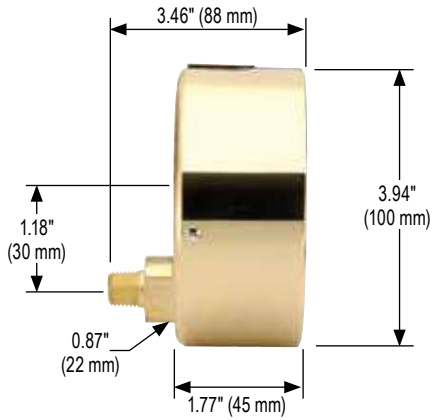
25-310



Dimensions

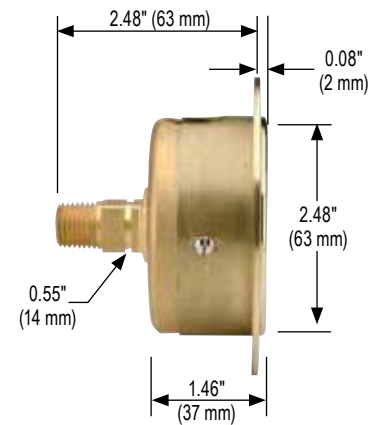
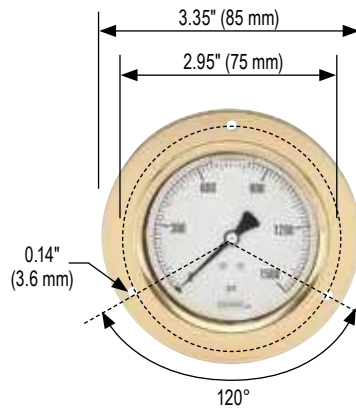
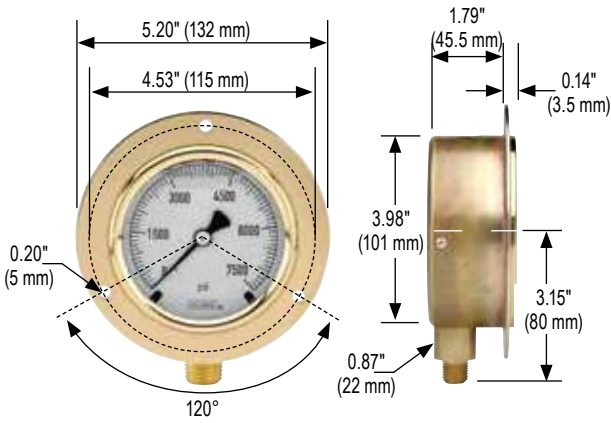
40-310

25-300 Front Flange



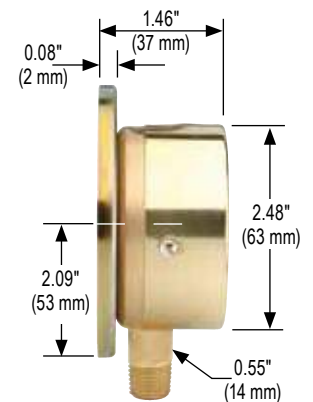
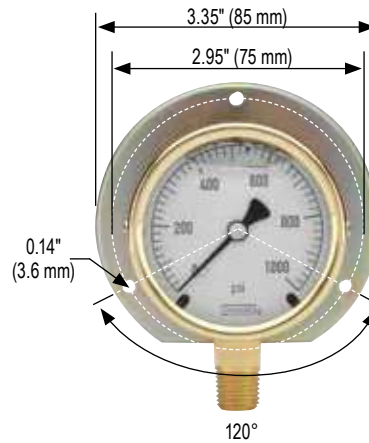
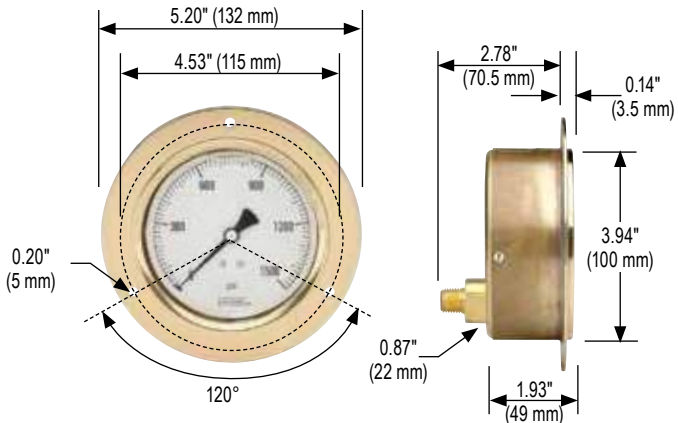
40-300 Front Flange

25-310 Front Flange

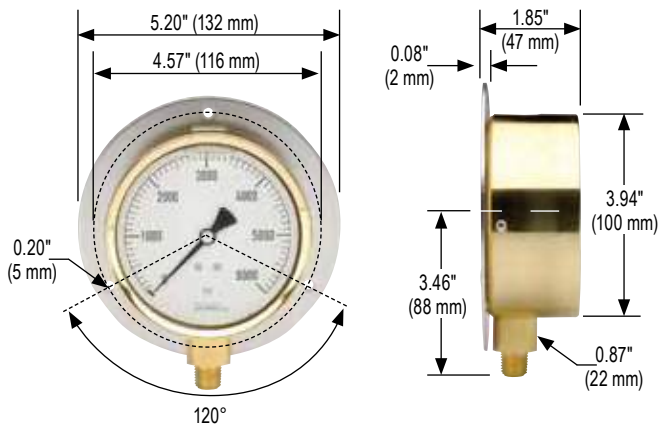


40-310 Front Flange

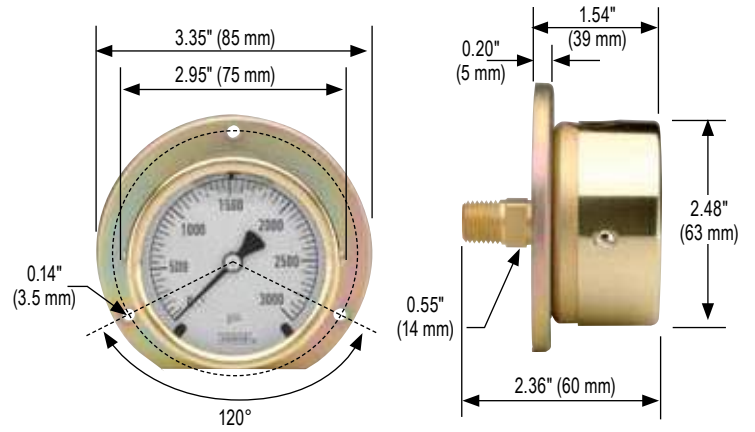
25-300 Rear Flange



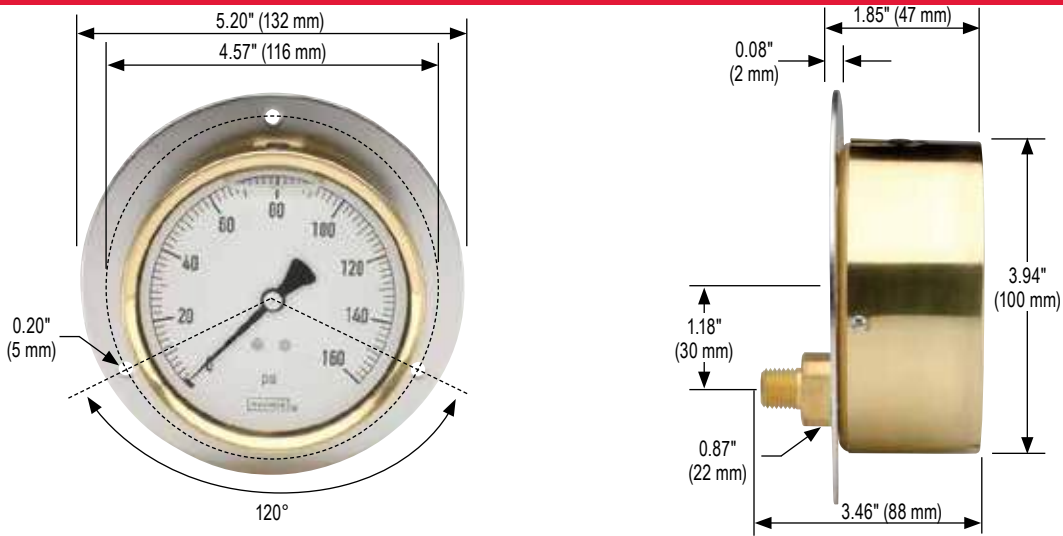
40-300 Rear Flange



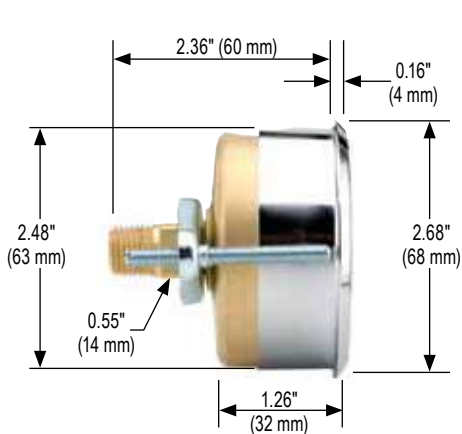
25-310 Rear Flange



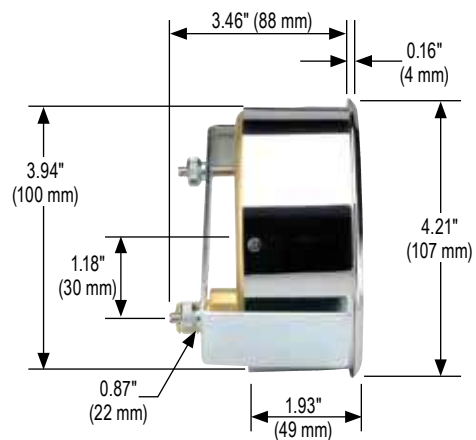
40-310 Rear Flange



25-310 Chrome Triangular Bezel with U-Clamp



40-310 Chrome Triangular Bezel with U-Clamp



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 Nickel, which is 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 401 All SS, dry, bottom connection 402 SS case, solid front, dry, 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 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 **	
SCALE OPTIONS	psi psi single scale psi/kPa psi/kPa dual scale	psi/kg/cm² psi/kg/cm ² 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 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.

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 size4"
 Case type SS case, liquid filled, bottom connection
 Pressure range & scale option0 psi to 600 psi
 Connection size^{††} 1/4" NPT
 Option Maximum Indicating Pointer

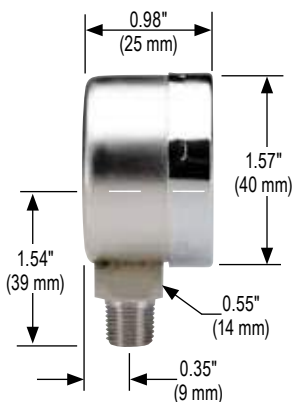
40 - 500 - 600 - psi - 1/4^{††} - MIP

^{††} 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

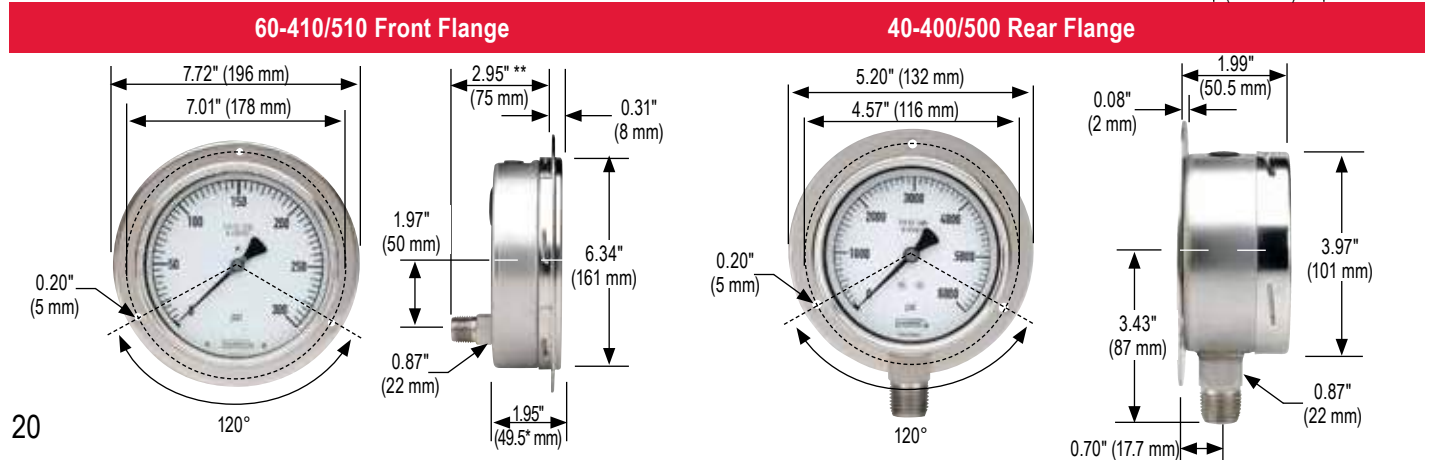
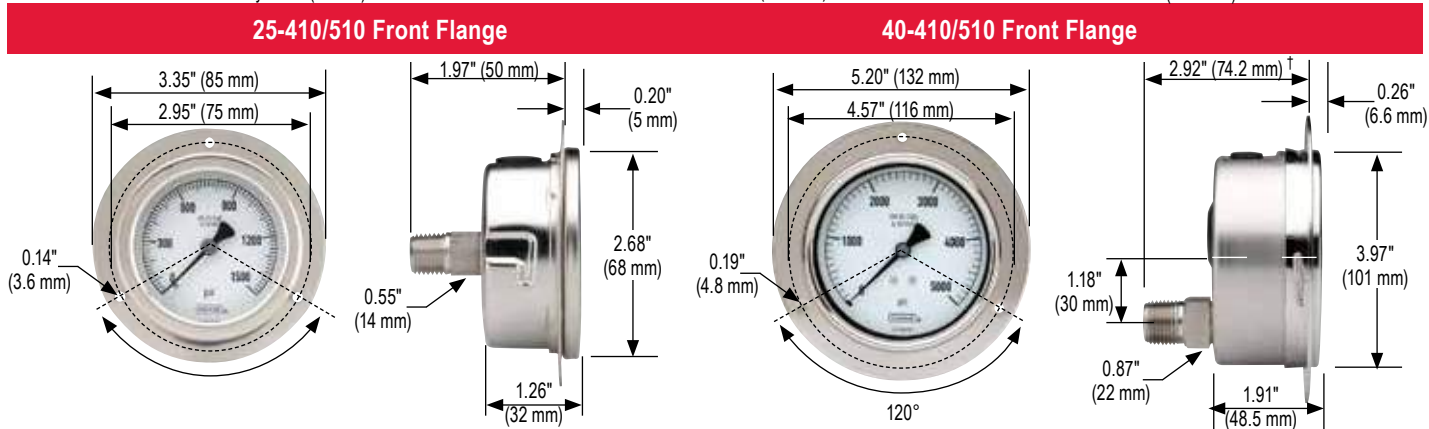
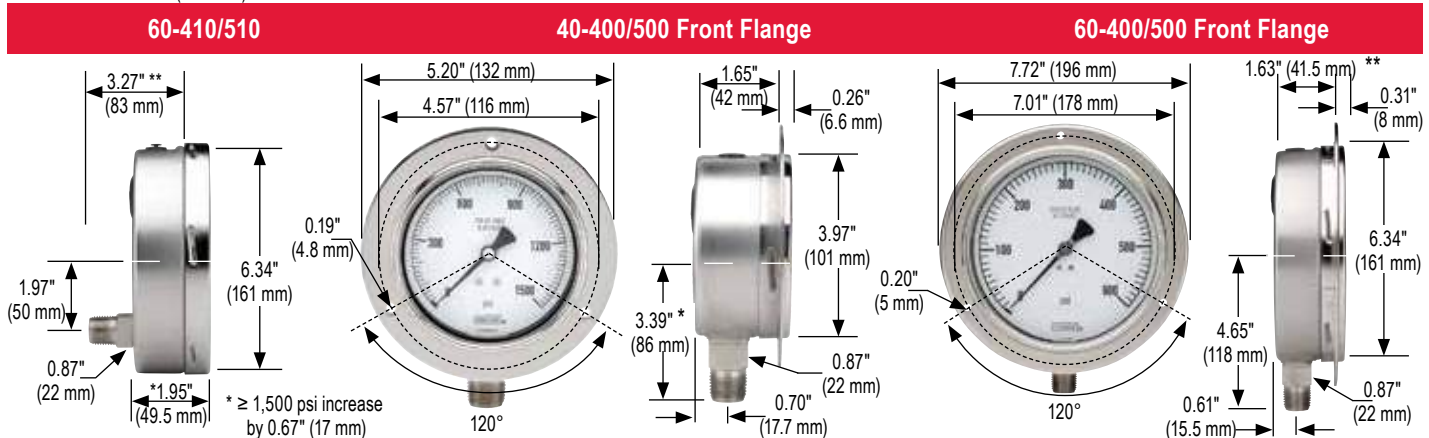
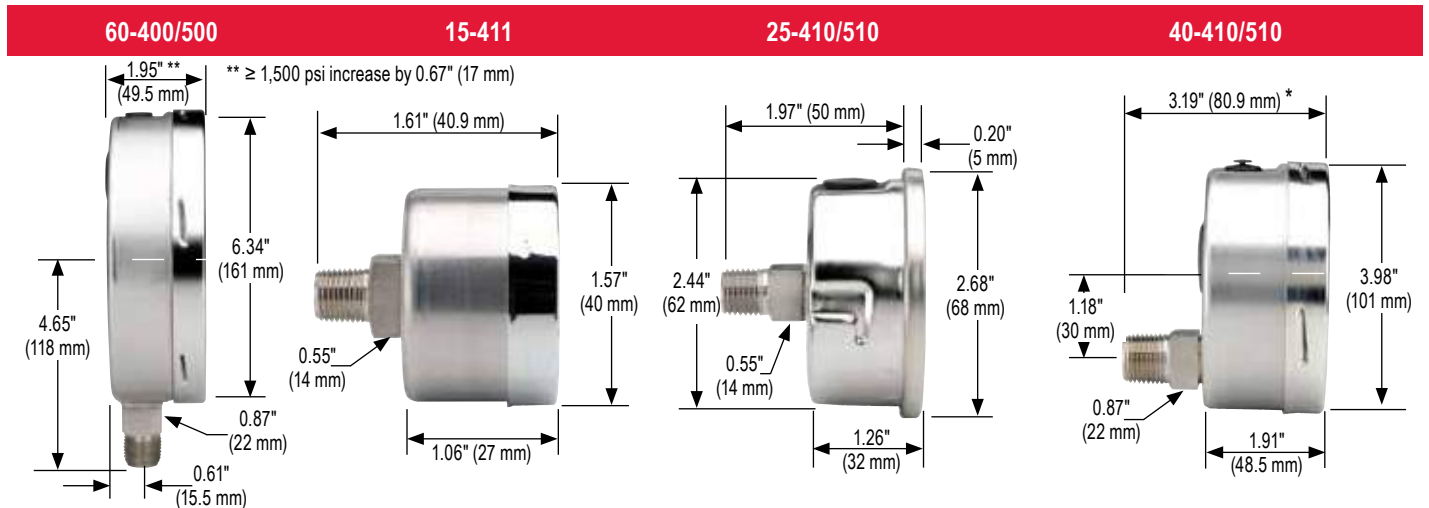


40-400/500

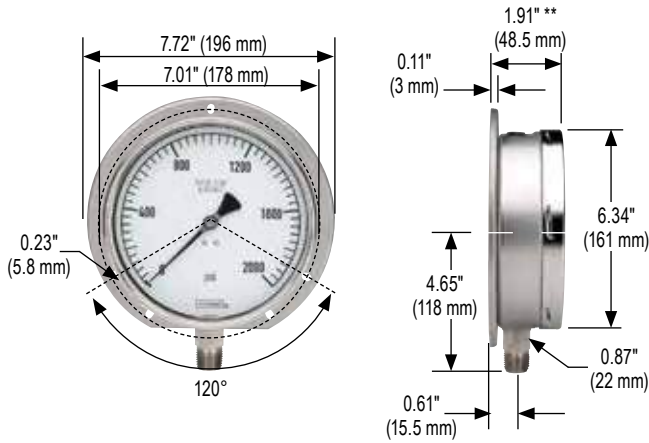


* Dimension is for 1/2" process connection.
 1/4" process connection = 3.15" (80 mm)

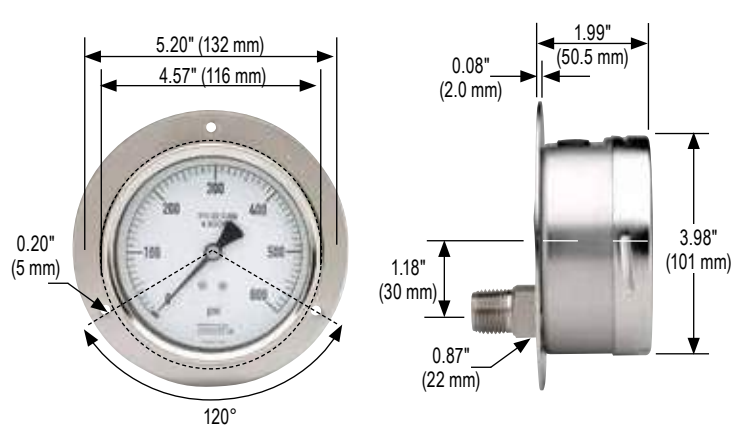
Dimensions



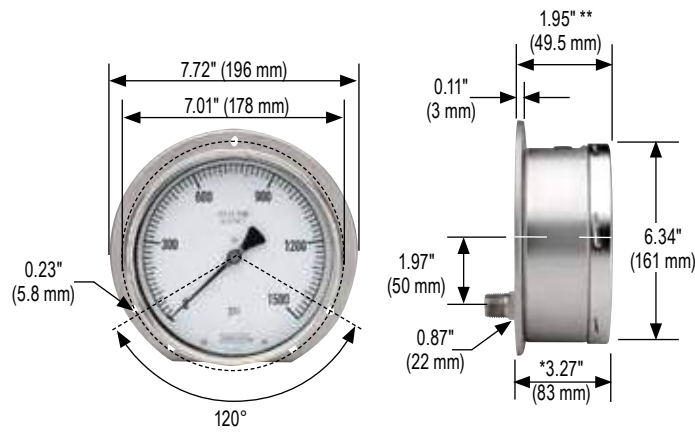
60-400/500 Rear Flange



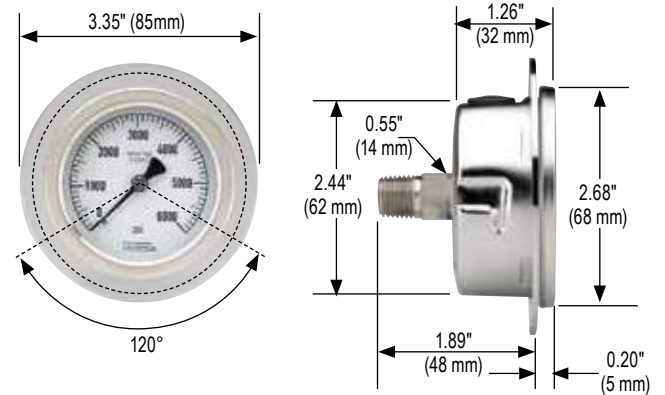
40-410/510 Rear Flange



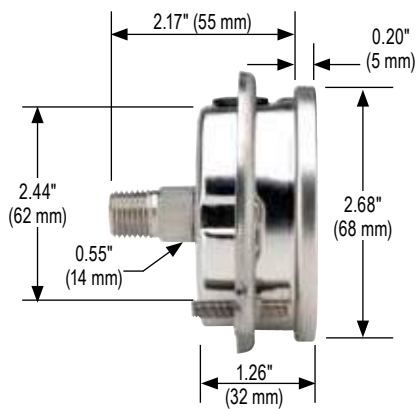
60-410/510 Rear Flange



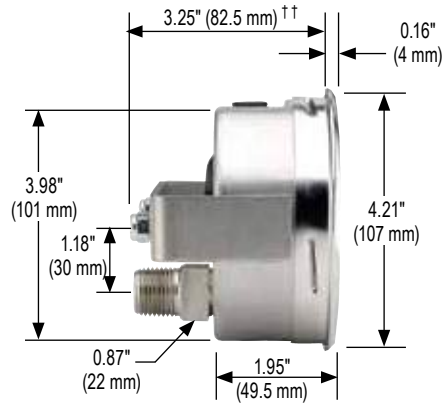
25-410/510 Flange Ring



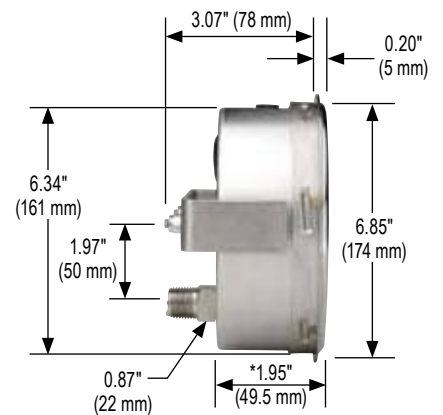
25-410/510 Panel Mount Clamp



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



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



* Dimension 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)

All Stainless Steel, Dry & Liquid Filled, Extreme High Pressure

402/502 SERIES



- Corrosion-resistant dry or liquid-filled gauge for high pressure applications
- Ranges from 0 psi to 30,000 psi through 0 psi to 85,000 psi
- 4" and 6" gauge sizes
- Solid front design with a blow out back in accordance to EN 837, S3 Safety Pattern
- Stainless Steel case
- NiFe alloy/316L Stainless Steel wetted parts
- DIN 16001 compliant

OPERATING SPECIFICATIONS

1. Working Pressure Limitations

a. Dynamic Pressure

The working pressure should be limited to 65% of the dial range.

b. Static Pressure

The working pressure, where no sharp fluctuations occur, should be limited to 75% of the dial range

APPLICATIONS

- Pumps & compressors
- High pressure processing
- Test equipment & systems
- Water jet cutting

	SERIES	SPECIFICATIONS
Pressure ranges	402, 412 & 500 Series	0 psi to 30,000 psi through 0 psi to 85,000 psi
Accuracy	≤40,000 psi	±1.6% full scale (optional 1% increased accuracy)
	≥50,000 psi	±1% full scale (85,000 psi is ±1.6% accuracy)
Temperature ranges*	402 & 412 Series	Media -40 °F to 392 °F (-40 °C to 200 °C) Ambient -40 °F to 140 °F (-40 °C to 60 °C)
	502 Series	Media -4 °F to 212 °F (-20 °C to 100 °C) Glycerin fill Ambient -4 °F to 140 °F (-20 °C to 60 °C) Glycerin fill
Measuring element	402/502 Series (all)	NiFe alloy
Connection	402/502 Series (all)	316L Stainless Steel
Case	402/502 Series (all)	Stainless Steel, solid front with blowout back
Cover ring	402/502 Series (all)	Stainless Steel bayonet ring
Lens	402/502 Series (all)	Laminated safety glass
Pointer	402/502 Series (all)	Black finished Aluminum
Dial	402/502 Series (all)	Aluminum, white background with black scale. UV resistant.
Movement	402/502 Series (all)	Stainless Steel with highly polished bearing surfaces
Fill liquids	502 Series (Bottom connected only)	Glycerin

* For every 68 °F (20 °C) shift in temperature from which the gauge is calibrated, the user can experience up to ±0.4% additional error.

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



WARNING: This product can expose you to chemicals including Nickel, which is 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

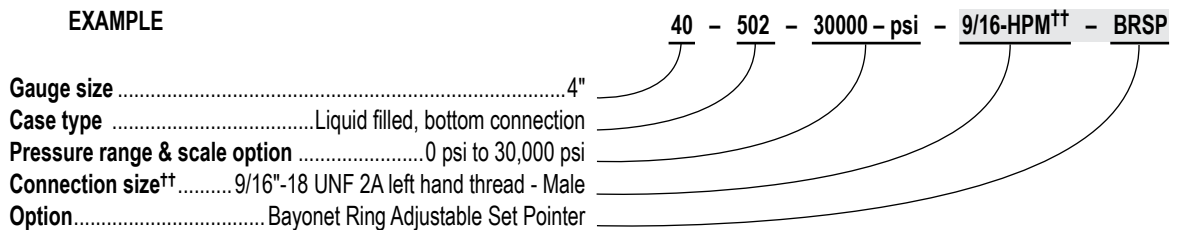
ORDERING INFORMATION			
GAUGE SIZE	40 4"	60 6" *	
CASE TYPES	402 Dry, bottom connection	412 Dry, lower back connection	502 Liquid filled, bottom connection
PRESSURE RANGES	30000 0 psi to 30,000 psi 40000 0 psi to 40,000 psi	50000 0 psi to 50,000 psi 60000 0 psi to 60,000 psi	75000 0 psi to 75,000 psi 85000 0 psi to 85,000 psi **
SCALE OPTIONS	psi psi single scale psi/kPa psi/kPa dual scale	psi/kg/cm² psi/kg/cm ² dual scale psi/bar psi/bar dual scale	
CONNECTION SIZES ***	9/16-18 9/16"-18 UNF 2B high pressure cone - Female	9/16-HPM 9/16"-18 UNF 2A left hand thread - Male	
OPTIONS	BRSP Bayonet Ring Adjustable Set Pointer LM Laser Marking MIP Maximum Indicating Pointer †	SL Silicone Fill SP Red Set Pointer SSFF 304SS Front Flange	ST Stainless Steel Tagging IA Increased Accuracy

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

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

- * Bottom connection only.
- ** Only available on 60-402 and 60-502 models, with ±1.6% accuracy.
- *** Additional process connection sizes available, consult factory.
- † GY40 fill is standard for liquid filled gauges

EXAMPLE



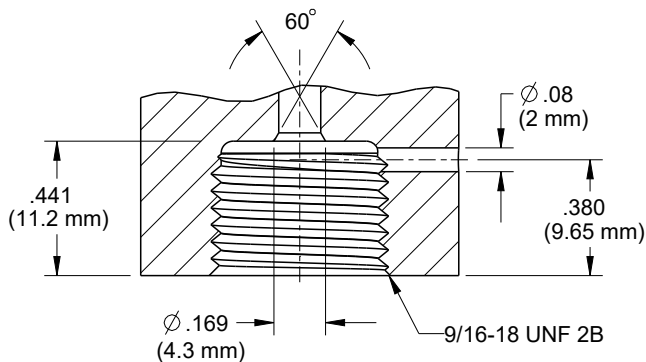
† † Only include in part number if non-standard connection size is ordered.

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.

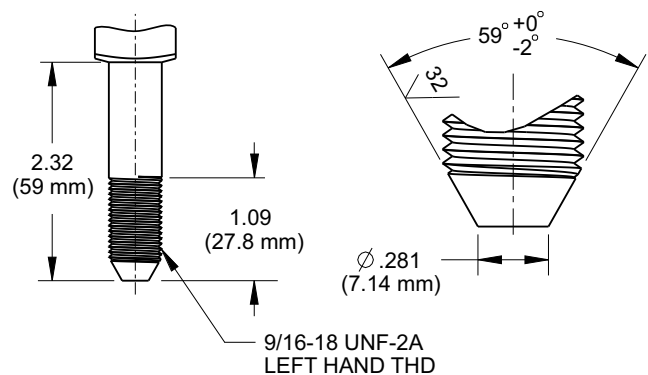
9/16"-18 UNF 2B High Pressure Cone Connection

9/16"-18 UNF 2A left hand thread

Female

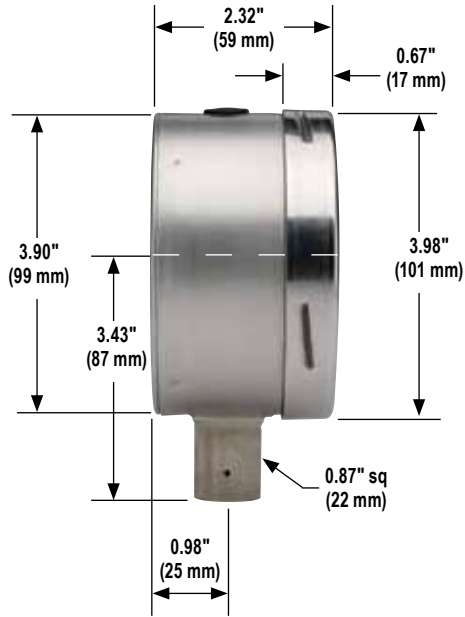


Male

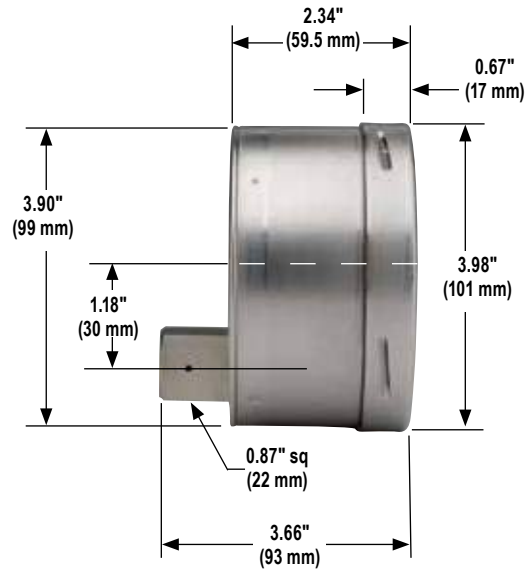


Dimensions

40-402/502



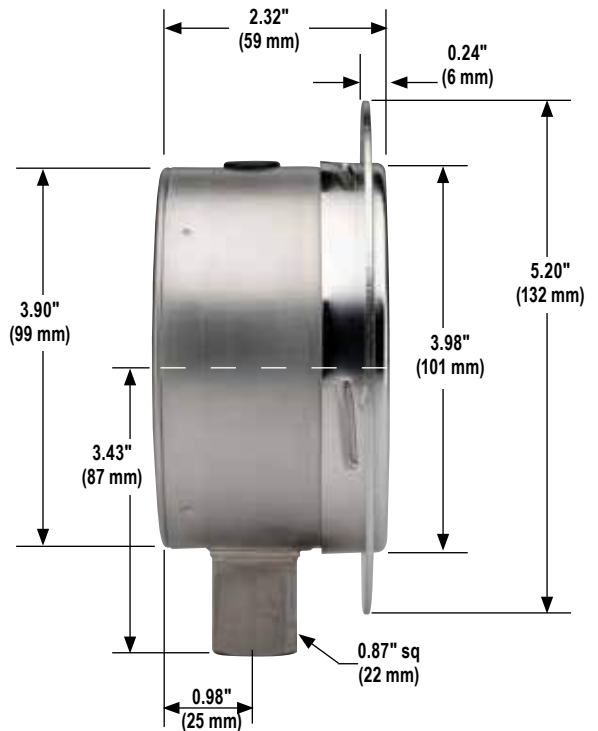
40-412



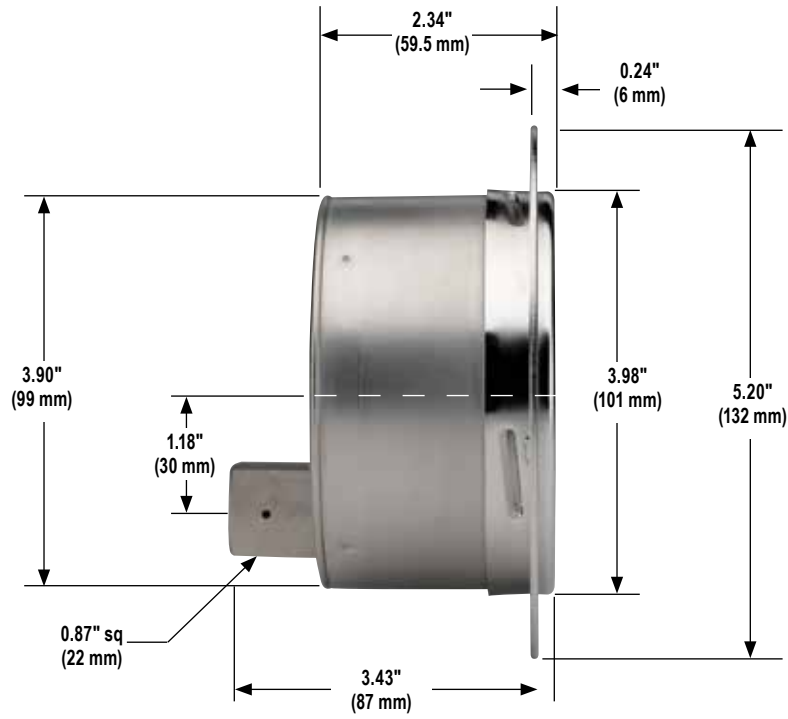
60-402/502



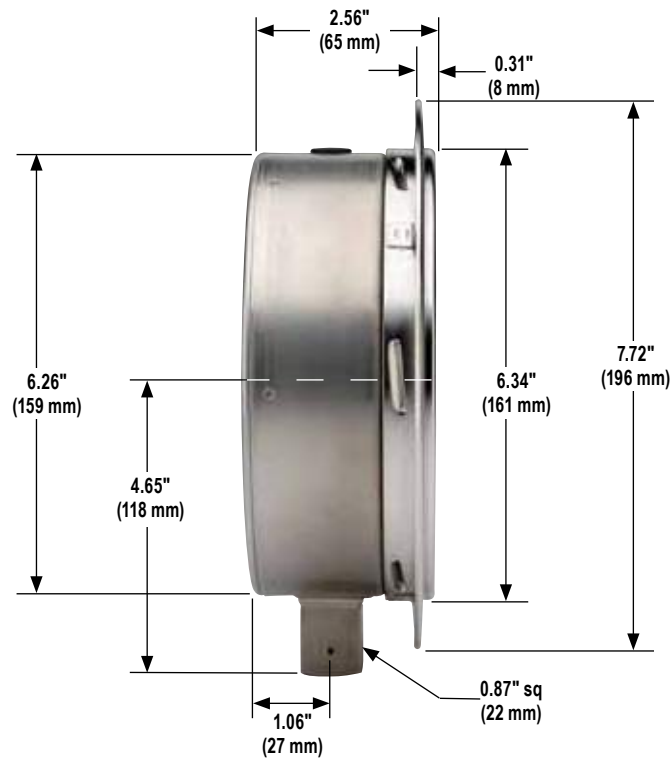
40-402/502 Front Flange



40-412 Front Flange



60-402/502 Front Flange



Process



600/700 SERIES

- Turret style dry (field fillable) and liquid filled process gauges
- Vacuum and compound ranges through 0 psi to 15,000 psi
- 4-1/2" gauge sizes
- Black Polypropylene safety case with solid front and blow-out back
- 316 Stainless Steel or Brass wetted parts

OPERATING SPECIFICATIONS

1. Working Pressure Limitations

a. Dynamic Pressure

The working pressure should be limited to 60% of the dial range.
Max. 0.9x full scale.

b. Static Pressure

The working pressure, where no sharp fluctuations occur, should be limited to 90% of the dial range.
Max. 1x full scale.

c. Short term max. 1.5x full scale (<10,000 psi).

APPLICATIONS

- Injection molding machines
- Laboratory & test equipment
- Power generation
- Oil field & offshore
- Utilities
- 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 52-56.

	SERIES	SPECIFICATIONS
Pressure ranges	600/700 Series (all)	Vacuum and compound ranges through 0 psi to 15,000 psi
Accuracy	600/700 Series (all)	±0.5% full scale
Temperature ranges*	45-640	Media -4 °F to 150 °F (-20 °C to 65 °C) Ambient -40 °F to 150 °F (-40 °C to 65 °C)
	45-740	Media -40 °F to 212 °F (-40 °C to 100 °C) 500 °F (260 °C) Maximum for short term/intermittent Ambient -40 °F to 150 °F (-40 °C to 65 °C)
	45-660	Media -4 °F to 150 °F (-20 °C to 65 °C) Glycerin fill -40 °F to 150 °F (-40 °C to 65 °C) Special fill Ambient -4 °F to 150 °F (-20 °C to 65 °C) Glycerin fill -40 °F to 150 °F (-40 °C to 65 °C) Special fill
	45-760	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 250 °F (130 °C) Maximum for short term/intermittent Ambient -4 °F to 150 °F (-20 °C to 65 °C) Glycerin fill -40 °F to 150 °F (-40 °C to 65 °C) Special fill
Case	600/700 Series (all)	Turret style black Polypropylene case, Solid front, safety case with blow-out back
Bayonet ring	600/700 Series (all)	Threaded black PBT
Lens	600/700 Series (all)	Acrylic
Measuring Element	45-640, 45-660 (≤ 600 psi)	Copper alloy C-Type Bourdon tube
	45-740, 45-760 (≤ 600 psi)	316 Stainless Steel C-Type Bourdon tube
	600/700 Series (all) (>600 psi)	316 Stainless Steel coiled safety Bourdon tube
Connection	45-640, 45-660	1/4" NPT, brass
	45-740, 45-760	1/4" NPT or 1/2" NPT, 316 Stainless Steel
Movement	45-640, 45-660	Brass and nickel-silver with highly polished bearing surfaces. An internal zero stop is standard.
	45-740, 45-760	Stainless steel with highly polished bearing surfaces. An internal zero stop is standard.
Pointer	600/700 Series (all)	Balanced micro-adjustable aluminum, black finish
Dial	600/700 Series (all)	Aluminum, white background with black scale. UV resistant.
Fill liquid **	45-660, 45-760	Glycerin

NOSHOK 600 Series Gauges:



WARNING: This product can expose you to chemicals including Lead, which is 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

NOSHOK 700 Series Gauges:



WARNING: This product can expose you to chemicals including Nickel, which is 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 SIZES	45 4-1/2"							
CASE TYPES	640	Brass, dry, bottom connection	660	Brass, liquid filled, bottom connection				
	740	SS, dry, bottom connection	760	SS, liquid filled, bottom connection				
PRESSURE RANGES	30vac	-30 inHg to 0 psi	30/300	-30 inHg to 0 to 300 psi	300	0 psi to 300 psi	3000	0 psi to 3,000 psi
	30/15	-30 inHg to 0 to 15 psi	15	0 psi to 15 psi	400	0 psi to 400 psi	5000	0 psi to 5,000 psi
	30/30	-30 inHg to 0 to 30 psi	30	0 psi to 30 psi	600	0 psi to 600 psi	6000	0 psi to 6,000 psi
	30/60	-30 inHg to 0 to 60 psi	60	0 psi to 60 psi	800	0 psi to 800 psi	10000	0 psi to 10,000 psi
	30/100	-30 inHg to 0 to 100 psi	100	0 psi to 100 psi	1000	0 psi to 1,000 psi	15000	0 psi to 15,000 psi
	30/160	-30 inHg to 0 to 160 psi	160	0 psi to 160 psi	1500	0 psi to 1,500 psi		
	30/200	-30 inHg to 0 to 200 psi	200	0 psi to 200 psi	2000	0 psi to 2,000 psi		
	SCALE OPTIONS	psi	psi single scale	psi/kg/cm ²	psi/kg/cm ² dual scale	psi/bar	psi/bar dual scale	
CONNECTION SIZES	1/4	1/4" NPT	1/2	1/2" NPT				
OPTIONS	SG	Safety Glass Lens	CPMR	Uninstalled Chrome Panel Mount Ring	BT3	Brass Threaded Orifice 0.3 mm		
	GL	Glass Lens	OS	Overload Stop	BT8	Brass Threaded Orifice 0.8 mm		
	MIP	Maximum Indicating Pointer*	LM	Laser Marking	ST8	316SS Threaded Orifice 0.8 mm		
	BPMR	Uninstalled Black Panel Mount Ring	ST	Stainless Steel Tagging				

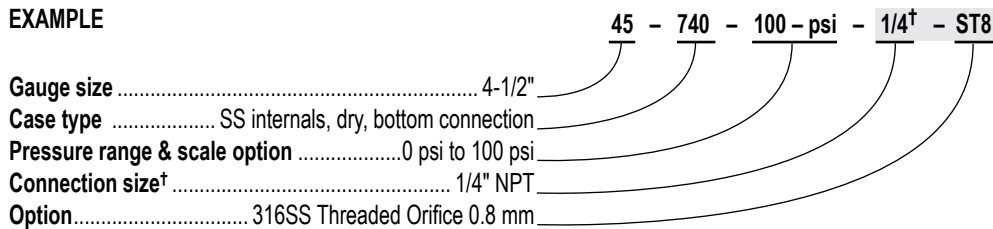
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

NOTES: Refer to 600/700 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

* GY40 fill is standard for liquid filled gauges

EXAMPLE



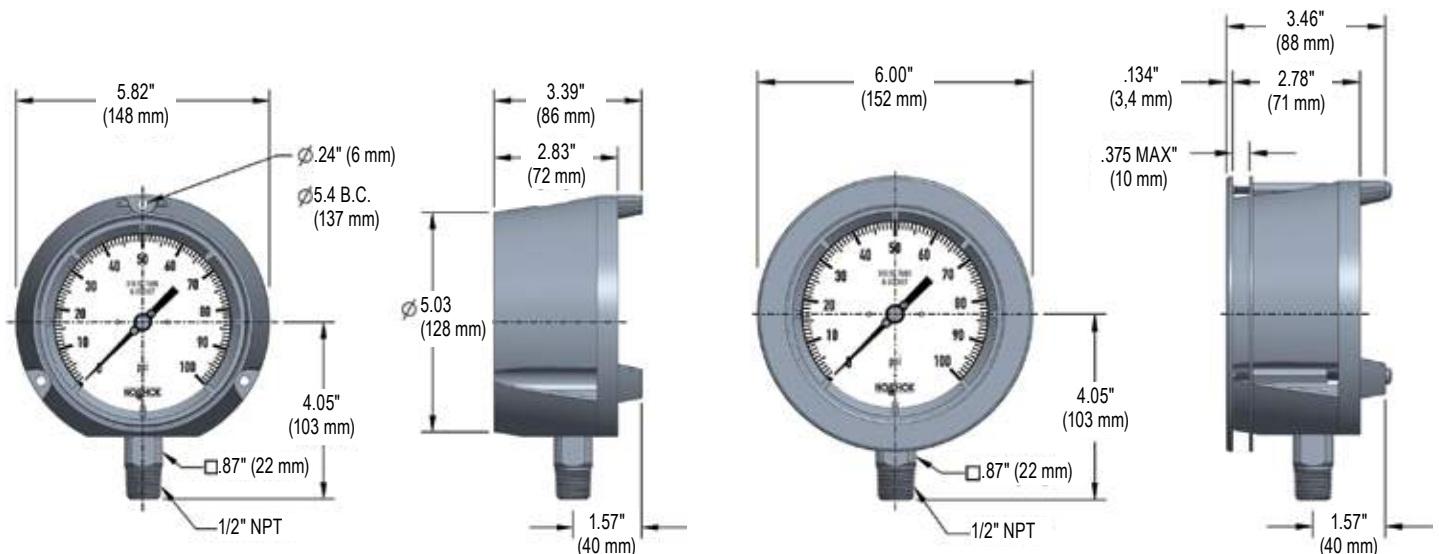
[†] Only include in part number if non-standard connection size is ordered.

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.

45-640/660 & 45-740/760

45-640/660 & 45-740/760 Panel Mount Ring



Precision Test



800 SERIES

- Highly accurate dry gauge
- Vacuum and compound ranges through 0 psi to 6,000 psi
- 6" gauge size
- Stainless Steel case
- Beryllium copper, 316 Stainless Steel, and Brass wetted parts

OPERATING SPECIFICATIONS

1. Working Pressure Limitations

a. Static Pressure

The working pressure, where no sharp fluctuations occur, should be limited to 100% of the dial range.

NOTE: 800 Series Precision Test gauges are not intended for dynamic applications.

APPLICATIONS

- Aerospace equipment
- Gauge repair facilities
- Laboratory & test equipment
- Precision measurement

	SERIES	SPECIFICATIONS
Pressure ranges	60-800	Vacuum and compound ranges through 0 psi to 6,000 psi
Accuracy	60-800	±0.25% full scale
Temperature ranges*	60-800	Media -40 °F to 180 °F (-40 °C to 80 °C) Ambient -40 °F to 140 °F (-40 °C to 60 °C)
Measuring element	60-800	Beryllium copper Bourdon tube to 1,000 psi 316 SS Bourdon tube 1,500 psi to 6,000 psi
Connection	60-800	1/4" NPT bottom connection, Brass
Case	60-800	304 Stainless Steel
Cover ring	60-800	304 Stainless Steel
Lens	60-800	Instrument glass
Pointer	60-800	Adjustable knife-edge pointer
Dial	60-800	Aluminum, white mirrored background with black scale.
Movement	60-800	Brass with jeweled bearings Nickel-silver pinion gear and shafts

* 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.

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

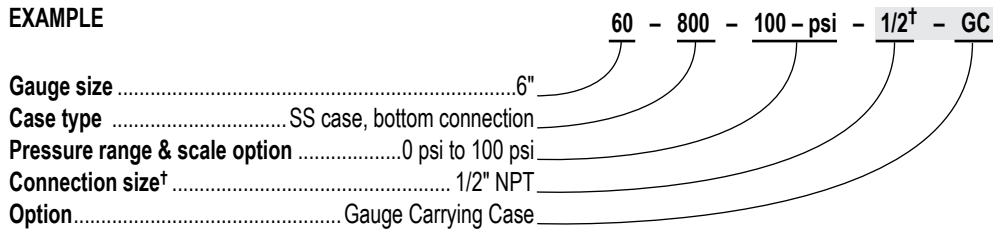


ORDERING INFORMATION									
GAUGE SIZE	60 6"								
CASE TYPE	800 SS Case, bottom connection								
PRESSURE RANGES	30vac	-30 inHg to 0 psi	30/300	-30 inHg to 0 to 300 psi	300	0 psi to 300 psi	5000	0 psi to 5,000 psi	
	30/15	-30 inHg to 0 to 15 psi	15	0 psi to 15 psi	400	0 psi to 400 psi	6000	0 psi to 6,000 psi	
	30/30	-30 inHg to 0 to 30 psi	30	0 psi to 30 psi	600	0 psi to 600 psi			
	30/60	-30 inHg to 0 to 60 psi	60	0 psi to 60 psi	1000	0 psi to 1,000 psi			
	30/100	-30 inHg to 0 to 100 psi	100	0 psi to 100 psi	1500	0 psi to 1,500 psi			
	30/160	-30 inHg to 0 to 160 psi	160	0 psi to 160 psi	2000	0 psi to 2,000 psi			
	30/200	-30 inHg to 0 to 200 psi	200	0 psi to 200 psi	3000	0 psi to 3,000 psi			
SCALE OPTION	psi psi single scale								
CONNECTION SIZES	1/4	1/4" NPT	1/2	1/2" NPT	SST	SAE J1926-3: 7/16-20 Adjustable			
OPTIONS	SSFF	304SS Front Flange		ST	Stainless Steel Tagging				
	SSRF	304SS Rear Flange		BP3	Brass Press Fit Orifice 0.3 mm				
	GC	Gauge Carrying Case				BT8	Brass Threaded Orifice 0.8 mm		
	LM	Laser Marking							

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

NOTES: Refer to 800 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

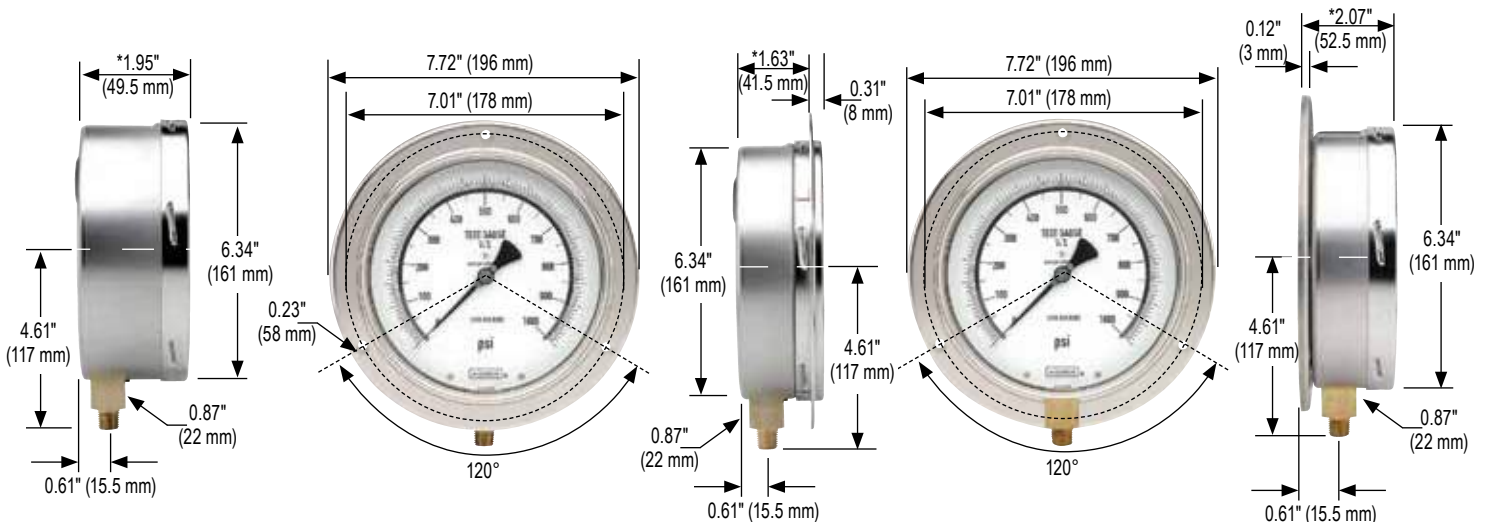
EXAMPLE



[†] 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 is ordered or an option is chosen.

60-800* 60-800 Front Flange 60-800 Rear Flange



*For ranges ≤60 psi and ≥1,500 psi, increase by 0.63" (16 mm)

ABS & Stainless Steel Case, Liquid Filled



900 SERIES

- High quality liquid filled gauge
- Vacuum and compound ranges through 0 psi to 15,000 psi
- 1-1/2", 2", 2-1/2" and 4" gauge sizes
- Impact-resistant ABS and Stainless Steel case
- Copper alloy and Brass 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 90% of the dial range

APPLICATIONS

- Automotive
- Construction
- Hydraulics & pneumatics
- Power generation
- Transportation
- Water management

	SERIES	SPECIFICATIONS
Pressure ranges	900 Series (all)	Vacuum and compound ranges through 0 psi to 15,000 psi
Accuracy	15-910	±2.5% full scale
	25-900, 25-910, 25-901, 25-911	±1.6% full scale
	40-901, 40-911	±1% full scale
Temperature ranges*	900 Series (all)	Media -4 °F to 140 °F (-20 °C to 60 °C) Glycerin fill -40 °F to 140 °F (-40 °C to 60 °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	900 Series (up to 600 psi)	Copper alloy C-Type Bourdon tube
	900 Series (> 600 psi)	Coiled safety tube
Connection	15-910	1/8" NPT, Brass
	25-900, 25-910, 25-901, 25-911	1/4" NPT or 7/16"-20 adjustable, Brass
	40-901, 40-911	1/4" NPT, Brass 1/2" NPT, Brass
Case	15-910, 25-900, 25-910	ABS with safety relief plug
	25-901, 25-911, 40-901, 40-911	304 Stainless Steel
Bezel	25-901, 25-911, 40-901, 40-911	304 Stainless Steel
Lens	15-910, 25-900, 25-910	Acrylic; ultrasonically welded to the case
	25-901, 25-911, 40-901	Polycarbonate
Pointer	15-910, 25-900, 25-910, 25-901, 25-911	Molded plastic
	40-901, 40-911	Balanced Aluminum, black finish
Dial	15-910, 25-900, 25-910, 25-901, 25-911	Molded plastic, white background with black primary scale & red secondary scale. UV resistant
	40-901, 40-911	Aluminum, white background with black primary scale & red secondary scale. UV resistant.
Movement	15-910, 25-900, 25-910, 25-901, 25-911	Brass and nylon with highly polished bearing surfaces
Fill liquid**	15-910	86.5/13.5 Glycerin:H ₂ O
	25-900, 25-910, 25-901, 25-911, 40-901, 40-911	Glycerin

* 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.



ORDERING INFORMATION						
GAUGE SIZES	15 1-1/2"	20 2"	25 2-1/2"	40 4"		
CASE TYPES	900 ABS Case, bottom connection		910 ABS Case, back connection			
	901 SS Case, bottom connection		911 SS Case, back 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 to 15 psi		160 0 psi to 160 psi		6000 0 psi to 6,000 psi	
	30/30 -30 inHg to 0 to 30 psi		200 0 psi to 200 psi		7500 0 psi to 7,500 psi	
	30/60 -30 inHg to 0 to 60 psi		300 0 psi to 300 psi		10000 0 psi to 10,000 psi	
	30/100 -30 inHg to 0 to 100 psi		400 0 psi to 400 psi		15000 0 psi to 15,000 psi	
	30/160 -30 inHg to 0 to 160 psi		600 0 psi to 600 psi		-1 -1 bar to 0 bar	
	30/200 -30 inHg to 0 to 200 psi		800 0 psi to 800 psi		1 0 bar to 1 bar	
	30/300 -30 inHg to 0 to 300 psi		1000 0 psi to 1,000 psi		1.6 0 bar to 1.6 bar	
	15 0 psi to 15 psi		1500 0 psi to 1,500 psi		2.5 0 bar to 2.5 bar	
	30 0 psi to 30 psi		2000 0 psi to 2,000 psi		4 0 bar to 4 bar	
	60 0 psi to 60 psi		3000 0 psi to 3,000 psi		6 0 bar to 6 bar	
SCALE OPTIONS	psi psi single scale		psi/kg/cm ² psi/kg/cm ² dual scale		bar/psi bar/psi dual scale	
	psi/bar psi/bar dual scale				psi/kPa psi/kPa dual scale	
CONNECTION SIZES	1/8 1/8" NPT		1/4 1/4" NPT		1/2 1/2" NPT	
					SST SAE J1926-3.7/16-20 Adjustable *	
OPTIONS	PMC Steel Panel Mount Clamp		SSCR 304SS Cover Ring		BLFF Black Front Flange***	
	SPMC 304SS Panel Mount Clamp		MIP Maximum Indicating Pointer**		SSFF 304SS Front Flange†	
	SSBU Stainless Steel Bezel & U-clamp		SP Red Set Pointer		SSRF 304SS Rear Flange	
	SSB Stainless Steel Bezel		SG Safety Glass Lens		LM Laser Marking	
					ST Stainless Steel Tagging	
					BP3 Brass Press Fit Orifice 0.3 mm	
					BT5 Brass Threaded Orifice 0.5 mm	
					BT8 Brass Threaded Orifice 0.8 mm	

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

NOTES: Refer to 900 Series Options & Accessories chart on page 53 for availability by series number.

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

* Includes FKM o-ring

** GY40 fill is standard for liquid filled gauges

*** Black Front Flange is only available for 25-910 gauges

† Stainless Steel Front Flange is not available for the 901 case type

EXAMPLE

25 - 910 - 1000 - psi /kPa - 1/8^{††} - PMC

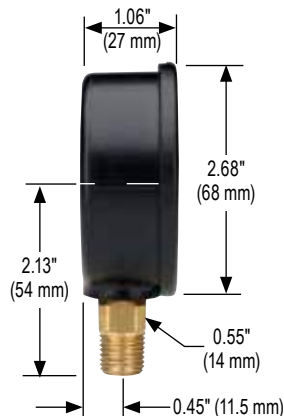
Gauge size 2-1/2"
 Case type ABS case, liquid filled, back connection
 Pressure range & scale option 0 psi to 1,000 psi/kPa
 Connection size[†] 1/8" NPT
 Option Panel Mount Clamp

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

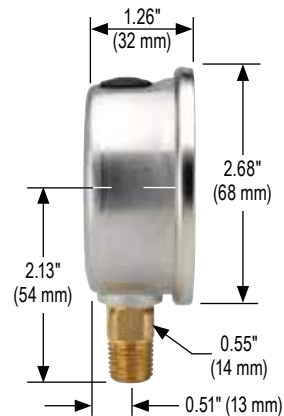
NOTES: See standard connection sizes chart on page 49.

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

25-900

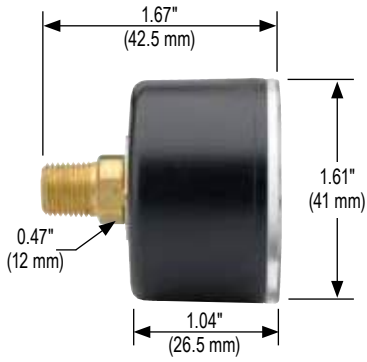


25-901

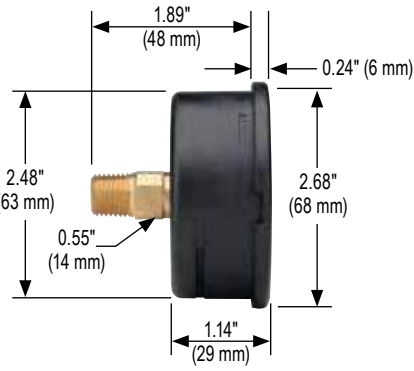


Dimensions

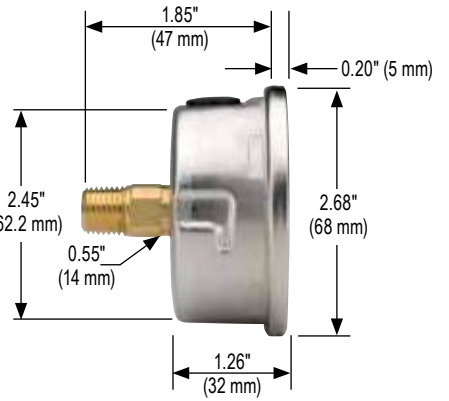
15-910



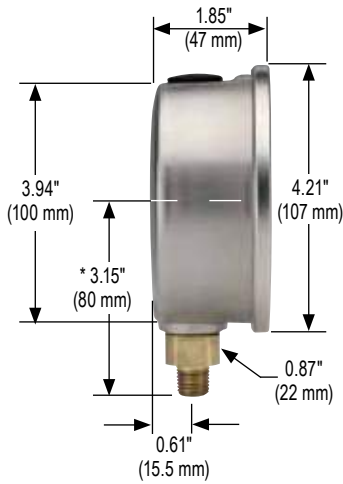
25-910



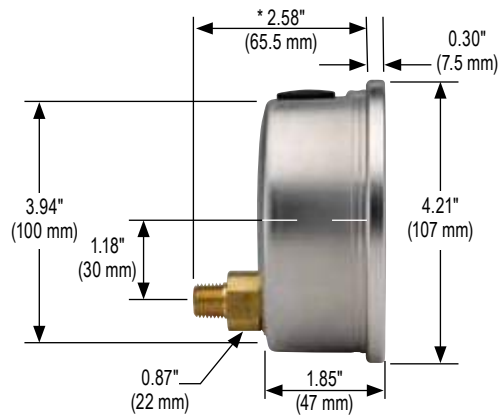
25-911



40-901

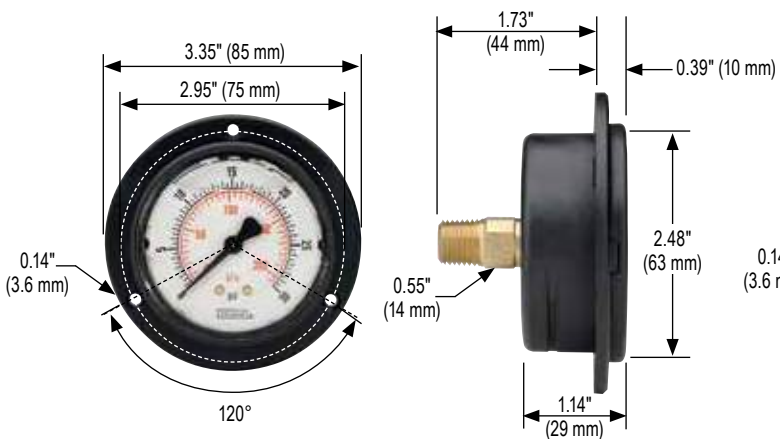


40-911

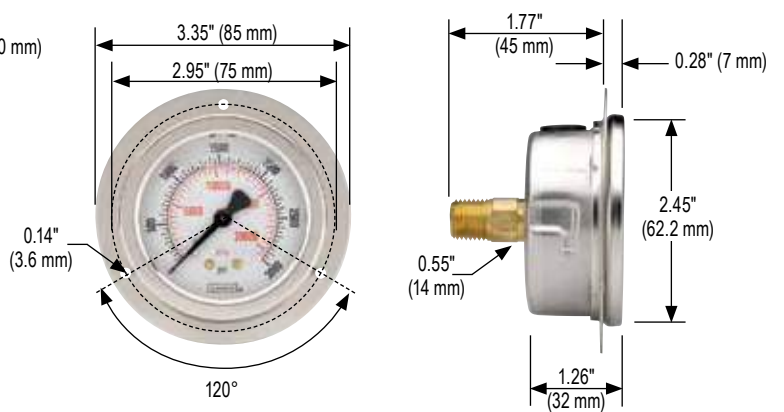


* 1/4" NPT shown
Add 6 mm for 1/2" NPT

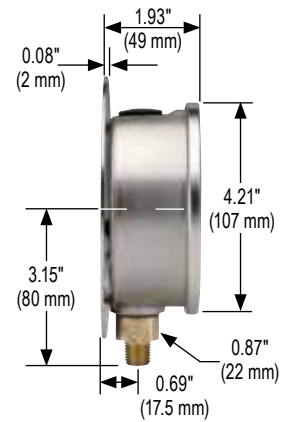
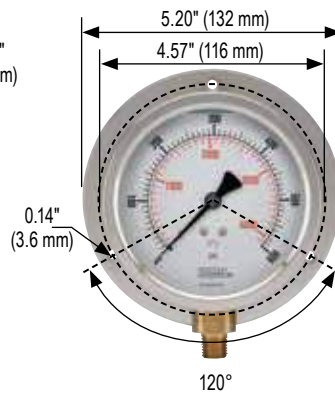
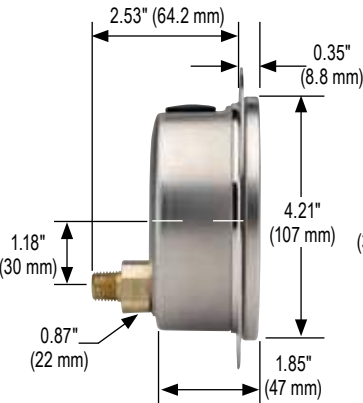
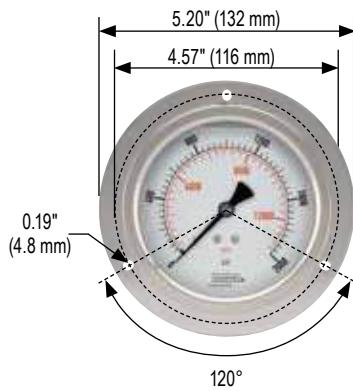
25-910 Front Flange



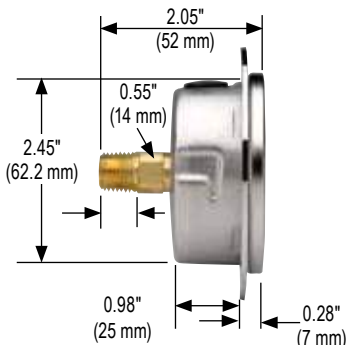
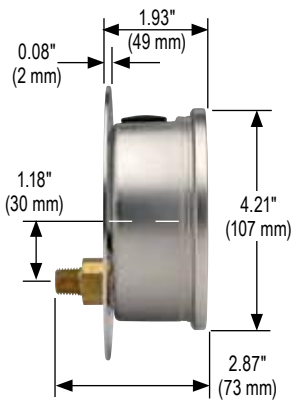
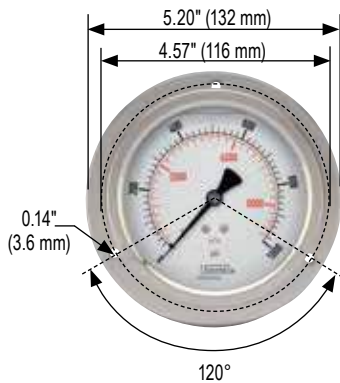
25-911 Front Flange



40-911 Front Flange

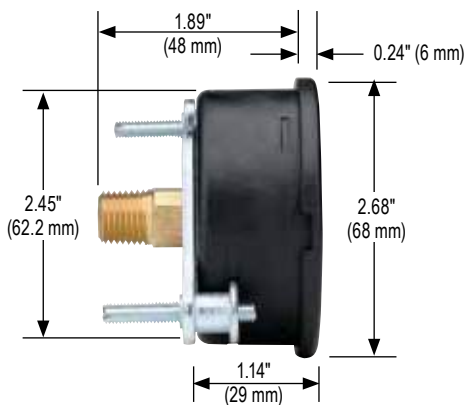


40-911 Rear Flange

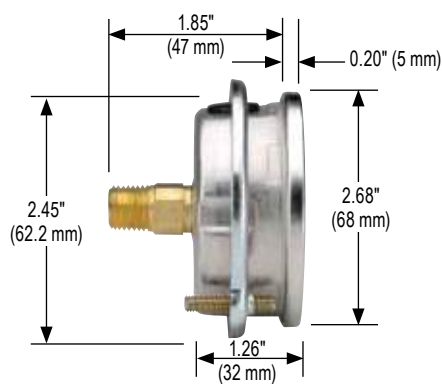


25-911 Flange Ring

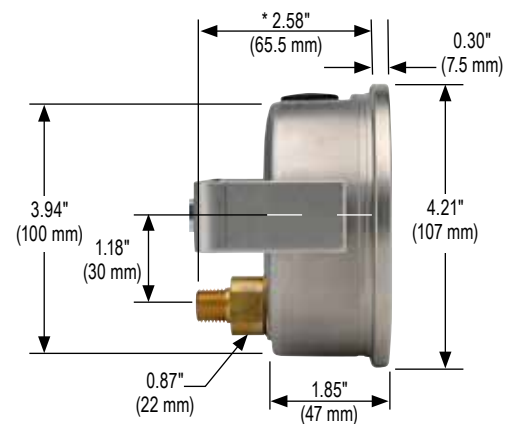
25-910 Panel Mount Clamp



25-911 Panel Mount Clamp



40-911 SS Narrow Bezel w/U-Clamp



* 1/4" NPT shown. Add 6 mm for 1/2" NPT. 33



1000 SERIES

- Simple, rugged, compact differential pressure gauge
- Ranges from 0 psid to 5 psid through 0 psid to 110 psid
- 2-1/2", 4-1/2" and 6" gauge sizes
- Engineered plastic gauge case
- Clear anodized Aluminum and 316 Stainless Steel wetted parts

APPLICATIONS

- Heat exchangers
- Filter monitoring
- Flow indication
- Level indication

SPECIFICATIONS

Pressure ranges	0 psid to 5 psid through 0 psid to 110 psid
Max. working static pressure	Aluminum 3,000 psig; Stainless Steel 6,000 psig
Accuracy	±3/2/3% of full scale on rising pressure
Temperature ranges (Including switch option)	Media -40 °F to 200 °F (-40 °C to 93 °C) Ambient -40 °F to 200 °F (-40 °C to 93 °C) Storage -40 °F to 200 °F (-40 °C to 93 °C)
Temperature ranges (4-20 mA transmitter option)	Ambient -20 °F to 150 °F (-29 °C to 66 °C)
Measuring element	316 Stainless Steel and ceramic piston/magnet
O-ring & diaphragm material	NBR
Connection	1/4" NPT female, back connection
Sensor housing material	Clear anodized Aluminum
Case	Engineered plastic
Bezel	Engineered plastic
Lens	Shatter-resistant acrylic
Pointer	Balanced Aluminum, black finish
Dial	Aluminum, white background with black scale
Movement	Magnetic
Optional switch rating	SPDT, 3W, 0.25 Amp, 125 Vac/Vdc (standard) (switch adjustable range of 15-95%). Other options available, consult factory.

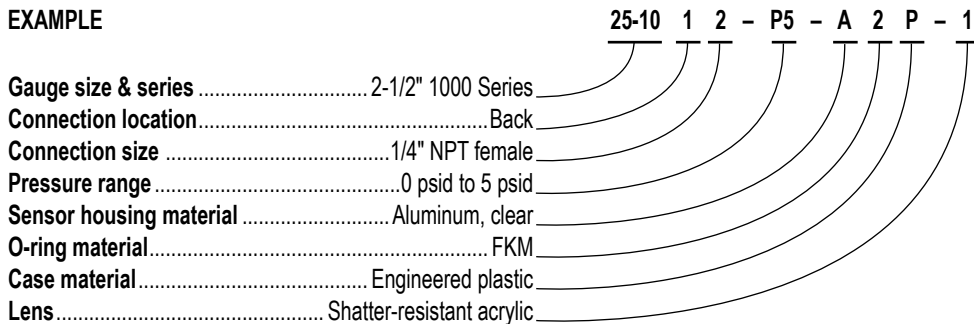


ORDERING INFORMATION			
GAUGE SIZES & SERIES	25 - 10 2-1/2"	45 - 10 4-1/2"	60 - 10 6"
CONNECTION LOCATIONS	0 Bottom	1 Back	2 Side
CONNECTION SIZE	2 1/4" NPT female	9 7/16-20 female (Back only)	
PRESSURE RANGES *	P5 0 psid to 5 psid	P20 0 psid to 20 psid	P50 0 psid to 50 psid P100 0 psid to 100 psid
	P10 0 psid to 10 psid	P25 0 psid to 25 psid	P60 0 psid to 60 psid P110 0 psid to 110 psid
	P15 0 psid to 15 psid	P30 0 psid to 30 psid	P75 0 psid to 75 psid
SENSOR HOUSING MATERIALS	A Aluminum (3,000 max working pressure)		S 316L Stainless Steel (6,000 max working pressure)
O-RING & DIAPHRAGM MATERIALS	1 PTFE	3 NBR	
	2 FKM	4 EPDM	
CASE MATERIALS	A Aluminum (4-1/2" only)	P Engineered plastic	
LENSES	1 Shatter-resistant acrylic	2 Safety glass **	3 Maximum indicating pointer (MIP) ***
FILL FLUID (optional)	GY Glycerin	SL Silicone †	
SWITCH OR TRANSMITTER TYPE & HOUSING	1 Single switch, flying leads with grommet wire seal	5 Single switch with Hirschman electrical connection	
	2 Dual switch, flying leads with grommet wire seal	6 Dual switch with Hirschman electrical connection	
	3 Single switch, flying leads with 1/4" female NPT, NEMA 4X	7 4-20 mA transmitter in NEMA 4x IP65 plastic enclosure with terminal strip (1/2" female NPT conduit connection)	
	4 Dual switch, flying leads with 1/4" female NPT, NEMA 4X		
OPTIONS	MH (2) 1/4-20 Mounting Holes		RP Reversed Ports
	MK5-CS Pipe Mounting Kit, Steel	ST Stainless Steel Tagging	
	MK5-SS Pipe Mounting Kit, Stainless Steel	WMK Wall Mounting Kit	

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

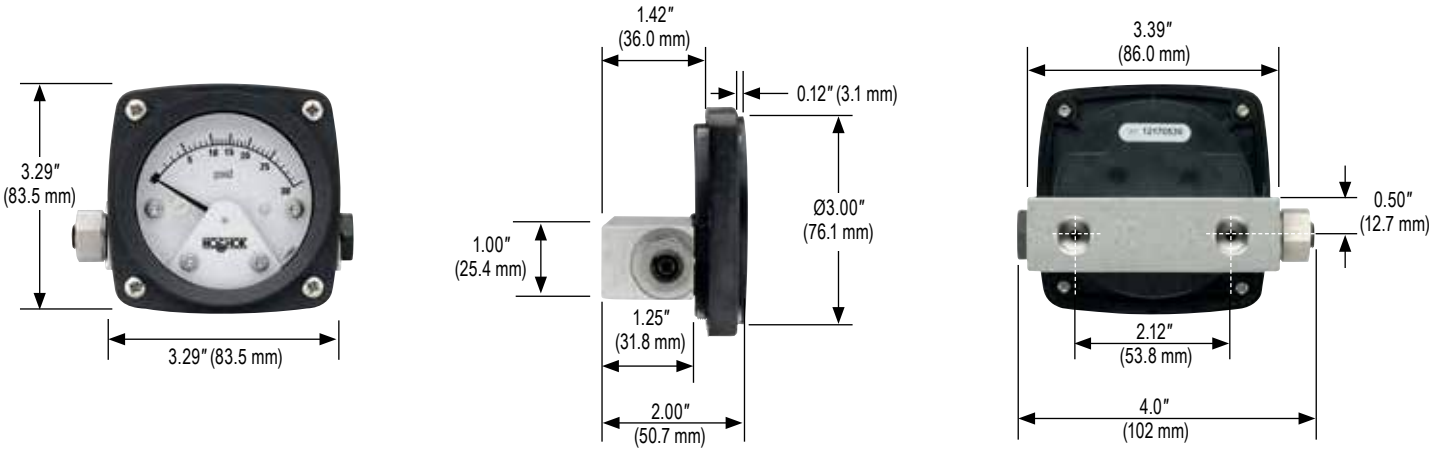
* Other ranges and scales available on request.
 ** Only available with dry, 4-1/2" gauge size with Aluminum case.
 *** Available with dry gauge only, 2-1/2" and 4-1/2" gauge sizes only.
 † Optional Silicone filling available with 2-1/2" and 6" gauge case sizes, and 4-1/2" gauge case size with Aluminum case and standard shatter-resistant acrylic lens only.

EXAMPLE

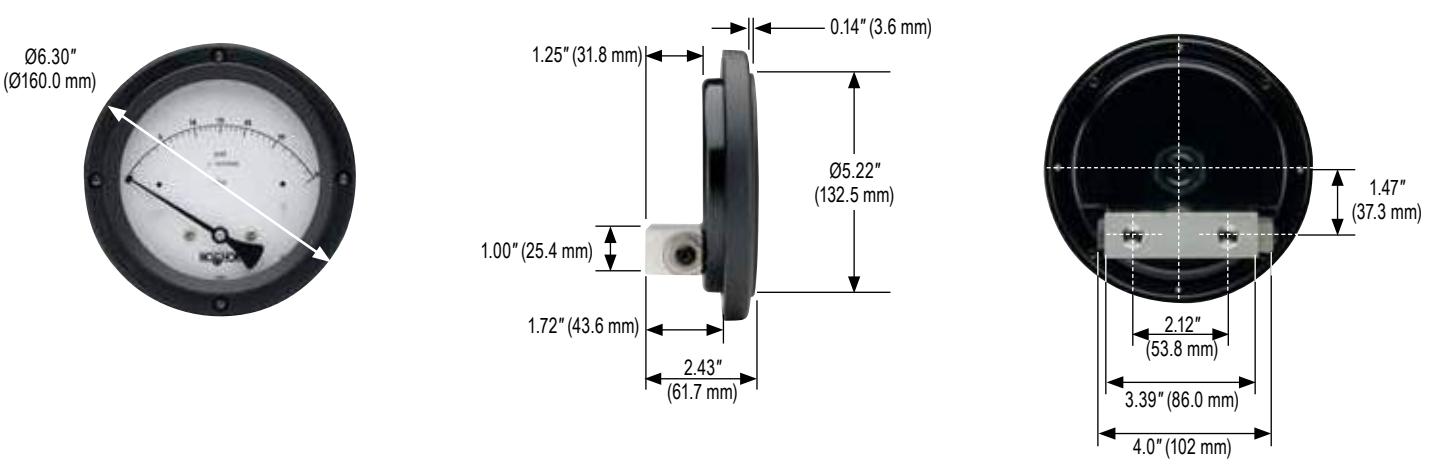


Dimensions

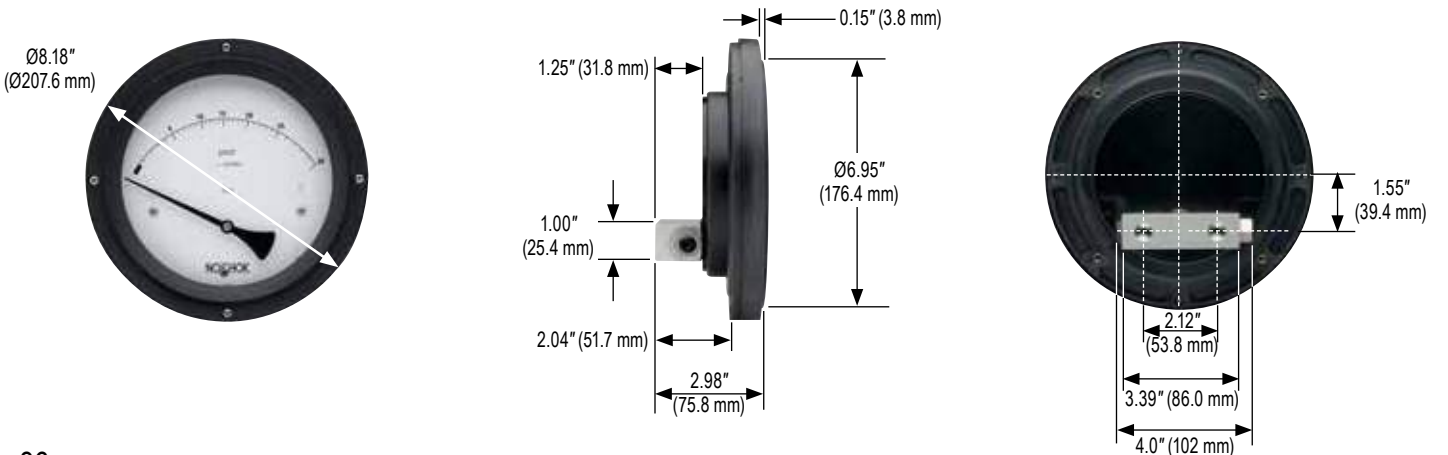
2-1/2" Gauge



4-1/2" Gauge



6" Gauge



1000 SERIES

Single switch, flying leads with grommet wire seal



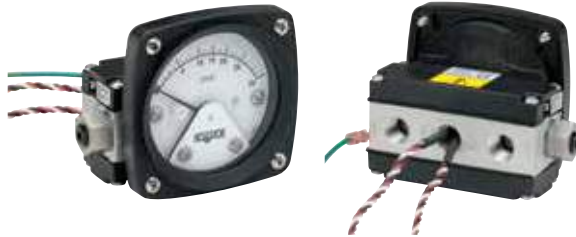
Dual switch, flying leads with grommet wire seal



Single switch, flying leads with 1/4" female NPT, NEMA 4X



Dual switch, flying leads with 1/4" female NPT, NEMA 4X



Single switch with Hirschman electrical connection



Dual switch with Hirschman electrical connection



4-20 mA transmitter in NEMA 4x IP65 plastic enclosure with terminal strip (1/2" female NPT conduit connection)





1100 SERIES

- Simple, rugged, compact differential pressure gauge
- Ranges from 0 inH₂O to 20 inH₂O through 0 psid to 100 psid
- 2-1/2", 4-1/2" and 6" gauge sizes
- Engineered plastic gauge case
- Black anodized Aluminum housing, 316 Stainless Steel optional

APPLICATIONS

- Heat exchangers
- Filter monitoring
- Flow indication
- Level indication

SPECIFICATIONS

Pressure ranges	0 inH ₂ O to 20 inH ₂ O through 0 psid to 100 psid
Max. working static pressure	Aluminum & Stainless Steel 3,000 psig; Brass 1,500 psig
Accuracy	±3/2/3% of full scale on rising pressure
Temperature ranges (Including switch option)	Media -40 °F to 200 °F (-40 °C to 93 °C) Ambient -40 °F to 200 °F (-40 °C to 93 °C) Storage -40 °F to 200 °F (-40 °C to 93 °C)
Temperature ranges (4-20 mA transmitter option)	Ambient -20 °F to 150 °F (-29 °C to 66 °C)
Measuring element	316 Stainless Steel, PTFE and ceramic magnet
O-ring & diaphragm material	NBR
Connection	1/4" NPT female, back connection
Sensor housing material	Black anodized Aluminum
Case	Engineered plastic
Bezel	Engineered plastic
Lens	Shatter-resistant acrylic
Pointer	Balanced Aluminum, black finish
Dial	Aluminum, white background with black scale
Movement	Magnetic
Optional switch rating	SPDT, 3W, 0.25 Amp, 125 Vac/Vdc (standard) (switch adjustable range of 15-95%). Other options available, consult factory.

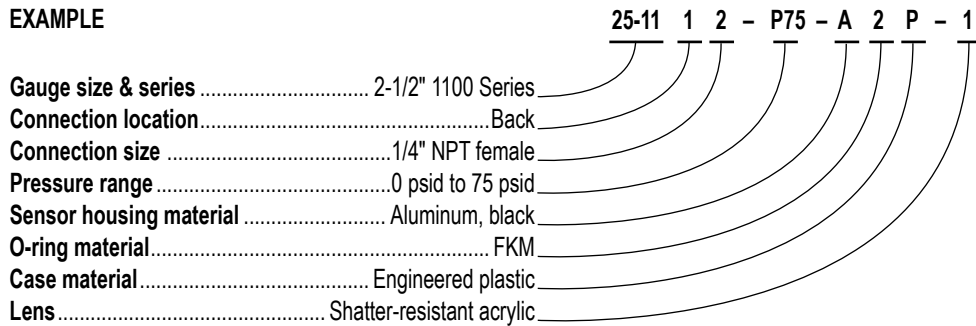


ORDERING INFORMATION								
GAUGE SIZES & SERIES	25 - 11	2-1/2"	45 - 11	4-1/2"	60 - 11	6"		
CONNECTION LOCATIONS	0	Dual top & bottom ***	1	Back	2	Side	3	Bottom
CONNECTION SIZE	2	1/4" NPT female	9	7/16-20 female (Back or side only)				
PRESSURE RANGES*	W20	0 inH ₂ O to 20 inH ₂ O	W75	0 inH ₂ O to 75 inH ₂ O	W400	0 inH ₂ O to 400 inH ₂ O	P30	0 psid to 30 psid
	W25	0 inH ₂ O to 25 inH ₂ O	W100	0 inH ₂ O to 100 inH ₂ O	P5	0 psid to 5 psid	P50	0 psid to 50 psid
	W30	0 inH ₂ O to 30 inH ₂ O	W135	0 inH ₂ O to 135 inH ₂ O	P10	0 psid to 10 psid	P60	0 psid to 60 psid
	W40	0 inH ₂ O to 40 inH ₂ O	W150	0 inH ₂ O to 150 inH ₂ O	P15	0 psid to 15 psid	P75	0 psid to 75 psid
	W50	0 inH ₂ O to 50 inH ₂ O	W200	0 inH ₂ O to 200 inH ₂ O	P20	0 psid to 20 psid	P100	0 psid to 100 psid
	W60	0 inH ₂ O to 60 inH ₂ O	W300	0 inH ₂ O to 300 inH ₂ O	P25	0 psid to 25 psid		
SENSOR HOUSING MATERIALS	A	Aluminum, black	B	Brass	S	316L Stainless Steel		
O-RING & DIAPHRAGM MATERIALS	2	FKM	3	NBR	4	EPDM		
CASE MATERIAL	A	Aluminum (4-1/2" only)	P	Engineered plastic				
LENSES	1	Shatter-resistant acrylic	2	Safety glass**		3	Maximum indicating pointer (MIP) †	
FILL FLUIDS (optional)	GY	Glycerin	SL	Silicone ††				
SWITCH OR TRANSMITTER TYPE & HOUSING (OPTIONAL)	3	Single switch, NEMA 4X	4	Dual switch, NEMA 4X		7	4-20 mA transmitter in NEMA 4x IP65 plastic enclosure with terminal strip (1/2" female NPT conduit connection).	
OPTIONS	MH	(2) 1/4-20 Mounting Holes			RP	Reversed Ports		
	MK5-CS	Pipe Mounting Kit, Steel			ST	Stainless Steel Tagging		
	MK5-SS	Pipe Mounting Kit, Stainless Steel			WMK	Wall Mounting Kit		

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

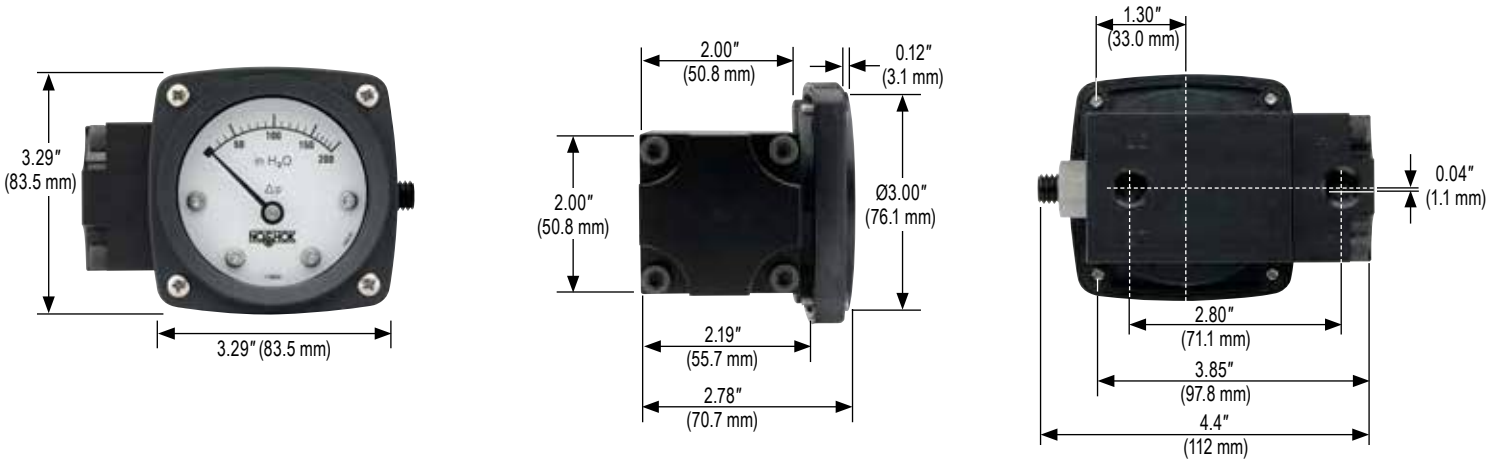
* Other ranges and scales available on request.
 ** Only available with dry, 4-1/2" gauge size with Aluminum case.
 *** Not available with switch or transmitter option.
 † Available with dry gauge only, 2-1/2" and 4-1/2" gauge sizes only.
 †† Optional Silicone filling available with 2-1/2" and 6" gauge case sizes, and 4-1/2" gauge case size with Aluminum case and standard shatter-resistant acrylic lens only.

EXAMPLE

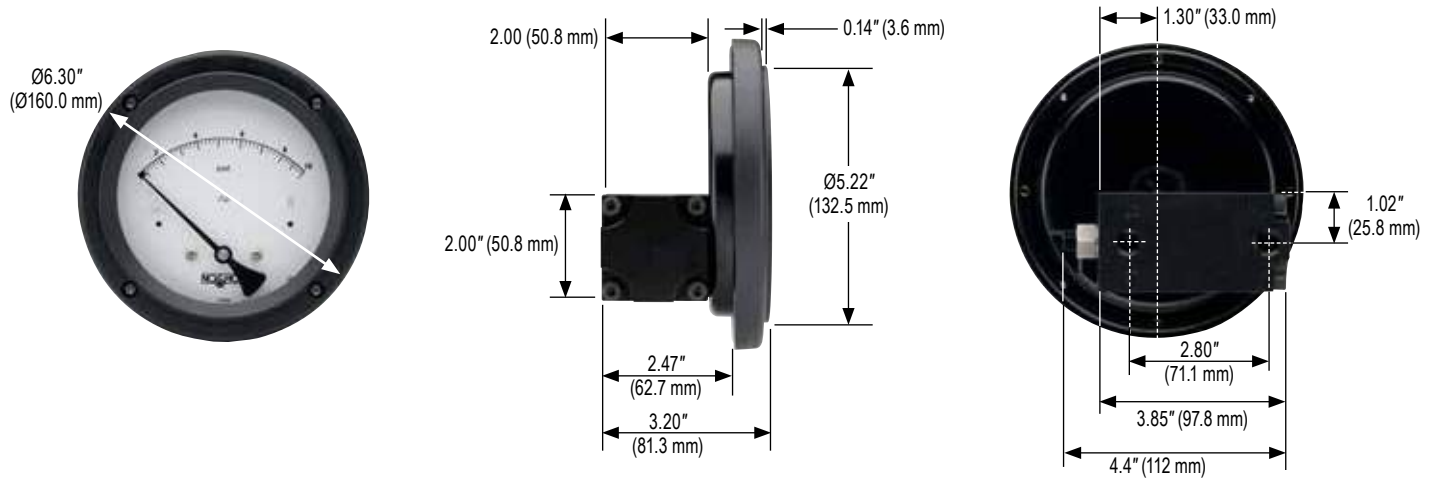


Dimensions

2-1/2" Gauge (<25 psid)



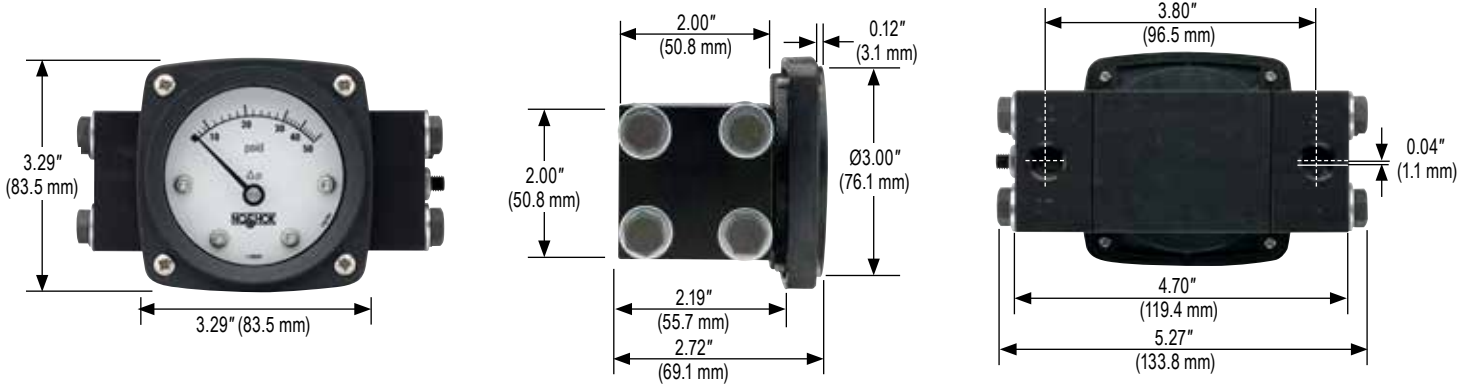
4-1/2" Gauge (<25 psid)



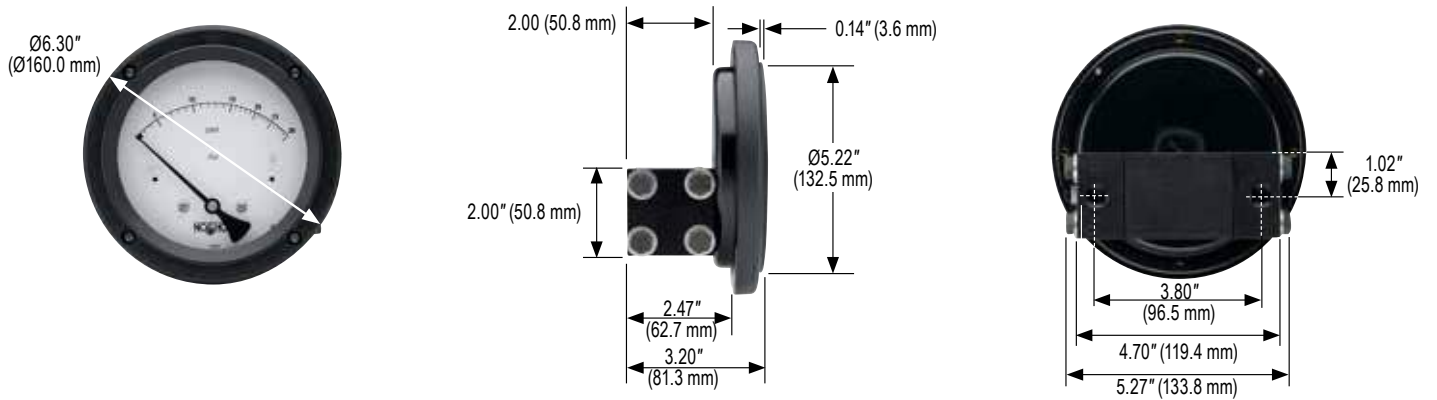
6" Gauge (<25 psid)



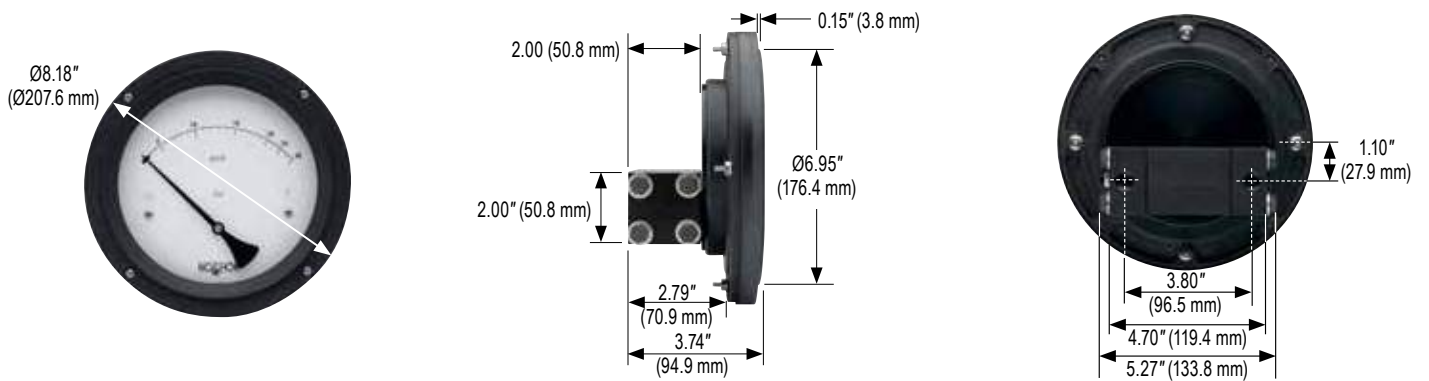
2-1/2" Gauge (≥25 psid)



4-1/2" Gauge (≥25 psid)



6" Gauge (≥25 psid)



4-20 mA Transmitter in NEMA 4x Enclosure



Single Switch in NEMA 4x Enclosure





10 SERIES

- 3/4" clamp, dry gauge
- Ranges from 0 psig to 30 psig through 0 psig to 600 psig
- 2" gauge size
- Electropolished Stainless Steel case
- 316 Stainless Steel wetted parts
- 3A certified
- C.I.P, S.I.P and Autoclave (only dry gauges are recommended for Autoclave)

APPLICATIONS

- Food & beverage processing
- Pasteurization systems
- Pharmaceutical
- Medical

SPECIFICATIONS

Pressure ranges	0 psig to 30 psig through 0 psig to 600 psig
Accuracy	±2.5% full scale
Temperature ranges	Media -40 °F to 300 °F (-40 °C to 150 °C) Ambient 25 °F to 140 °F (-4 °C to 60 °C) Storage 25 °F to 140 °F (-4 °C to 60 °C)
Measuring element	316 Stainless Steel Bourdon tube
Connection	3/4" Sanitary Clamp, 316L Stainless Steel Diaphragm 316L Stainless Steel, electropolished to 32 µin Ra or better
Case	2" Electropolished 304 Stainless Steel
Lens*	Polycarbonate
Pointer	Balanced Aluminum, black finish
Dial	Aluminum, white background, black print
Movement	Stainless Steel
Fill liquid	Glycerin, USP Grade

*Note: Autoclave requires the addition of optional laminated safety glass lens

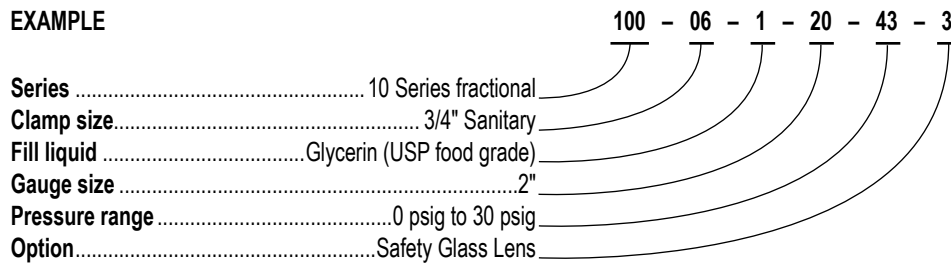
Diaphragm seal must be installed facing downward or in a vertical position for drainability.
Do not install diaphragm seal facing in an upward position.



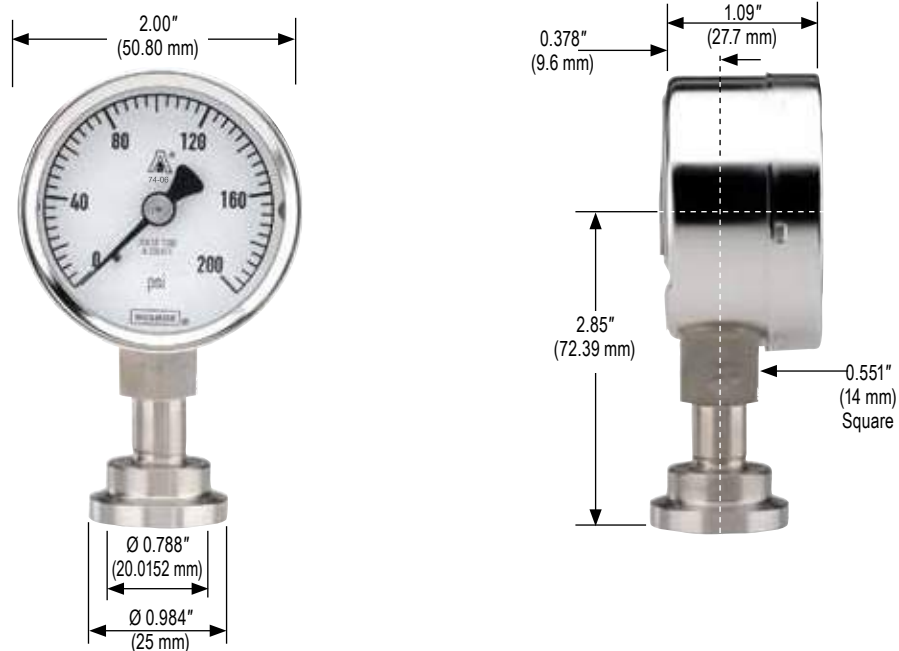
ORDERING INFORMATION			
SERIES	100	10 Series fractional	
CLAMP SIZE	06	3/4"	
FILL LIQUID	1	Glycerin	Other food grade quality fill fluids available – please consult factory
GAUGE SIZE	20	2"	
PRESSURE RANGES	43	0 psig to 30 psig	55 0 psig to 160 psig
	46	0 psig to 60 psig	58 0 psig to 200 psig
	49	0 psig to 100 psig	61 0 psig to 300 psig
OPTIONS	0	None	3 Safety Glass Lens (Required for Autoclave applications)

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE



2" Gauge with 3/4" ASME-BPE Sanitary Clamp Connection





10 SERIES

- 1-1/2" and 2" clamp, fillable dry or liquid-filled gauge
- Ranges from -30 inHg to 0 psig through 0 psig to 600 psig
- 2-1/2" and 4" gauge sizes
- Electropolished Stainless Steel case
- 316 Stainless Steel wetted parts
- 3A certified
- C.I.P, S.I.P and Autoclave (only dry gauges are recommended for Autoclave)

APPLICATIONS

- Food & beverage processing
- Pasteurization systems
- Pharmaceutical
- Medical

SPECIFICATIONS

Pressure ranges	-30 inHg to 0 psig through 0 to 600 psig
Accuracy	2-1/2" gauge $\pm 1.6\%$ full scale 4" gauge $\pm 1.0\%$ full scale
Temperature ranges	Media -40 °F to 300 °F (-40 °C to 150 °C) Ambient 25 °F to 140 °F (-4 °C to 60 °C) Storage 25 °F to 140 °F (-4 °C to 60 °C)
Measuring element	316 Stainless Steel "C" tube
Connection	1-1/2" or 2" ASME-BPE Sanitary Clamp, 316L Stainless Steel Diaphragm 316L Stainless Steel, electropolished to 32 μ m Ra or better
Case	Electropolished 304 Stainless Steel
Bayonet ring	Electropolished 304 Stainless Steel
Lens	Safety glass
Pointer	Balanced Aluminum, black finish
Dial	Aluminum, white background, black print
Movement	Stainless Steel
Fill liquid	Glycerin, USP Grade

*Note: Autoclave requires the addition of optional laminated safety glass lens

Diaphragm seal must be installed facing downward or in a vertical position for drainability.
Do not install diaphragm seal facing in an upward position.



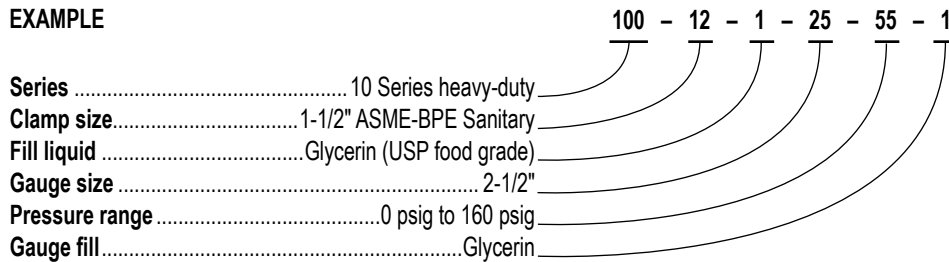
ORDERING INFORMATION				
SERIES	100	10 Series heavy-duty, bottom connected	101	10 Series heavy-duty, back connected
CLAMP SIZES	12	1-1/2"	16	2"
FILL LIQUID	1	Glycerin	Other food grade quality fill fluids available – please consult factory	
GAUGE SIZES	25	2-1/2"	40	4"
PRESSURE RANGES	01	-30 inHg to 0 psig *	16	-30 inHg to 160 psig
	04	-30 inHg to 15 psig	19	-30 inHg to 200 psig
	07	-30 inHg to 30 psig	22	-30 inHg to 300 psig
	10	-30 inHg to 60 psig	40	0 psig to 15 psig *
	13	-30 inHg to 100 psig	43	0 psig to 30 psig
			46	0 psig to 60 psig
			49	0 psig to 100 psig
			55	0 psig to 160 psig
			58	0 psig to 200 psig
			61	0 psig to 300 psig
GAUGE FILLS	0	None	1	Glycerin
			2	Silicone
			3	Mineral oil
	(All food grade quality fill fluids)			
GAUGE OPTIONS	0	None	1	Max. Indicating Pointer**
			2	Adjustable Pointer **

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

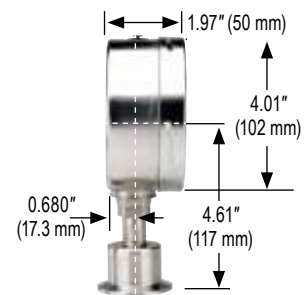
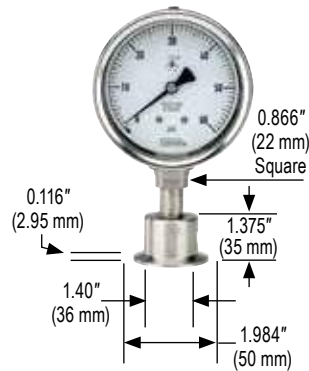
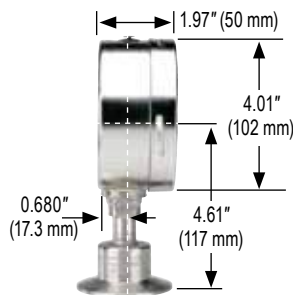
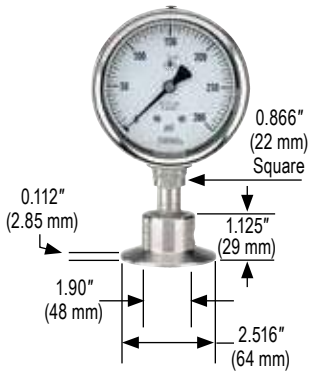
* Not available on 4" gauge and 1-1/2" ASME-BPE Sanitary Clamp

** Not available on 2-1/2" gauge

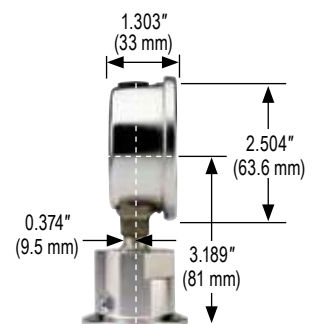
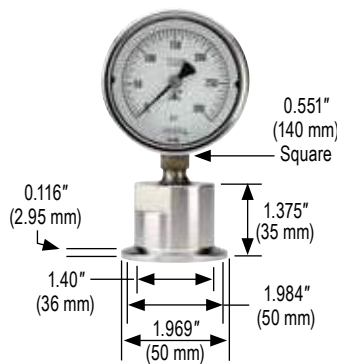
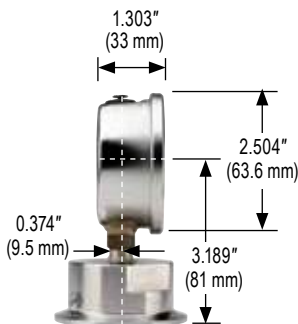
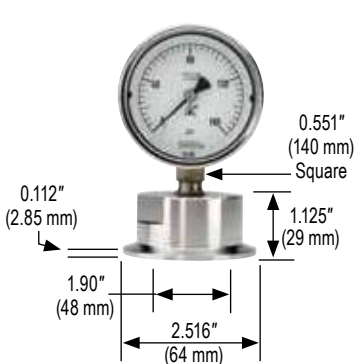
EXAMPLE



4" Gauge with 2" ASME-BPE Sanitary Clamp Connection 4" Gauge with 1-1/2" ASME-BPE Sanitary Clamp Connection



2-1/2" Gauge with 2" ASME-BPE Sanitary Clamp Connection 2-1/2" Gauge with 1-1/2" ASME-BPE Sanitary Clamp Connection



Dial Indicating Gauge Options & Accessories

PANEL MOUNTING FLANGES

- Many panel mounting options are available and can be installed in the field
- Options include:
 - Brass Front Flanges (BFF)
 - Black Painted Steel Front Flanges (BLFF)
 - Chrome Front Flanges (CFF)
 - Stainless Steel Front Flanges (SSFF)
 - Chrome Triangular Bezel with U-Clamp (CBU)
 - Black Painted Steel Triangular Bezels with U-Clamp (BBU-Clamp)
 - Stainless Steel Narrow Bezel Front Flanges (SSBU)
 - Panel Mount Clamps (PMC)
- Chrome-plated Steel Adapter Rings (AR) are available in conjunction with several of these flanges to adapt to oversized panel cut outs, including:
 - Stainless Steel Flange Rings (SSFR)
 - Chrome-Plated Steel Flange Rings (CFR)
 - Black or Chrome Panel Mount Rings (BPMR & CPMR)
- Rear Flanges (RF) for front of panel mounting are also available as a factory installed option on some series



Panel Mount Clamp
20-110 PMC



Chrome Triangular Bezel
with U-Clamp

CASES & COVER RINGS

- The following cases and cover rings are available on many NOSHOK gauges as production options:
 - Black painted Steel (BCR)
 - Chrome-plated Steel (CCR)
 - 304 Stainless Steel (SSCR)
- Some NOSHOK gauges are also available with a solid front, safety case

LENSES

- A variety of lens options are available on many NOSHOK gauges as a production option:
 - Instrument glass lenses
 - Laminated safety glass lenses
 - Acrylic lenses
 - Homalite lenses (resistant to many industrial solvents)
 - A Steel or Stainless case and cover ring may be required when other than acrylic lenses are utilized



Cases and Cover Rings

MAXIMUM INDICATING POINTERS (MIP)

- An invaluable tool for identifying pressure spikes in a system
- Extremely helpful during system start up and troubleshooting
- MIPs add an additional $\pm 1\%$ error to the gauge because of the increased load on the Bourdon tube
- On ranges of 60 psi and lower, MIPs may double the allowed error of the gauge



Maximum Indicating Pointer

See the Gauges Accessories & Options Charts on pgs. 50-53 for availability on specific gauges

SET POINTERS (SP)

- Used to identify an operating minimum or maximum pressure or vacuum value
- Set pointers are available on many NOSHOK gauges

RUBBER CASE PROTECTORS (RCP)

- Ideal for gauges that are subjected to direct physical shock
- 2-1/2" covers are blue and 4" covers are black

ORIFICES

- Press-fit or threaded orifices in Brass or 316 Stainless Steel are available on all NOSHOK pressure gauges
- Available with I.D.'s from 0.004" to 0.032" depending on the specific NOSHOK gauge
- Used in a gauge to restrict the flow of rapidly increasing and decreasing pressures, reducing the immediate effect of pulsations and pressure spikes
- Recommended for all dynamic applications

RECALIBRATORS & ADJUSTABLE POINTERS

- This option gives the user the capability of resetting the pointer by an adjustment screw accessible through the dial, or by a gear located on the pointer

OVERPRESSURE PROTECTION

- Overpressure protection of 3 times up to 10 times of the dial range is available on some NOSHOK gauges as a production option

AMMONIA REFRIGERATION GAUGES

- Ammonia and refrigeration gauges with dials reading in both pressure and temperature are available in 400/500 Series 2-1/2" and 4" sizes
- Refrigeration gauges with dials reading in pressure and temperature are available in 300, 400 and 500 Series for R-12 and R-22

LIQUID FILLING OPTIONS

- Many NOSHOK gauges are available with liquid filling options
- Standard fill is Glycerin
- Optional fill liquids include Dow Corning 200® Silicone and Halocarbon®

SPECIAL CONNECTIONS

- Available on most NOSHOK gauges
- Some examples include:
 - Metric threads
 - Female threads
 - Straight threads (flare or swivel type)
 - Special o-ring connections
- Please contact us with your requirements for prices, availability and minimum quantities

REID VAPOR TEST GAUGES

- Configuration includes a handle, special dial and special pressure port
- Available in 600/700 Series gauges with pressure ranges of 0 to 5 psi, 0 to 15 psi and 0 to 30 psi



Set Pointers



Rubber Case Protectors



Ammonia Gauges

Dial Indicating Gauge Options & Accessories

METRIC DIALS & CUSTOMIZED SPECIAL DIALS

- Dual scale metric dials in psi/bar, psi/kPa and psi/kg/cm² are available on many NOSHOK gauges
- Other scales are available for specific sizes and ranges, such as single scale bar and kPa, refrigerant scales and altitude scales
- Please consult the factory for availability
- Customized special dials such as non-standard metric scale, tons of ram, lbs. of force, etc. are available in small quantities (as few as one piece) on some NOSHOK gauges



Metric Dials and Customized Special Dials

CERTIFIED CALIBRATION

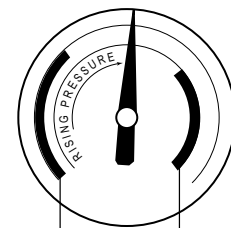
- Available on all NOSHOK gauges
- Certified calibration provides the user with a serial numbered gauge along with a calibration sheet against a primary pressure standard
- Traceable to the National Institute of Standards and Technology

MAGNETIC SPRING CONTACT SWITCH (MSCS)

- An excellent choice when an accurate pressure switch is required in addition to a reliable pressure gauge
- Fully adjustable by the user
- These switches are actuated by the pressure gauge pointer to provide accurate field adjustment
- A removable adjustment key makes them tamper-proof
- They operate with an extremely broad power supply, AC or DC up to 250V max. (30W 50 VA), allowing them to be used virtually anywhere in the world in addition to very remote applications with only DC battery pack power available
- Standard units consist of (2) two magnetic spring switches; either one or both switches may be used:
 - Switch (1) one is normally closed
 - Switch (2) two is normally open with operation referenced on clockwise pointer motion
- Magnetic spring contact switches are available as a factory installed option on 40-400 Series and 40-410 Series
- The lowest full scale pressure range this switch may be used on is 0 psi to 60 psi because of the increased load on the pointer and Bourdon tube
- A mating 4-pin connector with 5' of 4-wire and color coded shielded cable is standard



40-400 Series Gauge with Magnetic Spring Contact Switch



CONTACT NO. 1
Normally closed,
Opens on Rising
Pressure

CONTACT NO. 2
Normally open,
Closes on Rising
Pressure

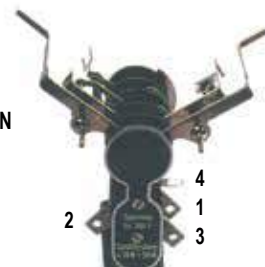
SPECIFICATIONS	
Type of power	A.C. or D.C. 24 to 250V max
Maximum amps	1.0 A
Maximum switching capacity	30 W/50 VA
Gauge accuracy	Add an additional $\pm 2\%$
Minimum magnet holding force	1g
Contact pin material	Silver Tungsten
Ambient temperature limitation	0 °F to 140 °F (-18 °C to 61 °C)
Minimum full scale pressure range	0-60 psi

APPLICATIONS

- Air compressors
- Gas compressors
- Hydraulic and pneumatic circuitry
- Die-cast machinery
- Plastic injection molding machinery

WIRING AND TERMINAL LOCATION

1. Contact Switch No. 1; Red or Black
2. Contact Switch No. 2; Blue
3. Power; Green or Brown
4. Ground; Yellow/Green Stripe



DIAL INDICATING PRESSURE GAUGES STANDARD CONNECTION SIZES

100 Series		200 Series		300 Series		400/500 Series Ammonia		400 Series		500 Series	
15-100	1/8" NPT	25-200	1/4" NPT	25-300	1/4" NPT	25-400	1/4" NPT	15-401	1/8" NPT	25-500	1/4" NPT
15-110	1/8" NPT	25-210	1/4" NPT	25-310	1/4" NPT	25-410	1/4" NPT	15-411	1/8" NPT	25-510	1/4" NPT
15-120	1/8" NPT	25-224	1/4" NPT	40-300	1/4" NPT	40-400	1/2" NPT	25-400	1/4" NPT	40-500	1/2" NPT
20-100	1/4" NPT	40-200	1/4" NPT	40-310	1/4" NPT	40-410	1/2" NPT	25-410	1/4" NPT	40-510	1/2" NPT
20-110	1/4" NPT					25-500	1/4" NPT	40-400	1/2" NPT	60-500	1/2" NPT
20-120	1/4" NPT					25-510	1/4" NPT	40-410	1/2" NPT	60-510	1/2" NPT
20-148	1/8" 10-32 NPT					40-500	1/2" NPT	60-400	1/2" NPT		
25-100	1/4" NPT					40-510	1/2" NPT	60-410	1/2" NPT		
25-110	1/4" NPT										
25-120	1/4" NPT										
40-100	1/4" NPT										

402/502 Series		600/700 Series		800 Series		900 Series	
40-402	9/16-18 UNF 2B High Pressure	45-640	1/4" NPT	60-800	1/4" NPT	15-910	1/8" NPT
40-412	9/16-18 UNF 2B High Pressure	45-740	1/2" NPT			25-900	1/4" NPT
60-402	9/16-18 UNF 2B High Pressure	45-660	1/4" NPT			25-910	1/4" NPT
40-502	9/16-18 UNF 2B High Pressure	45-760	1/2" NPT			25-901	1/4" NPT
60-502	9/16-18 UNF 2B High Pressure					25-911	1/4" NPT
						40-901	1/4" NPT
						40-911	1/4" NPT












Options & Accessories by Gauge Series

100 SERIES ABS & Steel CASE, DRY PRESSURE GAUGE ACCESSORIES

— = Option/accessory is available

C = Consult factory for availability

STD = Standard stock series specification

MODEL NO.	15-100	15-110	15-120	20-100	20-110	20-120	20-148	25-100	25-110	25-120	40-100
CONNECTION											
Black Steel Case (BSC)	C		STD	C	C	STD	—			STD	
Chrome Case (CRC)	C		—	C	C	—	—			—	—
Flat Sided ABS Case (FAC)	—		—	—		—	—	—		—	—
Stainless Steel Case (SSC)	C		—	C	C	—	—			—	—
Silicone Dampened Movement (SDM)	C	C	C	C	C	C	C	C	C	C	C
Glass Lens (GL)*	C	N/C		C	N/C		—	N/C	N/C		N/C
Homalite Lens (HL)*	—	—		—	—		—	—	—		—
Polycarbonate Lens (LL)*	—	—	—	—	—	—	—			—	—
Maximum Indicating Pointer (MIP)	—	—	—	—	—	—	—	C	C	—	—
Red Set Pointer (SP)**		C	C	C		C				C	—
Safety Glass Lens (SG)*	—	—	—	—	—	—	—			—	
Black Front Flange (BLFF) ABS Case	—		—	—		—	—	—		—	—
Chrome Front Flange (CFF) ABS Case	—		—	—		—	—	—		—	—
Chrome Front Flange (SCFF) Steel Case	C	C	—	C	C	—	—			—	
Black Front Flange (SBFF) Steel Case	C	C	—	C	C	—	—			—	
Black Rear Flange (BLRF)	—	—	—	—	—	—	—		—	—	
Black Cover Ring (BCR)**	C		—	C	C	—	—			—	
Stainless Steel Cover Ring (SSCR)**	C		—	C	C	—	—			—	—
Chrome Cover Ring (CCR)**	C		—	C	C	—	—			—	
Polished Stainless Steel Bezel (SSB)	—		STD	—		STD	—	—		STD	—
Chrome Adaptor Ring (AR)	—			—			—	—			—
Panel Mount Clamp (PMC)	—		STD	—		STD	—	—		STD	—
Rubber Case Protectors (RCP)	—	—	—	—	—	—	—			—	
10-32-UNF-2B (10-32)											
Orifice - Brass Press Fit Sintered, 20 Micron (CPO)											
Orifice - Brass Press Fit 0.1mm (BP1)											
Orifice - Brass Press Fit 0.3mm (BP3)											
Orifice - Brass Press Fit 0.8mm (BP8)											
Laser Marking (LM)											
Stainless Steel Tagging (ST)											

STANDARD ORIFICE FOR 100 SERIES GAUGE IS 0.3 MM PRESS FIT, UNLESS OTHERWISE SPECIFIED.



* A Steel, Stainless or chrome case & cover ring must be additionally ordered when lenses other than acrylic are utilized on all 100 Series.

** Only 110 Series require a Steel, Stainless or chrome case & cover ring to be additionally ordered when utilizing a set pointer or cover ring. Please consult factory when a set pointer is to be utilized on a 120 Series.

Consult factory for additional non-stock and special accessory availability.

200 SERIES LOW PRESSURE DIAPHRAGM GAUGE ACCESSORIES

- = Option/accessory is available
- C = Consult factory for availability
- STD = Standard stock series specification

MODEL NO.	25-200	25-210	25-224	40-200
CONNECTION				
Stainless Steel Case (SSC)			—	STD
Glass Lens (GL)*			—	STD
Safety Glass Lens (SG)*			—	
Plexiglass Lens (PL)			—	
Recalibrator Lens (RL)			—	—
Red Set Pointer (SP)				
Maximum Indicating Pointer (MIP)				C
Black Front Flange (BLFF)	—		—	
304SS Front Flange (SSFF)	—	—	—	
Chrome Front Flange (CFF)	—		—	—
Black Rear Flange (BLRF)		—	—	—
304SS Rear Flange (SSRF)	—	—	—	
Black Cover Ring (BCR)			—	—
Stainless Steel Cover Ring (SSCR)			—	STD
Chrome Cover Ring (CCR)			—	—
Black Bezel w/U-Clamp (BBU)	—		—	—
SS Bezel w/U-Clamp (SSBU)	—		—	—
Rubber Case Protectors (RCP)			—	
10-32-UNF-2B (10-32)				
Orifice - Brass Press Fit 0.3mm (BP3)	—			
Orifice - Brass Threaded 0.3mm (BT3)				
Laser Marking (LM)				
Stainless Steel Tagging (ST)				





STANDARD ORIFICE FOR 200 SERIES GAUGE IS 0.3 MM PRESS FIT, UNLESS OTHERWISE SPECIFIED.

* A Steel, Stainless or chrome cover ring must be additionally ordered when lenses other than acrylic are utilized on all 2-1/2" 200 Series.

Consult factory for additional non-stock and special accessory availability.

300 SERIES Brass CASE LIQUID-FILLED GAUGE ACCESSORIES

- = Option/accessory is available

MODEL NO.	25-300	25-310	40-300	40-310
CONNECTION				
Maximum Indicating Pointer (MIP)			—	—
Polycarbonate Lens (LL)	—	—		
Glass Lens Overlay (GLO)			—	—
Safety Glass Overlay (SGO)			—	—
Safety Glass (SG)	—	—		
Chrome Front Flange (CFF)				
Chrome Front Flange w/o Holes (CFFN)				
Brass Front Flange (BFF)				
Black Front Flange (BLFF)	—	—		
304SS Rear Flange (SSRF)	—	—		
Rear Flange (RF)			—	—
Chrome Cover Ring (CCR)				—
Chrome Bezel w/U-Clamp (CBU)	—		—	
Adaptor Ring (AR)	—		—	—
Increased Accuracy from 1.5% to 1.0% (IA)			—	—
Increased Accuracy from 1.0% to 0.5% (IA)	—	—		
SAE J1926-3:7/16-20 Adjustable Connection (SST)*				
10-32-UNF-2B (10-32)				
Orifice - Brass Threaded 0.3mm (BT3)				
Orifice - Brass Threaded 0.4mm (BT4)				
Orifice - Brass Threaded 0.8mm (BT8)				
Rubber Case Protectors (RCP)				
Laser Marking (LM)				
Stainless Steel Tagging (ST)				

STANDARD ORIFICE FOR 300 SERIES GAUGE IS 0.8 MM THREADED, UNLESS OTHERWISE SPECIFIED.

* Includes FKM o-ring. Consult factory for availability.

Consult factory for additional non-stock and special accessory availability.









Options & Accessories by Gauge Series

400/500 SERIES ALL Stainless Steel PRESSURE GAUGES DRY, LIQUID & AMMONIA GAUGE ACCESSORIES

— = Option/accessory is available

C = Consult factory for availability

STD = Standard stock series specification





MODEL NO.	15-401	15-411	25-400	25-410	40-400	40-410	60-400	60-410
			25-500	25-510	40-500	40-510	60-500	60-510
CONNECTION								
Adjustable Pointer (AP)	—	—	—	—			STD	STD
Safety Glass Lens (SG)	—	—					STD	STD
Maximum Indicating Pointer (MIP)	—	—						
Red Set Pointer (SP)	—	—						
Magnetic Spring Contact, 4" 400 & 410 (MSCS)	—	—	—	—			—	—
304 SS Front Flange (SSFF)	—	—	—					
304 SS Rear Flange (SSRF)	—	—	C	C				
SS Bezel w/U-Clamp (SSBU)	—	—	—	—	—		—	—
Flange Ring 304SS (SSFR)	—	—	—		—	—	—	—
304SS Panel Mount Clamp (SPMC)	—	—	—		—	—	—	—
Steel Panel Mount Clamp (PMC)	—	—	—		—	—	—	—
Increased Accuracy from 1.5% to 1.0% (IA)	—	—						
Increased Accuracy from 1.0% to 0.5% (IA)	—	—						
10-32-UNF-2B (10-32)								
Orifice - 316SS Threaded 0.8mm (ST8)								
Orifice - 316SS Threaded 0.5mm (ST5)								
Rubber Case Protectors (RCP)	—	—					—	—
Laser Marking (LM)								
Stainless Steel Tagging (ST)								

STANDARD ORIFICE FOR 400/500 SERIES GAUGE IS 0.8 MM THREADED, UNLESS OTHERWISE SPECIFIED.

Consult factory for additional non-stock and special accessory availability.

600/700 SERIES PROCESS GAUGE ACCESSORIES

— = Option/accessory is available


MODEL NO.	45-640	45-740	45-660	45-760
CONNECTION				
Safety Glass Lens (SG)				
Glass Lens (GL)				
Maximum Indicating Pointer (MIP)				
Overload Stop (OS)				
10-32-UNF-2B (10-32)				
Orifice - Brass Press Fit 0.3mm (BP3)		—		—
Orifice - Brass Threaded 0.8mm (BT8)		—		—
Orifice - 316SS Threaded 0.8mm (ST8)	—		—	
Laser Marking (LM)				
Stainless Steel Tagging (ST)				

STANDARD ORIFICE FOR 600/700 SERIES GAUGE IS 0.8 MM THREADED, UNLESS OTHERWISE SPECIFIED.

Consult factory for additional non-stock and special accessory availability.

800 SERIES PRECISION TEST GAUGE ACCESSORIES

— = Option/accessory is available

MODEL NO.	60-800
CONNECTION	
304 SS Front Flange (SSFF)	
304 SS Rear Flange (SSRF)	
10-32-UNF-2B (10-32)	
Orifice - Brass Press Fit 0.3mm (BP3)	
Orifice - Brass Threaded 0.8mm (BT8)	
Laser Marking (LM)	
Stainless Steel Tagging (ST)	
Carrying Case (GC)	

STANDARD ORIFICE FOR 800 SERIES GAUGE IS 0.8 MM THREADED, UNLESS OTHERWISE SPECIFIED.








Consult factory for additional non-stock and special accessory availability.

900 SERIES ABS & Stainless Steel LIQUID FILLED PRESSURE GAUGE ACCESSORIES

— = Option/accessory is available

C = Consult factory for availability

STD = Standard stock series specification

MODEL NO.	15-910	25-900	25-910	25-901	25-911	40-901	40-911
CONNECTION							
Adjustable Pointer (AP)	—	—	—	—	—		
Maximum Indicating Pointer (MIP)	—	—	—				
Red Set Pointer (SP)	—	—	—				
Safety Glass Lens (SG)	—	—	—				
Magnetic Spring Contact Switch 4" 901 & 911 Dry (MSCS)	—	—	—	—	—		
Black Front Flange (BLFF)	—	—		—	—	—	—
304 SS Front Flange (SSFF)	—	—	—	—			
304 SS Rear Flange (SSRF)	—	—	—	—	—		
304 SS Polished Flange Ring (SSFR)	—	—	—	—		—	—
SS Bezel w/U-Clamp (SSBU)	—	—	—	—	—	—	
304SS Panel Mount Clamp (SPMC)	—	—	—	—		—	—
Steel Panel Mount Clamp (PMC)	—	—		—		—	—
Increased Accuracy from 1.5% to 1.0% (IA)	—	—	—			—	—
Increased Accuracy from 1.0% to 0.5% (IA)	—	—	—	—	—		
SAE J1926-3:7/16-20 Adjustable Connection (SST)* †	—						
1/4" NPT x G1/4 Adaptor (1/4-NPT-MXG1/4-F-BR)							
G1/4 Sealing Washer (G1/4-SEALING-WASHER)							
10-32-UNF-2B (10-32)							
Orifice - Brass Press Fit 0.3mm (BP3)							
Orifice - Brass Threaded 0.5mm (BT5)						—	—
Orifice - Brass Threaded 0.8mm (BT8)	—	—	—	—	—		
Rubber Case Protectors (RCP)	—	—	—				
Dry Out Charge (DRY)	—	—	—				
Laser Marking (LM)							
Stainless Steel Tagging (ST)							

STANDARD ORIFICE FOR 900 SERIES GAUGE IS 0.3 MM PRESS FIT, UNLESS OTHERWISE SPECIFIED.

* Includes FKM o-ring. Consult factory for availability.

** For ranges 60 psi and above.

Consult factory for additional non-stock and special accessory availability.

GAUGE FILL OPTIONS

SERIES NO.	VOLUME	SILICONE	HALOCARBON®	-40° SERVICE	MINERAL OIL
300 SERIES	OZ	D.C. 200	4.2 OIL	86.5 : 13.5 GLYCERIN: H2O (d)	LIGHT VISCOSITY
25-300/25-310	2.0	—	—	—	—
40-300/40-310	6.5	—	—	—	—
500 SERIES					
25-500/25-510	2.0	—	—	—	—
40-500/40-510	8.5	—	—	—	—
60-500/60-510	31.0	—	—	—	—
600/700 SERIES					
45-660/45-760	14.0	—	—	—	—
900 SERIES					
25-900/25-910	2.0	C	C	—	C
25-901/25-911	2.0	C	C	—	C
40-901/40-011	8.5	—	—	—	—

Dial Indicating Gauge Accuracy/Standard Dial Configuration

300 Series Gauges: 4"

Applies to:
400/500 Series Gauges: 4" and 6"

900 Series Gauges: 4"

ACCURACY: $\pm 1.0\%$ full scale											
Primary Scale			Secondary Scales								
Dial Range	Figure	Graduation	kPa	Figure	Graduation	kg/cm ²	Figure	Graduation	bar	Figure	Graduation
-30 inHg to 0 psi	-5 inHg	-0.5 inHg	-100 kPa to 0 kPa	-20 kPa	-2 kPa	-1.02 kg/cm ² to 0 kg/cm ²	-0.2 kg/cm ²	-0.02 kg/cm ²	-1 bar to 0 bar	-0.2 bar	-0.02 bar
-30 inHg to 15 psi	-10 inHg	-1 inHg	-100 kPa to 100 kPa	-50 kPa	-5 kPa	-1 kg/cm ² to 1.05 kg/cm ²	-0.5 kg/cm ²	-0.05 kg/cm ²	-1 bar to 1 bar	-0.5 bar	-0.05 bar
-30 inHg to 30 psi	-10 inHg	-1 inHg	-100 kPa to 205 kPa	-50 kPa	-5 kPa	-1 kg/cm ² to 2.10 kg/cm ²	-1 kg/cm ²	-0.1 kg/cm ²	-1 bar to 2.05 bar	-0.5 bar	-0.05 bar
-30 inHg to 60 psi	-30 inHg	-2 inHg	-100 kPa to 410 kPa	-100 kPa	-10 kPa	-1 kg/cm ² to 4.2 kg/cm ²	-1 kg/cm ²	-0.1 kg/cm ²	-1 bar to 4.1 bar	-1 bar	.01 bar
-30 inHg to 100 psi	-30 inHg	-5 inHg	-100 kPa to 680 kPa	-100 kPa	-20 kPa	-1 kg/cm ² to 7 kg/cm ²	-1 kg/cm ²	-0.2 kg/cm ²	-1 bar to 6.8 bar	-1 bar	-0.2 bar
-30 inHg to 160 psi	-30 inHg	-5 inHg	-100 kPa to 1,100 kPa	-100 kPa	-20 kPa	-1 kg/cm ² to 11.2 kg/cm ²	-1 kg/cm ²	-0.2 kg/cm ²	-1 bar to 11 bar	-1 bar	-0.2 bar
-30 inHg to 200 psi	-30 inHg	-5 inHg	-100 kPa to 1,360 kPa	-100 kPa	-20 kPa	-1 kg/cm ² to 14 kg/cm ²	-1 kg/cm ²	-0.2 kg/cm ²	-1 bar to 13.6 bar	-1 bar	-0.2 bar
-30 inHg to 300 psi	-30 inHg	-10 inHg	-100 kPa to 2,050 kPa	-100 kPa	-50 kPa	-1 kg/cm ² to 21 kg/cm ²	-1 kg/cm ²	-0.5 kg/cm ²	-1 bar to 20.5 bar	-1 bar	-0.5 bar
0 psi to 15 psi	3 psi	0.2 psi	0 kPa to 102 kPa	30 kPa	2 kPa	0 kg/cm ² to 1.04 kg/cm ²	0.3 kg/cm ²	0.04 kg/cm ²	0 bar to 1.02 bar	0.3 bar	0.02 bar
0 psi to 30 psi	5 psi	0.5 psi	0 kPa to 205 kPa	50 kPa	5 kPa	0 kg/cm ² to 2.1 kg/cm ²	0.5 kg/cm ²	0.1 kg/cm ²	0 bar to 2.05 bar	0.5 bar	0.05 bar
0 psi to 60 psi	10 psi	1 psi	0 kPa to 410 kPa	100 kPa	10 kPa	0 kg/cm ² to 4.2 kg/cm ²	1 kg/cm ²	0.1 kg/cm ²	0 bar to 4.1 bar	1 bar	0.1 bar
0 psi to 100 psi	20 psi	2 psi	0 kPa to 680 kPa	200 kPa	20 kPa	0 kg/cm ² to 7 kg/cm ²	2 kg/cm ²	0.2 kg/cm ²	0 bar to 6.8 bar	2 bar	0.2 bar
0 psi to 160 psi	20 psi	2 psi	0 kPa to 1,100 kPa	200 kPa	20 kPa	0 kg/cm ² to 11.2 kg/cm ²	2 kg/cm ²	0.2 kg/cm ²	0 bar to 11 bar	2 bar	0.2 bar
0 psi to 200 psi	40 psi	4 psi	0 kPa to 1,360 kPa	400 kPa	40 kPa	0 kg/cm ² to 14 kg/cm ²	4 kg/cm ²	0.4 kg/cm ²	0 bar to 13.6 bar	4 bar	0.4 bar
0 psi to 300 psi	50 psi	5 psi	0 kPa to 2,050 kPa	500 kPa	50 kPa	0 kg/cm ² to 21 kg/cm ²	5 kg/cm ²	0.5 kg/cm ²	0 bar to 20.5 bar	5 bar	0.5 bar
0 psi to 400 psi	50 psi	5 psi	0 kPa to 2,750 kPa	500 kPa	50 kPa	0 kg/cm ² to 28 kg/cm ²	5 kg/cm ²	0.5 kg/cm ²	0 bar to 27.5 bar	5 bar	0.5 bar
0 psi to 600 psi	100 psi	10 psi	0 kPa to 4,100 kPa	1,000 kPa	100 kPa	0 kg/cm ² to 42 kg/cm ²	10 kg/cm ²	1 kg/cm ²	0 bar to 41 bar	10 bar	1 bar
0 psi to 1,000 psi	200 psi	20 psi	0 kPa to 6,800 kPa	2,000 kPa	200 kPa	0 kg/cm ² to 70 kg/cm ²	20 kg/cm ²	2 kg/cm ²	0 bar to 68 bar	20 bar	2 bar
0 psi to 1,500 psi	300 psi	20 psi	0 kPa to 10,200 kPa	3,000 kPa	200 kPa	0 kg/cm ² to 104 kg/cm ²	30 kg/cm ²	2 kg/cm ²	0 bar to 102 bar	30 bar	2 bar
0 psi to 2,000 psi	400 psi	40 psi	0 kPa to 13,600 kPa	4,000 kPa	400 kPa	0 kg/cm ² to 140 kg/cm ²	40 kg/cm ²	4 kg/cm ²	0 bar to 136 bar	40 bar	4 bar
0 psi to 3,000 psi	500 psi	50 psi	0 kPa to 20,500 kPa	5,000 kPa	500 kPa	0 kg/cm ² to 210 kg/cm ²	50 kg/cm ²	5 kg/cm ²	0 bar to 205 bar	50 bar	5 bar
0 psi to 5,000 psi	1,000 psi	100 psi	0 kPa to 34,000 kPa	10,000 kPa	1,000 kPa	0 kg/cm ² to 350 kg/cm ²	100 kg/cm ²	10 kg/cm ²	0 bar to 340 bar	100 bar	10 bar
0 psi to 6,000 psi	1,000 psi	100 psi	0 kPa to 41,000 kPa	10,000 kPa	1,000 kPa	0 kg/cm ² to 420 kg/cm ²	100 kg/cm ²	10 kg/cm ²	0 bar to 410 bar	100 bar	10 bar
0 psi to 7,500 psi	1,500 psi	100 psi	0 kPa to 51,000 kPa	10,000 kPa	1,000 kPa	0 kg/cm ² to 520 kg/cm ²	100 kg/cm ²	10 kg/cm ²	0 bar to 510 bar	100 bar	10 bar
0 psi to 10,000 psi	2,000 psi	200 psi	0 kPa to 68,000 kPa	20,000 kPa	2,000 kPa	0 kg/cm ² to 700 kg/cm ²	200 kg/cm ²	20 kg/cm ²	0 bar to 680 bar	200 bar	20 bar
0 psi to 15,000 psi	3,000 psi	200 psi	0 kPa to 102,000 kPa	30,000 kPa	2,000 kPa	0 kg/cm ² to 1,040 kg/cm ²	300 kg/cm ²	20 kg/cm ²	0 bar to 1,030 bar	300 bar	20 bar
0 psi to 20,000 psi	4,000 psi	400 psi	0 kPa to 136,000 kPa	40,000 kPa	4,000 kPa	0 kg/cm ² to 1,400 kg/cm ²	400 kg/cm ²	40 kg/cm ²	0 bar to 1,360 bar	400 bar	40 bar
0 psi to 30,000 psi	5,000 psi	500 psi	0 kPa to 205,000 kPa	50,000 kPa	5,000 kPa	0 kg/cm ² to 2,100 kg/cm ²	500 kg/cm ²	50 kg/cm ²	0 bar to 2,050 bar	500 bar	50 bar
0 psi to 40,000 psi	5,000 psi	500 psi	0 kPa to 275,000 kPa	50,000 kPa	5,000 kPa	0 kg/cm ² to 2,800 kg/cm ²	500 kg/cm ²	50 kg/cm ²	0 bar to 2,750 bar	500 bar	50 bar
0 psi to 50,000 psi	10,000 psi	1000 psi	0 kPa to 340,000 kPa	100,000 kPa	10,000 kPa	0 kg/cm ² to 3,500 kg/cm ²	1,000 kg/cm ²	100 kg/cm ²	0 bar to 3,400 bar	1,000 bar	100 bar
0 psi to 60,000 psi	10,000 psi	1000 psi	0 kPa to 410,000 kPa	100,000 kPa	10,000 kPa	0 kg/cm ² to 4,200 kg/cm ²	1,000 kg/cm ²	100 kg/cm ²	0 bar to 4,100 bar	1,000 bar	100 bar
0 psi to 75,000 psi	15,000 psi	1000 psi	0 kPa to 510,000 kPa	100,000 kPa	10,000 kPa	0 kg/cm ² to 5,200 kg/cm ²	1,000 kg/cm ²	100 kg/cm ²	0 bar to 5,100 bar	1,000 bar	100 bar
0 psi to 100,000 psi	20,000 psi	2000 psi	0 kPa to 680,000 kPa	200,000 kPa	20,000 kPa	0 kg/cm ² to 7,000 kg/cm ²	2,000 kg/cm ²	200 kg/cm ²	0 bar to 6,800 bar	2,000 bar	200 bar

Dial Indicating Gauge Accuracy/Standard Dial Configuration

Applies to:

200 Series Gauges: 2-1/2" and 4"

700 Series Gauges (Low Pressure): 4-1/2"

ACCURACY: $\pm 1.0\%$ full scale					
Standard Dial Configurations					
Dial Range	Figure Interval	Graduation Intervals	Dial Range	Figure Interval	Graduation Intervals
-15 inH ₂ O to 0 inH ₂ O	-3 inH ₂ O	-0.2 inH ₂ O	0 oz/in ² to 10 oz/in ²	2 oz/in ²	0.2 oz/in ²
-30 inH ₂ O to 0 inH ₂ O	-5 inH ₂ O	-0.5 inH ₂ O	0 oz/in ² to 15 oz/in ²	3 oz/in ²	0.2 oz/in ²
-60 inH ₂ O to 0 inH ₂ O	-10 inH ₂ O	-1 inH ₂ O	0 oz/in ² to 30 oz/in ²	5 oz/in ²	0.5 oz/in ²
-100 inH ₂ O to 0 inH ₂ O	-20 inH ₂ O	-2 inH ₂ O	0 oz/in ² to 35 oz/in ²	5 oz/in ²	0.5 oz/in ²
-60 inH ₂ O to 60 inH ₂ O	-10 inH ₂ O 10 inH ₂ O	-1 inH ₂ O 1 inH ₂ O	0 oz/in ² to 60 oz/in ²	10 oz/in ²	1 oz/in ²
0 inH ₂ O to 10 inH ₂ O	2 inH ₂ O	0.2 inH ₂ O	0 oz/in ² to 100 oz/in ²	20 oz/in ²	2 oz/in ²
0 inH ₂ O to 15 inH ₂ O	3 inH ₂ O	0.2 inH ₂ O	0 oz/in ² to 160 oz/in ² **	40 oz/in ²	4 oz/in ²
0 inH ₂ O to 30 inH ₂ O	5 inH ₂ O	0.5 inH ₂ O	0 oz/in ² inH ₂ O to 20 oz/in ² inH ₂ O	4 oz/in ² - 10 inH ₂ O	0.4 oz/in ² - 1 inH ₂ O
0 inH ₂ O to 60 inH ₂ O	10 inH ₂ O	1 inH ₂ O	0 oz/in ² inH ₂ O to 32 oz/in ² inH ₂ O	4 oz/in ² - 10 inH ₂ O	0.5 oz/in ² - 1 inH ₂ O
0 inH ₂ O to 100 inH ₂ O	20 inH ₂ O	2 inH ₂ O	0 psi to 3 psi	0.5 psi	0.05 psi
0 inH ₂ O to 160 inH ₂ O*	40 inH ₂ O	4 inH ₂ O	0 psi to 5 psi	1 psi	0.1 psi
0 inH ₂ O to 200 inH ₂ O	40 inH ₂ O	4 inH ₂ O	0 psi to 10 psi	2 psi	0.2 psi

* The values in the table are for 2-1/2". On 4" & 4-1/2" 0 inH₂O to 160 inH₂O gauges, the Figure is 20 inH₂O, and the Graduation is 2 inH₂O.

** The values in the table are for 2-1/2". On 4" & 4-1/2" 0 oz/in² to 160 oz/in² gauges, the Figure is 20 oz/in², and the Graduation is 2 oz/in².

Dial Indicating Gauge Accuracy/Standard Dial Configuration

Applies to:

100 Series Gauges: 4"

300 Series Gauges: 2-1/2"

400/500 Series Gauges: 2-1/2"

900 Series Gauges: 2-1/2"

ACCURACY: ±1.6% full scale											
Primary Scale			Secondary Scales								
Dial Range	Figure	Graduation	kPa	Figure	Graduation	kg/cm ²	Figure	Graduation	bar	Figure	Graduation
-30 inHg to 0 psi	-5 inHg	-0.5 inHg	-100 kPa to 0 kPa	-20 kPa	-2 kPa	-1.02 kg/cm ² to 0 kg/cm ²	-0.2 kg/cm ²	-0.02 kg/cm ²	-1 bar to 0 bar	-0.2 bar	-0.02 bar
-30 inHg to 15 psi	-10 inHg 5 psi	-1 inHg 0.5 psi	-100 kPa to 100 kPa	-50 kPa 50 kPa	-5 kPa 5 kPa	-1 kg/cm ² to 1.05 kg/cm ²	-0.5 kg/cm ² 0.5 kg/cm ²	-0.05 kg/cm ² 0.05 kg/cm ²	-1 bar to 1 bar	-0.5 bar 0.5 bar	-0.05 bar 0.05 bar
-30 inHg to 30 psi	-30 inHg 10 psi	-2 inHg 1 psi	-100 kPa to 205 kPa	-100 kPa 100 kPa	-10 kPa 10 kPa	-1 kg/cm ² to 2.10 kg/cm ²	-1 kg/cm ² 1 kg/cm ²	-0.1 kg/cm ² 0.1 kg/cm ²	-1 bar to 2 bar	-1 bar 1 bar	-0.1 bar 0.1 bar
-30 inHg to 60 psi	-30 inHg 20 psi	-5 inHg 2 psi	-100 kPa to 400 kPa	-100 kPa 200 kPa	-20 kPa 20 kPa	-1 kg/cm ² to 4.2 kg/cm ²	-1 kg/cm ² 2 kg/cm ²	-2 kg/cm ² 0.2 kg/cm ²	-1 bar to 4 bar	-1 bar 2 bar	-0.2 bar 0.2 bar
-30 inHg to 100 psi	-30 inHg 20 psi	-5 inHg 2 psi	-100 kPa to 680 kPa	-100 kPa 200 kPa	-20 kPa 20 kPa	-1 kg/cm ² to 7 kg/cm ²	-1 kg/cm ² 2 kg/cm ²	-0.2 kg/cm ² 0.2 kg/cm ²	-1 bar to 6.8 bar	-1 bar 2 bar	-0.2 bar 0.2 bar
-30 inHg to 160 psi	-30 inHg 40 psi	-10 inHg 4 psi	-100 kPa to 1,080 kPa	-100 kPa 400 kPa	-50 kPa 40 kPa	-1 kg/cm ² to 11.2 kg/cm ²	-1 kg/cm ² 4 kg/cm ²	-0.5 kg/cm ² 0.4 kg/cm ²	-1 bar to 11 bar	-1 bar 4 bar	-0.5 bar 0.4 bar
-30 inHg to 200 psi	-30 inHg 40 psi	-10 inHg 4 psi	-100 kPa to 1,360 kPa	-100 kPa 400 kPa	-50 kPa 40 kPa	-1 kg/cm ² to 14 kg/cm ²	-1 kg/cm ² 4 kg/cm ²	-0.5 kg/cm ² 0.4 kg/cm ²	-1 bar to 13.6 bar	-1 bar 4 bar	-0.5 bar 0.4 bar
-30 inHg to 300 psi	-30 inHg 50 psi	-10 inHg 5 psi	-100 kPa to 2,050 kPa	-100 kPa 500 kPa	-50 kPa 50 kPa	-1 kg/cm ² to 21 kg/cm ²	-1 kg/cm ² 5 kg/cm ²	-0.5 kg/cm ² 0.5 kg/cm ²	-1 bar to 20.5 bar	-1 bar 5 bar	-0.5 bar 0.5 bar
0 psi to 15 psi	3 psi	0.2 psi	0 kPa to 102 kPa	30 kPa	2 kPa	0 kg/cm ² to 1.04 kg/cm ²	0.3 kg/cm ²	0.02 kg/cm ²	0 bar to 1.02 bar	0.3 bar	0.02 bar
0 psi to 30 psi	5 psi	0.5 psi	0 kPa to 205 kPa	50 kPa	5 kPa	0 kg/cm ² to 2.1 kg/cm ²	0.5 kg/cm ²	0.05 kg/cm ²	0 bar to 2.05 bar	0.5 bar	0.05 bar
0 psi to 60 psi	10 psi	1 psi	0 kPa to 410 kPa	100 kPa	10 kPa	0 kg/cm ² to 4.2 kg/cm ²	1 kg/cm ²	0.1 kg/cm ²	0 bar to 4.10 bar	1 bar	0.1 bar
0 psi to 100 psi	20 psi	2 psi	0 kPa to 680 kPa	200 kPa	20 kPa	0 kg/cm ² to 7 kg/cm ²	2 kg/cm ²	0.2 kg/cm ²	0 bar to 6.8 bar	2 bar	0.2 bar
0 psi to 160 psi	40 psi	4 psi	0 kPa to 1,080 kPa	400 kPa	40 kPa	0 kg/cm ² to 11.2 kg/cm ²	4 kg/cm ²	0.4 kg/cm ²	0 bar to 11 bar	4 bar	0.4 bar
0 psi to 200 psi	40 psi	4 psi	0 kPa to 1,360 kPa	400 kPa	40 kPa	0 kg/cm ² to 14 kg/cm ²	4 kg/cm ²	0.4 kg/cm ²	0 bar to 13.6 bar	4 bar	0.4 bar
0 psi to 300 psi	50 psi	5 psi	0 kPa to 2,050 kPa	500 kPa	50 kPa	0 kg/cm ² to 21 kg/cm ²	5 kg/cm ²	0.5 kg/cm ²	0 bar to 20.5 bar	5 bar	0.5 bar
0 psi to 400 psi	100 psi	10 psi	0 kPa to 2,700 kPa	1,000 kPa	100 kPa	0 kg/cm ² to 28 kg/cm ²	10 kg/cm ²	1 kg/cm ²	0 bar to 27 bar	10 bar	1 bar
0 psi to 600 psi	100 psi	10 psi	0 kPa to 4,100 kPa	1,000 kPa	100 kPa	0 kg/cm ² to 42 kg/cm ²	10 kg/cm ²	1 kg/cm ²	0 bar to 41 bar	10 bar	1 bar
0 psi to 1,000 psi	200 psi	20 psi	0 kPa to 6,800 kPa	2,000 kPa	200 kPa	0 kg/cm ² to 70 kg/cm ²	20 kg/cm ²	2 kg/cm ²	0 bar to 68 bar	20 bar	2 bar
0 psi to 1,500 psi	300 psi	20 psi	0 kPa to 10,200 kPa	3,000 kPa	200 kPa	0 kg/cm ² to 104 kg/cm ²	30 kg/cm ²	2 kg/cm ²	0 bar to 102 bar	30 bar	2 bar
0 psi to 2,000 psi	400 psi	40 psi	0 kPa to 13,600 kPa	4,000 kPa	400 kPa	0 kg/cm ² to 140 kg/cm ²	40 kg/cm ²	4 kg/cm ²	0 bar to 136 bar	40 bar	4 bar
0 psi to 3,000 psi	500 psi	50 psi	0 kPa to 20,500 kPa	5,000 kPa	500 kPa	0 kg/cm ² to 210 kg/cm ²	50 kg/cm ²	5 kg/cm ²	0 bar to 205 bar	50 bar	5 bar
0 psi to 5,000 psi	1,000 psi	100 psi	0 kPa to 34,000 kPa	10,000 kPa	1,000 kPa	0 kg/cm ² to 350 kg/cm ²	100 kg/cm ²	10 kg/cm ²	0 bar to 340 bar	100 bar	10 bar
0 psi to 6,000 psi	1,000 psi	100 psi	0 kPa to 41,000 kPa	10,000 kPa	1,000 kPa	0 kg/cm ² to 420 kg/cm ²	100 kg/cm ²	10 kg/cm ²	0 bar to 410 bar	100 bar	10 bar
0 psi to 7,500 psi	1,500 psi	100 psi	0 kPa to 51,000 kPa	10,000 kPa	1,000 kPa	0 kg/cm ² to 520 kg/cm ²	100 kg/cm ²	10 kg/cm ²	0 bar to 510 bar	100 bar	10 bar
0 psi to 10,000 psi	2,000 psi	200 psi	0 kPa to 68,000 kPa	20,000 kPa	2,000 kPa	0 kg/cm ² to 700 kg/cm ²	200 kg/cm ²	20 kg/cm ²	0 bar to 680 bar	200 bar	20 bar
0 psi to 15,000 psi	3,000 psi	200 psi	0 kPa to 102,000 kPa	30,000 kPa	2,000 kPa	0 kg/cm ² to 1,040 kg/cm ²	300 kg/cm ²	20 kg/cm ²	0 bar to 1,020 bar	300 bar	20 bar

Dial Indicating Gauge Accuracy/Standard Dial Configuration

Applies to:
600/700 Series Gauges: 4-1/2"

ACCURACY: ±0.5% full scale

Primary Scale			Secondary Scales								
Dial Range	Figure	Graduation	kPa	Figure	Graduation	kg/cm ²	Figure	Graduation	bar	Figure	Graduation
-30 inHg to 0 psi	-5 inHg	-0.2 inHg	-101 kPa to 0 kPa	-20 kPa	-1 kPa	-1.03 kg/cm ² to 0 kg/cm ²	-0.2 kg/cm ²	-0.01 kg/cm ²	-1.01 bar to 0 bar	-0.2 bar	-0.01 bar
-30 inHg to 15 psi	-5 inHg 3 psi	-0.5 inHg 0.2 psi	-100 kPa to 102 kPa	-20 kPa 20 kPa	-2 kPa 2 kPa	-1 kg/cm ² to 1.04 kg/cm ²	-0.2 kg/cm ² 0.2 kg/cm ²	-0.02 kg/cm ² 0.02 kg/cm ²	-1 bar to 1.02 bar	-0.2 bar 0.2 bar	-0.02 bar 0.02 bar
-30 inHg to 30 psi	-10 inHg 5 psi	-1 inHg 0.5 psi	-100 kPa to 205 kPa	-50 kPa 50 kPa	-5 kPa 5 kPa	-1 kg/cm ² to 2.10 kg/cm ²	-0.5 kg/cm ² 0.5 kg/cm ²	-0.05 kg/cm ² 0.05 kg/cm ²	-1 bar to 2.05 bar	-0.5 bar 0.5 bar	-0.05 bar 0.05 bar
-30 inHg to 60 psi	-10 inHg 10 psi	-1 inHg 0.4 psi	-100 kPa to 412 kPa	-50 kPa 100 kPa	-5 kPa 4 kPa	-1 kg/cm ² to 4.2 kg/cm ²	-0.5 kg/cm ² 1 kg/cm ²	-0.01 kg/cm ² 0.04 kg/cm ²	-1 bar to 4.12 bar	-0.5 bar 1 bar	-0.01 bar 0.04 bar
-30 inHg to 100 psi	-30 inHg 10 psi	-2 inHg 1 psi	-100 kPa to 680 kPa	-100 kPa 100 kPa	-10 kPa 10 kPa	-1 kg/cm ² to 7 kg/cm ²	-1 kg/cm ² 1 kg/cm ²	-0.1 kg/cm ² 0.1 kg/cm ²	-1 bar to 6.8 bar	-1 bar 1 bar	-0.1 bar 0.1 bar
-30 inHg to 160 psi	-30 inHg 20 psi	-5 inHg 2 psi	-100 kPa to 1,100 kPa	-100 kPa 200 kPa	-20 kPa 20 kPa	-1 kg/cm ² to 11.2 kg/cm ²	-1 kg/cm ² 2 kg/cm ²	-0.2 kg/cm ² 0.2 kg/cm ²	-1 bar to 11 bar	-1 bar 2 bar	-0.2 bar 0.2 bar
-30 inHg to 200 psi	-30 inHg 20 psi	-5 inHg 2 psi	-100 kPa to 1,360 kPa	-100 kPa 200 kPa	-20 kPa 20 kPa	-1 kg/cm ² to 14 kg/cm ²	-1 kg/cm ² 2 kg/cm ²	-0.2 kg/cm ² 0.2 kg/cm ²	-1 bar to 13.6 bar	-1 bar 2 bar	-0.2 bar 0.2 bar
0 psi to 15 psi	3 psi	0.1 psi	0 kPa to 103 kPa	30 kPa	1 kPa	0 kg/cm ² to 1.05 kg/cm ²	0.3 kg/cm ²	0.01 kg/cm ²	0 bar to 1.03 bar	0.3 bar	0.01 bar
0 psi to 30 psi	5 psi	0.2 psi	0 kPa to 206 kPa	50 kPa	2 kPa	0 kg/cm ² to 2.1 kg/cm ²	0.5 kg/cm ²	0.02 kg/cm ²	0 bar to 2.06 bar	0.5 bar	0.02 bar
0 psi to 60 psi	10 psi	0.4 psi	0 kPa to 412 kPa	100 kPa	4 kPa	0 kg/cm ² to 4.2 kg/cm ²	1 kg/cm ²	0.04 kg/cm ²	0 bar to 4.12 bar	1 bar	0.04 bar
0 psi to 100 psi	10 psi	1 psi	0 kPa to 680 kPa	100 kPa	10 kPa	0 kg/cm ² to 7 kg/cm ²	1 kg/cm ²	0.1 kg/cm ²	0 bar to 6.8 bar	1 bar	0.1 bar
0 psi to 160 psi	20 psi	1 psi	0 kPa to 1,100 kPa	200 kPa	10 kPa	0 kg/cm ² to 11.2 kg/cm ²	2 kg/cm ²	0.1 kg/cm ²	0 bar to 11 bar	2 bar	0.1 bar
0 psi to 200 psi	20 psi	2 psi	0 kPa to 1,360 kPa	200 kPa	20 kPa	0 kg/cm ² to 14 kg/cm ²	2 kg/cm ²	0.2 kg/cm ²	0 bar to 13.6 bar	2 bar	0.2 bar
0 psi to 300 psi	50 psi	2 psi	0 kPa to 2,060 kPa	500 kPa	20 kPa	0 kg/cm ² to 21 kg/cm ²	5 kg/cm ²	0.2 kg/cm ²	0 bar to 20.6 bar	5 bar	0.2 bar
0 psi to 400 psi	40 psi	4 psi	0 kPa to 2,720 kPa	400 kPa	40 kPa	0 kg/cm ² to 28 kg/cm ²	4 kg/cm ²	0.4 kg/cm ²	0 bar to 27.2 bar	4 bar	0.4 bar
0 psi to 600 psi	100 psi	4 psi	0 kPa to 4,120 kPa	1,000 kPa	40 kPa	0 kg/cm ² to 42 kg/cm ²	10 kg/cm ²	0.4 kg/cm ²	0 bar to 41.2 bar	10 bar	0.4 bar
0 psi to 1,000 psi	100 psi	10 psi	0 kPa to 6,800 kPa	1,000 kPa	100 kPa	0 kg/cm ² to 70 kg/cm ²	10 kg/cm ²	1 kg/cm ²	0 bar to 68 bar	10 bar	1 bar
0 psi to 1,500 psi	300 psi	10 psi	0 kPa to 10,300 kPa	3,000 kPa	100 kPa	0 kg/cm ² to 105 kg/cm ²	30 kg/cm ²	1 kg/cm ²	0 bar to 103 bar	30 bar	1 bar
0 psi to 2,000 psi	200 psi	20 psi	0 kPa to 13,600 kPa	2,000 kPa	200 kPa	0 kg/cm ² to 140 kg/cm ²	20 kg/cm ²	2 kg/cm ²	0 bar to 136 bar	20 bar	2 bar
0 psi to 3,000 psi	500 psi	20 psi	0 kPa to 20,600 kPa	5,000 kPa	200 kPa	0 kg/cm ² to 210 kg/cm ²	50 kg/cm ²	2 kg/cm ²	0 bar to 206 bar	50 bar	2 bar
0 psi to 5,000 psi	500 psi	50 psi	0 kPa to 34,000 kPa	5,000 kPa	500 kPa	0 kg/cm ² to 350 kg/cm ²	50 kg/cm ²	5 kg/cm ²	0 bar to 340 bar	50 bar	5 bar
0 psi to 6,000 psi	1,000 psi	40 psi	0 kPa to 41,200 kPa	10,000 kPa	400 kPa	0 kg/cm ² to 420 kg/cm ²	100 kg/cm ²	4 kg/cm ²	0 bar to 412 bar	100 bar	4 bar
0 psi to 10,000 psi	1,000 psi	100 psi	0 kPa to 68,000 kPa	10,000 kPa	1,000 kPa	0 kg/cm ² to 700 kg/cm ²	100 kg/cm ²	10 kg/cm ²	0 bar to 680 bar	100 bar	10 bar
0 psi to 15,000 psi	3,000 psi	100 psi	0 kPa to 103,000 kPa	30,000 kPa	1,000 kPa	0 kg/cm ² to 1,050 kg/cm ²	300 kg/cm ²	10 kg/cm ²	0 bar to 1,030 bar	300 bar	10 bar
0 psi to 20,000 psi	2,000 psi	200 psi	0 kPa to 136,000 kPa	20,000 kPa	2,000 kPa	0 kg/cm ² to 1,400 kg/cm ²	200 kg/cm ²	20 kg/cm ²	0 bar to 1,360 bar	200 bar	20 bar
0 psi to 30,000 psi	5,000 psi	200 psi	0 kPa to 206,000 kPa	50,000 kPa	2,000 kPa	0 kg/cm ² to 2,100 kg/cm ²	500 kg/cm ²	20 kg/cm ²	0 bar to 2,060 bar	500 bar	20 bar
0 psi to 40,000 psi	4,000 psi	400 psi	0 kPa to 272,000 kPa	40,000 kPa	4,000 kPa	0 kg/cm ² to 2,800 kg/cm ²	400 kg/cm ²	40 kg/cm ²	0 bar to 2,720 bar	400 bar	40 bar
0 psi to 50,000 psi	5,000 psi	500 psi	0 kPa to 340,000 kPa	50,000 kPa	5,000 kPa	0 kg/cm ² to 3,500 kg/cm ²	500 kg/cm ²	50 kg/cm ²	0 bar to 3,400 bar	500 bar	50 bar
0 psi to 60,000 psi	10,000 psi	400 psi	0 kPa to 412,000 kPa	100,000 kPa	4,000 kPa	0 kg/cm ² to 4,200 kg/cm ²	1,000 kg/cm ²	40 kg/cm ²	0 bar to 4,120 bar	1,000 bar	40 bar

Dial Indicating Gauge Accuracy/Standard Dial Configuration

100 Series Gauges: 1-1/2", 2" and 2-1/2"

Applies to:
400 Series Gauges: 1-1/2"

900 Series Gauges: 1-1/2" and 2"

ACCURACY: $\pm 2.5\%$ full scale											
Primary Scale			Secondary Scales								
Dial Range	Figure	Graduation	kPa	Figure	Graduation	kg/cm ²	Figure	Graduation	bar	Figure	Graduation
-30 inHg to 0 psi	-5 inHg	-0.5 inHg	-100 kPa to 0 kPa	-20 kPa	-5 kPa	-1 kg/cm ² to 0 kg/cm ²	-0.2 kg/cm ²	-0.05 kg/cm ²	-1 bar to 0 bar	-0.2 bar	-0.05 bar
-30 inHg to 15 psi	-10 inHg 5 psi	-1 inHg 0.5 psi	-100 kPa to 100 kPa	-50 kPa 50 kPa	-5 kPa 5 kPa	-1 kg/cm ² to 1.05 kg/cm ²	-0.5 kg/cm ² 0.5 kg/cm ²	-0.05 kg/cm ² 0.05 kg/cm ²	-1 bar to 1 bar	-0.5 bar 0.5 bar	-0.05 bar 0.05 bar
-30 inHg to 30 psi	-30 inHg 10 psi	-2 inHg 1 psi	-100 kPa to 200 kPa	-100 kPa 100 kPa	-10 kPa 10 kPa	-1 kg/cm ² to 2.10 kg/cm ²	-1 kg/cm ² 1 kg/cm ²	-0.1 kg/cm ² 0.1 kg/cm ²	-1 bar to 2 bar	-1 bar 1 bar	-0.1 bar 0.1 bar
-30 inHg to 60 psi	-30 inHg 20 psi	-5 inHg 2 psi	-100 kPa to 400 kPa	-100 kPa 200 kPa	-20 kPa 20 kPa	-1 kg/cm ² to 4.2 kg/cm ²	-1 kg/cm ² 2 kg/cm ²	-0.2 kg/cm ² 0.2 kg/cm ²	-1 bar to 4 bar	-1 bar 2 bar	-0.2 bar 0.2 bar
-30 inHg to 100 psi	-30 inHg 20 psi	-10 inHg 5 psi	-100 kPa to 680 kPa	-100 kPa 200 kPa	-50 kPa 50 kPa	-1 kg/cm ² to 7 kg/cm ²	-1 kg/cm ² 2 kg/cm ²	-0.5 kg/cm ² 0.5 kg/cm ²	-1 bar to 6.8 bar	-1 bar 2 bar	-0.5 bar 0.5 bar
-30 inHg to 160 psi	-30 inHg 40 psi	-10 inHg 4 psi	-100 kPa to 1,100 kPa	-100 kPa 400 kPa	-50 kPa 40 kPa	-1 kg/cm ² to 11.2 kg/cm ²	-1 kg/cm ² 4 kg/cm ²	-0.5 kg/cm ² 0.4 kg/cm ²	-1 bar to 11 bar	-1 bar 4 bar	-0.5 bar 0.4 bar
-30 inHg to 200 psi	-30 inHg 40 psi	-10 inHg 4 psi	-100 kPa to 1,360 kPa	-100 kPa 400 kPa	-50 kPa 40 kPa	-1 kg/cm ² to 14 kg/cm ²	-1 kg/cm ² 4 kg/cm ²	-0.5 kg/cm ² 0.4 kg/cm ²	-1 bar to 13.6 bar	-1 bar 4 bar	-0.5 bar 0.4 bar
-30 inHg to 300 psi	-30 inHg 100 psi	-30 inHg 10 psi	-100 kPa to 2,050 kPa	-100 kPa 1,000 kPa	-100 kPa 100 kPa	-1 kg/cm ² to 21 kg/cm ²	-1 kg/cm ² 10 kg/cm ²	-1 kg/cm ² 1 kg/cm ²	-1 bar to 20.5 bar	-1 bar 10 bar	-1 bar 1 bar
0 psi to 15 psi	3 psi	0.5 psi	0 kPa to 100 kPa	30 kPa	5 kPa	0 kg/cm ² to 1.05 kg/cm ²	0.3 kg/cm ²	0.05 kg/cm ²	0 bar to 1 bar	0.3 bar	0.05 bar
0 psi to 30 psi	5 psi	0.5 psi	0 kPa to 205 kPa	50 kPa	5 kPa	0 kg/cm ² to 2.1 kg/cm ²	0.5 kg/cm ²	0.05 kg/cm ²	0 bar to 2.05 bar	0.5 bar	0.05 bar
0 psi to 60 psi	10 psi	1 psi	0 kPa to 410 kPa	100 kPa	10 kPa	0 kg/cm ² to 4.2 kg/cm ²	1 kg/cm ²	0.1 kg/cm ²	0 bar to 4.1 bar	1 bar	0.1 bar
0 psi to 100 psi	20 psi	2 psi	0 kPa to 680 kPa	200 kPa	20 kPa	0 kg/cm ² to 7 kg/cm ²	2 kg/cm ²	0.2 kg/cm ²	0 bar to 6.8 bar	2 bar	0.2 bar
0 psi to 160 psi	40 psi	4 psi	0 kPa to 1,100 kPa	400 kPa	40 kPa	0 kg/cm ² to 11.2 kg/cm ²	4 kg/cm ²	0.4 kg/cm ²	0 bar to 11 bar	4 bar	0.4 bar
0 psi to 200 psi	40 psi	4 psi	0 kPa to 1,360 kPa	400 kPa	40 kPa	0 kg/cm ² to 14 kg/cm ²	4 kg/cm ²	0.4 kg/cm ²	0 bar to 13.6 bar	4 bar	0.4 bar
0 psi to 300 psi	50 psi	5 psi	0 kPa to 2,050 kPa	500 kPa	50 kPa	0 kg/cm ² to 21 kg/cm ²	5 kg/cm ²	0.5 kg/cm ²	0 bar to 20.5 bar	5 bar	0.5 bar
0 psi to 400 psi	100 psi	10 psi	0 kPa to 2,700 kPa	1,000 kPa	100 kPa	0 kg/cm ² to 28 kg/cm ²	10 kg/cm ²	1 kg/cm ²	0 bar to 27 bar	10 bar	1 bar
0 psi to 600 psi	100 psi	10 psi	0 kPa to 4,100 kPa	1,000 kPa	100 kPa	0 kg/cm ² to 42 kg/cm ²	10 kg/cm ²	1 kg/cm ²	0 bar to 41 bar	10 bar	1 bar
0 psi to 1,000 psi	200 psi	20 psi	0 kPa to 6,800 kPa	2,000 kPa	200 kPa	0 kg/cm ² to 70 kg/cm ²	20 kg/cm ²	2 kg/cm ²	0 bar to 68 bar	20 bar	2 bar
0 psi to 1,500 psi	300 psi	50 psi	0 kPa to 10,000 kPa	3,000 kPa	500 kPa	0 kg/cm ² to 105 kg/cm ²	30 kg/cm ²	5 kg/cm ²	0 bar to 100 bar	30 bar	5 bar
0 psi to 2,000 psi	400 psi	40 psi	0 kPa to 13,600 kPa	4,000 kPa	400 kPa	0 kg/cm ² to 140 kg/cm ²	40 kg/cm ²	4 kg/cm ²	0 bar to 136 bar	40 bar	4 bar
0 psi to 3,000 psi	500 psi	50 psi	0 kPa to 20,500 kPa	5,000 kPa	500 kPa	0 kg/cm ² to 210 kg/cm ²	50 kg/cm ²	5 kg/cm ²	0 bar to 205 bar	50 bar	5 bar
0 psi to 5,000 psi	1000 psi	100 psi	0 kPa to 34,000 kPa	10,000 kPa	1,000 kPa	0 kg/cm ² to 350 kg/cm ²	100 kg/cm ²	10 kg/cm ²	0 bar to 340 bar	100 bar	10 bar
0 psi to 6,000 psi	1000 psi	100 psi	0 kPa to 41,000 kPa	10,000 kPa	1,000 kPa	0 kg/cm ² to 420 kg/cm ²	100 kg/cm ²	10 kg/cm ²	0 bar to 410 bar	100 bar	10 bar



Shown with enhanced software.

1000 SERIES

- Rugged, electronic gauge
- Compound and standard ranges through 0 psig to 10,000 psig
- 3.31" gauge size
- Stainless Steel case
- Stainless Steel wetted parts
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- Hydraulics & pneumatics
- Laboratory & test equipment
- Leak detection
- Power generation
- Water management

OPTIONAL ENHANCED SOFTWARE FEATURES

- Tare function
- Password protection
- Min./max. memory
- Internal lighting
- 300° rotatable base



Optional Gauge Carrying Case

SPECIFICATIONS

Pressure ranges	0 psig to 72 psig through 0 psig to 10,000 psig Compound ranges available
Accuracy	±0.5% terminal point ±1 digit
Temperature ranges	Compensated 32 °F to 140 °F (0 °C to 60 °C) Effect ±0.15% per 10K at zero and span Span effect is ±0.005% full scale/ °F Media -22 °F to 185 °F (-30 °C to 85 °C) Ambient 14 °F to 140 °F (-10 °C to 60 °C) Storage -4 °F to 158 °F (-20 °C to 70 °C)
Measuring element	Stainless Steel, thin-film measuring element
Connection	1/4" NPT Male, 316 Stainless Steel
Case	Stainless Steel
Bezel	Stainless Steel triangular
Display	Liquid Crystal Display with 0.43" digits 4 digits up to 9999 with bar graph
Power requirement*	2 x 1.5V "AA" battery 4,000 hrs ("AA" 2000 mAh)
Response time	200 ms
Proof pressure	2 times full scale range, maximum 15,000 psi
Programmable functions	Adjustable through front key pad
Measuring units	bar, psi, MPa
Peak memory	min/max, display, hold
Environmental rating	IP65
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Weight	0.88 lb.

* Unregulated

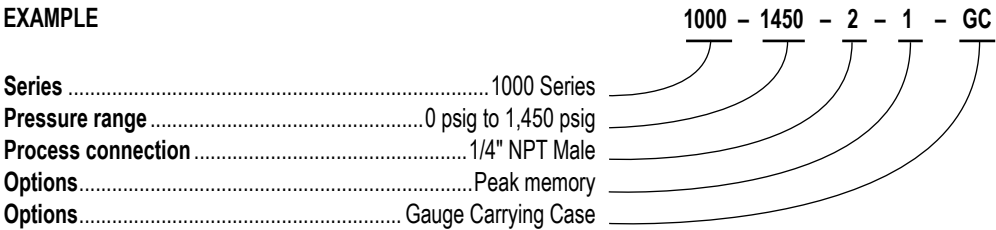


ORDERING INFORMATION				
SERIES	1000			
PRESSURE RANGES	30/72 -30 inHg to 0 to 72 psig	300 0 psig to 300 psig	2000 0 psig to 2,000 psig	6000 0 psig to 6,000 psig
	30/145 -30 inHg to 0 to 145 psig	600 0 psig to 600 psig	3000 0 psig to 3,000 psig	7500 0 psig to 7,500 psig
	145 0 psig to 145 psig psig = gauge pressure	1450 0 psig to 1,450 psig Other ranges available on request	5000 0 psig to 5,000 psig	10000 0 psig to 10,000 psig *
PROCESS CONNECTION	2 1/4" NPT male			
OPTIONS	1 Peak memory - standard	GC Gauge Carrying Case	RCP Rubber Case Protector	
	6 Enhanced software	ST8 Threaded Orifice		

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* Standard model will only display 9999 psig.

EXAMPLE





100 SERIES

- Vacuum and compound ranges through 0 psig to 15,000 psig
- Current output
- 316 and 17-4PH Stainless Steel wetted parts
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- HVAC
- Hydraulics & pneumatics
- Injection molding machines
- Railroad equipment
- Stamping & forming presses

SPECIFICATIONS

Output signal	4 mA to 20 mA, 2-wire
Pressure ranges	Vacuum through 0 psig to 15,000 psig Absolute from 0 psia to 15 psia through 0 psia to 300 psia
Accuracy	±0.5% full scale (BFSL); optional ±0.25% full scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±0.2% full scale for 1 year, non-accumulating
Adjustment	≤ ±10% full scale for zero and span
Response time	≤ 1 ms (between 10% and 90% full scale)
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Effect ±0.017% full scale/ °F for zero and span Media -22 °F to 212 °F (-30 °C to 100 °C) Ambient -40 °F to 185 °F (-40 °C to 85 °C) Storage -40 °F to 212 °F (-40 °C to 100 °C)
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire)
Load limitations	≤ (V _{power supply} - 10) / 0.020 Amp
Proof pressure	3 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 1.75 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 to 15,000 psi
Burst pressure	3.8 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 4 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 3 times full scale for 0 psi to 15,000 psi
Measuring element	316 Stainless Steel for vacuum through 300 psi; 17-4PH Stainless Steel for ≥500 psi
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Shock	1000 g's according to IEC 60068-2-27
Vibration	20 g's according to IEC 60068-2-6
Weight	Approximately 3.5 oz.

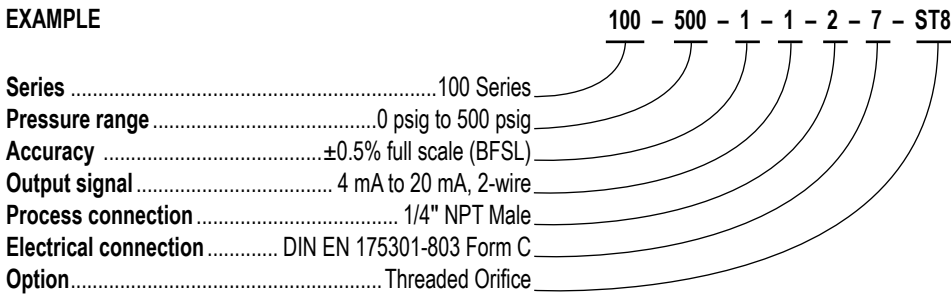
* Unregulated



ORDERING INFORMATION											
SERIES	100										
PRESSURE RANGES	30vac	-30 inHg to 0 psig	5	0 psig to 5 psig	200	0 psig to 200 psig	3000	0 psig to 3,000 psig	15A	0 psia to 15 psia	
	30/15	-30 inHg to 15 psig	10	0 psig to 10 psig	300	0 psig to 300 psig	4000	0 psig to 4,000 psig	30A	0 psia to 30 psia	
	30/30	-30 inHg to 30 psig	15	0 psig to 15 psig	500	0 psig to 500 psig	5000	0 psig to 5,000 psig	60A	0 psia to 60 psia	
	30/45	-30 inHg to 45 psig	25	0 psig to 25 psig	600	0 psig to 600 psig	6000	0 psig to 6,000 psig	100A	0 psia to 100 psia	
	30/100	-30 inHg to 100 psig	30	0 psig to 30 psig	750	0 psig to 750 psig	7500	0 psig to 7,500 psig	150A	0 psia to 150 psia	
	30/150	-30 inHg to 150 psig	60	0 psig to 60 psig	1000	0 psig to 1,000 psig	10000	0 psig to 10,000 psig	200A	0 psia to 200 psia	
	30/200	-30 inHg to 200 psig	100	0 psig to 100 psig	1500	0 psig to 1,500 psig	15000	0 psig to 15,000 psig	300A	0 psia to 300 psia	
	30/300	-30 inHg to 300 psig	150	0 psig to 150 psig	2000	0 psig to 2,000 psig					
			psig = gauge pressure		psia = absolute pressure		Other ranges available on request				
ACCURACIES	1	±0.5% full scale (BFSL)			2	±0.25% full scale (BFSL)					
OUTPUT SIGNAL	1	4 mA to 20 mA, 2-wire									
PROCESS CONNECTIONS	1	1/8" NPT male			3	SAE J1926-3:7/16-20 Adjustable			10	G1/4 male	
	2	1/4" NPT male			9	SAE J1926-1:7/16-20					
ELECTRICAL CONNECTIONS	1	DIN EN 175301-803 Form C w/ 36" cable			6	1/2" NPT conduit (with 36" cable)			25	M12 x 1 (4-pin)	
	2	4-pin Bayonet			7	DIN EN 175301-803 Form C					
	3	6-pin Bayonet			36	Integral cable 36"					
OPTION	ST8	Threaded Orifice									

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE



* Note: Mate supplied separately or customer supplied.



100 Series Wiring	4 mA to 20 mA	
CONNECTION TYPE (CODE)	V+	V-
DIN EN 175301-803 Form C (7)	1	2
DIN EN 175301-803 Form C w/ Cable (1)	Red	Black
4 or 6-Pin Bayonet (2 or 3)	A	B
1/2" NPT Conduit w/ Cable (6)	Red	Black
M12 x 1, 4-Pin (25)	1	3
Integral Cable (36)	Red	Black

Load Limitations 4 mA to 20 mA output	
V _{min}	= 10V + (.020 x RL)
RL	= Loop resistance (Ω) RL = RS + RW
RS	= Sensor resistance (Ω)
RW	= Wire resistance (Ω)



200 SERIES

- Ranges from vacuum to 0 psig to 15,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 300 psia
- Voltage output
- 316 and 17-4PH Stainless Steel wetted parts
- CE compliant to suppress RFI, EMI and ESD

SPECIFICATIONS

Output signals	0 Vdc to 5 Vdc, 3-wire; 0 Vdc to 10 Vdc, 3-wire; 1 Vdc to 5 Vdc, 3-wire; 1 Vdc to 6 Vdc, 3-wire; 1 Vdc to 11 Vdc, 3-wire
Pressure ranges	Vacuum through 0 psig to 15,000 psig Absolute from 0 psia to 15 psia through 0 psia to 300 psia
Accuracy	±0.5% full scale (BFSL); optional ±0.25% full scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±0.2% full scale per year, non-accumulating
Adjustment	±10% full scale for zero and span
Response time	≤ 1 ms (between 10% and 90% full scale)
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Effect ±0.017% full scale/ °F for zero and span Media -22 °F to 212 °F (-30 °C to 100 °C) Ambient -40 °F to 185 °F (-40 °C to 85 °C) Storage -40 °F to 212 °F (-40 °C to 100 °C)
Power requirement*	10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire, 1 Vdc to 5 Vdc, 3-wire, 1 Vdc to 6 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire, 1 Vdc to 11 Vdc, 3-wire)
Load limitations	≥ 5,000 Ω for 0 Vdc to 5 Vdc, 1 Vdc to 5 Vdc, and 1 Vdc to 6 Vdc outputs; ≥ 10,000 Ω for 0 Vdc to 10 Vdc and 1 Vdc to 11 Vdc outputs. Current consumption 8 mA
Proof pressure	3 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 1.75 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 psi to 15,000 psi
Burst pressure	3.8 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 4 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 3 times full scale for 0 psi to 15,000 psi
Measuring element	316 Stainless Steel for vacuum through 300 psi; 17-4PH Stainless Steel for ≥500 psi
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Shock	1,000 g's according to IEC 60068-2-27
Vibration	20 g's according to IEC 60068-2-6
Weight	Approximately 3.5 oz.

* Unregulated

APPLICATIONS

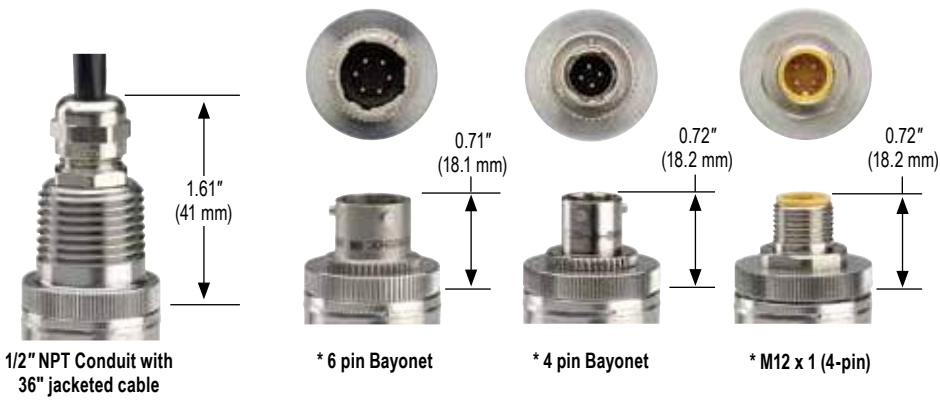
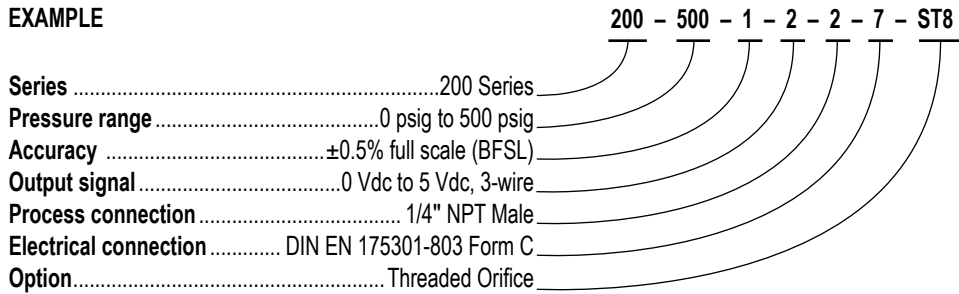
- HVAC
- Hydraulics & pneumatics
- Injection molding machines
- Railroad equipment
- Stamping & forming presses



ORDERING INFORMATION						
SERIES	200					
PRESSURE RANGES	30vac -30 inHg to 0 psig	30/300 -30 inHg to 300 psig	200 0 psig to 200 psig	3000 0 psig to 3,000 psig	15A 0 psia to 15 psia	
	30/15 -30 inHg to 15 psig	5 0 psig to 5 psig	300 0 psig to 300 psig	4000 0 psig to 4,000 psig	30A 0 psia to 30 psia	
	30/30 -30 inHg to 30 psig	10 0 psig to 10 psig	500 0 psig to 500 psig	5000 0 psig to 5,000 psig	60A 0 psia to 60 psia	
	30/45 -30 inHg to 45 psig	15 0 psig to 15 psig	600 0 psig to 600 psig	6000 0 psig to 6,000 psig	100A 0 psia to 100 psia	
	30/60 -30 inHg to 60 psig	30 0 psig to 30 psig	750 0 psig to 750 psig	7500 0 psig to 7,500 psig	150A 0 psia to 150 psia	
	30/100 -30 inHg to 100 psig	60 0 psig to 60 psig	1000 0 psig to 1,000 psig	10000 0 psig to 10,000 psig	200A 0 psia to 200 psia	
	30/150 -30 inHg to 150 psig	100 0 psig to 100 psig	1500 0 psig to 1,500 psig	15000 0 psig to 15,000 psig	300A 0 psia to 300 psia	
	30/200 -30 inHg to 200 psig	150 0 psig to 150 psig	2000 0 psig to 2,000 psig			
	psig = gauge pressure		psia = absolute pressure		Other ranges available on request	
ACCURACIES	1 ±0.5% full scale (BFSL)		2 ±0.25% full scale (BFSL)			
OUTPUT SIGNALS	2 0 Vdc to 5 Vdc, 3-wire	3 1 Vdc to 5 Vdc, 3-wire	4 1 Vdc to 6 Vdc, 3-wire	5 0 Vdc to 10 Vdc, 3-wire	6 1 Vdc to 11 Vdc, 3-wire	
PROCESS CONNECTIONS	1 1/8" NPT male	3 SAE J1926-3:7/16-20 adjustable			10 G1/4 male	
	2 1/4" NPT male	9 SAE J1926-1:7/16-20				
ELECTRICAL CONNECTION	1 DIN EN 175301-803 Form C w/ 36" Cable		6 1/2" NPT conduit (with 36" cable)		25 M12 x 1 (4-pin)	
	2 4-pin Bayonet		7 DIN EN 175301-803 Form C		36 Integral cable 36"	
	3 6-pin Bayonet					
	NOTE: 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc outputs are also available in 4-wire configurations for use with other electrical systems.					
OPTION	ST8 Threaded Orifice					

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE



200 Series Wiring	0-5 Vdc, 1-5 Vdc, 1-6 Vdc, 0-10 Vdc, 1-11 Vdc		
CONNECTION TYPE (CODE)	V+	COMMON	OUTPUT
DIN EN 175301-803 Form C (7)	1	2	3
DIN EN 175301-803 Form C w/ Cable (1)	Red	Black	White
4 or 6-Pin Bayonet (2 or 3)	A	B	C
1/2" NPT Conduit w/ Cable (6)	Red	Black	White
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (36)	Red	Black	White

* Note: mate supplied separately or customer supplied

Small Diameter Submersible



Shown with optional
NPT conduit and
optional FEP cable

APPLICATIONS

- Well head measurement
- Groundwater monitoring
- Level measurement in open bodies of water
- Sewage lift and pumping stations
- Setting ponds and rainwater basins

611 SERIES

- Hydrostatic level measurement for use in applications including bore holes and wells with small diameters (outer diameter 0.87")
- Low power output signals for battery-powered applications, and optional temperature output available
- 5:1 turndown using optional HART® signal
- 316L Stainless Steel, PVDF and polyurethane wetted parts
- CE compliant to suppress RFI, EMI and ESD
- Certifications pending:
 - ATEX
 - CSA
 - IECEx

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire 4 mA to 20 mA + HART®, 2-wire 4 mA to 20 mA x 2 (pressure and temperature)* 0.1 Vdc to 2.5 Vdc, 3-wire 0.1 Vdc to 2.5 Vdc x 2 (pressure and temperature)*
Pressure ranges**	0 inH ₂ O to 50 inH ₂ O through 0 psig to 100 psig
Accuracy	± 1.0% of span (± 0.5% of span optional) Includes non-linearity, hysteresis, zero offset and end value deviation per IEC 61298-2 Accuracy after turndown via HART®, ≤ ±1.25% of scaled span (0.75% optional) Temperature sensor 14 °F to 176 °F (-10 °C to 80 °C): ≤ ± 3.3 °F
Stability	≤ ± 0.1% of span per year
Switch on time	Output signals without HART®: ≤150 ms Output signals with HART®: ≤250 ms
Settling time	Output signals without HART®: ≤100 ms Output signals with HART®: ≤250 ms
Durability	> 100,000,000 full scale cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Effect ± 0.01%/ °F for zero and span Standard Media 14 °F to 122 °F (-10 °C to 50 °C) Optional Media -40 °F to 176 °F (-40 °C to 80 °C) Storage -40 °F to 176 °F (-40 °C to 80 °C)
Power requirement***	4mA to 20 mA: 8 Vdc to 36 Vdc 4 mA to 20 mA and HART®: 12-36 Vdc 0.1 to 2.5 Vdc: 3.6 - 36 Vdc
Load limitations	4 mA to 20 mA: ≤ (Vpower - 8 V) / 0.022 A 4 mA to 20 mA and HART®: ≤ (Vpower - 9.6 V) / 0.022 A
Proof pressure	5 times range
Measuring element	Cap: PVDF Sensor: 316 stainless steel, optional Hastelloy C-276 Cable: Polyurethane, optional FEP
Connection	316 stainless steel
Housing material	316 stainless steel, 318 LN optional
Environmental rating	IP68
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014 RFI, EMI and ESD protection
Electrical protection	Reverse polarity protection, short circuit and resistance to overvoltage :DC 40V and increased overvoltage for lightning protection. Normal discharge current ≥10 kA, Rise time 8/20 μs
Max. submersion depth	325 ft./100 meters
Vibration	4 g's according to IEC 60068-2-6
Weight	Approximately 10.6 oz. with standard nosecone - cable .5 lb per 10 ft.

* Temperature measurement is based on the media temperature range

** Other ranges and measuring units available including bar, mbar, MPa, kPa, and mH₂O

*** Unregulated



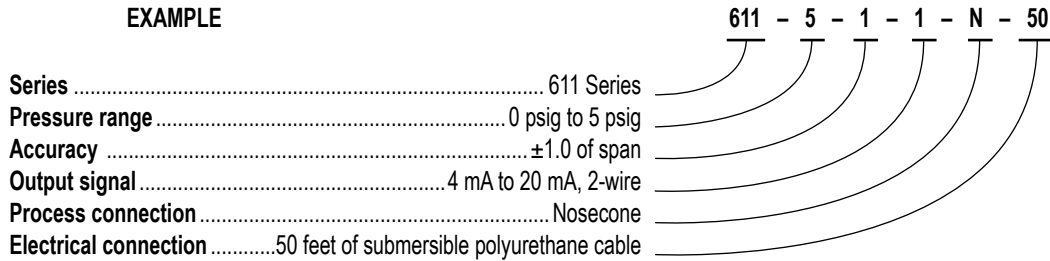
WARNING: This product can expose you to chemicals including Nickel, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

ORDERING INFORMATION					
SERIES	611		611H 318LN/Hastelloy C-276		
PRESSURE RANGES	50 inH₂O 0 inH ₂ O to 50 inH ₂ O	5 0 psig to 5 psig (11.5 ftH ₂ O)	50 0 psig to 50 psig (115 ftH ₂ O)	100A 0 psia to 100 psia	
	100 inH₂O 0 inH ₂ O to 100 inH ₂ O	10 0 psig to 10 psig (23.1 ftH ₂ O)	100 0 psig to 100 psig (230.8 ftH ₂ O)		
	150 inH₂O 0 inH ₂ O to 150 inH ₂ O	15 0 psig to 15 psig (34.6 ftH ₂ O)	25A 0 psia to 25 psia		
	250 inH₂O 0 inH ₂ O to 250 inH ₂ O	25 0 psig to 25 psig (57.7 ftH ₂ O)	50A 0 psia to 50 psia		
	psig = gauge pressure psia = absolute pressure Other ranges and measuring units available on request				
ACCURACIES	1 ±1.0 of span		2 ±0.5% of span		
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire		48 0.1 Vdc to 2.5 Vdc, 3 wire**		
	43 4 mA to 20 mA, 2-wire and HART® signal		49 0.1 Vdc to 2.5 Vdc x 2 (pressure and temperature) *, **		
	47 4 mA to 20 mA x 2 (pressure and temperature)*				
PROCESS CONNECTIONS	N Nosecone		W Weighted nosecone		
ELECTRICAL CONNECTIONS	XX Standard polyurethane (PUR) cable		62-XX Polyurethane (PUR) cable with 1/2" NPT conduit connection		
	38-XX Optional FEP cable		63-XX FEP cable with 1/2" NPT conduit connection		
	NOTE: XX = length of cable in feet				
OPTIONS	CBC Cable Clamp	LP Lightning Protection	JB Cable Junction Box (NEMA 4X)	HT Increased media temperature (-40 °F to 176 °F)	

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* Temperature measurement is based on the media temperature range
 ** Low power is optimized for battery operation

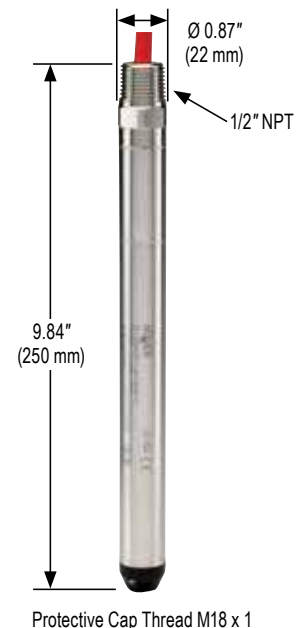
EXAMPLE



WIRING CODE SCHEMATICS

	Wiring	Cable
4 mA to 20 mA & 4 mA to 20 mA, 2-wire and Hart signal®	V+	Brown
	V-	Blue
	Case Ground	Grey
4 mA to 20 mA x 2 (pressure and temperature)	V+ (pressure sensor)	Brown
	V- (pressure sensor)	Blue
	V+ (temperature sensor)	Green
	V- (temperature sensor)	White
	Case Ground	Grey
0.1 Vdc to 2.5 Vdc, 3 wire	V+	Brown
	Common	Blue
	Output	Black
	Case Ground	Grey
0.1 Vdc to 2.5 Vdc x 2 (pressure and temperature)	V+	Brown
	V-	Bue
	Output (pressure sensor)	Black
	Output (temperature sensor)	Green
	Case Ground	Grey

With protective cap





612 SERIES

- Ranges from 0 inH₂O to 50 inH₂O through 0 psig to 1,000 psig
- Current and voltage outputs available
- 316 Stainless Steel, polyamide and polyurethane wetted parts
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- Irrigation
- Tank monitoring
- Water & wastewater
- Well head measurement

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc, 3-wire; 0.5 Vdc to 2.5 Vdc, 3-wire
Pressure ranges	0 inH ₂ O to 50 inH ₂ O through 0 psig to 1,000 psig
Accuracy	± 0.25% full scale (BFSL); optional ± 0.125% full scale (BFSL); (includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ± 0.2% full scale for 1 year, non-accumulating
Response time	≤ 1 ms (between 10% and 90% full scale)
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 122 °F/0 °C to 50 °C Effect ± 0.01%/ °F for zero and span Media 14 °F to 122 °F / -10 °C to 50 °C Storage -22 °F to 175 °F/-30 °C to 80 °C
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire, 0 Vdc to 5 Vdc, 3-wire) 5 Vdc to 30 Vdc (0.5 Vdc to 2.5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire)
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 0 Vdc to 10 Vdc, 3-wire ≥ 5,000 Ω for 0 Vdc to 5 Vdc, 3-wire
Proof pressure	2 times range
Burst pressure	4 times range
Measuring element	Cap: Polyamide, 316 Stainless Steel with weighted nosecone Cable: Polyurethane, optional FEP or PVC with double water block
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP68
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity protection, short circuit and optional lightning protection per EN 6100-4-5; 1.5J
Shock	100 g's according to IEC 60068-2-27
Vibration	15 g's according to IEC 60068-2-6
Weight	Approximately 7 oz. with standard nosecone - cable extra

* Unregulated



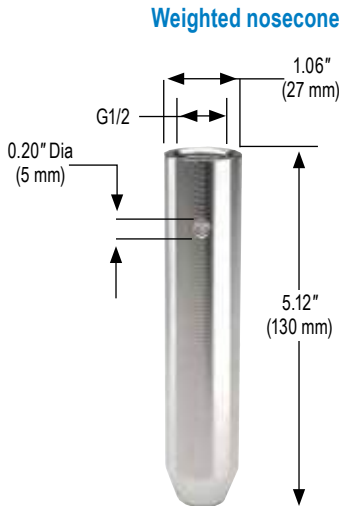
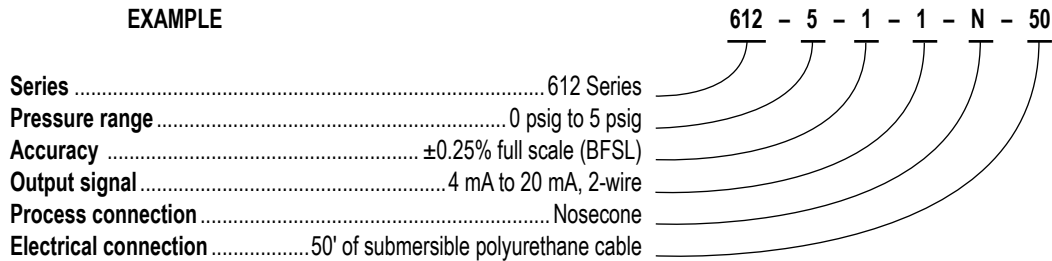
ORDERING INFORMATION												
SERIES	612											
PRESSURE RANGES	50 inH ₂ O	0 inH ₂ O to 50 inH ₂ O	2	0 psig to 2 psig (4.6 ftH ₂ O)	20	0 psig to 20 psig (46.2 ftH ₂ O)	200	0 psig to 200 psig (461.3 ftH ₂ O)				
	100 inH ₂ O	0 inH ₂ O to 100 inH ₂ O	3	0 psig to 3 psig (6.9 ftH ₂ O)	25	0 psig to 25 psig (57.7 ftH ₂ O)	300	0 psig to 300 psig (692.5 ftH ₂ O)				
	150 inH ₂ O	0 inH ₂ O to 150 inH ₂ O	5	0 psig to 5 psig (11.5 ftH ₂ O)	30	0 psig to 30 psig (69.2 ftH ₂ O)	350	0 psig to 350 psig (807.9 ftH ₂ O) *				
	200 inH ₂ O	0 inH ₂ O to 200 inH ₂ O	10	0 psig to 10 psig (23.1 ftH ₂ O)	60	0 psig to 60 psig (138.5 ftH ₂ O)	500	0 psig to 500 psig (1154.2 ftH ₂ O) *				
	400 inH ₂ O	0 inH ₂ O to 400 inH ₂ O	15	0 psig to 15 psig (34.6 ftH ₂ O)	100	0 psig to 100 psig (230.8 ftH ₂ O)	750	0 psig to 750 psig (1733.3 ftH ₂ O) *				
	psig = gauge pressure Other ranges available on request				150	0 psig to 150 psig (346.3 ftH ₂ O)	1000	0 psig to 1,000 psig (2311.0 ftH ₂ O) *				
ACCURACIES	1		±0.25% full scale (BFSL)		2		±0.125% full scale (BFSL)					
OUTPUT SIGNALS	1			4 mA to 20 mA, 2-wire			5			0 Vdc to 10 Vdc, 3-wire		
	2			0 Vdc to 5 Vdc, 3-wire			11			0.5 Vdc to 2.5 Vdc, 3-wire		
PROCESS CONNECTIONS	N						Nosecone					
	T						G 1/2 B x 1/2" NPT male with 1/4" NPT female					
ELECTRICAL CONNECTIONS	XX			Standard polyurethane (PUR) cable			38-XX			Optional FEP cable		
	22-XX			Optional water-blocked PVC cable (>200 psi only)								
	NOTE: XX = length of cable in feet.											
OPTIONS	PT1		PT100 RTD **		CBC		Cable Clamp		FE		Filter Element	
	DC		Desiccant Cartridge		LP		Lightning Protection **		JB		Cable Junction Box	

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* Only available with 4-20 mA output

** Not available for FEP/PVC cable or Water-Block PVC cable

EXAMPLE



612 Series Wiring	4 mA to 20 mA		
CONNECTION TYPE (CODE)	V+	V-	CASE GROUND
PUR Cable	Brown	Green	Gray
FEP Cable	Brown	White	Blue

612 Series Wiring	0-5 Vdc, 0-10 Vdc, 0.5 to 2.5 Vdc			
CONNECTION TYPE (CODE)	V+	COMMON	OUTPUT	CASE GROUND
PUR Cable	Brown	Green	White	Gray
FEP Cable	Brown	Green	White	Gray

Load Limitations 4 mA to 20 mA output	
V _{min}	= [10V + (.020 x RL)] - RC
RL	= RS + RW
RL	= Loop resistance (Ω)
RS	= Sensor resistance (Ω)
RW	= Wire resistance (Ω)
RC	= 0.0435 x cable length (ft.)

Cage-Protected Submersible



613 SERIES

- Ranges from 0 psi to 5 psi through 0 psi to 300 psi
- Current & voltage outputs available
- 316 Stainless Steel and polyurethane wetted parts
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- Lift stations
- Sewage
- Slurry tanks
- Storm canals
- Water & wastewater
- Wet wells

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc, 3-wire; 0.5 Vdc to 2.5 Vdc, 3-wire
Pressure ranges	0 psi to 5 psi through 0 psi to 300 psi
Accuracy	± 0.25% full scale (BFSL); optional ± 0.125% full scale (BFSL); (includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ± 0.2% full scale for 1 year, non-accumulating
Response time	≤ 1 ms (between 10% and 90% full scale)
Service life	> 100,000,000 full scale cycles
Temperature measurement	Optional PT100, 4-wire per IEC 60751
Temperature ranges	Compensated 32 °F to 122 °F/0 °C to 50 °C Effect ± 0.01%/ °F for zero and span Media 14 °F to 122 °F / -10 °C to 50 °C Storage -22 °F to 175 °F/ -30 °C to 80 °C
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire, 0 Vdc to 5 Vdc, 3-wire) 5 Vdc to 30 Vdc (0.5 Vdc to 2.5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire)
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 0 Vdc to 10 Vdc, 3-wire ≥ 5,000 Ω for 0 Vdc to 5 Vdc, 3-wire
Proof pressure	2 times range
Burst pressure	4 times range
Measuring element	Cage seal: All 316 Stainless Steel Cable: Polyurethane, optional FEP
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP68
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity protection, short circuit and optional lightning protection per EN 6100-4-5; 1.5J
Shock	100 g's according to IEC 60068-2-27
Vibration	15 g's according to IEC 60068-2-6
Weight	Approximately 3.2 lb. - cable extra

* Unregulated



WARNING: This product can expose you to chemicals including Nickel, which is 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				
SERIES	613			
PRESSURE RANGES	5 0 psi to 5 psi (11.55 ft/H ₂ O)	20 0 psi to 20 psi (46.20 ft/H ₂ O)	75 0 psi to 75 psi (173.25 ft/H ₂ O)	300 0 psi to 300 psi (693 ft/H ₂ O)
	10 0 psi to 10 psi (23.10 ft/H ₂ O)	30 0 psi to 30 psi (69.30 ft/H ₂ O)	100 0 psi to 100 psi (231.00 ft/H ₂ O)	
	15 0 psi to 15 psi (34.65 ft/H ₂ O)	50 0 psi to 50 psi (115.50 ft/H ₂ O)	150 0 psi to 150 psi (346.50 ft/H ₂ O)	
ACCURACIES	1 ±0.25% full scale (BFSL)		2 ±0.125% full scale (BFSL)	
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire		5 0 Vdc to 10 Vdc, 3-wire	
	2 0 Vdc to 5 Vdc, 3-wire		11 0.5 Vdc to 2.5 Vdc, 3-wire	
ELECTRICAL CONNECTIONS	XX Standard polyurethane (PUR) cable		38-XX Optional FEP cable	
	NOTE: XX = length of cable in feet.			
OPTIONS	CBC Cable Clamp	FE Filter Element	LP Lightning Protection *	PT1 PT100 RTD *
	DC Desiccant Cartridge	JB Cable Junction Box	LR Lifting Ring	

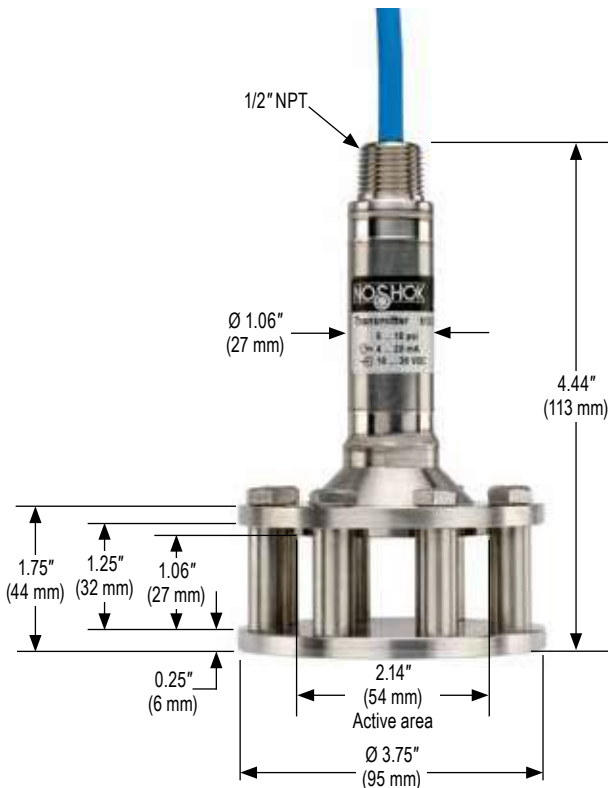
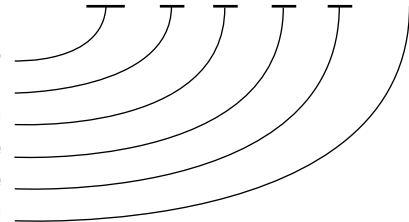
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* Only available with PUR cable

EXAMPLE

Series613 Series
 Pressure range0 psi to 5 psi
 Accuracy±0.25% full scale (BFSL)
 Output signal4 mA to 20 mA, 2-wire
 Electrical connection50' of submersible polyurethane cable
 OptionLifting Ring

613 - 5 - 1 - 1 - 50' - LR



Optional Cable Clamp



Optional Cable Junction Box



Optional Desiccant Cartridge



Optional Filter Element



Optional Lifting Ring

613 Series Wiring	4 mA to 20 mA		
CONNECTION TYPE (CODE)	V+	V-	CASE GROUND
PUR Cable	Brown	Green	Gray
FEP Cable	Brown	White	Blue

613 Series Wiring	0-5 Vdc, 0-10 Vdc, 0.5 to 2.5 Vdc			
CONNECTION TYPE (CODE)	V+	COMMON	OUTPUT	CASE GROUND
PUR Cable	Brown	Green	White	Gray
FEP Cable	Brown	Green	White	Gray

Load Limitations 4 mA to 20 mA output	
V _{min}	= [10V + (.020 x RL)] - RC
RL	= RS + RW
RL	= Loop resistance (Ω)
RS	= Sensor resistance (Ω)
RW	= Wire resistance (Ω)
RC	= 0.0435 $\frac{\Omega}{ft}$ x cable length (ft.)



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High Accuracy Heavy-Duty



High pressure model

APPLICATIONS

- Construction
- Hydraulics & pneumatics
- Laboratory & test equipment
- Power generation
- Stamping & forming presses
- Transportation



Also available with our 1800 Series Attachable Loop Indicator. Visit www.noshok.com for more information.

615/616 SERIES

- Vacuum ranges through 0 psig to 145,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 300 psia
- Current and voltage outputs available
- 316 and 17-4PH Stainless Steel wetted parts
- CE compliant to suppress RFI, EMI and ESD

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc, 0 Vdc to 10 Vdc, 1 Vdc to 5 Vdc, 3-wire
Pressure ranges	Vacuum through 0 psig to 145,000 psig Absolute from 0 psia to 15 psia through 0 psia to 300 psia
Accuracy	± 0.25% full scale (BFSL); optional ± 0.125% full scale (BFSL); (includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±0.2% full scale for 1 year, non-accumulating
Adjustment	± 10% full scale for zero and span
Response time	Less than 1 ms (between 10% and 90% full scale)
Service life	>100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 175 °F (0 °C to 80 °C) Effect ± 0.01%/ °F for zero and span Media -20 °F to 212 °F (-30 °C to 100 °C) Ambient -15 °F to 175 °F (-10 °C to 80 °C) Storage -40 °F to 212 °F (-40 °C to 100 °C)
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire, 1 Vdc to 5 Vdc, 3-wire, 1 Vdc to 6 Vdc, 3-wire, 0 Vdc to 5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire, 1 Vdc to 11 Vdc, 3-wire)
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 0 Vdc to 10 Vdc, 3-wire ≥ 5,000 Ω for 0 Vdc to 5 Vdc, 3-wire
Proof pressure	3 times full scale for ranges 0 psi to 2 psi through 0 psi to 200 psi 1.75 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 psi to 15,000 psi 1.2 times full scale for ranges 0 psi to 20,000 psi through 0 psi to 145,000 psi
Burst pressure	3.8 times full scale for ranges 0 psi to 2 psi through 0 psi to 200 psi 4 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 3 times full scale for 0 psi to 15,000 psi 1.5 times full scale for ranges 0 psi to 20,000 psi through 0 psi to 145,000 psi
Measuring element	316 Stainless Steel for vacuum through 300 psi; 17-4PH Stainless Steel for ≥500 psi
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, overvoltage and short circuit protection
Shock	1,000 g's according to IEC 60068-2-27
Vibration	15 g's according to IEC 60068-2-6
Weight	Approximately 7.2 oz.

* Unregulated



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ORDERING INFORMATION													
SERIES	615 (Internal diaphragm)			616 (Front flush diaphragm)									
PRESSURE RANGES	30vac	-30 inHg to 0 psig	2	0 psig to 2 psig	150	0 psig to 150 psig	2000	0 psig to 2,000 psig	20000	0 psig to 20,000 psig *	145000	0 psig to 145,000 psig	
	30/15	-30 inHg to 15 psig	3	0 psig to 3 psig	200	0 psig to 200 psig	3000	0 psig to 3,000 psig	30000	0 psig to 30,000 psig	15A	0 psia to 15 psia	
	30/30	-30 inHg to 30 psig	5	0 psig to 5 psig	300	0 psig to 300 psig	4000	0 psig to 4,000 psig	36000	0 psig to 36,000 psig	30A	0 psia to 30 psia	
	30/60	-30 inHg to 60 psig	10	0 psig to 10 psig	500	0 psig to 500 psig	5000	0 psig to 5,000 psig	58000	0 psig to 58,000 psig	60A	0 psia to 60 psia	
	30/100	-30 inHg to 100 psig	15	0 psig to 15 psig	600	0 psig to 600 psig	6000	0 psig to 6,000 psig	72000	0 psig to 72,000 psig	100A	0 psia to 100 psia	
	30/150	-30 inHg to 150 psig	30	0 psig to 30 psig	750	0 psig to 750 psig	7500	0 psig to 7,500 psig	87000	0 psig to 87,000 psig	150A	0 psia to 150 psia	
	30/200	-30 inHg to 200 psig	60	0 psig to 60 psig	1000	0 psig to 1,000 psig	10000	0 psig to 10,000 psig	100000	0 psig to 100,000 psig	200A	0 psia to 200 psia	
	30/300	-30 inHg to 300 psig	100	0 psig to 100 psig	1500	0 psig to 1,500 psig	15000	0 psig to 15,000 psig	115000	0 psig to 115,000 psig	300A	0 psia to 300 psia	
psig = gauge pressure psia = absolute pressure Other ranges available on request Note: 616 Series is available for pressure ranges up to 0 psig to 8,000 psig													
ACCURACIES	1	±0.25% full scale (BFSL)			2	±0.125% full scale (BFSL)							
OUTPUT SIGNALS	1	4 mA to 20 mA, 2-wire			3	1 Vdc to 5 Vdc, 3-wire			NOTE: 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc outputs are also available in 4-wire configurations for use with other electrical systems.				
	2	0 Vdc to 5 Vdc, 3-wire			5	0 Vdc to 10 Vdc, 3-wire							
PROCESS CONNECTIONS	615:	2	1/4" NPT male			6	9/16" -18 UNF 2B high pressure cone ** (Standard on 30,000 to 120,000 psig)			8			1/2" NPT male
	616:	11	G 1/2 B (Pressure ranges ≥ 0 psig to 30 psig)			13	G 1 B (Pressure ranges ≤ 0 psig to 30 psig)			Other connections available upon request			
ELECTRICAL CONNECTIONS	1	DIN EN 175301-803 Form A w/ 36" Cable			8	DIN EN 175301-803 Form A			25				M12 x 1 (4-pin)
	3	6-pin Bayonet			14	DIN EN 175301-803 Form A with 1/2" NPT female conduit			36				Integral 36" cable
	6	1/2" NPT conduit w/ 36" cable											
OPTIONS	ST8	SS Threaded Orifice			G1	G 1 Weld-on adapter (616 only)			G½				G 1/2 Weld-on adapter (616 only)

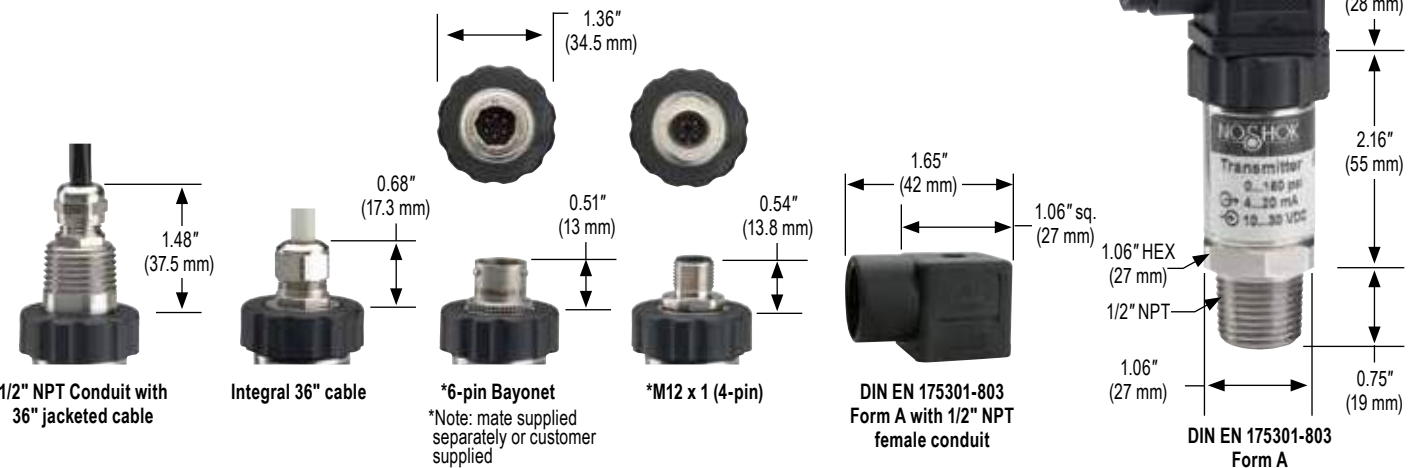
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* Not available with 1/4" NPT
 ** Equivalent to F250C Parker Autoclave

EXAMPLE

Series 615 Series
 Pressure range 0 psig to 500 psig
 Accuracy ±0.25% full scale (BFSL)
 Output signal 4 mA to 20 mA, 2-wire
 Process connection 1/2" NPT Male
 Electrical connection DIN EN 175301-803 Form A w/ 36" Cable
 Option Threaded Orifice

615 - 500 - 1 - 1 - 8 - 1 - ST8



615/616 Series Wiring	4 mA to 20 mA	
CONNECTION TYPE (CODE)	V+	V-
DIN EN 175301-803 Form A (8 or 14)	1	2
DIN EN 175301-803 Form A w/ Cable (1)	Red	Black
6-Pin Bayonet (3)	A	B
1/2" NPT Conduit w/ Cable (6)	Red	Black
M12 x 1, 4-Pin (25)	1	3
Integral Cable (36)	Red	Black

615/616 Series Wiring	0-5 Vdc, 1-5 Vdc, 1-6 Vdc, 0-10 Vdc, 1-11 Vdc		
CONNECTION TYPE (CODE)	V+	COMMON	OUTPUT
DIN EN 175301-803 Form A (8 or 14)	1	2	3
DIN EN 175301-803 Form A w/ Cable (1)	Red	Black	White
6-Pin Bayonet (3)	A	B	C
1/2" NPT Conduit w/ Cable (6)	Red	Black	White
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (36)	Red	Black	White

Load Limitations 4 mA to 20 mA output	
Vmin	= 10V + (.020 x RL)
RL	= Loop resistance (Ω)
	RL = RS + RW
RS	= Sensor resistance (Ω)
RW	= Wire resistance (Ω)



640 SERIES

- Vacuum ranges through 0 psig to 15,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 300 psia
- Standard 4 mA to 20 mA output
- 316 and 17-4PH Stainless Steel wetted parts
- CE compliant to suppress RFI, EMI and ESD

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc, 3-wire
Pressure ranges	Vacuum through 0 psig to 15,000 psig Absolute from 0 to 15 psia through 0 psia to 300 psia
Accuracy	±0.05% full scale (BFSL); optional ±0.025% full scale (BFSL); (includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±0.1% full scale; 5 psi ±0.2% full scale per year
Response time	< 300 ms (between 10% to 90% full scale)
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 160 °F (0 °C to 70 °C) Effect: ±0.005% / °F (32 °F to 50 °F) to zero point and pressure range no effect (50 °F to 104 °F) for zero and span ±0.005% / °F (104 °F to 158 °F) to zero point and pressure range Media - 5 °F to 160 °F (-20 °C to 70 °C) Ambient 32 °F to 160 °F (0 °C to 70 °C) Storage -5 °F to 160 °F (-20 °C to 70 °C)
Power requirement*	9 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire, 0 Vdc to 5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire) Voltage supply via RS232 interface (RS232)
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 0 Vdc to 10 Vdc, 3-wire ≥ 5,000 Ω for 0 Vdc to 5 Vdc, 3-wire
Proof pressure	3 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 2 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 psi to 15,000 psi
Burst pressure	4 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 4 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 3 times full scale for 0 psi to 15,000 psi
Measuring element	316 Stainless Steel for vacuum through 300 psi; 17-4PH Stainless Steel for ≥500 psi
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, overvoltage and short circuit protection
Shock	100 g's according to IEC 60068-2-27
Vibration	15 g's according to IEC 60068-2-6
Weight	Approximately 11 oz.

* Unregulated

APPLICATIONS

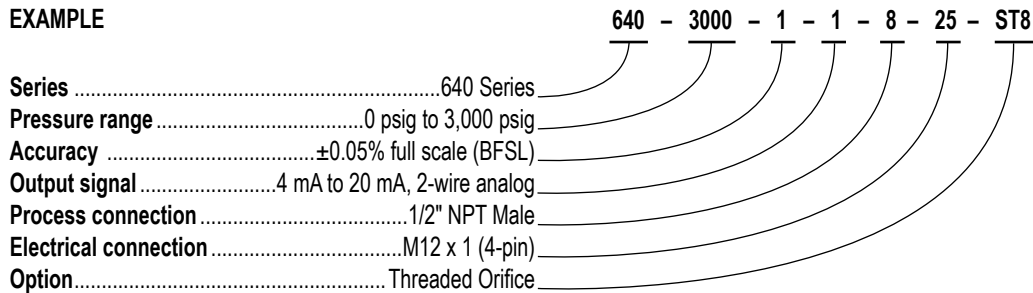
- Aerospace equipment
- Laboratory & test equipment
- Precision measurement



ORDERING INFORMATION											
SERIES	640										
PRESSURE RANGES	30vac	-30 inHg to 0 psig	30/300	-30 inHg to 300 psig	150	0 psig to 150 psig	3000	0 psig to 3,000 psig	30A	0 psia to 30 psia	
	30/15	-30 inHg to 15 psig	5	0 psig to 5 psig	200	0 psig to 200 psig	5000	0 psig to 5,000 psig	60A	0 psia to 60 psia	
	30/30	-30 inHg to 30 psig	10	0 psig to 10 psig	300	0 psig to 300 psig	6000	0 psig to 6,000 psig	100A	0 psia to 100 psia	
	30/60	-30 inHg to 60 psig	15	0 psig to 15 psig	500	0 psig to 500 psig	7500	0 psia to 7,500 psig	150A	0 psia to 150 psia	
	30/100	-30 inHg to 100 psig	30	0 psig to 30 psig	750	0 psig to 750 psig	10000	0 psia to 10,000 psig	200A	0 psia to 200 psia	
	30/150	-30 inHg to 150 psig	60	0 psig to 60 psig	1000	0 psig to 1,000 psig	15000	0 psia to 15,000 psig	300A	0 psia to 300 psia	
	30/200	-30 inHg to 200 psig	100	0 psig to 100 psig	2000	0 psig to 2,000 psig	15A	0 psia to 15 psia			
	psig = gauge pressure psia = absolute pressure Other ranges available on request										
ACCURACIES	1 ±0.05% full scale (BFSL)			2 ±0.025% full scale (BFSL)							
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire analog				5 0 Vdc to 10 Vdc, 3-wire analog						
	2 0 Vdc to 5 Vdc, 3-wire analog										
PROCESS CONNECTIONS	2 1/4" NPT male				8 1/2" NPT male; other connections available upon request						
ELECTRICAL CONNECTIONS	1 54" Integral cable				25 M12 x 1 (4-pin)						
OPTION	ST8 Threaded Orifice										

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE



Load Limitations 4 mA to 20 mA output	
V _{min}	= 10V + (.020 x RL)
RL	= Loop resistance (Ω) RL = RS + RW
RS	= Sensor resistance (Ω)
RW	= Wire resistance (Ω)

640 Series Wiring	4 mA to 20 mA	
CONNECTION TYPE (CODE)	V+	V-
M12 x 1, 4-Pin (25)	1	3
Integral Cable (1)	Brown	Blue

640 Series Wiring	0-5 Vdc, 0-10 Vdc, 0-20 mA		
CONNECTION TYPE (CODE)	V+	COMMON	OUTPUT
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (1)	Brown	Blue	Black



660 SERIES

- Ranges from 0 psig to 200 through 0 psig to 15,000 psig
- Current & voltage outputs available
- Stainless Steel wetted parts
- 1.0 mm standard orifice size for improved performance in dynamic applications
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- Hydraulics & pneumatics
- Mobile hydraulics
- Power generation
- Pumps & compressors
- Refrigeration controls

SPECIFICATIONS

Output signals	4 mA to 20 mA 2-wire, 1 Vdc to 5 Vdc 3-wire; 0.1 Vdc to 10 Vdc, 3-wire
Pressure ranges	0 psig to 200 psig through 0 psig to 15,000 psig
Accuracy	±0.25% full scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±2% full scale for 1 year, non-accumulating
Response time	<2 ms (between 10% and 90% full scale)
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated -4 °F to 185 °F (-20 °C to 85 °C) Zero effect ±0.01% full scale/ °F Span effect ±0.01% full scale/ °F Media -13 °F to 185 °F (-40 °C to 100 °C); -40 °F to 257 °F (-40 °C to 125 °C) available on request Ambient -4 °F to 185 °F (-25 °C to 85 °C) Storage -40 °F to 212 °F (-40 °C to 100 °C)
Power requirement*	10 Vdc to 36 Vdc (4 mA to 20 mA, 2-wire) 8 Vdc to 36 Vdc (1 Vdc to 5 Vdc, 3-wire) 14 Vdc to 36 Vdc (0.1 Vdc to 10 Vdc, 3-wire)
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 1 Vdc to 10 Vdc, 3-wire ≥ 5,000 Ω for 1 Vdc to 5 Vdc, 3-wire
Proof pressure	2 times full scale for ranges 0 psi to 200 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 psi to 15,000 psi range
Burst pressure	9 times full scale for 0 psi to 200 psi through 0 psi to 1,000 psi 3 times full scale for ranges 0 to 3,000 psi through 0 psi to 15,000 psi
Measuring element	17-4PH Stainless Steel
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65; IP67 M12x1 electrical connection for pressure ranges 0 psig to 1,500 psig or higher
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Shock	1,000 g's according to IEC 60068-2-27
Vibration	20 g's according to IEC 60068-2-6
Weight	Approximately 1.75 oz.

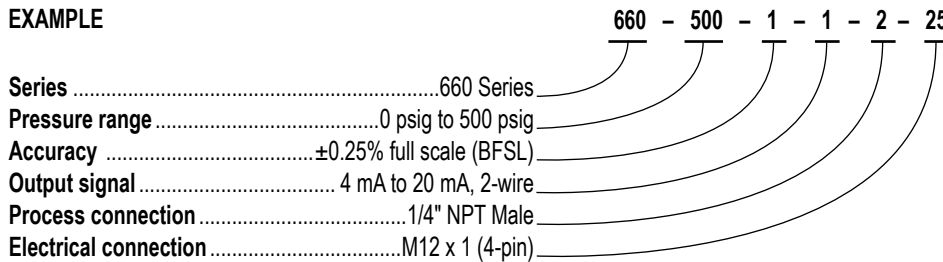
* Unregulated



ORDERING INFORMATION				
SERIES	660			
PRESSURE RANGES	200 0 psig to 200 psig	500 0 psig to 500 psig	3000 0 psig to 3,000 psig	10000 0 psig to 10,000 psig
	300 0 psig to 300 psig	1000 0 psig to 1,000 psig	5000 0 psig to 5,000 psig	15000 0 psig to 15,000 psig
	psig = gauge pressure Other ranges available on request			
ACCURACY	1 ±0.25% full scale (BFSL)			
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire	3 1 Vdc to 5 Vdc, 3-wire	27 0.1 Vdc to 10 Vdc, 3-wire	
PROCESS CONNECTIONS	2 1/4" NPT male			
ELECTRICAL CONNECTIONS	1 DIN EN 175301-803 Form C w/ 36" Cable	7 DIN EN 175301-803 Form C	25 M12 x 1 (4-pin)	

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE



660 Series Wiring	4 mA to 20 mA	
CONNECTION TYPE (CODE)	V+	V-
DIN EN 175301-803 Form C (7)	1	2
DIN EN 175301-803 Form C w/ Cable (1)	Red	Black
M12 x 1, 4-Pin (25)	1	3
Integral Cable (36)	Brown	Green

660 Series Wiring	1-5 Vdc, 0.1-10 Vdc		
CONNECTION TYPE (CODE)	V+	COMMON	OUTPUT
DIN EN 175301-803 Form C (7)	1	2	3
DIN EN 175301-803 Form C w/ Cable (1)	Red	Black	White
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (36)	Brown	Green	White

Load Limitations 4 mA to 20 mA output	
Vmin	= 10V + (.020 x RL)
RL	= Loop resistance (Ω) RL = RS + RW
RS	= Sensor resistance (Ω)
RW	= Wire resistance (Ω)

800 SERIES



- Compound and standard ranges from 0 psig to 10 psig through 0 psig to 7,500 psig
- 316L Stainless steel wetted parts
- Current and voltage outputs available
- 7 different output configurations available
- Display and electrical connection can be rotated independently
- CE compliant to suppress RFI, EMI and ESD
- RoHS compliant

APPLICATIONS

- Hydraulics & pneumatics
- Power generation
- Pumps & compressors
- Stamping & forming presses
- Water & wastewater

SPECIFICATIONS

Pressure ranges	Compound and standard ranges from 0 psig to 10 psig through 0 psig to 7,500 psig
Switching parameters	Individually adjustable via external control keys
Number	1 or 2 (PNP or NPN)
Function	N.O., N.C., window, hysteresis (freely adjustable)
Contact rating	250 mA max.
Response time	≤5 ms
Accuracy	≤ 0.5 % of span
Switch point	.25 to 100% of full scale
Hysteresis	Fully adjustable
Transmitter parameters	
Output signal	4 mA to 20 mA or 0 Vdc to 10 Vdc; programmable and freely adjustable
Accuracy	±0.5% of span including non-linearity, hysteresis, zero offset and end value deviation (corresponds to measured error per IEC 61298-2)
Non-repeatability	< 0.1% of span (IEC 61298-2)
Adjustment	Freely scalable within the range of 5:1
Service life	100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Media -4 °F to 185 °F (-20 °C to 85 °C) Ambient -4 °F to 176 °F (-20 °C to 80 °C) Storage -4 °F to 158 °F (-20 °C to 70 °C)
Display	14 segment-LED, red 4-digit, height 0.35"
Power requirement*	15 - 35 Vdc
Current consumption	Max. 45 mA for versions without 4-20 mA output signal, Max. 70 mA for versions with 4-20 mA output signal, Total consumption max. 600 mA including switching current
Proof pressure	2 times full scale
Measuring element	<150 psi: 316L Stainless steel ≥150 psi: 316L, PH grade Stainless steel
Housing material	304 Stainless steel
Connection	316 stainless steel
Environmental rating	IP65 and IP67 per IEC 60529
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Protected against reverse polarity, over-voltage and short circuit
Shock	> 50 g's according to IEC 60068-2-27
Vibration	> 20 g's according to IEC 60068-2-6
Weight	Approx 0.49 lb.

* Unregulated



ORDERING INFORMATION					
SERIES	800 304 Stainless steel housing				
SWITCH FUNCTIONS	1 2 N.O. or N.C. (PNP or NPN)	5 2 N.O. or N.C. switch (PNP/NPN) with 0 Vdc to 10 Vdc 3-wire output *	2 1 N.O. or N.C. (PNP or NPN) with 4 mA to 20 mA 3-wire analog output	6 1 N.O. or N.C. switch (PNP/NPN) with 4 mA to 20 mA/0 Vdc to 10 Vdc 3-wire output 2 **	7 2 N.O. or N.C. switch (PNP/NPN) with 4 mA to 20 mA/0 Vdc to 10 Vdc 3-wire output * **
PROCESS CONNECTIONS	2 1/4" NPT male	10 G 1/4 B male	45 7/16-20 SAE J514 FIG 34B (Non-Adjustable)	8 1/2" NPT male	11 G 1/2 B male
ADJUSTABLE RANGES (Max. working pressure)	14.5vac -14.5 psig to 0 psig	15 0 psig to 15 psig	1000 0 psig to 1,000 psig	30A 0 psia to 30 psia	14.5/15 -14.5 psig to 15 psig
	14.5/30 -14.5 psig to 30 psig	25 0 psig to 25 psig	1500 0 psig to 1,500 psig	50A 0 psia to 50 psia	14.5/50 -14.5 psig to 50 psig
	14.5/100 -14.5 psig to 100 psig	30 0 psig to 30 psig	2000 0 psig to 2,000 psig	100A 0 psia to 100 psia	14.5/160 -14.5 psig to 160 psig
	14.5/200 -14.5 psig to 200 psig	50 0 psig to 50 psig	3000 0 psig to 3,000 psig	160A 0 psia to 160 psia	14.5/300 -14.5 psig to 300 psig
	10 0 psig to 10 psig	100 0 psig to 100 psig	5000 0 psig to 5,000 psig	200A 0 psia to 200 psia	
		160 0 psig to 160 psig	7500 0 psig to 7,500 psig	300A 0 psia to 300 psia	
		200 0 psig to 200 psig	10A 0 psia to 10 psia		
		300 0 psig to 300 psig	15A 0 psia to 15 psia		
		500 0 psig to 500 psig	25A 0 psia to 25 psia		
ELECTRICAL CONNECTIONS	2 M12 x 1 (4-pin)	3 M12 x 1 (5-pin), 2 switch and analog output			
OPTIONS	ST8 Threaded Orifice				

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

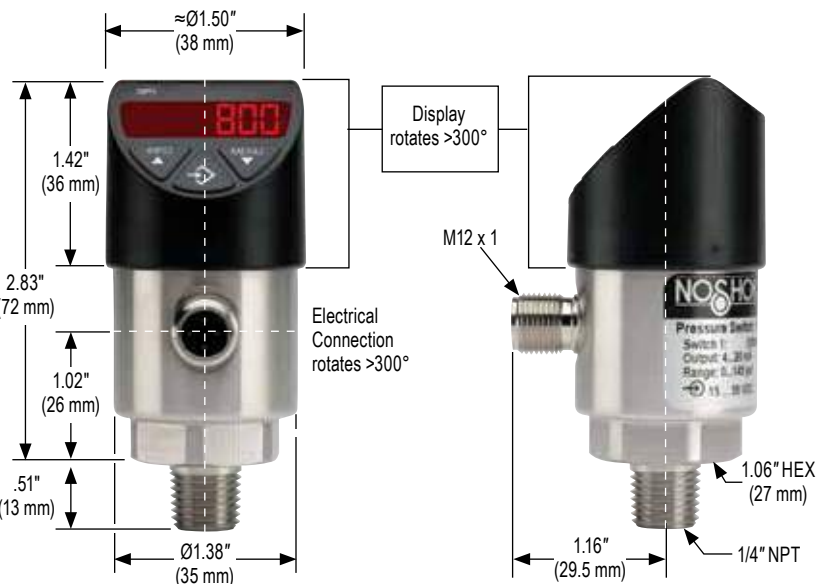
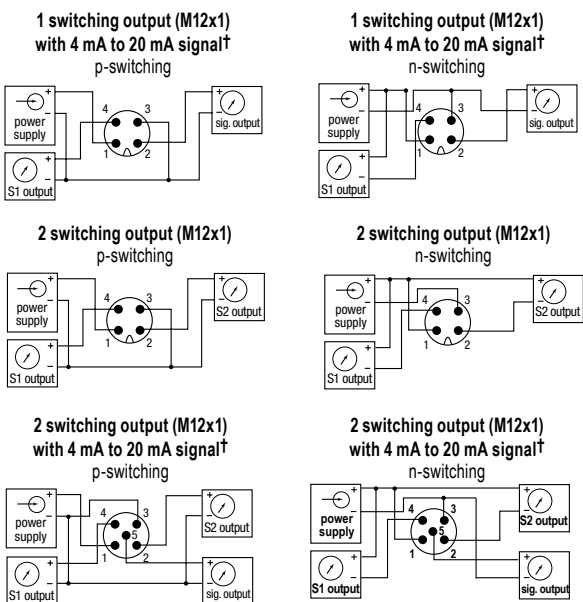
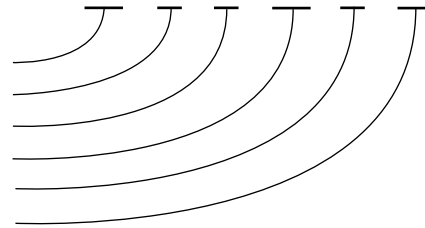
* Available only with a M12 x 1 (5-pin) connector

** Can switch between 4 mA to 20 mA / 0 Vdc to 10 Vdc

EXAMPLE

Series 800 Series
 Switch function..... 2 N.O. or N.C. (PNP or NPN)
 Process connection 1/4" NPT Male
 Adjustable range 0 psig to 160 psig
 Electrical connection M12 x 1 (4-pin)
 Option..... Threaded Orifice

800 - 1 - 2 - 160 - 2 - ST8



† Also applies to 0 Vdc to 10 Vdc output



300 SERIES

- Ranges from 0 psig to 15 through 0 psig to 10,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 300 psia
- Current and voltage outputs available
- 316 and 13-8PH Stainless Steel wetted parts
- RoHS compliant
- CE compliant to suppress RFI, EMI and ESD

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc, 3-wire; 1 Vdc to 5 Vdc, 3-wire; 0 Vdc to 10 Vdc, 3-wire; 0.5 Vdc to 4.5 Vdc ratiometric, 3-wire
Pressure ranges	0 psig to 15 psig through 0 psig to 10,000 psig Absolute from 0 psia to 15 psia through 0 psia to 300 psia
Accuracy	±0.5% full scale (BFSL), (includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±0.2% full scale per year, non-accumulating
Response time	≤ 4 ms (between 10% and 90% full scale)
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Media 32 °F to 176 °F (0 °C to 80 °C) Ambient 32 °F to 176 °F (0 °C to 80 °C) Storage -4 °F to 176 °F (0 °C to 80 °C)
Power requirement*	8 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire, 0 Vdc to 5 Vdc, 3-wire, 1 Vdc to 5 Vdc, 3-wire, 0.5 Vdc to 4.5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire) 5 Vdc ± 10% (0.5 Vdc to 4.5 Vdc ratiometric, 3-wire)
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA output ≤ 5,000 Ω for 1 Vdc to 5 Vdc output ≤ 10,000 Ω for 0 Vdc to 10 Vdc output ≤ 4,500 Ω for 0.5 Vdc to 4.5 Vdc output
Proof pressure	2 times full scale
Burst pressure	6 times full scale
Measuring element	316 Stainless Steel for absolute through 150 psi 13-8PH Stainless Steel for ≥150 psi
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65 to IP67 depending on electrical connection
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Shock	500 g's according to IEC 60068-2-27
Vibration	10 g's according to IEC 60068-2-6
Weight	Approximately 2.8 oz.

* Unregulated

APPLICATIONS

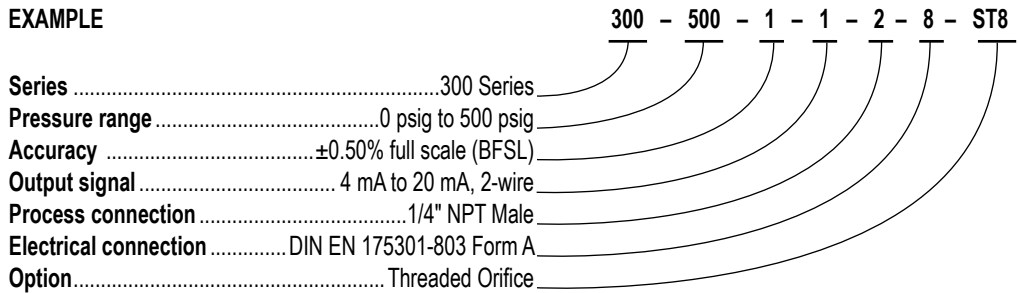
- HVAC
- Hydraulics & pneumatics
- Injection molding machines
- Railroad equipment
- Stamping & forming presses



ORDERING INFORMATION						
SERIES	300					
PRESSURE RANGES	30inH ₂ O-vac	-30 inH ₂ O to 0 psig	1 0 psig to 1 psig	500 0 psig to 500 psig	10000 0 psig to 10,000 psig	
	30vac	-30 inHg to 0 psig	5 0 psig to 5 psig	750 0 psig to 750 psig	15A 0 psia to 15 psia	
	30/15	30 inHg to 15 psig	15 0 psig to 15 psig	1000 0 psig to 1,000 psig	30A 0 psia to 30 psia	
	30/30	30 inHg to 30 psig	30 0 psig to 30 psig	1500 0 psig to 1,500 psig	60A 0 psia to 60 psia	
	30/60	30 inHg to 60 psig	60 0 psig to 60 psig	2000 0 psig to 2,000 psig	100A 0 psia to 100 psia	
	30/100	30 inHg to 100 psig	100 0 psig to 100 psig	3000 0 psig to 3,000 psig	150A 0 psia to 150 psia	
	30/160	30 inHg to 160 psig	150 0 psig to 150 psig	5000 0 psig to 5,000 psig	200A 0 psia to 200 psia	
	30/200	30 inHg to 200 psig	200 0 psig to 200 psig	6000 0 psig to 6,000 psig	300A 0 psia to 300 psia	
	30/300	30 inHg to 300 psig	300 0 psig to 300 psig	7500 0 psig to 7,500 psig		
		psig = gauge pressure psia = absolute pressure Other ranges available upon request.				
ACCURACIES	1 ±0.5% full scale (BFSL)					
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire		5 0 Vdc to 10 Vdc, 3-wire			
	2 0 Vdc to 5 Vdc, 3-wire		13 0.5 Vdc to 4.5 Vdc, 3-wire (ratiometric)			
PROCESS CONNECTIONS	2 1/4" NPT male		10 G 1/4 B		45 7/16-20 SAE J514 FIG 34B (Non-Adjustable)	
	8 1/2" NPT male		11 G 1/2 B			
ELECTRICAL CONNECTIONS	1 DIN EN 175301-803 Form A w/ 36" Cable			8 DIN EN 175301-803 Form A		25 M12 x 1 (4-pin)
	7 DIN EN 175301-803 Form C			14 DIN EN 175301-803 Form A with 1/2" NPT female conduit		36 6' Integral cable
OPTION	ST8 Threaded Orifice (0.8 mm)					

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE



Integral cable



DIN EN 175301-803 Form C



*M12 x 1 (4-pin)

* Note: (mate supplied separately)



DIN EN 175301-803 Form A

300 Series Wiring	4 mA to 20 mA	
CONNECTION TYPE (CODE)	V+	V-
DIN EN 175301-803 Form A (8 or 14), DIN EN 175301-803 Form C (7)	1	2
DIN EN 175301-803 Form A w/ Cable (1)	Red	Black
M12 x 1, 4-Pin (25)	1	3
Integral Cable, Unshielded (36)	Brown	Blue

300 Series Wiring	0-5 Vdc, 1-5 Vdc, 1-6 Vdc, 0-10 Vdc, 1-11 Vdc		
CONNECTION TYPE (CODE)	V+	COMMON	OUTPUT
DIN EN 175301-803 Form A (8 or 14), DIN EN 175301-803 Form C (7)	1	2	3
DIN EN 175301-803 Form A w/ Cable (1)	Red	Black	White
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable, Unshielded (36)	Brown	Blue	Black

Load Limitations 4 mA to 20 mA output
V _{min} = 10V + (.020 x RL)
RL = Loop resistance (Ω)
RL = RS + RW
RS = Sensor resistance (Ω)
RW = Wire resistance (Ω)



650 SERIES

- Ranges from 0 psig to 100 psig through 0 psig to 8,000 psig
- Current and voltage outputs available
- Stainless Steel wetted parts
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- Hydraulics & pneumatics
- Mobile hydraulics
- Pumps & compressors
- Refrigeration controls
- Transportation

SPECIFICATIONS

Output signals	4 mA to 20 mA 2-wire, or 1 Vdc to 5 Vdc 3-wire
Pressure ranges	0 psig to 100 psig through 0 psig to 8,000 psig
Accuracy	±0.50% full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	±0.2% full scale for 1 year, non-accumulating
Response time	< 5 ms (between 10% and 90% full scale); restrictor port I.D. to dampen pulsations
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Zero effect ±0.008% full scale/ °F Span effect ±0.008% full scale/ °F Media -40 °F to 257 °F (-40 °C to 125 °C) Ambient -40 °F to 212 °F (-40 °C to 100 °C) Storage -40 °F to 248 °F (-40 °C to 120 °C)
Power requirement*	8 Vdc to 36 Vdc (4 mA to 20 mA, 2-wire, 0 Vdc to 5 Vdc, 3-wire, 1 Vdc to 5 Vdc, 3-wire, 0.5 Vdc to 4.5 Vdc, 3-wire) 14 Vdc to 36 Vdc (0 Vdc to 10 Vdc, 3-wire) 5 Vdc ± 10% (0.5 Vdc to 4.5 Vdc ratiometric, 3-wire)
Load limitations	≤ (VPower-10)/0.020 amp for 4 mA to 20 mA output ≤ 5,000 Ω for 1 Vdc to 5 Vdc output ≤ 10,000 Ω for 0 Vdc to 10 Vdc output ≤ 4,500 Ω for 0.5 Vdc to 4.5 Vdc output
Proof pressure	2 times full scale
Burst pressure	8 times full scale for ranges 0 psi to 100 psi through 0 psi to 1,500 psi 4 times full scale for ranges 0 psi to 2,000 psi through 0 psi to 8,000 psi
Measuring element	17-4PH Stainless Steel
Connection	316 Stainless Steel
Housing material	PBT - fiber reinforced plastic
Environmental rating	IP67 for M12x1 (4-pin) electrical connection and Metri-Pack connection; IP69K (steam jet cleaning) for cable connection
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Shock	500 g's according to IEC 60068-2-27
Vibration	20 g's according to IEC 60068-2-6
Weight	Approximately 2.5 oz.

* Unregulated



ORDERING INFORMATION						
SERIES	650					
PRESSURE RANGES	100	0 psig to 100 psig	300	0 psig to 300 psig	600	0 psig to 600 psig
	150	0 psig to 150 psig	400	0 psig to 400 psig	750	0 psig to 750 psig
	200	0 psig to 200 psig	500	0 psig to 500 psig	1000	0 psig to 1,000 psig
	psig = gauge pressure		Other ranges available on request			
ACCURACY	1	±0.5% full scale (BFSL)				
OUTPUT SIGNALS	1	4 mA to 20 mA, 2-wire	3	1 Vdc to 5 Vdc, 3-wire	5	0 Vdc to 10 Vdc, 3-wire
PROCESS CONNECTIONS	2	1/4" NPT male	24	7/16-20 2B Schrader	45	7/16-20 SAE J514 FIG 34B (Non-Adjustable)
	10	G1/4B male	35	7/16-20 with 45° flare		
ELECTRICAL CONNECTIONS	25	M12 x 1 (4-pin)	36	18" Integral cable IP67	45	AMP Superseal 1.5
	34	Metri-Pack 150 series	39	18" Integral cable IP69K	46	Deutsch (3-pin) DT04-3P

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for minimum quantity requirements and delivery information.

EXAMPLE

650 - 500 - 1 - 1 - 2 - 25

Series650 Series
 Pressure range0 psig to 500 psig
 Accuracy±0.5% full scale
 Output signal4 mA to 20 mA, 2-wire
 Process connection1/4" NPT Male
 Electrical connectionM12 x 1 (4-pin)



2-WIRE WIRING

Wiring	Cable	M12	Metri-Pack	AMP Superseal	Deutsch DT04-3P
V+	Brown	1	B	3	A
V-	Black	3	A	1	B

3-WIRE WIRING

Wiring	Cable	M12	Metri-Pack	AMP Superseal	Deutsch DT04-3P
V+	Brown	1	B	3	A
Common	Green	3	A	1	B
Output	White	4	C	2	C



621/622 SERIES

- Vacuum and compound ranges through 0 psig to 15,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 100 psia
- Current and voltage outputs available
- 316 Stainless Steel and Elgiloy wetted parts
- CE compliant to suppress RFI, EMI and ESD
- NACE MR0175/ISO 15156 compliant
- NSI/ISA-12.27.01-2003 approved single seal

APPLICATIONS

- Chemical processing
- Gas pressure measurement
- Oil field & offshore
- Mining
- Well head measurement

NOSHOK 621 and 622 Series transmitters are Factory Mutual and Canadian Standards Association approved for use in hazardous location applications as follows:

Explosion-proof with entity approved for: Class I, Division 1, Groups A, B, C and D. Dust Ignition-proof with entity approval for class II/III, Division 1, Groups E, F and G. Maximum electrical ratings 30V, 20 mA.

CE compliant with pressure equipment directive 2014/68/EU.

ANSI/ISA-12.27.01, Approved single seal.

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 1 Vdc to 5 Vdc, 3-wire; 0.5 Vdc to 4.5 Vdc, 3-wire
Pressure ranges	Vacuum through 0 psi to 15,000 psi Absolute from 0 psia to 15 psia through 0 psia to 100 psia
Accuracy	±0.25% full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤±0.2% full scale for 1 year, non-accumulating
Response time	≤1 ms (between 10% and 90% full scale)
Service life	>100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Zero effect ±0.011% full scale/ °F Span effect ±0.011% full scale/ °F Media T6: -40 °F to 131 °F (-40 °C to 55 °C) T5: -40 °F to 158 °F (-40 °C to 70 °C) T4: -40 °F to 212 °F (-40 °C to 100 °C) Ambient T6: -40 °F to 140 °F (-40 °C to 60 °C) T5: -40 °F to 167 °F (-40 °C to 75 °C) T4: -40 °F to 221 °F (-40 °C to 105 °C) Storage -40 °F to 221 °F (-40 °C to 105 °C)
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire) 6 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire, 0.5 Vdc to 4.5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire)
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 1 Vdc to 5 Vdc, 3-wire
Proof pressure	3 times full scale for ranges 0 psi to 15 psi through 0 psi to 200 psi 1.75 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 psi to 15,000 psi
Burst pressure	3.8 times full scale for ranges 0 psi to 15 psi through 0 psi to 200 psi 4 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 3 times full scale for 0 psi to 15,000 psi
Measuring element	621 Series is 316 Stainless Steel for ranges up through 0 psi to 300 psi, 316 Stainless Steel with Elgiloy ranges 0 psig to 500 psig and higher; 622 Series is 316 Stainless Steel with NBR o-ring; (FKM o-ring optional)
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP67
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protected
Shock	1,000 g's according to IEC 60068-2-27
Vibration	20 g's according to IEC 60068-2-6
Weight	Approximately 12 oz.

* Unregulated



WARNING: This product can expose you to chemicals including Nickel, which is 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				
SERIES	621 Stainless Steel threaded connection	622 316 Stainless Steel flush diaphragm	622H Hastelloy C flush diaphragm	
PRESSURE RANGES	30vac -30 inHg to 0 psig 30/30 -30 inHg to 30 psig 30/60 -30 inHg to 60 psig 30/100 -30 inHg to 100 psig 30/160 -30 inHg to 160 psig 30/200 -30 inHg to 200 psig 30/300 -30 inHg to 300 psig psig = gauge pressure psia = absolute pressure Other ranges available on request	5 0 psig to 5 psig 10 0 psig to 10 psig 15 0 psig to 15 psig 30 0 psig to 30 psig 60 0 psig to 60 psig 100 0 psig to 100 psig 200 0 psig to 200 psig	300 0 psig to 300 psig 500 0 psig to 500 psig 1000 0 psig to 1,000 psig 1500 0 psig to 1,500 psig 2000 0 psig to 2,000 psig 3000 0 psig to 3,000 psig 5000 0 psig to 5,000 psig	6000 0 psig to 6,000 psig 8000 0 psig to 8,000 psig 10000 0 psig to 10,000 psig 15000 0 psig to 15,000 psig 15A 0 psia to 15 psia 100A 0 psia to 100 psia Note: 622 Series is available for pressure ranges up to 0 psig to 8,000 psig
ACCURACY	1 ±0.25% full scale (BFSL)			
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire 2 0 Vdc to 5 Vdc, 3-wire	3 1 Vdc to 5 Vdc, 3-wire, low power 5 0 Vdc to 10 Vdc, 3-wire	31 0.5 Vdc to 4.5 Vdc 3-wire, low power	
PROCESS CONNECTIONS	2 1/4" NPT male 8 1/2" NPT male	11 G 1/2 B * 13 G 1 B (622 Series only, <30 psig)		
ELECTRICAL CONNECTIONS	6 1/2" NPT male conduit with 6' integral cable		37 1/2" NPT male conduit with 6' flying leads with epoxy seal	
OPTIONS	ST8 Threaded Orifice (621 Series only)	20 20' Cable/lead (attached to electrical connection 6 or 37)	30 30' Cable/lead (attached to electrical connection 6 or 37)	

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* 622 Series only, G 1/2 B Flush (≥ 30 psig).

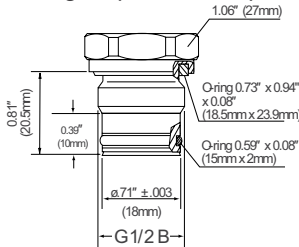
EXAMPLE

Series 621 Series
 Pressure range 0 psig to 500 psig
 Accuracy ±0.25% full scale (BFSL)
 Output signal 4 mA to 20 mA, 2-wire
 Process connection 1/2" NPT Male
 Electrical connection 1/2" NPT Male conduit with 6' integral cable
 Option Threaded Orifice

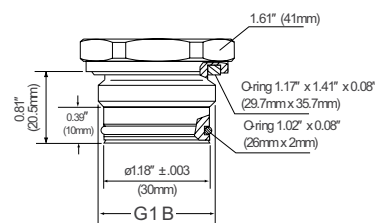
621 - 500 - 1 - 1 - 8 - 6 - ST8

Front flush process connections

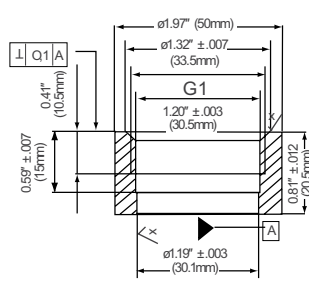
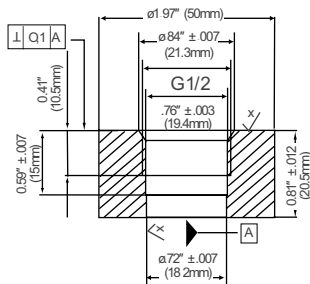
For ranges 0 psi to 30 psi through 0 psi to 8,000 psi



For ranges 0 to 30 psi and below



Flush corresponding port weld-on adapters



2-WIRE WIRING

V+	Red
V-	Black
Ground	Gray

3-WIRE WIRING

V+	Red
Common	Black
Output	Brown
Ground	Gray

Non-Incendive Pressure Transmitters



623/624 SERIES

- Vacuum and compound ranges through 0 psig to 15,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 100 psia
- Current and voltage outputs available
- 316 Stainless Steel and Elgiloy wetted parts
- Factory Mutual and Canadian Standards Association approved
- CE compliant to suppress RFI, EMI and ESD
- NACE MR0175/ISO 15156 compliant
- NSI/ISA-12.27.01 approved single seal

APPLICATIONS

- Chemical processing
- Gas pressure measurement
- Oil field & offshore
- Mining
- Well head measurement

NOSHOK 623 and 624 Series transmitters are Factory Mutual and Canadian Standards Association approved for use in hazardous location applications as follows:

Non-Incendive for: Class I, Division 2, Groups A, B, C and D.I.P.; Class II, Division 1, Groups E, F and G Maximum ratings 30 Vdc, 20 mA.

CE compliant with pressure equipment directive 2014/68/EU. ANSI/ISA-12.27.01, Approved single seal.

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 1 Vdc to 5 Vdc low power, 3-wire; 0.5 Vdc to 4.5 Vdc low power, 3-wire
Pressure ranges	Vacuum through 0 psig to 15,000 psig Absolute through 0 psia to 100 psia
Accuracy	±0.25% full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±0.2% full scale for 1 year, non-accumulating
Response time	≤1 ms (between 10% and 90% full scale)
Service life	>100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Zero effect is ±0.011% full scale/ °F within compensated range Span effect is ±0.011% full scale/ °F within compensated range Media -40 °F to 212 °F (-40 to 100 °C) Ambient -22 °F to 176 °F (-30 °C to 80 °C) Storage -22 °F to 212 °F (-30 °C to 100 °C)
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire) 6 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire, 0.5 Vdc to 4.5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire)
Load limitations	≤ (VPower -10)/0.020 Amp for 4 mA to 20 mA; ≥ 10,000 Ω for 1 Vdc to 5 Vdc, 3-wire
Proof pressure	3 times full scale for ranges 0 psi to 15 psi through 0 psi to 200 psi 1.75 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 psi to 15,000 psi range
Burst pressure	3.8 times full scale for ranges 0 psi to 15 psi through 0 psi to 200 psi 4 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 3 times full scale for 0 psi to 15,000 psi
Measuring element	623 Series is 316 Stainless Steel for ranges up through 0 psi to 300 psi, 316 Stainless Steel and Elgiloy for ranges 0 psig to 500 psig and higher; 624 Series is 316 Stainless Steel with NBR o-ring; FKM o-ring optional
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65 to IP67 dependent upon electrical connection
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protected
Shock	1000 g's according to IEC 60068-2-27
Vibration	20 g's according to IEC 60068-2-6
Weight	Approximately 12 oz.

* Unregulated



WARNING: This product can expose you to chemicals including Nickel, which is 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					
SERIES	623 Stainless Steel threaded connection	624 316 Stainless Steel flush diaphragm *			
PRESSURE RANGES	30vac -30 inHg to 0 psig	30 0 psig to 30 psig	500 0 psig to 500 psig	6000 0 psig to 6,000 psig	
	30/30 -30 inHg to 30 psig	60 0 psig to 60 psig	1000 0 psig to 1,000 psig	8000 0 psig to 8,000 psig	
	30/60 -30 inHg to 60 psig	100 0 psig to 100 psig	1500 0 psig to 1,500 psig	10000 0 psig to 10,000 psig	
	30/100 -30 inHg to 100 psig	200 0 psig to 200 psig	2000 0 psig to 2,000 psig	15000 0 psig to 15,000 psig	
	15 0 psig to 15 psig	300 0 psig to 300 psig	3000 0 psig to 3,000 psig	15A 0 psia to 15 psia	
			5000 0 psig to 5,000 psig	100A 0 psia to 100 psia	
	psig = gauge pressure psia = absolute pressure Other ranges available on request		Note: 624 Series is available for pressure ranges up to 0 psig to 8,000 psig		
ACCURACY	1 ±0.25% full scale (BFSL)				
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire		3 1 Vdc to 5 Vdc, 3-wire, low power		31 0.5 Vdc to 4.5 Vdc, 3-wire, low power
PROCESS CONNECTIONS	2 1/4" NPT male		11 G 1/2 B **		
	8 1/2" NPT male		13 G 1 B (624 Series only, <30 psig)		
ELECTRICAL CONNECTION	6 1/2" NPT male conduit with 6' integral cable				
OPTION	ST8 Threaded Orifice (623 Series only)				

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

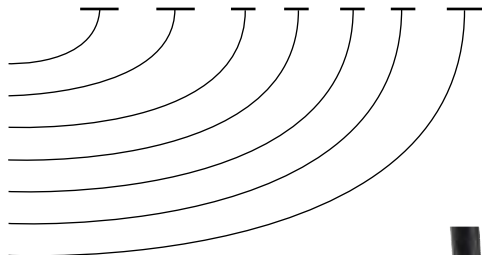
* Hastelloy flush diaphragm available upon request.

** 624 Series only, G 1/2 B Flush (≥ 30 psig).

EXAMPLE

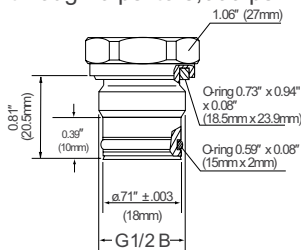
Series 623 Series
 Pressure range 0 psig to 500 psig
 Accuracy ±0.25% full scale (BFSL)
 Output signal 4 mA to 20 mA, 2-wire
 Process connection 1/2" NPT Male
 Electrical connection 1/2" NPT Male conduit with 6' integral cable
 Option Threaded Orifice

623 - 500 - 1 - 1 - 8 - 6 - ST8

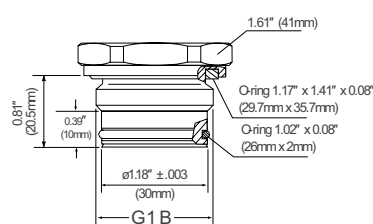


Front flush process connections

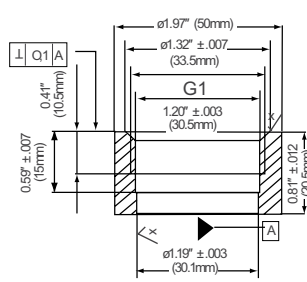
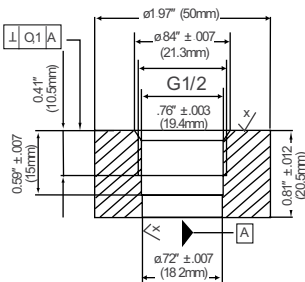
For ranges 0 psi to 30 psi through 0 psi to 8,000 psi



For ranges 0 to 30 psi and below



Flush corresponding port weld-on adapters



2-WIRE WIRING

V+	Brown
V-	Green

3-WIRE WIRING

V+	Brown
Common	Green
Output	White



625/626 SERIES

- Low pressure ranges for vapor recovery applications, vacuum and compound ranges through 0 psig to 15,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 300 psia
- Current output
- 316 and 14-4PH Stainless Steel wetted parts
- Factory Mutual and Canadian Standards Association approved
- CE compliant to suppress RFI, EMI and ESD
- NSI/ISA-12.27.01 approved single seal

APPLICATIONS

- Chemical processing
- Gas pressure measurement
- Oil field & offshore
- Mining
- Vapory recovery systems
- Well head measurement

NOSHOK 625 and 626 Series transmitters are Factory Mutual and Canadian Standards Association approved for use in hazardous location applications as follows:

Intrinsically Safe, entity approval for Class I, II and III, Division 1, Groups A, B, C, D, E, F and G; and Class I, Zone 0 Aex ia IIC Dust Ignition-proof for Class II and III, Division 2, Groups F and G Non-incendive for Class I, Division 2, Groups A, B, C and D. CE compliant with pressure equipment directive 2014/68/EU. ANSI/ISA-12.27.01, Approved single seal.

SPECIFICATIONS

Output signal	4 mA to 20 mA, 2-wire
Pressure ranges	Vacuum through 0 psig to 15,000 psig Absolute from 0 psia to 15 psia through 0 psia to 300 psia
Accuracy	±0.25% full scale (BFSL); optional ±0.125% full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±0.2% full scale for 1 year, non-accumulating
Adjustment	± 10% full scale for zero and span
Response time	≤ 1 ms (between 10% and 90% full scale)
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Zero effect is ±0.011% full scale/ °F Span effect is ±0.011% full scale/ °F Media -4 °F to 185 °F (-20 °C to 85 °C) Ambient -4 °F to 176 °F (-20 °C to 80 °C) Storage -22 °F to 221 °F (-30 °C to 105 °C)
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire)
Load limitations	≤ (VPower-10)/0.020 Amp
Proof pressure	3.5 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 2 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 1.5 times full scale for 0 psi to 15,000 psi
Burst pressure	4 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 4 times full scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi 3 times full scale for 0 psi to 15,000 psi
Measuring element	625 Series is 316 Stainless Steel for ranges up through 0 psi to 300 psi, 316 Stainless Steel with 17-4PH Stainless Steel for ≥300 psi; 626 Series is 316 Stainless Steel with NBR o-ring
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65 to IP67 depending upon electrical connection
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protected
Shock	1,000 g's according to IEC 60068-2-27
Vibration	20 g's according to IEC 60068-2-6
Weight	Approximately 7 oz.

* Unregulated



ORDERING INFORMATION										
SERIES	625	Stainless Steel threaded connection	626 316 Stainless Steel flush diaphragm	626H Hastelloy flush diaphragm						
PRESSURE RANGES	4/12 oz/in ²	-4 oz/in ² to 12 oz/in ²	30/100	-30 inHg to 100 psig	150	0 psig to 150 psig	5000	0 psig to 5,000 psig	100A	0 psia to 100 psia
	12 oz/in ²	0 oz/in ² to 12 oz/in ²	30/150	-30 inHg to 150 psig	200	0 psig to 200 psig	6000	0 psig to 6,000 psig	150A	0 psia to 150 psia
	16 oz/in ²	0 oz/in ² to 16 oz/in ²	30/200	-30 inHg to 200 psig	300	0 psig to 300 psig	7500	0 psig to 7,500 psig	200A	0 psia to 200 psia
	50 inH ₂ O	0 inH ₂ O to 50 inH ₂ O	3	0 psig to 3 psig	500	0 psig to 500 psig	8000	0 psig to 8,000 psig	250A	0 psia to 250 psia
	100 inH ₂ O	0 inH ₂ O to 100 inH ₂ O	5	0 psig to 5 psig	750	0 psig to 750 psig	10000	0 psig to 10,000 psig		
	30vac	-30 inHg to 0 psig	15	0 psig to 15 psig	1000	0 psig to 1,000 psig	15000	0 psig to 15,000 psig		
	30/15	-30 inHg to 15 psig	30	0 psig to 30 psig	1500	0 psig to 1,500 psig	15A	0 psia to 15 psia		
	30/30	-30 inHg to 30 psig	60	0 psig to 60 psig	2000	0 psig to 2,000 psig	30A	0 psia to 30 psia		
30/60	-30 inHg to 60 psig	100	0 psig to 100 psig	3000	0 psig to 3,000 psig	60A	0 psia to 60 psia			
	psig = gauge pressure psia = absolute pressure Other ranges available on request			Note: 626 Series is available for pressure ranges up to 0 psig to 8,000 psig						
ACCURACY	1	±0.25% full scale (BFSL)	2	±0.125% full scale (BFSL)						
OUTPUT SIGNAL	1	4 mA to 20 mA, 2-wire								
PROCESS CONNECTIONS	2	1/4" NPT male	13	G 1 B (626 Series only, <30 psig)						
	8	1/2" NPT male	45	7/16-20 SAE J514 FIG 34B (Non-Adjustable)						
	11	G 1/2 B *								
ELECTRICAL CONNECTIONS	1	DIN EN 175301-803 Form A w/ 36" Cable	14	DIN EN 175301-803 Form A with 1/2" NPT female conduit – IP65						
	3	6-pin Bayonet - IP65	25	M12x1 (4-pin) IP67						
	8	DIN EN 175301-803 Form A	36	Integral cable 36" - IP67						
OPTION	ST8	Threaded Orifice (625 Series only)								

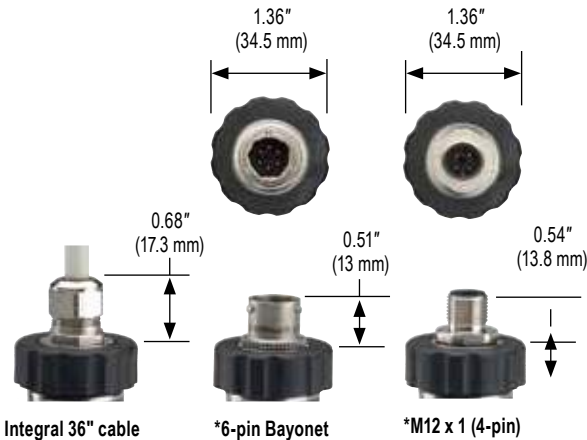
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* 626 Series only, G 1/2 B Flush (≥ 30 psig).

EXAMPLE

Series 625 Series
 Pressure range 0 psig to 500 psig
 Accuracy ±0.25% full scale (BFSL)
 Output signal 4 mA to 20 mA, 2-wire
 Process connection 1/2" NPT Male
 Electrical connection DIN EN 175301-803 Form A
 Option Threaded Orifice

625 - 500 - 1 - 1 - 8 - 8 - ST8



*Note: mate supplied separately

2-WIRE WIRING

	DIN EN 175301-803 Form A	Cable	M12	Bayonet
V+	1	Red/Brown	1	A
V-	2	Black/Green	3	B



NOTE
 See 621/622 Series for G1/2B and G1B Front Flush Process Connection Dimensions pg. 85



Intrinsically Safe Submersible



627 SERIES

- Ranges from 0 inH₂O to 50 inH₂O through 0 psig to 350 psig
- Current output
- 316 Stainless and 17-4PH Steel wetted parts
- Canadian Standards Association approved
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- Irrigation
- Tank monitoring
- Water & wastewater
- Well head measurement

SPECIFICATIONS

Output signal	4 mA to 20 mA, 2-wire
Pressure ranges	0 inH ₂ O to 50 inH ₂ O through 0 psig to 350 psig
Accuracy	±0.25 % full scale (BFSL); optional ±0.125% full scale (BFSL), for ranges ≥ 150 inH ₂ O (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±0.2% full scale for 1 year, non-accumulating
Response time	≤1 ms (between 10% and 90% full scale)
Service life	>100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 122 °F (0 °C to 50 °C) Zero effect is ±0.011% full scale/ °F within compensated range Span effect is ±0.011% full scale/ °F within compensated range Media 14 °F to 140 °F (-10 °C to 60 °C) Ambient 14 °F to 140 °F (-10 °C to 60 °C) Storage 14 °F to 140 °F (-10 °C to 60 °C)
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire)
Load limitations	≤ (VPower-10)/0.020 Amp-(0.043 Ω x length of cable in feet)
Proof pressure	2 times range
Burst pressure	3 times range
Measuring element	Diaphragm and cap: 316 Stainless Steel 17-4PH Stainless Steel for 0 psig to 350 psig Cable: Polyurethane, optional FEP
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP68
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protected
Weight	Approximately 7 oz. with standard nosecone - cable extra

* Unregulated

NOSHOK 627 Series transmitters are Canadian Standards Association approved for use in hazardous location applications as follows:

Intrinsically Safe, entity approval for Class I, II and III, Division 1, Groups A, B, C, D, E, F and G; and Class I, Zone 0 Aex ia IIC
Dust ignition-proof for Class II and III, Division 1, Groups E, F and G
Non-incendive for Class I, Division 2, Groups A, B, C and D
FMRC 3600, 3610, 3611, 3810 (including supplement #1),
ISA-S12.0. 01, IEC 60529 (including amendment #1).
CE compliant with pressure equipment directive 2014/68/EU.

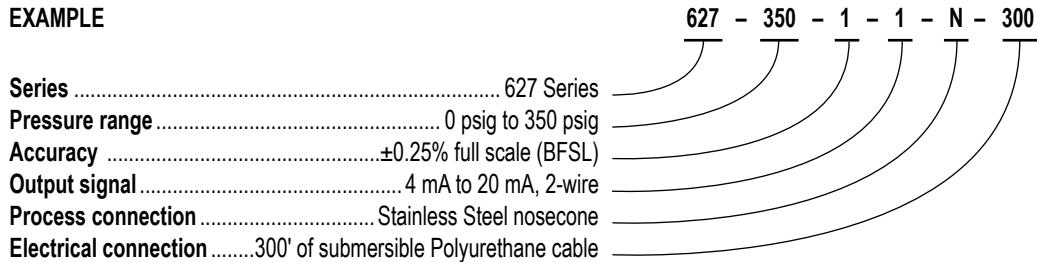


WARNING: This product can expose you to chemicals including Nickel, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

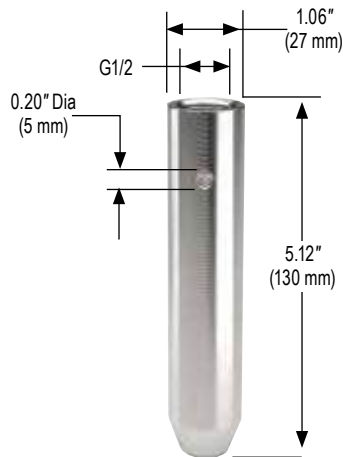
ORDERING INFORMATION			
SERIES	627		
PRESSURE RANGES	50inH ₂ O	0 inH ₂ O to 50 inH ₂ O	5 0 psig to 5 psig (11.5 ftH ₂ O)
	100inH ₂ O	0 inH ₂ O to 100 inH ₂ O	10 0 psig to 10 psig (23.1 ftH ₂ O)
	150inH ₂ O	0 inH ₂ O to 150 inH ₂ O	15 0 psig to 15 psig (34.6 ftH ₂ O)
	250inH ₂ O	0 inH ₂ O to 250 inH ₂ O	25 0 psig to 25 psig (57.7 ftH ₂ O)
	400inH ₂ O	0 inH ₂ O to 400 inH ₂ O	30 0 psig to 30 psig (69.2 ftH ₂ O)
	psig = gauge pressure inH ₂ O = inches of water ftH ₂ O = feet of water Other ranges available on request.		
ACCURACIES	1	±0.25% full scale (BFSL)	2 ±0.125% full scale (BFSL) on ≥ 150 inH ₂ O
OUTPUT SIGNAL	1	4 mA to 20 mA, 2-wire	
PROCESS CONNECTIONS	N	Stainless Steel nosecone	W Stainless Steel weighted nosecone (1.1 lb.)
	T	G 1/2 B x 1/2" NPT male with 1/4" NPT female	
ELECTRICAL CONNECTIONS	XX	Standard Polyurethane cable	
	38-XX	Optional FEP cable	NOTE: XX = length of cable in feet
OPTIONS	CBC	Cable Clamp	FE Filter Element
	DC	Desiccant Cartridge	JB Cable Junction Box

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

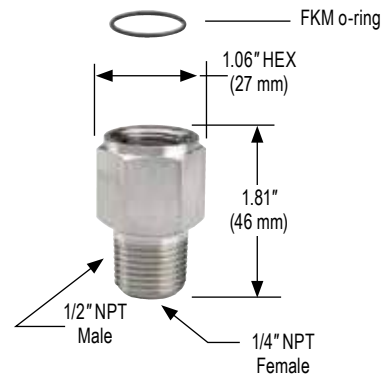
EXAMPLE



Weighted Nosecone



NPT Adapter



2-WIRE WIRING

V+	Brown
V-	Green
Shield	Gray

Intrinsically Safe Hammer Union



628 SERIES

- Ranges from 0 psig to 5,000 psig through 0 psig to 20,000 psig
- Current output
- Inconel X-750 wetted parts
- Canadian Standards Association approved
- Every sensor comes with a Certificate of Calibration
- Certifications pending:
 - Factory Mutual
 - ATEX
 - CE



Shown with optional Electrical Connector Cage

APPLICATIONS

- Acidizing
- Choke & kill manifold
- Fracturing & cementing
- Mud logging & mud pumps
- Oil field & offshore
- Well head measurement

NOSHOK 628 Series transmitters are Canadian Standards Association approved for use in hazardous location applications as follows:

Intrinsically Safe Class I, DIV 1, Groups A,B,C,D,
 -40°C<Tamb<+85°C T4, Class II, DIV 1, Groups E,F,G, Class III, Class I, Zone 0 AEx/Ex ia IIC T4.
 Non-Incendive Class I, DIV 2, Groups A,B,C,D,
 -40°C<Tamb<+85°C T4, Class II, DIV 2, Groups F,G, Class III, Class I, Zone 2 AEx/Ex ic IIC T4.

SPECIFICATIONS

Output signal	4 mA to 20 mA, 2-wire
Pressure ranges	0 psig to 5,000 psig through 0 psig to 20,000 psig
Accuracy	±0.25% full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	≤ ±0.2% full scale for 1 year, non-accumulating
Response time	< 2 m/s
Service life	> 10,000,000 load cycles
Temperature ranges	Compensated 40 °F to 140 °F (5 °C to 60 °C) Zero effect is ±0.01% full scale/ °F Span effect is ±0.01% reading/ °F Media -40 °F to 185 °F (-40 °C to 85 °C) Ambient -40 °F to 185 °F (-40 °C to 85 °C) Storage -40 °F to 185 °F (-40 °C to 85 °C)
Power requirement*	10 Vdc to 28 Vdc
Load limitations	≤ (VPower-10)/0.020 Amp
Proof pressure	1.5 times full scale (22,500 psi maximum)
Burst pressure	3 times full scale (22,500 psi maximum)
Measuring element	Inconel X-750
Connection	Inconel X-750
Housing material	316 Stainless Steel
Environmental rating	IP67 depending upon electrical connection
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protected
Shock	100 g's according to IEC 60068-2-27
Vibration	15 g's according to IEC 60068-2-6
Weight	Approximately 6 lb.

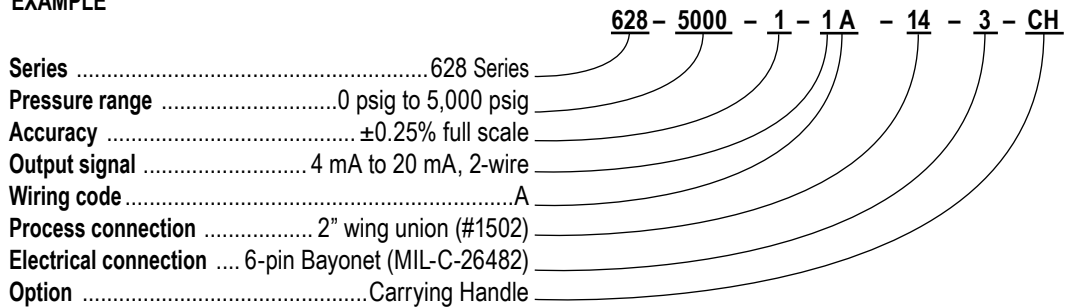
* Unregulated

ORDERING INFORMATION											
SERIES	628										
PRESSURE RANGES	5000	0 psig to 5,000 psig	6000	0 psig to 6,000 psig	10000	0 psig to 10,000 psig	15000	0 psig to 15,000 psig	20000	0 psig to 20,000 psig	
ACCURACY	1	±0.25% full scale (BFSL)									
OUTPUT SIGNAL	1	4 mA to 20 mA, 2-wire									
WIRING CODE	A		E		H*						
(See Wiring Code Schematics below)	C		F		J						
	D		G								
PROCESS CONNECTIONS	14	2" Wing union (#1502)									
ELECTRICAL CONNECTIONS	3	6-pin Bayonet (MIL-C-26482)				44	4-pin (MIL-5015 Type)				
	36	Integral cable with gland									
OPTION	CH	Carrying Handle				EC	Electrical Connector Cage				

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* H is the standard wiring code.

EXAMPLE

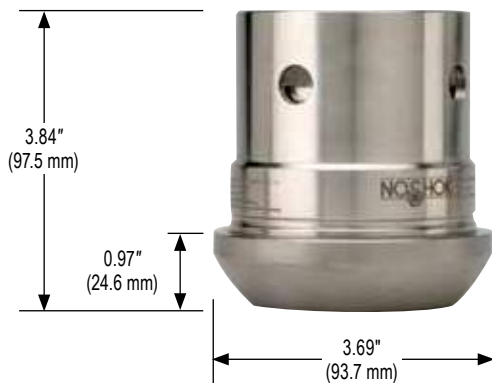


WIRING CODE SCHEMATICS

Wiring Code	Pin A		E	Pin A		G	Pin B		J	Pin A			
	Pin B	V+		Pin B	V+		Pin C	V-		Pin B	V+	Pin B	V+
A	Pin B	V-	E	Pin B	V-	G	Pin C	V+	J	Pin C	V-		
C	Pin E	Ground		Pin E	V+		Pin D	Ground		Pin D	- Shunt Cal	Pin D	+ Shunt Cal
	Red	V+		Pin F	- Shunt Cal		Pin A	V+		Pin E	CASE GROUND, NOT CONNECTED**	Pin E	CASE GROUND, NOT CONNECTED**
D	Black	V-	F	Pin A	V+	H*	Pin B	V-	J	Pin F	CASE GROUND, NOT CONNECTED**		
	Red	V+		Pin B	V-		Pin D	Ground		Pin E	+ Shunt Cal		
	Black	V-		Pin C	+ Shunt Cal		Pin E	+ Shunt Cal		Pin F	- Shunt Cal		
	White	- Shunt Cal		Pin D	- Shunt Cal								
	Green	Ground		Pin E	Ground								

* H is the standard wiring code.

** No internal connection to E or F.





11 SERIES

- Ranges from vacuum through 0 psig to 400 psig
- Current and voltage outputs available
- 316 Stainless Steel wetted parts
- Can be cleaned-in-place (CIP) or steamed-in-place (SIP)
- 3A certified
- CE compliant to suppress RFI, EMI and ESD

APPLICATIONS

- Food & beverage processing
- Pasteurization systems
- Pharmaceutical
- Medical

SPECIFICATIONS

Output signals	4 mA to 20 mA 2-wire, 0 Vdc to 5 Vdc 3-wire, 1 Vdc to 5 Vdc 3-wire, 1 Vdc to 6 Vdc 3-wire, 0 Vdc to 10 Vdc, 3-wire, 1 Vdc to 11 Vdc 3-wire
Pressure ranges	Vacuum through 0 psig to 400 psig
Accuracy	±0.25% full scale (BFSL); Optional ±0.125% full scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Stability	±0.2% full scale for 1 year, non-accumulating
Adjustment	±10% full scale for zero and span
Response time	< 10 ms
Service life	> 100,000,000 load cycles
Temperature ranges	Compensated 32 °F to 175 °F (0 °C to 80 °C) Effect ±0.01%/°F for zero and span Media -40 °F to 300 °F (-40 °C to 150 °C) Ambient -40 °F to 176 °F (-40 °C to 80 °C) Storage -40 °F to 212 °F (-40 °C to 100 °C)
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire, 0 Vdc to 5 Vdc, 3-wire, 1 Vdc to 5 Vdc, 3-wire, 1 Vdc to 6 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire, Vdc to 11 Vdc, 3-wire)
Load limitations	≤ (VPower -10)/0.020 Amp for 4 mA to 20 mA output ≤ 5,000 Ω for 1 Vdc to 5 Vdc output ≤ 10,000 Ω for 0 Vdc to 10 Vdc output ≤ 4,500 Ω for 0.5 Vdc to 4.5 Vdc output
Proof pressure	3 times full scale for 0 psig to 2 psig through 0 psig to 200 psig 1.75 times full scale for 0 psig to 300 psig through 0 psig to 400 psig
Burst pressure	3.8 times full scale for 0 psig to 2 psig through 0 psig to 200 psig 4 times full scale for 0 psig to 300 psig through 0 psig to 400 psig
Measuring element	316 Stainless Steel
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, overvoltage and short circuit protection
Shock	1,000 g's according to IEC 60068-2-27
Vibration	15 g's according to IEC 60068-2-6
Weight	Approximately 1.1 lb.

* Unregulated

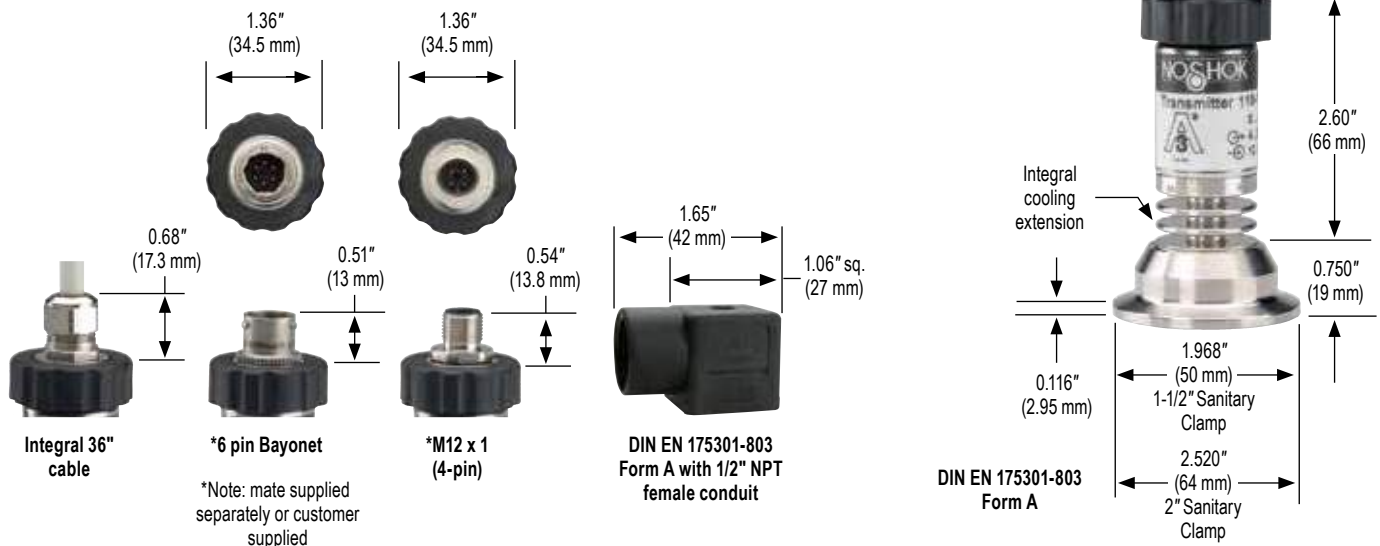
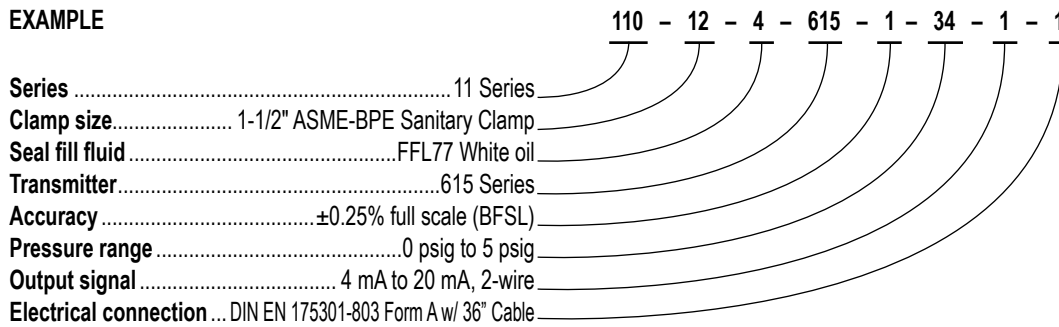
Diaphragm seal must be installed facing downward or in a vertical position for drainability.
Do not install diaphragm seal facing in an upward position.



ORDERING INFORMATION				
SERIES	110			
CLAMP SIZES	12 1-1/2"	16 2"		
SEAL FILL FLUID	4 FFL77 White oil Other food grade quality fill fluids available — please consult factory			
TRANSDUCER	615 615 Series transducer			
ACCURACIES	1 ±0.25% full scale (BFSL)	2 ±0.125% full scale		
PRESSURE RANGES	01 -30 inHg to 0 psig	16 -30 inHg to 150 psig	37 0 psig to 10 psig	55 0 psig to 160 psig
	04 -30 inHg to 15 psig	19 -30 inHg to 200 psig	40 0 psig to 15 psig	58 0 psig to 200 psig
	07 -30 inHg to 30 psig	22 -30 inHg to 300 psig	43 0 psig to 30 psig	61 0 psig to 300 psig
	10 -30 inHg to 60 psig	31 0 psig to 100 inH ₂ O	46 0 psig to 60 psig	64 0 psig to 400 psig
	13 -30 inHg to 100 psig	34 0 psig to 5 psig	49 0 psig to 100 psig	
	OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire	3 1 Vdc to 5 Vdc, 3-wire	5 0 Vdc to 10 Vdc, 3-wire
	2 0 Vdc to 5 Vdc, 3-wire	4 1 Vdc to 6 Vdc, 3-wire	6 1 Vdc to 11 Vdc, 3-wire	
ELECTRICAL CONNECTIONS	1 DIN EN 175301-803 Form A w/ 36" Cable	14 DIN EN 175301-803 Form A with 1/2" NPT female conduit		
	3 6-pin Bayonet	25 M12 X 1 (4-pin)		
	8 DIN EN 175301-803 Form A	36 Integral 36" cable		

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE



2-WIRE WIRING

	DIN EN 175301-803 Form A	Cable	M12	Bayonet
V+	1	Red	1	A
V-	2	Black	3	B

3-WIRE WIRING

	DIN EN 175301-803 Form A	Cable	M12	Bayonet
V+	1	Red	1	A
Common	2	Black	3	B
Output	3	White	4	C



20 SERIES

- Ranges from 16 inH₂O to 58 psig (1,600 inH₂O)
- Hart® protocol output available
- 316 Stainless Steel wetted parts
- Strong flush diaphragm with minimal fill volume
- Can be cleaned-in-place (CIP) or steamed-in-place (SIP)
- 3A certified



APPLICATIONS

- Food & beverage
- Dairy
- Chemical processing
- Pharmaceutical

FEATURES & BENEFITS

- All Stainless Steel housing
- Easy programming and range adjustment without test pressure via on-board display
- Accuracy 0.1% of adjusted span
- 10:1 turn down
- Active temperature compensation
- Hart® protocol optional
- 360° rotatable display

SPECIFICATIONS

Output signals	4 mA to 20 mA 2-wire, 4 mA to 20 mA 2-wire and Hart® signal
Pressure ranges	16 inH ₂ O to 58 psig (1,600 inH ₂ O)
Accuracy	0.1% of adjusted span
Stability	<0.1%/year
Adjustment	By 3 push buttons on display or optional Hart® signal
Response time	<150 ms
Service life	>10 years
Temperature ranges	-4 °F to 212 °F (-20 °C to 100 °C); 293 °F (145 °C) for 45 min.
Power requirement*	12 Vdc to 36 Vdc
Measuring element	316 Stainless Steel (Hastelloy C, Tantalum or Goldplated optional)
Connection	316 Stainless Steel
Housing material	304 Stainless Steel
Environmental rating	IP66 (IP68 optional)
Electrical protection	IP66 (NEMA 4X), IP68 (NEMA 6) optional
Weight	Approximately 3.3 lb. (Depending on process connection)

* Unregulated

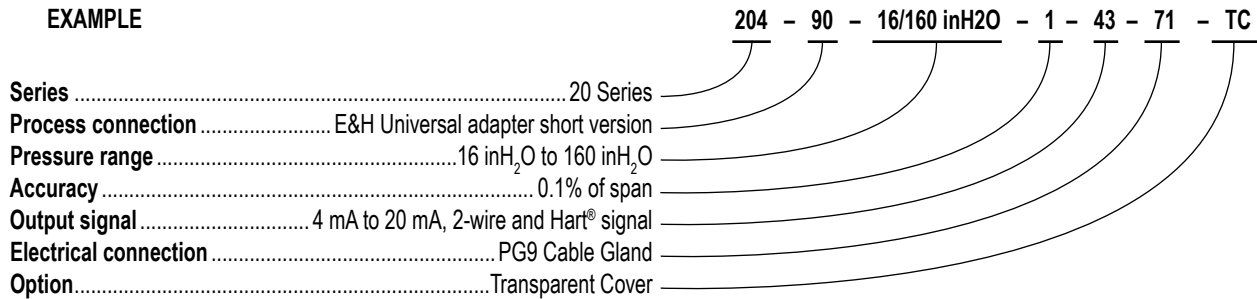


ORDERING INFORMATION			
SERIES	204		
PROCESS CONNECTIONS	90 E&H Universal adapter short version	95 King Gage Standard - 6"	
	91 E&H Universal adapter long version	96 King Gage Long - 8"	
	92 Anderson Negele Type SL Short	97 Rosemount Tank Spud - 2"	
	93 Anderson Negele Type SL Long - 6"	98 Rosemount Tank Spud - 6"	
	94 King Gage Short	99 Tank Mate Medium - 6"	
PRESSURE RANGES (Adjustable)*	16/160 inH₂O 16 inH ₂ O to 160 inH ₂ O (.06 psig to 6 psig)	6/58 psig 6 psig to 58 psig (160 inH ₂ O to 1,600 inH ₂ O)	
	47/470 inH₂O 47 inH ₂ O to 470 inH ₂ O (1.7 psig to 17 psig)		
ACCURACIES	1 0.1% of adjusted span		
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire	43 4 mA to 20 mA, 2-wire and Hart® signal	
ELECTRICAL CONNECTIONS	25 M12 x 1 (4-pin)	71 PG9 Cable Gland	
OPTIONS	TC Transparent Cover (for display)		

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

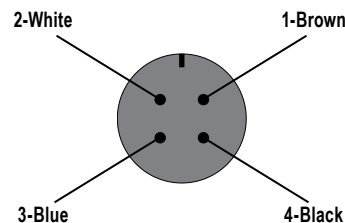
*Other ranges available, consult factory

EXAMPLE



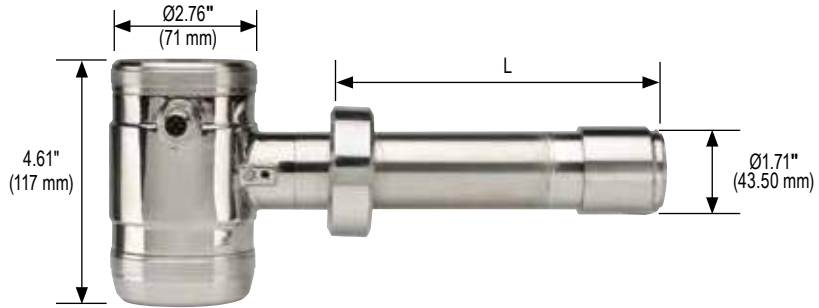
M12 x 1 (4-PIN) WIRING

1	Brown	V+
2	White	V-
3	Blue	Not used
4	Black	Not used



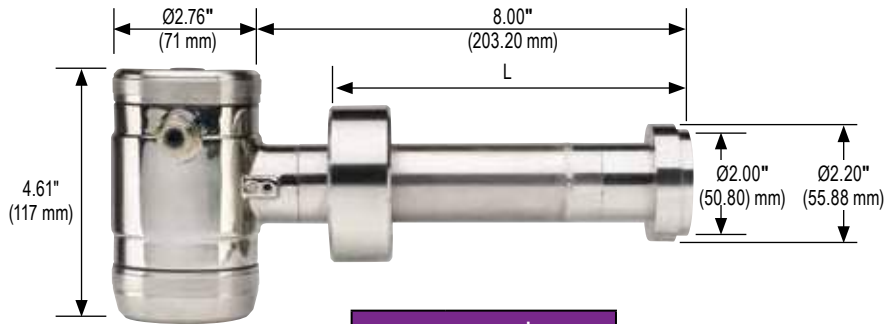
Dimensions

204-91 (E&H Universal adapter)



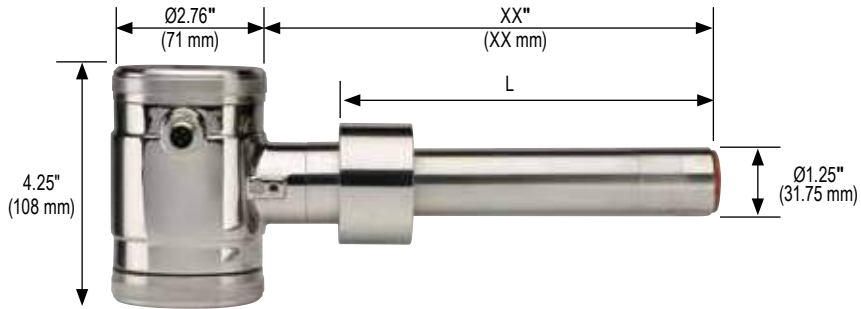
L	
Short	2.16" (54.86 mm)
Long	5.93" (150.50 mm)

204-93 (Anderson Negele Type SL)



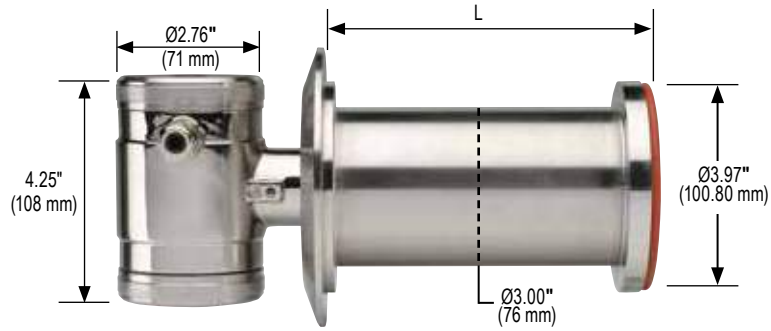
L	
Short	2.05" (52.0 mm)
Long	6.36" (161.50 mm)

204-95 (King Gage)



L	
Short	2.19" (55.63 mm)
Standard	6.62" (168.15 mm)
Long	8.81" (223.77 mm)

204-98 (Rosemount Tank Spud)



L	
Short	2.11" (53.58 mm)
Long	6.11" (155.19 mm)

204-99 (Tank Mate)





25 SERIES

- Ranges from -160 inH₂O vac to 1,160 psig
- Hart® protocol output available
- 316 Stainless Steel wetted parts
- Strong flush diaphragm with minimal fill volume
- Can be cleaned-in-place (CIP) or steamed-in-place (SIP)
- 3A certified



APPLICATIONS

- Food & dairy
- Chemical processing
- Pharmaceutical

FEATURES & BENEFITS

- All Stainless Steel housing
- Easy programming and range adjustment without test pressure via on-board display
- Accuracy 0.2% of adjusted span
- 4:1 turn down
- Active temperature compensation
- Hart® protocol optional

SPECIFICATIONS

Output signals	4 mA to 20 mA 2-wire, 4 mA to 20 mA 2-wire and Hart® signal
Pressure ranges	-160 inH ₂ O vac to 1,160 psig
Accuracy	0.2% of adjusted span
Stability	<0.1%/year
Adjustment	By 3 push buttons on display or optional Hart® signal
Response time	<100 ms
Service life	>10 years
Temperature ranges	-4 °F to 212 °F (-20 °C to 100 °C); 293 °F (145 °C) for 45 min.
Power requirement*	12 Vdc to 36 Vdc
Measuring element	316 Stainless Steel (Hastelloy C or Tantalum optional)
Connection	316 Stainless Steel
Housing material	304 Stainless Steel (316 Stainless Steel optional)
Environmental rating	IP66 (IP68 optional)
Electrical protection	IP66 (NEMA 4X), IP68 (NEMA 6) optional
Weight	Approximately 2.20 lb. (Depending on process connection)

* Unregulated

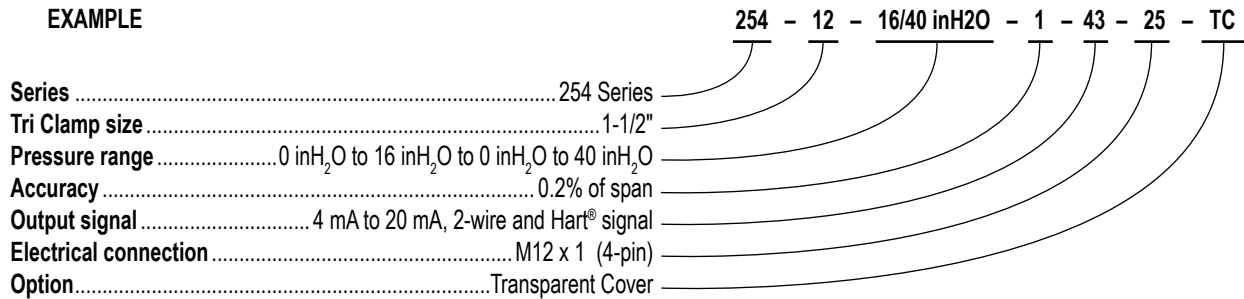


ORDERING INFORMATION		
SERIES	254	
TRI-CLAMP SIZE	12 1-1/2" 16 2"	24 3"
PRESSURE RANGES (Adjustable)	40inH₂O-vac -40 inH ₂ O to 0 inH ₂ O* 160inH₂O-vac -160inH ₂ O to 0 inH ₂ O 14.7/43-vac -14.7 psig to 43 psig 14.7/130-vac -14.7 psig to 130 psig 14.7/335-vac -14.7 to 335 psig 14.7/1145-vac -14.7 psig to 1,145 psig	16/40 inH₂O 0 inH ₂ O to 16 inH ₂ O to 0 inH ₂ O to 40 inH ₂ O (.6 psig to 1.45 psig) 40/160 inH₂O 0 inH ₂ O to 40 inH ₂ O to 0 inH ₂ O to 160 inH ₂ O (1.45 psig to 5.8 psig) 160/637 inH₂O 0 inH ₂ O to 160 inH ₂ O to 0 inH ₂ O to 637 inH ₂ O (5.8 psig to 23 psig) 14.5/58 14.5 psig to 58 psig (0 inH ₂ O to 400 inH ₂ O to 0 inH ₂ O to 1,607 inH ₂ O) 29/145 29 psig to 145 psig (0 inH ₂ O to 803 inH ₂ O to 0 inH ₂ O to 4,017 inH ₂ O) 87/350 87 psig to 350 psig (0 inH ₂ O to 2,410 inH ₂ O to 0 inH ₂ O to 9,697 inH ₂ O) 290/1160 290 psig to 1,160 psig (0 inH ₂ O to 8,035 inH ₂ O to 0 inH ₂ O to 32,140 inH ₂ O)
ACCURACIES	1 0.2% of adjusted span	
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire	43 4 mA to 20 mA, 2-wire and Hart® signal
ELECTRICAL CONNECTIONS	25 M12 x 1 (4-pin) 28 1/2" NPT Female	71 PG9 Cable Gland
OPTIONS	TC Transparent Cover (for display)	

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

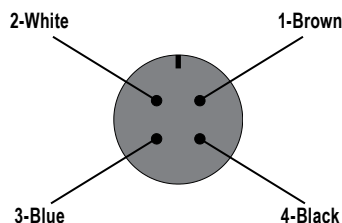
* Not available in 1-1/2" Tri-Clamp

EXAMPLE



M12 x 1 (4-PIN) WIRING

1	Brown	V+
2	White	V-
3	Blue	Not used
4	Black	Not used



*1-1/2", 2" and 3" Tri-Clamp connections available

“SNORKEL” Pressure & Level Transmitter

304 Series shown
with transparent cover

APPLICATIONS

- Tank level measurement
- Food & beverage
- Dairy
- Breweries
- Chemical processing
- Pharmaceutical

FEATURES & BENEFITS**300/301 Series**

- Cable connection only (no housing)
- Active temperature compensation
- Fixed range (300 Series)
- Range adjustment with Hart® (301 Series)
- 10:1 Turn down (301 Series)

302 Series

- All polished Stainless Steel housing
- Active temperature compensation
- Zero/span adjustable
- 4:1 Turn down

304 Series

- All polished Stainless Steel housing
- Active temperature compensation
- Accuracy 0.1% of adjusted span
- 10:1 Turn down
- Easy programming and range adjustment without test pressure via on-board display
- Hart® protocol available

30 SERIES

- 300 Series: ranges from 40 inH₂O to 60 psig
- 301 Series: adjustable ranges from 16 inH₂O to 1,450 psig via Hart®
- 302 Series: adjustable ranges from 40 inH₂O to 1,160 psig
- 304 Series: adjustable ranges from 16 inH₂O to 1,450 psig
- Hart® signal output available on 301 & 304 Series Transmitters
- 316 Stainless Steel wetted parts
- Strong flush diaphragm with minimal fill volume
- Can be cleaned-in-place (CIP) or steamed-in-place (SIP)
- 3A certified



	SERIES	SPECIFICATIONS
Output signals	All	4 mA to 20 mA 2-wire, 4 mA to 20 mA 2-wire and Hart® signal (301 & 304 Series only)
Pressure ranges	300 Series	Ranges from 40 inH ₂ O to 60 psig
	302 Series	Adjustable ranges from 40 inH ₂ O to 1,160 psig
	301/304 Series	Adjustable ranges from 16 inH ₂ O to 1,450 psig
Accuracy	300//302 Series	0.2% of adjusted span
	301/304 Series	0.1% of adjusted span
Stability	All	<0.1%/year
Adjustment	301 Series	Hart® signal
	302 Series	Zero and span internally
	304 Series	By 3 push buttons on display or optional Hart® signal
Response time	All	<150 ms
Service life	All	>10 years
Temperature ranges	300/301 Series	14 °F to 158 °F (-10 °C to 70 °C)
	302/304 Series	-4 °F to 212 °F (-20 °C to 100 °C) ; 293 °F (145 °C) for 45 min.
Power requirement*	All	12 Vdc to 36 Vdc
Measuring element	All	316L Stainless Steel (Hastelloy C, Tantalum or Gold plated optional)
Connection	All	316 Stainless Steel
Housing material	All	304 Stainless Steel (316 Stainless Steel optional)
Environmental rating	300/301 Series	IP68
	302/304 Series	IP66 (IP68 optional)
Electrical protection	All	IP66 (NEMA 4X), IP68 (NEMA 6) optional
Weight		Weight is dependent on model and cable length

* Unregulated



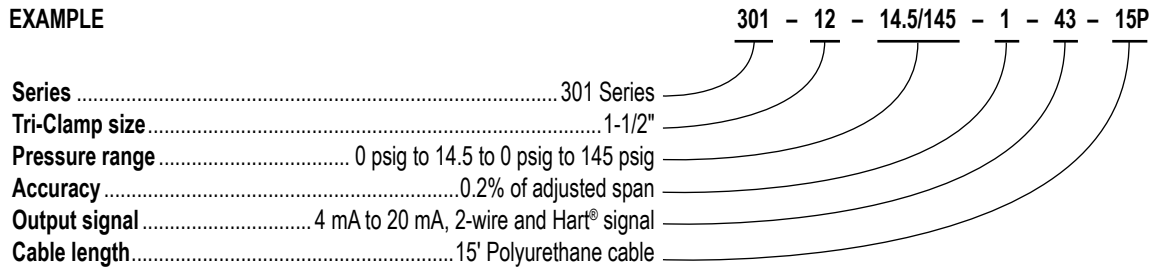
WARNING: This product can expose you to chemicals including Nickel, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

ORDERING INFORMATION				
SERIES	300 Fixed range transmitter	302 Adjustable transmitter	301 Adjustable transmitter with Hart® signal	304 Intelligent transmitter
TRI-CLAMP SIZE	12 1-1/2"	24 3"	16 2"	
300 SERIES PRESSURE RANGES (Fixed)	40 inH₂O 0 inH ₂ O to 40 inH ₂ O	120 inH₂O 0 inH ₂ O to 120 inH ₂ O	15 0 psig to 15 psig	
	60 inH₂O 0 inH ₂ O to 60 inH ₂ O	5 0 psig to 5 psig	30 0 psig to 30 psig	
	80 inH₂O 0 inH ₂ O to 80 inH ₂ O	10 0 psig to 10 psig	60 0 psig to 60 psig	
301 SERIES PRESSURE RANGES (Adjustable with Hart®)	16/160 inH₂O 0 inH ₂ O to 16 inH ₂ O to 0 inH ₂ O to 160 inH ₂ O	14.5/145 0 psig to 14.5 to 0 psig to 145 psig	290/1450 0 psig to 290 psig to 0 psig to 1,450 psig	
	47/470 inH₂O 0 inH ₂ O to 47 inH ₂ O to 0 inH ₂ O to 470 inH ₂ O	72.5/435 0 psig to 72.5 psig to 0 psig to 435 psig		
302 SERIES PRESSURE RANGES (Adjustable)	40/160 inH₂O 0 inH ₂ O to 40 inH ₂ O to 0 inH ₂ O to 160 inH ₂ O	14.5/58 0 psig to 14.5 to 0 to 58 psig	232/725 0 psig to 232 psig to 0 psig to 725 psig	
	160/277 inH₂O 0 inH ₂ O to 160 inH ₂ O to 0 inH ₂ O to 277 inH ₂ O	36/145 0 psig to 36 psig to 0 psig to 145 psig	580/1160 0 psig to 580 psig to 0 psig to 1,160 psig	
	277/609 inH₂O 0 inH ₂ O to 277 to 0 inH ₂ O to 609 inH ₂ O	100/232 0 psig to 100 psig to 0 psig to 232 psig		
304 SERIES PRESSURE RANGES (Intelligent)	16/160 inH₂O 0 inH ₂ O to 16 inH ₂ O to 0 inH ₂ O to 160 inH ₂ O	14.5/145 0 psig to 14.5 to 0 psig to 145 psig	290/1450 0 psig to 290 psig to 0 psig to 1,450 psig	
	47/470 inH₂O 0 inH ₂ O to 47 inH ₂ O to 0 inH ₂ O to 470 inH ₂ O	72.5/435 0 psig to 72.5 psig to 0 psig to 435 psig		
ACCURACIES	1 0.2% of adjusted span*			
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire	43 4 mA to 20 mA, 2-wire and Hart® signal**		
ELECTRICAL CONNECTIONS †	25 M12 x 1 (4-pin)	71 PG9 Cable Gland		
	28 1/2" NPT Female			
CABLE LENGTHS † †	15P 15' Polyurethane cable	30P 30' Polyurethane cable		
OPTIONS	JB Cable Junction Box	TC Transparent Cover (for display)***		

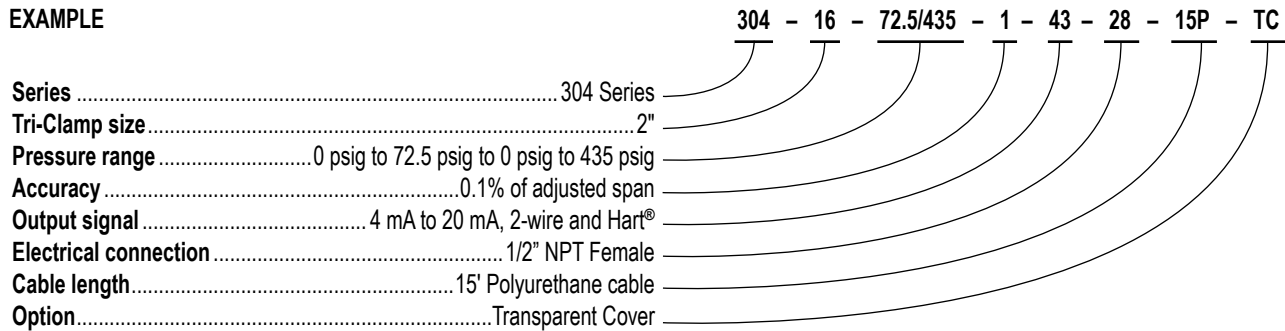
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

- * Standard accuracy on the 304 Series is ±0.1% of adjusted span
- ** Required for the 301 Series, optional for the 304 Series
- *** Available for the 304 Series only
- † Available for the 302 and 304 Series only
- † † Additional cable lengths available, consult factory

EXAMPLE

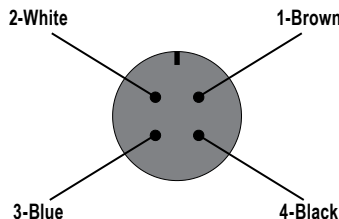


EXAMPLE



M12 x 1 (4-PIN) WIRING

1	Brown	V+
2	White	V-
3	Blue	Not used
4	Black	Not used



Dimensions

300/301 Series



* 300 Series fixed range is 6.22" (158 mm)

302 Series



*1-1/2", 2" and 3" Tri-Clamp connections available

304 Series



*1-1/2", 2" and 3" Tri-Clamp connections available