Measurement Solutions Product Guide

NOSHOK

Pressure & Level
Temperature
Force

Needle Valves
Manifold Valves

Diaphragm Seals

Digital Indicators

At NOSHOK, we pride ourselves on being innovators in the industry by continually offering the latest technology and measurement solutions, and providing the best customer support in the marketplace.

Established in 1967, NOSHOK was one of the first companies to offer liquid filled pressure gauges. We also took a bold step by backing our quality gauges with an extended 3-year warranty. That unwavering standard of quality has endured for over 45 years, and as we have expanded our product offering we continue to provide industry-leading warranties. NOSHOK also leads the industry as one of the first companies to offer corrosion-resistant zinc nickel plating standard on our carbon steel valves.

We have the capacity to put together special requirements which are so often hard to find. If you do not find what you need in this catalog, chances are we can still put a solution together.

NOSHOK is committed to providing excellence on every level. Thank you for choosing NOSHOK products.

Jeff N. Scott
President

NOSHOK Corporate Headquarters
Your Single Source Instrumentation Company

NOSHOK is a member and actively supports:

FCI Fluid Controls Institute, Inc. Technical Resources for Instrumentation and Fluid Control

THE FPDA MOTION & CONTROL NETWORK

ASME SETTING THE STANDARD

ASSOCIATION FOR HIGH TECHNOLOGY DISTRIBUTION AHTD

NOSHOK is an ISO 9001:2008 registered company

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NOSHOK

SPECIFICATIONS

SIZES: 1-1/2″, 2″, 2-1/2″ and 4″
CONNECTION: Bottom, back, panel mount, 1/8″ NPT, SAE J1926-3:7/16-20 Adjustable, and 1/4″ NPT
CASE: ABS is standard. Steel, chrome and stainless steel are available as options
LENS: Acrylic is standard; others available
MEASURING ELEMENT: Phosphor bronze Bourdon tube
MOVEMENT: Brass and nylon
ACCURACY: ±1.5% full scale to ±2.5% full scale dependent on model
AVAILABLE RANGES: Vacuum and compound through 15,000 psi
OPTIONS AND ACCESSORIES: Panel mount options, cover rings, orifices, rubber case protectors, recalibrators, special connections and more

OPERATING LIMITATIONS WORKING PRESSURE:
DYNAMIC: 60% of dial range
STATIC: 90% of dial range
TEMPERATURE: -4 °F to 140 °F (-20 °C to 60 °C)

100 SERIES

NOSHOK STANDARD GAUGES are general purpose, non-fillable dry gauges designed to provide reliable service on applications not corrosive to brass. They are used in almost every area of manufacturing and are especially suited for applications in hydraulics, pneumatics, medical, pumps & compressors, refrigeration controls, utlities and water management.

WARRANTY: One Year†

SPECIFICATIONS

SIZES: 2-1/2″ and 4″
CONNECTION: Bottom, back, panel mount, 1/4″ NPT
CASE: ABS, black painted steel or 304 stainless steel, Gas pressure test kit available (in 2-1/2″ size only, 20 oz./35 inH_2O)
LENS: Acrylic on the 2-1/2″ size, instrument glass on the 4″ size
MEASURING ELEMENT: Phosphor bronze diaphragm capsule
MOVEMENT: Brass, bearing parts highly polished nickel silver with zero point adjustment
ACCURACY: 2-1/2": ± 1.5% or ± 2.5% full scale: 4": ±1.6% full scale, optional ±1% full scale
AVAILABLE RANGES: -15 inH_2O to 0 inH_2O vacuum through 0 psi -10 psi
OPTIONS AND ACCESSORIES: Panel mount options, orifices, over-pressure protection, custom ranges and dials, special connections and more

OPERATING LIMITATIONS WORKING PRESSURE:
DYNAMIC: 60% of dial range
STATIC: 90% of dial range
TEMPERATURE: -4 °F to 140 °F (-20 °C to 60 °C)

200 SERIES

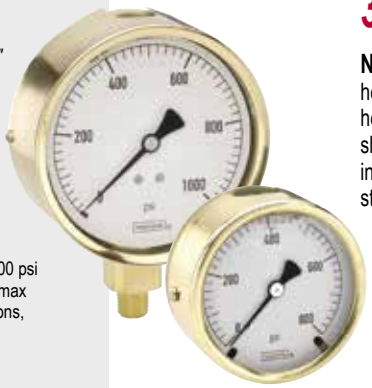
NOSHOK LOW PRESSURE DIAPHRAGM GAUGES are sensitive, capsule-type, non-fillable dry gauges designed for extremely low pressure and vacuum measurement. The ultra sensitive phosphor bronze diaphragm capsules are rated for pressure as low as 0 inH_2O -10 inH_2O and as high as 0 psi -10 psi. Applications include filter monitoring, gas distribution, HVAC, leak detection, level indication and medical.

WARRANTY: One Year†

SPECIFICATIONS

SIZES: 2-1/2″ and 4″
CONNECTION: Bottom and back, 1/4″ NPT bottom and back, 7/16″-20 SAE-4 and 1/2″ NPT available
CASE: One piece die cast brass
LENS: Acrylic with o-ring seal
MEASURING ELEMENT: 2-1/2″ size: phosphor bronze "C" tube for ≤ 600 psi, phosphor bronze coiled safety tube for 800 psi to 6,000 psi, and 316 stainless steel on 7,500 psi to 15,000 psi. 4" size: 316 stainless steel for 1,500 psi to 15,000 psi
MOVEMENT: Brass and nickel-silver
ACCURACY: 2-1/2″: ± 1.5% full scale: 4″: ±1% full scale
AVAILABLE RANGES: Vacuum and compound through 0 psi - 15,000 psi
OPTIONS AND ACCESSORIES: Panel mount options, cover rings, max indicating pointers, orifices, rubber case protectors, special connections, metric dials and more

OPERATING LIMITATIONS WORKING PRESSURE:
DYNAMIC: 60% of dial range
STATIC: 90% of dial range
TEMPERATURE: -4 °F to 140 °F (-20 °C to 60 °C)



300 SERIES

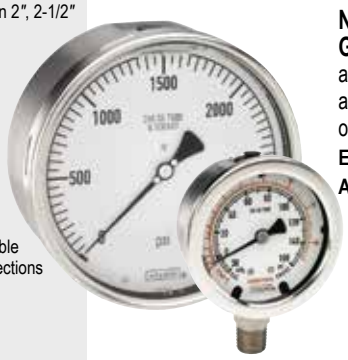
NOSHOK BRASS CASE LIQUID FILLED GAUGES are high quality, heavy-duty liquid filled gauges. Their one piece die cast brass case and heavy-duty Bourdon tube and movement enables them to stand up to shock and vibration encountered on the most demanding applications, including automotive, construction, hydraulics & pneumatics, mining, stamping & forming presses, and transportation.

WARRANTY: Three Years†

SPECIFICATIONS

SIZES: 2-1/2″ and 4″
CONNECTION: Bottom and back, 1/8" NPT on 1-1/2" sizes, 1/4" NPT on 2″, 2-1/2″ and 4" sizes, 1/2" NPT on 4" and 6" sizes.
CASE: 304 stainless steel
LENS: Acrylic on 1-1/2" and 2", Trogamide on 2-1/2", Instrument glass on 4" and safety glass on 6" sizes
MEASURING ELEMENT: 316 stainless steel C-Type Bourdon tube for ≤ 600 psi, Coiled safety tube for > 600 psi
MOVEMENT: Stainless steel
ACCURACY: 1-1/2": ± 2.5% full scale, 2-1/2": ± 1.5% full scale 4" and 6": ± 1% full scale
AVAILABLE RANGES: Vacuum and compound through 100,000 psi.
OPTIONS AND ACCESSORIES: Panel mount options, orifices, adjustable pointers, max indicating pointers, metric and special dials, special connections and more

OPERATING LIMITATIONS WORKING PRESSURE:
DYNAMIC: 60% of dial range
STATIC: 90% of dial range
TEMPERATURE: 400 Series: -40 °F to 212 °F (-40 °C to 100 °C)
500 Series: -4 °F to 212 °F (-20 °C to 100 °C)



400/500 SERIES

NOSHOK DRY AND LIQUID FILLED ALL STAINLESS STEEL GAUGES are corrosion-resistant fillable dry or liquid-filled gauges. They are used in corrosive service world-wide where ruggedness and reliability are critical. Typical applications include chemical processing, oil field & offshore, paper mills, agriculture plants, marine, and water & wastewater.

Extreme high pressure ranges available.

Ammonia gauges available in certain ranges.

WARRANTY: 400 Series: One Year†
500 Series: Three Years†

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

SIZES: 4-1/2″
CONNECTION: Bottom, 1/4″ NPT, 1/2″ NPT, 9/16-18 UNF 3B (above 30,000 psi standard)
CASE: Turret style black phenolic. Solid front safety case with blowout back PBT
LENS: Acrylic
MEASURING ELEMENT: Phosphor bronze C-Type Bourdon tube, 316 SS C-Type or coiled Bourdon tube, 316 SS coiled safety Bourdon tube or 316 SS steel capsule, depending on model
MOVEMENT: Brass and nickel-silver
ACCURACY: 640/660: ±0.5% full scale ASME Grade 2A
740/760: ±0.5% full scale ASME Grade 2A, ±1.5% full scale ASME Grade A for inH_2O, 5 psi and 10 psi ranges
AVAILABLE RANGES: Vacuum and compound through 60,000 psi
OPTIONS AND ACCESSORIES: Panel mount options, lens options, MIP, orifices

OPERATING LIMITATIONS WORKING PRESSURE:
DYNAMIC: 60% of dial range
STATIC: 90% of dial range
TEMPERATURE: 640/660 (Glycerin fill): -4 °F to 150 °F (-20 °C to 65 °C); **740:** -40 °F to 212 °F (-40 °C to 100 °C); **760 (Glycerin fill)**: -4 °F to 212 °F (-20 °C to 100 °C)

600/700 SERIES

NOSHOK PROCESS GAUGES are turret style dry or liquid-filled gauges. These gauges are made with phosphor bronze, 316 stainless steel and brass wetted parts, and phenolic cases that are specifically designed for demanding service in chemical, petroleum and industrial processing industries. They are widely used throughout the world on applications including injection molding machines, laboratory & test equipment, power generation, oil field & offshore, utilities, and water & wastewater.
Extreme high pressure and extreme low pressure diaphragm ranges available.

WARRANTY: 640/740 Series: One Year†
660/760 Series: Three Years†

SPECIFICATIONS

SIZES: 6″
CONNECTION: Bottom, 1/4″ NPT
CASE: 304 stainless steel
COVER RING: 304 stainless steel
LENS: Instrument glass
MEASURING ELEMENT: Beryllium copper Bourdon tube for ≤1,000 psi, 316 SS Bourdon tube for 1,500 to 6,000 psi
MOVEMENT: Brass with jeweled bearings & nickel-silver pinion gear & shafts
ACCURACY: ± 0.25% full scale
AVAILABLE RANGES: Vacuum and compound through 6,000 psi
OPTIONS AND ACCESSORIES: Panel mount options, orifices, special connections, carrying cases and more

OPERATING LIMITATIONS WORKING PRESSURE:
STATIC: 100% of dial range (Not recommended for dynamic applications)
TEMPERATURE: -40 °F to 180 °F (-40 °C to 80 °C)

800 SERIES

NOSHOK PRECISION TEST GAUGES are highly accurate dry gauges. They are used in laboratories, calibration stands, aerospace and wherever accuracy and sensitivity are critical parameters in measurement. The NOSHOK adjustable knife-edge pointer in conjunction with the mirror dial band eliminate parallax* error. (*The difference in apparent direction of an object as seen from two different points not on a straight line with the object.)

WARRANTY: One Year†

SPECIFICATIONS

SIZES: 1-1/2″, 2″, 2-1/2″ and 4″
CONNECTION: 1/8″ NPT back connection on 1-1/2″ size, 1/4″ NPT bottom and back on 2-1/2″ and 4″ sizes, SAE J1926-3: 7/16-20 Adjustable
CASE: ABS or 304 stainless steel dependent on model
LENS: Acrylic or polycarbonate on 1-1/2″ and 2-1/2″; instrument glass on 4″
MEASURING ELEMENT: Phosphor bronze C-Type Bourdon tube for ≤ 600 psi, Coiled safety tube for > 600 psi
MOVEMENT: Brass and nylon
ACCURACY: ±2.5% full scale on 1-1/2″ and 2″ sizes; ±1.5% full scale on 2-1/2″ sizes; ±1% full scale on 4″ sizes
AVAILABLE RANGES: Vacuum and compound through 15,000 psi
OPTIONS AND ACCESSORIES: Panel mount options, orifices, rubber case protectors, special connections, special dials and more
OPERATING LIMITATIONS WORKING PRESSURE:
DYNAMIC: 60% of dial range
STATIC: 90% of dial range
TEMPERATURE: -4 °F to 140 °F (-20 °C to 60 °C) (Glycerin fill)

900 SERIES

NOSHOK ABS AND STAINLESS STEEL CASE LIQUID FILLED GAUGES are high quality gauges that incorporate unique design features aimed at extended service life and reliability. They are used world-wide where pulsation, vibration and shock are present and the media is not corrosive to brass, including automotive, construction, hydraulics & pneumatics, power generation, transportation and water management.

WARRANTY: Three Years†

SPECIFICATIONS

HOUSING MATERIAL: Stainless steel
DISPLAY: 0.43″ high liquid crystal display
DIGITS: 4 standard. 4-1/2, up to 9999
WETTED MATERIALS: ≤750 psig stainless steel, aluminum, NBR, ceramic measuring element ≥1,000 psig stainless steel, thin-film measuring element
ACCURACY: ±0.25% full scale (BFSL)
UPDATE RATE: 5 times/second
PRESSURE RANGES: Standard ranges from 30 psig to 10,000 psig; compound ranges from 30/30 psig through 30/600 psig
TEMPERATURE RANGES: Storage: -4 °F to 158 °F (20 °C to 70 °C); **Media:** -22 °F to 185 °F (-30 °C to 85 °C); **Ambient:** 14 °F to 140 °F (-10 °C to 60 °C)
PROOF PRESSURE: 2 times full scale range, maximum 15,000 psi
POWER SUPPLY: 2 x 1.5V AA battery 4,000 hrs (AA 2,000 mAh)
ON/OFF SWITCH: Manual; auto shut-off optional
PROGRAMMABLE FUNCTIONS: Adjustable through front key pad
Tare: ±20% of full scale range; **On/Off:** Adjustable automatic turn off
Measuring Unit: bar, psi, MPa

CE Compliant to EN61326, EMI and ESD protection; NEMA 4X to EN60529/IEC529

1000 SERIES

NOSHOK DIGITAL PRESSURE GAUGES are designed to exceed the industry's most demanding application requirements. Using the latest in reliable ceramic thick film strain gage technology combined with low power electronics, these gauges are accurate, stable and extremely reliable. The 1000 Series gauges are ideally suited for local indication.

Shown with enhanced software.

WARRANTY: Three Years†

†For further warranty information please consult your specific product catalogs.

PRESSURE GAUGE ACCESSORIES & OPTIONS

PIGTAIL STEAM SYPHONS

PISTON TYPE SNUBBERS

SWIVEL ADAPTOR

SINTERED SNUBBER REPLACEMENT DISCS

PANEL MOUNT CLAMP

CHROME FRONT FLANGE

POLISHED BRASS FRONT FLANGE

CHROME TRIANGULAR BEZEL WITH U-CLAMP

REAR FLANGE

PIGTAIL STEAM SYPHONS protect the instrument from the damaging effects of high temperature steam and should be used in all steam applications. They are available in 1/4″ and 1/2″ NPT sizes in welded steel, welded 316 stainless steel or seamless 316 stainless steel with ratings to 3800 psi @ 850 °F.

PISTON TYPE SNUBBERS resist clogging and are self cleaning. Five different sized pistons are included with each snubber to insure the correct amount of snubbing for virtually every application. They are available in brass and 316 stainless steel in either 1/4″ NPT, 1/2″ NPT or 7/16-20 SAE-4.
WARRANTY: One Year†

SINTERED SNUBBERS are a cost-effective solution to protect expensive instrumentation. These snubbers increase gauge readability by smoothing out pressure surges, pulsations and spikes, and they eliminate instrument failure due to pressure shock. Five basic discs are available to accommodate 90% of applications. Snubbing action is achieved by utilizing a corrosion-resistant 316 stainless steel sintered element; exotic materials or intermediate disc grades are available on a per order basis. NOSHOK Sintered Snubbers provide long service life with no moving parts to wear out.

SWIVEL ADAPTORS are used with gauges and gauge valves to adjust the line of sight. The swivel adaptor rotates 360° to allow the connected instrument to be positioned in the desired direction and has temperature ratings of 15,000 psi @ 200 °F and 3,000 psi @ 1,000 °F. The pressure connection is achieved with a tapered cone style compression fitting simply by tightening the swivel hex nut. They feature all 316 stainless steel construction, and are standard with 1/2″ NPT male process – 1/2″ NPT female instrument connections. Also available with 1/4″ NPT connections.

PANEL MOUNTING

Many panel mounting options are available and can be installed in the field. Options include polished brass front flanges (BFF), black painted steel front flanges (BLFF), chrome front flanges (CFF), polished stainless steel front flanges (SSFF), chrome triangular bezel front flanges with U-clamp (CBU), black painted steel triangular bezels with U-clamp (BBU-clamp), polished stainless steel narrow bezel front flanges (SSBU), and 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. A selection of flange rings are also offered: polished stainless steel flange rings (SSFR), chrome plated steel flange rings (CFR), and black or chrome panel mount rings (BPMR & CPMR). Brass rear flanges (BRF) and black rear flanges (BLRF) for front of panel mounting are also available on some models. Rear Flanges are a factory installed option.

CASES AND COVER RINGS

Black painted steel (BCR), chrome plated steel (CCR) and 304 stainless steel (SSCR) cases and cover rings are available on many models as production options.

LENSES

Instrument glass lenses, laminated safety glass lenses, acrylic lenses, and homalite lenses (resistant to many industrial solvents) are available on many models. NOTE: A steel or stainless steel case and cover ring is required when other than acrylic lenses are utilized. Some models are also available with a solid front, safety case configuration as a production option.

†For further warranty information please consult your specific product catalogs.

MAXIMUM INDICATING POINTERS

SET POINTERS

RUBBER CASE PROTECTORS

AMMONIA REFRIGERATION GAUGES

MAXIMUM INDICATING POINTERS (MIP) are an invaluable tool for identifying pressure spikes in a system. They are very helpful during system start up and trouble shooting. MIPs add an additional ±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.

SET POINTERS (SP) are used to identify an operating minimum or maximum pressure or vacuum value. Set pointers are available on most 100 Series gauges.

RUBBER CASE PROTECTORS (RCP)
Rubber case protectors (RCP) are ideal for gauges that are subjected to direct physical shock. 2-1/2″ covers are blue and 4″ covers are black.

ORIFICES
Press-fit brass orifices or threaded 316 stainless steel orifices are available on all NOSHOK pressure gauges. They are standard with .012″ I.D or .032″ I.D, depending on the model. Orifices are used in a gauge to restrict the flow of rapidly increasing and decreasing pressures, thereby lessening the immediate effect of pulsations and pressure spikes. Orifices are recommended for all dynamic applications.

RECALIBRATORS
The option of an adjustment screw accessible through the dial facilitates re-setting the zero point without disassembling the gauge.

OVER PRESSURE PROTECTION
Over pressure protection of up to 200% of the dial range is available on some models as a production option.

AMMONIA REFRIGERATION GAUGES
Ammonia refrigeration gauges with dials reading in both pressure and temperature are available in 400/500 Series 2-1/2″ and 4″ sizes.

LIQUID FILLING OPTIONS
Many NOSHOK gauges are available with liquid filling options. Our standard fill is Glycerin and water; however, optional fill liquids include Dow Corning® 200 silicone and Halocarbon®.

SPECIAL CONNECTIONS
Special connections are available on most NOSHOK gauges. Some examples include: metric threads, female threads, straight threads (flare or swivel type) and special o-ring connections. Please contact us with your requirements for prices, availability and minimum quantities.

REID VAPOR TEST GAUGES
A Reid Vapor test gauge configuration which includes a handle, special dial and special pressure part is available in 600/700 Series gauges with pressure ranges of 0 psi-5 psi, 0 psi-15 psi and 0 psi-30 psi.

RECEIVER GAUGES
3-15 psi receiver gauges are available in both 600 Series (brass) and 700 Series (316 stainless steel) configurations.

METRIC DIALS AND CUSTOMIZED SPECIAL DIALS
Dual scale metric dials in psi/bar, psi/kPa and psi/kg/cm^2 are available on many models. Certain 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. 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 models.

CERTIFIED CALIBRATION
Certified calibration is 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 and is traceable to the National Institute of Standards and Technology.

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

SIZES: 2-1/2″ and 4-1/2″
CASE MATERIAL: Fiberglass reinforced plastic – standard
LENS: Acrylic – standard; laminated safety glass – optional; Acrylic w/ MIP – optional
SENSOR HOUSING MATERIAL: Aluminum, black – standard; 316L stainless steel – optional
PROCESS CONNECTION: 1/4″ F-F NPT, back connection – standard; Other 1/4″ F-F NPT with back or side connections available
ACCURACY: ±2% full scale on rising pressure
RANGES: 0 psid to 5 psid through 0 psid to 100 psid
OPTIONAL FILL FLUIDS: Glycerin, Silicone or Halocarbon®

OPERATING LIMITATIONS:
TEMPERATURE: -40 °F to 200 °F (-40 °C to 93 °C)
MAXIMUM WORKING STATIC PRESSURE: 6,000 psig

1000 SERIES

NOSHOK PISTON TYPE DIFFERENTIAL GAUGES are designed for measuring pressure drop across filters, strainers, separators and valves. The single piece construction of the ceramic magnet/piston is designed to reduce "blow by" and increase gauge accuracy. These gauges can be found in applications requiring high differential pressure from 0 to 5 psid to 0 to 100 psid with maximum working/static pressure to 6,000 psig.

WARRANTY: 1000 Series (dry): One Year†
1000 Series (liquid filled): Three Years†

SPECIFICATIONS

SIZES: 2-1/2″ and 4-1/2″
CASE MATERIAL: Fiberglass reinforced plastic – standard.
LENS: Acrylic – standard; laminated safety glass – Opt.; acrylic w/ MIP – Opt.
SENSOR HOUSING MATERIAL: Aluminum, black – standard; 316L stainless steel – Opt.
PROCESS CONNECTION: 1/4″ F-F NPT, back connection – standard; Other 1/4″ F-F NPT with top and bottom connections available
ACCURACY: ±2% full scale on for ranges 0 psid to 15 psid and above; ±5% full scale for ranges below 0 psid to 15 psid
RANGES: 0 inH_2O to 50 inH_2O through 0 psid to 100 psid
OPTIONAL FILL FLUIDS: Glycerin, Silicone or Halocarbon®

OPERATING LIMITATIONS:
TEMPERATURE: -40 °F to 200 °F (-40 °C to 93 °C)
MAXIMUM WORKING STATIC PRESSURE: 3,000 psig - stainless steel and aluminum

1100 SERIES

NOSHOK DIAPHRAGM TYPE DIFFERENTIAL GAUGES are designed for applications where higher levels of solids are present in the measuring media. The magnetic piston and polymeric diaphragm are utilized to measure the low to high differential pressure. The isolation of the high and low inlets prevents fluid movement between the ports. They are used in measuring pressure drops across filters, strainers, separators, heat exchangers and more.

WARRANTY: 1100 Series (dry): One Year†
1100 Series (liquid filled): Three Years†

SPECIFICATIONS

SIZES: 4-1/2″ and 6″
CASE MATERIAL: Aluminum, black – standard; 316L stainless steel – Optional
LENS: Polycarbonate – standard; laminated safety glass optional
SENSOR HOUSING MATERIAL: 316L stainless steel – standard
PROCESS CONNECTION: 1/4″ F-F NPT, back connection – standard; Other 1/4″ F-F NPT with dual top and bottom connection available
ACCURACY: ±1% full scale on rising pressure
RANGES: 0 to 100 inH2O through 0 to 600 psid
OPTIONAL FILL FLUIDS: Glycerin, Silicone or Halocarbon®

OPERATING LIMITATIONS:
TEMPERATURE: -40 °F to 200 °F (-40 °C to 93 °C)
MAXIMUM WORKING STATIC PRESSURE: 3,000 psig

1200 SERIES

NOSHOK MEMBRANE TYPE HIGH STATIC DIFFERENTIAL PRESSURE GAUGES are designed for applications requiring high static pressure and high differential pressure measurement. Utilizing opposing Monel membranes, Halocarbon® fill and a bi-directional overpressure valve these gauges are suited for applications in hydraulic and pneumatic systems, filters, flow indicators and caustic liquid or gaseous media. A liquid filled case is available to dampen the effects of pulsation, vibration and shock.

WARRANTY: 1200 Series (dry): One Year†
1200 Series (liquid filled): Three Years†

SPECIFICATIONS

SIZES: 4-1/2″ and 6″
CASE MATERIAL: Aluminum, black – standard; 316L stainless steel – optional
LENS: Polycarbonate – standard; laminated safety glass optional
SENSOR HOUSING MATERIAL: 316L stainless steel – standard
PROCESS CONNECTION: 1/4″ F-F NPT, dual top and bottom connection – standard; Other 1/4″ F-F NPT with back connection available
ACCURACY: ±1% full scale on rising pressure
RANGES: 0 inH_2O to 100 inH_2O through 0 psid to 400 psid
OPTIONAL FILL FLUIDS: Glycerin, Silicone or Halocarbon®

OPERATING LIMITATIONS:
TEMPERATURE: -40 °F to 200 °F (-40 °C to 93 °C)
MAXIMUM WORKING STATIC PRESSURE: 600 psig

1300 SERIES

NOSHOK MEMBRANE TYPE NOMINAL STATIC DIFFERENTIAL PRESSURE GAUGES are designed for integral process applications requiring nominal static and low differential pressure measurement. The black anodized aluminum case and 316L stainless steel sensor housing combine to form a durable case construction with NEMA 4X rating. These gauges are suited for application in caustic liquid or gaseous media and/or low temperature gases, water treatment systems, filters, strainers, pumps and more.

WARRANTY: 1300 Series (dry): One Year†
1300 Series (liquid filled): Three Years†

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

DISPLAY: 0.4″ LCD
DIGITS: 4, from -1999 to 9999
ACCURACY: ±0.2% full scale, ±1 digit
UPDATE RATE: 5 times/sec
RANGE: The 4 mA to 20 mA signal from the transmitter can be assigned any display value within the display range
POWER: Loop-powered; No additional power supply required; Maximum current rating is 40 mA and voltage drop of 3 Vdc

CE Compliant to EMC norm EN61326:1997/A1:1998 RFI, EMI, ESD protection; NEMA 4X to EN60529/IEC529

1800 SERIES

NOSHOK ATTACHABLE LOOP-POWERED DIGITAL INDICATORS utilize a transmitters' 4 mA to 20 mA output signal and the Hirschmann connector for local pressure indication. It is simply inserted between the transmitter body and the connector without the need for additional wiring or power source. The indicator is programmable to display a range of -1999 to 9999 and may be tilted for better viewing. There is a user selectable digital filtering to improve readability in rapidly varying pressure pulsations. Available with optional relay that is programmable through the front of the meter.

WARRANTY: One Year†

SPECIFICATIONS

DISPLAY: 3-1/2″ digit LCD from -1999 to 1999
INPUT SIGNAL: Current: 4 mA to 20 mA
SPAN RANGE: 0 to 1999
OFFSET RANGE: -1999 to 1999
LINEARITY: ±0.1% to 1 digit
READING RATE: 2.5 readings per second, nominal
RESPONSE TIME: 1.5 seconds to settle for a step change

CE Compliant to EMC norm EN61326:1997/A1:1998 RFI, EMI, ESD protection; NEMA 4X to EN60529/IEC529

1900C SERIES

NOSHOK COMPACT LOOP-POWERED DIGITAL INDICATORS provide digital display of any desired unit of pressure, temperature, level, and force or flow measurement. Their 3-1/2″ digit display has a span range of 0 to 1999 and is available in a positive image reflective LCD or in an optional red or yellow/green back-lit version.

WARRANTY: Two Years†

SPECIFICATIONS

ENCLOSURE: Black painted steel or off-white fiberglass optional
DISPLAY: 5 digit, 0.48″ high (-9999 to 99999) LCD
INPUT SIGNAL: Current: 4 mA to 20 mA
Voltage: 0 Vdc to 10 Vdc; Resistance: 100 Ω pt
POWER REQUIREMENT: 9 Vdc to 28 Vdc (optional power supply available for 85 Vac to 250 Vac excitation)
ELECTRICAL CONNECTIONS: Terminal block in rear, recommended wire: 30 to 14 AWG copper
OPTIONAL POWER SUPPLIES: 115 Vac to 12 Vdc (400 mA); 115 Vac to 24 Vdc (200 mA); or 115 Vac to 12 Vdc (80 mA)

CE Compliant to EMC norm EN61326:1997/A1:1998 RFI, EMI, ESD protection; NEMA 4X to EN60529/IEC529

1950 SERIES

NOSHOK COMPACT SMART SYSTEM DIGITAL INDICATORS offer all the features of a full size panel meter compressed into a small design for ease of installation in almost any application. The 5 digit display has a span range of -9999 to 99999 and is available in reflective LCD and selectable red or green backlit versions. The display can accept a variety of process signals for applications in pressure, flow, level, force and temperature. All programming can be done easily through the front of the meter. The display is fully expandable to accommodate applications requiring relays, dual sinking outputs, and serial communications by RS232 or RS485. NOSHOK calibrates all of its indicators to your transducer requirements at no additional cost.

WARRANTY: Two Years†

SPECIFICATIONS

INPUT SIGNALS: Current, voltage or resistance
POWER REQUIREMENTS: 115/230 Vac or 11 Vdc to 36 Vdc
INTERNAL POWER SUPPLY: 24 Vdc
ELECTRICAL CONNECTION: Terminal blocks in rear
UPDATE RATE: Up to 20 times per second adjustable (Up to 105 time per second, adjustable for 2100 Series)
LINEARIZATION: 16 point scaling of non linear input
ACCURACY: ±0.03% of reading +3 µA for 4 mA to 20 mA input; ±0.03% of reading +3 mV for 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc inputs over the range of 18 °C to 28 °C

CE Compliant to EMC norm EN61326:1997/A1:1998 RFI, EMI, ESD protection; NEMA 4X/IP65 sealed bezel only

2000/2100 SERIES

NOSHOK SMART SYSTEM "INTELLIGENT" DIGITAL INDICATORS are field upgradeable digital process indicators with single or dual input which suit a wide range of indication and control requirements. They can accept a variety of standard process signals and precisely scale them into any desired unit of measure. The indicator employs advanced technology for stable, drift free readout, while incorporating added features such as an optional analog output card, dual or quad relay cards or serial communication cards. The easy menu driven programming or available PC software allows the user to quickly and easily set system configurations.

WARRANTY: Two Years†

SPECIFICATIONS

DISPLAY: Upper 6 digit, 0.71", tri-color LED (red, green, orange); Lower 9 digit, 0.35", green LED
INPUT SIGNALS: Thermocouple, RTD, current, voltage, resistance and process signals
POWER REQUIREMENTS: AC input 40 Vac to 250 Vac, 50/60 Hz, 20 VA; DC input 21.6 Vdc to 250 Vdc, 8 W
ELECTRICAL CONNECTION: Screw terminals at back of case, USB port for configuring with a computer
UPDATE RATE: 160/sec
LINEARIZATION: 2 to 16 points, selectable
ACCURACY: <0.03% of full scale, 64 °F to 82 °F (18 °C to 28 °C); <0.12% of full scale, 32 °F to 122 °F (0 °C to 50 °C)

CE Compliant to EMC norm EN61326:1997/A1:1998 RFI, EMI, ESD protection; NEMA 4X/IP65 sealed bezel only

2200 SERIES

NOSHOK DUAL DISPLAY DIGITAL INDICATORS accept a wide variety of input signals including thermocouples or RTDs, current, voltage, resistance & process signals, and feature a dual display with tri-color and variable intensity digits. The NOSHOK 2200 Series Dual Display Digital Indicator has a universal power input accepting either AC or DC voltage, along with a 24 Vdc sensor excitation, as well as a built-in USB port for configuring with a computer. Plug-in option cards are available for field upgrading. Interface sotware available on requsest.

WARRANTY: Two Years†

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

OUTPUT SIGNAL: 4 mA to 20 mA, 2-wire
RANGES: Standard gauge ranges from vacuum to 15,000 psi;absolute ranges also available
ACCURACY: ±0.5% full scale (BFSL);
Optional ±0.25% full scale (BFSL)
HOUSING MATERIAL: 316 stainless steel
POWER SUPPLY: 10 Vdc to 30 Vdc (4 mA to 20 mA) - Unregulated
ADJUSTMENT: ≤ ±10% for zero and span

CE compliant to EMC norm EN 61326: 1997/A1 1998
RFI, EMI and ESD protection
IP65, NEMA 4X to EN 60529/IEC 529

100 SERIES

NOSHOK CURRENT OUTPUT PRESSURE TRANSMITTERS are designed utilizing advanced diffused semiconductor and proven sputtered thin film sensor technology for maximum stability. They are highly repeatable, shock resistant and extremely stable over long periods of time. CE compliance, which includes substantial levels of RFI, EMI and ESD protection combined with reverse polarity and over-voltage protection, ensures that these transmitters perform well in the most demanding applications.

WARRANTY: Three Years†

SPECIFICATIONS

OUTPUT SIGNALS: 0 Vdc to 5 Vdc, 0 Vdc to 10 Vdc, 1 Vdc to 5 Vdc, 1 Vdc to 6 Vdc & 1 Vdc to 11 Vdc, 3-wire
RANGES: Standard gauge ranges from vacuum to 15,000 psi; absolute ranges also available
ACCURACY: ±0.5% full scale (BFSL);
Optional ±0.25% full scale (BFSL)
HOUSING MATERIAL: 316 stainless steel
POWER SUPPLY: 10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire); 10 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire); 10 Vdc to 30 Vdc (1 Vdc to 6 Vdc, 3-wire); 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire); 14 Vdc to 30 Vdc (1 Vdc to 11 Vdc, 3-wire) - Unregulated
ADJUSTMENT: ±10% for zero and span

CE compliant to EMC norm EN 61326: 1997/A1 1998
RFI, EMI and ESD protection; IP65, NEMA 4X to EN 60529/IEC 529

200 SERIES

NOSHOK VOLTAGE OUTPUT PRESSURE TRANSDUCERS are highly repeatable, shock resistant and extremely stable over long periods of time. Utilizing advanced diffused semiconductor and proven sputtered thin film sensor technology they are highly accurate and stable. CE compliant.

WARRANTY: Three Years†

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;
.5 Vdc to 4.5 Vdc ratiometric, 3-wire
RANGES: Standard from 0 psig to 15 psig; through 0 psig to 10,000 psig, standard absolute ranges 15 psig through 300 psig
ACCURACY: ±0.5% full scale (BFSL);
Optional ±0.25% full scale (BFSL)
HOUSING MATERIAL: 316L stainless steel
POWER SUPPLY: 8 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire); 8 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire); 8 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire); 8 Vdc to 30 Vdc (0.5 Vdc to 4.5 Vdc, 3-wire);14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire); 5 ± 10% (0.5 Vdc to 4.5 Vdc ratiometric, 3-wire) - Unregulated

CE compliant to EMC norm EN 61326: 1997/A1 1998
RoHS Compliant

300 SERIES

NOSHOK COMPACT OEM PRESSURE TRANSDUCERS' rugged, compact design delivers solid durability and long term stability during operation. Engineered for use in general industrial applications, it features technical specifications exceeding those of competitors' transducers costing much more. A wide variety of electrical and mechanical connections are available for easy installation into most applications, along with most popular analog output signals. All electrical components carry a high degree of EMC protection compliant with EN 61326, which makes it ideal for areas where RFI, EMI or ESD signals are present. Its high quality stainless steel construction is compatible with chemically aggressive media.

WARRANTY: Three Years†

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire & 0 Vdc to 5 Vdc, 0 Vdc to 10 Vdc, 0.5 Vdc to 2.5 Vdc, 3-wire
RANGES: 0 inH_2O to 50 inH_2O through 0 psi to 1,000 psi
CABLE: PUR cable standard; FEP and water-blocked PVC optional
ACCURACY ±0.25% full scale (BFSL);
Optional ±0.125% full scale (BFSL)
HOUSING MATERIAL: 316 stainless steel
POWER SUPPLY: 10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire); 10 Vdc to 30 Vdc (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) - Unregulated

CE compliant to EMC norm EN 61326: 1997/A1 1998
RFI, EMI and ESD protection
IP68, NEMA 6P

612 SERIES

NOSHOK SUBMERSIBLE LEVEL TRANSMITTERS offer a previously unequalled level of performance. Utilizing diffused semiconductor and proven sputtered thin film sensor technology they are highly accurate, shock resistant and extremely stable for long periods of time. Reverse polarity protection and short circuit protection have been installed as standard features. Lightning protection is optional.

WARRANTY: Three Years†

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc, 0 Vdc to 10 Vdc, 3-wire; 0.5 Vdc to 2.5 Vdc, 3-wire
RANGES: 0 inH_2O to 50 inH_2O through 0 psig to 300 psig
CABLE: Durable high performance PUR cable enhances reliability; FEP optional
ACCURACY ±0.25% full scale (BFSL); optional ± 0.125% full scale (BFSL)
HOUSING MATERIAL: 316 stainless steel
POWER SUPPLY: 10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire); 10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire); 5 Vdc to 30 Vdc (0.5 Vdc to 2.5 Vdc, 3-wire),1 4 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire) - Unregulated

613 SERIES

NOSHOK CAGE-PROTECTED SUBMERSIBLE LEVEL TRANSMITTERS are ideal for a wide variety of industrial and municipal liquid level measurement applications requiring watertight protection. These anti-clogging transmitters are designed for severe high solids environments such as sewage, lift stations, storm canals, wet wells and slurry tanks where sludge, slurry or turbulence may be present. It features durable all 316 stainless steel construction and a large 2.14" diameter diapragm which is extremely responsive, even when monitoring low levels or buried in media.

WARRANTY: Three Years†

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, 1 Vdc to 6 Vdc & 1 Vdc to 11 Vdc, 3-wire
RANGES: Standard gauge ranges from vacuum to 145,000 psi; absolute ranges also available
ACCURACY: ±0.25% full scale (BFSL); Optional ±0.125% full scale (BFSL)
POWER SUPPLY: 10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire); 10 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire); 10 Vdc to 30 Vdc (1 Vdc to 6 Vdc, 3-wire); 10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire); 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire); 14 Vdc to 30 Vdc (1 Vdc to 11 Vdc, 3-wire) - Unregulated
ADJUSTMENT: ±10% for zero and span

CE compliant to EMC norm EN 61326: 1997/A1
1998 RFI, EMI and ESD protection IP65, NEMA 4X
to EN 60529/IEC 529

615/616 SERIES

NOSHOK HIGH ACCURACY HEAVY-DUTY PRESSURE TRANSDUCERS are designed for heavy-duty applications requiring high accuracy and durability. Utilizing advanced diffused semiconductor and proven sputtered thin film sensor technology they are stable, accurate, shock resistant and extremely durable. The durability is coupled with the mechanical integrity of the case, process connection, and wetted parts constructed of corrosion-resistant stainless steel.

WARRANTY: Three Years†

HAZARDOUS LOCATION PRESSURE TRANSMITTERS

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA or 1 Vdc to 5 Vdc or 0.5 Vdc to 4.5 Vdc low power outputs
RANGES: From vacuum to 15,000 psi-gauge, compound or absolute
ACCURACY: ±0.25% full scale (BFSL)
CONNECTION: 1/2" NPT male conduit electrical connection
POWER SUPPLY: 10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire); 6 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire); 6 Vdc to 30 Vdc (0.5 Vdc to 4.5 Vdc, 3-wire); 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire) - Unregulated

FM and CSA approved; XP / Class I / Division 1 / Groups A, B, C and D; DIP / Class II and III / Division 1 / Groups E, F and G

CE compliant to EMC norm EN 61326: 1997/A1
1998 RFI, EMI and ESD protection / ANSI/ISA-12.27.01-2003 approved single seal

621/622 SERIES

FM APPROVED C SP US CE

NOSHOK EXPLOSION-PROOF PRESSURE TRANSMITTERS are designed for applications that require pressure measurement in hazardous environments. They combine proven sputtered thin film sensor technology or the reliable, long life diffused semiconductor with safe electronics to provide outstanding performance and value in a hazardous location transmitter. All wetted parts are made of stainless steel and Elgiloy welded with no internal o-rings, gaskets or seals.

619/620 Series available with ATEX Approval. Ex

WARRANTY: Three Years†

HAZARDOUS LOCATION PRESSURE TRANSMITTERS

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA or 1 Vdc to 5 Vdc or 0.5 Vdc to 4.5 Vdc low power outputs
RANGES: From vacuum to 15,000 psi-gauge, compound or absolute
ACCURACY: ±0.25% full scale (BFSL)
POWER SUPPLY: 10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire); 6 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire); 6 Vdc to 30 Vdc (0.5 Vdc to 4.5 Vdc, 3-wire); 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire) - Unregulated

FM and CSA approved; NI / Class I / Division 2 / Groups A, B, C, DIP; Class II / Division 1 / Groups E, F and G

CE compliant to EMC norm EN 61326: 1997/A1
1998 RFI, EMI and ESD protection / ANSI/ISA-12.27.01-2003 approved single seal

623/624 SERIES

FM APPROVED C SP US CE

NOSHOK NON-INCENDIVE PRESSURE TRANSMITTERS combine advanced diffused semiconductor and proven sputtered thin film sensor technology with safe electronics for outstanding performance and value in a hazardous environment pressure transmitter. The wetted parts are made of stainless steel and a welded pressure chamber with no internal o-rings, gaskets or seals.

WARRANTY: Three Years†

†For further warranty information please consult your specific product catalogs.

HAZARDOUS LOCATION PRESSURE TRANSMITTERS

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire
RANGES: From vacuum to 15,000 psi-gauge, compound or absolute
WETTED PARTS: Stainless steel standard, welded
ACCURACY: ±0.25% full scale (BFSL); Optional ±0.125% full scale (BFSL)
POWER SUPPLY: 10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire) - Unregulated power supplies

FM and CSA approved; IS / Class I, II and III / Division 1 / Groups A, B, C, D, E, F and G; Class I / Zone 0 / AEx ia / Group IIC; DIP / Class II and III / Division 2 / Groups F and G; NI / Class I / Division 2 / Groups A, B, C and D

CE compliant to EMC norm EN 61326: 1997/A1, 1998 RFI, EMI and ESD protection / ANSI/ISA-12.27.01-2003 approved single seal

625/626 SERIES

FM APPROVED C SP US CE

NOSHOK INTRINSICALLY SAFE PRESSURE TRANSMITTERS combine the reliability and long life of diffused semiconductor and proven sputtered thin film sensor technology with safe electronics for outstanding performance and value. These transmitters were designed for applications that require pressure measurement in hazardous locations. Multiple pressure connections, ranges and electrical connections are available. Low pressure ranges are also available for vapor recovery applications.

WARRANTY: Three Years†

HAZARDOUS LOCATION PRESSURE TRANSMITTERS

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire
RANGES: From 50 inH_2O to 350 psig
CABLE: PUR jacketed cable; PTFE cable optional
ACCURACY: ±0.25% full scale (BFSL);
Optional ±0.125% full scale (BFSL)
POWER SUPPLY: 10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire) - Unregulated power supplies

CE Compliant to EMC norm EN 61326; 1997/A1 1998 RFI, EMI and ESD

FM and CSA approved; IS / Class I, II and III / Division 1 / Groups A, B, C, D, E, F and G; Class I / Zone 0 / AEx ia / Group IIC; DIP / Class II and III / Division 2 / Groups F and G; NI / Class I / Division 2 / Groups A, B, C and D

627 SERIES

FM APPROVED C SP US CE

NOSHOK INTRINSICALLY SAFE SUBMERSIBLE LEVEL TRANSMITTERS combine the reliability and long life of diffused semiconductor or proven sputtered thin film strain gage sensors with safe electronics to provide outstanding performance and value in a liquid level transmitter designed for hazardous environments. They are available with a stainless steel nosecone, weighted stainless steel nosecone or NPT adapter and ranges to suit most applications.

WARRANTY: Three Years†

HAZARDOUS LOCATION PRESSURE TRANSMITTERS

SPECIFICATIONS

OUTPUT SIGNAL: 4 mA to 20 mA, 2 wire
RANGES: 0 psig to 5,000 psig through 0 psig to 20,000 psig
WETTED PARTS: 316 stainless steel
ACCURACY: ±0.25% full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
POWER SUPPLY: 10 Vdc to 28 Vdc - Unregulated power supplies

CSA approved; IS / 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 ic 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 seal

Shown with Electrical Connector Cage.

628 SERIES

C SP US

NOSHOK INTRINSICALLY SAFE HAMMER UNION TRANSMITTERS Constructed with a heavy-duty Inconel X-750 diaphragm and connection, the NOSHOK Intrinsically Safe Hammer Union Transmitter offers ranges from 5,000 psig through 20,000 psig and has a 4 mA to 20 mA, 2-wire output signal. Each sensor comes with a Certificate of Calibration. This transmitter is CSA compliant for hazardous location equipment, NACE MR0175/ISO 15156 compliant, and is ideal for applications including acidizing, choke & kill manifold, fracturing & cementing, mud logging & mud pumps, oil field & offshore and well head measurement. Optional electrical connector cage is available to protect the electrical connection during installation or removal.

WARRANTY: One Year†

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc, 0 Vdc to 20 Vdc, 3-wire; RS232 8N1/9600 Baud, USB
RANGES: Standard gauge ranges from vacuum to 15,000 psi; absolute ranges also available
ACCURACY: ±0.05% full scale (BFSL);
Optional ±0.025% full scale (BFSL)
POWER SUPPLY: 9 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire);
9 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire);
14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire);
Voltage supply via interface RS232-C - Unregulated

CE compliant to EMC norm EN 61326: 1997/A1 1998 RFI, EMI and ESD IP65, NEMA 4X (IEC 529)

640 SERIES

NOSHOK PRECISION HEAVY-DUTY PRESSURE TRANSDUCERS WITH SERIAL INTERFACE have been designed for industrial and laboratory applications requiring high accuracy and repeatability with excellent compensation for temperature.

WARRANTY: Three Years†

†For further warranty information please consult your specific product catalogs.

PRESSURE TRANSMITTERS & TRANSDUCERS

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire; 0 to 10 Vdc, 1 to 5 Vdc, 3-wire; 0.5 Vdc to 4.5 Vdc, 3-wire ratio-metric
RANGES: 0 psig to 100 psig to 0 psig to 8,000 psig
ACCURACY: ±0.5% full scale (BFSL)
POWER SUPPLY: 8 Vdc to 36 Vdc (4 mA to 20 mA, 2-wire); 8 Vdc to 36 Vdc (0 Vdc to 5 Vdc, 3-wire); 8 Vdc to 36 Vdc (1 Vdc to 5 Vdc, 3-wire); 8 Vdc to 36 Vdc (0.5 Vdc to 4.5 Vdc, 3-wire); 14 Vdc to 36 Vdc (0 Vdc to 10 Vdc, 3-wire); 5 ± 10% (0.5 Vdc to 4.5 Vdc ratiometric, 3-wire) - Unregulated power supplies

CE compliant to EMC norm EN 61326: 1997/A1 1998
RFI, EMI and ESD

650 SERIES

NOSHOK HIGH VOLUME OEM PRESSURE TRANSDUCERS combine high performance with off road vehicle reliability under severe process and environmental conditions. They are designed to handle high pressure spikes and process pulsation. Utilize advanced diffused semiconductor and proven sputtered thin film sensor technology for maximum stability.

WARRANTY: Three Years†

SPECIFICATIONS

OUTPUT SIGNAL: 4 mA to 20 mA 2-wire, 1 Vdc to 5 Vdc, and 0.1 Vdc to 10 Vdc 3-wire
RANGES: Standard ranges from 200 psig to 15,000 psig
ACCURACY: ±0.25% full scale (BFSL)
POWER SUPPLY: 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) - Unregulated power supplies

CE compliant to EMC norm EN 61326: 1997/A1 1998
RFI, EMI and ESD IP65, NEMA 4X (IEC 529)

660 SERIES

NOSHOK MICRO-SIZE PRESSURE TRANSDUCERS are designed with high overpressure capability to provide long service life and reliability in hydraulic and pneumatic applications containing process pulsations and high vibration. Utilizes proven sputtered thin film sensor technology for maximum stability and accuracy.

WARRANTY: Three Years†

PRESSURE SWITCHES

SPECIFICATIONS

CASE: Brass standard, stainless steel optional
MEASURING ELEMENT: NBR Diaphragm standard – FKM, EPDM optional
SWITCHING FUNCTION: 1 SPST N.O. or 1 N.C.
ADJUSTMENT: Adjustment screw from 5 psig to 150 psig depending on full scale range
AVAILABLE RANGES: 0 psig to 30 psig through 0 psig to 150 psig
CONNECTION: 1/8″ NPT, male
ELECTRICAL CONNECTION: 6.3 mm spade terminals
MEDIA TEMPERATURE: -13 °F to 185 °F (-25 °C to 85 °C)

100 SERIES

NOSHOK MECHANICAL MINIATURE LOW-PRESSURE SWITCHES are constructed of a solid one-piece housing, making them highly durable for use in the most rugged applications. The compact design allows it to be installed where space is limited. These switches utilize a proven diaphragm-type sensing element, and have an external adjustment screw for ease of setting the switching point on-site. Special versions are available with the alternate diaphragm, housing and contact materials to meet most current requirements. 100 Series is the ideal choice when reliability, accuracy and cost efficiency are a priority.

WARRANTY: One Year†

SPECIFICATIONS

CASE: Zinc-plated steel
MEASURING ELEMENT: NBR diaphragm < 225 psig; Steel piston with NBR seal > 225 psig
SWITCHING FUNCTION: SPDT, micro switch with silver plated contacts, gold plated contacts available on request
ADJUSTMENT: Adjustment screw from 3 psig to 4,600 psig depending on full scale range
AVAILABLE RANGES: 3 psig to 30 psig through 450 psig to 4600 psig
CONNECTION: 1/4″ NPT standard, others available on request
ELECTRICAL CONNECTION: 6.3 mm spade terminals
MEDIA TEMPERATURE: -4 °F to 176 °F (-20 °C to 80 °C)

200 SERIES

NOSHOK MECHANICAL COMPACT SPDT PRESSURE SWITCHES operate using a high quality diaphragm or piston element to open or close a micro switch, and provide maximum versatility, excellent repeatability and superior contact ratings. These compact-sized switches have a frequency of 100 cycles per minute, and switching repeatability of ±2.0%. They also feature superior contact ratings: up to 28 Vdc (2A), and up to 50 Vac (4A), and are RoHS compliant. This switch features an SPDT (single changeover) contact configuration and is available in special versions with stainless steel or brass housing and gold contacts for low switching currents.

WARRANTY: One Year†

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

CASE: Zinc-plated steel
MEASURING ELEMENT: NBR diaphragm < 225 psig; Steel piston with NBR seal > 225 psig
SWITCHING FUNCTION: SPDT, micro switch with silver plated contacts, gold plated contacts available on request
ADJUSTMENT: Adjustment screw from 3 psig to 4,600 psig depending on full scale range
AVAILABLE RANGES: 3 psig to 30 psig through 450 psig to 4600 psig
CONNECTION: 1/4″ NPT standard, others available on request
ELECTRICAL CONNECTION: Hirschmann (DIN EN 175301-803 Form A), Optional 36" cable (attached to Hirschmann)
MEDIA TEMPERATURE: -4 °F to 176 °F (-20 °C to 80 °C)

300 SERIES

NOSHOK MECHANICAL COMPACT SPDT PRESSURE SWITCHES WITH ADJUSTABLE HYSTERESIS are constructed with a rugged zinc-plated steel housing and process connection, and provide adjustable hysteresis. Utilizing a proven diaphragm or piston type sensing technology, it provides excellent reliability, repeatability, and affordability for use in many applications. The micro switch contacts are silver plated for extended service life and exceptional dependability. Switching functions are field adjustable, while under pressure, and it features an SPDT single changeover contact configuration. These switches are RoHs compliant.

WARRANTY: One Year†

SPECIFICATIONS

CASE: Zinc-plated steel
MEASURING ELEMENT: NBR diaphragm ≤230 psig, stainless steel piston with NBR seal ≥500 psig
CONNECTION: 1/4″ NPT and 7/16-20 SAE – standard
ELECTRICAL CONNECTION: Hirschmann (DIN EN175301-803 Form A), Optional M12 x 1 (4-pin)
REPEATABILITY: ±2% full scale
AVAILABLE RANGES: 0 psig to 300 psig through 0 psig to 5,000 psig
SWITCHING FUNCTIONS: SPDT, micro-switch with silver-plated contacts

CE Compliant to EMC norm 61326: 1997/A1 1998 RFI, EMI and ESD

400 SERIES

NOSHOK MECHANICAL HEAVY-DUTY PRESSURE SWITCHES provide excellent repeatability and features a robust design for applications requiring maximum accuracy under extreme loads. With a switching point setting that remains stable for years, this switch converts pneumatic and hydraulic pressure into switching functions, and depending on the type of connection, it can easily be used as a N.C., N.O. or SPDT contact. The switching point is fully adjustable and includes a locking mechanism. This switch is fitted with DIN EN175301-803 Form A connectors for fast and easy installation. It is also available with a socket with an LED for easier switch point adjustment and visual status indication, or without the socket and an M12 x 1 (4-pin) electrical connection.

WARRANTY: One Year†

SPECIFICATIONS

CASE: Brass through 350 psi; aluminum 600 psi and higher
WETTED PARTS: Copper alloy; 316 stainless steel above 600 psi
CONNECTION: 1/4″ NPT, brass
ELECTRICAL CONNECTION: M12 x 1 (4-pin)
REPEATABILITY: ≤1% full scale
AVAILABLE RANGES: Vacuum through 0 to 10,000 psi
SWITCHING FUNCTIONS: 1 N.O. or 1 N.C. contact standard, 2 N.O or 2 N.C contacts are optional, p-switching or n-switching

CE compliant to EMC norm EN 61326: 1997/A1 1998 RFI, EMI and ESD

500 SERIES

NOSHOK ELECTRONIC MAG-SWITCHES are electronic pressure switches that utilize proven diaphragm pressure sensing technology coupled with Hall Effect magnetic field sensing technology and semiconductor switching technology to provide a highly reliable, accurate, repeatable pressure switch without mechanical contacts. The standard electrical connection is a M12 X 1 (4-pin) threaded connector which carries a NEMA 4: IP65 (IEC529) rating.

WARRANTY: Three Years†

SPECIFICATIONS

CASE: Series 800 - stainless steel, Series 810 – black anodized aluminum
WETTED PARTS: Stainless steel with ceramic sensor and FKM seal on ranges through 0 psig to 750 psig (other sealing materials available); stainless steel only for higher pressure ranges
CONNECTION: 1/4″ NPT standard, other options available
ELECTRICAL CONNECTION: M12 x 1 (4-pin)
ACCURACY: <0.5% full scale (BFSL)
AVAILABLE RANGES: Standard -14.5 psig to 30 psig through 0 psig to 9,000 psig
SWITCHING FUNCTIONS: 1 or 2 N.O. or N.C. (PNP or NPN)
POWER SUPPLY: 12 Vdc to 30 Vdc
ANALOG OUTPUT: 4 mA to 20 mA or 0 Vdc to 10 Vdc; programmable and freely adjustable

CE compliant to EMC norm EN 61326: 1997/A1 1998 RFI, EMI and ESD

800/810 SERIES

NOSHOK'S ELECTRONIC INDICATING PRESSURE TRANSMITTER/SWITCHES are available with 2 switching outputs, 1 switching output and 1 analog output (4 mA - 20 mA or 0 Vdc to 10 Vdc), or 2 switching outputs and 1 analog output (4 mA - 20 mA). These pressure switch/transmitters provide continuous pressure monitoring and allow the programming of set points without pressurizing. Two buttons allow easy adjustment of the set points, contact functions (normally open/normally closed), reset points, contact types (NPN/PNP) and switching function (hysteresis/gate). Other features include integrated password protection, and a higher maximum pressure than anything comparable on the market (9999 psi). The 800/810's convenient 330° rotatable indicator head and optional turntable process connection provide ease of installation and wiring.

WARRANTY: Three Years†

†For further warranty information please consult your specific product catalogs.

CAUTION: NOSHOK pressure transmitters are not to be used in heat sterilization systems as stated in 3A Standard 74-03 paragraph D10.1.2
Diaphragm seal must be installed facing downward or in a vertical position for drainability. Do not install diaphragm seal facing in an upward position.

SPECIFICATIONS

SIZE: 2″
CASE MATERIAL: 304 stainless steel
COVER RING: 304 stainless steel
LENS: Polycarbonate – standard; safety glass – optional
BOURDON TUBE: 316 stainless steel
ACCURACY: ±2.5% full scale
PROCESS CONNECTION: 3/4″ clamped-style
SEAL HOUSING: 316L stainless steel
DIAPHRAGM MATERIAL: 316L stainless steel
SEAL FILL: Glycerin, USP grade
RANGES: 0 psig to 30 psig through 0 psig to 600 psig
TEMPERATURE: -40 °F to 300 °F (-40 °C to 150 °C)

10 SERIES FRACTIONAL

NOSHOK FRACTIONAL SANITARY PRESSURE GAUGES are designed for compact applications within the food & beverage, dairy, pharmaceutical, and biomedical industry while meeting the current 3A standards and ASME BPE-2009. The wetted materials are 316L stainless steel and electropolished to 32 µin Ra or better. Gauges can be cleaned in place (CIP), steamed in place (SIP) or Autoclaved to reduce system shutdown time.

WARRANTY: (dry): One Year†; (liquid filled): Three Years†

SPECIFICATIONS

SIZE: 2-1/2″ or 4″
CASE MATERIAL: 304 stainless steel
COVER RING: 304 stainless steel
LENS: Safety glass – standard
BOURDON TUBE: 316 stainless steel
ACCURACY: ±1.5% full scale on 2-1/2″ sizes;
±1 % full scale on 4″ sizes
OPTIONAL FILL FLUID: Glycerin or silicone
PROCESS CONNECTION: 1-1/2″ or 2″ clamped-style
SEAL HOUSING: 316L stainless steel
DIAPHRAGM MATERIAL: 316L stainless steel
SEAL FILL: Glycerin, USP grade
RANGES: Vacuum and compound through 0 psig to 600 psig
TEMPERATURE: -40 °F to 300 °F (-40 °C to 150 °C)

*C.I.P, S.I.P and Autoclave

10 SERIES HEAVY-DUTY

NOSHOK HEAVY-DUTY SANITARY PRESSURE GAUGES meet the current standards for 3A and ASME BPE-2009. They are designed for applications throughout the pharmaceutical industry, food & beverage, dairy and biomedical industries. The available 1-1/2″ or 2″ clamped-style connections are constructed of 316L stainless steel welded to the all stainless steel 2-1/2″ or 4″ gauge for greater strength and durability. Wetted parts are electropolished to 32 µin Ra or better.

WARRANTY: (dry): One Year†; (liquid filled): Three Years†

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire: 0 Vdc to 5 Vdc, 0 to 10 Vdc, 1 Vdc to 5 Vdc, 1 Vdc to 6 Vdc & 1 Vdc to 11 Vdc, 3-wire
ACCURACY: ±0.25% full scale (BFSL); Optional ±0.125% full scale (BFSL)
POWER SUPPLY: 10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire); 10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire); 10 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire); 10 Vdc to 30 Vdc (1 Vdc to 6 Vdc, 3-wire); 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire); 14 Vdc to 30 Vdc (1 Vdc to 11 Vdc, 3-wire) - Unregulated
PROCESS CONNECTION: 1-1/2″ or 2″ clamped-style
SEAL HOUSING: 316L stainless steel
DIAPHRAGM MATERIAL: 316L stainless steel
SEAL FILL: White oil, USP grade
RANGES: Vacuum and compound through 0 psig to 400 psig
TEMPERATURE: -40 °F to 300 °F (-40 °C to 150 °C)

CE compliant to EMC norm EN 61326: 1997/A1 1998 RFI, EMI and ESD

11 SERIES

NOSHOK CLAMPED-STYLE SANITARY PRESSURE TRANSMITTERS utilize diffused semiconductor and proven sputtered thin film sensor technology to produce a highly accurate, stable, shock resistant and durable pressure transmitter. They are suited for applications in the food & beverage, dairy, biotechnology and pharmaceutical industries and meet the current 3A standards as well as ASME BPE-2009 and CE compliant. Wetted parts are 316L stainless steel and electropolished to 32 µin Ra or better. Can be cleaned in place (CIP) and steamed in place (SIP).

WARRANTY: Three Years†

SPECIFICATIONS

SIZE: 4″
CASE MATERIAL: 304 stainless steel
COVER RING: 304 stainless steel
LENS: Laminated safety glass
BOURDON TUBE: 316 stainless steel
ACCURACY: ±1.0% full scale, ANSI Grade 1A
PROCESS CONNECTION: 1-1/8″ homogenizer flange
SEAL HOUSING: 316L stainless steel
DIAPHRAGM MATERIAL: 316L stainless steel, electropolished to Ra25 or better
SEAL FILL: Glycerin, USP grade
RANGES: 0 psig to 1,000 psig through 0 psig to 15,000 psig
TEMPERATURE: -40 °F to 300 °F (-40 °C to 150 °C)

20 SERIES

NOSHOK HOMOGENIZER SANITARY GAUGES meet the current 3A standards and ASME BPE-2009. They are designed for high pressure applications in the dairy, food & beverage, pharmaceutical and biotechnology industries. The 4″ all stainless steel gauge is welded to the flanged homogenizer connection. Wetted parts are 316L stainless steel and electropolished to 32 µin Ra or better. These gauges may be cleaned in place (CIP), steamed in place (SIP) or Autoclaved to reduce process shutdown time.

WARRANTY: (dry): One Year†; (liquid filled): Three Years†

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, 1 Vdc to 6 Vdc & 1 Vdc to 11 Vdc, 3-wire
RANGES: 0 psig -1,000 psig through 0 psig -15,000 psig
ACCURACY: ±0.25% full scale (BFSL); Optional ±0.125% full scale (BFSL)
POWER SUPPLY: 10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire); 10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire); 10 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire); 10 Vdc to 30 Vdc (1 Vdc to 6 Vdc, 3-wire); 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire); 14 Vdc to 30 Vdc (1 Vdc to 11 Vdc, 3-wire) - Unregulated
PROCESS CONNECTION: 1-1/8″ homogenizer flange
SEAL HOUSING: 316L stainless steel
DIAPHRAGM MATERIAL: 316L stainless steel
SEAL FILL: White oil, USP grade
TEMPERATURE: -40 °F to 185 °F (-40 °C to 85 °C)

CE compliant to EMC norm EN 61326: 1997/A1 1998; RFI, EMI and ESD

21 SERIES

NOSHOK HOMOGENIZER SANITARY PRESSURE TRANSMITTERS are high accuracy, heavy-duty transmitters that utilize proven sputtered thin film sensor technology to meet the demands of the dairy, food & beverage and pharmaceutical industries. These transmitters are shock resistant, highly accurate, stable and durable and meet the current standards for 3A, CE compliance and ASME BPE-2009. Wetted parts are 316L stainless steel and electropolished to 32 µin Ra or better. Can be cleaned in place (CIP) and steamed in place (SIP).

WARRANTY: Three Years†

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

UPPER HOUSING: Universal Housing w/polypropylene, glass fiber reinforced
LOWER HOUSING: PVC, PP or PVDF
DIAPHRAGM: EPDM-PTFE coated on process side
MAX WORKING PRESSURE: 160 psi

TYPE 5

NOSHOK ALL NON-METALLIC, NON-REPLACEABLE DIAPHRAGM SEALS are designed for wastewater and chemical feed applications, or any application with a corrosive media. These seals protect pressure or vacuum instruments used on ultra-pure or highly corrosive fluid lines such as demineralized water, sulfuric acid, hydrochloric acid, and caustics. Available 100% non-metallic construction assures maximum chemical and temperature compatibility.

WARRANTY: One Year†

SPECIFICATIONS

LOWER HOUSING: Epoxy-coated steel and 316 stainless steel
UPPER HOUSING: Epoxy-coated steel, 316 stainless steel
DIAPHRAGM MATERIALS: 316 stainless steel (Exotic materials available on request)
O-RING: NBR, PTFE, FKM
BOLTING: Zinc-plated steel, optional stainless steel

TYPE 10

NOSHOK STANDARD PRESSURE BOLTED REPLACEABLE DIAPHRAGM SEALS are designed to utilize a replaceable diaphragm clamped between the metal housings. They are rated to 2,000 psi with a displacement capability of 3.2 ml.

WARRANTY: One Year†

SPECIFICATIONS

LOWER HOUSING: PVDF, PP, PVC, PTFE (Other materials available on request)
UPPER HOUSING: Epoxy-coated steel, 316 stainless steel
DIAPHRAGM MATERIALS: 316 stainless steel, FKM, PTFE (Exotic materials available on request)
O-RING: NBR, PTFE, FKM
BOLTING: Zinc-plated steel, optional stainless steel

TYPE 10L

NOSHOK REDUCED PRESSURE, NON-METALLIC LOWER, BOLTED REPLACEABLE DIAPHRAGM SEALS utilize a replaceable diaphragm and non-metallic lower housing. They are rated to 200 psi with a displacement capability of 3.2 ml.

WARRANTY: One Year†

SPECIFICATIONS

LOWER HOUSING: Epoxy-coated steel and 316 stainless steel
UPPER HOUSING: Epoxy-coated steel, 316 stainless steel
DIAPHRAGM MATERIALS: 316 stainless steel (Exotic materials available on request)
O-RING: NBR, PTFE, FKM
BOLTING: Zinc-plated steel, optional stainless steel

TYPE 10H

NOSHOK ELEVATED PRESSURE BOLTED REPLACEABLE DIAPHRAGM SEALS are a threaded connection, off-line seal with a replaceable diaphragm. They are designed for high pressure applications and are rated to 5,000 psi. Displacement capability is 1.4 ml.

WARRANTY: One Year†

SPECIFICATIONS

UPPER HOUSING: 316 stainless steel
DIAPHRAGM MATERIALS: 316 stainless steel
STAINLESS STEEL ASME-BPE CLAMPS: 1-1/2″, 2″, 2-1/2″ and 3″ options
GASKETS: NBR, PTFE

CAUTION: NOSHOK pressure transmitters are not to be used in heat sterilization systems as stated in 3A Standard 74-03 paragraph D10.1.2 Diaphragm seal must be installed facing downward or in a vertical position for drainability. Do not install diaphragm seal facing in an upward position.

TYPE 12

NOSHOK SANITARY, CLAMPED-STYLE, ASME-BPE NON-REPLACEABLE DIAPHRAGM SEALS feature a flush mount diaphragm and all welded construction, making them ideal for food & beverage, pharmaceutical and sanitary markets. They can accommodate process connection pipes from 1-1/2" through 3" sizes. Their clamped connection allows ease of installation and removal of seal for maintenance and cleaning.

WARRANTY: One Year†

SPECIFICATIONS

HOUSING: 316 stainless steel
DIAPHRAGM MATERIALS: 316 stainless steel

TYPE 20

NOSHOK FRONT FLUSH NON-REPLACEABLE DIAPHRAGM SEALS are constructed with a 316 stainless steel housing and diaphragm. Maximum pressure rating is 9,000 psi. Available instrument connection sizes are 1/4 and 1/2″ with a process connection size of 1/2″ NPT male to 2″ NPT male.

WARRANTY: One Year†

SPECIFICATIONS

LOWER HOUSING: 316 stainless steel (Exotic materials available on request)
UPPER HOUSING: 316 stainless steel
DIAPHRAGM MATERIALS: 316 stainless steel (Exotic materials available on request)

TYPE 25

NOSHOK STANDARD PRESSURE NON-REPLACEABLE DIAPHRAGM SEALS utilize an all welded, all metallic housing design, pressure rated to 2,500 psi. The housing and diaphragm are offered in a variety of materials to suit most applications. A flushing port is offered as an option.

WARRANTY: One Year†

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

LOWER HOUSING: 316 stainless steel
(Exotic materials available on request)
UPPER HOUSING: 316 stainless steel
DIAPHRAGM MATERIALS: 316 stainless steel
(Exotic materials available on request)

TYPE 25H

NOSHOK ELEVATED PRESSURE NON-REPLACEABLE DIAPHRAGM SEALS utilize an all welded, all metallic housing design pressure rated to 5,000 psi. The housing and diaphragm are offered in a variety of materials to suit most applications. A flushing port is offered as an option.

WARRANTY: One Year†

SPECIFICATIONS

LOWER HOUSING: 316 stainless steel
(Exotic materials available on request)
UPPER HOUSING: Epoxy-coated steel, 316 stainless steel
DI**APHRAGM MATERIALS:** 316 stainless steel
(Exotic materials available on request)

TYPE 29

NOSHOK HIGH VOLUMETRIC DISPLACEMENT NON-REPLACEABLE DIAPHRAGM SEALS are an all welded, all metallic housing design that does not utilize an o-ring or gasket. Displacement is limited to 1.5 ml requiring the use of gauges with less than 4-1/2″ dial size and Bourdon tube range no lower than 0 psi to 15 psi. Pressure rating is 2,500 psi.

WARRANTY: One Year†

SPECIFICATIONS

LOWER HOUSING: Epoxy-coated steel, 316 stainless steel (Exotic materials available on request)
UPPER HOUSING: Epoxy-coated steel, 316 stainless steel
DIAPHRAGM MATERIALS: 316 stainless steel (Exotic materials available on request)
BOLTING: Zinc-plated steel, optional stainless steel

TYPE 30

NOSHOK STANDARD PRESSURE, BOLTED, NON-REPLACEABLE DIAPHRAGM SEALS utilize an all metallic diaphragm welded to the upper housing with a displacement capability of 1.5 ml. Standard pressure rating is 2,500 psi with a wide variety of instrument and process connections available. A flushing connection is offered as an option.

WARRANTY: One Year†

SPECIFICATIONS

LOWER HOUSING: Epoxy-coated steel, 316 stainless steel (Exotic materials available on request)
UPPER HOUSING: Epoxy-coated steel, 316 stainless steel
DIAPHRAGM MATERIALS: 316 stainless steel (Exotic materials available on request)
BOLTING: Zinc-plated steel, optional stainless steel

TYPE 30H

NOSHOK ELEVATED PRESSURE, BOLTED, NON-REPLACEABLE DIAPHRAGM SEALS utilize an all metallic diaphragm welded to the upper housing with a displacement capability of 1.5 ml. Pressure rating is 5,000 psi with a wide variety of instrument and process connections available. A flushing connection is offered as an option.

WARRANTY: One Year†

SPECIFICATIONS

LOWER HOUSING: PVDF, PP, PVC, PTFE (Other materials available on request)
UPPER HOUSING: Epoxy-coated steel, 316 stainless steel
DIAPHRAGM MATERIALS: 316 stainless steel, FKM, PTFE (Exotic materials available on request)
BOLTING: Zinc-plated steel, optional stainless steel

TYPE 30L

NOSHOK REDUCED PRESSURE, NON-METALLIC LOWER, BOLTED, NON-REPLACEABLE DIAPHRAGM SEALS utilize an all metallic diaphragm welded to the upper housing. Displacement capability is 1.5 ml with a 2.4″ diameter diaphragm. Maximum pressure rating is 200 psi with non-metallic lower housing materials.

WARRANTY: One Year†

SPECIFICATIONS

UPPER HOUSING: Epoxy-coated steel, 316 stainless steel
DIAPHRAGM MATERIALS: NBR, FKM, EPDM, PTFE (Other materials available on request)
BOLTING: Zinc-plated steel, optional stainless steel

TYPE 40

NOSHOK FLOW-THROUGH ANNULAR STYLE REPLACEABLE DIAPHRAGM SEALS are frequently used in abrasive media applications such as slurries, heavy sludges, chemical (synthetic polymers), and diffusers (flow measurement). Process liquid flowing through the pipe exerts pressure onto a flush-mounted flexible inner cylider containing clean, captive liquid; completely isolating instrumentation from the process flow and preventing plugging.

WARRANTY: One Year†

†For further warranty information please consult your specific product catalogs.

DIAL INDICATING THERMOMETERS

SPECIFICATIONS

SIZE: 2″ and 3″
CASE: 304 stainless steel
BEZEL: 304 stainless steel
LENS: 2″ – convex glass; 3″ – Instrument glass
STEM: 304 stainless steel; 2.5″ to 24″ lengths available
CONNECTION: Center back – standard; 2″ – 1/4″ NPT; 3″ – 1/2″ NPT, 3/8″ NPT - optional
ACCURACY: ±1% full scale, Grade A, ASME B40.3
RANGES: -100 °F to 150 °F through 200 °F to 1,000 °F; (-70 °C to 70 °C through 100 °C to 550 °C); Single and dual scales available

100 SERIES

NOSHOK INDUSTRIAL TYPE BIMETAL THERMOMETERS are high quality, low cost thermometers designed for limited space applications or where a weather resistant, tamper proof case is required. The bimetal element is an extremely responsive temperature sensing helix which has been carefully sized and tested, heat treated and aged to relieve inherent stresses and insure continued accuracy.

WARRANTY: One Year†

SPECIFICATIONS

SIZE: 3″ and 5″
CASE: 304 stainless steel
BEZEL: Electropolished 304 stainless steel
LENS: Instrument glass
STEM: 304 stainless steel; 2.5″ to 24″ lengths available
CONNECTION LOCATION: Center back; bottom connection; adjustable angle connection
CONNECTION SIZE: 1/2″ ENPT – standard; 1/4″ NPT & 3/8″ NPT – optional
ACCURACY: ±1% full scale
RANGES: -100 °F to 150 °F through 200 °F to 1,000 °F; (-70 °C to 65 °C through -100 °C to 550 °C); Single and dual scales available

A silicone liquid filled option is available for applications where severe vibration may be a factor.

300 SERIES

NOSHOK INSTRUMENT TYPE BIMETAL THERMOMETERS are the highest quality thermometers available in today's market. They feature a sturdy, corrosion resistant 304 stainless steel case and bezel which provides a hermetic seal to prevent lens fogging and damage caused by moisture. A slotted hex adjustment head offers field calibration for maximum accuracy at a selected range.

WARRANTY: Seven Years†

SPECIFICATIONS

SIZES: 2-1/2″, 4″, 4-1/2″ and 6″
CASE MATERIAL: Brass, stainless steel or phenolic
CONNECTION: Bottom connection; back connection; lower back connection
OPTIONAL FILL FLUIDS: Glycerin, -40° service and silicone
MOUNTING OPTIONS: Front or rear flange, bezel & U-clamp
RANGES: -40 °F/C to 60 °F/C through 100 °F/C to 350 °F/C
CAPILLARY MATERIAL: Plain or armored copper or stainless steel
BULB MATERIAL & DIMENSIONS: Plain or 1/2" NPT union copper or stainless steel; 2-5/8" x 3/8″ through 9" x 3/8″

300/400/600/700/900 SERIES

NOSHOK VAPOR ACTUATED REMOTE THERMOMETERS operate using a temperature actuated liquid in the sensing element and a highly accurate, high quality pressure gauge to indicate media temperature. As the media temperature increases the capillary fill fluid vaporizes, causing an increase of pressure within the Bourdon tube, and activates the movement and pointer for proper indication. Dial scale graduations are non linear, therefore, the highest degree of accuracy and readability is found in the upper half of the scale.

WARRANTY: One Year†

DIAL INDICATING THERMOMETER OPTIONS

MINIMUM OR MAXIMUM INDICATING POINTER

A MIP is an invaluable tool for identifying spikes in a system. This feature is extremely helpful during system start up and troubleshooting. You must add an additional ±1% error to the thermometer due to the increased load on the movement. This option is available on 3" dial sizes. A plastic lens is only available with an indicating pointer.

SILICONE FILLED

All NOSHOK 300 Series bimetal thermometers are offered in a filled version.This fill is used for applications where severe vibration may be a factor. Standard fill is SF-96-500 silicone, which dampens and lubricates the internal mechanism thus reducing pointer oscillation and premature wear. A plastic lens is only available with a silicone filled thermometer.

STEM TYPES

The 304 Series stainless steel stem is welded at the tip and case connector to prevent leakage. 1/4" (6.35 mm) diameter is standard for lengths up to 24" (609 mm). 72" is the maximum length. 3/8" diameter, sharp tip options and optional 316SS wetted parts are also available.

CONNECTIONS

In addition to our standard 1/2" NPT connection, 1/4" or 3/8" NPT connections are also available. If a special connection is required, please consult the factory.Other options include an adjustable compression fitting, or left, right or top connections.

SPECIAL DIALS

Special ranges and dials with company names, company logos, part numbers, telephone numbers, and custom layouts are available. Dependent on the requirements, single scale °F or °C are available on request.

LENSES

Laminated safety glass lenses are available on all 3" and 5" NOSHOK bimetal thermometers. Acrylic and polycarbonate lenses are available on all NOSHOK bimetal thermometers also, however they should not be used where case temperature exceeds 500 °F/260 °C.

CERTIFIED CALIBRATION

Certified calibration is available on all NOSHOK thermometers, and provides the user with a serial numbered thermometer along with a calibration sheet against a primary temperature standard, which is traceable to the National Institute of Standards and Technology.

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire; 0 Vdc to 10 Vdc, 3-wire
RANGES: Standard ranges from -40 °F to 1,000 °F (-40 °C to 538 °C), Custom ranges available from -300 °F to 1,100 °F (-200 °C to 600 °C)
ACCURACY: Class B (±0.5% full scale)
POWER SUPPLY: 10 Vdc to 30 Vdc for current output
14 Vdc to 30 Vdc for voltage output
HOUSING MATERIAL: 316 stainless steel
WETTED MATERIAL: 316 stainless steel
STEM LENGTHS: From 2-1/2″ to 12″ – Stock
PROCESS CONNECTION: 1/2″ NPT male; 1/4″ NPT available

CE compliant to EMC norm , EN 61326: 1997/A1 1998
RFI, EMI and ESD IP65, NEMA 4X (IEC 529)

800 SERIES

NOSHOK PLATINUM RESISTANCE TEMPERATURE TRANSMITTERS use the proven reliability and stability of the platinum 100 Ω sensor to provide unbeatable performance at an economical price.

Shown with 1800 Series Attachable Loop Indicator

WARRANTY: Three Years†

SPECIFICATIONS

OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire
RANGES: Standard ranges from -25 °F to 250 °F (-30 °C to 120 °C)
ACCURACY: PT100 Class B ±[0.30 + 0.005*|t|] °C
POWER SUPPLY: 10 Vdc to 36 Vdc
HOUSING MATERIAL: 316 stainless steel
WETTED MATERIAL: 316 stainless steel
STEM LENGTHS: From 1″ to 2″
PROCESS CONNECTION: 1/4″ NPT Male

810 SERIES

NOSHOK COMPACT OEM TEMPERATURE TRANSMITTERS are compact size transmitters at an economical price, with standard temperature ranges from -25 °F to 125 °F through 0 °F to 250 °F.

These transmitters feature a proven 100 Ω platinum resistance sensor which provides reliability, stability and unbeatable performance, and a 316 stainless steel housing. A 4 mA to 20 mA transmitter is included.

WARRANTY: Three Years†

SPECIFICATIONS

HOUSING: 316 stainless steel
ACCURACY: ±0.25% full scale (0.45 °F + 0.40% of reading) max. with default calibration; Optional ±0.125% full scale (0.18 °F + 0.20% of reading) max. with one-point factory or customer calibration
AVAILABLE RANGES: Standard ranges from -325 °F to 1,100 °F (-200 °C to 600 °C); Customer rescalable with optional PC interface and software
POWER SUPPLY: 9-36 Vdc, polarity protected
ANALOG OUTPUT: 4 mA to 20 mA (3-wire configuration) linear to temperature
ELECTRICAL CONNECTION: M12 x 1 (5-pin) or integral cable

820/821 SERIES

NOSHOK DIGITAL TEMPERATURE INDICATORS are an ideal replacement for bimetal, liquid bulb and glass thermometers in applications including pharmaceutical, food preparation, utilities and municipal, refineries, chemical and petrochemical plants, paper mills and hydraulics. Featuring a large 4-digit LED display, they are field re-programmable with optional PC interface module and software, which includes a security feature to prevent accidental reprogramming. NOSHOK Digital Indicators utilize a self-calibration feature for accurate and stable performance, and allow easy installation with various mounting configurations.

WARRANTY: Three Years†

SPECIFICATIONS

CASE: Stainless steel
WETTED PARTS: 316Ti stainless steel
CONNECTION: 1/2″ NPT Male standard, 1/4″ NPT optional
ACCURACY: Class B +0.1% of the temperature range
AVAILABLE RANGES: Standard ranges from -300 °F to 1,100 °F (-200 °C to 600 °C)
SWITCHING FUNCTIONS: 2 N.O. or N.C. (PNP), 1 N.O. or N.C. (PNP) with 4 mA to 20 mA analog output optional
POWER SUPPLY: 12 Vdc to 30 Vdc
ANALOG OUTPUT: 4 mA to 20 mA, scaleable from 20% to 100% of range
ELECTRICAL CONNECTION: M12 x 1 (4-pin)

CE compliant to EMC norm EN 61326: 1997/A1 1998
RFI, EMI and ESD

850 SERIES

NOSHOK ELECTRONIC INDICATING TEMPERATURE TRANSMITTER/SWITCHES measure and display temperature, and have one or two switching outputs as well as an optional analog output. The two buttons on top allow simple adjustment of the temperature set points, reset points, switching functions and the measuring range of the optional analog output. A variety of process connections, which are also available as adjustable screw connections, add to the versatility of this sensor. For rapid response times, a version with tapered stem is also available. All wetted parts, as well as the housing, are made of stainless steel.

WARRANTY: Three Years†

SPECIFICATIONS

SHEATH MATERIAL: 316 stainless steel
ACCURACY: ±0.12% (±0.3 °C) at 0 °C, Class B standard; ±0.06% (±0.15 °C) at 0 °C, Class A or ±0.04% (±0.1 °C) at 0 °C, Class AA
AVAILABLE RANGES: Standard ranges from -50 °F to 400 °F to -330 °F to 1,100 °F
PRESSURE RATING: 500 psi (34.5 bar), tube only
RTD ELEMENT: PT100 Ω @ 32 °F (0 °C), α=0.00385 IEC 751
LEAD WIRES: Stranded 22 AWG standard, PVC or PTFE insulation
SELF-HEATING: 50 mW / °C typical in moving water
INSULATION RESISTANCE: Single element probes: 100 mega Ω/min. at 500 Vdc, leads to case. Dual element probes: 100 mega Ω/min. at 100 Vdc, between element and leads to case.
TRANSITION: Sheath to wire transition max. temperature 266 °F (130 °C)

900 SERIES

NOSHOK PROBE TYPE INDUSTRIAL RTDs are general purpose RTD probes with PVC or PTFE lead wires. They are ideal for OEM applications, and are offered in 2, 3 or 4-wire circuit types. Many options are available, including adustable and welded fittings, a varity of fitting sizes and probe diameters, and custom designs. RTD PT100 Ω is standard, others are available on request. Multiple electrical connections are available.

WARRANTY: Three Years†

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

SHEATH MATERIAL: 316 stainless steel
ACCURACY: ±0.12% (±0.3 °C) at 0 °C, Class B standard; ±0.06% (±0.15 °C) at 0 °C, Class A or ±0.04% (±0.1 °C) at 0 °C, Class AA optional
AVAILABLE RANGES: Standard ranges from -50 °F to 400 °F to -330 °F to 1,100 °F
PRESSURE RATING: 500 psi (34.5 bar), tube only
RTD ELEMENT: PT100 Ω @ 32 °F (0 °C), α=0.00385 IEC 751
LEAD WIRES: Stranded 22 AWG standard, PVC or PTFE insulation
SELF-HEATING: 50 mW / °C typical in moving water
INSULATION RESISTANCE: Single element probes: 100 mega Ω/ min. at 500 Vdc, leads to case. Dual element probes: 100 mega Ω/min. at 100 Vdc, between element and leads to case.
ENVIRONMENTAL PROTECTION: A1/A2: NEMA 4; P1 & S1/S2: NEMA 4X
TRANSITION: Sheath to wire transition max. temperature 266 °F (130 °C)

910/915 SERIES

APPROVED C US

NOSHOK PROBE TYPE INDUSTRIAL RTD WITH CONNECTION HEAD are available in 2, 3 or 4-wire circuit configurations and they can be ordered with a fixed probe or spring loaded, depending on the application. These RTDs are available with a variety of NEMA 4 and NEMA 4X head types, including aluminum cast, explosion proof aluminum cast, polypropylene, stainless steel cast, and explosion proof stainless steel cast. Explosion proof versions are Class I, Division I, Groups B, C and D; Class II, Division I, Groups E, F and H. Electrical connection options include connection head with 1/2" NPT conduit, and connection head with 3/4" NPT conduit. Stem length options range from 2.5" to 24", and stem diameter options range from 1/8" to 1/2", as well as 6 mm.

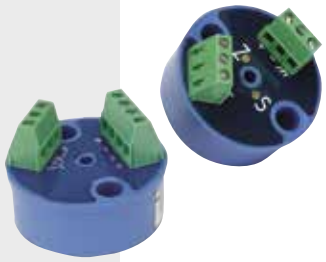
Aluminum Cast **Polypropylene** **SS Cast**

WARRANTY: Three Year†

SPECIFICATIONS

HOUSING MATERIAL: Die-cast zinc, enamel painted
HOUSING DIMENSIONS: 1.82" dia. x 1.15" H
INPUT: PT100, 3-wire, α=0.00385, DIN EN 60751
OUTPUT: 4 mA to 20 mA loop powered or voltage, linear to temperature
POWER SUPPLY: 12-32 Vdc, polarity protected
SUPPLY EFFECT: 0.02%/V, 0.001%/V with computer programmable version
SENSOR LEAD RESISTANCE RTD: 500 Ω max.
ACCURACY*: 0.1% FS (includes effects of linearity, hysteresis and repeatability)
SPAN/ZERO ADJUSTMENT: 20 turn potentiometer, ±10% for zero and span
MAXIMUM LOOP RESISTANCE: Rmax. = [(Vsupply – 9 Vdc) / 20 mA
OPEN CIRCUIT DETECTION: Overscale limit (27.0 mA) or underscale limit (2.2 mA)

* Max. error on complete span. Error at calibration point ≤ 0.1 °C.



920 SERIES

NOSHOK RTD TRANSMITTERS are high accuracy (±0.1%) transmitters with a 2-wire loop-powered 4 ma to 20 mA output. They feature a PT100 input with 3-wire compensation, and have an analog design with an adjustable potentiometers. These RTD transmitters are factory calibrated for a fixed range, and fit standard heads. An optional model is fully field re-programmable with module and PC-based software.

WARRANTY: Three Year†

SPECIFICATIONS

MATERIALS: Brass, 304 stainless steel or 316 stainless steel
INSERTION: 1-5/8″ to 22″
BORE DEPTH: 2-1/2″ to 24″
PROCESS CONNECTION: 3/4″ – standard; Others available upon request

THERMOWELLS

NOSHOK THERMOWELLS are recommended whenever the process being measured may be under pressure, is corrosive, abrasive or may be at a high velocity. They are also recommended as protection to the operator. The correct thermowell will reduce the possibility of damage to the temperature instrument and allows an instrument to be removed and replaced without shutting down and possibly draining the process. Standard thermowells are supplied with 1/2″ NPSM instrument connection. The female thread will accept the 1/2″ NPT male thread without galling or seizing.

WARRANTY: One Year†

RTD ACCESSORIES

RTD CONNECTON HEADS meet the NEMA requirements for indoor or outdoor use, providing protection against dust, rain, splashing and hose-directed water. Featuring easy access, one-turn caps, these connection heads accept standard and DIN terminal blocks and transmitters, and provide greater volume for ease of wiring. Available in aluminum, polypropylene, and stainless steel (explosion-proof versions available).

RTD TERMINAL BLOCKS

These terminal blocks are provided with a steatite ceramic base, brass terminal pieces and stainless steel screws, and can be used in the temperature sensor or low voltage Class 2 circuits. Material options include Bakelite and ceramic, and multiple configurations are available including 2, 3, 4 and 6 position.

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

NOMINAL DIAMETER: 6 cm2
LOAD CELL HOUSING MATERIAL: Stainless steel
PISTON: Stainless steel – standard; plastic – optional
CONNECTING LINE: 50 mm adapter – standard; others available
RANGES: From 150 lb_f through 7,000 lb_f

MEASURING INSTRUMENT
PRESSURE GAUGE: 2-1/2″ 300 Series, one piece die cast brass case; dry or liquid filled
TRANSDUCER: 100, 200 or 615 Series transducer
OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire: 0 Vdc to 5 Vdc, 0 Vdc to 10 Vdc, 1 Vdc to 5 Vdc, 1 Vdc to 6 Vdc & 1 Vdc to 11 Vdc, 3-wire
ACCURACY: ±0.125% full scale (BFSL) to ±1.5% full scale
OPERATING TEMP.: 14 °F to 122 °F (-10 °C to 50 °C)
AMBIENT TEMP.: -4 °F to 140 °F (-20 °C to 60 °C)

1000 SERIES

NOSHOK 6 CM² NOMINAL DIAMETER HYDRAULIC LOAD CELLS are engineered with a compact flat body design for use within control systems of spot welding machines, robots, printing machines and other compression force measurement applications. The stainless steel housing and piston provide for exceptional corrosion resistance and extended service life. Accuracy levels range from ±0.125% full scale (BFSL) to ±1.5% full scale depending on the measuring instrument.

WARRANTY: One Year†; Three Years† on liquid filled gauges & transducers

SPECIFICATIONS

NOMINAL DIAMETER: 20 cm2
LOAD CELL HOUSING MATERIAL: Stainless steel
PISTON: Stainless steel
CONNECTING LINE: Direct connection – standard; flexible tubing, capillary restrictor
RANGES: From 300 lb_f through 22,000 lb_f

MEASURING INSTRUMENT
PRESSURE GAUGE: 2-1/2″ 300 Series, one piece die cast brass case; dry or liquid filled; 4″ 901 Series stainless steel case; dry or liquid filled
TRANSDUCER: 100, 200 or 615 Series transducer
OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire: 0 Vdc to 5 Vdc, 0 Vdc to 10 Vdc, 1 Vdc to 5 Vdc, 1 Vdc to 6 Vdc & 1 Vdc to 11 Vdc, 3-wire
ACCURACY: ±0.5% full scale (BFSL) to ±0.125% full scale
OPERATING TEMP.: -4 °F to 140 °F (-20 °C to 60 °C)
AMBIENT TEMP.: -4 °F to 140 °F (-20 °C to 60 °C)

2000 SERIES

NOSHOK 20 CM² NOMINAL DIAMETER HYDRAULIC LOAD CELLS are designed for measuring axial loads and bearing forces in turning and drilling machines, extruders, and other compression or tension force applications. The self adapting piston and housing are constructed of high grade, corrosion resistant stainless steel and are available in standard or ring form. A high quality, highly accurate NOSHOK pressure gauge or transducer is attached for measurement indication.

WARRANTY: One Year†; Three Years† on liquid filled gauges & transducers

SPECIFICATIONS

NOMINAL DIAMETER: 80 cm^2
LOAD CELL HOUSING MATERIAL: Stainless steel
PISTON: Stainless steel
CONNECTING LINE: Direct connection – standard; flexible tubing, capillary restrictor
RANGES: From 360 lb_f through 70,000 lb_f

MEASURING INSTRUMENT
PRESSURE GAUGE: 2-1/2″ 300 Series, one piece die-cast brass case; dry or liquid filled; 4″ 901 Series stainless steel case; dry or liquid filled
TRANSDUCER: 100, 200 or 615 Series transducer
OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire: 0 Vdc to 5 Vdc, 0 Vdc to 10 Vdc, 1 Vdc to 5 Vdc, 1 Vdc to 6 Vdc & 1 Vdc to 11 Vdc, 3-wire
ACCURACY: ±0.125% full scale (BFSL) to ±1.5% full scale depending on the measuring element
OPERATING TEMP.: -4 °F to 140 °F (-20 °C to 60 °C)
AMBIENT TEMP.: -4 °F to 140 °F (-20 °C to 60 °C)

3000 SERIES

NOSHOK 80 CM² NOMINAL DIAMETER HYDRAULIC LOAD CELLS are constructed from a high grade, corrosion resistant stainless steel and joined with a high quality NOSHOK pressure gauge or transducer to measure axial loads and bearing forces in turning and drilling machines, extruders and other compression force measurement applications. Accuracy levels range from ±0.125% full scale (BFSL) to ±1.5% full scale depending on the measuring instrument with measuring ranges from 360 lb_f through 70,000 lb_f.

WARRANTY: One Year†; Three Years† on liquid filled gauges & transducers

†For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

NOMINAL DIAMETER: 10 cm^2 to 250 cm^2
LOAD CELL HOUSING MATERIAL: Galvanized and chrome plated steel
PISTON: Stainless steel
CONNECTING LINE: Rigid tubing; flexible tubing, capillary restrictor

RANGES: From 300 lb_f through 280 $tons_f$

MEASURING INSTRUMENT
PRESSURE GAUGE: 4″ 901 Series stainless steel case; dry or liquid filled; 6″ 400/500 Series all stainless steel gauge
TRANSDUCER: 100, 200 or 615 Series transducer
OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire: 0 Vdc to 5 Vdc, 0 Vdc to 10 Vdc, 1 Vdc to 5 Vdc, 1 Vdc to 6 Vdc & 1 Vdc to 11 Vdc, 3-wire
ACCURACY: From ±0.125% full scale (BFSL) to ±1.5% full scale, depending on the measuring instrument
OPERATING TEMP.: -13 °F to 194 °F (-25 °C to 90 °C)
AMBIENT TEMP.: -13 °F to 194 °F (-25 °C to 90 °C)

4000 SERIES

NOSHOK 10 CM^2 to 250 CM^2 NOMINAL DIAMETER HYDRAULIC LOAD CELLS are designed for level measurement, rope and belt tension and torque measurement, bearing support forces on lifting equipment and other compression force measurement applications. The cell housing is built from a durable galvanized and chrome plated steel while the piston is constructed from a high grade stainless steel for exceptional corrosion resistance.

WARRANTY: One Year†; Three Years† on liquid filled gauges & transducers

SPECIFICATIONS

NOMINAL DIAMETER: 40 cm^2 to 410 cm^2
LOAD CELL HOUSING MATERIAL: Stainless steel
PISTON: Stainless steel
CONNECTING LINE: Rigid tubing; flexible tubing, capillary restrictor

RANGES: From 900 lb_f through 315 $tons_f$

MEASURING INSTRUMENT
PRESSURE GAUGE: 4″ 901 Series stainless steel case; dry or liquid filled; 6″ 400/500 Series all stainless steel gauge
TRANSDUCER: 100, 200 or 615 Series transducer
OUTPUT SIGNALS: 4 mA to 20 mA, 2-wire: 0 Vdc to 5 Vdc, 0 Vdc to 10 Vdc, 1 Vdc to 5 Vdc, 1 Vdc to 6 Vdc & 1 Vdc to 11 Vdc, 3-wire
ACCURACY: From ±0.125% full scale (BFSL) to ±1.5% full scale, depending on the measuring instrument
OPERATING TEMP.: -13 °F to 194 °F (-25 °C to 90 °C)
AMBIENT TEMP.: -13 °F to 194 °F (-25 °C to 90 °C)

5000 SERIES

NOSHOK 40 CM^2 to 410 CM^2 NOMINAL DIAMETER HYDRAULIC LOAD CELLS are designed in a distinctive ring shaped form for compression and tension force measurement in injection molding machine screws, tailstock spindles, propeller shafts, rope and torque measurement applications and more. The high grade stainless steel housing and piston provide exceptional corrosion resistance and durability.

WARRANTY: One Year†; Three Years† on liquid filled gauges & transducers

SPECIFICATIONS

OUTPUT SIGNAL: 1-2 mV/V 4-wire, 4 mA to 20 mA 2-wire, 0 Vdc to 10 Vdc 3-wire, CANopen-fieldbus, others available on request
MEASURING RANGES: 0 kN to 5 kN through 0 kN to 200 kN
ACCURACY: ±2.0% full scale to ±0.5% full scale
HOUSING MATERIAL: 316 stainless steel
ENVIRONMENTAL PROTECTION: NEMA 4X, IP67 per EN 60529/IEC 529
OPERATING TEMPERATURE: -40 °F to 176 °F (-40 °C to 80 °C)
ELECTRICAL PROTECTION: Reverse polarity, overvoltage and short circuit protection

5301/5308 SERIES

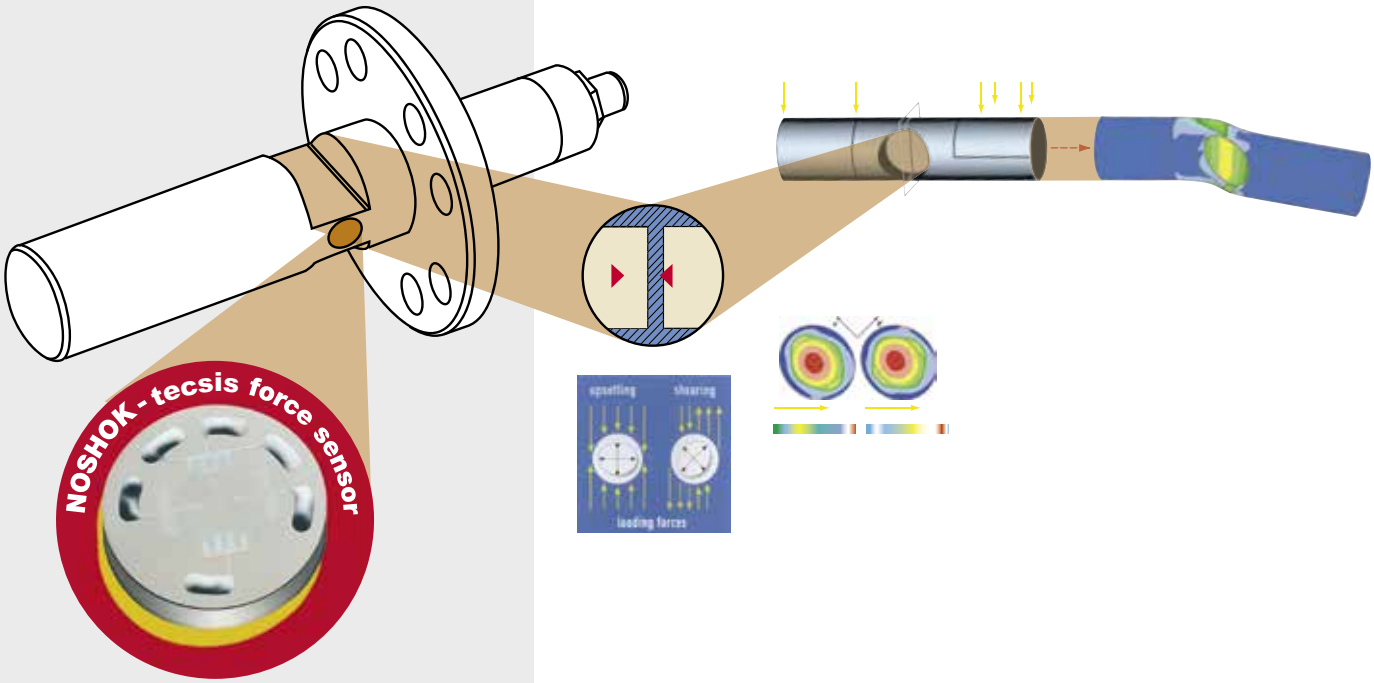
NOSHOK LOAD PINS utilize our proven thin film sensor technology laser welded directly to the measuring instrument. This technology gives us the ability to offer accuracies up to ±0.5% and minimize the disadvantages seen in the bonded foil versions (temperature drifts and long term stability). They are available in many different sizes and shapes for the direct replacement of existing bolts where a force measurement may need to be taken. Various output signals are available to integrate with almost any electrical system. Common applications for load pins are force measurement on roller bearings, industrial weighing, measurement of cable tension on hoists and overload protection on cranes.

WARRANTY: One Year†

†For further warranty information please consult your specific product catalogs.

The NOSHOK-TECSIS CUSTOM FORCE SENSOR is a break through in force measurement. Utilizing proven thin film sensor technology combined with an advanced automated production process we create a highly adaptive force transmitter that is suitable for industrial use. This development process gives the customer complete freedom in creating a high quality, highly accurate force sensor that is custom designed and engineered to meet their specific application needs.

NOSHOK-TECSIS Custom Force Sensors provide the OEM and end user alike with unsurpassed flexibility to achieve a previously unattainable solution because of nonconforming standard designs and high accuracy requirements. NOSHOK achieves this solution in a way that is performance and reliability enhancing while remaining cost effective.



SPECIFICATIONS

OUTPUT SIGNAL: 4 mA to 20 mA, 2-wire, 0 Vdc to 5 Vdc, 3-wire, 0 Vdc to 10 Vdc, 3-wire
NOMINAL RANGES: 1,000 lb_f to 100,000 lb_f (5 kN to 500 kN), standard. Others available, please consult factory.
LIMIT FORCE: 150% Fnom
FRACTURE FORCE: > 300% full scale
ACCURACY: < 1% full scale
HYSTERESIS: < 0.5% full scale
POWER SUPPLY: 10 Vdc to 30 Vdc; 14 Vdc to 30 Vdc for 0 Vdc to 10 Vdc output
HOUSING MATERIAL: 316 stainless steel
RESPONSE TIME: ≤ 0.5s (between 10% to 90% full scale)
ENVIRONMENTAL RATING: IP 67, NEMA 4X to EN 60529/IEC 529
ELECTRICAL PROTECTION: Reverse polarity, over-voltage and short circuit protection
VIBRATION: 20g's per IEC 68-2
ELECTRICAL CONNECTION: M12 X 1 (4-pin) standard. Others available, please consult factory.

FEATURES

- Custom designed and built to the exact application specifications requiring less space for mounting and installation
- The NOSHOK-TECSIS proven thin film sensor is LASER WELDED to the deformation body for superior strength and performance
- Extremely accurate, with the help of Finite Element Method Analysis, the sensor is able to reach accuracies from 0.2% to 1% full scale
- Available in a variety of standard current and voltage output signals, with others available upon request
- High quality product produced in an automated system with cost effective pricing
- Deformation body is constructed from a high grade, high quality stainless steel that provides exceptional durability and contributes to extended service life

[†]For further warranty information please consult your specific product catalogs.

SPECIFICATIONS

OUTPUT SIGNAL: 4 mA to 20 mA, 2-wire or 3-wire; 0 Vdc to 10 Vdc, 3-wire
MEASURING RANGES: 0 kN to 1 kN through 0 kN to 500 kN
ACCURACY: ±0.2% full scale of Cn
HOUSING MATERIAL: 316 stainless steel or aluminum, dependent on version
ENVIRONMENTAL PROTECTION: NEMA 4X, IP67 per EN 60529/IEC 529
OPERATING TEMPERATURE: -4 °F to 176 °F (-20 °C to 80 °C)
ELECTRICAL PROTECTION: Short circuit, overvoltage and reverse polarity protection

3540 SERIES

NOSHOK TENSION AND COMPRESSION FORCE TRANSDUCERS are available in many different sizes and shapes to fit almost any application. They are available in measuring ranges as small as 0 kN to 1 kN and as high as 0 kN to 500 kN with an accuracy of ±0.2% of full scale Cn. Several outputs are available in both amplified and unamplified to interface with most electrical systems. Many versions are manufactured from stainless steel which makes them suitable for installation in harsh environments. Applications for use of this product include cable or rod tension, weight measurement, overload protection, clamping force and fill level measurement.

WARRANTY: One Year†

SPECIFICATIONS

OUTPUT SIGNAL: 2 mV/V
MEASURING RANGES: 0 N to 20 N through 0 kN to 50 kN
ACCURACY: ±0.2% full scale (±0.1% full scale optional)
HOUSING MATERIAL: 316 stainless steel or aluminum, dependent on version
ENVIRONMENTAL PROTECTION: Protection class NEMA IP 65 or IP 67
OPERATING TEMPERATURE: -30 °F to 85 °F (-34 °C to 29 °C)
ELECTRICAL PROTECTION: Short circuit, overvoltage and reverse polarity protection

2351 SERIES

NOSHOK S-TYPE FORCE TRANSDUCERS' conventional design features internal threads which allow force to be easily introduced via suitable swivel heads. Calibrations in the tension or compression direction only are available at no charge. The S-Type transducer features thin film sensors and an integrated amplifier for excellent sensitivity, provides high shock and vibration resistance, with an accuracy up to 0.1% of full scale value. This transducer can be used for either dynamic or static requirements, and its overload protection is rated for 150% of the maximum nominal load.

WARRANTY: One Year†

3010 SERIES

NOSHOK CHAIN HOIST TEST KIT (CHTK) for overload cutoff is a precise, durable and dependable tester for slip couplings on chain hoists. The CHTK provides a wide range of measurement, with high accuracy, low weight and ease of use.

To perform the test, the force transducer is inserted into the chain, travels upwards with it against the base of the chain hoist and thereby blocks the chain. The display unit allows you to read the load at which the friction clutch stalls.

The CHTK consists of a force transducer with integrated handle and a display unit. Two chain adapters and three centering sleeves are also included in the kit, to ensure the CHTK can be used for most types of chain hoists in the specified load range. The large illuminated graphic display makes it very easy for the user to read the measured values. Optionally, 99 different data sets can be stored and transferred via an infrared interface to a PC. The CHTK's special feature is the single sensor concept for the entire load range.

3020 SERIES

NOSHOK WELD FORCE TEST KITS are designed to easily and accurately check electrode force in spot welding equipment. The WFTK consists of a force transducer, a handheld display unit, plastic carrying case, charger, 2-meter signal cable and Manufacturer's Test Certificate. The WFTK weighs only 13 lbs, and features a Max/Min Value Memory, a large illuminated display, and electrode diameters of 14–20 mm.

To check the force acting on the electrodes, the force transducer is held between the electrodes. The concave surfaces center the force transducer. When the welding electrodes come together, the magnitude of the applied force can be read on the display unit. The force transducer is insensitive to transverse forces and torques. It has a measuring range of 0 kN -10 kN. The output signal is connected to the handheld display unit via a cable. This display unit carries the voltage supply for the transducer. Alternatively, the supply can be taken from a PLC. The sensor, which is laser welded, has all the advantages of the conventional bonded foil strain gauges, but without having their substantial disadvantages (temperature drifts due to the glue and creeping).

†For further warranty information please consult your specific product catalogs.

HARD SEAT & SOFT TIP

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel, 360 brass
CONNECTIONS: 1/8″ NPT, 1/4″ NPT, 7/16″-20 UNF-2B, 9/16″-18 UNF-2B, Male-male, Male-female, Female-female, in-line and angled configurations
PRESSURE RATINGS: Brass: 6,000 psi @ 200 °F, zinc-nickel plated steel: 10,000 psi @ 200 °F, stainless steel: 10,000 psi @ 200 °F
ORIFICE SIZE: 100 Series & 150 Series: 0.172″
Flow coefficient: 100 Series & 150 Series: C_V 0.42
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
OPTIONS: Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

100/140 Series: U.S. Patent 7,758,014
150/190 Series: U.S. Patent 6,820,857 and 7,758,014

100/150 SERIES

NOSHOK MINI VALVES are small in size but deliver maximum strength and durability. Available in zinc nickel-plated steel, electropolished stainless steel and brass, these rugged mini valves are equipped with an FKM o-ring and PTFE back-up ring below the stem threads to protect against corrosion and galling. Stem threads are rolled for greater strength and ease of operation. 100 Series feature a metal-to-metal hard seat, and have a maximum pressure of 10,000 psi for stainless steel and steel models, and 6,000 psi for brass. 150 Series valves feature a patented Delrin® non-rotating soft tip stem. They have a max pressure of 6,000 psi for stainless steel and steel models, and 3,000 psi for brass.

WARRANTY: Three Years†

HARD SEAT & SOFT SEAT

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTIONS: 1/2″ NPT to 3/4″ NPT Male-female
Pressure rating: 200 Series: 10,000 psi @ 200 °F; 300 Series: 6,000 psi @ 200 °F
ORIFICE SIZE: 200/300 Series: 0.187″
FLOW COEFFICIENT: 200 Series: C_V 0.44; 300 Series: C_V 0.64
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
OPTIONS: Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

200/300 SERIES

NOSHOK MULTIPORT VALVES reduce the number of gauge and other instrument connections to permanent piping installations, therefore decreasing possible leak points (paths). Optional bleed plugs further allow pressure to be bled off without disturbing the permanent piping installation. The metal-to-metal hard seat design has a maximum pressure rating to 10,000 psi @ 200 °F. The soft seat design, with the replaceable Delrin® seat, is pressure rated to 6,000 psi @ 200 °F.

WARRANTY: Three Years†

HARD SEAT & SOFT SEAT

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTIONS: 1/4″, 3/8″, 1/2″, 3/4″, 1″, 1-1/4″ & 1-1/2″ NPT; 7/16″-20 UNF (#4 SAE, J1926); Male-female, Female-female, in-line and angled configurations
PRESSURE RATING: 400 Series: 10,000 psi @ 200 °F; 500 Series: 6,000 psi @ 200 °F
ORIFICE SIZES: 400 Series: 1/4″ - 1/2″ NPT: 0.187″ with C_V 0.44; 3/4″ - 1-1/2″ NPT: 0.438″ with CV 2.70
ORIFICE SIZES: 500 Series: 1/4″ - 1/2″ NPT: 0.187″; with C_V 0.76; 3/4″ - 1-1/2″ NPT: 0.438″ with C_V 4.0
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional for 1/4″, 3/8″ & 1/2″ NPT only
OPTIONS: Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

400/500 SERIES

NOSHOK STANDARD NEEDLE VALVES are the work horses of the industry. The 400 Series' metal-to-metal hard seat design is pressure rated to 10,000 psi @ 200 °F and helium leak tested to 1x10^{-4} ml/s for guaranteed performance and reliability. The 500 Series valves are fitted with a precision molded, replaceable Delrin® soft seat which is the key to the bubble tight seal. They have a maximum pressure rating of 6,000 psi @ 200 °F with straight through porting for bi-directional, high capacity flow and easy roddable cleaning. The all 316 stainless steel blow out proof stem provides greater service life and provides a secondary stem seal in the full open position. On the 400 Series, the stem and the one piece bonnet threads are rolled for greater strength and ease of operation. Both the 400 and 500 Series feature stem seal below the threads to protect against corrosion and galling.

WARRANTY: Three Years†

All NOSHOK 316SS valve products meet the requirements of NACE MR0175/ISO 15156-3.

All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

†For further warranty information please consult your specific product catalogs.

HARD SEAT & SOFT SEAT

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTIONS: 1/4″ & 1/2″ NPT, Male-female & Female-female configurations
PRESSURE RATING: 600 Series:10,000 psi @ 200 °F; 700 Series: 6,000 psi @ 200 °F
ORIFICE SIZE: 600/700 Series: 0.187″ (both series)
FLOW COEFFICIENT: 600 Series: C_V 0.44; 700 Series: C_V 0.76
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
OPTIONS: Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

600/700 SERIES

NOSHOK BLOCK & BLEED NEEDLE VALVES allow pressure to be bled off without disturbing the permanent piping installation thereby enabling the user to quickly and easily remove and/or replace instruments. The metal-to-metal hard seat design is pressure rated to 10,000 psi @ 200 °F and the soft seat design, with a replaceable Delrin® seat, is rated to 6,000 psi @ 200 °F. The all 316 stainless steel blow out proof stem provides greater service life and a secondary stem seal in the full open position. Stem seals, with the FKM o-ring and PTFE back up ring, are below the threads and protect against galling and corrosion.

WARRANTY: Three Years†

HARD SEAT & SOFT TIP

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel, 360 brass
CONNECTIONS: 1/4″ & 1/2″ NPT
HARD SEAT PRESSURE RATINGS: Brass: 6,000 psi @ 200 °F; steel: 10,000 psi @ 200 °F; stainless steel: 10,000 psi @ 200 °F
SOFT TIP PRESSURE RATINGS: Brass: 3,000 psi @ 200 °F; steel: 6,000 psi @ 200 °F; stainless steel: 6,000 psi @ 200 °F
BLEED PORT: 800/850 Series: 0.159″ (both series)
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® (800 Series only) packing optional
OPTIONS: Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

U.S. Patent 6,820,857
U.S. Patent 7,758,014

800/850 SERIES

NOSHOK BLEED VALVES provide a convenient means to relieve process pressures trapped between a shut off valve and the instrument. The 800/850 Series valves use the same bonnet assemblies as the 100 and 150 Series mini valves with an integrated single threaded body for insertion into a vent port. NOSHOK Soft tip valves feature a patented Delrin® non-rotating soft tip stem, a back-up metal-to-metal seal and a 0.159” bleed port. Our patented body-to-bonnet, metal-to-metal seal is designed to significantly increase the pressure range of the valve. All stem threads are rolled for strength and ease of operation.

WARRANTY: Three Years†

HARD SEAT & SOFT SEAT

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTION: 1/2″ & 1/4″ NPT, Male-female & Female-female configurations available, right venting optional
PRESSURE RATING: 2070 Series: 10,000 psi @ 200 °F; 2170 Series: 6,000 psi @ 200 °F
ORIFICE SIZE: 2070/2170: 0.187″ (both series)
FLOW COEFFICIENT: 2070 Series: C_V 0.44; 2170 Series: C_V 0.76
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
LENGTH: 4″ standard and 5-3/8″ extended length available
OPTIONS: Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

2070/2170 SERIES

NOSHOK BLOCK & BLEED 2-VALVE NEEDLE VALVES combine isolating and venting in a single valve, eliminating the need for tubing and fittings. The block valve isolates the downstream process fluids, and the bleed valve exhausts upstream fluids enabling instruments to be removed without disturbing the permanent piping installation. The 1/4″ NPT vent plug may be removed and replaced with exhaust piping to direct the fluids to a safe location. The metal-to-metal hard seat design is pressure rated to 10,000 psi @ 200 °F and the soft seat design, with a replaceable Delrin® seat, is rated to 6,000 psi @ 200 °F. The all 316 stainless steel blow out proof stem provides greater service life and a secondary stem seal in the full open position. The standard stem seal is below the threads and protects against galling and corrosion.

WARRANTY: Three Years†

All NOSHOK 316SS valve products meet the requirements of NACE MR0175/ISO 15156-3.

All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

†For further warranty information please consult your specific product catalogs.

HARD SEAT

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTION: 1/2″ & 1/4″ NPT Male-female & Female-female configurations available, right venting optional
PRESSURE RATING: 10,000 psi @ 200 °F
ORIFICE SIZE: 0.187″
FLOW COEFFICIENT: C_V 0.44
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
LENGTH: 4″ standard and 5-3/8″ extended length available
OPTIONS: Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

3070 SERIES

NOSHOK DOUBLE BLOCK & BLEED 2-VALVE NEEDLE VALVES combine double isolation and venting in a single valve, eliminating the need for tubing and fittings. The double block and bleed valve isolates the downstream process fluids, or isolates the upstream instrument pressure. The bleed valve exhausts either upstream or downstream fluid pressure depending on which block valve is used. The 1/4″ NPT vent port is located on the opposite side of the process block valve and 90° from the instrument block valve. 10,000 psi hard seat pressure rating @ 200 °F. Blow-out proof stem provides a secondary stem seal in the full open position. All stem threads are rolled for strength and ease of operation. These valves feature a one-piece bonnet with a metal-to-metal seal to the valve body below the bonnet threads, and a slotted spring pin to prevent accidental loosening. Vinyl dust cap for bonnet and stem (non-packing).

WARRANTY: Three Years†

2-VALVE STATIC PRESSURE & LIQUID LEVEL MANIFOLDS

HARD SEAT & SOFT SEAT

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTION: 1/2″ NPT, 1/4″ NPT, NPT-flange, Flange-flange, NPT-NPT configurations available
PRESSURE RATINGS: 2000 Series: 10,000 psi @ 200 °F; 2100 Series: 6,000 psi @ 200 °F
ORIFICE SIZE: 0.187″
FLOW COEFFICIENT: 2000 Series: C_V 0.44; 2100 Series: C_V 0.76
STEM SEAL & TYPES: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
OPTIONS: O-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

2000/2100 SERIES

NOSHOK BLOCK & BLEED 2-VALVE STATIC PRESSURE MANIFOLD VALVES combine isolating and venting in a single manifold eliminating the need for tubing and fittings. The block valve isolates the downstream process fluids and the bleed valve exhausts upstream fluids enabling static pressure transmitters, switches or gauges to be removed without disturbing the permanent piping installation. The block valve is located on the side and the bleed valve is located on top in a 90° orientation. Venting is to the right. The all 316 stainless steel blow out proof stem provides longer service life and a secondary stem seal in the full open position. The stem seal, with the FKM o-ring and PTFE back up ring, is below the threads and protects against galling and corrosion.

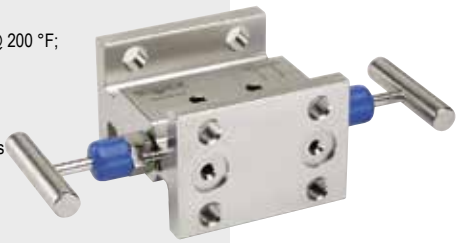
WARRANTY: Three Years†

HARD & SOFT SEAT

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTIONS: Flange-flange, 1/2″ NPT-flange
PRESSURE RATINGS: 2020 Series: 10,000 psi @ 200 °F; 2120 Series: 6,000 psi @ 200 °F
ORIFICE SIZE: 0.187″
FLOW COEFFICIENT: 2020 Series: C_V 0.44; 2120 Series: C_V 0.76
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below he threads, PTFE or Grafoil® packing optional
OPTIONS: O-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.



2020/2120 SERIES

NOSHOK 2-VALVE LIQUID LEVEL MANIFOLD VALVES are designed for use with differential pressure transmitters in liquid level applications. These valves are available in either single flange or double flange connection for direct installation. The soft seat design features a replaceable Delrin® seat with straight through porting for bi-directional flow and easy roddable cleaning.

WARRANTY: Three Years†

All NOSHOK 316SS valve products meet the requirements of NACE MR0175/ISO 15156-3.

All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

†For further warranty information please consult your specific product catalogs.

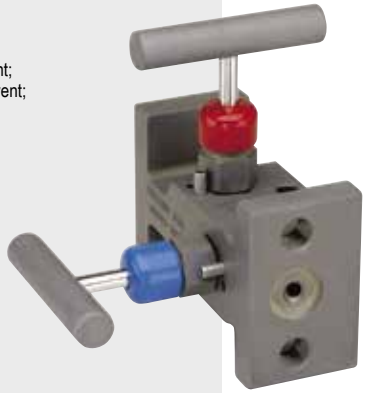
HARD SEAT & SOFT SEAT

200002/210002 SERIES
200402/210402 SERIES

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTIONS:
200002/210002 Series: Flange-flange, 1/4″ NPT vent;
200402/210402 Series: 1/2″ NPT-flange, 1/4″ NPT vent;
200202/210202 Series: 1/4″ NPT-flange, 1/4″ NPT vent; Left venting optional
PRESSURE RATINGS:
200002 & 200402 Series: 10,000 psi @ 200 °F;
210002 & 210402 Series: 6,000 psi @ 200 °F
Orifice size: 0.187″
FLOW COEFFICIENT:
200002 & 200402 Series: C_V 0.44;
210002 & 210402 Series: C_V 0.76
STEM SEAL: All 316 stainless steel stems with FKM o-ring and & type PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
OPTIONS: O-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.



NOSHOK NARROW BLOCK & BLEED 2-VALVE STATIC PRESSURE MANIFOLD VALVES combine isolating and venting in a single manifold eliminating the need for tubing and fittings. The block valve isolates the downstream process fluids and the bleed valve exhausts upstream fluids enabling static pressure transmitters, switches or gauges to be removed without disturbing the permanent piping installation. The block valve is located on the side and the bleed valve is located on top in a 90° orientation. Venting is to the right. The all 316 stainless steel blow out proof stem provides greater service life and a secondary stem seal in the full open position. The stem seal, with the FKM o-ring and PTFE back up ring, is below the threads and protects against galling and corrosion.

WARRANTY: Three Years†

SOFT SEAT (0.375″ ORIFICE)

2530 SERIES

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTIONS:
Flange-flange 90° Angle
PRESSURE RATINGS:
6,000 psi @ 200 °F
Orifice size: 0.375″
FLOW COEFFICIENT: C_V 3.0
STEM SEAL: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads
OPTIONS: O-ring materials and soft seats

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

NOSHOK LARGE BORE, 90° ANGLE NATURAL GAS MANIFOLD VALVES incorporate two isolation valves for natural gas applications. These valves feature a double flange 90° angle connection for remote or direct installation. The soft seat design features a replaceable Delrin® seat with straight through porting for bi-directional flow and easy roddable cleaning.

WARRANTY: Three Years†

HARD SEAT & SOFT TIP (0.141″ ORIFICE)

2602/2702 SERIES

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTIONS: 1/4″ NPT, 1/8″ NPT, right venting optional
PRESSURE RATINGS:
2602 Series: 10,000 psi @ 200 °F;
2702 Series: 6,000 psi @ 200 °F
ORIFICE SIZE: 0.141″
FLOW COEFFICIENT: 2602 Series: C_V 0.38;
2702 Series: C_V 0.38
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
OPTIONS: O-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

U.S. Patent 6,820,857
U.S. Patent 7,758,014

NOSHOK MINI BLOCK & BLEED 2-VALVE STATIC PRESSURE MANIFOLD VALVES combine isolating and venting in a single manifold eliminating the need for tubing and fittings. The block valve isolates the downstream process fluids and the bleed valve exhausts upstream fluids enabling static pressure transmitters, switches or gauges to be removed without disturbing the permanent piping installation. The valves are located on the top to fit into compact spaces and two holes are provided for mounting. Venting is to the left. The all 316 stainless steel blow out proof stem provides greater service life and a secondary stem seal in the full open position. The stem seal, with the FKM o-ring and PTFE back up ring, is below the threads and protects against galling and corrosion.

WARRANTY: Three Years†

All NOSHOK 316SS valve products meet the requirements of NACE MR0175/ISO 15156-3.

All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

†For further warranty information please consult your specific product catalogs.

2-VALVE STATIC PRESSURE & NATURAL GAS MANIFOLDS

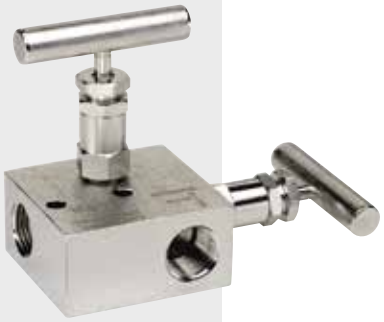
HARD SEAT & SOFT TIP (0.156″ ORIFICE)

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTIONS:
2603/2703 Series: 3/8″ NPT;
2604/2704 Series: 1/2″ NPT, right venting optional
PRESSURE RATINGS:
2603 & 2604 Series: 10,000 psi @ 200 °F;
2703 & 2704 Series: 6,000 psi @ 200 °F
ORIFICE SIZE: 0.156″
FLOW COEFFICIENT: C_V 0.44
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
OPTIONS: O-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

U.S. Patent 6,820,857; U.S. Patent 7,758,014



2603/2703 SERIES
2604/2704 SERIES

NOSHOK BLOCK & BLEED 2-VALVE STATIC PRESSURE MANIFOLDS combine isolating and venting in a single manifold eliminating the need for tubing and fittings. The block valve isolates the downstream process fluids and the bleed valve exhausts upstream fluids enabling static pressure transmitters, switches or gauges to be removed without disturbing the permanent piping installation.
The block valve is located on the side and the bleed valve is located on top in a 90° orientation. Venting is to the left. The all 316 stainless steel blow out proof stem provides greater service life and a secondary stem seal in the full open position. The stem seal, with the FKM o-ring and PTFE back up ring, is below the threads and protects against galling and corrosion.

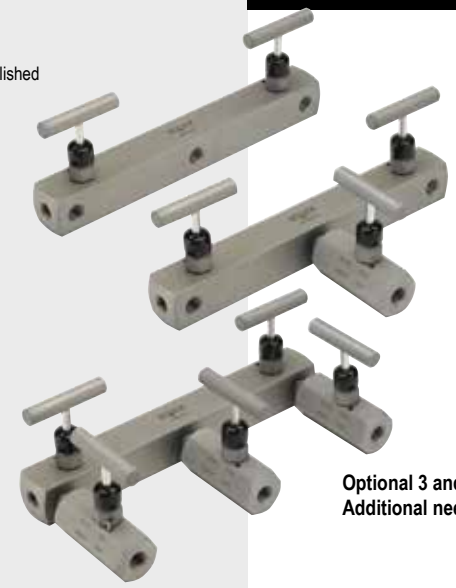
WARRANTY: Three Years†

SOFT SEAT

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTION: 1/4″ NPT
PRESSURE RATING: 6,000 psi @ 200 °F
ORIFICE SIZE: 0.187″
FLOW COEFFICIENT: C_V 0.76
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE packing optional
OPTIONS: O-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.



2180 SERIES

NOSHOK 2-VALVE STATIC PRESSURE NATURAL GAS METER MANIFOLDS are designed for use with orifice meters. These manifolds feature a replaceable Delrin® seat and straight through porting for bidirectional, high capacity flow and easy roddable cleaning. A blow-out proof stem provides a secondary stem seal in the full open position, and all stem threads are rolled for strength and ease of operation. These valves feature a one-piece bonnet with a metal-to-metal seal to the valve body below the bonnet threads, and a slotted spring pin to prevent accidental loosening. Vinyl dust caps are included for bonnets and stems (non-packing).

WARRANTY: Three Years†

Optional 3 and 5 valve configurations also shown.
Additional needle valves sold separately.

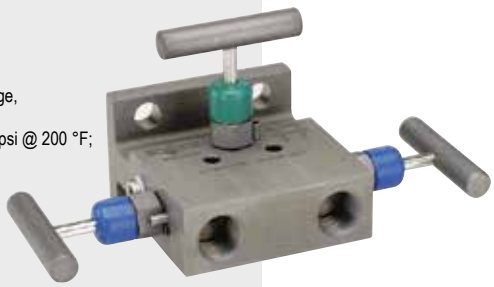
3-VALVE DIFFERENTIAL PRESSURE MANIFOLDS

HARD SEAT & SOFT SEAT

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTION: Flange-flange, 1/2″ NPT-flange, 1/2″ NPT-1/2″ NPT
PRESSURE RATINGS: 3010 Series: 10,000 psi @ 200 °F; 3110 Series: 6,000 psi @ 200 °F
ORIFICE SIZE: 0.187″
FLOW COEFFICIENT: 3010 Series: C_V 0.44; 3110 Series: C_V 0.76
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
OPTIONS: O-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.



3010/3110 SERIES

NOSHOK 3-VALVE DIFFERENTIAL PRESSURE MANIFOLD VALVES are designed for use with differential pressure transmitters incorporating two isolation valves and an equalizing valve in differential pressure measurement. These valves are available in block, single flange or double flange connection for remote or direct installation.
The soft seat design features a replaceable Delrin® seat with straight through porting for bi-directional flow and easy roddable cleaning.

WARRANTY: Three Years†

All NOSHOK 316SS valve products meet the requirements of NACE MR0175/ISO 15156-3.

All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

†For further warranty information please consult your specific product catalogs.

3-VALVE DIFFERENTIAL PRESSURE MANIFOLDS

SOFT SEAT (0.375" ORIFICE)

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTION: Flange-flange, 1/2″ NPT-flange, 1/2″ NPT-1/2″ NPT
PRESSURE RATINGS: 6,000 psi @ 200 °F
ORIFICE SIZE: 0.375″
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads
OPTIONS: O-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.

3510 SERIES

NOSHOK 3-VALVE DIFFERENTIAL PRESSURE MANIFOLD VALVES are designed for use with differential pressure transmitters incorporating two isolation valves and an equalizing valve in differential pressure measurement. These valves are available in block, single flange or double flange connection for remote or direct installation. The soft seat design features a replaceable Delrin® seat with straight through porting for bi-directional flow and easy roddable cleaning.

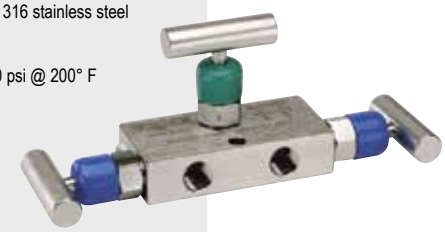
WARRANTY: Three Years†

HARD SEAT & SOFT TIP (0.141" ORIFICE)

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTION: 1/4″ NPT
PRESSURE RATINGS:
3610 Series: 10,000 psi @ 200° F; 3710 Series: 6,000 psi @ 200° F
ORIFICE SIZE: 0.141″
FLOW COEFFICIENT: C_V 0.44
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
OPTIONS: O-ring materials, handles, packings, regulating stem and stem tips

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.
U.S. Patent 6,820,857; U.S. Patent 7,758,014



3610/3710 SERIES

NOSHOK MINI 3-VALVE DIFFERENTIAL PRESSURE MANIFOLD VALVES are identical to the 3000/3100 Series Manifold Valves, but in miniature version. They are designed for use with differential pressure transmitters incorporating two isolation valves and an equalizing valve in differential pressure measurement.

WARRANTY: Three Years†

5-VALVE NATURAL GAS MANIFOLDS

HARD SEAT & SOFT SEAT/TIP

SPECIFICATIONS

MATERIALS: Zinc-nickel plated carbon steel, electropolished 316 SS
CONNECTION: Flange-flange, 1/2″ NPT-flange, 1/2″ NPT-1/2″ NPT
PRESSURE RATINGS:
5030 Series: 10,000 psi @ 200° F; 5130 Series: 6,000 psi @ 200° F
ORIFICE SIZE: 0.187″
FLOW COEFFICIENT:
5030 Series: C_V 0.44; 5130 Series: C_V 0.76
STEM SEAL & TYPE: All 316 SS stems with FKM o-ring and PTFE back-up ring below the threads.
ADDITIONAL FEATURES: Two static (test) ports, color coded vinyl bonnet and stem dust cap, patented soft seat/tip stem design on equalizing and vent valves
OPTIONS: O-ring materials, handles, packings, regulating stem and stem tips seal
All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability.
U.S. Patent 6,820,857; U.S. Patent 7,758,014

Flare Pattern™ option

5030/5130 SERIES

NOSHOK 5-VALVE NATURAL GAS MANIFOLDS are designed for use with differential pressure transmitters incorporating two isolation valves, two equalizing valves and a vent valve in natural gas applications. These valves are available in block, single flange or double flange connection for remote or direct installation. A Flare Pattern™ valve configuration is optional, which provides maximum clearance for fingers during operation. The soft seat design features a replaceable Delrin® seat with straight through porting for bi-directional flow and easy roddable cleaning*.
*Isolation valves only

WARRANTY: Three Years†

All NOSHOK 316SS valve products meet the requirements of NACE MR0175/ISO 15156-3.

All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

†For further warranty information please consult your specific product catalogs.

5-VALVE NATURAL GAS MANIFOLDS

SOFT SEAT/TIP (O.375" ORIFICE)

SPECIFICATIONS

MATERIALS: Zinc-nickel plated steel, electropolished 316 stainless steel
CONNECTIONS: Flange-flange, 1/2″ NPT-flange, 1/2″ NPT-1/2″ NPT, Flange-flange 90° Angle
PRESSURE RATINGS: 6,000 psi @ 200°F
ORIFICE SIZE: 0.375″
STEM SEAL & TYPE: All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads
ADDITIONAL FEATURES: Two static (test) ports, color coded vinyl bonnet and stem dust cap, patented soft tip stem design on equalizing and vent valves

All NOSHOK valves are 100% helium leak tested to 1 X 10^{-4} ml/s for guaranteed performance and reliability. U.S. Patent 6,820,857

90° Angle option

Flare Pattern™ option

5530 SERIES

NOSHOK 5-VALVE NATURAL GAS MANIFOLDS are designed for use with differential pressure transmitters incorporating two isolation valves, two equalizing valves and a vent valve for natural gas applications. These valves are available in block, single flange, double flange, or double flange 90° angle connection for remote or direct installation. Flare Pattern™ configurations are optional, which provides maximum clearance for fingers during operation. The soft seat design features a replaceable Delrin® seat with straight through porting for bi-directional flow and easy roddable cleaning*.

*Isolation valves only

WARRANTY: Three Years†

STABILIZED & NON-STABILIZED CONNECTORS

SPECIFICATIONS

MATERIALS: Zinc-nickel plated carbon steel, 316 stainless steel
CONNECTION: 1/2″ NPT-flange

Stablized Connectors

Non-stablized Connector

SZ SERIES

NOSHOK STABILIZED & NON-STABILIZED CONNECTORS are designed to reinforce the entire installation by shifting radial-stress load away from the NPT connections, and are available in 3-3/8” and 5” lengths.

SZ Series Stabilized & Non-Stabilized Connectors are available in zinc-nickel plated carbon steel and 316 stainless steel, and feature slotted bolt holes that allow for 2-1/8” and 2-1/4” bolt spacings.

A single piece dielectric gasket (DK1) is available as an option to create a non-conductive shield between the process piping and the instrument. A two piece dielectric kit (DK2) is also available as an alternative when a separate sealing gasket or o-ring is required.

SPECIFICATIONS

MATERIALS: Zinc-nickel plated carbon steel, 316 stainless steel
CONNECTION: 1/2″ NPT-flange

Shown with flange adaptor for round installations.

SV SERIES

NOSHOK STABILIZED CONNECTORS WITH INTEGRAL VALVE are also designed to reinforce an installation by shifting radial-stress load away from the NPT connections, but also feature a block valve that can be installed on either side of stabilized body, allowing 1/2 turn installation.

SV Series Stabilized Connectors with Integral Valve are available in zinc-nickel plated carbon steel and 316 stainless steel, and feature slotted bolt holes that allow for 2-1/8" and 2-1/4" bolt spacings.The integral valve has a 0.375" bore for unrestricted passage of process gas, and a standard non-rotating stem tip. This application will work on both flat surfaces (orifice fitting) and round surfaces (orifice flange) with flange adaptor.

A single piece dielectric gasket (DK1) is available as an option to create a non-conductive shield between the process piping and the instrument. A two piece dielectric kit (DK2) is also available as an alternative when a separate sealing gasket or o-ring is required. Stainless steel bolts are also available.

All NOSHOK 316SS valve products meet the requirements of NACE MR0175/ISO 15156-3.

All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

50FA1 SERIES FUTBOLS

Futbols (flange adapters) bolt to the process side of a flange-flange manifold to allow connection of process flange taps or process root valves. Futbols also allow flanges to be connected to threaded process piping while maintaining the ease of removal or repair of the manifoldif maintenance is required.

The futbols provide a 1/16″ offset connection from the bolt holes to give connection centers of 2″, 2-1/8″, or 2-1/4″

SPECIFICATIONS

MATERIAL: Zinc-nickel plated steel, 316 stainless steel
CONNECTIONS: 1/2″ NPT
KIT INCLUDES : (2) Futbols, (4) hex bolts 7/16-20, (2) PTFE face seals

SA SERIES STATIC ADAPTORS

Static adaptor are used to join threaded ports to a flange style connection. They are often used to join the NPT port of a static transmitter with a flange mounted connection on a differential pressure to static adaptor plate. They are available in zinc-nickel plated steel and electropolished stainless steel.

SPECIFICATIONS

MATERIAL: Zinc-nickel plated steel, electropolished stainless steel,
CONNECTIONS: 1/2″ NPT Male - flange, 1/2" NPT Female-flange

DIELECTRIC KITS

The dielectric kit is designed to maintain the integrity and reliability of the pipeline and piping system through safety and corrosion protection. Dielectric kits provide a non-conductive barrier between the process piping and the instrument and isolate componentsfrom the effects of electrical current. By eliminating metal-to-metal contact, current is halted to prevent corrosion and aid in the cathodic protection of the system.

DK1

- Single piece design combining a Delrin® sealing gasket and dielectric
- Bolts, washers and dielectric bushings are included with the kits
- Cannot be used in conjunction with seal rings or o-rings

DK1

DK2

- Used as an alternative to a one piece design when a separate sealing gasket or o-ring is required
- Two piece design consisting of a PTFE sealing gasket and PVC dielectric shim
- Bolts, washers and dielectric bushings are included with the kits

DK2

SPECIFICATIONS

MATERIAL: Delrin®, PVC
MAX OPERATING TEMP: 150° F (66° C)
DIELECTRIC STRENGTH: Exceeds 1/32 air arc gap approx 2,500 Vdc

All NOSHOK 316SS valve products meet the requirements of NACE MR0175/ISO 15156-3.

All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

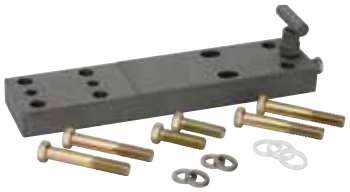
†For further warranty information please consult your specific product catalogs.

MANIFOLD MOUNTING KIT

Designed for direct or remote mounting to a 2″ pipe stand, can be utilized with any NOSHOK 2, 3 or 5 valve manifold by mounting a steel or stainless steel bracket directly to the manifold body.

Δ PRESSURE TO STATIC ADAPTOR

Used in direct mount systems for gas pipelines, the pressure to static adaptor plate is used to mount a differential pressure transmitter and a static pressure transmitter to a five valve flange-flange manifold. They are available in zinc-nickel plated steel or electropolished stainless steel. An integral mini style bleed valve is incorporated in the plate and a 1/4″ NPT vent plug is provided. The mini style bleed valve is equipped with a FKM o-ring and PTFE back up ring below the stem threads to protect against corrosion and galling. Stem threads are rolled for greater strength and ease of operation and all NOSHOK valves are 100% helium leak tested for guaranteed reliability. Maximum pressure rating of 10,000 psi for steel & stainless steel models.



Δ PRESSURE TO Δ PRESSURE ADAPTORS

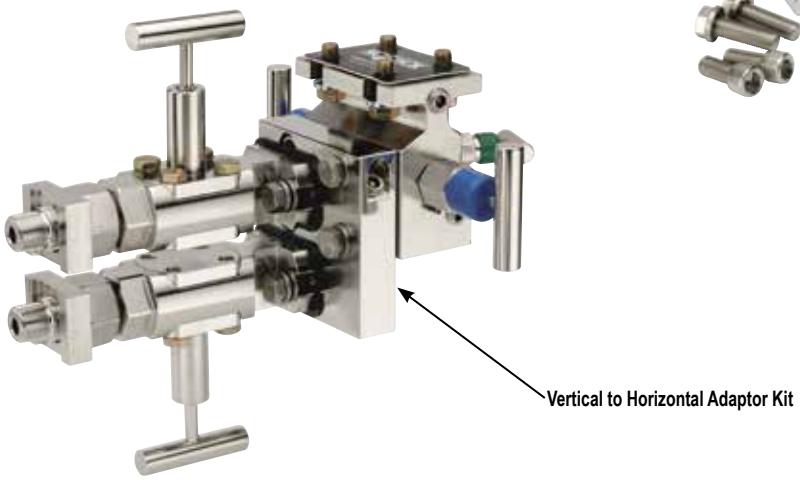
NOSHOK differential pressure to differential pressure adaptors allow two differential pressure transmitters to be mounted on a single set of orifice taps. This configuration is ideal for applications such as bi-directional flow, and custody transfer where only a single set of orifice taps is available. Multiple adaptors are available for various application configurations and space restrictions.

DP1-DP1-CS / DP1-DP1-SS
3/8" bore, 23" length

DP2-DP2-CS / DP2-DP2-SS
3/8" bore, 9" length

VERTICAL TO HORIZONTAL ADAPTOR KIT

The Vertical to Horizontal Adaptor Kit converts vertically mounted Stabilized Connectors to a horizontal position for mounting additional valves and instrumentation.



All NOSHOK 316SS valve products meet the requirements of NACE MR0175/ISO 15156-3.

All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

CANADIAN REGISTRATION NUMBERS

CRN documents are available at www.noshok.com.

Category:	C. Valves	F. Measuring Devices
Type of Fitting:	All line valves	Including pressure gauges, level gauges, sight glasses, level or pressure transmitters
Alberta	0C15217.52	0F15217.52
British Columbia	Exempt	0F15217.51
Manitoba	0C15217.54	0F15217.54
New Brunswick	0C15217.57	0F15217.57
Newfoundland & Labrador	0C15217.50	0F15217.50
Northwest Territories	0C15217.5T	0F15217.5T
Nova Scotia	0C15217.58	0F15217.58
Nunavut	0C15217.5N	0F15217.5N
Ontario	0C15217.5	0F15217.5
Prince Edward Island	0C15217.59	0F15217.59
Quebec	CSA-0C15217.56	CSA-0F15217.56
Saskatchewan	CSA-0C15217.56	CSA-0F15217.56
Yukon Territory	0C15217.5Y	0F15217.5Y

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Quality Policy

NOSHOK
is committed to providing
a high degree of value and continually
improving processes to improve customer
satisfaction by focusing on customer
requirements for the design, manufacture and
distribution of pressure, temperature, and
force measurement instruments along with
needle and manifold valves including
custom manifold systems for
industrial applications.

All from world class technology.

Combined with real-world stamina.

The highest value with the industry's best warranty.

And all from a company with a 45+ year record of customer satisfaction.

All from your Single Source Instrumentation Company.

NOSHOK

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