

# VAPOR ACTUATED REMOTE THERMOMETERS AND THERMOWELLS

## SPECIFICATIONS

**SIZES:** 2, 2-1/2, 3-1/2, 4 and 4-1/2 inch  
**CASE MATERIAL:** Brass or stainless steel (dry or liquid filled)  
**CONNECTION:** Bottom connection; back connection; lower back connection  
**OPTIONAL FILL FLUIDS:** Glycerine, Glycerine-H<sub>2</sub>O and Silicone  
**MOUNTING OPTIONS:** Front or rear flange, bezel & U-clamp  
**RANGES:** -40 °F/C to 60 °F/C through 50 °F/C to 400 °F/C  
**CAPILLARY LENGTH & MATERIAL:** Copper & stainless steel; 5 foot to 40 foot  
**BULB MATERIAL & DIMENSIONS:** Copper or stainless steel; 2-5/8 x 3/8 inch through 7 x 12 inch



## REMOTE THERMOMETERS

**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†

## SPECIFICATIONS

**MATERIALS:** Brass, 304 stainless steel or 316 stainless steel  
**INSERTION:** 1-5/8 inch to 22 inch  
**BORE DEPTH:** 2-1/2 inch to 24 inch  
**PROCESS CONNECTION:** 3/4 inch – STD; 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 inch NPSM instrument connection. The female thread will accept the 1/2 inch NPT male thread without galling or seizing.

**WARRANTY:** One Year†

# HYDRAULIC LOAD CELLS

## SPECIFICATIONS

**NOMINAL DIAMETER:** 6cm<sup>2</sup>  
**LOAD CELL HOUSING MATERIAL:** Stainless steel  
**PISTON:** Stainless steel – STD; plastic – Optional  
**CONNECTING LINE:** 50mm adapter – STD; others available  
**RANGES:** From 150 lbs-force through 7,000 lbs-force

### MEASURING INSTRUMENT

**PRESSURE GAUGE:** 2-1/2 inch 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 (B.F.S.L) 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 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 (B.F.S.L) to ±1.5% full scale depending on the measuring instrument.

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

## SPECIFICATIONS

**NOMINAL DIAMETER:** 20cm<sup>2</sup>  
**LOAD CELL HOUSING MATERIAL:** Stainless steel  
**PISTON:** Stainless steel  
**CONNECTING LINE:** Direct connection – STD; flexible tubing, capillary restrictor  
**RANGES:** From 300 lbs-force through 22,000 lbs-force

### MEASURING INSTRUMENT

**PRESSURE GAUGE:** 2-1/2 inch 300 Series, one piece die cast brass case; dry or liquid filled; 4 inch 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 (B.F.S.L) to ±0.125% 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)



## 2000 SERIES

**NOSHOK 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 Year† on liquid filled gauges & transducers

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