



## Restriction Orifice Paddle Plates Single and Multi Hole

Restriction orifice plates are used as a means of controlling line pressure in systems using pressure critical components and are placed in-line using orifice flanges. By nature of their design, Restriction Orifice plates create a large differential pressure and in turn provide the required downstream pressure. The restriction orifice is calculated and designed taking into account the medium characteristics, the pressure loss and the process data.



STROP



## Restriction Orifice Multi Plate Spools

Restriction Orifice Multi Plate Spools are used as a means of controlling line pressure in systems using pressure critical componentry when a single Restriction Orifice plate is not adequate. The design is based on a series of Restriction Orifice Plates welded into a custom made pipe spool which creates an overall pressure drop and in turn provides the required downstream pressure.

Each restriction orifice is calculated and designed taking into account the medium characteristics, the pressure loss and the process data.

The use of multi-holed plates is often used if the noise at each plate is above the industry accepted 85 dB.

For liquid restriction applications the spool is normally the same line size. For gas restriction applications the multi plate spool is sometimes required to expand across pressure drop stages due to the expansion of the gas under the reduced pressures.



STROMPS



## 100 Series ABS & Steel Case Dry Pressure Gauges

Accurate and reliable general purpose dry gauge with vacuum & compound ranges, and ABS or Steel case. Ideal for applications including hydraulics, pneumatics, medical, pumps, compressors, refrigeration controls and more.

Multiple connection options are available including panel mount. A wide variety of pressure ranges, scale options, connections sizes, and options including flanges, case options, cover rings, lens materials, pointers, and orifices are also available.



ST100





## 200 Series Low Pressure Diaphragm Dry Pressure Gauges

- Sensitive capsule-type, non-fillable dry gauge
- Vacuum ranges through 0 psi to 10 psi
- 2-1/2" and 4" gauge sizes
- Black painted Steel, Stainless Steel and impact-resistant ABS case
- Copper alloy and Brass wetted parts
- Ideal for applications including filter monitoring, gas distribution, HVAC, leak detection, level indication and medical

ST200



## 1000 Series Digital Pressure Gauges

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

ST1000



## 1000 Series Piston Type Differential Pressure Gauges

- Simple, rugged, compact differential pressure gauge
- Ranges from 0 psid to 5 psid through 0 psid to 110 psid
- 2-1/2", 4-1/2" and 6" gauge sizes
- Engineered plastic gauge case
- Clear anodized Aluminum and 316 Stainless Steel wetted parts
- Ideal for applications including hydraulics & pneumatics, laboratory & test equipment, leak detection, power generation and water management

ST1000A





## 10 Series Fractional Sanitary Pressure Gauges

- 3/4" clamp, dry gauge
- Ranges from 0 psig to 30 psig through 0 psig to 600 psig
- 2" gauge size
- Electropolished Stainless Steel case
- 316 Stainless Steel wetted parts
- Meets current standards for 3A
- C.I.P, S.I.P and Autoclave (only dry gauges are recommended for Autoclave)
- Ideal for applications including food & beverage processing, pasteurization systems, pharmaceutical and medical

ST10



## 300 Series Brass Case Liquid Filled Pressure Gauges

- High quality, heavy-duty liquid filled gauge
- Vacuum and compound ranges through 0 psi to 15,000 psi
- 2-1/2" and 4" gauge sizes
- Die cast Brass case with natural Brass finish
- Copper alloy or 316 Stainless Steel and Brass wetted parts
- Ideal for applications including automotive, construction, hydraulics & pneumatics, mining, stamping & forming presses and transportation

ST300



## 400/500 Series All Stainless Steel Dry & Liquid Filled Pressure Gauges

- Corrosion-resistant fillable dry or liquid-filled gauge
- Vacuum and compound ranges through 0 psi to 20,000 psi
- 316 Stainless Steel wetted parts
- ECE-R110 Certification for CNG/LNG Pressure Gauge Component (Part number 25-410-300-psi/bar only)

ST400, ST500



## 1100 Series Diaphragm Type Differential Pressure Gauges

- Simple, rugged, compact differential pressure gauge
- Ranges from 0 inH<sub>2</sub>O to 20 inH<sub>2</sub>O through 0 psid to 100 psid
- 2-1/2", 4-1/2" and 6" gauge sizes
- Engineered plastic gauge case
- Black anodized Aluminum and 316 Stainless Steel wetted parts
- Ideal for applications including back flow testing, heat exchangers, filter monitoring, flow indication and level indication

ST1100



## 10 Series Heavy-Duty Sanitary Pressure Gauges

- 1-1/2" and 2" clamp, fillable dry or liquid-filled gauge
- Ranges from -30 inHg to 0 psig through 0 psig to 600 psig
- 2-1/2" and 4" gauge sizes
- Electropolished Stainless Steel case
- 316 Stainless Steel wetted parts
- Meets current standards for 3A
- C.I.P, S.I.P and Autoclave (only dry gauges are recommended for Autoclave)
- Ideal for applications including food & beverage processing, pasteurization systems, pharmaceutical and medical

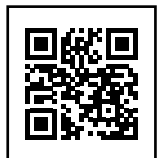
ST10A



## 100 Series Current Output Pressure Transmitters

- Current output
- 316 and 17-4PH Stainless Steel wetted parts
- CE compliant to suppress RFI, EMI and ESD

ST100A





## 300 Series Compact OEM Transducers

- Ranges from 0 psig to 15 through 0 psig to 10,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 300 psia
- Current and voltage outputs available
- 316 and 13-8PH Stainless Steel wetted parts
- RoHS compliant
- CE compliant to suppress RFI, EMI and ESD
- Ideal for applications including HVAC, hydraulics & pneumatics, injection molding machines, railroad equipment and stamping & forming presses

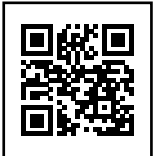


ST300A



## 621/622 Series Explosion-Proof Pressure Transmitters

- Current and voltage outputs available
- 316 stainless Steel and Elgiloy wetted parts
- Factory Mutual and Canadian Standards Association approved
- CE compliant to suppress RFI, EMI and ESD
- NACE MR0175/ISO 15156 compliant
- NSI/ISA-12.27.01 approved single seal

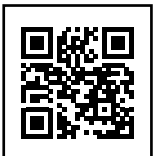


ST621, ST622



## 100 Series Miniature Low Pressure Mechanical Switch

- Switch adjustment ranges from 15 psig to 30 psig through 15 psig to 150 psig
- Standard Brass with NBR diaphragm wetted parts
- 1 SPST N.O. or N.C. contact

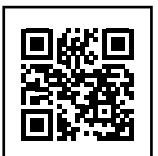


ST100B



## 200 Series Mechanical Compact SPDT Switch

- Switch adjustment ranges from 3 psig to 30 psig through 450 psig to 4,600 psig
- Zinc-nickel plated Steel with NBR diaphragm (< 225 psig); Steel piston with NBR seal (< 225 psig) wetted parts
- SPDT snap-action micro switch with solid Silver contacts
- RoHS compliant



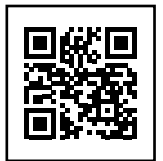
ST200B



## 800 Series Electronic Indicating Pressure Transmitter/Switch

- Compound and standard ranges from 0 psig to 10 psig through 0 psig to 7,500 psig
- 316L Stainless Steel wetted parts
- Current and voltage outputs available
- 7 different output configurations available
- Display and electrical connection can be rotated independently
- CE compliant to suppress RFI, EMI and ESD
- RoHS compliant
- Ideal for applications including hydraulics & pneumatics, power generation, pumps & compressors, stamping & forming presses and water & wastewater

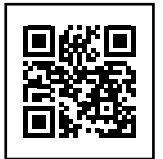
ST800



## 300 Series Compact SPDT Mechanical Switch with Adjustable Hysteresis

- Switch adjustment ranges from 3 psig to 30 psig through 450 psig to 4,600 psig
- Standard Zinc-plated Steel with NBR diaphragm (< 225 psig); Steel piston with NBR seal (> 225 psig) wetted parts
- SPDT snap-action micro switch
- RoHS compliant

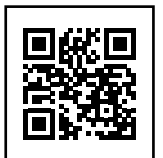
ST300B



## 400 Series Heavy-Duty Mechanical Switch

- Switch adjustment ranges from 0 to 300 psig through 0 to 5,000 psig
- Standard Zinc-plated Steel with NBR diaphragm (< 225 psig); Steel piston with NBR seal (> 225 psig) wetted parts
- SPDT snap-action micro switch
- CE compliant to suppress RFI, EMI and ESD

ST400B





## Type 10L Reduced Pressure, Non-Metallic Lower, Bolted, Replaceable Diaphragm Seals

- Intended for corrosive or viscous pressure media
- Designed for applications where typical metallic lower housings cannot withstand process media
- Can be used for remote mounting of pressure instrument(s) with capillary
- Utilizes a replaceable diaphragm clamped between the flanged housings with an o-ring seal to create a leak-free union
- Process connection sizes from 1/4" NPT through 1-1/2" NPT
- Consider instrument size, pressure range, media composition, ambient and operating temperature, and maximum working pressure when selecting
- Fill fluid must be compatible with process media; i.e. Glycerin may become volatile in conjunction with a strong oxidizing agent such as chlorine, forms of oxygen or peroxide and nitric acids

ST10L



## Type 20 Front-Flush, Non-Replaceable Diaphragm Seals

- Designed for applications requiring an NPT male threaded process connection and with a flush diaphragm
- Flush diaphragm construction prevents clogging and process material build-up
- Constructed with a 316 Stainless Steel housing and diaphragm for strength and durability
- Available instrument connection sizes are 1/4" and 1/2" with a process connection size of 1/2" NPT male to 2" NPT male
- Consider instrument size, pressure range, media composition, ambient and operating temperature, and maximum working pressure when selecting
- Capillaries and cooling elements are available for elevated process temperatures
- Fill fluid must be compatible with process media; i.e. Glycerin may become volatile in conjunction with a strong oxidizing agent such as chlorine, forms of oxygen or peroxide and nitric acids

ST20

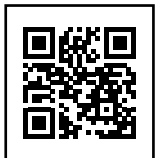




## Type 25/25H Standard & Elevated Pressure, Non-Replaceable Diaphragm Seals

- Designed to isolate the pressure measuring instrument from corrosive or viscous process media
- Utilize an all welded, all metallic housing design to eliminate potential leak paths
- For use with gauges with dial sizes of 2-1/2" and smaller, and pressure ranges no less than 100 psig
- Housing and diaphragm offered in a variety of materials to suit most applications
- A flushing port is available to clean wetted areas and prevent process media build up
- Consider instrument size, pressure range, media composition, ambient and operating temperature, and maximum working pressure when selecting
- Capillaries and cooling elements are available for elevated process temperatures
- Fill fluid must be compatible with process media; i.e. Glycerin may become volatile in conjunction with a strong oxidizing agent such as chlorine, forms of oxygen or peroxide and nitric acids

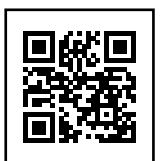
ST25, ST25H



## Type 40 Flow-Through Annular Style, Replaceable Diaphragm Seals

- Process liquid flowing through the pipe exerts pressure onto a flush-mounted flexible inner cylinder containing clean, captive liquid; completely isolating instrumentation from the process flow and preventing plugging
- Can be used for remote mounting of pressure instrument(s) with capillary
- Instrumentation can be removed for calibration, repair or replacement without interrupting the process flow
- Integral design prevents accidental breakage
- Can be used with a variety of process conditions in many applications
- Eliminates clogging typically associated with diaphragm seals used in viscous fluid applications which can lead to inaccurate pressure readings
- Assembly flanges ASME B16.1 Class 150, 2" to 10"

ST40



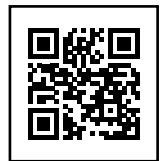




## Type 29 High Volumetric Displacement, Non-Replaceable Diaphragm Seals

- An off-line seal with a threaded connection and all welded, all metallic housing design that does not utilize an o-ring or gasket
- Can be used for remote mounting of pressure instrument(s) with capillary
- Designed with a larger diameter diaphragm for higher displacement capability
- A variety of upper and lower housing and diaphragm materials are available to suit most applications
- A flushing port is available to clean wetted areas and prevent process media build up
- Consider instrument size, pressure range, media composition, ambient and operating temperature, and maximum working pressure when selecting
- Capillaries and cooling elements are available for elevated process temperatures
- Fill fluid must be compatible with process media; i.e. Glycerin may become volatile in conjunction with a strong oxidizing agent such as chlorine, forms of oxygen or peroxide and nitric acids

ST29



## Type 30/30H Standard & Elevated Pressure, Bolted, Non-Replaceable Diaphragm Seals

- Utilizes an all metallic diaphragm welded to the upper housing to allow field replacement of the lower housing while maintaining continuity of the measuring system
- Can be used for remote mounting of pressure instrument(s) with capillary
- A wide variety of instrument and process connections are available
- A flushing port is available to clean wetted areas and prevent process media build up
- Consider instrument size, pressure range, media composition, ambient and operating temperature, and maximum working pressure when selecting
- Capillaries and cooling elements are available for elevated process temperatures
- Fill fluid must be compatible with process media; i.e. Glycerin may become volatile in conjunction with a strong oxidizing agent such as chlorine, forms of oxygen or peroxide and nitric acids

ST30, ST30H





## ST10V Control Valve

The unique axial flow design of the Sur-Tech SF10V valve is engineered to maintain pressure under tough conditions. Perforations in the cone assembly allow fluids to pass through the valve without affecting performance.

Engineered simply for exceptional performance with no emissions.



ST10V



## STAT Advanced Direct Mount Pressure Transmitter - Inline

- Unique characterization and composite semiconductor sensor provides high accuracy and stable operation for years to come.
- Wide rangeability means you can cover more of your applications with less inventory, saving you money.
- A diverse product offering, including measurement ranges, process connections and working pressure ratings are available to meet your requirements
- Fast Response time of under 100 msec makes suitable for pressure control in turbine applications
- User-customizable interface can measure and display in the units you decide are right for your application
- Bilingual communication capability (HART & DE Protocol) makes the choice for plants with a mixed DCS installed base.



STAT



## STAT9000 Advanced Transmitter for Absolute Pressure

The ST AT9000 Advanced Transmitter is a microprocessor-based smart transmitter that features high performance and excellent stability. Capable of measuring gas, liquid,apor, and liquid levels, it transmits 4 to 20 mA DC analog and digital signals according to the measured differential pressure.

It can also execute two-way communications between the Smart Communicator or HART® 375 communicator, thus facilitating self-diagnosis, range resetting, and automatic zero adjustment.



STAT9000



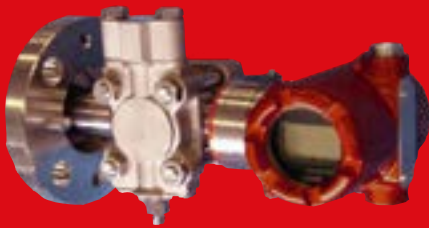
## ST Advanced Transmitter for Differential Pressure

Advanced Transmitter is a microprocessor-based smart transmitter that features high performance and excellent stability. Capable of measuring gas, liquid, and vapor, and liquid levels, it transmits 4 to 20 mA DC analog and digital signals according to the measured differential pressure.

It can also execute two-way communications between the communicator, thus facilitating self-diagnosis, range resetting, and automatic zero/span adjustment.

SFN, HART and FOUNDATION Fieldbus are available.

STAT-DP



## ST Flange Mount Transmitter for Liquid Level Measurement

Advanced Transmitter is a microprocessor-based smart transmitter that features high performance and excellent stability. Capable of measuring gas, liquid, and vapor, and liquid levels, it transmits 4 to 20 mA DC analog and digital signals according to the measured differential pressure.

It can also execute two-way communications between the communicator, thus facilitating self-diagnosis, range resetting, and automatic zero/span adjustment.

SFN, HART and FOUNDATION Fieldbus are available.

STAT-FLG

