

QUICK-ADVANCE PISTON-TYPE SAMPLING VALVES

QA SERIES



## QUICK-ADVANCE PISTON-TYPE SAMPLING VALVES

Piston Type Sampling Valves are widely employed in the sampling of thick slurries and viscous materials because their design provides little to no dead space within the valve and vessel or line connection. The piston completely fills the valve and connection bores and provides a self-cleaning (self-pigging) action during the closing stroke of the valve. The common design of this type of valve also utilizes a very long stroke to completely withdraw the piston from the media flow.

Typical designs for a manually operated piston type valve used for draining or sampling liquids utilize a hand wheel attached to a threaded stem which in turn is connected to the piston. The stem typically turns in a fixed threaded bushing that is generally found in the yoke (or bonnet) or the piston itself. Rotary motion of the hand wheel causes a linear movement of the piston.

Although the effort used to draw a sample using a piston type valve is greater than using a ball valve, the advantages quickly outweigh any of the disadvantages. For instance, ball valves are operated with a quarter-turn. A ball valve allows material to accumulate around the ball which prevents a representative sample from being drawn unless the valve is first properly purged.

Strahman's new Quick Advance Sampling Valves offer all of the features typically found in piston type sampling valves with the convenience of a quick open/close feature of a ball valve. The QA series uses a rack and gear combination to maintain the linear motion of the piston and provides the valve with a full piston design while traveling just 1/3 turn. This results in less time and labor required to collect a true, representative sample.

All QA Series Valves feature a safety stop detent that prevents the valve from opening under process pressure. The QA-700 is rated to ANSI Class 300 and is available in the same materials as Strahman's standard Sampling Valve line. The new QA Series is available with standard packing rings and zero or two inch piston extensions. Conversion kits for existing valves are also available.

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## STANDARD FEATURES FOR QA SERIES PISTON TYPE SAMPLING VALVES

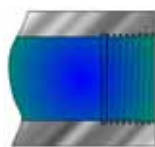
1. **FAST OPENING: SINGLE PULL ACTUATION TO OPEN/CLOSE** — using just a 1/3 turn the valve can be stroked from full open to full closed position. The rack and gear combination translates the rotary motion into linear movement.
2. **NO DEAD SPACE: FULL PISTON DESIGN** — the piston fills the entire bore of the valve with no clearance. A true representative sample is always assured.
3. **COMPRESSIBLE PACKING RINGS** — employing a pair of rings above and below the valve discharge provides a seatless design that meets the requirements of ANSI leakage Class VI.
4. **FLOW CONTROL** — inherent design features flow control sample positions and provide metering flow options to ensure accurate sample quantities
5. **INTEGRAL HANDLE LOCK** — The handle includes a locking device that ensures the valve will not open under process pressure, vibration or by incidental contact.
6. **SAFETY STOP** — prevents the QA series valve from opening if the handle is released.

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## AVAILABLE END CONNECTIONS



Flanges



Threaded  
connections  
NPT & BSP



Socket Weld

## QUICK-ADVANCE PISTON-TYPE SAMPLING VALVES



### RANGE DEFINITION

	$\frac{3}{8}'' \times \frac{1}{4}''$ , 0'' PE	$\frac{3}{8}'' \times \frac{3}{8}''$ , 0'' PE	$\frac{1}{2}'' \times \frac{3}{8}''$ , 0'' PE	$\frac{1}{2}'' \times \frac{1}{2}''$ , 0'' PE	$\frac{3}{4}'' \times \frac{1}{2}''$ , 0'' PE	$\frac{3}{4}'' \times \frac{3}{4}''$ , 0'' PE	$\frac{3}{8}'' \times \frac{1}{4}''$ , 2'' PE	$\frac{3}{8}'' \times \frac{3}{8}''$ , 2'' PE	$\frac{1}{2}'' \times \frac{3}{8}''$ , 2'' PE	$\frac{1}{2}'' \times \frac{1}{2}''$ , 2'' PE	$\frac{3}{4}'' \times \frac{1}{2}''$ , 2'' PE	$\frac{3}{4}'' \times \frac{3}{4}''$ , 2'' PE
PN 10												
PN 16												
ANSI 150/PN 20												
PN 25												
PN 40												
ANSI 300/PN 50												

## TECHNICAL & GENERAL INFORMATION

### DESIGN CODE & CONSTRUCTION

- ◆ Design standard compliant with ASME B16.34, ASME B31.3 and ASME B16.10
- ◆ International standards include ANSI, DIN, JIS and API.
- ◆ Wide range of materials available including carbon steel, stainless steel, titanium, Hastelloy, duplex steel, monel, inconel and chrome-moly steels.
- ◆ Cast design standard, fabricated forged and bar stock designs available.
- ◆ Qualify by design to API 6FA Fire Safe requirements using graphite rings.

### QUALITY ASSURANCE & TESTING

- ◆ ISO 9001 compliant
- ◆ PED/ATEX/CE marking
- ◆ TA Luft
- ◆ Standard Strahman testing procedures

## The Strahman family of products include:

### SAMPLING AND DRAIN VALVES

Strahman has a full line of sampling and drain valves. Our sampling and drain valves use a unique design to prevent failure caused by sediment or clogging.

### POLYMER VALVES

Strahman Polymer Valves are designed to prevent clogging. They are ideal for use in liquid and gas service or with slurries, polymers, and high viscosity fluids that tend to solidify at room temperature.

### WASH DOWN EQUIPMENT

Strahman offers a full line of mixing units, hose stations, hoses, nozzles and wash down accessories. Our wash down line is designed for industrial use and is used in a wide variety of industries including food, beverage, pharmaceutical, chemical and other applications.

### LINE BLINDS

Strahman Line Blinds provide zero leakage down stream and total isolation on process pipelines, vessels, and maritime applications. No pipeline movement is required when blind position is changed.

### BALL VALVES

Strahman offers a full range of Trunnion Mounted, Metal Seated Ball Valves.

Please contact your local Strahman representative for further details  
or visit our website: [www.strahmanvalves.com](http://www.strahmanvalves.com)



#### Corporate Headquarters:

Strahman Valves, Inc. 2801 Baglyos Circle, Bethlehem, PA 18020 USA  
Tel: 1.484.893.5080 • Fax: 1.484.893.5099

#### Strahman France:

Savoie Hexapole, F-73420, Mery, France  
Tel: + 33 4 79 35 78 00 • Fax: + 33 4 79 35 78 20

#### Strahman German Office:

Kirchstrasse 16, D-77855, Achern, Germany  
Tel: + 49 7841 6846530 • Fax: + 49 7841 6846531



ISO 9001  
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