

# Product Digest

### this month's topic Valves

#### **Ball Valve Seats Withstand Severe Service Conditions**



These carbon-graphite seats are available for use in ball valves designed to handle hot liquids or hot gases. The seats come in more than 150 grades of the company's oil-free, self-lubricating carbon/graphite materials. With a high degree of chemical compatibility, they are designed for use in the most severe chemical environments, including applications with temperatures to 350°F (where plastic ball valves begin to soften); in oxidizing environments, they can be used at temperatures up to 800°F. They are also appropriate for fire-safe petroleum industry ball valves, which must operate freely after a simulated fire test at 1,400-1,800°F.

Metallized Carbon Corp. www.metcar.com

#### One 3-Way Ball Valve can Replace Multiple 2-Way Valves

A single L Port PTP Series 3-way polyvinyl chloride (PVC) ball valve can eliminate the need to purchase and install multiple valves, actuators, and solenoids. This saves I/O space in the control panel, reduces overhead, installation, and capital costs, and reduces the weight of the piping system, which also requires less space. With the 3-way L-port design, the valve always has an open port, even while it is in transition, so there is no chance of pump dead-heading. The company's online configurator enables users to quickly and easily

specify key aspects of the PTP Series valves — including valve size, end connections, actuator type (pneumatic or electric), and accessories (such as limit switches and solenoid valves) for a variety of applications.

**Assured Automation** www.aa-fs.com

#### **Design Improvements Enhance** this Valve's Functionality

Enhancements to the 810 Series angle body piston valve enable stroke limitation while maintaining the standard optical valve-position indicator that

allows the user to see whether the valve is open or closed. Constructed with a Type 316L stainless steel or bronze body, the valve is designed to handle millions of cycles in



applications with high temperatures (to 430°F or 221°C) and aggressive media. It is available with metal actuators of various sizes that meet operating pressure ratings of up to 580 psi (40 bar). The product line includes valves with up to 3-in. port connections.

Parker Hannifin Corp., Fluid Control Div. www.parker.com/fcd

#### **Smart Valve Actuator Reduces Total Cost of Ownership**

The Limitorque QXM is designed for rising-stem valve applications, including choke valves and small control valves in upstream oil and gas, water treatment, fossil fuel power generation, and renewable energy applications. The QXM is a smart electronic valve actuator available with either 6.5 total turns or a maximum of 20 total drive sleeve turns — an important feature for small valves that

require limited travel and maximum control. The QXM encoder uses "system-on-chip" technology, which permits redundant, 12-bit resolution over 20 total turns, or an accuracy of less than 2 deg. of drive sleeve rotation. This redundancy is part of the built-in self-test feature of all Limitorque smart actuators.

Flowserve Corp. www.flowserve.com

#### **Centralized Control Element Simplifies Valve Automation**

The Type 8681 control head expands the company's hygienic processing line for the food and beverage and pharmaceutical industries. Developed for use as the centralized control

element in decentralized automation systems, it performs all pneumatic actuation. feedback, and diagnostic functions. as well as bus communication,



for pneumatically controlled valves. Depending on the type of process valve, it is able to control up to three pneumatic actuator chambers separately. Manual configuration is not necessary — once installed on the valve actuator, the switching positions are automatically determined. The three integrated switching positions are measured by the control head via an inductive analog position sensor and transmitted to a programmable logic controller; a fourth switching position, if required, can also be provided via an externally mounted inductive proximity switch.

**Burkert Fluid Control Systems** www.burkert.com

#### **Booster Improves Valve Positioning**

The compact, lightweight
Fisher VBL booster is
designed for
applications
in which
a valve
positioner
alone cannot provide
the stroking
speed needed to meet

rapidly changing process conditions and demands. The booster enables fast valve response in the face of rapid input-signal changes. It incorporates a variety of features that work in tandem — fixed deadband, internal soft seats that produce tight shutoff (to reduce unnecessary air consumption and eliminate positioner delays), and an internal bypass restriction that enables fast actuator response. Maximum input signal pressure is 10.3 bar (150 psig), and the input-to-output ratio is fixed at 1:1.

Emerson Process Management www.emerson.com

#### Multipurpose Valve Provides Backpressure Control or Pressure Relief

The lug-mounted Series RVDT automatic valve performs multiple functions, including pressure relief, backpressure control, pump bypass, and anti-siphon protection. It uses

an adjustable nonwetted spring to control backpressure in liquid piping systems. The setpoint is adjustable, and once the set pressure is reached, the valve begins to



open. This operation enables the valve to provide a controlled obstruction in

a piping system, as needed, which is useful for providing backpressure on a pump or backpressure to maintain desired flow to downstream points of use. All wetted components are available in a variety of thermoplastic materials, including polyvinyl chloride (PVC), chlorinated PVC (CPVC), polypropylene, and polyvinylidene fluoride (PVDF); the metal spring is isolated from the process liquid by a polytetrafluoroethylene (PTFE) diaphragm. Pressure can be set from 5 to 150 psi, and factory modifications can be made for special applications.

Plast-O-Matic Valves, Inc. www.plastomatic.com

## Cone Check Valves Deliver Leakproof Operation

The Type 561 and Type 562 cone check valves have an aerodynamic, spherical-shaped cone that ensures tight closing and leakproof operation. The cone's double bearing prevents it from tilting, even during rapid closing, and eliminates malfunctions. Other design features include a cone guide that prevents jamming; a fixed gasket that eliminates slipping, bending, or gasket erosion; and a union that allows for easy replacement or maintenance in the field. The Type 562 valve has an integrated stainless steel spring (other material options are available) for horizontal installation, while the Type 561 valve has no spring and is mounted vertically. The valves have an operating pressure rating of 2.9 psi and are available in sizes from 3/8 in. to 4 in. Materials of construction include polyvinylchloride (PVC), chlorinated PVC (CPVC), polypropylene, polyvinylidene fluoride (PVDF), and acrylonitrile butadiene styrene (ABS); sealing materials include ethylene propylene diene monomer (EPDM) rubber and fluoroelastomer (FPM).

**GF Piping Systems** 

www.us.piping.georgefischer.com

