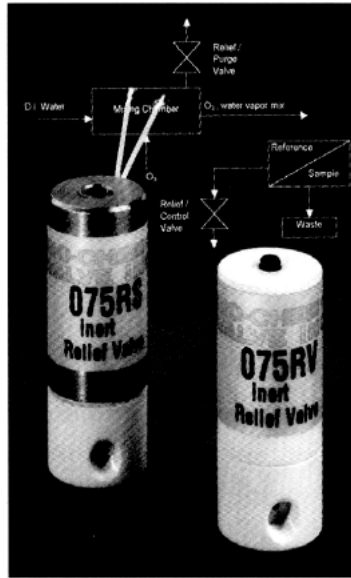


Pressure relief and control valve

Bio-Chem Valve Inc. has developed an ultra-inert pressure relief and control valve. The solenoid-operated valve protects a system from excessive pressure, and functions as a control module that can be used for periodic purging of a system, opening a bypass channel when a pump is running in a closed system, and providing on/off control. Designed for use with high purity or aggressive fluids, the 075RS series isolates the medium from the solenoid. The relief pressure is factory set to customer specifications. Standard settings of 1.4, 2.4, 4.1, 5.9, 7.6 and 10.3 bar are available.



The solenoid is powered by a continuous duty coil and permits the valve to be opened by a 12V or 24V DC signal on command. The 075RV series relief valve does not contain a solenoid and serves strictly as a relief valve. The fluid path has been configured to be as short as possible to maintain a low internal volume of 0.054 cubic centimetres and to reduce carryover fluid left inside the valve. Wetted parts consist of a PPS body and a perfluoroelastomer diaphragm, which also provides resistance to mechanical damage from particulates.

Simplified fieldbus wiring

Where space is tight for field wiring installations, Phoenix Contact Interbus S-Line fieldbus input/output modules could be the answer. Measuring 26 x 26 x 139mm, these units, providing connection facilities for up to eight inputs or outputs, offer space savings, and are suitable for direct mounting onto standard-width machine framework. Designed for use with Phoenix Contact's Loop 2 wiring system, the modules can be linked, via the company's range of bus couplers, to fieldbus installations using any of the major protocols. Connections to the modules use standard plug-in connectors. The modules can be mounted in any orientation, and have an IP67 protection rating which makes them suitable for use in the toughest industrial environments. The new S-Line modules are available in four versions: one providing eight inputs, one with eight outputs rated at 500mA, one with four inputs and four outputs, and one with four high-power outputs rated at 2A. All are suitable for use on nominal 24V DC systems, and all output modules are fully protected against overloads and short circuits. All modules in the range feature integral status indicators and powerful diagnostic facilities.

Domestic fire safety

Statistics show that over 80% of fires occur in the home, many with fatal consequences. One effective and increasingly popular answer to this problem are sprinkler systems. The Nimbus Fire Protection Systems employ 12V floating diaphragm valves from Asco Joucomatic to isolate domestic supplies during sprinkler operation. Domestic sprinkler systems are used widely in the USA, Canada, Australia and New Zealand.

Self-contained actuators

Electric Hydrostatic Actuators (EHAs) are said to offer advantages over the Pneumatic or Electric Mechanical Actuators commonly used for applications in power generation and oil and gas industries. These stand-alone self-contained actuators expend energy only on demand, are free of hydraulic lines and remote hydraulic power supplies, are inherently lubricated, mount in any orientation, have high

force densities and are controlled electrically, direct from the energy source, the prime mover, the electric motor. M-mac's self-contained actuators combine a bi-directional, variable speed electric motor coupled to a high-pressure bi-directional pump that plugs into an integrated circuit block with an in-built facility to access a pre-charged expanding reservoir and volume compensator.

Fireproof actuators for HC plants

AUMA has expanded its product offering to meet the needs of the explosion-proof actuator market segment. As a leading manufacture with just under four decades experience in actuator design, AUMA successfully upgraded its multi-turn and part-turn actuator certification to meet latest ATEX Directives (94/9/EC) in 2001. Building on this expertise, AUMA has expanded its portfolio of explosion-proof application solutions with the addition of K-Mass® fireproofing from Thermal Designs, Inc. With superior fire protection capabilities, this moulded intumescent fireproofing has outstanding coefficient of thermal conduction characteristics which enables the actuator to operate without affecting its standard operation functions. Designed to allow actuator service or mainte-

nance without removal, the fireproofing has passed UL 1709 high heat flux fireproofing test requirements ensuring actuator survival and operation of valves or other devices in fire created 1100°C environments. A further advantage of the new addition to AUMA'S portfolio is the supply of fireproofed actuators ready for installation. This logistical benefit eliminates the need for separate procurement and commissioning which is required by other methods.

