

Process Valves

2-3 Port Solenoid Valves



Direct Operated 2 Port Solenoid Valve (2 Way Valve) VX2 for air, medium vacuum, water, oil, steam (Can be used with heated water). Flow rate: 20% more flow, Height: 10% smaller, Weight: 30% lighter, Body materials: Aluminium, Resin, C37, Stainless steel. Available with One-touch fittings (Resin body). Comparison made with SMC's existing model. Manifold type no.: VVX21, VVX22, VVX23.

IBV1 – X5/X7(-Q)



Increased impact force due to higher peak pressure. Drastic reduction in air consumption and labour time. High peak pressure: 3 times or more. Air consumption: 93% reduction Compact design allows for installation in narrow spaces. Impact Blow Valve IBV1 – X5/X7(-Q).

JSXFA



Dust Collector, Pulse Valve, Series JSXFA. Dust collector reverse pulse jet valves are the filter cleaning components for baghouses (dust collection systems) for preventing dust explosions by removing particulates from the air. The JSXFA dust collector valve is engineered with a robust elastomer diaphragm that requires no spring to shift, enhancing its service life to 10 million plus cycles while producing faster response times and energy savings. The JSXFA diaphragm valve will open and close rapidly to create a short, intense blast of air with sonic shock wave to dislodge accumulated dust from bag filters and cartridge filters without disrupting regular operations. The JSXFA can be actuated by either solenoid or air operated pilot valves, available with enclosures. Service Life: 10 million plus cycles. Maximum: 35% reduced air consumption. Maximum: 15% increased peak pressure. Threaded and compression fitting connection. For Industries: Abrasive Blasting (Parts Cleaning), Asphalt, Concrete and Aggregates, Fertilizer, Forestry and Lumber, Grain and Agriculture, Metal Fabrication (Cutting, Grinding, Machining), Mining, Paper and Pulp Processing, Pharmaceutical Processing, Powder and Bulk Solids Handling, Power Generation (Gas Turbines), Rubber Processing and Steel and Smelting.



LVMK20/200

LVMK20/200, 2/3 Port Media Separated Valve, Base Mounted, Applicable fluid: Cleaning fluid, Diluent, Deionized water, Water, Air. Flow rates: 0.9 l/min (water) and 57 l/min (air). Low particle generation and Oil free and metal free.

SGC

SGC, Coolant Valve, External Pilot Solenoid. Series SGC coolant valve, with both CE and RoHS accreditation, provides the perfect solution for high-speed machining. Due to the SGC's unique scraper, squeeze seal, grease channel and dry bearing construction, the valve's service life will exceed 5 million cycles. The introduction of a built-in magnet allows auto switches to be fitted, enabling confirmation of whether the valve is open or closed. Fluid temperature: -5 to 60°C. Operating pressure up to 1.6 MPa. Power consumption 0.35W. CE and RoHS compliant. Port size: 3/8 to 1 inch.



VCH/VCHC

Pilot Operated 2/3 Port Sol. VCH/VCHC. Service life: 10 million times. Uses the polyurethane elastomer poppet for valve parts. Improves durability at high pressure. VCHC40, 5.0 MPa Check Valve. Process Industry and PET machine builder's requests for both 2 and 3 port, pilot operated, solenoid valves, with high pressure performance are now answered with the launch of SMC's latest Series VCH range. Designed for use with air or inert gas, these new valves can operate up to a maximum pressure of 5.0 MPa thereby substantially exceeding SMC's existing VXH high pressure series. With large flow passages, and ISO1179-1 conforming port thread sizes of G1/2 to G1, high flow rates



are ensured and due to a reduction in the overall volume of the pilot chamber their responsiveness can now only be measured in milliseconds. Additionally, the VCH range offers enclosure protection equivalent to IP65 and a DIN type electrical connector as standard and due to its unique collision-less armature construction, with rubber buffers and urethane diaphragm, early indications have confirmed that the valves operation life time will exceed 10 million cycles. Currently the VCH Series is available in four different valve configurations; 2 port valves normally closed – VCH41, 2 port valve normally open – VCH 42, our 3-port option – VCH410, plus a check valve – VCHC40.

VXE



Industrial applications requiring precise fluid control now have an energy saving option with the launch of a new generation of zero differential pressure; pilot and direct operated 2 port solenoid valves – Series VXE from world leaders SMC. Developed as part of SMC’s Energy Saving Programme, these new solenoid valves are based on SMC’s popular Series VX valves, but with the addition of some unique power saving features. Using the Pulse Width Modulation method (PWM), an in-built power saving circuit ensures exactly the same valve performance from the new VXE whilst achieving 30% less power consumption – when holding- compared to the standard VX range. Further benefits of this reduced power consumption are a dramatic reduction in coil heat – of up to 50% – and reduced CO2 emissions. Suitable for use with water, air and oil, Series VXE, which is both RoHS directive compliant and IP65 enclose approved, is currently available in both single unit and manifold options, in a comprehensive range of sizes, and in both 12- and 24-volt direct current models. Additional benefits of the new Series VXE development have ensured that these energy efficient valves are fully inter-changeable with the Series VX ranges, plus current VX users can also replace their valve’s coil with this new power saving version. Energy Saving Type 2 Port Solenoid Valve VXE Series for Air, Water, Oil.

VXZ



Pilot operated, the VXZ has zero differential pressure so it can handle both low pressure fluids and low vacuum and because it doesn’t rely on compressed air to operate, it’s simple to install. Up to 27% lighter and 4% smaller than conventional models, the VXZ is ideal for lightweight machines and narrow spaces. And a rubber buffer means the series is suitable for quiet environments, with an extended service life guarantee thanks to its improved construction, which is all part of our commitment to refine the performance and functionality of our products and drive competitive advantages for our customers. Available in low concentration ozone resistant and oil free options, the VXZ series comes in a wide range of body materials, with piping thread variations ¼” to 1” and one-touch fitting from Ø10 to Ø12. Together with normally closed or normally open valve types and an improved OFF response, the VXZ is ideal for handling air, water, oil, heated water and high temperature oil for cooling systems, segmentation of pneumatic lines and exhaust valve in vacuum lines.

VXS

Zero Differential Pressure Type/Pilot Operated VXS

- For steam
- Long service life: 3 million cycles (Based on SMC's test condition)
- Improved air filtration
- Reduced apparent power: 18VA→12VA, 20VA→15VA
- Reduced coil temperature rise: 120°C→100°C
- IP65



XSA

XSA, NC Type, Straight Solenoid Valve. Series XSA is a normally closed solenoid valve suitable for air or inert gas in high vacuum applications. This valve functions properly at an operating pressure as low as 1×10^{-6} Pa(absolute). Face Seal and compression fitting options offer extremely low levels of internal and external leakage. Two DC and eight AC voltage options are available, paired with multiple electrical entry styles. Normal Close High Vacuum Solenoid Valve XSA Series

