

# pneumatrol



PROCESS INDUSTRY  
PNEUMATIC SOLUTIONS



## **Pneumatrol provide engineered pneumatic solutions for use within hazardous and non-hazardous area environments.**

For over 50 years Pneumatrol has developed the technical and manufacturing expertise together with the market knowledge necessary to meet the demands of the Process markets. Pneumatrol understands the high expectations of the process industry and our solenoid valves are standard specification within many world class companies. We also design and manufacture piston linear actuators and control systems for most of the major process valve manufacturers and distributors.

### **▶ PROCESS MARKETS**

- **Petrochemical**
- **Chemical**
- **Pharmaceutical**
- **Oil & Gas**
- **Energy**
- **Distilling**



### **▶ Engineering & Design**

We have a highly competent and experienced team of design engineers who are able to design both standard and bespoke cost effective solutions, adding value for the benefit of our customers. Over the years the company has developed a depth of experience within the process markets allowing solutions to be designed to meet the needs of our customers and conform to the industry specifications. Using the very latest design and analysis modelling software allows us to produce innovative designs prior to commencement of any manufacturing.

### **▶ Manufacturing**

Our manufacturing plant includes a wide range of CNC and conventional machine tools, paint shop, assembly and testing facilities to enable us to produce our full range of products, from the smallest component, up to cylinders of 1000 mm diameter. Our planning control system manages all customer orders and schedules material and purchasing requirements.

### **▶ Customer Service**

We work closely with our customers to ensure we provide them with the level of service they require. We are flexible and open minded in our approach and we look to build long term relationships and partnerships with our customers.

### **▶ Quality Management**

Continuous improvement forms a corner stone of our quality philosophy to ensure our customers, suppliers and other key stake holder's benefit from effective and efficient business processes. Pneumatrol is ISO9001 registered. Full material traceability, Test Certificates and other documentation is available as required.

## ▶ VALVES & SOLENOID VALVES

**Our core product ranges of hazardous and safe area pneumatic solenoid valves are available with a complete range of approved pilot solenoid operators.**

**The innovative designs include valves for high flow applications and valves for operation across a wide temperature range. Valve options include:**

- Materials: Aluminium, Brass, Stainless Steel and surface coating options.
- Manual overrides: Screw Driver, Lever and Push Button
- Internal or external pilot
- Complete range of voltages available including low power options

### ▶ Namur Mounted Valves

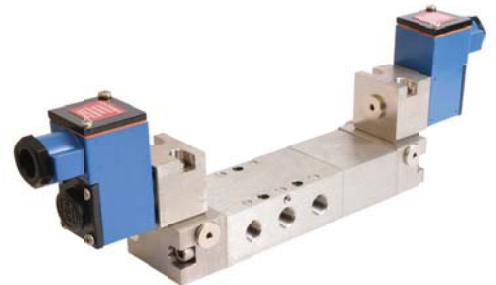
Designed for direct mounting onto ¼ turn pneumatically operated valve actuators, meeting 'Namur' standards.

- 1/8" and 1/4" ports
- 3/2 or 5/2 functions from the same valve, using interface plates
- Exhaust to spring (ETS) feature in the 3/2 versions to protect actuator spring from corrosion
- High flow version available with CV=1



### ▶ Remote Mounted Valves

- M5 to 1" ports
- Heavy duty valves up to 1 ½" ports
- 3/2, 5/2, and 5/3 functions



### ▶ Manifold Mounted and Sub-Based Mounted Valves

- Up to 14 valves in a manifold, subject to valve size
- 1/8" and 1/4" ports
- 3/2 and 5/2 functions



### ▶ Direct Acting Valves

- M5, 1/8", 1/4" ports
- Banjo fitting
- CNOMO Interface
- 3/2, N/C or N/O



## ▶ HAZARDOUS & SAFE AREA SOLENOIDS

**Our core product range of hazardous and safe area 3 port 2 position direct acting spring return normally closed solenoid valves conform to CNOMO standards.**

### FEATURES

- Direct mounting to all valves meeting CNOMO fixing dimensions
- Interchangeable coils, including various hazardous area options
- Pilot Exhaust dust caps fitted as standard
- Hazardous area approved pilot operators (EExnA, EEXm, EExme, EExd and EExia) are available variously with ATEX, FM, CSA, UL, GOST-R and Nepsi approvals.

### ▶ ATEX Category 1 Approved

Intrinsically Safe (EExia Solenoid), available as a 12VDC or 24VDC unit, with the following construction variants: Terminal Box, In-Line Connector, Flying Lead, Plug and Socket, or Stainless Steel Terminal Box.

### ▶ ATEX Category 2 Approved

Flameproof and Encapsulated Solenoids (EExd IIC T4/T6 and EExd IIB + H2 T4/T6). With Stainless Steel Terminal Box construction.

### ▶ ATEX Category 2 Approved

EEx m T5 with Three Core cable connection and EEx me T5 with the following construction variants: Standard Terminal Box, In-Line Connector, or Stainless Steel Terminal Box.

### ▶ ATEX Category 3 Approved

Non-incendive approved solenoid (EExnA T4/T6). Available with the following construction variants: Standard Terminal Box, Plug and Socket, and Stainless Steel Terminal Box.

### ▶ Safe Area

General purpose solenoids (IP65). Suitable for installation in non-hazardous areas. Designed to operate in any inclement environment.



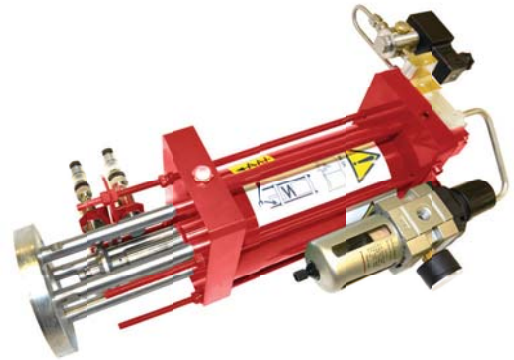
## ▶ LINEAR VALVE ACTUATORS

### ▶ Pneumatic Actuators For Operating Rising Spindle Process Valves

- Double Acting & Spring Return Formats.
- Spring to Open or Close
- 100mm (4") to 1066mm (42") Diameters
- Pneumatic forces to 300000 lbf (1300 kN)
- Spring forces to 70000 lbf (300 kN)
- Wide operating temperature range
- Available in different materials

Linear actuation requirements are generally specific to each valve/application, as even similar type/classes have individual thrust and stroke requirements, compounded by differing supply pressures.

To provide the 'Best Cost Effective Solution' we establish the operating criteria for the valve to be actuated, in terms of stroke, close force, opening force etc and propose a customised package to suit.



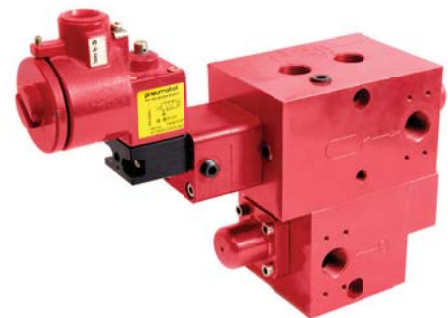
### ▶ Pneumatic Control Modules

Pneumatrol pneumatic control modules provide the end-user with pre-determined control functionality. Air-Fail / Remote solenoid control sequence priorities. Factory set fail mode set points. Inclusive pressure regulation/filtration & isolation options.

'One-Shot Auto' provides air-fail default position. Locks out remote control functions.

'Multi-Shot Auto' with initial air-fail mode. Can be overridden by remote control signals.

'Multi-Shot Auto' initial air-fail and final air-fail mode. Can initially be overridden by remote control signals, but final fail-mode takes priority.



### ▶ Ancillaries

- Interconnection mountings.
- Bridgeworks and connectors.
- Mechanical - manual overrides with hand wheels.
- Limit-switches, sensors and junction boxes.
- Positioners, position indicators and pointers.
- Customer required specifics.



## ▶ APPROVALS & CERTIFICATIONS

As a company we are committed to working to very high quality standards and in line with this we have a solid portfolio of approvals and certifications



BS EN ISO 9001



ATEX



Baseefa  
Notified Body



International  
Electrotechnical  
Commission



SIL – Safety  
Integrity Level



FM  
USA & Canada



GOST-R  
Russia  
Approval



NEPSI  
China Approval

# pneumatrol

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Member of the British Valve  
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