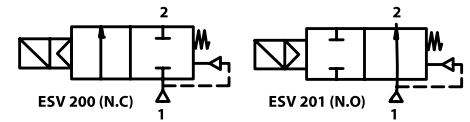


#### TECHNICAL SPECIFICATIONS, DESCRIPTIONS and GENERAL FEATURES

- **Fluids:** Valves are suitable for steam, over heated water and non aggressive liquids
- **Switching Function:** Normally Closed (N.C, Closed when de-energised) (ESV 200 Series) and Normally Open (N.O, Open when de-energised) (ESV 201 Series)
- **Principle of Operation:** Pilot Operated
- **Way Number:** 2/2 (Ports / Positions)
- **Connection and Port Sizes:** G1/8" up to G2"
- **Connection Type:** Thread (Female), G (BSPP / ISO 228-1)
- **Pressure Range:** 0,35 - 5 Bar (1/8" up to 1"), 0,5 - 3 Bar (1 1/4" up to 2")
- **Fluid Temperature:** -10°C to max. 160°C (G1/8" up to 1"), -10°C to max. 140°C (G1 1/4" up to 2")
- **Ambient Temperature:** -20°C to max. 70°C
- **Opening Time:** 200ms up to 1500ms
- **Closing Time:** 500ms up to 2000ms
- **Max Viscosity:** 38 cSt or mm<sup>2</sup>/s
- **Maximum Allowable Pressure or Design Pressure:** 7,5 Bar
- **Minimum operating differential pressure:** 0,35 Bar (For 3/8" up to 1") and 0,5 Bar (For 1 1/4" up to 2"), internal exhaust system (for ESV 201 Series)
- Valve has sealing o-rings
- Suitable AC and DC voltage, high voltage tolerance
- Coil interchangeable without dismantling the valve (don't matter AC or DC)
- High flow rate, high reliability, high mechanical strength
- Various flow rate options, wide range of orifice options
- Mounting position, optional any position but preferably solenoid coil vertical on top
- The fluid passing through the valve must be filtered
- Flow rate (Q) can be usually calculated as a function of pressure, density and flow coefficient
- According 97/23/EC Pressure Equipment Directive (PED), 2006/95/EEC Low Voltage Directive (LVD) and 2004/108/EC Electromagnetic Compatibility Directive (EMC)



|                |                                            |                     |                  |
|----------------|--------------------------------------------|---------------------|------------------|
| Low Power Loss | Min.Ope.Differential Pressure 0,35/0,5 Bar | Coil Rotatable 360° | High Reliability |
| Full Orifice   | Patented Enclosing Tube Design             | High Performance    | Long Life        |



| Model No       | Position | Connection and Port Size | Orifice Size | Flow Factor / Coefficient Kv | Operating Pressure Differential |               |               |               | Fluid Temperature |      | Seal | Approximate Weight | Reference Figure |       |
|----------------|----------|--------------------------|--------------|------------------------------|---------------------------------|---------------|---------------|---------------|-------------------|------|------|--------------------|------------------|-------|
|                |          |                          |              |                              | Min. (For AC)                   | Min. (For DC) | Max. (For AC) | Max. (For DC) | Min.              | Max. |      |                    |                  |       |
| ESV            |          | G                        | mm           | L / m                        | m³/h                            | Bar           | Bar           | Bar           | Bar               | °C   | °C   |                    | kg               |       |
| ESV 200.02     | N.C      | 3/8"                     | 12           | 40                           | 2.40                            | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 0.62             | Fig.1 |
| ESV 200.03     | N.C      | 1/2"                     | 15           | 70                           | 4.20                            | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 0.58             | Fig.1 |
| ESV 200.04     | N.C      | 3/4"                     | 20           | 130                          | 7.80                            | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 0.74             | Fig.1 |
| ESV 200.05     | N.C      | 1"                       | 25           | 180                          | 10.80                           | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 1                | Fig.1 |
| ESV 200.06     | N.C      | 1 1/4"                   | 32           | 380                          | 22.80                           | 0.5           | 0.5           | 3             | 3                 | -10  | 140  | EPDM               | 2.95             | Fig.2 |
| ESV 200.07     | N.C      | 1 1/2"                   | 40           | 480                          | 28.80                           | 0.5           | 0.5           | 3             | 3                 | -10  | 140  | EPDM               | 2.85             | Fig.2 |
| ESV 200.08     | N.C      | 2"                       | 50           | 600                          | 36.00                           | 0.5           | 0.5           | 3             | 3                 | -10  | 140  | EPDM               | 3.3              | Fig.2 |
| ESV 201.02     | N.O      | 3/8"                     | 12           | 40                           | 2.40                            | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 0.65             | Fig.1 |
| ESV 201.03     | N.O      | 1/2"                     | 15           | 70                           | 4.20                            | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 0.61             | Fig.1 |
| ESV 201.04     | N.O      | 3/4"                     | 20           | 130                          | 7.80                            | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 0.75             | Fig.1 |
| ESV 201.05     | N.O      | 1"                       | 25           | 180                          | 10.80                           | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 1.03             | Fig.1 |
| ESV 201.06     | N.O      | 1 1/4"                   | 32           | 380                          | 22.80                           | 0.5           | 0.5           | 3             | 3                 | -10  | 140  | EPDM               | 2.98             | Fig.2 |
| ESV 201.07     | N.O      | 1 1/2"                   | 40           | 480                          | 28.80                           | 0.5           | 0.5           | 3             | 3                 | -10  | 140  | EPDM               | 2.88             | Fig.2 |
| ESV 201.08     | N.O      | 2"                       | 50           | 600                          | 36.00                           | 0.5           | 0.5           | 3             | 3                 | -10  | 140  | EPDM               | 3.33             | Fig.2 |
| ESV 200.00.120 | N.C      | 1/8"                     | 12           | 20                           | 1.20                            | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 0.67             | Fig.1 |
| ESV 200.01.120 | N.C      | 1/4"                     | 12           | 25                           | 1.50                            | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 0.65             | Fig.1 |
| ESV 201.00.120 | N.O      | 1/8"                     | 12           | 20                           | 1.20                            | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 0.7              | Fig.1 |
| ESV 201.01.120 | N.O      | 1/4"                     | 12           | 25                           | 1.50                            | 0.35          | 0.35          | 5             | 5                 | -10  | 160  | PTFE               | 0.68             | Fig.1 |