## **PULSE SOLENOID VALVES**

#### PILOT OPERATED, 2/2 WAY, NORMALLY CLOSED, G11/2"

### TECHNICAL SPECIFICATIONS and FEATURES

• Way Number: 2/2

· Fluids / Media: Air and Inert Gas

. Principle of Operation: Pilot Operated

. Function or Switching Type: Normally Closed

. Connection and Port Sizes: G11/2' . Connection Type: Thread [Female] • Fluid Temperature: -40°C to 80°C • Ambient Temperature: -20°C to 70°C

• Minimum Operating Differential Pressure: 0,35 Bar

• Maximum Operating Pressure: 8,5 Bar

. Maximum Allowable Pressure or Design Pressure: 12,5 bar

. Opening Time: 100 ms . Closing Time: 100 ms

· Life is greater than 5 million cycles.

• The angle between inlet and outlet is 90 degree.

· Pulse valves are well known as an air shock valve and generally used with dust collectors. When its coil is energized valve goes open position and pressurized air goes by in a while. This cause shock wave. The shock wave is clean up the dust and particles before it remains permanently. It you continue to energize coil it won't cause any shock wave again. In order to create it, valve needs pressurized air which must be waiting inlet of the valve. That's means pulse valves must be energized like an on-off signal. On position pressurized air goes by. Off position valve waiting for pressurized air will be created.

· Application: Dust Collection Systems, Jet Pulse Filters, Dust Ventilation Systems, Dust Extraction Systems, Dust Deposition Systems, Pneumatic Conveying Systems, Sand Blasters, Electrostatic Powder Coating Systems, Casting Factories, Cement Plants, Bunkers, Painting Booths, Industrial Filter Facilities.

· Fast opening and closing, Coils Are changeable, Coils Are Rotatable, Compact design, high reliability, high flow rate, effective cleaning, high quality, high performance, long life, high corrosion resistance, lower air consumption, low decibel noise level, ideal peak pressure, maximum security against icing, low flow and pressure loss, a special and patented diaphragm, a fast and easy assembly-disassembly, original and patented enclosing tube design, high mechanical strength, low power loss, high-voltage tolerance, maximum inrush and hold power, peak pressure ratio greater %85, special design made having studied tank geometric, exhaust port protected by silencer and filter, valve with two diaphragm for large flow, fast on & off response, large exhaust area for reducing noise

• Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure

· Pulse valves must be used with filtred fluids.

· Pulse valve can be mounted in any position without affecting operating; vertical with coil upwards preferred

· Respect the direction of flow across the valve, shown with an arrow.

Approved from 97/23/EC Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD)

. Standard connection can be G (BSPP/ ISO 228-1)



























### **ELECTRICAL CHARACTERISTICS**

Continuous Duty: %100 ED Coil Insulation Class: H [180°C]

Coil Impregnation: Polyester Fiber-Resin Glass Coil Encapsulation Material: Fiber Glass Reinforced

Protection Degree: IP 65 (EN 60529)

Electric Plug Connection: DIN 46340-3 poles connectors (DIN 43650)

Connector Specification: ISO 4400/EN 175301-803, Form A, Spade plug [Cable 0 6-8 mm]

Electrical Safety: IEC 335, EN 60335-1, EN 60204-1

Standard Voltages: For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110V

Voltage Tolerances: For AC or DC %-10; %+10

Freauencie: 50 Hz

Min. and Max Amb. Tem: -20; 70

## MATERIALS

Valve Body and Cover: Die Cast Aluminum

Diaphragm/Seat Seal: TPE Plunger Seal: H-NBR

Enclosing Tube: Stainless Steel (AISI430FR and AISI304)

Plunger: Stainless Steel (AISI 430FR) Springs: Stainless Steel (AISI 302) Shading Ring: Copper [%98 Cul

Valve Seat: Aluminum

Other Internal Metal Parts: Stainless Steel

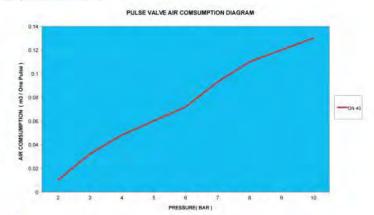
Cover Screws: Stainless Steel Internal and External O-rings: NBR

Model No	Connection and Port Size	Orifice Size	Pressure Minimum For AC Voltage	Pressure Minimum For DC Voltage	Pressure Maximum For AC Voltage	Pressure Maximum For DC Vollage	Flow Coeffient	Fluid Temperalure Minimum	Fluid Temperalure Maximum	Seal	Approximate Weight	
EPV 100	G	mm	Bar	Bar	Ваг	Bar	1/m	©»	Ĉ.		kg	
EPV 100.07	11/2"	40	0,35	0,35	8,5	8,5	850	-40	80	TPE	1.2	

## OPTIONS

- On request with electronic timer, exproof coil.
- On request other connections are available NPT (ANSI 1.20.3), R (BSPT/ ISO 7-1), W (BSW/Whitworth), M (Metric)...
- On request other special voltages, other frequencies (60 Hz)
- On request connector with LED, coil insulation class: F (155°C)
- On request diaphragm seal neoprene (-10°C to 80°C for Fluid), connector with timer

## DIAGRAM



## POWER CONSUMPTION

Power Consumption											
Alterna	ating Cur	rent (AC	Dire	t Curren	t (DC)						
Model No	Voltage	Inrush (VA)	Holding (VA)	Model No	Voltage	Cold (W)	Hot (W)				
EC0 10.AC,012	12V	30	18	ECO 10.DC.012	12V	16	12				
ECO 10.AC.024	24V	30	18	ECO 10.DC.024	24V	16	12				
ECO 10.AC.048	48V	30	18	ECO 10.DC.048	48V	16	12				
ECO 10.AC.110	110V	30	18	ECO 10.DC.110	110V	16	12				
ECO 10.AC.230	230V	30	18	ECO 10.DC.230	230V	16	12				

## APPLICATION PICTURES



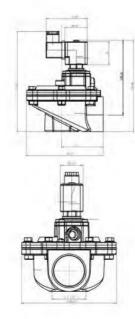






# DIMENSIONS (mm)







**EPV 100**