#### PULSE SOLENOID VALVES

#### PILOT OPERATED, 2/2 WAY, NORMALLY CLOSED, G 3/4" - G1"

#### TECHNICAL SPECIFICATIONS and FEATURES

- Way Number: 2/2
- Fluids/Media: Air and Inert Gas
- · Principle of Operation: Pitot Operated
- . Function or Switching Type: Normally Closed
- . Connection and Port Sizes: G3/4" and G1"
- 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: 60 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 it's coil is energized valve goes open position and pressurized air goes by in a while. This causes shock wave. The shock wave cleans up the dust and particles before it remains permanently. If 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 like valve. This 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 loing, 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.

- . 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: IEC335, EN 60335-1, EN 60204-1 Standard Voltages: For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V Voltage Tolerances: For AC or DC %-10; %+10 Frequencie: 50 Hz

Min and Max Ambient Tamp: -20; +70

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 Voltage	Flow Coeffient	Fluio Temperature Minimum	Fluid Temperature Maximum	Seal	Approximate Weight
EPV 100	G	mm	Bar	Bar	Bar	Bar	L/m	Co	(C <sup>u</sup>		kg
EPV 100.04	3/4"	25	0,35	0,35	8,5	8,5	230	-40	80	TPE	Q.65
EPV 100.05	1	25	0,35	0,35	8,5	8,5	330	-40	80	TPE	0.6





MATERIALS

Valve Body and Cover: Die Cast Aluminum Diaphragm/Seat Seal: TPE Plunger Seal: H-NBR Enclosing Tube: Stainless Steel (AISI 430FR and AISI 304) Plunger: Stainless Steel (AISI 430FR) Springs: Stainless Steel (AISI 430FR) Shading Ring: Copper (%98 Cu | Valve Seat: Aluminum Other Internal Metal Parts: Stainless Steel

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

# 13-01



#### EPV 100

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NOIL

AIR COMSUN

0.005

### OPTIONS

- On request with electronic timer, exproof coil, dual diaphragm
- On request other connections are available NPT (ANS11.20.3), 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 PULSE VALVE AIR COMSUMPTION DIAGRAM 0.045 0.04 ( One Pulse ) 0.035 E 0.025 0.02

PRESSURE( BAR )

# POWER CONSUMPTION

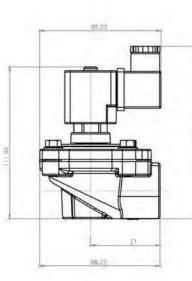
Power Consumption										
Alterna	ating Cur	rent IAC	Direct Current (DC)							
Model No	Voltage Inrush (VA)		Holding (VA)	Model No	Voltage	Cold (W)	Hot (W)			
ECO 10.AC.012	12V	30	18	ECO 10.DC.012	12V	16	12			
ECO 10.AC.024	24V	30	18	ECO 10.DC.024	24V	16	12			
ECO 10.AC.048	48V	30	18	ECO 10.DC.048	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			

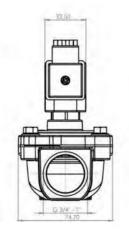
# APPLICATION PICTURES



# DIMENSIONS (mm)









**EPV 100** 

**EPV 100** 

ON 20

DN 25