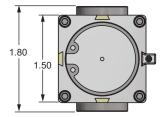


# **Series APVS04**

The Spartan Scientific Series APVS04 is an inert gas/spring operated, Single Acting Normally Closed, or Double Acting media compatible diaphragm valve, designed for control of high purity, aggressive and corrosive liquid chemical media. It has a miniature overall footprint, and low dead volume. The Series APVS04 features media compatible composite body, and FKM, NBR, and EPDM elastomers to control the 6mm orifice which afford Cv ratings of .72 that far exceed competitive valves of this type and size. Media pressure ratings range from 0 to 200 psi and pilot pressure is 60 psi minimum. A Normally Open version can be made using a Normally Open pilot valve. In the case of pilot gas failure, the valve will fail closed. In the case where electric power is lost but pilot gas remains, the valve will remain open. Each valve is tested to bubble tight standard ANSI FCI 70-2 Class VI. The Series APVS04 can be controlled by our proven Spartan Scientific 3-way solenoid pilot valve which enhances operation with manual override and indicator lighted connector options, and is used where sampling, draining, or transferring process fluid are performed. An optional magnetic piston is available for end of stroke sensing when combined with the additional valve position sensor.

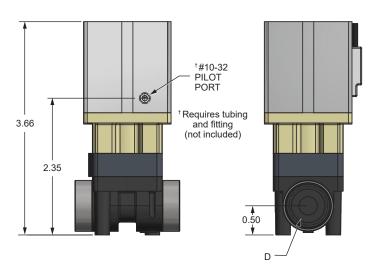
### **Dimensional Data**

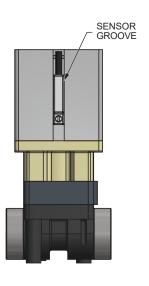
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

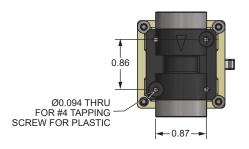




Non-Piloted Version







DIFFERENTIAL PRESSURE CHART		
Port Size NPT (D)	Orifice Size	Pilot Pressure (psi)
1/4"	6mm	60
3/8"	6mm	60



## **Series APVS04**

#### Technical Data

Function: 2-Way, 2-Position; Normally Closed;

Double Acting Air Pilot Operated

Port Size: 1/4" NPT

3/8" NPT

Orifice Sizes / 6mm / .72 Cv

Flow Factor:

Pressure Range: 0 to 200 psi

Temp. Range: Fluid Max.: +60°C

Dry Range: Ambient +10° to +50°C

Media: All fluids and gases compatible with wetted materials

**Mounting:** On pipe. (2x), Ø 0.170 blind holes for #8 tapping screw

Wetted Materials: Valve Body: G.F. Nylon or PEI

Elastomers: FKM, NBR, EPDM, (others available on request)

Seal Coupling: 300 Series Stainless Steel

(Pilot Option) Elastomers: FKM, NBR, EPDM

Pilot Data: Function: 3-Way, 2-Postion; Direct Acting; Normally Closed

Pressure Range: 60 to 150 PSI Port Size: 1/8" NPT (Pilot Valve)

Coil Data: Duty Cycle: Continuous (within specifications)

Encapsulation: Glass-Filled Nylon

Insulation: Class F

Power Rating: 6.5 Watts 8.5 VA

Voltage: 12, 24 VDC 120, 220, 240 VAC 50/60 Hz

120, 220, 240 VAC 50/60 HZ Voltage Tolerance: +/- 10% Nominal

Winding: Class H

Connections: Spades: Terminals AMP 6.3x0.8 width 11mm

(Available in DIN Style "A" EN175301-803

for 3.0mm orifice or larger)

Flying Lead: PVC 22 AWG, Multi-Strand Copper Wire,

300V, 12" minimum length

Packaged Weight: 0.448 lbs. (add 0.25 lbs. for pilot)

### **How To Order**

5 meter female 3 pin
Pilot Valve Lighted Connector

6ft PVC Cable, Ground Down Pilot Options 2, A - 12VDC

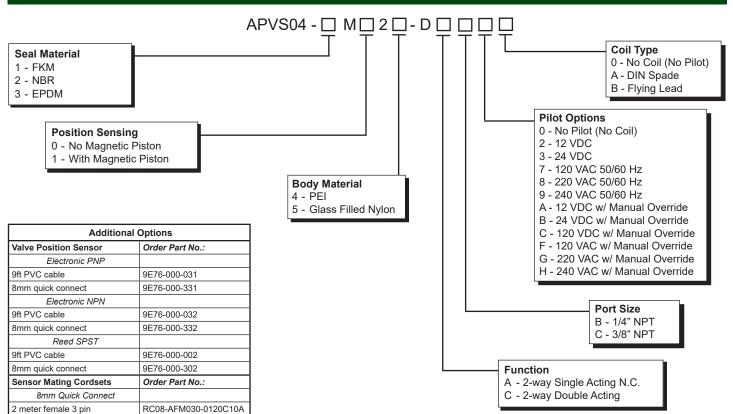
Pilot Options 3, B - 24VDC

Pilot Options 4, C - 120VDC

Pilot Options 7, F - 120VAC

Pilot Options 8, G - 220VAC

Pilot Options 9, H - 240VAC



Order Example: APVS04-1M24-DAB7A

FKM, With magnetic piston, PEI, 2-way N.C., 1/4" NPT, 120 VAC 50/60 Hz, DIN Spade



RC08-AFM030-0150C10A

Order Part No.:

5J560-201-US0A

5J560-201-US0A

5J560-501-US0A

5,1560-501-US0A

5J560-801-US0A

5J560-801-US0A