



Series APVS04

Air Piloted 2-Way Media Separated Valve

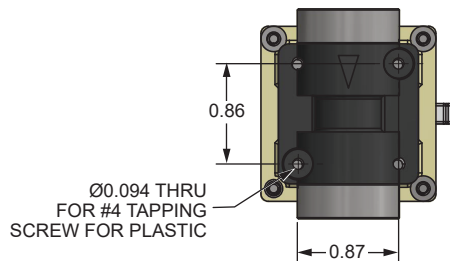
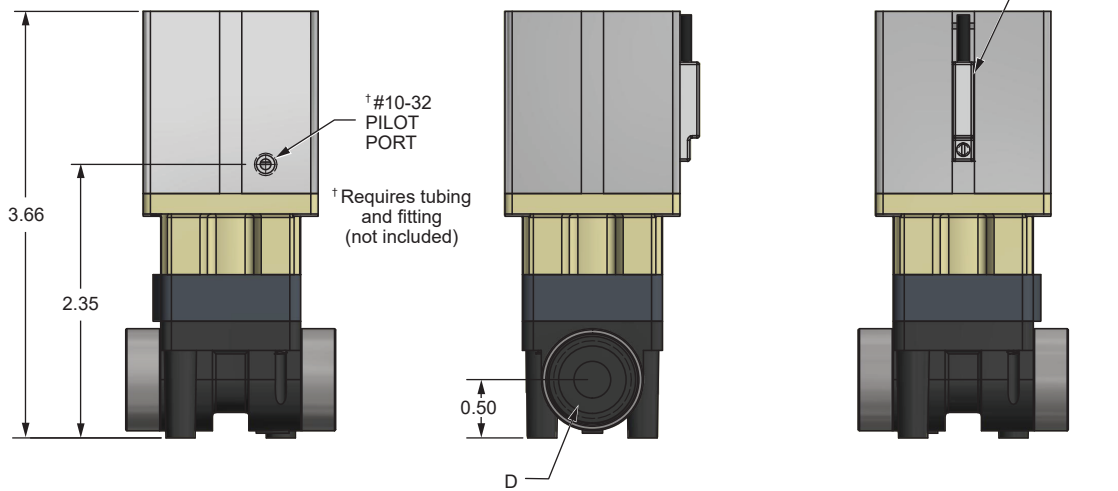
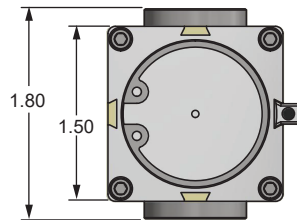
The Spartan Scientific Series APVS04 is an inert gas/spring operated, Single Acting Normally Closed, or Double Acting media compatible diaphragm valve, designed for control of high purity, aggressive and corrosive liquid chemical media. It has a miniature overall footprint, and low dead volume. The Series 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

AIR PILOTED



Series APVS04

Air Piloted 2-Way
Media Separated Valve

Technical Data

Function:	2-Way, 2-Position; Normally Closed; Double Acting Air Pilot Operated	(Pilot Option) Pilot Data :	Elastomers: FKM, NBR, EPDM Function: 3-Way, 2-Position; Direct Acting; Normally Closed Pressure Range: 60 to 150 PSI Port Size: 1/8" NPT (Pilot Valve)
Port Size:	1/4" NPT 3/8" NPT	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 Voltage Tolerance: +/- 10% Nominal Winding: Class H
Orifice Sizes / Flow Factor:	6mm / .72 Cv	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
Pressure Range:	0 to 200 psi	Packaged Weight:	0.448 lbs. (add 0.25 lbs. for pilot)
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		

How To Order

APVS04 - M 2 - D

Seal Material

- 1 - FKM
- 2 - NBR
- 3 - EPDM

Position Sensing

- 0 - No Magnetic Piston
- 1 - With Magnetic Piston

Body Material

- 4 - PEI
- 5 - Glass Filled Nylon

Coil Type

- 0 - No Coil (No Pilot)
- A - DIN Spade
- B - Flying Lead

Pilot Options

- 0 - No Pilot (No Coil)
- 2 - 12 VDC
- 3 - 24 VDC
- 7 - 120 VAC 50/60 Hz
- 8 - 220 VAC 50/60 Hz
- 9 - 240 VAC 50/60 Hz
- A - 12 VDC w/ Manual Override
- B - 24 VDC w/ Manual Override
- C - 120 VDC w/ Manual Override
- F - 120 VAC w/ Manual Override
- G - 220 VAC w/ Manual Override
- H - 240 VAC w/ Manual Override

Port Size

- B - 1/4" NPT
- C - 3/8" NPT

Function

- A - 2-way Single Acting N.C.
- C - 2-way Double Acting

Additional Options	
Valve Position Sensor	Order Part No.:
<i>Electronic PNP</i>	
9ft PVC cable	9E76-000-031
8mm quick connect	9E76-000-331
<i>Electronic NPN</i>	
9ft PVC cable	9E76-000-032
8mm quick connect	9E76-000-332
<i>Reed SPST</i>	
9ft PVC cable	9E76-000-002
8mm quick connect	9E76-000-302
Sensor Mating Cordsets	Order Part No.:
<i>8mm Quick Connect</i>	
2 meter female 3 pin	RC08-AFM030-0120C10A
5 meter female 3 pin	RC08-AFM030-0150C10A
Pilot Valve Lighted Connector	Order Part No.:
<i>6ft PVC Cable, Ground Down</i>	
Pilot Options 2, A - 12VDC	5J560-201-US0A
Pilot Options 3, B - 24VDC	5J560-201-US0A
Pilot Options 4, C - 120VDC	5J560-501-US0A
Pilot Options 7, F - 120VAC	5J560-501-US0A
Pilot Options 8, G - 220VAC	5J560-801-US0A
Pilot Options 9, H - 240VAC	5J560-801-US0A

Order Example: APVS04-1M24-DAB7A
FKM, With magnetic piston, PEI, 2-way N.C.,
1/4" NPT, 120 VAC 50/60 Hz, DIN Spade