



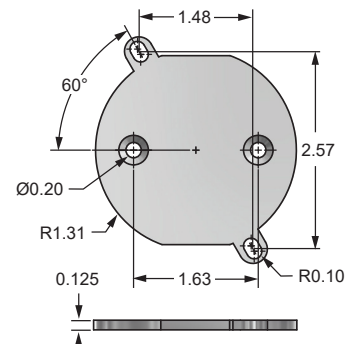
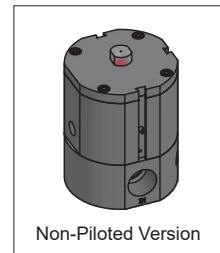
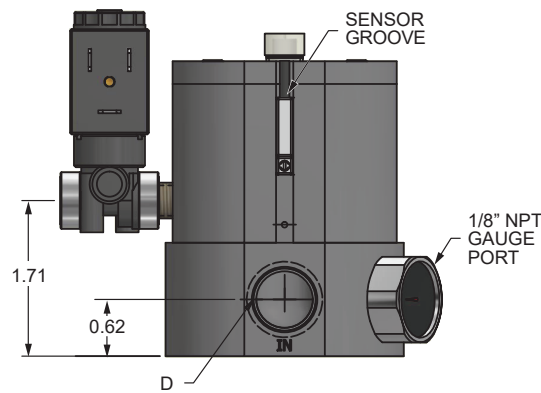
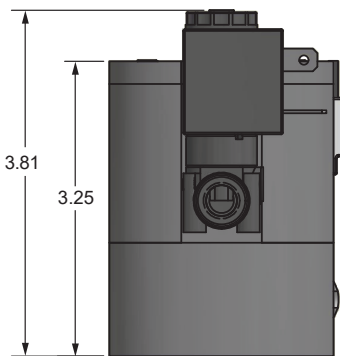
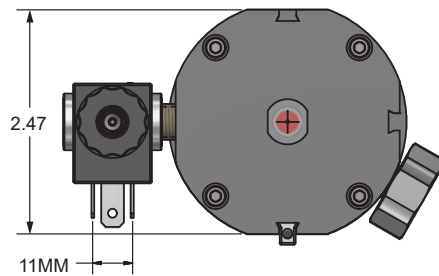
Series APVS08

Air Piloted 2-Way Media Separated Valve

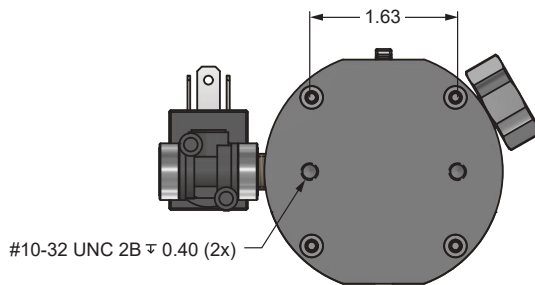
The Spartan Scientific Series APVS08 is an inert gas/spring operated, 2-Way 2-Position Normally Closed (fail safe), Normally Open or Double Acting media compatible diaphragm valve designed for control of high purity, aggressive and corrosive liquid chemical media. With a small overall footprint, and low dead volume, the Series APVS08 features CPVC bodies, and FKM, NBR, EDPM and PTFE diaphragms to control orifice size of 16mm which afford Cv ratings of 4.70 that far exceed competitive valves of this type. Pressure ratings go from 0 to 120 psi and each valve is tested to bubble tight standard ANSI FCI 70-2 Class VI. The Series APVS08 can be controlled by our proven Spartan Scientific 3-way solenoid pilot valve which enhances operation with manual override and indicator lighted connector options. The Normally Closed version features an optical position indicator showing valve open condition. The Series APVS08 is used where sampling, draining, or transferring process fluid are performed. The Normally Open version function is accomplished by use of a Normally Open solenoid pilot valve. Upon loss of power, namely pilot gas, there is an internal spring that will fail closed in the spring closed version. If this is not a preferred condition, Normally Open fail can be accomplished using a Double Acting version and a 4-way valve plumbed to open on spring return, creating a full Normally Open fail mode. 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



MOUNTING PLATE DETAILS



| Port Size (D) NPT | Cv / GPM @ Δ P = 20 psi | Normally Closed Normally Open | | | Double Acting | | |
|-------------------|-------------------------|-------------------------------|--------------------|---------------|---------------|--------------------|---------------|
| | | Δ P (psi) | Pilot Press. (psi) | Cylinder Bore | Δ P (psi) | Pilot Press. (psi) | Cylinder Bore |
| 1/4" | 4 / 18 | 120 | 60 | 2.0" | 120 | 120 | 2.0" |
| 3/8" | 5 / 22 | 120 | 80 | 2.0" | 120 | 120 | 2.0" |
| 1/2" | 6.5 / 29 | 120 | 80 | 2.0" | 120 | 120 | 2.0" |

AIR PILOTED



Series APVS08

Air Piloted 2-Way
Media Separated Valve

Technical Data

Function: 2-Way, 2-Position; Single Acting Fail Closed, Normally Closed, Normally Open* and Double Acting (*requires Normally Open pilot valve option)

Port Size: 1/4" NPT
3/8" NPT
1/2" NPT

Orifice Sizes / Flow Factor: 16mm / 4.70 Cv

Pressure Range: 0 to 120 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; Mounting plate; or #10-32 x 0.40" screws (2) (screws are not provided)

Wetted Materials: Elastomers: FKM, NBR, EPDM, (PTFE Optional)
Valve Body: CPVC

Pilot Option Function: 3-Way, 2-Position; Direct Acting; Normally Closed, Normally Open
Pressure Range: 60 to 120 PSI
Port Size: 1/8" 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, 120 VDC
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: 1.05 lbs.
(add 0.25 lbs. for pilot)

How To Order

APVS08 - Q 0 8 - D

Seal Material

- 1 - FKM
- 2 - NBR
- 3 - EPDM
- J - PTFE Disc Backed EPDM
- K - PTFE Disc Backed NBR
- L - PTFE Disc Backed FKM

Position Sensing

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

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
- 4 - 120 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
- D - 1/2" NPT

Function

- A - 2-way Single Acting N.C.
- C - 2-way Double Acting
- E - 2-way Single Acting N.O. (fail closed configuration)

| 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-AFM030-0120CB0A |
| 5 meter female 3 pin | RC08-AFM030-0150CB0A |
| 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 |
| Mounting Plate | Order Part No.: |
| Anodized Aluminum | APV08-10 |

Order Example: APVS08-1Q108-DAB7A
FKM, With magnetic piston, 2-way N.C.,
1/4" NPT, 120 VAC 50/60 Hz, DIN Spade