



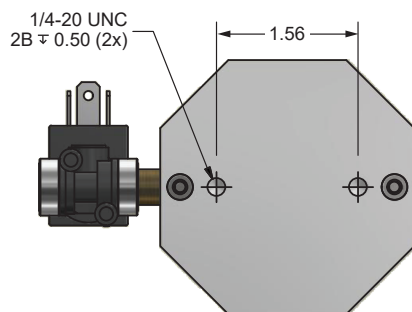
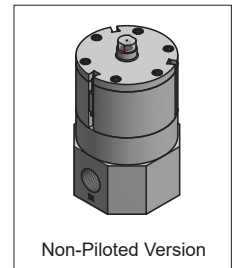
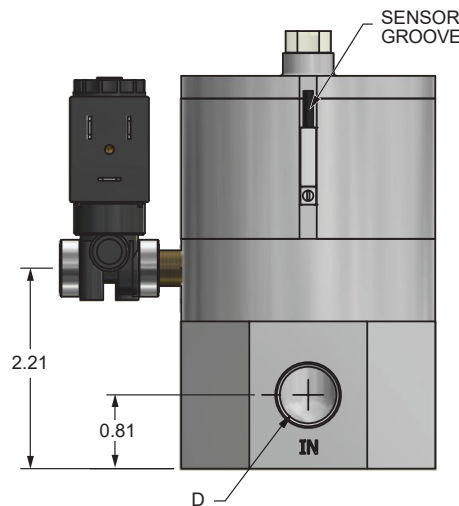
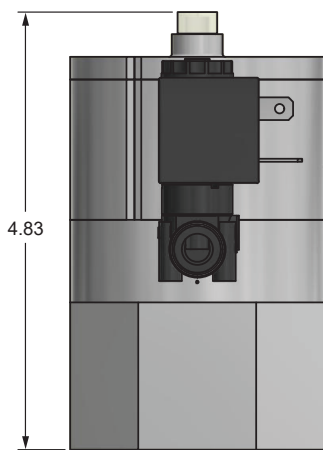
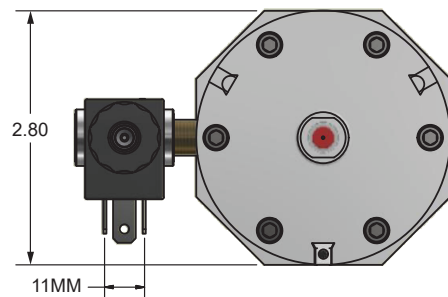
Series APVS15

Air Piloted 2-Way Media Separated Valve

The Spartan Scientific APVS15 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. With a small overall footprint, and low dead volume, the APVS15 features CPVC bodies, and FKM, EDPM and NBR elastomers to control orifice sizes 16mm and 20mm which afford Cv ratings of 4.70 and 10.9 that far exceed competitive valves of this type. Pressure ratings go from 10 to 100 psi depending on orifice size and each valve is tested to bubble tight standard ANSI FCI 70-2 Class VI. The APVS15 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 APVS15 is used where sampling, draining, or transferring process fluid are performed. 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. 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



| DIFFERENTIAL PRESSURE CHART | | | |
|-----------------------------|--------------|---------------|----------------------|
| Port Size NPT (D) | Orifice Size | GPM @ 100 psi | Pilot Pressure (psi) |
| 1/2" | 16mm | 30 | 60-100 |
| 3/4" | 16mm | 50 | 60-100 |
| 3/4" | 20mm | 58 | 60-80 |

AIR
PILOTED



Series APVS15

Air Piloted 2-Way
Media Separated Valve

Technical Data

Function: Single Acting Normally Closed; or Double Acting, Air Piloted, media separated diaphragm valve

Port Size: 1/2" NPT
3/4" NPT
(Others available on request)

Orifice Sizes / Flow Factor: 16mm / 4.70 Cv
20mm / 10.9 Cv

Pressure Range: 10 to 100 psi
Pilot Pressure Range: 60 to 100 psi
(depending on orifice size)

Temp. Range: Fluid Max.: +60°C
Dry Range: Ambient +10°C to +50°C

Media: All fluids and gases compatible with wetted materials

Mounting: (2x) 1/4" - 20 UNC Tapped Holes, 0.5" DP. On pipe

Wetted Materials: Valve Body: CPVC (Others available on request)
Elastomers: FKM, NBR, EPDM,

Pilot Option Function: 3-Way, 2-Position; Direct Acting; Normally Closed, Normally Open
Pressure Range: 60 to 100 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: Piloted: 1.72 lbs.
Non-piloted: 1.5 lbs.

How To Order

APVS15 - 2 8 - D

Seal Material

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

Orifice Size

- Q - 16mm
- R - 20mm

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

- D - 1/2" NPT
- E - 3/4" NPT

Function

- A - 2-way 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-AFM030-0120CB0A |
| 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 |

Order Example: APVS15-1Q028-DAD7A
FKM, 16mm Orifice size,
No magnetic piston, 2-way N.C.,
1/2" NPT, 120 VAC 50/60 Hz, DIN Spade

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