



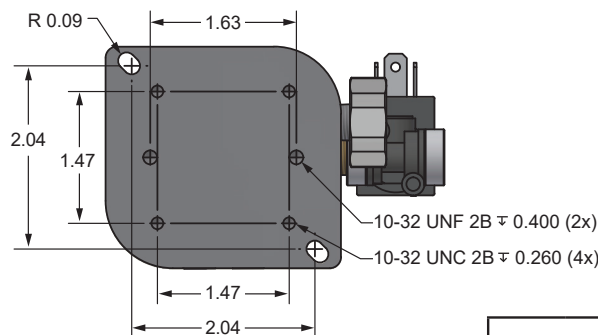
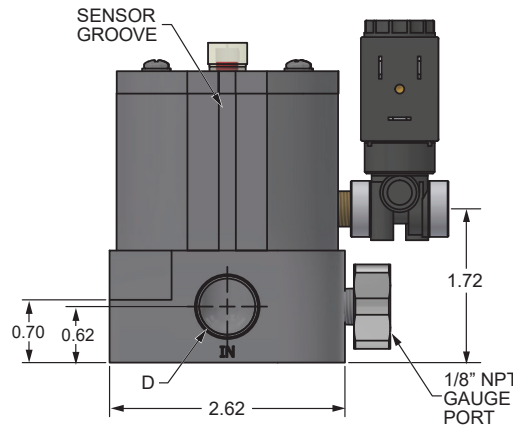
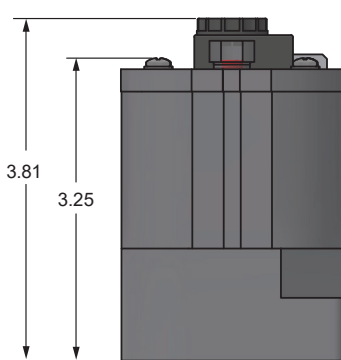
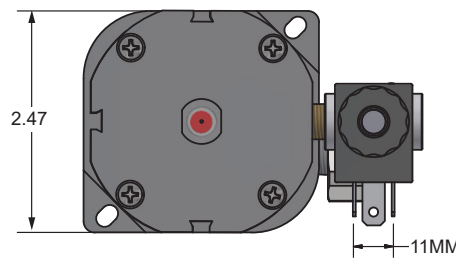
Series APVS08

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



DIFFERENTIAL PRESSURE CHART							
Port Size (D) NPT	Cv / GPM @ Δ P = 20 psi	Δ P (psi)	Normally Closed Normally Open		Double Acting		
			Pilot Press. (psi)	Cylinder Bore	Δ P (psi)	Pilot Press. (psi)	Cylinder Bore
1/4"	4 / 18	120	40-110	2.0"	120	120	2.0"
3/8"	5 / 22	120	40-110	2.0"	120	120	2.0"
1/2"	6.5 / 29	120	40-110	2.0"	120	120	2.0"



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Technical Data

Function:	2-Way, 2-Position; Single Acting Fail Closed, Normally Closed, Normally Open* and Double Acting (*requires Normally Open pilot valve option)	(Pilot Option)	Elastomers: FKM, NBR, EPDM
Port Size:	1/4" NPT 3/8" NPT 1/2" NPT	Pilot Data :	Function: 3-Way, 2-Position; Direct Acting; Normally Closed Pressure Range: 40 to 110 PSI Port Size: 1/8" NPT (Pilot Valve)
Orifice Sizes / Flow Factor:	16mm / 4.70 Cv	Coil Data:	Duty Cycle: Continuous (within specifications) Encapsulation: Glass-Filled Nylon Insulation: Class F Power Rating: 6.5 Watts 8.5 VA
Pressure Range:	0 to 120 psi		Voltage: 12, 24, 120 VDC 120, 220, 240 VAC 50/60 Hz Voltage Tolerance: +/- 10% Nominal Winding: Class H
Temp. Range:	Fluid Max.: +60°C Dry Range: Ambient +10° to +50°C	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
Media:	All fluids and gases compatible with wetted materials	Packaged Weight:	1.05 lbs. (add 0.25 lbs. for pilot)
Mounting:	On pipe; Mounting plate; or #10-32 x 0.40" screws (2) (screws are not provided)		
Wetted Materials:	Valve Body: CPVC Elastomers: FKM, NBR, EPDM, (PTFE Optional) Fastener: 316 Stainless Steel or (PEEK optional)		

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-AFM030-0120C10A
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
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

AIR
PILOTED