



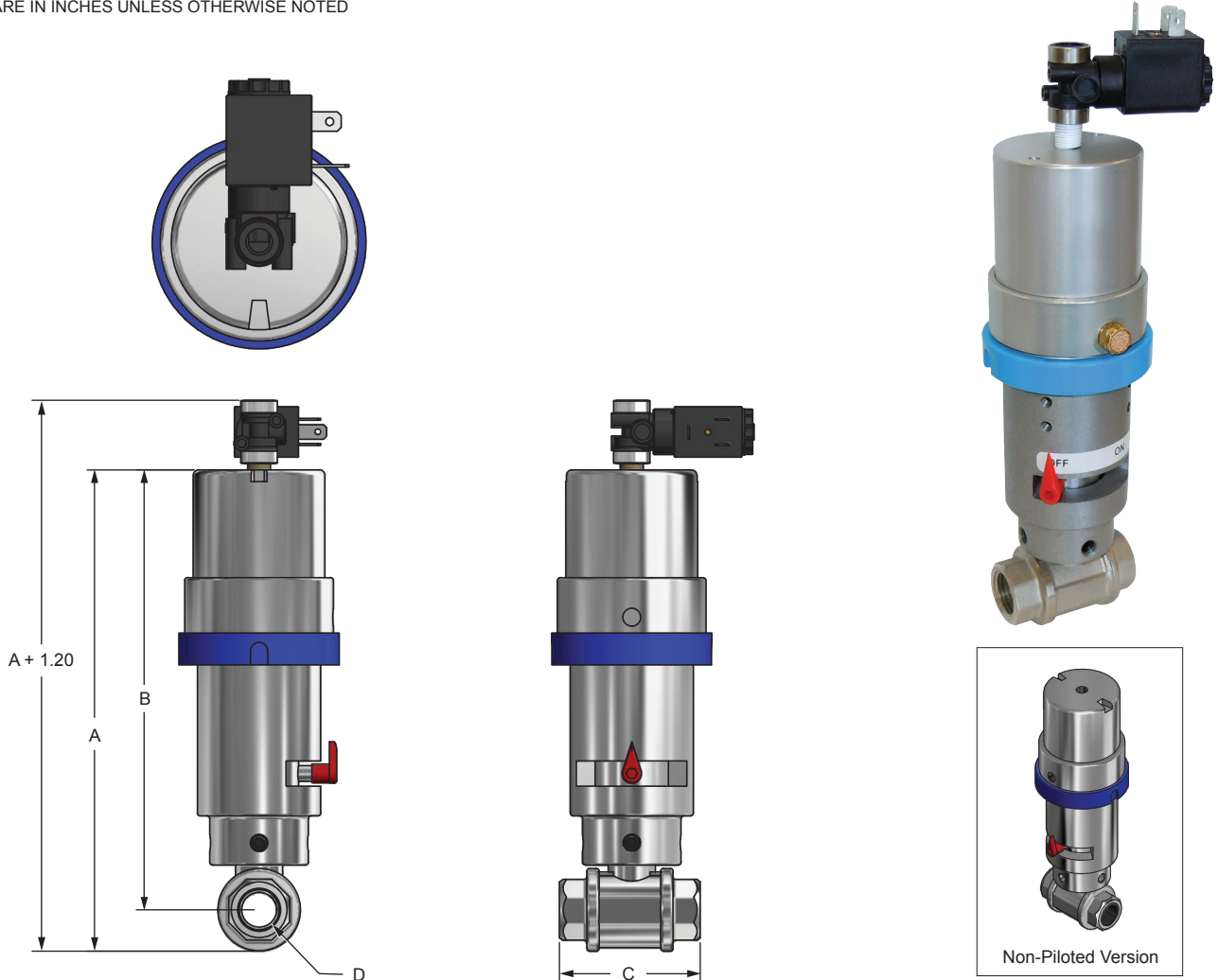
# Series APV-30

Air Pilot Valves  
Pneumatically Actuated 2-Way

The Spartan Scientific Series APV-30 is a rugged full featured, pneumatically piloted ball valve. The unit is available in Normally Open, Normally Closed or Double Acting versions. The Series APV-30 sizes range from 1/2" to 2.0" NPT. This unit is compact as compared to competitive rack and pinion or motorized ball valves and comes standard with an ON-OFF indicator. The Series APV-30 features PTFE ball valve sealing using Chrome plated brass or 316 Series Stainless Steel balls. The valve body materials are E-Nickel plated brass and 316 Series Stainless Steel.

## Dimensional Data

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED



DIMENSIONAL TABLE			
Port Size (D) NPT	A	B	C
1/2"	8.30"	7.64"	2.70"
3/4"	9.50"	8.70"	3.00"
1"	9.85"	9.25"	3.50"
1 1/4"	11.00"	9.52"	4.00"
1 1/2"	11.60"	10.40"	4.50"
2"	12.50"	10.80"	5.25"

DIFFERENTIAL PRESSURE CHART			
Port Size (D) NPT	Max. Pressure (psi) @ Temp. Range 0 to 25°C	Cv / GPM @ Δ P = 10 psi	Pilot Pressure (psi)
1/2"	750	23.3 / 74.8	70 - 120
3/4"	750	56.4 / 180.5	70 - 120
1"	750	93.7 / 300	70 - 120
1 1/4"	600	165 / 528	70 - 120
1 1/2"	600	272.5 / 872	70 - 120
2"	480	400 / 1277	70 - 120

**SPARTAN**  
SCIENTIFIC

P.O. Box 9792 • Boardman, Ohio 44513  
PH: (855)629-4648 • Fax: (330)758-3314  
www.spartanscientific.com



# Series APV-30

Air Pilot Valves  
Pneumatic Actuated 2-Way

## Technical Data

<b>Function:</b>	2-Way, 2-Position; Remote Air Pilot; Double Acting, Normally Closed, Normally Open	<b>Mounting:</b>	On pipe
<b>Port Size:</b>	1/2" NPT 3/4" NPT 1" NPT 1 1/4" NPT 1 1/2" NPT 2" NPT (BSP available on request)	<b>Wetted Materials:</b>	Actuator: Cylinder: Anodized Aluminum Valve Body / Ball: E-nickle plated brass / heavy duty chromium plated: 316 Series Stainless Steel, Teflon bushings
<b>Orifice Sizes / Flow Factor:</b>	15mm / 23.3 Cv 20mm / 56.4 Cv 25mm / 93.7 Cv 32mm / 165.0 Cv 40mm / 272.5 Cv 50mm / 400.0 Cv	<b>Coil Data:</b>	Duty Cycle: Continuous (within specifications) Encapsulation: Glass-Filled Nylon Insulation: Class F Power Rating: 6.5 Watts 8.5 VA VAC Voltage: 6, 12, 24 VDC 24, 120, 220, 240VAC 50/60 Hz Voltage tolerance: +/- 10% Nominal Winding: Class H (3-Way, 2-Position available on request)
<b>Pressure Range:</b>	0 to 750 psi Pilot Pressure: 70 to 120 psi (depending on orifice size)	<b>Connections:</b>	Spades: Terminals AMP 6.3x0.8 width 11mm (Available in DIN 43650 Form "A" / ISO 4400, EN175301-803:2000 for 3.0mm orifice or larger) Flying Lead: PVC 22 AWG, Multi-Strand Copper Wire, 300V, 12" Length
<b>Temp. Range:</b>	Fluid max.: +60°C Dry Range: Ambient +10° to +50°C	<b>Packaged Weight:</b>	1/2": 2.8 lbs.      1 1/4": 7.9 lbs. 3/4": 3.7 lbs.      1 1/2": 9.3 lbs. 1": 4.3 lbs.      2": 15.9 lbs. (add 0.25 lbs. for pilot)
<b>Media:</b>	All fluids and gases compatible with wetted materials Steam to 180°C		

## How To Order

APV30 - 00 - □ □ □ □

**Body Material**  
4 - E-Nickel plated Brass  
9 - 316 Stainless Steel

**Function**  
1 - 2/2 N.C.  
2 - 2/2 N.O.  
3 - Double acting

**Coil Options**  
0 - No Pilot  
1 - 6 VDC  
2 - 12 VDC  
3 - 24 VDC  
6 - 24 VAC 50/60 Hz  
7 - 120 VAC 50/60 Hz  
8 - 220 VAC 50/60 Hz  
9 - 240 VAC 50/60 Hz

*Port Size	Orifice	Cv
1 - 1/2" NPT	15mm	23.3
2 - 3/4" NPT	20mm	56.4
3 - 1" NPT	25mm	93.7
4 - 1 1/4" NPT	32mm	165.0
5 - 1 1/2" NPT	40mm	272.5
6 - 2" NPT	50mm	400.0

\* All thread sizes available in BSP.  
Contact factory for details.

Order Example: APV30-00-4127  
E-Nickel plated Brass, 2/2 N.C.,  
3/4" NPT, 120 VAC 50/60 Hz

Replacement Ball Valves	
Description	Model Number
1/2" NPT	APV30-01-0001
3/4" NPT	APV30-01-0002
1" NPT	APV30-01-0003
1 1/4" NPT	APV30-01-0004
1 1/2" NPT	APV30-01-0005
2" NPT	APV30-01-0006

AIR  
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