



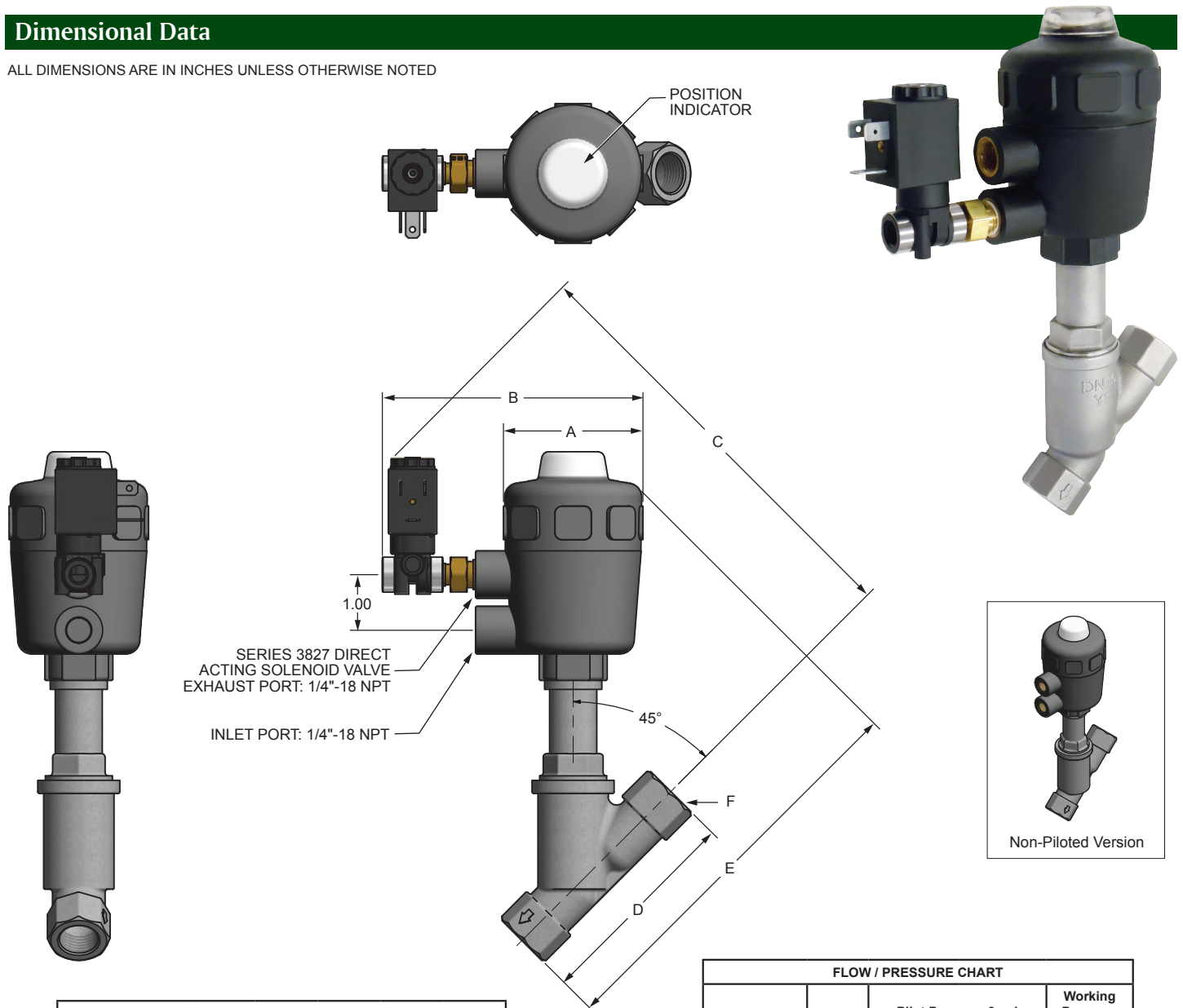
# Series APV-23

Angle Steam  
2-Way Air Pilot Valves

The Spartan Scientific Series APV-23 is 2-way, 2-position valve specifically designed for the control of air, oil or steam. The Series APV-23 uses a specially designed Teflon Chevron® seal which ensures separation of the media and pilot sections. In the single acting Normally Closed version, the Series APV-23 uses a spring extended pneumatic operator connected to a sealing disc which when retracted unseats from a precision orifice and allows fluid flow. When pilot pressure is removed from the Series APV-23 the seat returns to the orifice and flow stops. Features of the Series APV-23 are the ON-OFF indicator at the top of the pneumatic actuator and can be used for high temperature liquids compatible with the materials of construction and steam. The stainless steel body is standard and is available in sizes ranging from 1/2" to 2.0" NPT and can control media up to 215 psi in various configurations.

## Dimensional Data

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED



AIR  
PILOTED

DIMENSIONAL TABLE					
Port Size (F) NPT	A	B	C	D	E
1/2"	2.52"	4.67"	7.70"	3.35"	6.83"
3/4"	2.52"	4.67"	7.70"	3.74"	7.03"
1"	2.52"	4.67"	7.70"	4.13"	7.22"
1 1/4"	3.15"	5.63"	9.25"	4.72"	8.78"
1 1/5"	3.15"	5.75"	9.50"	5.12"	8.98"
2"	3.15"	5.75"	9.88"	5.91"	9.37"

FLOW / PRESSURE CHART				
Port Size (F)	Cv	Pilot Pressure 9 psi		Working Pressure (psi)
		Min.	Max.	
1/2"	5.7	45	115	215
3/4"	9.2	50	115	215
1"	21.9	60	115	215
1 1/4"	31.8	50	115	215
1 1/2"	48.5	50	115	215
2"	60.1	60	115	215

**SPARTAN**  
SCIENTIFIC

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# Series APV-23

Air Pilot Valves  
Angle Steam 2-Way

## Technical Data

<b>Function:</b>	2-Way, 2-Position; Remote Air Pilot; Normally Closed	<b>Mounting:</b>	On pipe
<b>Port Size / Flow Factor:</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>	Valve Body: 300 Series Stainless Steel and PTFE
<b>Orifice Sizes:</b>	15mm / 5.70 Cv 20mm / 9.2 Cv 25mm / 21.9 Cv 32mm / 31.8 Cv 40mm / 48.5 Cv 50mm / 60.1 Cv	<b>Coil Data:</b>	Duty Cycle: Continuous (within specifications) Encapsulation: Glass-Filled Nylon Insulation: Class F Power Rating: 6.5 Watts VDC 8.5 VA (others available on request) Voltage: 6, 12, 24 VDC 24, 120, 220, 240VAC 50/60 Hz Voltage tolerance: +/- 10% Nominal Winding: Class H
<b>Pressure Range:</b>	Main valve: 0 to 215 psi Pilot pressure: 45 to 115 psi	<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": 1.78 lbs.      1 1/4": 3.80 lbs. 3/4": 1.97 lbs.      1 1/2": 4.55 lbs. 1": 2.29 lbs.      2": 6.40 lbs. (add 0.25 lbs. for pilot)
<b>Media:</b>	All fluids and gases compatible with wetted materials		

## How To Order

APV23 - 00 - 91

*Port Size	Orifice	Cv
1 - 1/2" NPT	15mm	5.70
2 - 3/4" NPT	20mm	9.2
3 - 1" NPT	25mm	21.9
4 - 1 1/4" NPT	32mm	31.8
5 - 1 1/2" NPT	40mm	48.5
6 - 2" NPT	50mm	60.1

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

### Coil / Pilot 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

### PTFE Seal and Gasket Kits

Description	Model Number
1/2" NPT	APV23-T1-0000
3/4" NPT	APV23-T2-0000
1.0" NPT	APV23-T3-0000
1.25" NPT	APV23-T4-0000
1.5" NPT	APV23-T5-0000
2.0" NPT	APV23-T6-0000

Order Example: APV23-00-9127  
APV23, 3/4" NPT port size,  
120 VAC 50/60 Hz