

SKINNER 7000 Series General Purpose Four-Way Pilot and Manually Operated Valves

SPECIFICATIONS

Mechanical Characteristics

Standard Materials of Construction

- Body—Aluminum
- Seals—NBR
- Spool—Aluminum
- Sleeve Tube—Stainless Steel (304)
- Plunger—Stainless Steel (430FR)
- Stop—Stainless Steel (430FR)
- Springs—Stainless Steel (18-8)
- Shading Rings—Copper

Compatible Fluids

- Lubricated Air, Non-Lubricated Air, Inert Gases.
- Use of non-lubricated gaseous media will substantially limit valve life.

Agency Approval

- UL and CSA approvals are available on valves with applicable coil/enclosure combinations. For additional information see page 136.

Electrical Characteristics

Voltages

- DC—12, 24
- AC—24/60, 110/50-120/60, 208/60, 220/50-240/60, 440/50-480/60 (other AC/DC voltages available upon request)

Miscellaneous

Maximum Ambient Temperature

- 10 watt AC/DC—150°F
- 22 watt AC/DC—77°F
- Fluxtron/Magnelatch—122°F

7341 PILOT OPERATED ALUMINUM SOLENOID OPERATED VALVES—NBR SEALS

Pipe Size NPT	Orifice Size (inch)	Cv Factor	Operating Pressure Differential (PSI)				MAX. Fluid Temp. (F)	Pressure Vessel Number	UL/CSA** Approval	Const. Ref.	
			Min.*	Maximum							
				AC Ratings		DC Ratings					
				10 watt	22 watt	10 watt					22 watt
1/4*	1/4	1	15	150		150	165	73419AN2NN00	GP	56	
	1/4	1	15	150		150	165	73419AN2NNM0	GP	56	

* When valves have not been cycled for a period of time or when they are first used the minimum operating pressure will range from 15 to 30 PSI. This is caused by displacement of the lubricant at the point of contact between the spool and O-ring seals which increase friction. After the spool has

been cycled a few times the system will become completely lubricated, thus reducing friction so that operation at the rated minimum pressure differential is possible.

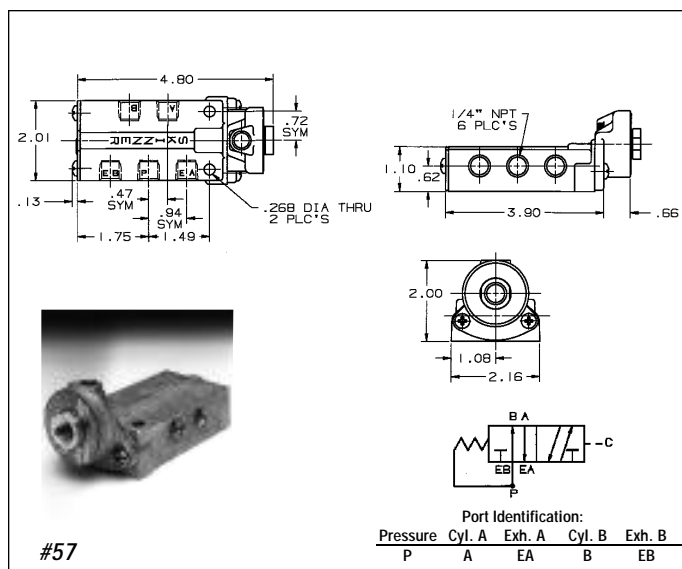
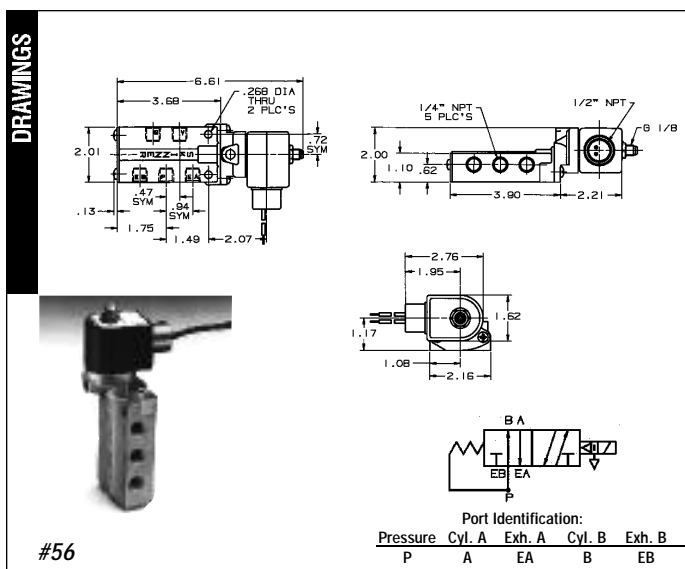
** GP=General Purpose Valves. See page 136 for additional agency approval information.

7541 REMOTE AIR PILOT OPERATED ALUMINUM VALVE—NBR SEALS

Pipe Size NPT	Orifice Size (inch)	Cv Factor	Operating Pressure Differential (PSI)		Pressure Vessel Number	Const. Ref.
			Min.	Max.		
1/4"	1/4	1	*	150	75419AN2NN00	57

* Remote pilot pressure to operate the valve = 20 PSI + 1/3 (main line pressure)

DRAWINGS



7000 Series General Purpose Sealed Four-Way Pilot and Manually Operated Valves

Hand Lever Operated Valves

Two-position spool valves are available with no spring return, spring return with cylinder B port open, or spring return with cylinder B port open. Spring return models require the operator to move the handle in one direction and hold it to provide the function. The no-

spring model will remain in either position without holding.

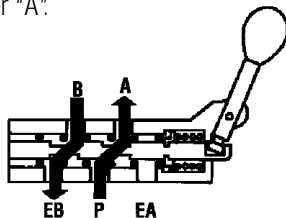
A three-position spool valve is available with all ports closed in its normal position. The handle is moved and held in one

direction to open one cylinder port and to the opposite direction to open the other cylinder port. The spool is spring centered and the handle is normally in the center or upright position.

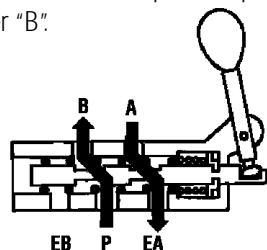
Pipe Size NPT	Orifice Size (inch)	Cv Factor	Operating Pressure Differential (PSI)		Catalog Number	Const. Ref.
			Minimum	Maximum		
1/4"	1/4	1	0	150	76419AN2NNCA	58
	1/4	1	0	150	76419AN2NNCB	58
	1/4	1	0	150	76429AN2NN00	58
	1/4	1	0	150	76469AN2NN00	58

Types of Operation

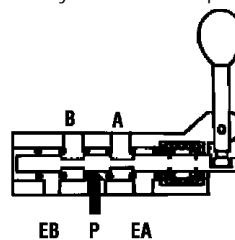
Valve 76419AN2NNCA: Two-position, Spring Return, cylinder "A" Open. On this valve cylinder "A" is open to the pressure inlet. To open cylinder "B" to pressure, the lever must be moved toward the valve and held in this position. Once released, the spring will return the spool to open cylinder "A".



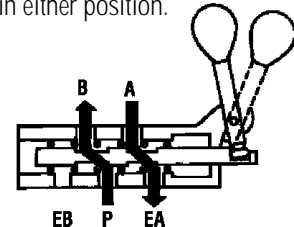
Valve 76419AN2NNCB: Two-position, Spring Return, cylinder "B" Open. On this valve, cylinder "B" is open to the pressure inlet. To open cylinder "A" to pressure, the lever must be moved away from the valve and held in this position. Once released, the spring will return the spool to open cylinder "B".



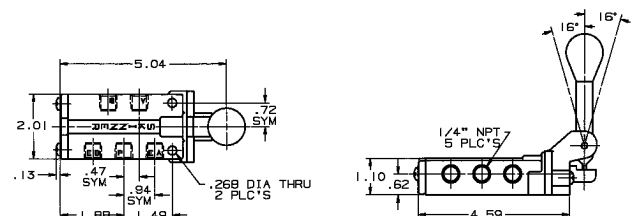
Valve 76429AN2NN00: Three-Position, Spring Centered, All Ports Closed. On this model the spring and retainers are designed so that the spool is centered, all ports are closed, and the hand lever is in the center position. When the lever is moved toward the valve and held, cylinder "B" is open to pressure and cylinder "A" is open to exhaust. When the lever is moved away from the valve and held, cylinder "A" is open to pressure and cylinder "B" is open to exhaust.



Valve 76469AN2NN00: Two-position No Spring Return. Permits the operator to open cylinder "B" to pressure and cylinder "A" to exhaust when the lever is moved forward, and to reverse the process when the lever is moved in the opposite direction. Since there is no spring, the spool can be left in either position.



DRAWINGS



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