

VANGUARD Solenoid Pilot 3/2 Valves with Lockout and DPB Functions

V485 Models Port Sizes: 1/4 to 1

Model Shown: V485-4N4



- ◆ Manual lockout control; can be padlocked in the closed position.
- ◆ Delayed pressure buildup (DPB); rate of pressure buildup adjustable.
- ◆ 3-Way poppet valve. Available in two body sizes and five port sizes.
- ◆ Uses solenoid pilot control.
- ◆ Solenoids CSA approved.
- ◆ Threaded exhaust port to accommodate a silencer or a line for remote exhausting.
- ◆ NPTF port threads; optional BSPP threads.

SPECIFICATIONS

Media Temperature:

40° to 175°F (4° to 80°C).

Ambient Temperature:

40° to 120°F (4° to 50°C).

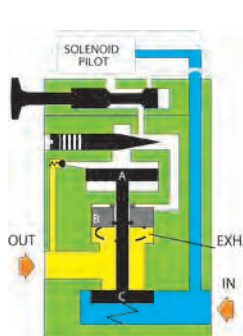
Fluid Media: Compressed air.

Inlet Pressure: 15 to 150 psig (1 to 10 bar).

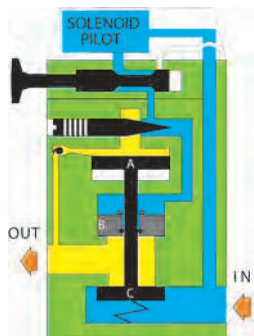
Solenoid Voltages: 110 volts 50/60 Hz standard.

Optional available voltages shown on following page.

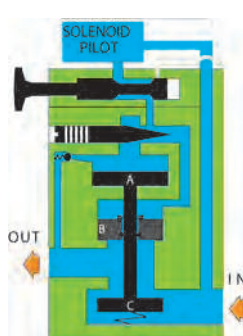
VALVE OPERATION



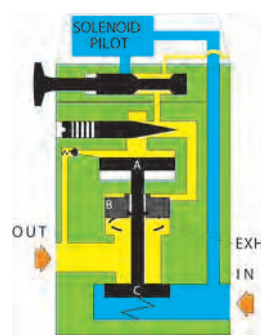
Lockout open and pilot not energized. Inlet air is blocked by inlet poppet C. Any downstream pressure forces sliding piston B upward. This opens the exhaust port and vents the downstream air.



Lockout open and pilot energized. Pilot air forces piston B downward to close exhaust port. Pilot air also flows past the metering pin, opens the ball check, and slowly pressurizes the outlet line. Pressure is also building up on piston A.



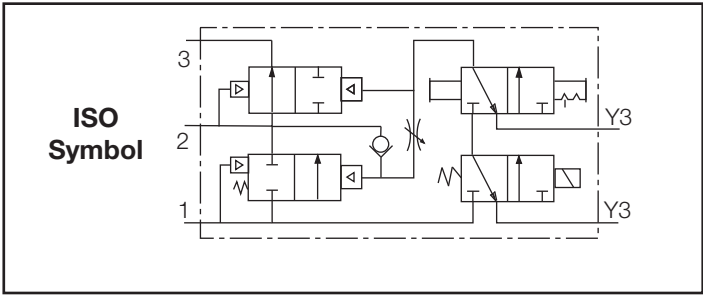
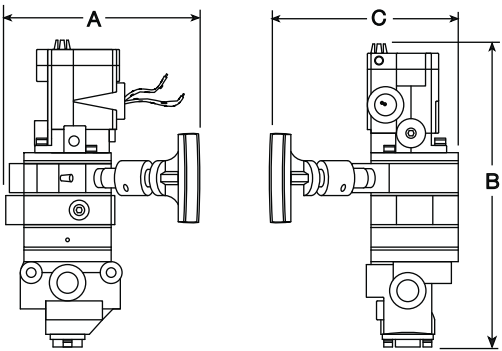
When the pressure on piston A reaches 50% of inlet pressure, the piston is forced downward, opening inlet poppet C. Inlet air now flows freely to the outlet port.



Lockout closed. At any time the lockout handle can be pushed inward, closing off the flow of pilot air. Pilot air above pistons A and B is then vented through the exhaust port. Piston A moves upward closing inlet poppet C. Sliding piston B moves upward opening the exhaust port and venting the downstream line.

DIMENSIONS inches (mm)

Port Sizes		Average c_v		A	B	C
In-Out	Exh	1 to 2	2 to 3			
1/4	1/2	2.5	3.1			
3/8	1/2	3.6	5.3	6.1 (153)	9.8 (249)	6.3 (161)
1/2	1/2	3.3	5.3			
1/2	1	6.3	9.2			
3/4	1	7.7	11	6.6 (167)	10.6 (268)	6.3 (161)
1	1	8.0	12			



ORDERING INFORMATION

Select the port sizes in the sample model number below to specify the valve you want.

V485 - A - 2 N4 W

VOLTAGE REQUIREMENT

- 110/50Hz, 110-120/60Hz (AC)..... Leave Blank
- 12/50-60Hz (AC) -A
- 24/50-60Hz (AC) -B
- 48/50-60Hz (AC) -C
- 220/50, 220-240/60Hz (AC) -D
- 12v (DC) -E
- 24v (DC) -F
- 48v (DC) -G
- 120v (DC) -H

INLET/OUTLET PORTS

- 1/4 NPTF.....2
- 3/8 NPTF.....3
- 1/2 NPTF.....4
- 3/4 NPTF.....6
- 1 NPTF.....8

PORT TYPE

- NPTF threads Leave Blank
- BSPP threads W

EXHAUST PORT SIZE:

- 1/2" exhaust port.....N4
for 1/4, 3/8, 1/2 inlet / outlet ports.
- 1" exhaust port.....N8
for 1/2, 3/4, 1 inlet / outlet ports