



# PILOT VALVE (Manual Reset Type)

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## Valve Operation

MV29176-SP-56L-D-MO-A & MV29178-SP-56L-D-MO-A are 3 Way 2-Position, Universal operation, Manual palm button & latch pin, Air latch pilot with spring return pilot valves, manual reset type.

To open the valve, supply signal pressure (within the required minimum pilot pressure range) to the Pilot port or engaging the Manual Latch Pin (Manual Latch Pin releases when pilot port is pressurized) and manually pull the palm button to actuate, the valve as below control table (state 1), the P2 port will open to OUT port and P1 port will be block. Once Pulling palm button outward and applied pilot signal pressure, the valve's normal in-service placement will be maintained.

To close the valve, when the pilot port signal pressure drop to lower than 20psi (1.37bar), the valve will spring return to close as below control table (state 2), the P1 port will open to OUT port and P2 port will be block.

When there is no pilot signal or the pilot pressure lower than min operating pressure, engaging latching pin will keep the valve open, Latching pin disengage when pilot pressure is present as control table (State 1).

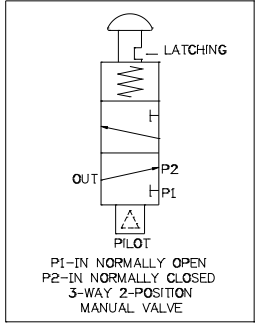
\*Note: 1. Valve is a universal operation, when select P2 port as IN port, the valve is normally closed. When select P1 port as IN port the valve is normally open.  
2. The palm button can't push to close the valve when the Pilot port pressure signal within the required minimum pilot pressure range.

3. When the Pilot signal pressure drop within 6 to 18psi, the valve will spring to close, reintroduction of the pilot signal pressure to the required min. pilot pressure, the valve will auto reset to open without pulling the palm button. The valve required to manually pull to open is only when the pilot signal pressure drop to lower than 5psi (0.34bar).

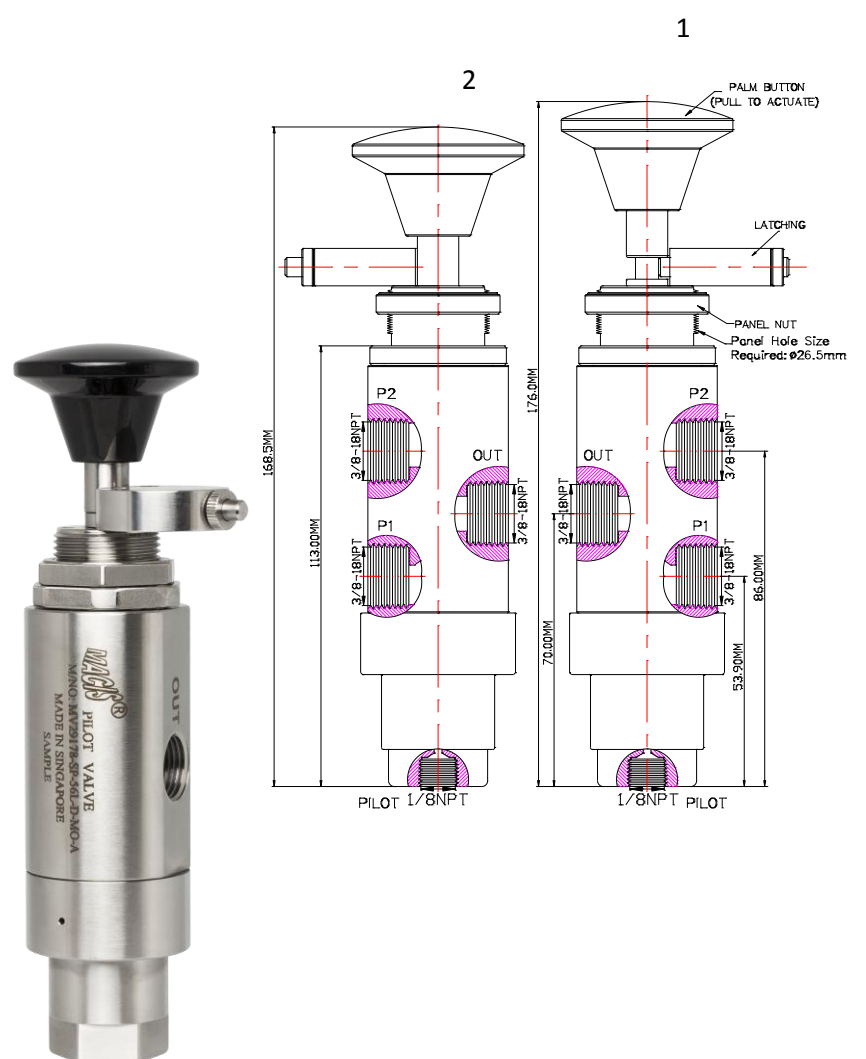
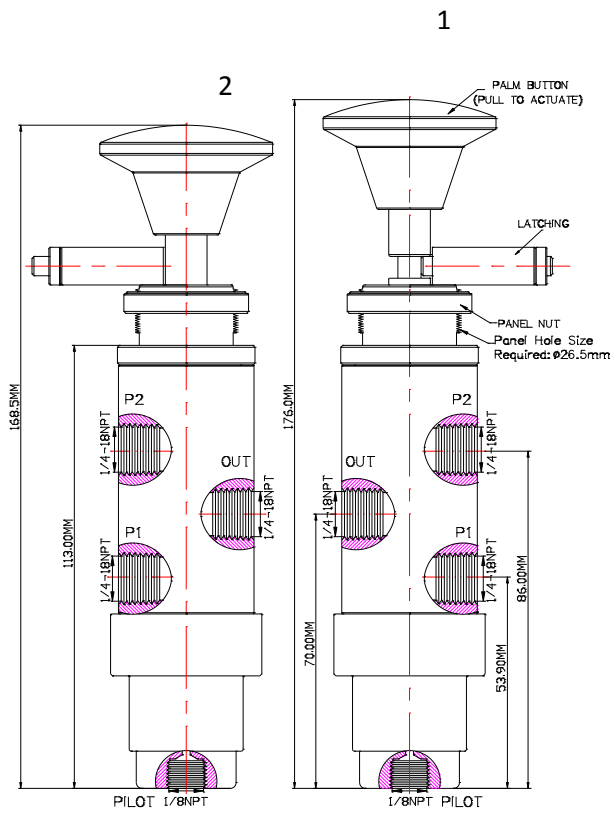
4. If P1 or P2 port use as the exhaust, the backpressure cannot exceed more than 5psi (0.34bar)

Flow Control Table (Palm Button)

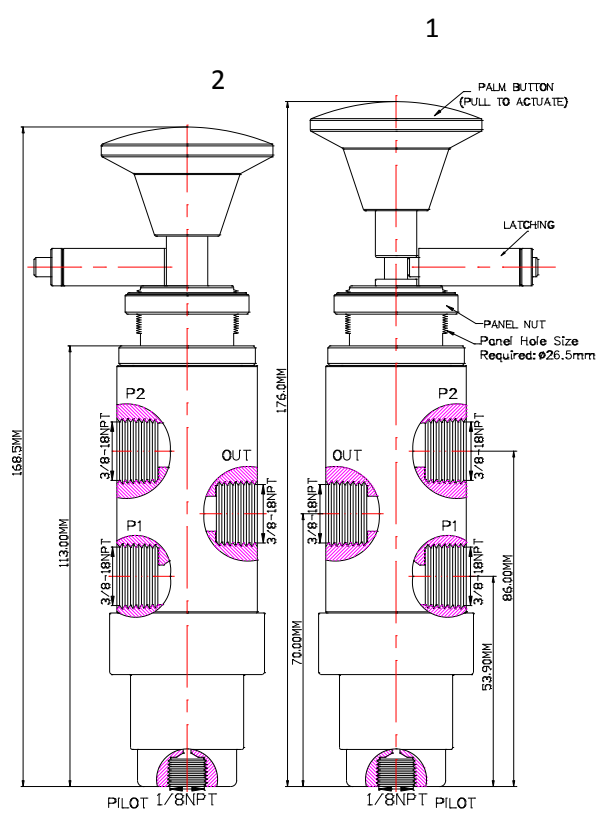
STATE	P1	P2	OUT	PILOT	Palm Button
1	-	O	O	O	PULL
2	O	-	O	-	-



Ordering Ref : MV 29176-SP-56L-D-MO-A



Ordering Ref : MV 29178-SP-56L-D-MO-A



## Specification

Control Application	3-Way 2-Position, Universal Operation, Manual Palm Button, Manual Latch Pin, Air Latch Pilot with Spring Return. Manual Reset Type	Distinctions	<u>Ordering Ref no</u>	<u>Port Connection Size</u>	<u>Exterior Shape</u>
Working Media	Air		MV 29176-SP-56L-D-MO-A :	P1, P2 & OUT Ports: ¼" NPT F Pilot Port : 1/8" NPT F	Circular Ø 38.1 mm (1 ½")
Net Weight	1.0kg	MV 29178-SP-56L-D-MO-A :	P1, P2 & OUT Ports : 3/8" NPT F Pilot Port : 1/8" NPT F	Circular Ø 40.0mm (1 37/64")	
Pilot Pressure Range	28 - 300 PSI (2.0 – 20.6bar)				
Max Working Pressure	300 PSI (20.6bar)				
Temperature Range	- 30°C to 120°C <i>Other Temperature Ranges available. Consult Factory</i>				
Material(Valve Body)	316 L				
Panel Hole Size	Ø 26.5 mm (1 3/64")				
Seal Material	Viton(FKM) <i>Other Seal Material Available Upon Request</i>				
Material (Palm Button)	Polyamide <i>Other Material Available Upon Request</i>				
Flow Rate	Cv = 1.65				

\*\* Measurement stated are with tolerance of +/-10%. Optional Parts/Material are available upon request.

MACIS PTE LTD

Blk 3015A Ubi Road 1, #01-02 & #01-06 Kampong Ubi Industrial Estate, Singapore 408705  
Email : [sales@macis.com.sg](mailto:sales@macis.com.sg) TEL : 65-6749 6011 / 65- 6749 7882 FAX : 65-6749 1398