






## Typical Applications for using DME Pneumatic Valve Gate Products


This Applications note is to help customers understand the overview of DME Pneumatic Valve Gate Control Products and how they are integrated with other DME Control Products. It is not intended to reference the Injection Molding Valve Gate Components other than the connectors that may be used to interface to them.

### Typical Pneumatic Control Applications


<p>4 ZONE PNEUMATIC COMPONENTS</p>  <p>Users Manual</p> <p>VCTB4000 Controller</p>	<p>Users Manual</p>  <p>VCAP0400 w/ 10 Ft. DB25 Cable 1/4 NPT Air Inlet</p> <p>See DME MRO Cat. for miscellaneous Air Regulators, Hoses, Fittings, Etc.</p>	 <p>NY44-100 or PE44-100 100 Ft. 1/4" Tubing DME MRO VCAP-Mold</p>  <p>56844 DME MRO 1/4" Tubing 1/4" NPT 2 per Zone on Mold</p>  <p>52640 DME MRO 1/4" Tubing Plug For Unused Zones 2 per Zone on VCAP</p>	<p><u>Customer Supplied</u></p> <p>Electrical 120 VAC US Plug supplied under 7 amps. Can use 115 to 255 VAC 50/60 Hz.</p> <p>Trigger Signal Dry Contact Closure (Typically from Injection Forward)</p> <p>Shop Air about 100PSI Avoid using disconnects which restrict air flow and use air hose with ball type valves with full flow for best response. Should have Air Filter / Regulator</p>
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<p>4 ZONE PNEUMATIC COMPONENTS</p>  <p>Users Manual</p> <p>VCTB-03-024D-16 Controller with Optional FSSL-0001 Floorstand</p>	<p>Users Manual</p>  <p>VCAP0400 w/ 10 Ft. DB25 Cable 1/4 NPT Air Inlet</p> <p>See DME MRO Cat. for miscellaneous Air Regulators, Hoses, Fittings, Etc.</p>	 <p>NY44-100 or PE44-100 100 Ft. 1/4" Tubing DME MRO VCAP-Mold</p>  <p>56844 DME MRO 1/4" Tubing 1/4" NPT 2 per Zone on Mold</p>  <p>52640 DME MRO 1/4" Tubing Plug For Unused Zones 2 per Zone on VCAP</p>	<p><u>Customer Supplied</u></p> <p>Electrical 120 VAC US Plug supplied under 7 amps. Can use 115 to 255 VAC 50/60 Hz.</p> <p>Trigger Signal Dry Contact Closure (Typically from Injection Forward)</p> <p>Alarm Output Connector with Crimp Pins to be wired by customer and used by Injection Molding Machine to stop next Trigger Signal when Alarm Occurs.</p> <p>Shop Air about 100PSI Avoid using disconnects which restrict air flow and use air hose with ball type valves with full flow for best response. Should have Air Filter / Regulator</p>
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**6 ZONE PNEUMATIC COMPONENTS**




**Users Manual**




**Users Manual**

**VCAP0600**  
w/ 10 Ft. DB25 Cable  
1/4 NPT Air Inlet


See DME MRO Cat. for miscellaneous Air Regulators, Hoses, Fittings, Etc.



NY44-100 or PE44-100  
100 Ft. 1/4" Tubing  
DME MRO VCAP-Mold



56844 DME MRO  
1/4" Tubing 1/4" NPT  
2 per Zone on Mold




52640 DME MRO  
1/4" Tubing Plug  
For Unused Zones  
2 per Zone on VCAP


**Customer Supplied**  
Electrical 120 VAC US Plug supplied under 7 amps. Can use 115 to 255 VAC 50/60 Hz.  
Trigger Signal Dry Contact Closure (Typically from Injection Forward)  
Alarm Output Connector with Crimp Pins to be wired by customer and used by Injection Molding Machine to stop next Trigger Signal when Alarm Occurs.  
Shop Air about 100PSI  
Avoid using disconnects which restrict air flow and use air hose with ball type valves with full flow for best response. Should have Air Filter / Regulator

VCTB-03-024D-16 Controller with Optional FSSL-0001 Floorstand

**8 ZONE PNEUMATIC COMPONENTS**




**Users Manual**




**Users Manual**

**VCAP0800**  
w/ 10 Ft. DB25 Cable  
1/4 NPT Air Inlet


See DME MRO Cat. for miscellaneous Air Regulators, Hoses, Fittings, Etc.



NY44-100 or PE44-100  
100 Ft. 1/4" Tubing  
DME MRO VCAP-Mold



56844 DME MRO  
1/4" Tubing 1/4" NPT  
2 per Zone on Mold




52640 DME MRO  
1/4" Tubing Plug  
For Unused Zones  
2 per Zone on VCAP


**Customer Supplied**  
Electrical 120 VAC US Plug supplied under 7 amps. Can use 115 to 255 VAC 50/60 Hz.  
Trigger Signal Dry Contact Closure (Typically from Injection Forward)  
Alarm Output Connector with Crimp Pins to be wired by customer and used by Injection Molding Machine to stop next Trigger Signal when Alarm Occurs.  
Shop Air about 100PSI  
Avoid using disconnects which restrict air flow and use air hose with ball type valves with full flow for best response. Should have Air Filter / Regulator

VCTB-03-024D-16 Controller with Optional FSSL-0001 Floorstand

**10 ZONE PNEUMATIC COMPONENTS**




**Users Manual**




**Users Manual**

**VCAP1000**  
w/ 10 Ft. DB25 Cable  
1/4 NPT Air Inlet


See DME MRO Cat. for miscellaneous Air Regulators, Hoses, Fittings, Etc.



NY44-100 or PE44-100  
100 Ft. 1/4" Tubing  
DME MRO VCAP-Mold



56844 DME MRO  
1/4" Tubing 1/4" NPT  
2 per Zone on Mold




52640 DME MRO  
1/4" Tubing Plug  
For Unused Zones  
2 per Zone on VCAP

**Customer Supplied**  
Electrical 120 VAC US Plug supplied under 7 amps. Can use 115 to 255 VAC 50/60 Hz.  
Trigger Signal Dry Contact Closure (Typically from Injection Forward)  
Alarm Output Connector with Crimp Pins to be wired by customer and used by Injection Molding Machine to stop next Trigger Signal when Alarm Occurs.  
Shop Air about 100PSI  
Avoid using disconnects which restrict air flow and use air hose with ball type valves with full flow for best response. Should have Air Filter / Regulator


VCTB-03-024D-16 Controller with Optional FSSL-0001 Floorstand

**12 ZONE PNEUMATIC COMPONENTS**




VCTB-03-024D-16 Controller with Optional FSSL-0001 Floorstand

Users Manual




VCAP1200 w/ 10 Ft. DB25 Cable 1/4 NPT Air Inlet


See DME MRO Cat. for miscellaneous Air Regulators, Hoses, Fittings, Etc.



NY44-100 or PE44-100 100 Ft. 1/4" Tubing DME MRO VCAP-Mold




56844 DME MRO 1/4" Tubing 1/4" NPT 2 per Zone on Mold



52640 DME MRO 1/4" Tubing Plug For Unused Zones 2 per Zone on VCAP


**Customer Supplied**  
 Electrical 120 VAC US Plug supplied under 7 amps. Can use 115 to 255 VAC 50/60 Hz.  
 Trigger Signal Dry Contact Closure (Typically from Injection Forward)  
 Alarm Output Connector with Crimp Pins to be wired by customer and used by Injection Molding Machine to stop next Trigger Signal when Alarm Occurs.  
 Shop Air about 100PSI  
 Avoid using disconnects which restrict air flow and use air hose with ball type valves with full flow for best response. Should have Air Filter / Regulator

**16 ZONE PNEUMATIC COMPONENTS**




VCTB-03-024D-16 Controller with Optional FSSL-0001 Floorstand

Users Manual




VCAP0800

Users Manual




VCAP0800 w/ 10 Ft. DB25 Cable 1/4 NPT Air Inlet


See DME MRO Cat. for miscellaneous Air Regulators, Hoses, Fittings, Etc.



NY44-100 or PE44-100 100 Ft. 1/4" Tubing DME MRO VCAP-Mold



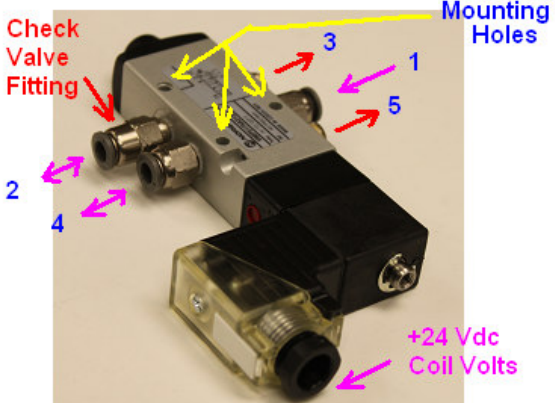
56844 DME MRO 1/4" Tubing 1/4" NPT 2 per Zone on Mold



52640 DME MRO 1/4" Tubing Plug For Unused Zones 2 per Zone on VCAP

**Customer Supplied**  
 Electrical 120 VAC US Plug supplied under 7 amps. Can use 115 to 255 VAC 50/60 Hz.  
 Trigger Signal Dry Contact Closure (Typically from Injection Forward)  
 Alarm Output Connector with Crimp Pins to be wired by customer and used by Injection Molding Machine to stop next Trigger Signal when Alarm Occurs.  
 Shop Air about 100PSI  
 Avoid using disconnects which restrict air flow and use air hose with ball type valves with full flow for best response. Should have Air Filter / Regulator

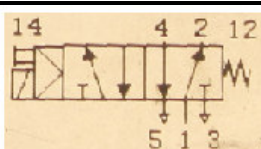
**Single Zone 24 Vdc Pneumatic Solenoid Valve**  
 - For Customer Special Applications  
 PSV-024D-01-001




Check Valve Fitting

Mounting Holes


+24 Vdc Coil Volts



1/4" Tubing 1,2,4 // Exhaust 3,5



NY44-100 or PE44-100 100 Ft. 1/4" Tubing DME MRO VCAP-Mold



56844 DME MRO 1/4" Tubing 1/4" NPT 2 per Zone on Mold

See DME MRO Cat. for miscellaneous Air Regulators, Hoses, Fittings, Etc.

**Customer Supplied**  
 Customer to Mount Valve.  
 Customer to provide port "1" pneumatic pressure source. About 100 PSI Shop Air.  
 Customer to supply 24 Vdc control signal to power 2 Watt Solenoid Coil.  
 Screw Terminal and Amber LED inside coil wiring area.  
 Check Valve is disabled when tubing pushed in.  
 - See TCM-03-024D Time Based single zone controller to control 24 Vdc Solenoid.