

VCAP-0400 THROUGH 1200

Air Valve Assemblies

4 Station through 12 Station

Plus Accessory VCAP01 Terminal Breakout Box



SAFETY

DME Company products have been designed to be safe and simple to operate. As with any electronic equipment and hot runner system, you must observe standard safety procedures to protect both yourself and the equipment.

To Prevent Injuries:

- Do not use these valves with more than 145 PSI air pressure.
- Do not apply more than 26.4 VDC to the valve assembly.
- To avoid injury or fire hazard, do not operate this product in an explosive atmosphere.
- To avoid burn hazards, do not operate valve gates with operator gates open. Correct hookup of valve gates should only be performed with all operator guards in place.
- To avoid burn hazards and possible damage to equipment, do not leave hot runner systems at elevated temperature for extended periods of time. When the mold and machine are not operating, disconnect the molding machines injection unit from the hot runner system so that pressure may discharge through the sprue or manifold extension nozzle. Make sure the molding machines purge guard is in place.
- DO NOT look into the hot runner system when actuating valve gates. Serious burns could occur. The molding machine gate should be closed when ever operating a valve gate.

To Prevent Product Damage:

- Do not operate this product from an air pressure source of more than 145 PSI.
- Do not apply more than 26.4 VDC to this valve assembly.

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WARRANTY

DME Company warrants that this product will be free from defects in materials and workmanship for a period of one (1) year from the date of shipment. If any such product proves defective during this warranty period, DME Company, at its option, either will repair the defective product without charge for parts and labor, or will provide a replacement in exchange for the defective product.

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care. DME Company shall not be obligated to furnish service under this warranty a) to repair damage resulting from attempts by personnel other than DME Company representatives to repair or service the product; b) to repair damage resulting from improper use or connection to incompatible equipment; or c) to service a product that has been modified or integrated with other products when the effect of such modification or integration increases the time or difficulty of servicing the product.

VCAP-0400 Through 1200 Multi-Station Valve assemblies

GENERAL DESCRIPTION

This manual describes the installation and operation of the VCAP valve assemblies.

The VCAP series offers 4 station (0400), 6 station (0600), 8 station (0800), 10 station (1000) and 12 station (1200) valve island assemblies.

The valves in the assemblies are single solenoid, spring returned. The solenoids are intended to run from 24 VDC +/- 10%.

Maximum rated air pressure is 145 PSI (10 BAR). The air supply should be filtered to 40 μ m. The air supply can be lubricated or nonlubricated. Dry air is preferred but the valve is constructed in such a way as to tolerate a fair degree of moisture.

Quick connects are provided on all air outputs to accept 1/4" tubing. The deenergized outputs (for closing the valve gates) have check valves in them so that unused valves do not leak air.

UNPACKING AND INSPECTION

After unpacking, inspect the valve assembly and check for any damage that may have occurred during shipment.

INSTALLATION

It will be necessary to provide an air inlet into the valve assembly. See below.

Air Input
goes here
(1/4" NPT)



Electrical Connections:

Connection to the valve is accomplished with a single DB-025 connector, regardless of the number of valves. Pin out of the connector is as follows:

Pin 1: Valve 1 +
Pin 2: Valve 2 +
Pin 3: Valve 3 +



Pin 12: Valve 12 +
Pin 13: Common -

All valves run at 24 VDC +/- 10%

Valve Gate Connections:

The air connections closest to the valve bodies are the valve close connections. The ones furthest away are the open connections.

Close
Connections

Open
Connections



Exhaust Outputs

There are four mounting holes through the body of the valve island. These can be used to fasten the assembly to the fixed platen, top of the mold any where else that is convenient. Maximum diameter is 0.1780" (4.52 mm)

Maximum recommended ambient temperature is 122°F (50°C). Minimum recommended temperature is 35°F (2°C).

Indicator LEDs on the valves illuminate when the solenoid is energized.

SPECIFICATIONS

Operating Pressure

29 to 145 PSI (2 to 10 bar)

Air Supply Inlet

1/4 inch NPT female

Air Connections to Valve Gate Cylinders

1/4 inch quick connect fittings

Deenergized positions have check valves. Energized positions do not.

Recommended Temperature Range

Minimum: 35°F (2°C)

Maximum: 122°F (50°C)

Flow Rating

CV = 0.56

Volume = 550 L/min

Operating Voltage

24 VDC +/- 10% (21.6 to 26.4 VDC)

Electrical Connection

DB-025 Male

See pin out on page 4

Protection Classification

IP65 and NEMA 4

PELV

Electrical protection class 3)

RETURN POLICY

The DME® VCAP-0400™ through VCAP-1200™ are warranted for 1-year parts and labor as long as maximum ratings are not exceeded. Contact DME Customer Service for return authorization for repairs, or warranties.

DME Customer Service

In U.S.: 1-800-626-6653

In Canada: 1-905-677-6370

SERVICE CENTER U.S.A.

DME WORLD HEADQUARTERS

42827 IRWIN DRIVE

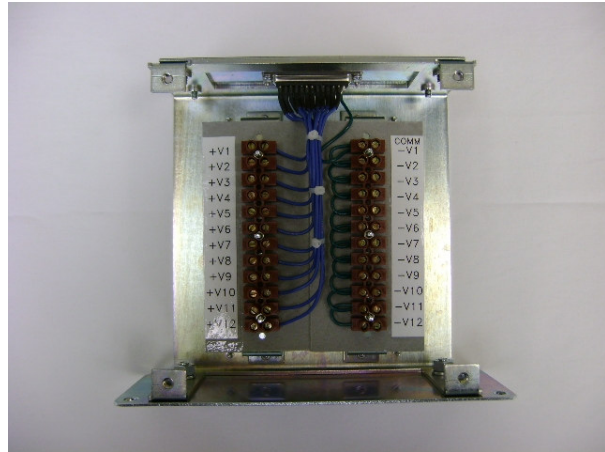
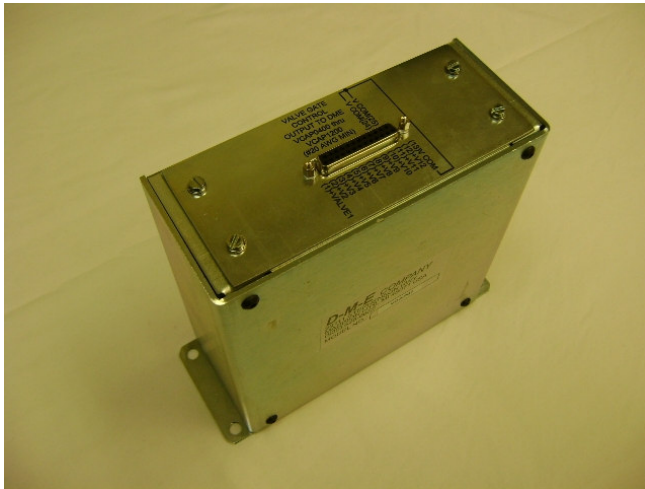
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VCAP01 Terminal Breakout Box Accessory

This option allows customers to use the provided cable to the Air Manifold Valves and then connect their +24Vdc Valve Control to provided screw terminals.

Two views of the VCAP01 Accessory Terminal Breakout Box Shown.



VCAP-0400 Air Manifold shown – Connector will attach to VCAP01 Box for customer wiring.

