

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Humphrey M31E1* at our website: ***Click HERE***

Humphrey Mini-Myte Air Valves

* Available with U.L. Rating, consult factory

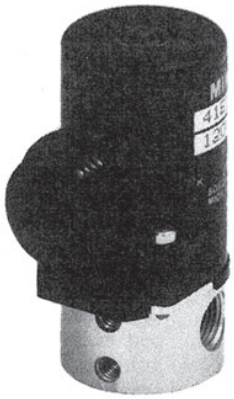
Mini-Myte air valves are a series of direct-operating, 3-way and 4-way, single- solenoid, 2-position, spring-return valves that provide quiet operation with no AC hum. A non-detented manual override is standard.

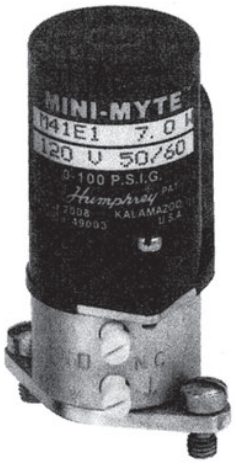
The solenoid cover of a Mini-Myte valve is supplied with both a push-in grommet and a snap-in, two piece, 1/2-inch conduit connector for installation flexibility.

Mini-Myte 3-way and 4-way valves are identical in size for consistent, uniform appearance. Their versatile mounting options include base mounting, mounting with body holes, mounting directly in line, or mounting on either of two different manifold styles. One manifold has a common inlet, the other has a common inlet and a common (captured) exhaust.









31E1
Model 31E1 is a 3-way valve that can be used normally closed, normally open, or as a selector or diverter.

When used as a 2-way valve, the unused IN port must be plugged. Use Humphrey Model PF plug fitting.



M31E1
Model M31E1 is a version of the 31E1 valve for mounting on either Mini-Myte MM or MMC manifolds. The NC or NO function of this valve is determined by the orientation of the valve on the manifold. Valves seal to manifold with push-in grommets that will not fall out. There are no gaskets to tear or replace.

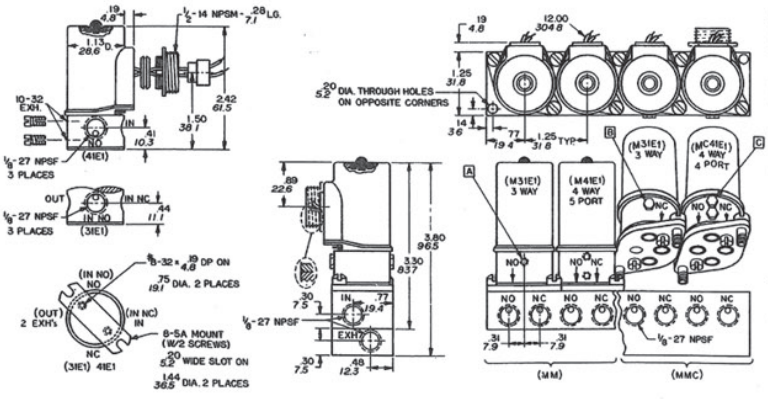


41E1
Model 41E1 is a 4-way, 5-port valve featuring unique exhaust port flow-control screws that independently control exhaust from NC or NO ports while saving space and eliminating the frequent need for externally mounted and plumbed flow controls. Two Humphrey Model 97-21 metering screws are supplied loose.



M41E1
Model M41E1 is a manifold-mounted version of the 41E1 valve intended primarily for use on Mini-Myte MM manifolds. Two exhaust ports can be metered with the two Humphrey Model 97-21 metering screws (two of these are supplied loose).



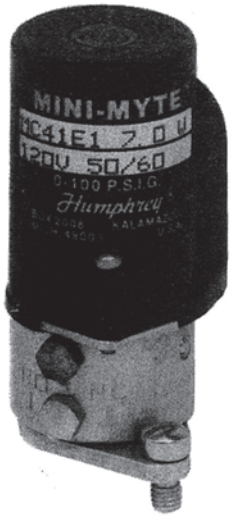


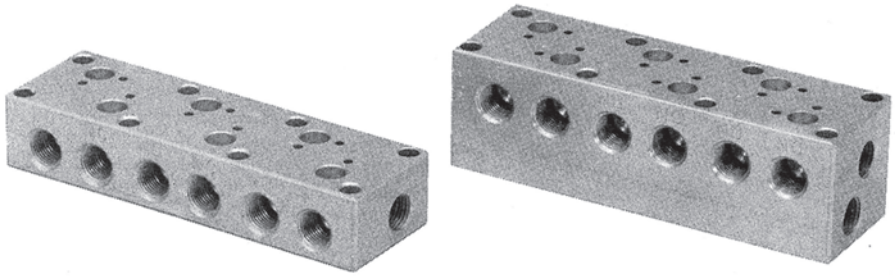
Mini-Myte Manifold Valve Installation Instructions

Letter references keyed to illustration.

Align valve body arrows with manifold port for desired flow-path, i.e. NC/NO.

MANIFOLD	VALVE	DISPOSITION OF #10-32 VALVE PORT PLUGS AFTER INSTALLATION OF VALVE ON MANIFOLD
MM Series Common IN	M31E1	For 3-way (exhaust), remove Port Plug A above NO manifold ports. For 2-way function, do not remove port plug A.
	M41E1	Valve is ready to use as-is.
	MC41E1	Remove Plugs C (Exhaust).
MMC Series Common IN and Common EXHAUST	M31E1	Do not remove Port Plug B. Valve exhausts into manifold. For 2-way function substitute #43-42 Block-Off Seal to block the exhaust.
	M41E1	Valve is ready to use as is. Valve exhausts to atmosphere.
	MC41E1	Do not remove Port Plug C. Valve exhausts into manifold.





MC41E1

Model MC41E1 is a manifold-mounted version of the 41E1 valve which has been designed specifically for use on Mini-Myte MMC manifolds with common (captured) exhaust. Captured exhaust is desirable when exhausting media must be piped away to avoid potential contamination of the ambient area, as in clean rooms.



Mini-Myte MM and MMC Manifolds

Manifolds permit centralized location of control valves, simplify plumbing, and reduce installation and maintenance costs. Valves and manifolds can be sub-assembled and placed in the end-product as a complete control unit, thereby saving the time and labor involved in installing valves individually.

MM Manifolds

Model MM Manifolds are of sturdy, one-piece extruded aluminum construction. All cylinder outlet ports are conveniently located on one side of the manifold. MM manifolds have a common inlet and accept any combination of Mini-Myte manifold valves. MM manifolds are available in models offering two through seven stations.

MMC Manifolds

Model MMC manifolds are similar to MM manifolds but feature a common (captured) exhaust. Captured exhaust is desirable when exhausting media must be piped away to avoid contamination of the ambient area, as in clean rooms. MMC manifolds are available in models offering two through seven stations.

Specifications

MEDIA:
Compressed Air (Consult factory for others)

PRESSURE RANGE:
0 to 100 psig (0 to 7.0 bars)

TEMPERATURE RANGE:
–30 to 130°F (–34.4 to 54.4°C)

OPERATING SPEEDS:
To 600 CPM

MATERIALS:
Aluminum, Stainless Steel, Buna N, Polyurethane, Polyester Plastic

LUBRICATION ..... 31E1 Not required
41E1 Required

FILTRATION ..... Recommended,
40 Microns Minimum

Air Flow to Atmosphere

MODEL	25 PSIG CFM	(1.7 BARS) LPM	100 PSIG CFM	(7.0 BARS) LPM
M/MC31E1	1.5	42.4	6.0	169.8
M/MC41E1	1.0	28.3	2.1	59.4

Weight

ACTUAL LBS	KGS
0.30	0.14
0.32	0.15

Electrical Specifications

MODEL	VOLTAGE	COIL NUMBER	WATTS	AMPS	OHMS	HEAT RISE (°C)	ON TIME SECONDS	OFF TIME SECONDS
M/31E1	24 DC	46-51	8.5	0.352	68	113.2	0.009	0.007
M/41E1	120 AC	46-52	7.0	0.084	800	95.2	0.007	0.041
MC/41E1								

Lead Wire: #22 AWG, Temperature Rating 80°C, Voltage Rating: 300 Volts, UL Style: 1007, CSA Type: TR-64, PVC Insulation.

Fill/Exhaust Times (Seconds)

	SUPPLY PRESSURE							
	At 50 psig (3.5 bars)				At 100 psig (7.0 bars)			
	Chamber Fill 0-40 psig (0-2.8 bars)		Exhaust 50-10 psig (3.5-.7 bars)		Chamber Fill 0-80 psig (0-5.5 bars)		Exhaust 100-20 psig (7.0-1.4 bars)	
	10 Cubic Inches (164cc)		100 Cubic Inches (1640cc)		10 Cubic Inches (164cc)		100 Cubic Inches (1640cc)	
MODEL	FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUST
M/MC31E1	0.295	0.364	2.850	3.840	0.316	0.447	3.080	5.990
M/MC41E1	0.837	1.155	8.700	12.758	0.933	1.400	9.560	15.110

See following page for Mini-Myte accessories.

Humphrey Mini-Myte Accessories



8-5A Mounting Base
Furnished with two machined screws and two Plastite screws. Use machined screws with Mini-Myte valves.



PF Plug Fitting
A #10-32 screw used to plug unused ports. Furnished with gaskets and sold in bags of 10 each.



97-21 Metering Screw
A #10-32 split nylon screw used for exhaust control. Sold in bags of 10 each.



RBF Reducer Bushing
A ⅛" NPT male to female #10-32 bushing for use with 97-21 Metering Screw to control exhaust of 31E1 valve. Sold in bags of 10 each.



BF Barbed Fitting
#10-32 male to female ⅛" O.D. tubing. Furnished with gaskets and sold in bags of 10 each.



BF1 Barbed Fitting
#10-32 male to female ¼" O.D. tubing. Use with ⅛" to 3⁄16" I.D. tubing. Supplied with gaskets and sold in bags of 10 each.



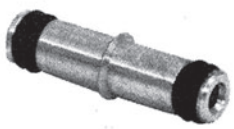
PBF1 Pipe Barbed Fitting
⅛" NPT male to female ¼" O.D. Use with ⅛" to 3⁄16" I.D. tubing. Supplied with gaskets and sold in bags of 10 each.



150-30A Muffler
#10-32 male thread. Fabricated of sintered bronze and furnished with gasket. Sold in bags of 10 each.



8-37A BOP Block-Off Plate
For suspending use of any MM or MMC Manifold station or providing for future addition of valves.



31-150A Manifold Port Connector
For linking manifolds together when more than a 7-station manifold is needed. Connects either manifold IN or EXHAUST ports. Does not change dimensions. Consider connecting supply air to IN ports on both ends of manifold to ensure adequate supply of air to valves, especially in rapid cycling applications.



43-42 Block-Off Seal (Red)
Substitute for any black "through" seal to isolate valve/manifold ports. Typical use: to provide separate supply pressure to M31E1 valve. Substitute #43-42 Block-Off Seal for valve "through" seal. The "through" seal is the seal that lines up with the manifold supply (IN) orifice, which is the smaller unthreaded hole located farthest from the manifold cylinder (NO and NC) ports. The separate supply pressure should be connected to the #10-32 valve port on the blind side of the manifold. Sold in bags of 10 each.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP