



Manifold mountable, solenoid-operated pivot valves for use with aggressive and high-purity fluids

- Compact size and footprint
- Low Power Consumption
- Fully Isolated Solenoid
- Dual Pivot Diaphragm
- High Cycle Life
- Low Internal Volume
- Fast Response Time
- Choice of PEEK™, PPS, EPDM and Viton® wetted parts
- Optional manual override
- Broad temperature and pressure range
- 2-way and 3-way valves with identical footprint
- No Pumping Effects

Easy Installation

The 039H and 079H series pivot valves are manifold mountable isolation valves designed for easy and efficient installation. All of the 2-way and 3-way versions have identical footprints to provide a symmetrical, interchangeable manifold configuration. The precise pivot mechanism ensures minimal internal volume. An optional lever permits manual operation of the valve.

Choice of inert wetted materials

Several wetted material choices are available to provide compatibility with a broad range of chemicals and environmental conditions. Choices are: EPDM or Viton® for the diaphragm and PPS, or PEEK™ for the body fluid path insert. The outer body housing (non-wetted) is always PPS.

Manifold Options

Bio-Chem Valve also offers customized manifolds in conjunction with the valves. This can eliminate production time and costs associated with design, testing, assembly, inventory, and order handling. For certain applications, such as early-stage instrument development, a stand-alone version is available consisting of a block attachment with 1/4"-28 flat-bottom ports. Contact a Bio-Chem Valve applications engineer for further information on manifold options.

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Specifications

Valve Series

The pivot valves are offered in two valve series, distinguished by the solenoid shell size:

Valve Series	Shell Diameter
039H	0.38 inches
079H	0.75 inches

Lead Wires

Valve Series	Lead Wires
039H	15" 28-Gauge Teflon® coated
079H	15" 26-Gauge Teflon® coated

Orifice diameter options & maximum operating pressures

Valve Series	Orifice Diameters	
	0.032" (0.80 mm)	0.062" (1.57 mm)
039H2	20 psi	n/a
039H3	20 psi	n/a
079H2	n/a	30 psi
079H3	n/a	30 psi

Note: Higher pressures are available, consult factory.

Stand-alone Version Port Threads

The block attachment of the stand-alone version has 1/4"-28 UNF flat bottom port threads.

Other port threads are available, such as M6 x 1.0, 10-32, 5/16"-24 and 1/8" NPT. Consult factory.

Internal Volumes (µL)

Valve Series	Orifice Diameter	Internal Volume
039H2	0.032"	21 µl
039H3	0.032"	21 µl
079H2	0.062"	50 µl
079H3	0.062"	55 µl

Wetted Material Options

Diaphragm Material Options

EPDM (Ethylene propylene rubber)
Viton® (Fluorine rubber)

Body Material Options

PPS (Polyphenylsulfide)
PEEK™ (Polyetheretherketone)

Electrical

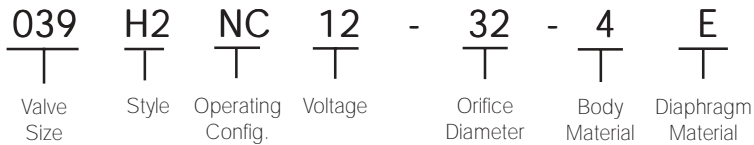
Valve Series	Voltage	Power @	Current @
		70°F (21°C)	70°F (21°C)
039H	12 VDC	1.9 Watts	0.17 amps
	24 VDC	1.9 Watts	0.08 amps
079H	12 VDC	2.7 Watts	0.22 amps
	24 VDC	2.7 Watts	0.11 amps

Ordering Information

1	Select valve size	039, 079
2	Indicate Style	H2 (2-way), H3 (three-way)
3	Indicate Operating Configuration	NC (normally-closed), NO (normally-open), MP (3-way)
4	Indicate voltage	12 VDC, 24 VDC, 115 VAC ¹ , 220 VAC ¹
5	Indicate orifice diameter (in 1/1000 inch) (See table on page 2 for available orifice sizes with specific models.)	32, 62
6	Body Material	4 (PPS), 5 (PEEK™)
7	Diaphragm material	E (EPDM), V (Viton®)
8	Stand alone option	SA

Note 1: Available on 079H series valves only.

Example P/N:



Options

Consult Bio-Chem Valve and Omnifit for options concerning:

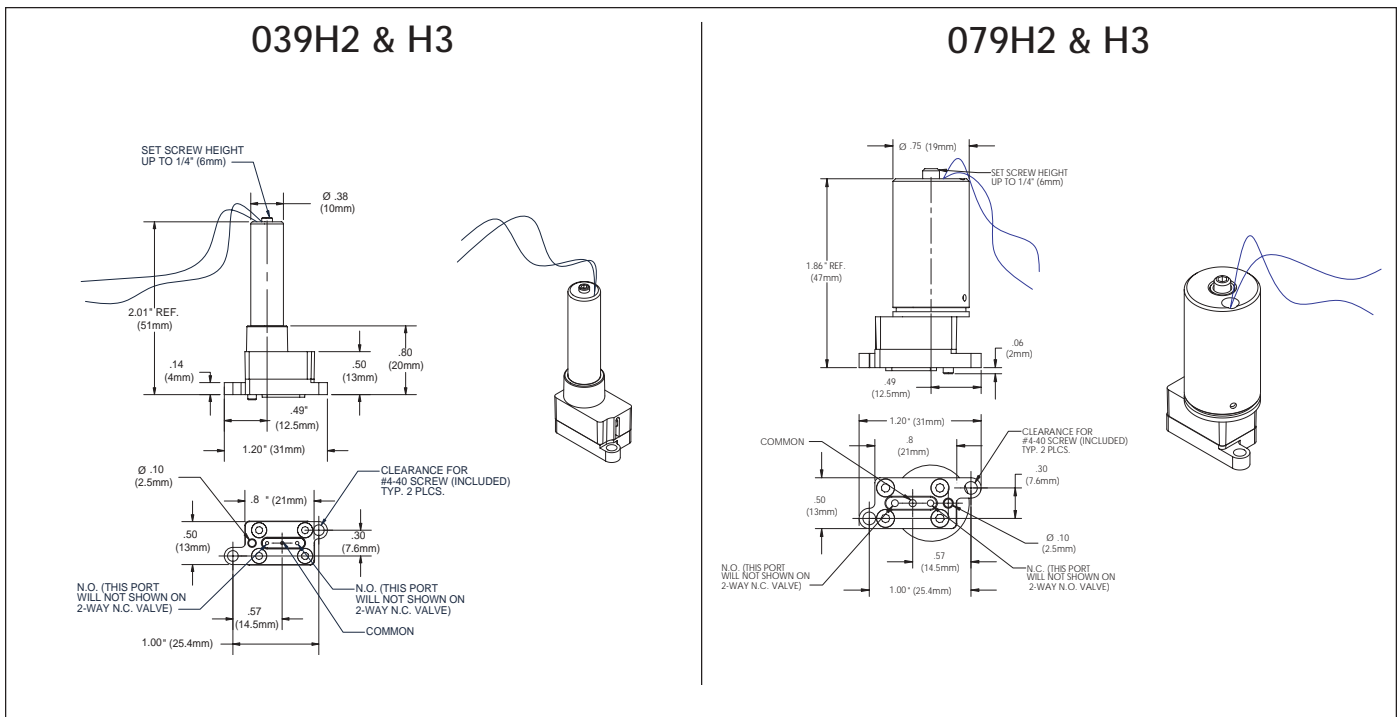
- Terminal connectors and non-standard lead wire lengths
- Above standard operating pressure requirements
- Manifold configurations

Accessories

Please see the following product specification sheets for accessories:

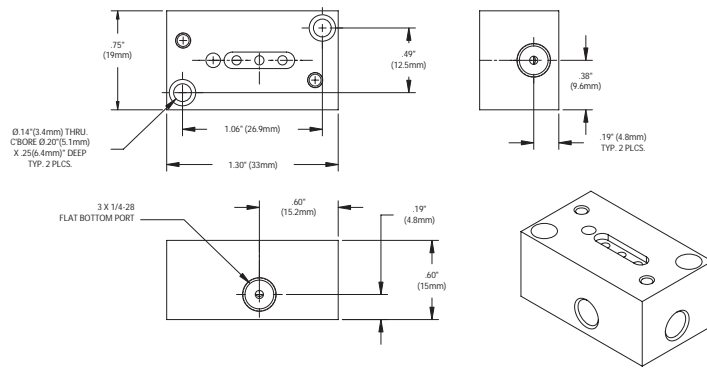
- Fitting Systems
- The Omni-Lok™ Fitting System
- Tubing Sets with The Omni-Lok™ Fitting System
- CoolCube™ control module

Installation Drawings

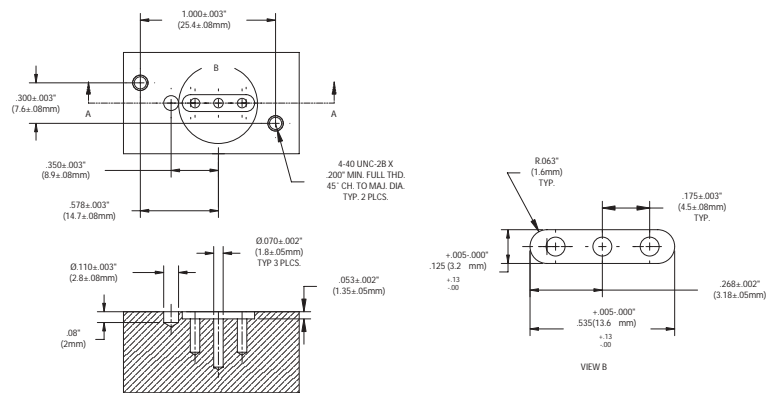


Installation Drawings (contd.)

Block for stand-alone version



Manifold Interface



Trademarks:

CoolCube™ is a trademark of Bio-Chem Valve Inc.
Omni-Lok™ is a trademark of Omnifit Ltd.
PEEK™ is a trademark of Victrex plc
Teflon® is a registered trademark of E.I. du Pont de Nemours and Company
Viton® is a registered trademark of DuPont Dow Elastomers