

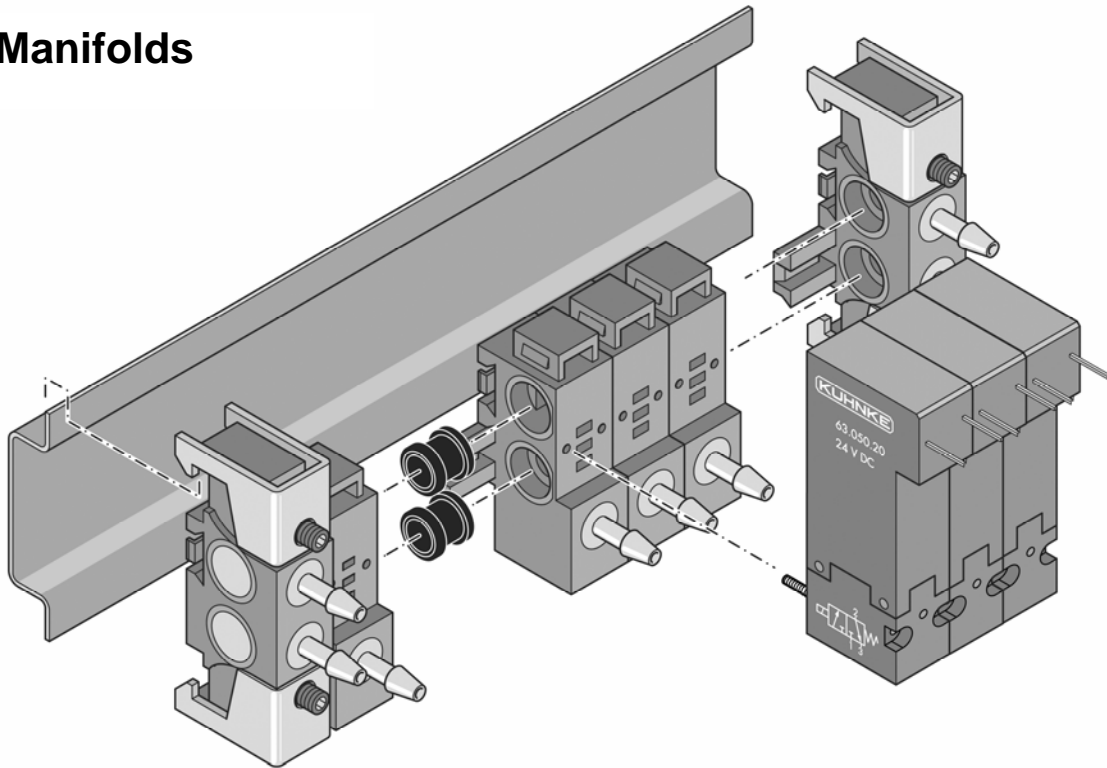


# Micro Solenoid Valves

## Series 63 Valve Accessories

Kuhnke Miniature Valves

### Modular Manifolds



Manifold Assembly,  
DIN Rail Version with  
Standard Size Valves

Series 63 Modular Manifolds can be built up to suit specific installation requirements. Components are available in 2 versions: for DIN rail, or surface mounting. Component sections consist of inlets, endplates, centre supports, centre inlets as well as valve bases. Special grommets, included with each module, are inserted between units to form a seal for internal common air supply and exhaust lines. Tabs at the bottom of each module interlock with adjacent sections to form the manifold. The module assembly is secured by tightening screws on the end modules to the panel surface or DIN rail.

Normally closed or normally open valve functions are achieved by assembling the valve bases in specific positions on the manifold, see manifold assembly notes.

Intermediate air supply modules and seal barriers can be used to construct manifolds with several air supply sources.

All air connections have barb fittings for 3mm I.D. tubing.

Valves are assembled on the built up manifold using a special seal and screws supplied in the valve package.

Electrical connections are dependent on the type of valve coil design selected.

Custom manifolds can be factory assembled for OEM applications.

#### Dimensions

Approximate manifold dimensions, including the standard size valves mounted, are 35mm (1 3/8") deep x 55mm (2 5/32") high x length. To determine length, add 10mm (3/8") for each module used in the assembly.

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Modules are moulded from Pocan, seals NBR, and have brass inserts for end caps and tube connections. The use of an intermediate support is recommended for each 8 valve positions on the manifold.

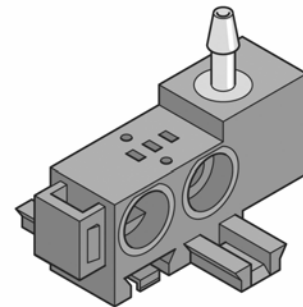
### Modular Manifolds–Valve Base Sections

- Base for 3/2 N.C. or N.O. Valve **63071-00**
- Base for 2/2 N.C. Valve **63071-10**
- Base for 2/2 N.O. Valve **63071-20**

Manifold valve base sections are available in 3 versions to meet valve application requirements. 3/2 valves are used in conjunction with these bases to provide 2 or 3 way operation. The position of the valve base on the manifold determines the N.O. or N.C. function. See manifold assembly notes on the next page.

*Valve bases are used for both DIN rail or surface mounted manifolds.*

Sections are moulded material and include a brass barb fitting for 3mm I.D. tubing. Each base has interlocking tabs for snap on connection to the manifold assembly and includes 2 grommet seals for the common input and exhaust channels. Valves are mounted on the bases with the use of 2 special self-tapping screws and gasket included in the valve package.



3/2  
Valve Base

### Modular Manifolds- Headers, Center Supports, Endplates (For DIN Rail Mounting)

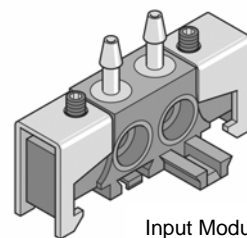
- Common Input and Exhaust Module (Header) **63076-00**
- End Plate **63079-00**
- Intermediate Input Module **63076-10**
- Middle Support Module **63079-10**

Rail mounting modules are supplied with clips and fastening screws to mount manifold assemblies on standard DIN rails. All modules have interlocking tabs for assembling custom manifolds and include 2 sealing grommets. Input modules have brass barb fittings for 3mm (1/8") I.D. tubing for connection of common air supply and exhaust lines.

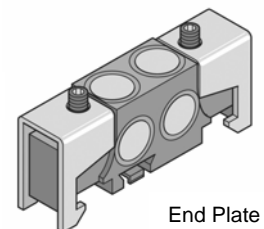
An intermediate input module can be used to provide an additional air supply on large manifold assemblies, or with the use of a blocking grommet cat. no. 64390-02, can be used to isolate the manifold section for connection of a separate air supply.

The middle support module should be used to support the manifold between every 8 valve bases used on the manifold assembly.

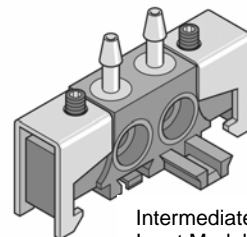
An end plate is required to close off the manifold.



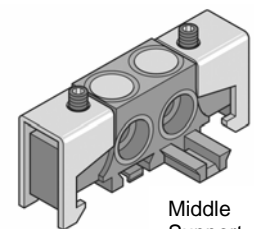
Input Module



End Plate



Intermediate  
Input Module



Middle  
Support

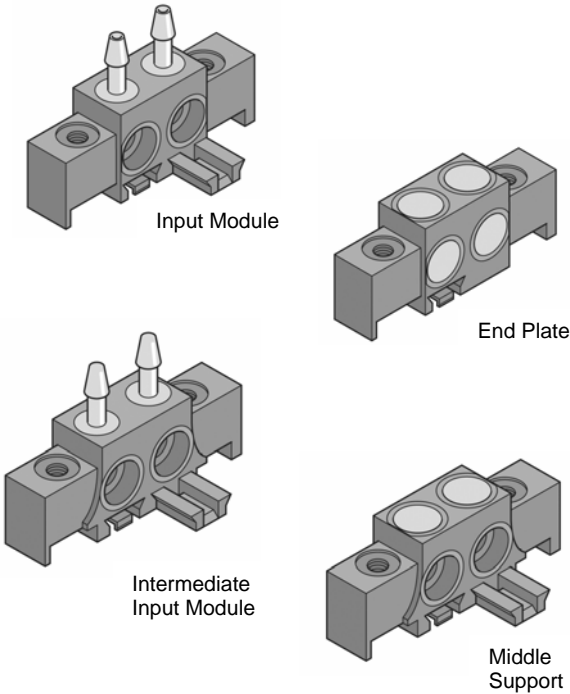
# Micro Solenoid Valves

## Series 63 Valve Accessories

Kuhnke Miniature Valves

### Modular Manifolds- Headers, Center Supports, Endplates

(For Surface Mounting)



**63086-00** Common Input and Exhaust Module (Header)

**63089-00** End Plate

**63086-10** Intermediate Input Module

**63089-10** Middle Support Module

Surface mounting modules have 2 mounting holes on 31mm (1 7/32") centers for M3 (or #4) screws to attach manifolds to panel surfaces. All modules have interlocking tabs for assembling custom manifolds and include 2 sealing grommets.

Input modules have brass barb fittings for 3mm (1/8") I.D. tubing for connection of common air supply and exhaust lines.

An intermediate input module can be used to provide an additional air supply on large manifold assemblies, or with the use of a blocking grommet cat. no. 64390-02, can be used to isolate the manifold section for connection of a separate air supply.

The middle support module should be used to support the manifold between every 8 valve bases used on the manifold assembly.

End plates are used to close off the manifold.

### Manifold Assembly Notes

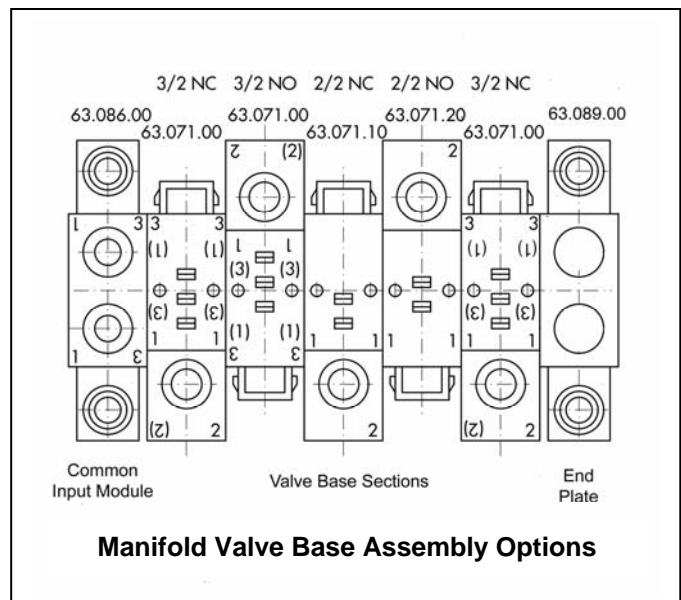
The basic manifold assembly consists of a header for supply air and exhaust connections, bases to mount valves and an end plate to close off the manifold.

Valve bases must be assembled in specific positions on the manifold to obtain normally open or normally closed functions. For all *Normally Closed* functions the tube connection for port 2 will be at the bottom. For *Normally Open* functions the base is mounted with the tube connection at the top of the manifold (180° opposite).

The illustration shows the variations for mounting valve bases.

#### Dimensions

Manifold dimensions, including the standard valves mounted, are 35mm (1 3/8") deep x 55mm (2 5/32") high x length. To determine length, add 10mm (3/8") for each module used in the assembly (include header, end plate and all intermediate modules).

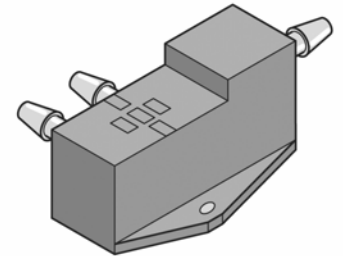


**Manifold Valve Base Assembly Options**

### Single Sub Base

#### Moulded Sub Base **63091-41**

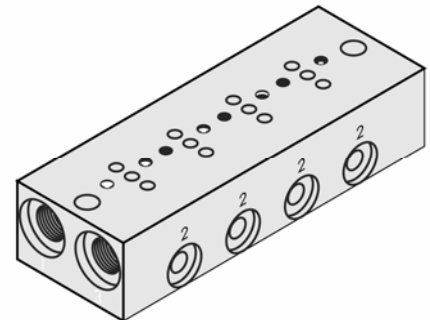
A moulded sub base can be used for surface mounting a single 3/2 valve. The base includes brass barb fittings for 3mm (1/8") I.D. non-rigid tubing. Dimensions (including valve mounted) are 31mm H. x 40mm L x 22mm W. Two mounting holes for M3 (or #4) screws on 16mm centres are used to mount the base. Valves are mounted on the base using the special self-tapping screws supplied in the valve package.



An aluminum sub base, (catalogue no. **86406-01** -not shown) is also available for mounting single valves. The base has ports for M3 fittings and has 2 mounting holes for #4 (or M3) screws. Valve mounting screws are self-tapping type for metal and are included with the base.

### Aluminum Manifolds

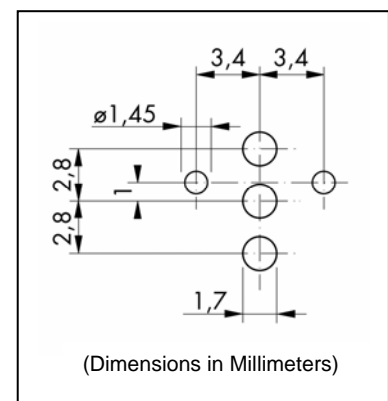
Aluminum manifolds are available to mount 3 way normally closed Series 63 valves. Units are constructed of aluminum bar stock with M5 supply ports at each end and M3 output ports along valve stack. Manifolds are all pre-drilled to allow valves to be mounted side by side without intermediate spacing. Standard manifolds are available for 2, 3 or 4 station configurations. Mounting is via a 3.2mm screw hole at each end of the manifold. Valve mounting screws are self-tapping type for metal and are included with the manifold.



Number of Stations	Dimensions 19mm W x 12mm H x L Dim Below	Catalogue Number
2	32.5mm	<b>86406-02</b>
3	43mm	<b>86406-03</b>
4	53.5mm	<b>86406-04</b>

### Drilling Plan for Custom Manifolds

Valves can be mounted with 10.5mm spacing between centres. Mounting holes should be tapped for 1.6mm x 18 thread for machine screws. A self-tapping screw is also available. Screws supplied with valves are used for moulded modular manifolds. For other screws see next page. Ports are centered and are numbered 3, 2, 1 from top to bottom.

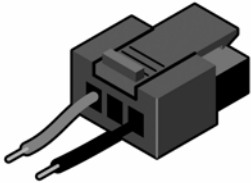


# Micro Solenoid Valves

## Series 63 Valve Accessories

Kuhnke Miniature Valves

### Electrical Connectors

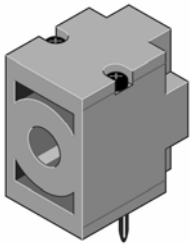


**MPP91130-36-00** Connector, 300mm leads (Pack of 10)

**MPP91130-39-00** Connector, 2000mm leads (Pack of 10)

Connectors are designed for use with Series 63 valves equipped with a plug socket. Wires are colour coded for easy identification and connectors are available with 2 different wire lengths. Connector snaps on to coil and can be easily disconnected by pressing a release tab on the top of the plug.

### Blanking Cap



**63095-00**

Blanking caps are used to block ports on an unoccupied valve base. Used when manifolds are constructed with positions for future valves. Constructed of the same moulded material as the manifold, the cap includes a gasket and 2 special screws for mounting on the modular valve base.

### Blocking Grommet



**64390-02** (Pack of 50)

A barrier is used in place of the standard sealing grommet between manifold modules to block off common input and exhaust ports when constructing manifolds with different air supply sources.

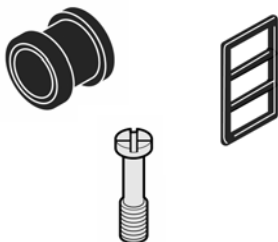
### Special Mounting Hardware



**63100-02** 1.6 x 18 Metric Machine Screw (Pack of 100)

Special size machine screws are used for mounting valves on custom made metal manifolds with tapped holes. See spare parts below for self-tapping screws.

### Spare Parts



**64390-01** Sealing Grommet (Pack of 50)

**63230-02** Valve Seal (Pack of 50)

**63100-00** Valve Mounting Screw, Self-tapping, for Aluminum Manifolds (Pack of 100)

**63100-01** Valve Mounting Screw, Self-tapping, for Modular Manifolds (Pack of 100)