

The following page(s) are extracted from multi-page Kuhnke product catalogues or CDRoms and any page number shown is relevant to the original document. The PDF sheets here may have been combined to provide technical information about the specific product(s) you have selected.

Hard copy product catalogues, and CDRoms have been published describing Kuhnke Pneumatics, Solenoids, Relays and Electronics; some divided into different books. A list of current publications is available on this web site or from our sales offices. Some may be available for download, but as substantially larger files.

Contact Details

Kuhnke sales and service in North America

Kuhnke
Automation Inc.
P.O Box 1369
Wayne, N.J.

T: (973) 633 0690
F: (973) 633 7230
Email: sales@kuhnkeusa.com

Important Note

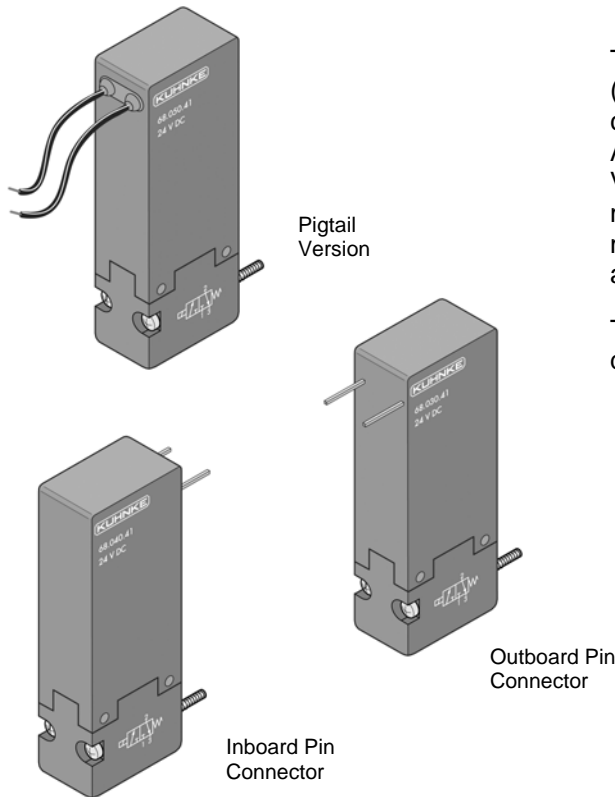
The information shown in these documents is for guidance only. No liability is accepted for any errors or omissions. The designer or user is solely responsible for the safe and proper application of the parts, assemblies or equipment described.

Micro Solenoid Valves

Series 68 – 3 Way

Kuhnke Miniature Valves

Micro Solenoid Valves (15mm Wide)



The Series 68 solenoid valve is a manifold mounted 15mm (5/8 inch) wide valve with low power consumption, ideal for compact installations where small volumes of air are required. Accessories include modular manifolds and connectors. Valves are designed for 24 volts DC operation and feature a molded housing, viton seals, encapsulated coils and are mountable in any position. Optional seal materials are available.

The Series 68 valve is available with 3 orifice sizes each with different flow values and maximum air pressures.



In addition to general purpose use, Series 68 valves are designed for the special requirements of medical, dental and laboratory equipment. Custom designs available.

Technical Specifications

Operating Pressure:

0 to 145 PSI, see selection chart.

Max. Flow Rate and Pressure:

See selection chart.

Cv/Kv:

See flow graphs.

Connection:

See manifold details.

Media:

All neutral gaseous media.

Power Consumption:

24VDC, 3 W
Optional 12VDC, 3 W

Valve Operating Time:

Pick-up: 5-10 ms
Drop out: 3-5 ms

Materials:

Molded body Pocan (PBT),
Viton (FKM) Seals,
Brass inserts.
Optional NBR or EPDM seals

Average Mechanical Life:

20 million operations

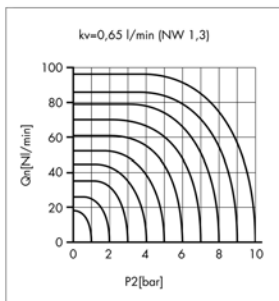
Operating Ambient:

-10°C to 50°C (12°F to 120°F)

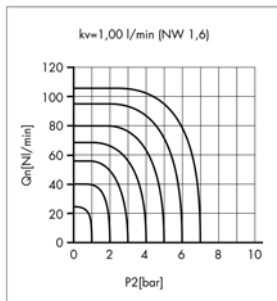
Dimensions (inches):

5/8" W x 2 1/2" H x 1" D.
(15mm W x 64mm H x 24mm D)

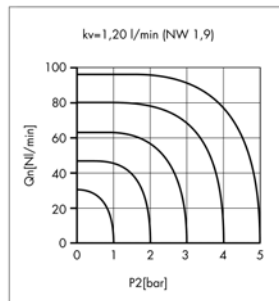
Flow Graphs in Bar and Liters per Minute



1.3mm Orifice
Cv - ..045 / Kv - .65



1.6mm Orifice
Cv - .07 / Kv - 1

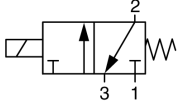


1.9mm Orifice
Cv - .085 / Kv - 1.2

(1 Bar = 14.5 PSI; 1 Liter = .03531 cubic feet)

Selection Chart



Description	Orifice (Maximum Operating Pressure and Flow)	Catalog Number		
		With Pigtails	Pin Connector (Outboard)	Pin Connector (Inboard)
3 Way Normally Closed, 24 VDC 	1.3mm (145 PSI, 95 Liter 3.3 CFM)	68050-41	68030-41	68040-41
	1.6mm (100 PSI, 105 Liter 3.7 CFM)	68050-01	68030-01	68040-01
	1.9mm (75 PSI, 95 Liter 3.3 CFM)	68050-51	68030-51	68040-51

Standard coil voltage 24 VDC, specify 12 VDC if required.

Coil Options

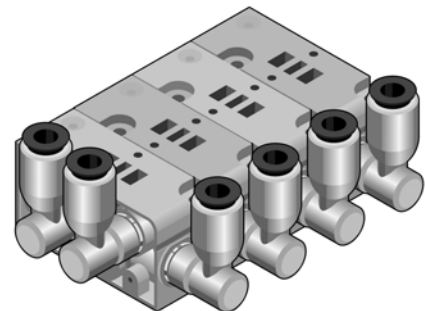
Several coil connection versions are available to suit application preferences.

Pigtails- Valves have 18 inch (500mm) pigtails molded into coil.

Pin connectors – Valves are equipped with connector pins for use with electrical connector cat. no. 68135 (see accessories) or for direct connections to printed circuit board assemblies. Pins are 0.64mm square and are spaced 10.2mm apart. Outboard pins face away from valve ports while inboard types have pins facing in the same side as valve ports.

Manifolds

Standard manifolds are available with up to 8 stations for Series 68 valves. The manifold is constructed of molded POCAN and is equipped with push in connectors for 1/4 inch O.D. tubing.



Number of Stations	Dimensions 1 7/8"W x 1 3/8"H x L Dim Below	Catalog Number
1	5/8"	68240-01
2	1 1/4"	68240-02
3	1 13/16"	68240-03
4	2 3/8"	68240-04
5	3"	68240-05
6	3 5/8"	68240-06
7	4 1/4"	68240-07
8	4 13/16"	68240-08

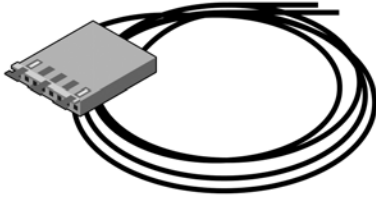
Consult factory for special seals, flow requirements or custom manifold designs including electronic intelligence circuits.
See Valve accessories for manifolds and connectors. For detail dimensions contact factory.

Micro Solenoid Valves

Series 68 Valve Accessories

Kuhnke Miniature Valves

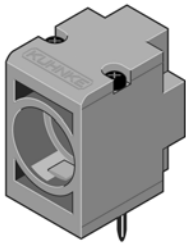
Electrical Connectors



68135 Connector, 18 inch (500mm) leads (Package of 10)

Connectors are designed for use with Series 68 valves equipped with pin connectors. Wires are color coded for easy identification.

Blanking Cap



68201-00

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 molded material as the manifold, the cap includes a gasket and 2 special screws for mounting on the modular valve base.

Spare Parts



68230-01 Valve gaskets (Pack of 50)

68110-00 Mounting Screw (pack of 100)

68110-01 Machine Screw M2.5 x 28 (pack of 100)

Valves are supplied with a sealing gasket and mounting screws for molded manifolds.

Spare gaskets are available to provide the seal between the valve and manifold. Mounting screws for use on plastic manifolds are available in packages of 100 and a machine screw for mounting Series 68 valves on custom manifolds can be used on custom metal manifolds.