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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.

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### Important Note

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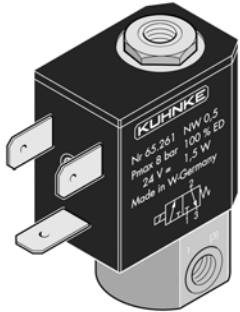
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# Miniature Solenoid Valves

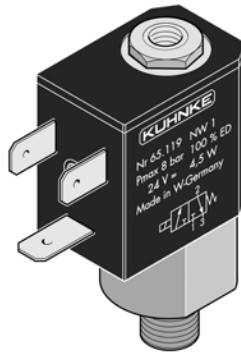
## Series 65 – 2 or 3 Way

Kuhnke Miniature Valves

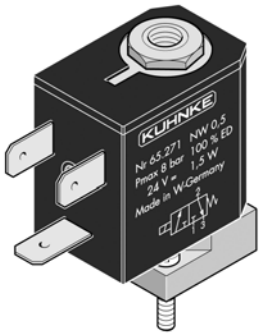
### Miniature Solenoid Valves (22mm Wide)



In-Line Mounting



Direct Mounting



Manifold Mount

The Series 65 solenoid valve is available for in-line, direct or manifold mounting. Accessories include connecting plugs, sub-bases and manifolds. All standard valves feature a solid brass housing, buna seals, encapsulated coils and are mountable in any position.

Types: Standard valves are available in 3 mounting configurations. In-line (body ported) valves are mounted using (2) M3 threaded holes on the underside of the base. Manifold mounted valves can be used with Kuhnke accessories or can be mounted on custom manifolds or equipment. A direct mounted valve is available for mounting in 1/8" ports on cylinders or for piloting larger valves.



In addition to general purpose use, Series 65 valves are designed for the special requirements of medical, dental and laboratory equipment. Custom designs available.

### Technical Specifications

**Operating Pressure:**

90% Vacuum up to 115 PSI max.

**Max. Flow Rate and Pressure:**

See selection chart.

**Cv/Kv:**

See flow graphs.

**Connection:**

10-32 (M5) ports

**Media:**

All neutral liquid and gaseous media.

**Power Consumption:**

Standard: DC: 4.5 W / AC: 5 VA

Low Power: DC: 1.5 W

**Valve Operating Time:**

Pick-up: 10 to 15 ms

Drop out: 3 to 5 ms

**Materials:**

Brass body, Buna N Seals, encapsulated coil.

**Average Mechanical Life:**

20 million operations

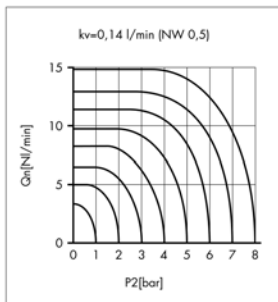
**Operating Ambient:**

-10°C to 60°C (12°F to 140°F)

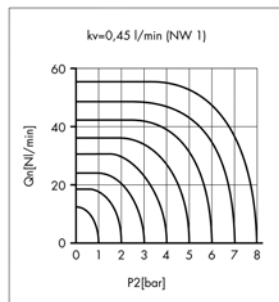
**Dimensions (inches):**

	In Line	Manif.	Direct
Height:	1 7/8	1 5/8	2 5/32
Width:	13/16	13/16	13/16
Depth:	1 11/16	1 11/16	1 11/16
Weight	4 oz.	3.4 oz.	4.1 oz.

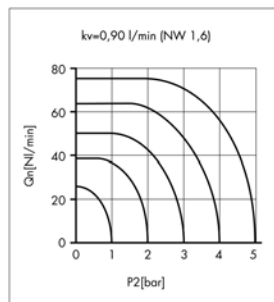
**Flow Graphs in Bar and Liters per Minute**



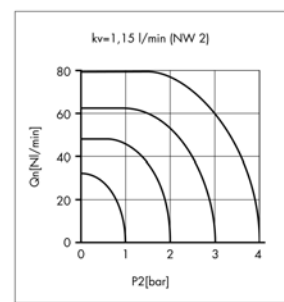
0.5mm Orifice  
Cv - .01 / Kv - .14



1mm Orifice  
Cv - .03 / Kv - .45



1.6mm Orifice  
Cv - .06 / Kv - .9



2mm Orifice  
Cv - .08 / Kv - 1.15

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

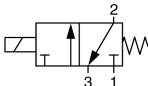
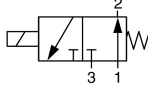

# Miniature Solenoid Valves

Kuhnke Miniature Valves

**Series 65 – 2 or 3 Way**



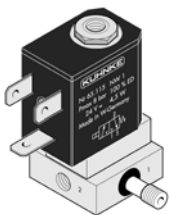
## Selection Chart

Description	Orifice (Maximum Operating Pressure and Flow)	Catalog Number					
		In-Line Mounted		Manifold Mounting		1/8 Port Mounting	
		DC Coil	AC Coil	DC Coil	AC Coil	DC Coil	AC Coil
<b>3 Way</b> Normally Closed  	<b>1mm</b> (115 PSI, 2 CFM)	<b>65111- •</b>	<b>65112- •</b>	<b>65127- •</b>	<b>65128- •</b>	<b>65119- •</b>	<b>65120- •</b>
	<b>1.6mm</b> (75 PSI, 2.7 CFM)	<b>65171- •</b>	<b>65172- •</b>	<b>65173- •</b>	<b>65174- •</b>	<b>65175- •</b>	<b>65176- •</b>
	<b>2mm</b> (45 PSI, 2.2 CFM)	<b>65231- •</b>	<b>65232- •</b>	<b>65235- •</b>	<b>65236- •</b>	--	--
<b>3 Way</b> Normally Open  	<b>1mm</b> (90 PSI, 1.5 CFM)	<b>65113- •</b>	<b>65114- •</b>	<b>65123- •</b>	<b>65124- •</b>	--	--
	<b>2mm</b> (60 PSI, 2.8 CFM)	<b>65233- •</b>	<b>65234- •</b>	<b>65237- •</b>	<b>65238- •</b>	--	--
<b>3 Way</b> Normally Closed Low Power Coil  	<b>0.5mm</b> (115 PSI, .5 CFM)	<b>65261- •</b>	--	<b>65271- •</b>	--	--	--
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• - Insert coil voltage required to complete catalog number. Standard voltages are 12 and 24 VDC; 24, 110 and 230 VAC.

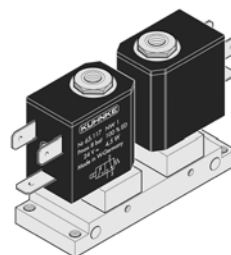
### Pre-assembled Sub Base Valves

Assembled valves on single or double sub bases are available. Valves are 3 way normally closed with a 1mm orifice, max. pressure -115 PSI and have flows of 2 CFM.



**65115- • (DC)**  
**65116- • (AC)**

The single valve assembly can be used to build valve banks with the use of a connecting nipple (cat no. **560.100.040.020**) and 2 'O' rings (cat. no. **65412**).



**65117- • (DC)**  
**65118- • (AC)**

Double sub base valves have ports out the bottom of a metal sub base that fits on manifolds for series 81/83 or 84 valves.

UL versions are available on special order.

For 2 way operation of any 65 Series valve, plug exhaust port 3.

Consult factory for valves with special mounting configurations, flow requirements or different seal materials.

**See miniature solenoid valve accessories for electrical connectors and manifolds. For detail dimensions contact factory.**