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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

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.

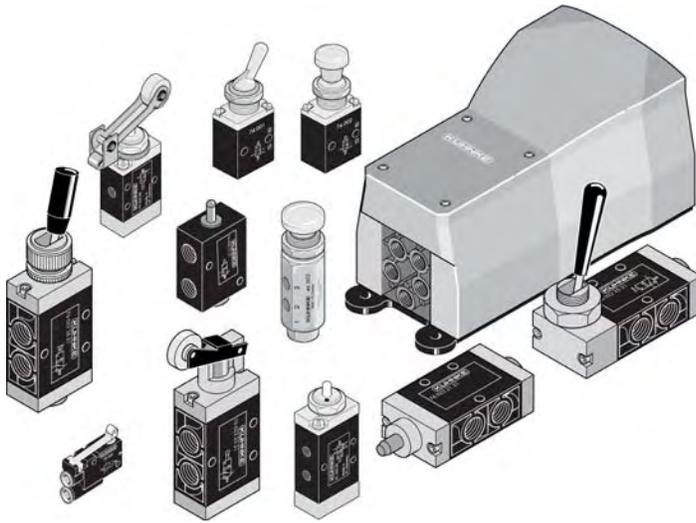
Pneumatic Power Valves

Series 75/76 –
Manual, Mechanical, Pneumatic and Electric Valves

Contents:

Product Line Overviews	2	Electrically Operated Valves	39
Manually Operated Valves	5	3 Way	40
Pushbuttons	6	Vacuum Use	41
Toggle Switch	8	4 Way (Directional)	42
Knob Operators	9	3 Position	46
Lever Operators	10	Flip-Flop	48
Foot Pedals	12	Oscillator	48
Oil Tight Pushbuttons	14	European Replacement Valves	49
Mechanically Operated Valves	19	ISO Pneumatic Actuation	50
Lever Operated	20	ISO Solenoid Operated	51
Plunger Operated	20	ISO 3 Position	52
Roller Lever Operated	24	NAMUR	52
One Way Roller Lever	27	Accessories and Replacement Parts	53
Antenna Valves	30	Electrical Accessories	54
Pneumatically Operated Valves	31	Manifolds	56
3 Way	32	ISO Valve Parts	58
Vacuum Use	33	Appendix	61
4 Way (Directional)	34	Valve Specifications	62
3 Position	36	Index by Catalog Number	64
Flip-Flop	37	Index	68
Oscillator	38		

Kuhnke Pneumatic Products.....

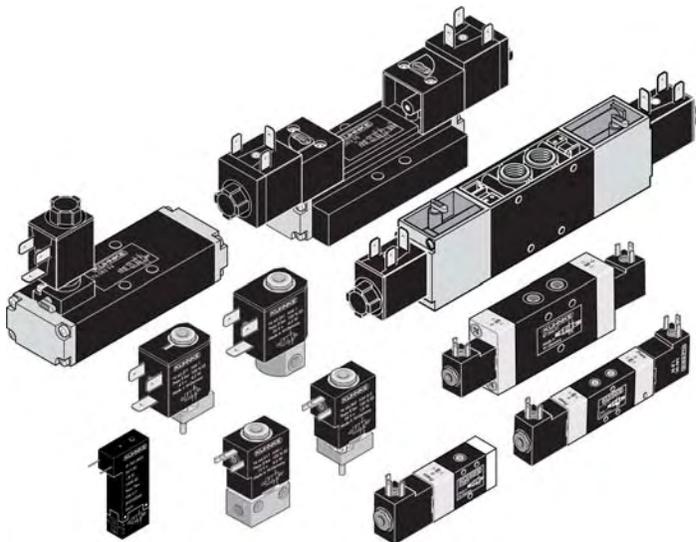
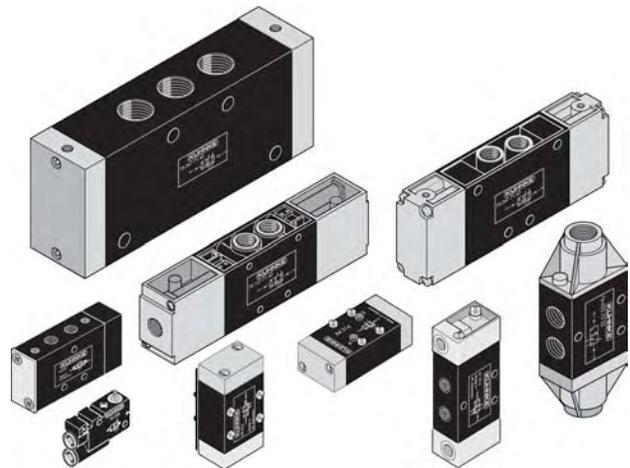


Mechanically and Manually Operated Valves

From micro valves through 1/4 ported, heavy duty foot pedals and just about every type of operator needed to fit your application.

Pneumatically Operated Valves

From low pressure amplifiers to 1/2 inch ported power valves in all types of configurations.

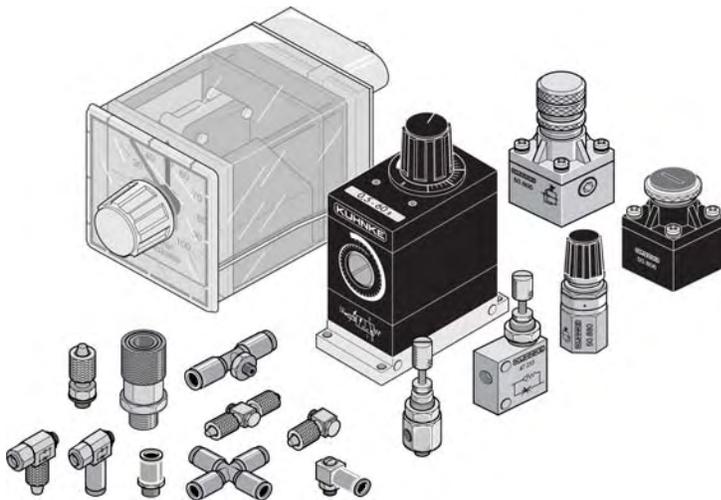
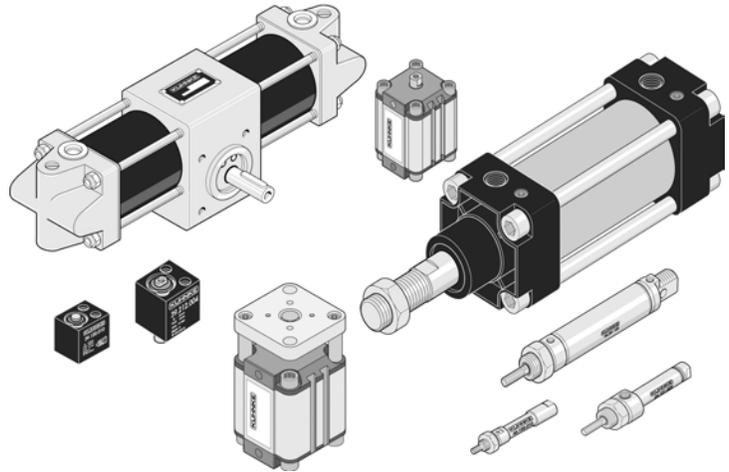


Electrically Operated Valves

A complete line of solenoid operated valves from 10mm wide bodies to 1/2 inch ported sizes. In spool as well as poppet designs.

Cylinders and Rotary Actuators

Cylinders from 1/8 to 6 inch bores in brass, stainless or aluminum designs. Miniature short stroke cylinders and rotary actuators up to power size movers. And cylinders built to ISO 6431 and other important standards.

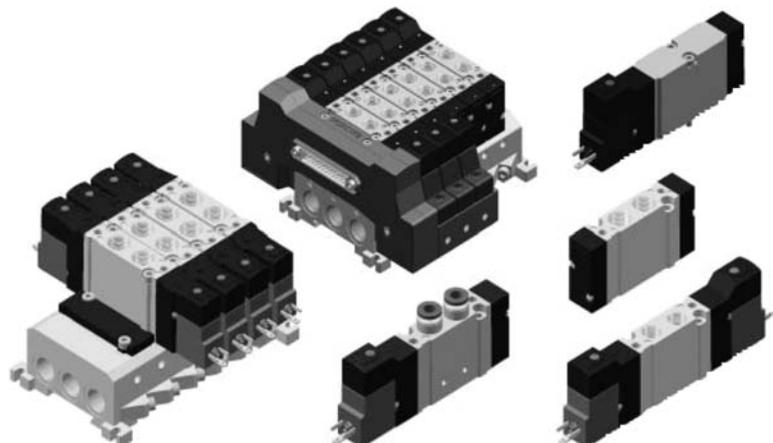


System Accessories

A wide range of pneumatic control system accessories including timers, counters, logic devices, precision regulators, flow controls and miniature pneumatic fittings.

Electronic/Pneumatic System Components

Valve islands incorporating I/O modules for Profi or Can-open bus systems. Valve modules for ASi control systems. Smart cylinders incorporating electronics for bus systems and controllers for cylinder load/speed control.

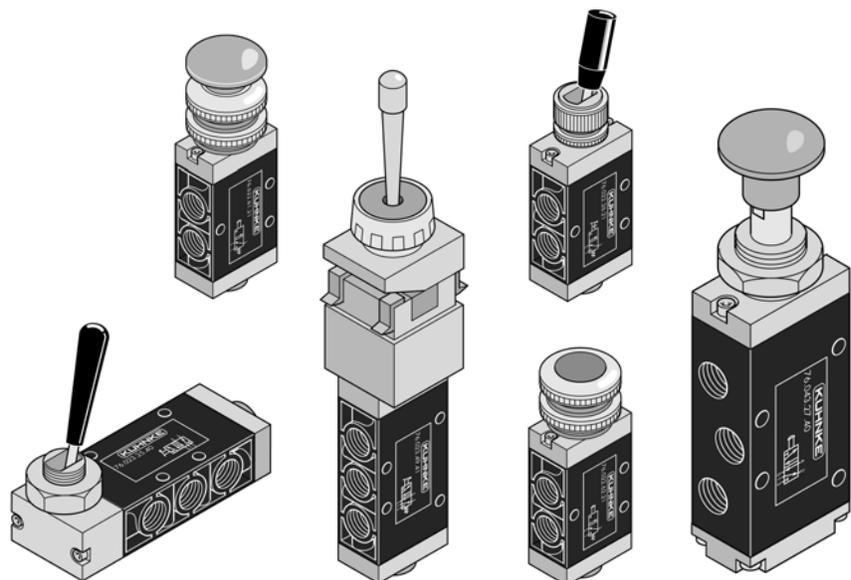


Manually Operated Valves

Kuhnke's manually operated valves have a wide variety of operators to satisfy most applications involving man-machine interface of pneumatic systems.

General purpose pushbuttons, toggle switches, knob operators, key switches, selector switches and foot pedals are available in 3 or 4 way standard manual as well as air pilot assisted designs. An assortment of maintained position, spring return, latching and pneumatic reset versions round out the selection.

Manually operated valves are constructed of aluminum die cast and machined bodies. Valves with ports in both NPT and Metric threads are available to satisfy connection preferences. Spool and sleeve design provides dependable long life service.



Manually Operated Valves

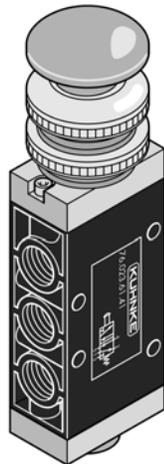
General Purpose

Kuhnke Power Valves

Mushroom Head Pushbutton, 1/8 Ports

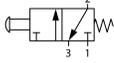
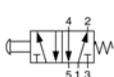


3 Way



4 Way

Mushroom Heads provide easy palm operation of valve. Mushroom diameter is 1 3/8 inch. Button can be mounted in panels up to 1/2 inch thick or mounted via through body holes.

Description	Orifice Port (Body No.)	PB Color	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Spring Return 	6mm 1/8 Port (1S)	Red	75022-61-21	76022-61-21
		Black	75022-61-23	76022-61-23
		Green	75022-61-24	76022-61-24
4 Way Spring Return 	6mm 1/8 Port (2S)	Red	75023-61-41	76023-61-41
		Black	75023-61-43	76023-61-43
		Green	75023-61-44	76023-61-44

Flush Head Pushbutton, 1/8 Ports

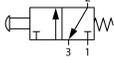
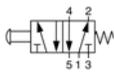


3 Way



4 Way

Flush Head pushbuttons are used to prevent accidental operation or provide flat panel appearance. Button is flush with shroud surface and diameter is 1 3/8 inch.

Description	Orifice Port (Body No.)	PB Color	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Spring Return 	6mm 1/8 Port (1S)	Red	75022-62-21	76022-62-21
		Black	75022-62-23	76022-62-23
		Green	75022-62-24	76022-62-24
4 Way Spring Return 	6mm 1/8 Port (2S)	Red	75023-62-41	76023-62-41
		Black	75023-62-43	76023-62-43
		Green	75023-62-44	76023-62-44

Operating pressure range is 0 to 145 PSI. Actuation force @ 90 PSI, is approx. 7.9 Lbs.

For normally open function on 3 way valve reverse connect ports 1-3. For 2 way operation, plug port 3.

Panel mounting hole is 1 3/16 inch (30mm) diameter. Above panel dimensions are 1.375" Dia. x .875" H. (Mushroom) or .375" H. (Flush Head).

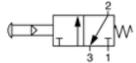
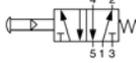
Behind panel dimensions of 3 way valve – 3.25" D x 1.375" H x .75" W; 4 way valve- 4" D x 1.375" H x .75" W. Allow space for fittings and tubing.

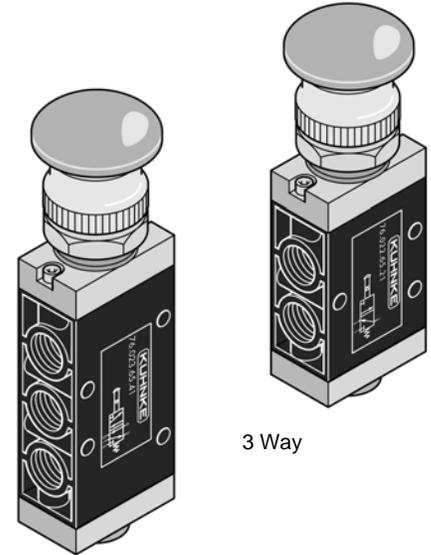
Valve through body mounting holes are 3/16" diameter.

For valve specifications see appendix. For detail dimensions contact factory.

Mushroom Head Pushbutton, Air Pilot Assisted, 1/8 Ports

Mushroom Heads provide easy operation of valve. An internal air pilot assist using the supply air, reduces the force necessary to operate valve to 14 ounces.

Description	Orifice Port (Body No.)	PB Color	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Spring Return 	6mm 1/8 Port (1S)	Red	75022-65-21	76022-65-21
		Black	75022-65-23	76022-65-23
		Green	75022-65-24	76022-65-24
4 Way Spring Return 	6mm 1/8 Port (2S)	Red	75023-65-41	76023-65-41
		Black	75023-65-43	76023-65-43
		Green	75023-65-44	76023-65-44

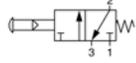
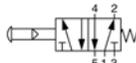


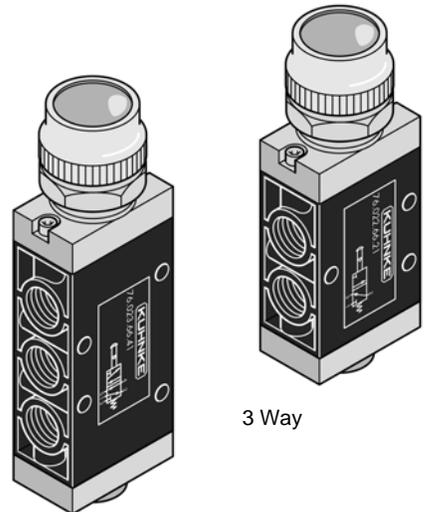
4 Way

3 Way

Shrouded Head Pushbutton, Air Pilot Assisted, 1/8 Ports

Shroud Head prevents accidental operation. Button is flush with shroud surface and the diameter is 1 1/8 inches. Operating force 14 ounces.

Description	Orifice Port (Body No.)	PB Color	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Spring Return 	6mm 1/8 Port (1S)	Red	75022-66-21	76022-66-21
		Black	75022-66-23	76022-66-23
		Green	75022-66-24	76022-66-24
4 Way Spring Return 	6mm 1/8 Port (2S)	Red	75023-66-41	76023-66-41
		Black	75023-66-43	76023-66-43
		Green	75023-66-44	76023-66-44



4 Way

3 Way

Operating pressure range is 35 to 145 PSI. Minimum operating pressure is 35 PSI. Actuation force @ 90 PSI, is approx. 14 ozs.
 Panel mounting hole is 7/8 inch (22mm) diameter. Above panel dimensions are 1.375" Dia. x 1" H. (Mushroom) or .625" H. (Shroud Head).
 Behind panel dimensions of 3 way valve – 3.75" D x 1.375" H x .75" W; 4 way valve – 4.25" D x 1.375" H x .75" W.
 Allow space for fittings and tubing.

Valve through body mounting holes are 3/16" diameter.

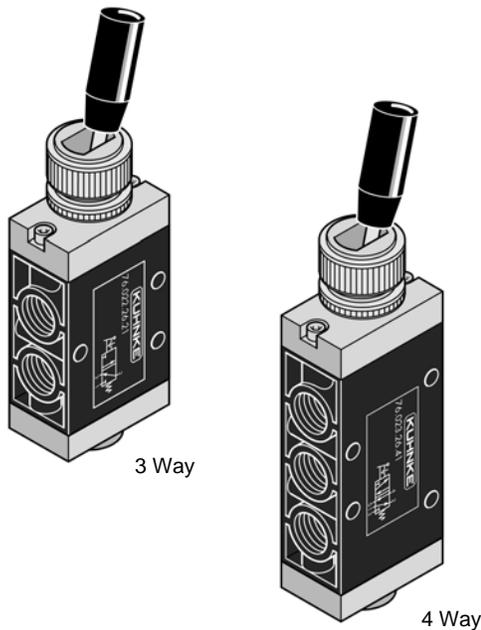
For valve specifications see appendix. For detail dimensions contact factory.

Manually Operated Valves

General Purpose

Kuhnke Power Valves

Toggle Lever, Panel Mounted, 2 Position



Toggle Lever valves can be used to manually switch air supplies on equipment. Valves are designed for panel mounting. Handles have a contemporary black molded grip and require 3.4 lbs. of force to operate.

Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Maintained Position 	6mm (1S)	1/8	75022-26-21	76022-26-21
4 Way Maintained Position 	6mm (2S)	1/8	75023-26-41	76023-26-41

Operating pressure range is 0 to 145 PSI. Actuation force @ 90 PSI, is approx. 3.4 Lbs.

For normally open function on 3 way valve reverse connect ports 1-3. For 2 way operation, plug port 3.

Panel mounting hole is 5/8 inch diameter, maximum panel thickness 1/8 inch. Above panel dimensions are .8125" Dia. x 2" H.

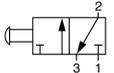
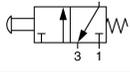
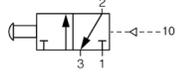
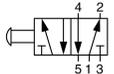
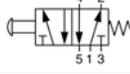
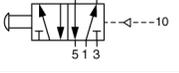
Behind panel dimensions of 3 way valve are 2.875" D x 1.375" H x .75" W; 4 way valve- 4.625" D x 1.375" H x .75" W.

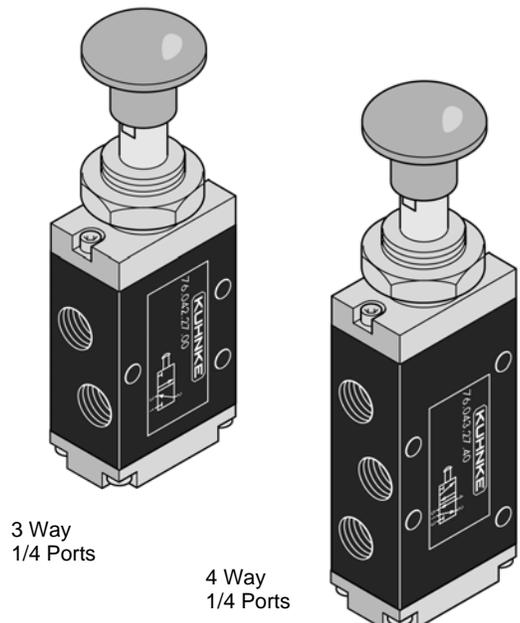
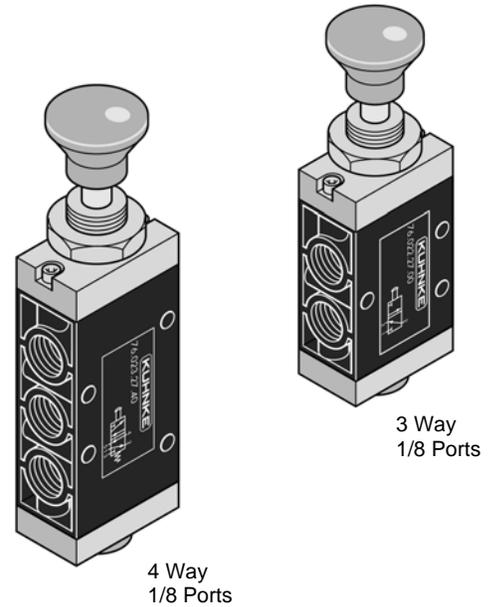
Valve through body mounting holes are 3/16" diameter. Allow space for fittings and tubing.

For valve specifications see appendix. For detail dimensions contact factory.

Knob Operator, 2 Position

Knob valves have a small travel of about ¼ inch and can be easily operated with the palm of a hand. Knobs are constructed of sturdy black molded material. Available in spring return, pneumatic return and push-pull versions.

Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Push-Pull Knob (Maintained Position) 	6mm (1S)	1/8	75022-27-00	76022-27-00
	8mm (3S)	1/4	75042-27-00	76042-27-00
3 Way Knob Spring Return 	6mm (1S)	1/8	75022-27-21	76022-27-21
	8mm (3S)	1/4	75042-27-21	76042-27-21
3 Way Push-Pull Knob Pneumatic Reset* 	6mm (1S)	1/8	75022-27-22	76022-27-22
	--	--	--	--
4 Way Push-Pull Knob (Maintained Position) 	6mm (2S)	1/8	75023-27-40	76023-27-40
	8mm (4S)	1/4	75043-27-40	76043-27-40
4 Way Knob Spring Return 	6mm (2S)	1/8	75023-27-41	76023-27-41
	8mm (4S)	1/4	75043-27-41	76043-27-41
4 Way Push-Pull Knob Pneumatic Reset* 	6mm (2S)	1/8	75023-27-42	76023-27-42
	8mm (4S)	1/4	75043-27-42	76043-27-42



* Pneumatic Reset Valves operate manually or are returned by a pneumatic signal (35 PSI minimum) applied to an auxiliary 1/8 port.

Operating pressure range is 0-145 PSI. Actuation force @ 90 PSI: 1/8 port approx. 3.4 Lbs., 1/4 port 11.3 Lbs.

For normally open function on 3 way valves reverse connect ports 1-3. For 2 way operation, plug port 3.

Panel mounting hole size for 1/8-ported valves is 5/8 inch diameter, for 1/4-ported valves, 7/8 inch. Above panel dimensions: 1/8-ported are 1" Dia. x 1.5" H; 1/4-ported- 1.5" Dia. x 2.25" H.

Typical behind panel dimensions of 4 way 1/8 ported valves are 2.5" D x 1.375" W x .75" H; 1/4 ported valves- 4" D x 2" W x 1" H. For 3 way valves subtract .75" from depth. For pneumatic return add 1" to depth dimension. Allow space for fittings and tubing.

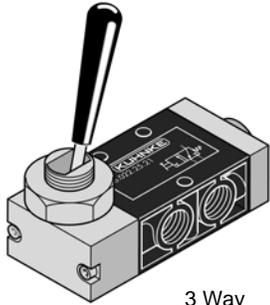
For valve specifications see appendix. For detail dimensions contact factory.

Manually Operated Valves

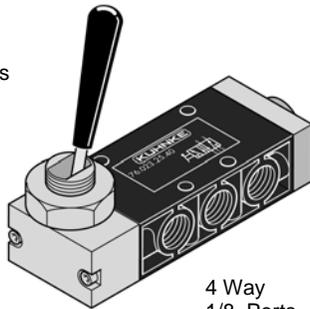
General Purpose

Kuhnke Power Valves

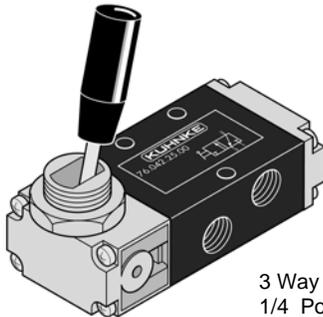
Lever Operator, 2 Position



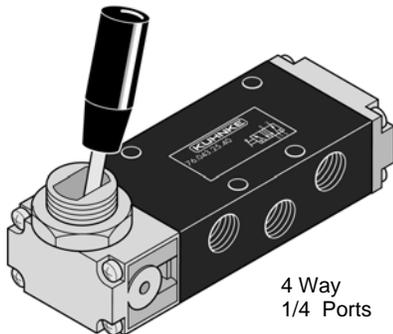
3 Way
1/8 Ports



4 Way
1/8 Ports

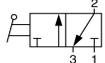
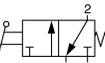
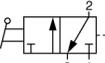
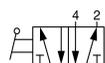
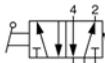


3 Way
1/4 Ports



4 Way
1/4 Ports

Lever valves can be used to manually switch air supplies on equipment or operate cylinders and other devices. Valves can be panel mounted or fastened to a surface via body mounting holes. Handles have a contemporary black molded grip and require 3.4 lbs. of force to operate. Valves are available in spring return, pneumatic return and maintained position versions.

Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Maintained Position 	6mm (1S)	1/8	75022-25-00	76022-25-00
	8mm (3S)	1/4	75042-25-00	76042-25-00
3 Way Spring Return 	6mm (1S)	1/8	75022-25-21	76022-25-21
	8mm (3S)	1/4	75042-25-21	76042-25-21
3 Way Pneumatic Reset* 	6mm (1S)	1/8	75022-25-22	76022-25-22
	8mm (3S)	1/4	75042-25-22	76042-25-22
4 Way Maintained Position 	6mm (2S)	1/8	75023-25-40	76023-25-40
	8mm (4S)	1/4	75043-25-40	76043-25-40
4 Way Spring Return 	6mm (2S)	1/8	75023-25-41	76023-25-41
	8mm (4S)	1/4	75043-25-41	76043-25-41
4 Way Pneumatic Reset* 	6mm (2S)	1/8	75023-25-42	76023-25-42
	8mm (4S)	1/4	75043-25-42	76043-25-42

* Pneumatic Reset Valves operate manually or are returned by a pneumatic signal (35 PSI minimum) applied to an auxiliary 1/8 port.

Operating pressure range is 0-145 PSI. Actuation force @ 90 PSI, is approx. 3.4 Lbs.

For normally open function on 3 way valves, reverse connect ports 1-3. For 2 way operation, plug port 3.

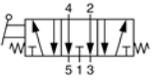
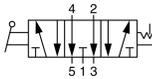
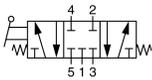
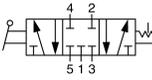
Panel mounting hole size for 1/8-ported valves is 5/8 inch diameter, for 1/4 ported valves, 7/8 inch. Through body mounting holes are 3/16" dia.

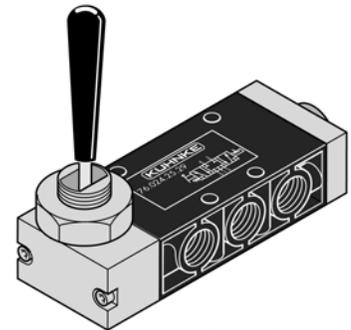
Typical dimensions of 4 way 1/8 ported valves are 3.75" L x 1.375" W x .75" D. For 1/4 ported valves: 4.75" L x 2" W x 1" D. For 3 way valves subtract .75" from L dimension. For pneumatic return valves add 1" to L dimension. Allow space for fittings and tubing.

For valve specifications see appendix. For detail dimensions contact factory.

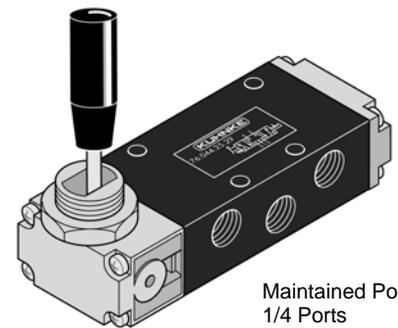
Lever Operator, 4 Way, 3 Position

Three position valves are used mostly to position cylinders manually. The operator controls the cylinder direction by moving the lever side to side. Valves with all ports open in the center position allow the cylinder piston rod to move freely, while valves with all ports closed in the center position will hold the cylinder in the desired position when the lever is returned to center. Valves can be panel or body mounted.

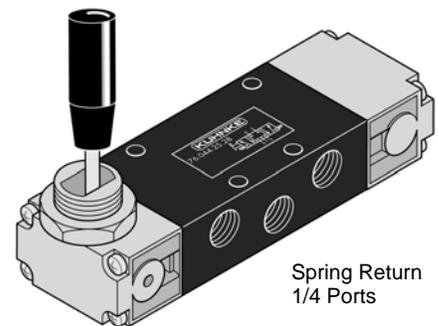
Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
Spring Return to Center All ports <i>open</i> in center position. 	6mm (2S)	1/8	75024-25-28	76024-25-28
	8mm (4S)	1/4	75044-25-28	76044-25-28
Maintained Position All ports <i>open</i> in center position. 	6mm (2S)	1/8	75024-25-29	76024-25-29
	8mm (4S)	1/4	75044-25-29	76044-25-29
Spring Return to Center All ports <i>closed</i> in center position. 	6mm (2S)	1/8	75024-25-38	76024-25-38
	8mm (4S)	1/4	75044-25-38	76044-25-38
Maintained Position All ports <i>closed</i> in center position. 	6mm (2S)	1/8	75024-25-39	76024-25-39
	8mm (4S)	1/4	75044-25-39	76044-25-39



Spring Return and Maintained Position
1/8 Ports



Maintained Pos.
1/4 Ports



Spring Return
1/4 Ports

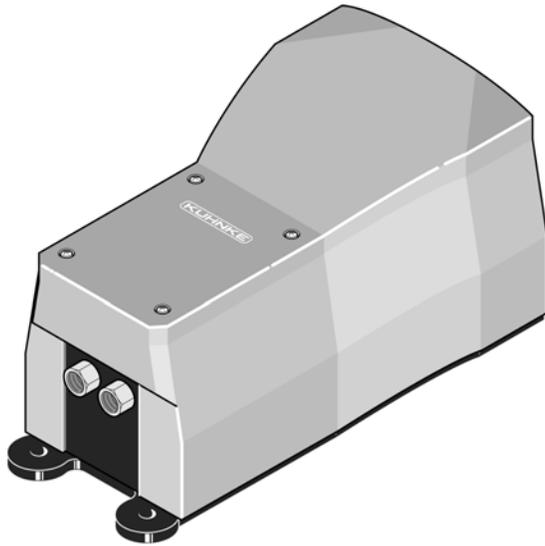
Operating pressure range is 0-145 PSI. Actuation force @ 90 PSI, is approx. 3.4 Lbs.
 Panel mounting hole size for 1/8-ported valves is 5/8 inch diameter, for 1/4-ported valves, 7/8 inch. Through body mounting holes are 3/16" dia.
 Typical dimensions of spring return 1/8 ported valves are 4" L x 1.375" W x .75" D. For 1/4 ported valves: 5.375" L x 2" W x 1" D. Above panel dimensions including handle for 1/8-ported valves – 2.5", 1/4-ported valves – 3.375". Allow space for fittings and tubing.
For valve specifications see appendix. For detail dimensions contact factory.

Manually Operated Valves

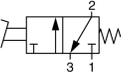
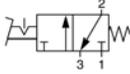
General Purpose

Kuhnke Power Valves

Foot Pedal, 3 Way, 1/8 Ports



Foot pedal valves can be used to operate devices which hold work pieces in place on bench workstations or perform punching or drilling operations on production pieces. Housing shields pedal preventing accidental operation. Enclosure is constructed of polycarbonate and available in high visibility yellow or blue colors.

Description	Orifice Port	Color	Catalog Number	
			NPT Ports** (USA Std.)	Metric Ports (European Std.)
3 Way Spring Return Normally Closed 	2mm 1/8	Yellow	75026-68-21	76026-68-21
	2mm 1/8	Blue	75026-69-21	76026-69-21
3 Way Latch/Unlatch Normally Closed 	2mm 1/8	Yellow	75026-68-29	76026-68-29
	2mm 1/8	Blue	75026-69-29	76026-69-29

** For NPT versions, a metric ported foot pedal unit is supplied with NPT fitting adaptor kits.

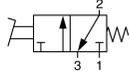
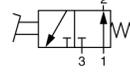
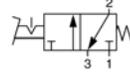
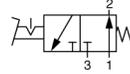
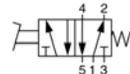
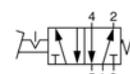
Operating pressure range is 0 to 145 PSI. Actuation force @ 90 PSI, is approx. 8 lbs.

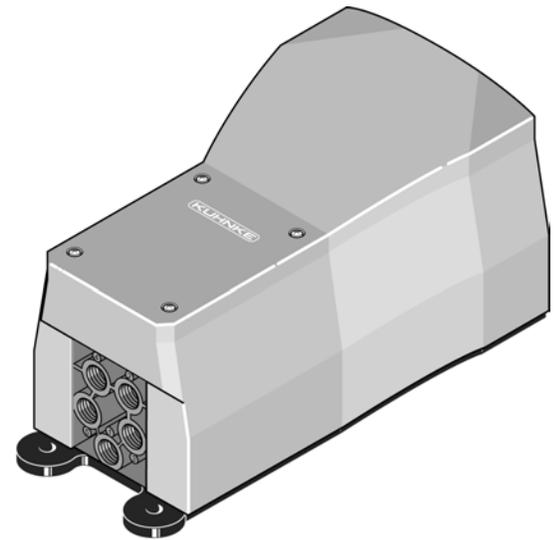
Enclosure dimensions are 9" L x 5 5/8" W x 4 5/8" H. Enclosure- polycarbonate, valve body die cast aluminum housing with Buna N seals.

Foot pedals with 2mm orifice valves have an internal non-accessible exhaust port.

Foot Pedal, 1/4 Ports

Foot pedals are available in 3 or 4 way spring return or maintained versions. Latching pedals can be used to lock work pieces in place, while spring return units can be used to perform work operations like punching, pressing etc.

Description	Orifice Port	Color	Catalog Number	
			NPT Ports** (USA Std.)	Metric Ports (European Std.)
3 Way Spring Return Normally Closed 	8mm 1/4	Yellow	75046-68-21	76046-68-21
	8mm 1/4	Blue	75046-69-21	76046-69-21
3 Way Spring Return Normally Open 	--	--	--	--
	8mm 1/4	Blue	75046-69-31	76046-69-31
3 Way Latch/Unlatch Normally Closed 	8mm 1/4	Yellow	75046-68-29	76046-68-29
	8mm 1/4	Blue	75046-69-29	76046-69-29
3 Way Latch/Unlatch Normally Open 	--	--	--	--
	8mm 1/4	Blue	75046-69-30	76046-69-30
4 Way Spring Return 	8mm 1/4	Yellow	75047-68-41	76047-68-41
	8mm 1/4	Blue	75047-69-41	76047-69-41
4 Way Latch/Unlatch 	8mm 1/4	Yellow	75047-68-49	76047-68-49
	8mm 1/4	Blue	75047-69-49	76047-69-49



** For NPT versions, a metric ported foot pedal unit is supplied with NPT fitting adaptor kits.

Operating pressure range is 0 to 145 PSI. Actuation force @ 90 PSI, is approx. 8 lbs.

Enclosure dimensions are 9" L x 5 5/8" W x 4 5/8" H. Enclosure- polycarbonate, valve body die cast aluminum housing with Buna N seals.

Manually Operated Valves

Panel Mounted 22mm Pushbuttons

Kuhnke Power Valves

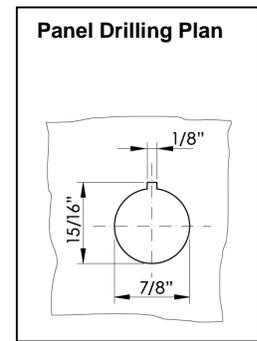
Miniature Oil Tight Pushbuttons (22mm)

Panel mounted 22mm pushbuttons are designed to fit along side standard industrial electrical pushbuttons to provide a uniform panel appearance and utilize the same drilling hole sizes and spacing. Additionally, items such as legend plates, lock off devices and other standard 22mm accessories can be used to blend air valves with electrical buttons on operator control panels.

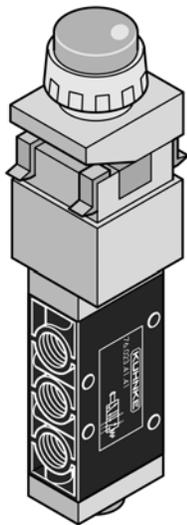
This miniature line is available in 3 way and 4 way versions both standard and air pilot assisted. Operators include standard pushbuttons, mushroom heads, selector switches, key operators and wobble sticks.

Operators are cast metal, with a silver finish. Buttons are plastic. Valves are 1/8 ported and have an actuation force of 7.9 lbs for the standard types and 1.8 lbs. for air pilot assisted types.

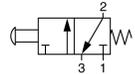
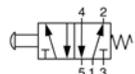
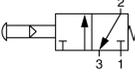
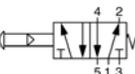
Miniature pushbutton valves utilize a bayonet mounting system that reduces installation time by eliminating loose washers, spacers and valve assembly. The pushbutton operator is inserted in the panel hole and attached to the valve body by turning the valve into place. 2 clamping screws are then tightened into the back of the panel to secure the unit in place.



Red Pushbutton



Standard raised red pushbutton for momentary actuation.

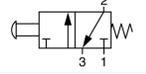
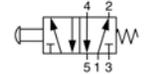
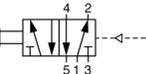
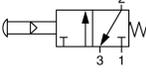
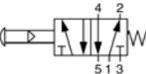
Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Normally Closed Spring Return 	6mm (1S)	1/8	75022-41-21	76022-41-21
4 Way Spring Return 	6mm (2S)	1/8	75023-41-41	76023-41-41
3 Way Air Pilot Assisted Normally Closed Spring Return 	6mm (1S)	1/8	75022-51-21	76022-51-21
4 Way Air Pilot Assisted Spring Return 	6mm (2S)	1/8	75023-51-41	76023-51-41

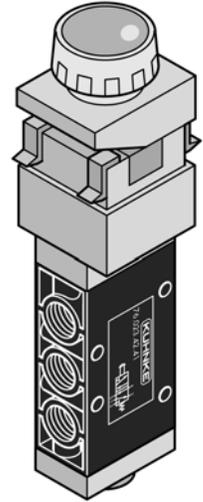
Operating pressure range std. type – 0-145 PSI; air piloted types minimum 35 PSI. Actuation force: std. - 7.9 lbs., air pilot assisted types 1.8 lbs. Above panel dimensions 1.125" dia. x .75" H. Typical behind panel dimensions are 4.75" (3 way), 5.5" (4 way) D. x 1.375" H x .75" W.

For valve specifications see appendix. For detail dimensions contact factory.

Shrouded Head Red Pushbutton

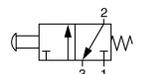
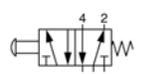
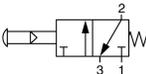
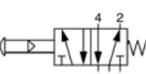
Shrouded Head helps prevent accidental operation of button.

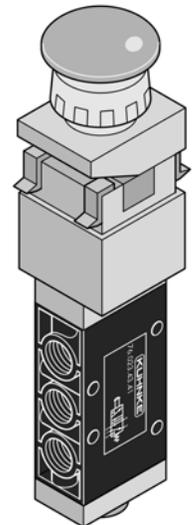
Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Normally Closed Spring Return	 6mm (1S)	1/8	75022-42-21	76022-42-21
4 Way Spring Return	 6mm (2S)	1/8	75023-42-41	76023-42-41
4 Way Pneumatic Reset Only *	 6mm (2S)	1/8	75023-42-42	76023-42-42
3 Way Air Pilot Assisted Normally Closed Spring Return	 6mm (1S)	1/8	75022-52-21	76022-52-21
4 Way Air Pilot Assisted Spring Return	 6mm (2S)	1/8	75023-52-41	76023-52-41



Mushroom Head Red Pushbutton

Mushroom Head allows for palm operation of valve.

Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Normally Closed Spring Return	 6mm (1S)	1/8	75022-43-21	76022-43-21
4 Way Spring Return	 6mm (2S)	1/8	75023-43-41	76023-43-41
3 Way Air Pilot Assisted Normally Closed Spring Return	 6mm (1S)	1/8	75022-53-21	76022-53-21
4 Way Air Pilot Assisted Spring Return	 6mm (2S)	1/8	75023-53-41	76023-53-41



* Pneumatic Reset PB can only be returned by applying a pneumatic signal (35 PSI min.) to an auxiliary 1/8 port.
 Operating pressure range std. type— 0-145 PSI; air piloted types minimum 35 PSI. Actuation force: std. - 7.9 lbs., air pilot assisted types 1.8 lbs.
 Above panel dim. are 1.125" dia. x .5" H (shroud) or 1.25"H (mushroom). Behind panel dim. are 4" (3 way), 4.5" (4 way) D. x 1.375" H x .75 W.
For valve specifications see appendix. For detail dimensions contact factory.

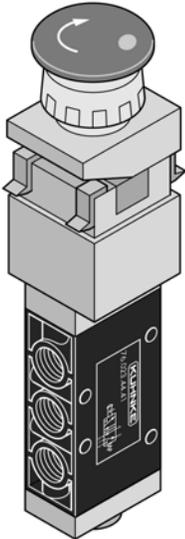
Manually Operated Valves

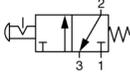
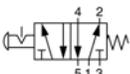
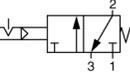
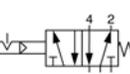
Panel Mounted 22mm Pushbuttons

Kuhnke Power Valves

Mushroom Head, Latching, Red Pushbutton (Punch Button)

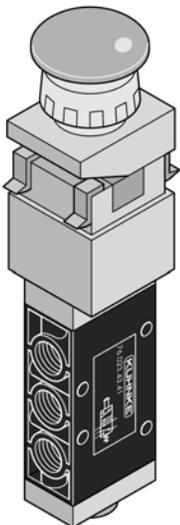
Push to latch, turn to unlatch. Can be used as an emergency stop button.

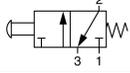
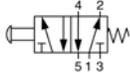
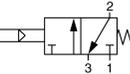
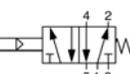


Description	Orifice (Body No.)	Port Size	Catalog Number		
			NPT Ports (USA Std.)	Metric Ports (European Std.)	
3 Way Normally Closed Maintained Position		6mm (1S)	1/8	75022-44-21	76022-44-21
4 Way Maintained Position		6mm (2S)	1/8	75023-44-41	76023-44-41
3 Way Air Pilot Assisted Normally Closed Maintained Position		6mm (1S)	1/8	75022-54-21	76022-54-21
4 Way Air Pilot Assisted Maintained Position		6mm (2S)	1/8	75023-54-41	76023-54-41

Wobble Head Red Pushbutton

Wobble button can be operated by pushing mushroom head down or to the side.



Description	Orifice (Body No.)	Port Size	Catalog Number		
			NPT Ports (USA Std.)	Metric Ports (European Std.)	
3 Way Normally Closed Spring Return		6mm (1S)	1/8	75022-45-21	76022-45-21
4 Way Spring Return		6mm (2S)	1/8	75023-45-41	76023-45-41
3 Way Air Pilot Assisted Normally Closed Spring Return		6mm (1S)	1/8	75022-55-21	76022-55-21
4 Way Air Pilot Assisted Spring Return		6mm (2S)	1/8	75023-55-41	76023-55-41

See page 14 for general information on miniature oil tight pushbutton valves.

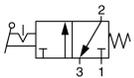
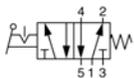
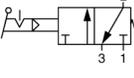
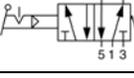
Operating pressure range std. type— 0-145 PSI; air piloted types minimum 35 PSI. Actuation force: std. - 7.9 lbs., air pilot assisted types 1.8 lbs.

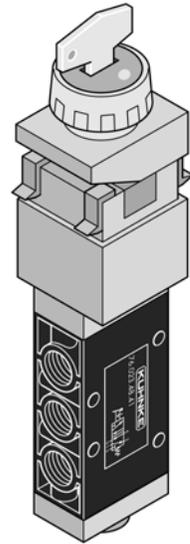
Above panel dim. are 1.125" dia. x 1.25"H. Behind panel dimensions are 4" (3 way), 4.5" (4 way) D. x 1.375" H x .75 W.

For valve specifications see appendix. For detail dimensions contact factory.

Key Operated 2 Position Selector

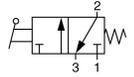
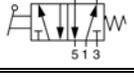
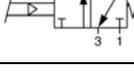
Key provides security for locking off air supply to equipment.

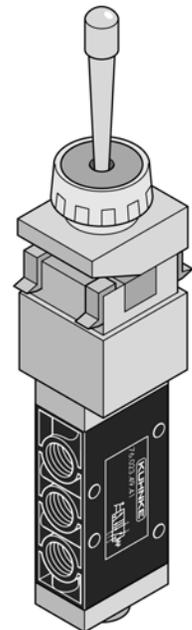
Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Normally Closed Maintained Position	 6mm (1S)	1/8	75022-48-21	76022-48-21
4 Way Maintained Position	 6mm (2S)	1/8	75023-48-41	76023-48-41
3 Way Air Pilot Assisted Normally Closed Maintained Position	 6mm (1S)	1/8	75022-58-21	76022-58-21
4 Way Air Pilot Assisted Maintained Position	 6mm (2S)	1/8	75023-58-41	76023-58-41



Wobble Stick

Moving stick in any direction operates valve. Spring return to off.

Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Normally Closed Spring Return	 6mm (1S)	1/8	75022-49-21	76022-49-21
4 Way Spring Return	 6mm (2S)	1/8	75023-49-41	76023-49-41
3 Way Air Pilot Assisted Normally Closed Spring Return	 6mm (1S)	1/8	75022-59-21	76022-59-21
4 Way Air Pilot Assisted Spring Return	 6mm (2S)	1/8	75023-59-41	76023-59-41



See page 14 for general information on miniature oil tight pushbutton valves.

Operating pressure range std. type- 0-145 PSI; air piloted types minimum 35 PSI. Actuation force: std. - 7.9 lbs., air pilot assisted types 1.8 lbs. Above panel dim. are 1.125" dia. x .5" H (key) or 2.75" H (wobble). Behind panel dimensions are 4" (3 way), 4.5" (4 way) D. x 1.375" H x .75 W.

For valve specifications see appendix. For detail dimensions contact factory.

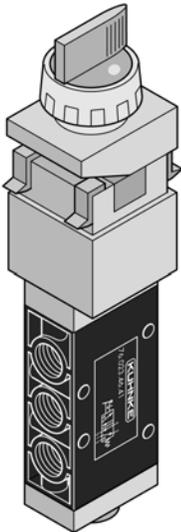
Manually Operated Valves

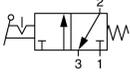
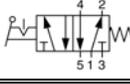
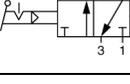
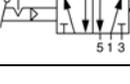
Panel Mounted 22mm Pushbuttons

Kuhnke Power Valves

Selector Switch, 2 Position, Short Handle, Black

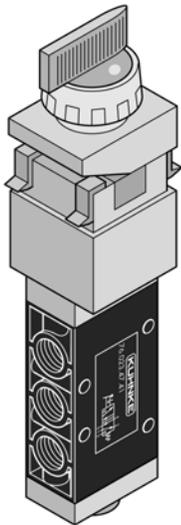
Selector switch maintains valve position.

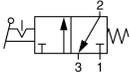
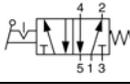
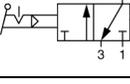
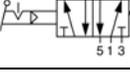


Description	Orifice (Body No.)	Port Size	Catalog Number		
			NPT Ports (USA Std.)	Metric Ports (European Std.)	
3 Way Normally Closed Maintained Position		6mm (1S)	1/8	75022-46-21	76022-46-21
4 Way Maintained Position		6mm (2S)	1/8	75023-46-41	76023-46-41
3 Way Air Pilot Assisted Normally Closed Maintained Position		6mm (1S)	1/8	75022-56-21	76022-56-21
4 Way Air Pilot Assisted Maintained Position		6mm (2S)	1/8	75023-56-41	76023-56-41

Selector Switch, 2 Position, Long Handle, Black

Selector switch maintains valve position.



Description	Orifice (Body No.)	Port Size	Catalog Number		
			NPT Ports (USA Std.)	Metric Ports (European Std.)	
3 Way Normally Closed Maintained Position		6mm (1S)	1/8	75022-47-21	76022-47-21
4 Way Maintained Position		6mm (2S)	1/8	75023-47-41	76023-47-41
3 Way Air Pilot Assisted Normally Closed Maintained Position		6mm (1S)	1/8	75022-57-21	76022-57-21
4 Way Air Pilot Assisted Maintained Position		6mm (2S)	1/8	75023-57-41	76023-57-41

See page 14 for general information on miniature oil tight pushbutton valves.

Operating pressure range std. type— 0-145 PSI; air piloted types minimum 35 PSI. Actuation force: std. - 7.9 lbs., air pilot assisted types 1.8 lbs.

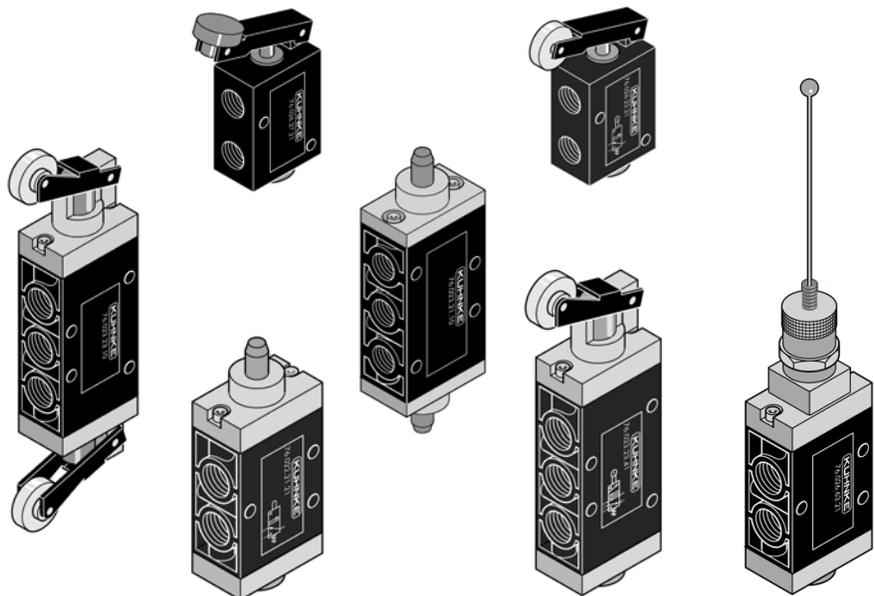
Above panel dimensions are 1.125" dia. x 1" H. Behind panel dimensions are 4" (3 way), 4.5" (4 way) D. x 1.375" H x .75 W.

For valve specifications see appendix. For detail dimensions contact factory.

Mechanically Operated Valves

Kuhnke's mechanically operated power valve selection is available in 2, 3 or 4 way valve designs with a variety of operators including flat levers, plungers, roller levers (limit switch) and antenna versions. Some units are equipped with valve operators on both ends and with pneumatic resets. Valves are available in standard mechanical designs or in air piloted assist versions for low actuation force applications.

Valves are constructed from zinc or aluminum die cast and machined bodies. Porting can be with either NPT or Metric threads to meet connection preferences. Mechanically operated valves can be either spool or poppet designs depending on valve selection.

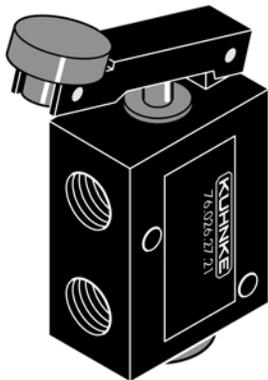


Mechanically Operated Valves

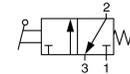
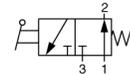
Plunger Operators

Kuhnke Power Valves

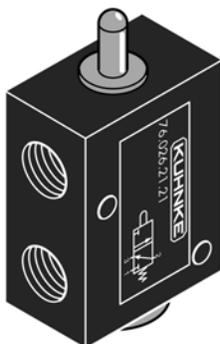
Flat Lever Operated, Body Mount, Compact Design



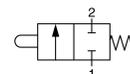
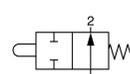
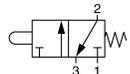
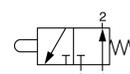
Can be used as end of travel device or thumb valve. Lever travel is 3/8" (10mm). Actuation force is 4.5 Lbs.

Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Normally Closed Spring Return 	4mm (1bP)	1/8	75026-27-21	76026-27-21
3 Way Normally Open Spring Return 	4mm (1aP)	1/8	75026-27-31	76026-27-31

Plunger Operated, Body Mount, Compact Design



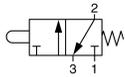
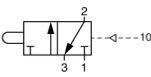
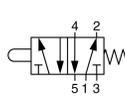
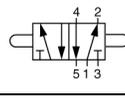
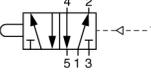
Depressing plunger operates valve. Used to detect material position or as an end of travel valve. Plunger travel approx. 3/16 inch (5mm). Actuation force is 13.5 Lbs.

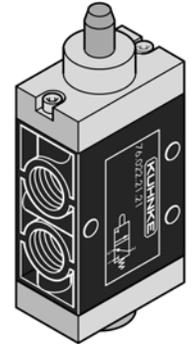
Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
2 Way Normally Closed Spring Return 	4mm (1bP)	1/8	75025-21-21	76025-21-21
2 Way Normally Open Spring Return 	4mm (1aP)	1/8	75025-21-31	76025-21-31
3 Way Normally Closed Spring Return 	4mm (1bP)	1/8	75026-21-21	76026-21-21
3 Way Normally Open Spring Return 	4mm (1aP)	1/8	75026-21-31	76026-21-31

Operating pressure range 0-145 PSI. Actuation force @ 90 PSI, is approx. 13.5 Lbs.
 Valve body dimensions are 1.968" L x .625" W x 1.25" H. Through body mounting holes 3/16" Dia.
 Flat Lever extends 1.0625" from valve body. Travel .562".
 Plunger diameter is 9/32" and extends .55" from valve body. Plunger travel .1875" +/- .04".
For valve specifications see appendix. For detail dimensions contact factory.

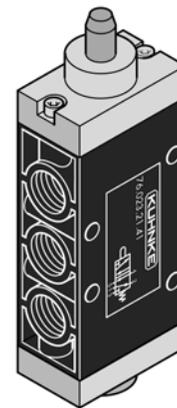
Plunger Operated, Body Mount

Used as position or end of travel detector. Valve configurations include pneumatic reset types which can be used in conjunction with pushbuttons or other control devices to manually or automatically reset valve. A double plunger is also available which can be used on machine carriages to reverse direction of travel. Operating force is 7.9 Lbs. and plunger travel is approx. 3/16 inch (5mm).

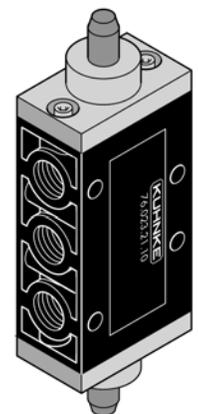
Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Norm. Closed Spring Return 	6mm (1S)	1/8	75022-21-21	76022-21-21
3 Way Norm. Closed Pneumatic Reset * 	6mm (1S)	1/8	75022-21-22	76022-21-22
4 Way Spring Return 	6mm (2S)	1/8	75023-21-41	76023-21-41
4 Way Plunger on Both Ends (Maintained) 	6mm (2S)	1/8	75023-21-10	76023-21-10
4 Way Pneumatic Reset* 	6mm (2S)	1/8	75023-21-42	76023-21-42



3 Way



4 Way



4 Way Plunger On Both Ends

* Pneumatic Reset Valves can be returned only by applying a pneumatic signal (35 PSI min.) to an auxiliary 1/8 port.

Operating pressure range 0-145 PSI. Actuation force @ 90 PSI, is approx. 7.9 Lbs.

For normally open function on 3 way valve reverse connect ports 1-3. For 2 way operation, plug port 3.

Typical valve body dimensions are 2.5" L (3 way), 3.15" L (4 way) x 1.375" H x .75" W. Add 1" to L dim. for pneumatic reset types. Through body mounting holes 3/16" dia.

Plunger diameter is .25" and extends .669" from valve body. Plunger travel is .1875" +/- .04".

For valve specifications see appendix. For detail dimensions contact factory.

Mechanically Operated Valves

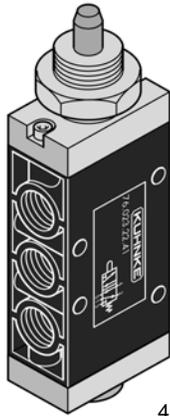
Plunger Operators

Kuhnke Power Valves

Plunger Operated, Nose Mount

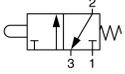
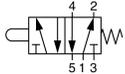


3 Way



4 Way

Depressing plunger operates valve. Used to detect material position or as an end of travel valve. Plunger travel approx. 3/16 inch (5mm). Actuating force is 7.9 Lbs.

Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Norm. Closed Spring Return 	6mm (1S)	1/8	75022-22-21	76022-22-21
4 Way Spring Return 	6mm (2S)	1/8	75023-22-41	76023-22-41

Operating pressure range 0-145 PSI. Actuation force @ 90 PSI, is approx. 7.9 Lbs.

For normally open function on 3 way valve, reverse connect ports 1-3. For 2 way operation, plug port 3.

Typical valve body dimensions are 2.5" L (3 way), 3.15" L (4 way) x 1.375" H x .75" W. Mounting hole 5/8" diameter.

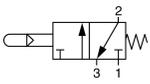
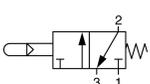
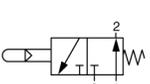
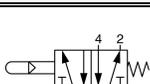
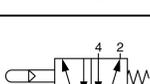
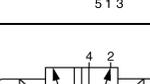
Through body mounting holes 3/16" dia.

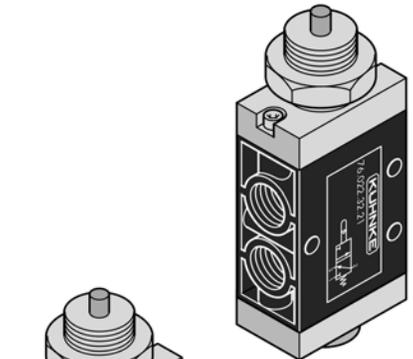
Plunger diameter is .25" and extends .875" from valve body. Plunger travel is .1875" +/- .04".

For valve specifications see appendix. For detail dimensions contact factory.

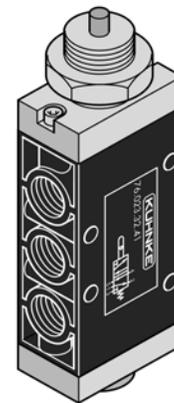
Plunger Operated, Air Pilot Assist, Nose Mount

Can be used as a door closed switch, material position detector or an end of travel detector. A double plunger is available which can be used on machine carriages to reverse direction of travel. Air pilot assist reduces actuation force to 1.8 lbs., minimum supply pressure 35 PSI.

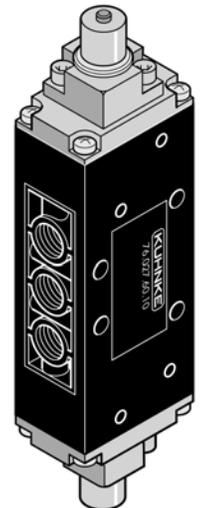
Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Norm. Closed Spring Return 	6mm (1S)	1/8	75022-32-21	76022-32-21
3 Way Norm. Closed Spring Return 	8mm (6P)	1/4	75046-60-21	76046-60-21
3 Way Norm. Open Spring Return 	8mm (6P)	1/4	75046-60-31	76046-60-31
4 Way Spring Return 	6mm (2S)	1/8	75023-32-41	76023-32-41
4 Way Spring Return 	8mm (7P)	1/4	75047-60-41	76047-60-41
4 Way Plunger on Both Ends (Maintained) 	6mm (10P)	1/8	75027-60-10	76027-60-10
4 Way Plunger on Both Ends (Maintained) 	8mm (7P)	1/4	75047-60-10	76047-60-10



3 Way
1/8 Ports



4 Way
1/8 Ports



4 Way Plunger
On Both Ends

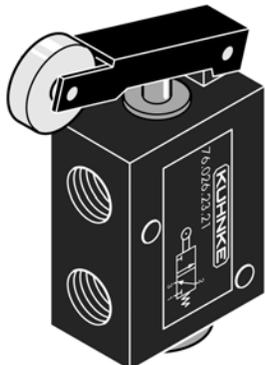
Operating pressure range is 35-145 PSI. Actuation force @ 90 PSI, is approx. 1.8 Lbs.
 Approximate valve body dimensions for 1/8 ported valves are 3.5" L (4 way body no. 2S) x 1.375" H x .75" W. For body no. 10P- 4.75" L x 2" H x 1" W. Approximate dimensions for 1/4 ported valves are 4.75" L x 2" H x 1" W. Mounting hole 5/8" diameter.
 Plunger diameter 5/32" and extends .625" from valve body. Plunger travel is .125".
For valve specifications see appendix. For detail dimensions contact factory.

Mechanically Operated Valves

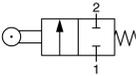
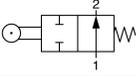
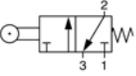
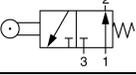
Roller Lever Operators

Kuhnke Power Valves

Roller Lever Operated, Body Mount, Compact Design



Used as a pneumatic limit switch or position detector. Roller arm travel is 9/16" (14mm). Actuation force is 7.9 Lbs.

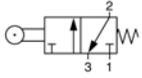
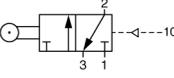
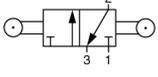
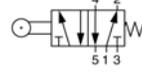
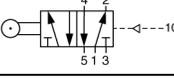
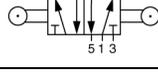
Description	Orifice (Body No.)	Port Size	Catalog Number		
			NPT Ports (USA Std.)	Metric Ports (European Std.)	
2 Way Normally Closed Spring Return		4mm (1bP)	1/8	75025-23-21	76025-23-21
2 Way Normally Open Spring Return		4mm (1aP)	1/8	75025-23-31	76025-23-31
3 Way Normally Closed Spring Return		4mm (1bP)	1/8	75026-23-21	76026-23-21
3 Way Normally Open Spring Return		4mm (1aP)	1/8	75026-23-31	76026-23-31

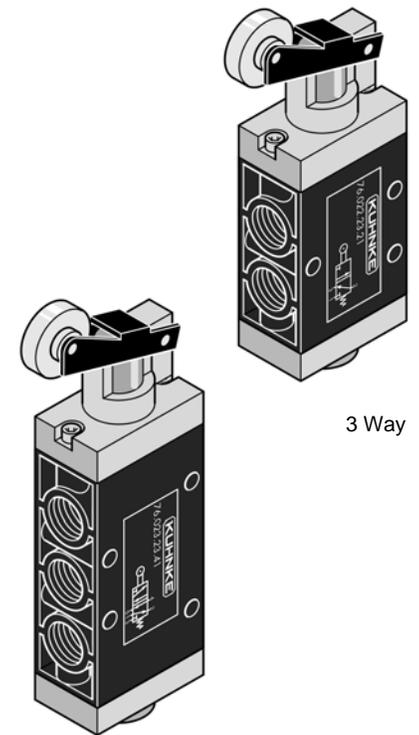
Operating pressure range 0-145 PSI. Actuation force @ 90 PSI, is approx. 7.9 Lbs.
Valve body dimensions are 1.812" L x 1.25" H x .625" W. Roller arm extends 1.33" beyond body and travel is .562".
Through body mounting holes 3/16" diameter.

For valve specifications see appendix. For detail dimensions contact factory.

Roller Lever Operated, Body Mount

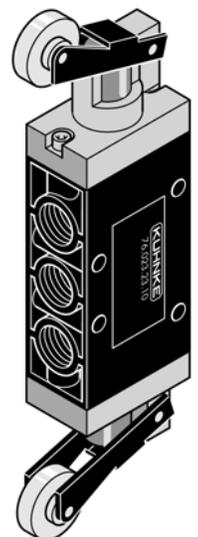
Used as a pneumatic limit switch or position detector. Roller arm travel is 3/8" (10mm). Actuating force is 4.5 Lbs. Options include valves with pneumatic reset used in conjunction with other controlling devices to reset valve. A double roller lever valve can be used on machine carriages to reverse direction of travel.

Description	Orifice (Body No.)	Port Size	Catalog Number		
			NPT Ports (USA Std.)	Metric Ports (European Std.)	
3 Way Norm. Closed Spring Return		6mm (1S)	1/8	75022-23-21	76022-23-21
3 Way Norm. Closed Pneumatic Reset *		6mm (1S)	1/8	75022-23-22	76022-23-22
3 Way Roller Lever Both Ends (Maintained)		6mm (1S)	1/8	75022-23-10	76022-23-10
4 Way Spring Return		6mm (2S)	1/8	75023-23-41	76023-23-41
4 Way Pneumatic Reset *		6mm (2S)	1/8	75023-23-42	76023-23-42
4 Way Roller Lever Both Ends (Maintained)		6mm (2S)	1/8	75023-23-10	76023-23-10



3 Way

4 Way



4 Way
Roller Lever
Both Ends

* Pneumatic Reset Valves are returned to the off position only by applying a pneumatic signal (35 PSI min.) to an auxiliary 1/8 port.

Operating pressure range is 0-145 PSI. Actuation force @ 90 PSI, is approx. 4.5 Lbs.

For normally open function on 3 way valve, reverse connect ports 1-3. For 2 way operation, plug port 3.

Typical valve body dimensions are 2.5" L (3 way), 3.15" L (4 way) x 1.375" H x .75" W. Add 1" to L dim. for pneumatic reset types. Through body mounting holes are 3/16" diameter.

Roller Lever extends 1.343" beyond body and travel is .39" +/- .04".

For valve specifications see appendix. For detail dimensions contact factory.

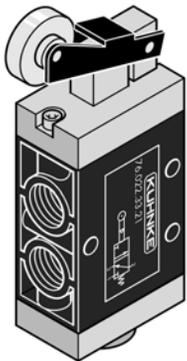
Mechanically Operated Valves

Roller Lever Operators

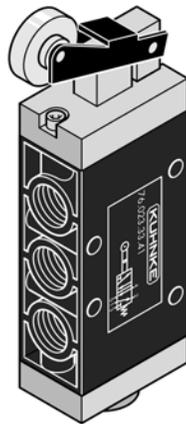
Kuhnke Power Valves

Roller Lever Operated, Air Pilot Assist, Body Mount

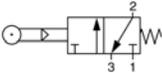
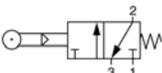
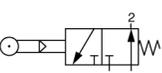
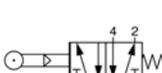
Used as a pneumatic limit switch or position detector. Actuation force is 14 ounces and roller lever travel is approx. 5/32 inch (4mm).



3 Way
1/8 Ports



4 Way
1/8 Ports

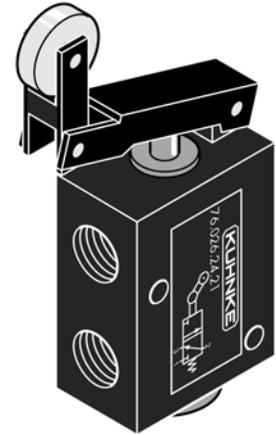
Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Norm. Closed Spring Return	 6mm (1S)	1/8	75022-33-21	76022-33-21
3 Way Norm. Closed Spring Return	 8mm (6P)	1/4	75046-70-21	76046-70-21
3 Way Norm. Open Spring Return	 8mm (6P)	1/4	75046-70-31	76046-70-31
4 Way Spring Return	 6mm (2S)	1/8	75023-33-41	76023-33-41
4 Way Spring Return	 8mm (7P)	1/4	75047-70-41	76047-70-41

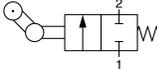
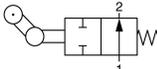
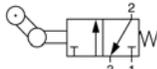
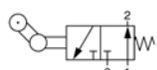
Operating pressure range is 35-145 PSI. Minimum pressure 35 PSI. Actuation force @ 90 PSI, is approx. 14 ounces. Approximate valve body dimensions for 1/8 ported valves are 2.75" L (3 way), 3.5" L (4 way) x 1.375" H x .75" W. Approximate valve body dimensions for 1/4 ported valves are 4.75" L x 2" H x 1" W. Roller lever extends 1.1875" and travel is .156". Through body mounting holes 3/16".

For valve specifications see appendix. For detail dimensions contact factory.

One Way Roller Lever Operated, Body Mount, Compact Design

One way roller operates valve only in one direction. Used as a pneumatic limit switch or position detector. Roller arm travel is 3/8" (10mm). Actuation force is 4.5 Lbs.



Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
2 Way Normally Closed Spring Return 	4mm (1bP)	1/8	75025-24-21	76025-24-21
2 Way Normally Open Spring Return 	4mm (1aP)	1/8	75025-24-31	76025-24-31
3 Way Normally Closed Spring Return 	4mm (1bP)	1/8	75026-24-21	76026-24-21
3 Way Normally Open Spring Return 	4mm (1aP)	1/8	75026-24-31	76026-24-31

Operating pressure range 0-145 PSI. Actuation force @ 90 PSI, is approx. 4.5 Lbs. Valve body dimensions are 1.812" L x .625" W x 1.25" H. Roller arm extends 1.89" beyond body and travel is .375" in actuate direction and .3125 in non-actuate direction. Through body mounting holes 3/16" diameter.

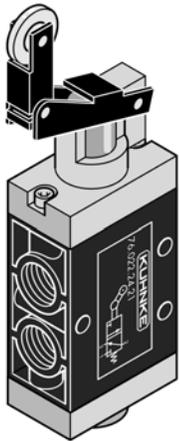
For valve specifications see appendix. For detail dimensions contact factory.

Mechanically Operated Valves

Roller Lever Operators

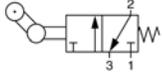
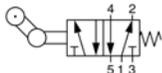
Kuhnke Power Valves

One Way Roller Lever Operated, Body Mount



3 Way

One way roller lever operates valve only in one direction. Can be used as safety valve for limiting travel on machinery. Roller arm travel is 1/2" (12mm). Actuating force is 4.5 Lbs.

Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
3 Way Norm. Closed Spring Return	 6mm (1S)	1/8	75022-24-21	76022-24-21
4 Way Spring Return	 6mm (2S)	1/8	75023-24-41	76023-24-41



4 Way

Operating pressure range 0-145 PSI. Actuation force @ 90 PSI, is approx. 4.5 Lbs.

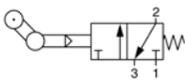
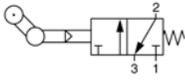
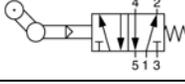
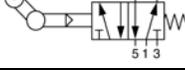
For normally open function on 3 way valve, reverse connect ports 1-3. For 2 way operation, plug port 3.

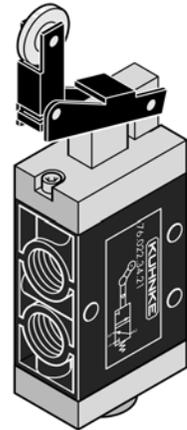
Valve body dimensions are 2.5" L (3 way), 3.15" L (4 way) x 1.375" W x .75" H. Roller Lever extends 2" beyond body and travel is .5" in actuate direction and non actuate direction. Through body holes are 3/16" diameter.

For valve specifications see appendix. For detail dimensions contact factory.

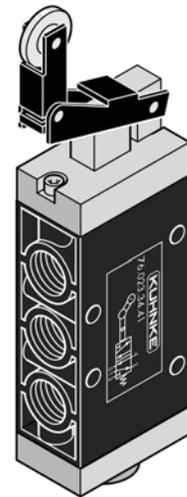
One Way Roller Lever Operated, Air Pilot Assist, Body Mount

One way roller lever operates valve only in one direction. Actuation force is 14 ounces and roller lever travel is approx. 5/32 inch (4mm).

Description	Orifice (Body No.)	Port Size	Catalog Number		
			NPT Ports (USA Std.)	Metric Ports (European Std.)	
3 Way Norm. Closed Spring Return		6mm (1S)	1/8	75022-34-21	76022-34-21
3 Way Norm. Closed Spring Return		8mm (6P)	1/4	75046-74-21	76046-74-21
4 Way Spring Return		6mm (2S)	1/8	75023-34-41	76023-34-41
4 Way Spring Return		8mm (7P)	1/4	75047-74-41	76047-74-41



3 Way
1/8 Ports



4 Way
1/8 Ports

Operating pressure range 35-145 PSI. Minimum pressure 35 PSI. Actuation force @ 90 PSI, is approx. 14 ounces. Approximate valve body dimensions for 1/8 ported valves are 2.75" L (3 way), 3.5" L (4 way) x 1.375" H x .75" W. Approximate valve body dimensions for 1/4 ported valves are 4.75" L x 2" H x 1" W. Roller arm extends 1.81" beyond body and travel is .156 in actuate direction and .5" in non actuate direction. Through body mounting holes 3/16".

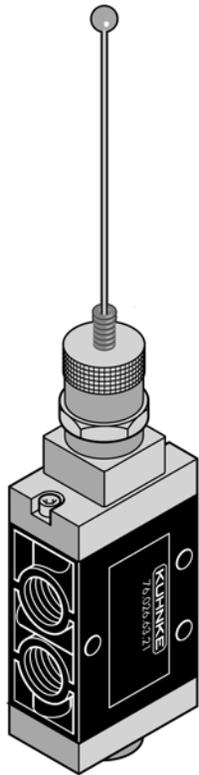
For valve specifications see appendix. For detail dimensions contact factory.

Mechanically Operated Valves

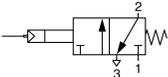
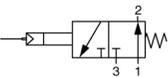
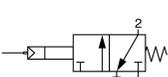
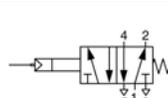
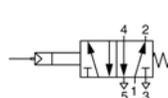
Misc. Operators

Kuhnke Power Valves

Antenna Valve, Air Pilot Assisted



Actuation is caused by deflection of spring supported 4½-inch wire. Can be used to detect passing items on conveyor belts. Allows valve to be mounted close to detected unit and provides a wiping action.

Description	Orifice (Body No.)	Port Size	Catalog Number		
			NPT Ports (USA Std.)	Metric Ports (European Std.)	
3 Way Norm. Closed Spring Return		6mm (9P)	1/8	75026-63-21	76026-63-21
3 Way Norm. Open Spring Return		6mm (9P)	1/8	75026-63-31	76026-63-31
3 Way Norm. Closed Spring Return		8mm (6P)	1/4	75046-63-21	76046-63-21
4 Way Spring Return (Spool Valve)		6mm (1mS)	1/8	(Not Available)	76123-63-41
4 Way Spring Return (Poppet Valve)		6mm (1mP)	1/8	(Not Available)	76127-63-41

Valve operating pressure range is 35-145 PSI. Minimum pressure 35 PSI. Actuation force @ 90 PSI, is approx. 6 ounces.

Body dimensions for 1/8 ported valves are 2.75" L (3 way), 3.5" L (4 way) x 1.375" H x .75" W. Approximate valve body dimensions for 1/4 ported valves are 4.75" L x 2" H x 1" W.

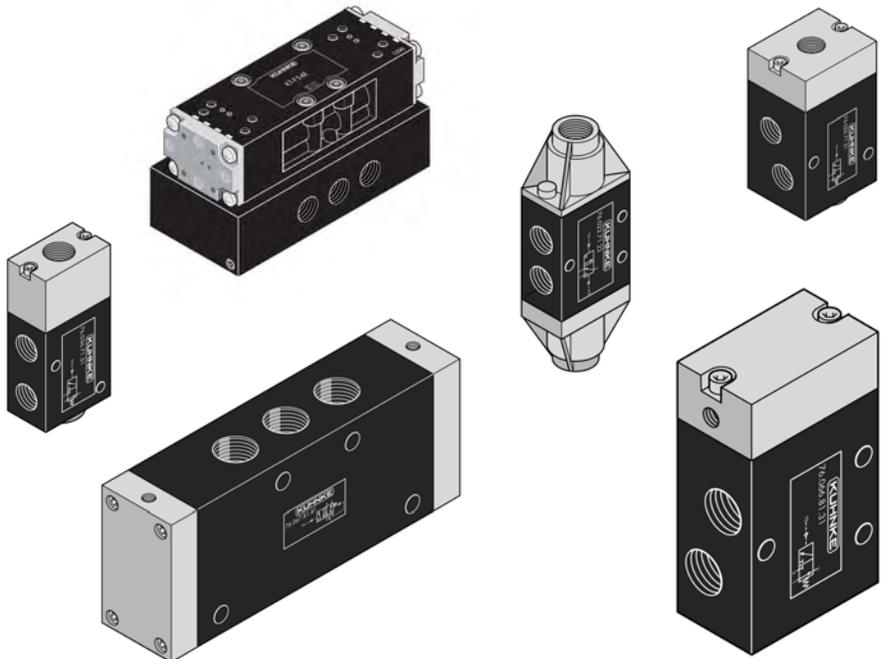
Through body mounting holes 3/16".

For valve specifications see appendix. For detail dimensions contact factory.

Pneumatically Operated Valves

Pneumatically operated valves are available in both spool and poppet designs from 1/8 to 1/2 inch porting, 3 or 4 way, and in 2 or 3 position versions. Variations include single or double air piloted, double acting with priority port, specialty flip-flop and oscillating valves as well as a group of 3 way poppet valves for vacuum use.

Kuhnke's Series 75/76 valves are constructed from aluminum or zinc die cast and machined bodies to provide reliable service. Valves with both NPT and Metric threads are available to satisfy international standards requirements.

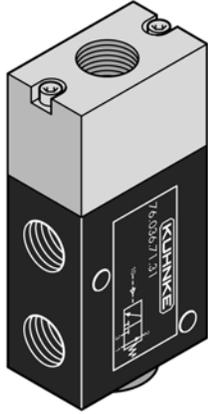


Pneumatically Operated Valves

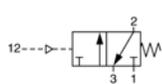
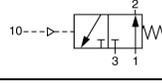
General Purpose

Kuhnke Power Valves

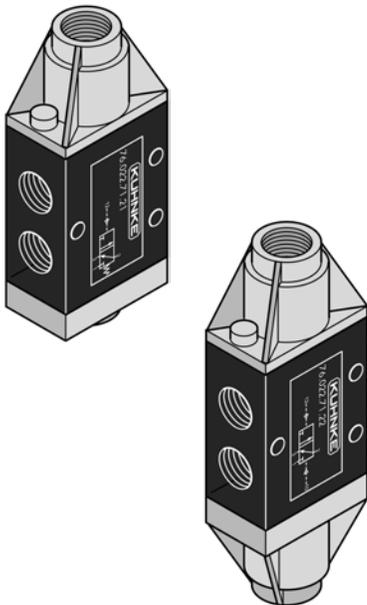
Pneumatic Operator, 3 Way, Compact Design



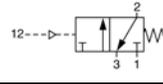
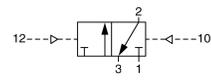
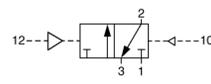
Compact design provides a simple solution for air piloted 3 way valve requirements. These poppet design valves are body mounted, have 1/8 ports and require 50 PSI control pressure to operate.

Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
Normally Closed Spring Return 	4mm (1bP)	1/8	75036-71-21	76036-71-21
Normally Open Spring Return 	4mm (1aP)	1/8	75036-71-31	76036-71-31

Pneumatic Operator, 3 Way, Spool Design



Direct acting pneumatic operated spool valves are available with single, double or with priority actuators. Priority ports override signals from opposite pilot operator to ensure positive return to home position. Minimum pilot pressure 35 PSI.

Description	Orifice (Body No.)	Port Size	Catalog Number	
			NPT Ports (USA Std.)	Metric Ports (European Std.)
Single Pilot Spring Return 	6mm (1S)	1/8	75022-71-21	76022-71-21
Double Pilot With Detent 	6mm (1S)	1/8	75022-71-22	76022-71-22
Double Pilot With Priority Detent 	6mm (1S)	1/8	75022-71-47	76022-71-47

Operating pressure range is 0 to 145 PSI. Pilot port size is 1/8.

Compact valves actuation force (pilot pressure): 50 PSI minimum. Dimensions: 2 7/8" L x 5/8" W x 1 1/4"D.

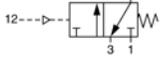
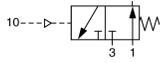
Spool design valves actuation force -35 PSI minimum. Dimensions: approx. 3 1/4" L x 1 3/8" W x 7/8"D, (Double pilot 3 5/8" L).

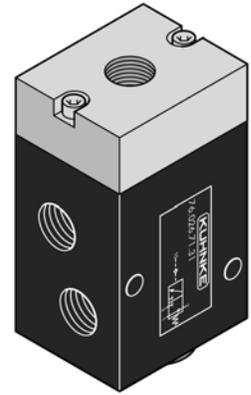
Mounting via through body holes 3/16" dia.

For valve specifications see appendix. For detail dimensions contact factory.

Pneumatic Operator, 3 Way, Poppet Design

Three way pneumatically operated poppet valves provide high flow rates in a basic valve design. Available up to 1/2 ported sizes in normally closed and normally open versions. Pilot ports are 1/8 inch and require a minimum of 35 PSI to operate.

Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Normally Closed Spring Return 	6mm (9P)	2 5/8 x 1 x 1 5/8	1/8	75026-71-21	76026-71-21
	8mm (6P)	2 5/8 x 1 x 1 5/8	1/4	75046-71-21	76046-71-21
	15mm (11P)	4 7/8 x 1 5/8 x 2 3/4	1/2	75066-81-21	76066-81-21
Normally Open Spring Return 	6mm (9P)	2 5/8 x 1 x 1 5/8	1/8	75026-71-31	76026-71-31
	8mm (6P)	2 5/8 x 1 x 1 5/8	1/4	75046-71-31	76046-71-31
	15mm (11P)	4 7/8 x 1 5/8 x 2 3/4	1/2	75066-81-31	76066-81-31

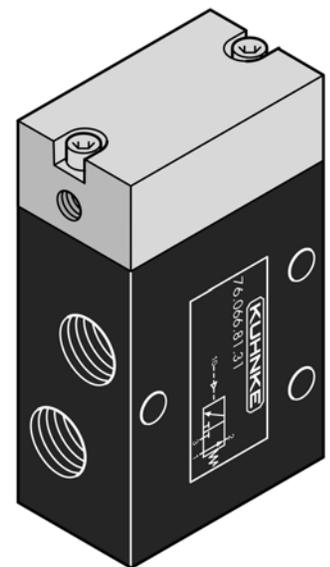


Typical 3 Way 1/8 and 1/4 Ported Valves

Pneumatic Operator, 3 Way, for Vacuum Use

Valves are similar to units above except have been modified with special seals and springs for use in vacuum applications.

Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Normally Closed Spring Return 	6mm (9P)	2 5/8 x 1 x 1 5/8	1/8	75226-71-21	76226-71-21
	8mm (6P)	2 5/8 x 1 x 1 5/8	1/4	75246-71-21	76246-71-21
	15mm (11P)	4 7/8 x 1 5/8 x 2 3/4	1/2	75266-81-21	76266-81-21



Typical 3 Way 1/2 Ported Valve

Operating pressure range is 0 to 145 PSI. Pilot port size is 1/8. Actuation pressure (pilot pressure) is 35 PSI minimum. Through body mounting holes are 3/16" for 1/8 and 1/4 ported valves, 1/4" for 1/2 ported valves. **For valve specifications see appendix. For detail dimensions contact factory.**

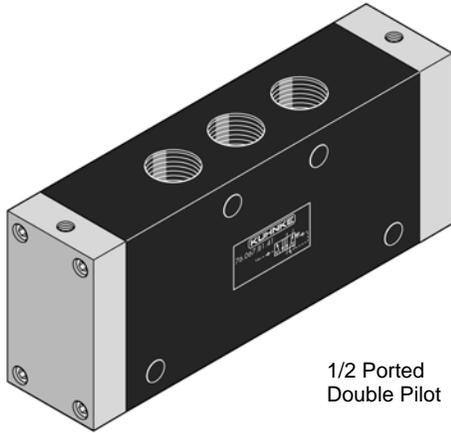
Pneumatically Operated Valves

General Purpose

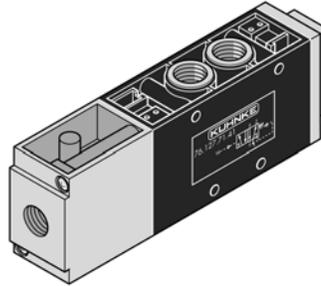
Kuhnke Power Valves

Directional Control Valves, (4 Way), Pneumatic Actuation

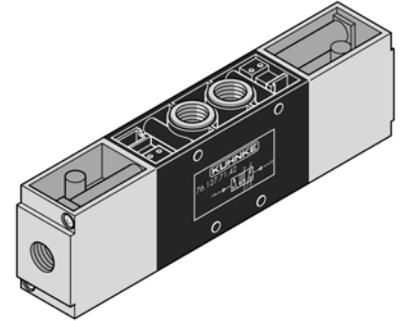
(Poppet Design, In Line Mounting)



1/2 Ported
Double Pilot



1/8 Ported
Single Pilot
Type 76127



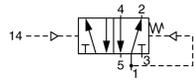
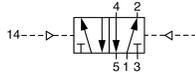
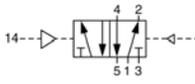
1/8 Ported
Double Pilot
Type 76127

Pneumatically operated poppet valves are available in single, double or with priority port actuators. The priority port design overrides the signal from the opposite pilot operator to insure return to home position.

Poppet valves rely on O rings and gaskets to seal passage ways within the valve and generally offer higher flow rates than other types of valves.

These valves are available in port sizes of 1/8, 1/4 and 1/2. Pilot ports are 1/8 for all size valves and require minimum of 35 PSI operating pressure. Single air pilot valves have an air supported spring return and require a pilot pressure equal to or greater than the air supply pressure at port 1.

Valves can be mounted using through body holes or assembled on manifolds.

Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Single Air Pilot Spring Return * 	6mm (10P)	4 1/4 x 1 1/8 x 1 5/8	1/8	75027-71-41	76027-71-41
	6mm (1MP)	4 7/8 x 1 x 1 5/8	1/8	(Not Available)	76127-71-41
	8mm (7P)	4 7/8 x 1 x 2	1/4	75047-81-41	76047-81-41
	15mm (12P)	6 3/4 x 1 5/8 x 2 3/4	1/2	75067-81-41	76067-81-41
Double Air Pilot With Detent 	6mm (10P)	4 1/4 x 1 1/8 x 1 5/8	1/8	75027-71-42	76027-71-42
	6mm (1MP)	5 3/8 x 1 x 1 5/8	1/8	(Not Available)	76127-71-42
	8mm (7P)	5 1/2 x 1 x 2	1/4	75047-81-42	76047-81-42
	15mm (12P)	6 3/4 x 1 5/8 x 2 3/4	1/2	75067-81-42	76067-81-42
Double Air Pilot With Priority Detent 	6mm (10P)	4 1/4 x 1 1/8 x 1 5/8	1/8	75027-71-47	76027-71-47
	6mm (1MP)	5 3/8 x 1 x 1 5/8	1/8	(Not Available)	76127-71-47
	8mm (7P)	5 1/2 x 1 x 2	1/4	75047-81-47	76047-81-47
	15mm (12P)	6 3/4 x 1 5/8 x 2 3/4	1/2	75067-81-47	76067-81-47

* Single air pilot valves have an air supported spring return. Actuation force must be equal to or greater than the pressure at port 1.

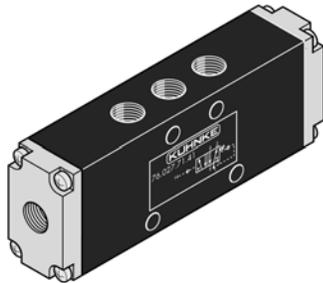
Pilot port size (for actuation): 1/8 for all size valves.

Operating pressure range 35 to 145 PSI. Actuation force (pilot pressure): 35 PSI minimum.

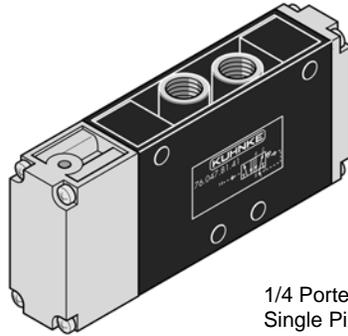
Mounting via 4 through body holes 3/16" Dia. (1/2" ported valves- 1/4" Dia.).

For valve specifications see appendix. See accessory section for manifolds if required. For detail dimensions contact factory.

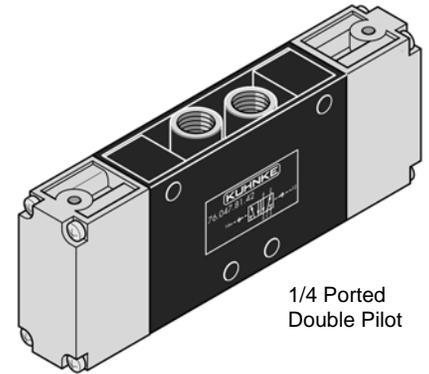
Directional Control Valves (4 Way), Pneumatic Actuation (Spool Design, In Line Mounting)



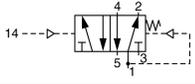
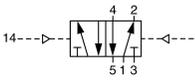
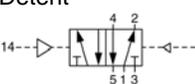
1/8 Ported
Single Pilot



1/4 Ported
Single Pilot



1/4 Ported
Double Pilot

Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Single Air Pilot Spring Return * 	6mm (8S)	4 1/4 x 1 1/8 x 1 5/8	1/8	75023-71-41	76023-71-41
	6mm (1MS)	4 7/8 x 1 x 1 5/8	1/8	(Not Available)	76123-71-41
	8mm (5S)	4 7/8 x 1 x 2	1/4	75043-81-41	76043-81-41
Double Air Pilot With Detent 	6mm (8S)	4 1/4 x 1 1/8 x 1 5/8	1/8	75023-71-42	76023-71-42
	6mm (1MS)	5 3/8 x 1 x 1 5/8	1/8	(Not Available)	76123-71-42
	8mm (5S)	5 1/2 x 1 x 2	1/4	75043-81-42	76043-81-42
Double Air Pilot With Priority Detent 	6mm (8S)	4 1/4 x 1 1/8 x 1 5/8	1/8	75023-71-47	76023-71-47
	6mm (1MS)	5 3/8 x 1 x 1 5/8	1/8	(Not Available)	76123-71-47
	8mm (5S)	5 1/2 x 1 x 2	1/4	75043-81-47	76043-81-47

Spool valves rely on a stainless steel spool moving within a sleeve to direct flow to the ports of the valve. Spool designs are known for their long life capability. Available in single, double or with priority port actuators. The priority port design overrides the signal from the opposite pilot operator to insure return to home position. Pneumatically actuated spool valves are available in 1/8 and 1/4 port sizes and require a minimum of 35 PSI operating pressure. Valves can be mounted individually using through body holes or assembled on manifolds.

* Single air pilot valves have an air supported spring return. Actuation force must be equal to or greater than the pressure at port 1. Pilot port size (for actuation): 1/8 for all size valves. Operating pressure range 35 to 145 PSI. Actuation force (pilot pressure): 35 PSI minimum. Mounting via 4 through body holes 3/16" Dia.

For valve specifications see appendix. See accessory section for manifolds if required. For detail dimensions contact factory.

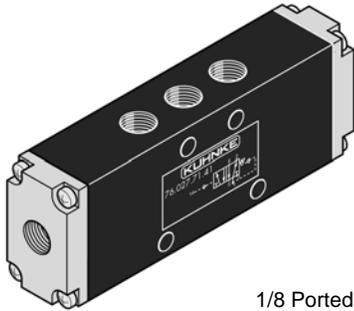
Pneumatically Operated Valves

General Purpose

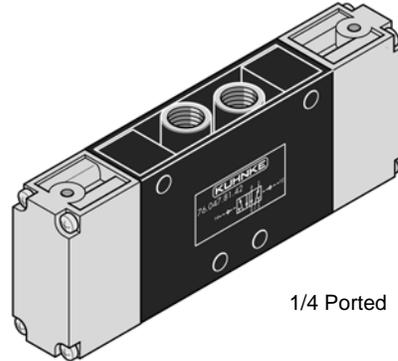
Kuhnke Power Valves

3 Position Valves, (4 Way), Pneumatic Actuation

(Spool Design, In Line Mounting)



1/8 Ported

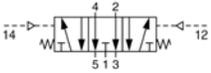
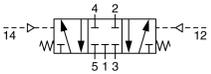
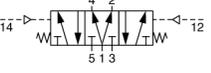


1/4 Ported

Three position spool valves are used mostly to position cylinders. Valves with all ports open in the center position allow the cylinder piston rod to move freely, while valves with all ports closed in the center position will hold the cylinder in the desired position when no pilot pressure is present. A third type keeps line pressure on both sides of the cylinder piston.

Pneumatically actuated spool valves are available in 1/8 and 1/4 port sizes and require a minimum of 35 PSI operating pressure.

Valves can be mounted with through body holes or assembled on manifolds.

Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Double Air Pilot All ports <i>open</i> in center position. 	6mm (8S)	4 1/4 x 1 1/8 x 1 5/8	1/8	75024-71-28	76024-71-28
	6mm (1MS)	5 3/8 x 1 x 1 5/8	1/8	(Not Available)	76124-71-28
	8mm (5S)	5 1/2 x 1 x 2	1/4	75044-81-28	76044-81-28
Double Air Pilot All ports <i>closed</i> in center position. 	6mm (8S)	4 1/4 x 1 1/8 x 1 5/8	1/8	75024-71-38	76024-71-38
	6mm (1MS)	5 3/8 x 1 x 1 5/8	1/8	(Not Available)	76124-71-38
	8mm (5S)	5 1/2 x 1 x 2	1/4	75044-81-38	76044-81-38
Double Air Pilot Working ports 2-4 <i>pressurized</i> in center position. 	6mm (8S)	4 1/4 x 1 1/8 x 1 5/8	1/8	75024-71-58	76024-71-58
	--	--	--	--	--
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Pilot port size (for actuation): 1/8 for all size valves.

Operating pressure range 35 to 145 PSI. Actuation force (pilot pressure): 35 PSI minimum.

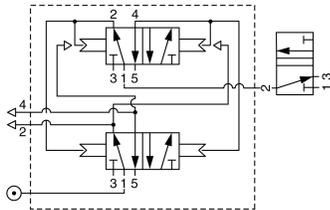
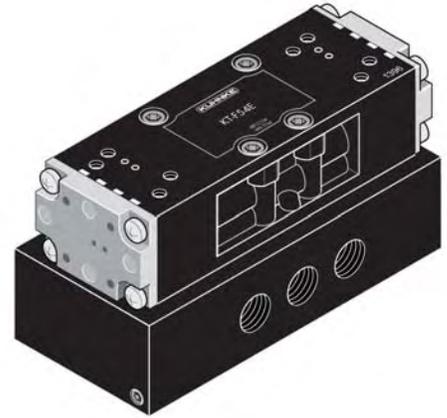
Mounting via 4 through body holes 3/16" Dia.

For valve specifications see appendix. See accessory section for manifolds if required. For detail dimensions contact factory.

Flip Flop Valve, Pneumatic Actuation

NPT Ports **75083-89-42**
Metric Ports **76083-89-42**

The Monostable Flip-Flop valve provides a 4 way switched output from an air pilot pulse signal of at least 300 ms in length. A pilot pressure is applied to the control port changing the valve output position. The output valve maintains position until the next pilot pulse signal is applied. The control pilot signal must be greater than 50% of the switched line pressure. Minimum operating pressure 35 PSI.

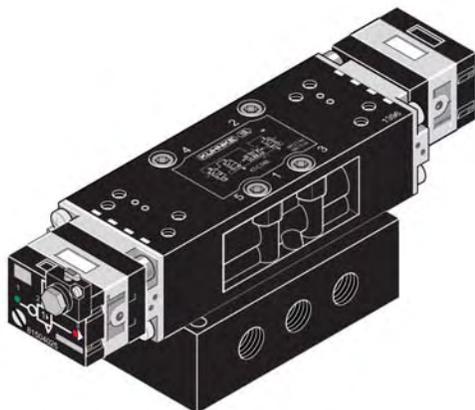


Port Size- 1/4
Orifice- 8mm
Body No.- 5S
Dimensions-
4 1/4" L x 2" W x 2 3/8" H.

Operating pressure range 35 to 145 PSI. Actuation force (pilot pressure): 35 PSI minimum.
Pilot port size is 1/8. Mounting via 4 through body holes 3/16" Dia.

For valve specifications see appendix. For detail dimensions contact factory.

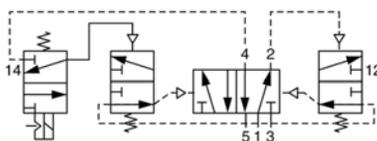
Oscillator Valve, Pneumatic Actuation



75083-90-42 NPT Ports

76083-90-42 Metric Ports

Valve can be used to oscillate a double acting cylinder. Applications include mixing, stirring or sawing devices where time critical cycling is not required. A pneumatic control signal applied to the control port starts valve oscillating. Speed is dependent on connected volume and line pressure, and can be controlled by the addition of flow control valves on the cylinder input ports. Typical speed is 16 cycles per minute at 90 PSI.



Port Size- 1/8
Orifice- 6mm
Body No.- 8S
Dimensions-
6 3/4" L x 2" W x 2 1/8" H.

Operating pressure range 35 to 145 PSI. Actuation force (pilot pressure): 35 PSI minimum.

Pilot port size is 1/8. Mounting via 4 through body holes 3/16" Dia.

Oscillator valve will not operate if applied on vented applications such as an air motor. Working ports must have a connected defined volume.

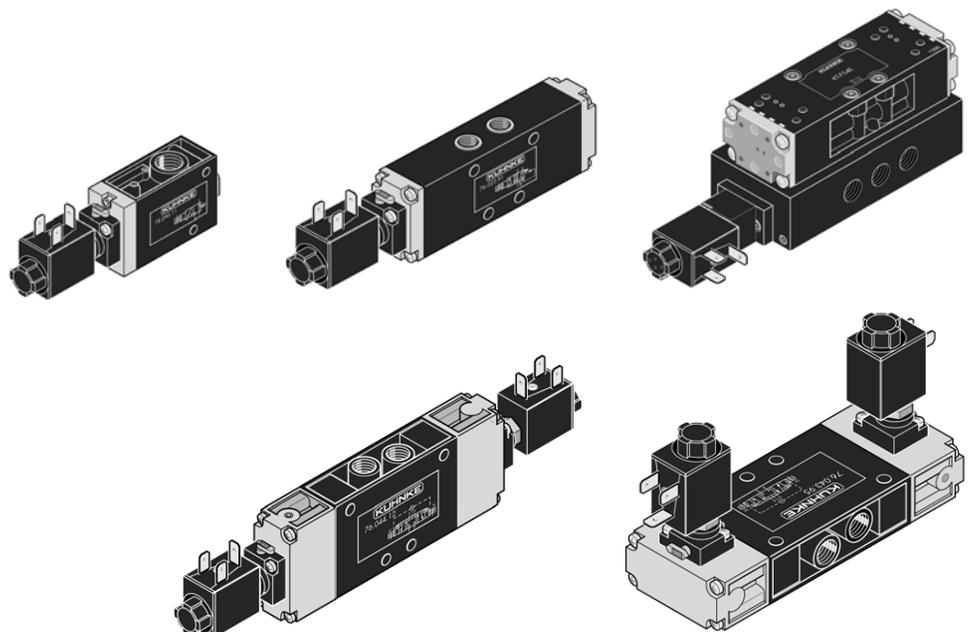
For valve specifications see appendix. For detail dimensions contact factory.

Electrically Operated Valves

Kuhnke Series 75/76 Solenoid operated valves satisfy most pneumatic system design requirements. Valves use an air piloted solenoid system complete with a red manual over ride lever for testing circuits. Air pilots are standard throughout the line. Coil systems consume only 2.5 watts of power and operate in 15-20 ms making the valve line compatible with most electronic controller outputs.

Valves are available in 3 or 4 way designs, 2 or 3 position, 1/8 to 1/2 inch porting and with single or double solenoid operators. Most valve types have optional units with external air pilots for switching low air pressure supplies including vacuum. Specialty valves include Flip-Flop as well as oscillator designs.

Valves can be either spool or poppet design depending on preference and are available both in flat mounting designs as well as in line mounting types which can also be manifold mounted. Valve bodies are die cast and machined aluminum with porting in either NPT or Metric threads to meet connection preferences.

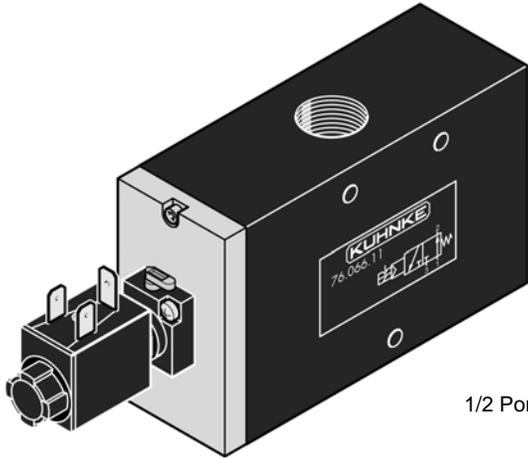


Electrically Operated Valves

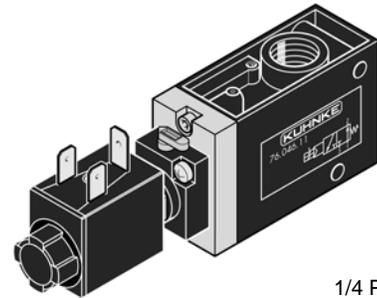
General Purpose

Kuhnke Power Valves

3 Way Solenoid Valves



1/2 Ported



1/4 Ported

Three way poppet design valves are solenoid operated, air pilot assisted. Valves include a red manual override lever for easy testing of pneumatic circuits. Coils are encapsulated for long life.

Available in standard versions, or with a port for external air supply used for switching pressures below 35 PSI.

Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Normally Closed Spring Return 	6mm (9P)	4 7/8 x 1 x 1 1/2	1/8	75026-01-00	76026-01-00
	8mm (6P)	4 7/8 x 1 x 1 1/2	1/4	75046-01-00	76046-01-00
	15mm (11P)	6 7/8 x 1 5/8 x 2 3/4	1/2	75066-01-00	76066-01-00
Normally Open Spring Return 	6mm (9P)	4 7/8 x 1 x 1 1/2	1/8	75026-11-00	76026-11-00
	8mm (6P)	4 7/8 x 1 x 1 1/2	1/4	75046-11-00	76046-11-00
	15mm (11P)	6 7/8 x 1 5/8 x 2 3/4	1/2	75066-11-00	76066-11-00
Normally Closed External Air Pilot * Spring Return 	6mm (9P)	6 1/4 x 1 x 1 1/2	1/8	75326-01-00	76326-01-00
	8mm (6P)	6 1/4 x 1 x 1 1/2	1/4	75346-01-00	76346-01-00
	15mm (11P)	8 1/8 x 1 5/8 x 2 3/4	1/2	75366-01-00	76366-01-00
Normally Open External Air Pilot * Spring Return 	6mm (9P)	6 1/4 x 1 x 1 1/2	1/8	75326-11-00	76326-11-00
	8mm (6P)	6 1/4 x 1 x 1 1/2	1/4	75346-11-00	76346-11-00
	15mm (11P)	8 1/8 x 1 5/8 x 2 3/4	1/2	75366-11-00	76366-11-00

Order Coils Separately

Valve catalog numbers do not include solenoid coils. Coils are supplied loose and unmounted as separate items.

AC Coil Catalog No. 76410-02-**

DC Coil Catalog No. 76410-00-**

** - Add the required coil voltage suffix code from the chart below to complete the coil catalog number.

Voltage	AC	DC
12V	—	01
24V	12	02
48V	13	03
110V	14	04
230V	15	05

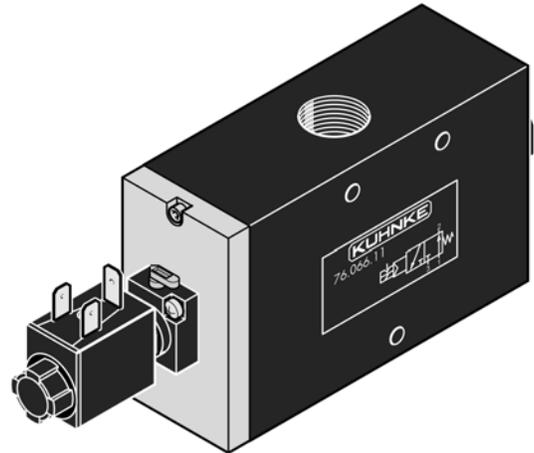
* External Air Pilot: valves have an auxiliary 10-32 (M5) port (1/8 on 1/2 ported valves) for connecting a separate air pilot supply for the solenoid section. For use when switching air pressures below 35 PSI.

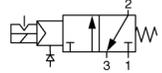
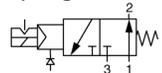
Operating pressure range is 35 to 145 PSI. (Use valves with external pilot for switching lower pressures).

For 2-way operation plug exhaust port 3. Through body mounting holes are 3/16" for 1/8 and 1/4 ported valves, 1/4 " for 1/2 ported valves.

For valve specifications see appendix. See accessory section for electrical connectors. For detail dimensions contact factory.

3 Way Solenoid Valves for Vacuum Use



Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Normally Closed External Air pilot * Spring Return 	6mm (9P)	5 x 1 x 1 5/8	1/8	75226-01-00	76226-01-00
	8mm (6P)	5 x 1 x 1 5/8	1/4	75246-01-00	76246-01-00
	15mm (11P)	6 7/8 x 1 5/8 x 2 7/8	1/2	75266-01-00	76266-01-00
Normally Open External Air pilot * Spring Return 	--	--	--	--	--
	8mm (6P)	5 x 1 x 1 5/8	1/4	75246-11-00	76246-11-00
	15mm (11P)	6 7/8 x 1 5/8 x 2 7/8	1/2	75266-11-00	76266-11-00

Valves are similar to the standard 3 way valves shown on the opposite page except have been modified with special seals and springs for vacuum applications. Valves have an external air supply port required to operate the pilot valve.

Order Coils Separately

Valve catalog numbers do not include solenoid coils. Coils are supplied loose and unmounted as separate items. (Double solenoids require 2 coils.)

AC Coil Catalog No. 76410-02-**

DC Coil Catalog No. 76410-00-**

** - Add the required coil voltage suffix code from the chart below to complete the coil catalog number.

Voltage	AC	DC
12V	-	01
24V	12	02
48V	13	03
110V	14	04
230V	15	05

* External Air Pilot: Valves have an auxiliary 10-32 (M5) port (1/8 on 1/2 ported valves) for connecting a separate air pilot supply for the solenoid section. A minimum of 35 PSI is required to operate valve.

Through body holes are 3/16" for 1/8 and 1/4 ported valves, 1/4 " for 1/2 ported valves.

For valve specifications see appendix. See accessory section for electrical connectors. For detail dimensions contact factory.

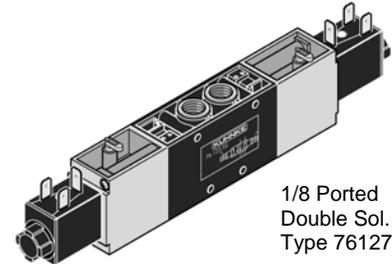
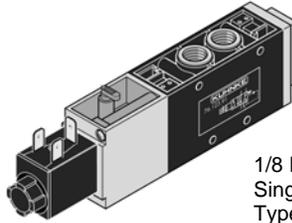
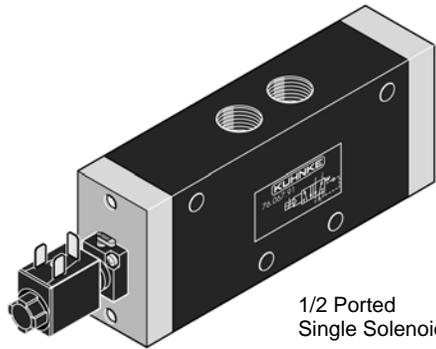
Electrically Operated Valves

General Purpose

Kuhnke Power Valves

Directional Control Valves (4 Way), Solenoid Operated

(Poppet Design, In Line Mounting)



Solenoid operated, air piloted poppet valves are available in single, double, priority and external air pilot supply versions. Priority version overrides signal from opposite solenoid to assure return to valve home position. Valves with external air pilot connections are used when switching pressures below 35 PSI. Poppet valves usually provide higher flow rates than other types of valves because of flow path design. Valves include a red manual override for easy testing. Encapsulated coils provide splash proof protection when used with plug connectors. Valves can be mounted individually using through body holes or assembled on manifolds.

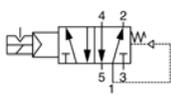
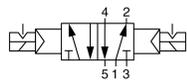
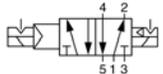
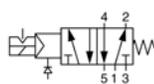
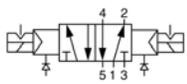
Order Coils Separately

Valve catalog numbers do not include solenoid coils. Coils are supplied loose and unmounted as separate items. (Double solenoid types require 2 coils.)

AC Coil Catalog No. 76410-02-**
DC Coil Catalog No. 76410-00-**

** - Add the required coil voltage suffix code from the chart below to complete the coil catalog number.

Voltage	AC	DC
12V	-	01
24V	12	02
48V	13	03
110V	14	04
230V	15	05

Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Single Solenoid Spring Return-air assisted 	6mm (10P)	6 3/8 x 1 1/8 x 1 5/8	1/8	75027-91-00	76027-91-00
	6mm (1MP)	6 1/4 x 1 x 1 5/8	1/8	(Not Available)	76127-91-00
	8mm (7P)	7 x 1 x 2	1/4	75047-91-00	76047-91-00
	15mm (12P)	8 7/8 x 1 5/8 x 2 3/4	1/2	75067-91-00	76067-91-00
Double Solenoid With Detent 	6mm (10P)	8 5/8 x 1 1/8 x 1 5/8	1/8	75027-92-00	76027-92-00
	6mm (1MP)	8 1/2 x 1 x 1 5/8	1/8	(Not Available)	76127-92-00
	8mm (7P)	10 x 1 x 2	1/4	75047-92-00	76047-92-00
	15mm (12P)	11 1/8 x 1 5/8 x 2 3/4	1/2	75067-92-00	76067-92-00
Double Solenoid With Priority Detent 	6mm (1MP)	8 1/2 x 1 x 1 5/8	1/8	(Not Available)	76127-93-00
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Single Solenoid External Air Pilot * Spring Return 	6mm (10P)	6 3/8 x 1 1/8 x 1 5/8	1/8	75327-91-00	76327-91-00
	6mm (1MP)	7 5/8 x 1 x 1 5/8	1/8	(Not Available)	76527-91-00
	8mm (7P)	7 x 1 x 2	1/4	75347-91-00	76347-91-00
	15mm (12P)	8 1/4 x 1 x 2	1/2	75367-91-00	76367-91-00
Double Solenoid External Air Pilot * With Detent 	6mm (10P)	8 5/8 x 1 1/8 x 1 5/8	1/8	75327-92-00	76327-92-00
	6mm (1MP)	10 1/8 x 1 x 1 5/8	1/8	(Not Available)	76527-92-00
	8mm (7P)	12 1/8 x 1 x 2	1/4	75343-92-00	76347-92-00
	15mm (12P)	12 5/8 x 1 5/8 x 2 3/4	1/2	75367-92-00	76367-92-00

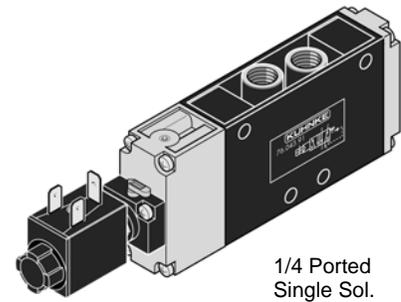
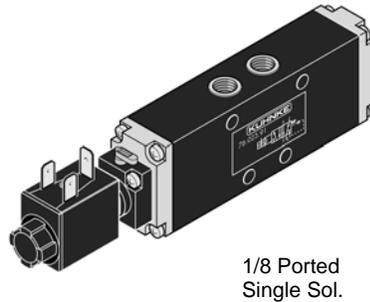
* External Air Pilot: valves have an auxiliary 10-32 (M5) port (1/8 on 1/2 ported valves) for connecting a separate air pilot supply for the solenoid section. For use when switching air pressures below 35 PSI.

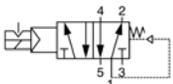
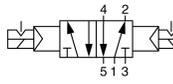
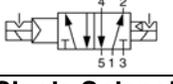
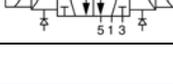
Operating pressure range is 35 to 145 PSI. (Use valves with external pilot for switching lower pressures).

Through body holes are 3/16" for 1/8 and 1/4 ported valves, 1/4" for 1/2 ported valves.

For valve specifications see appendix. See accessory section for connectors and manifolds. For detail dimensions contact factory.

Directional Control Valves (4 Way) Solenoid Operated (Spool Design, In Line Mounting)



Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Single Solenoid Spring Return-air assisted 	6mm (8S)	6 3/8 x 1 1/8 x 1 5/8	1/8	75023-91-00	76023-91-00
	6mm (1MS)	6 1/4 x 1 x 1 5/8	1/8	(Not Available)	76123-91-00
	8mm (5S)	7 x 1 x 2	1/4	75043-91-00	76043-91-00
Double Solenoid With Detent 	6mm (8S)	8 5/8 x 1 1/8 x 1 5/8	1/8	75023-92-00	76023-92-00
	6mm (1MS)	8 1/2 x 1 x 1 5/8	1/8	(Not Available)	76123-92-00
	8mm (5S)	10 x 1 x 2	1/4	75043-92-00	76043-92-00
Double Solenoid With Priority Detent 	6mm (1MS)	8 1/2 x 1 x 1 5/8	1/8	(Not Available)	76123-93-00
	--	--	--	--	--
	--	--	--	--	--
Single Solenoid External Air Pilot * Spring Return 	6mm (8S)	7 5/8 x 1 x 1 5/8	1/8	75323-91-00	76323-91-00
	6mm (1MS)	7 5/8 x 1 x 1 5/8	1/8	(Not Available)	76523-91-00
	8mm (5S)	8 1/4 x 1 x 2	1/4	75343-91-00	76343-91-00
Double Solenoid External Air Pilot * Detent 	6mm (8S)	10 1/8 x 1 1/8 x 1 5/8	1/8	75323-92-00	76323-92-00
	8mm (5S)	12 1/8 x 1 x 2	1/4	75343-92-00	76343-92-00
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Solenoid operated, air piloted spool valves are available in single, double, priority and external air pilot versions. Valve designs use a stainless steel spool moving within a sleeve to direct airflow to the ports of the valve. Spool valves are known for their long life capability. Valves are available in 1/8 and 1/4 port sizes and have an operating range of 35 to 145 PSI. Valves include a red manual override and encapsulated coils and can be individually mounted or assembled on manifolds.

Order Coils Separately

Valve catalog numbers do not include solenoid coils. Coils are supplied loose and unmounted as separate items. (Double solenoid types require 2 coils.)

AC Coil Catalog No. 76410-02-**
DC Coil Catalog No. 76410-00-**

** - Add the required coil voltage suffix code from the chart below to complete the coil catalog number.

Voltage	AC	DC
12V	-	01
24V	12	02
48V	13	03
110V	14	04
230V	15	05

* External Air Pilot: valves have an auxiliary 10-32 (M5) port for connecting a separate air pilot supply for the solenoid section. For use when switching air pressures below 35 PSI. Operating pressure range is 35 to 145 PSI. (Use valves with external pilot for switching lower pressures.) Through body mounting holes are 3/16".
For valve specifications see appendix. See accessory section for connectors and manifolds. For detail dimensions contact factory.

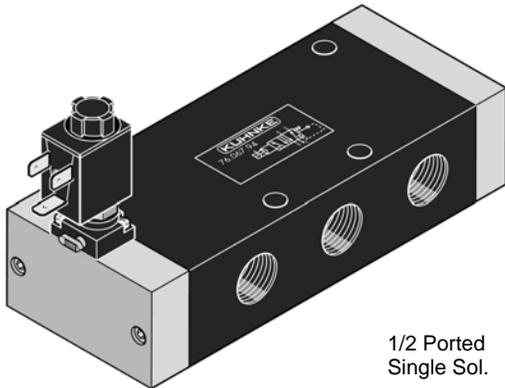
Electrically Operated Valves

General Purpose

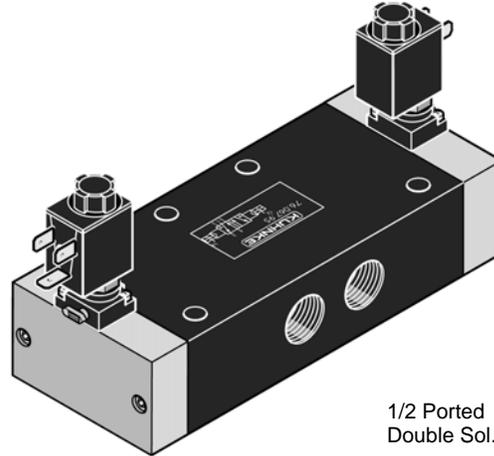
Kuhnke Power Valves

Directional Control Valves (4 Way), Solenoid Operated

(Poppet Design, Flat Mounting)

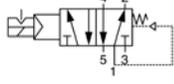
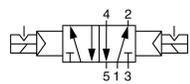
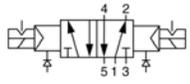


1/2 Ported
Single Sol.



1/2 Ported
Double Sol.

Valves have the same features as In-Line Directional Control valves on page 42, but are designed for mounting on flat surfaces.

Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Single Solenoid Spring Return- air assisted 	6mm (10P)	4 1/4 x 1 5/8 x 3 3/8	1/8	75027-94-00	76027-94-00
	8mm (7P)	4 7/8 x 2 x 3 1/4	1/4	75047-94-00	76047-94-00
	15mm (12P)	7 1/4 x 2 3/4 x 3 7/8	1/2	75067-94-00	76067-94-00
Double Solenoid With Detent 	6mm (10P)	4 1/4 x 1 5/8 x 3 3/8	1/8	75027-95-00	76027-95-00
	8mm (7P)	5 1/2 x 2 x 3 1/4	1/4	75047-95-00	76047-95-00
	15mm (12P)	7 5/8 x 2 3/4 x 3 7/8	1/2	75067-95-00	76067-95-00
Double Solenoid External Air Pilot * Detent 	--	--	--	--	--
	--	--	--	--	--
	15mm (12P)	7 5/8 x 2 3/4 x 3 7/8	1/2	75367-95-00	76367-95-00

Order Coils Separately

Valve catalog numbers do not include solenoid coils. Coils are supplied loose and unmounted as separate items. (Double solenoid types require 2 coils.)

AC Coil Catalog No. 76410-02-**

DC Coil Catalog No. 76410-00-**

** - Add the required coil voltage suffix code from the chart below to complete the coil catalog number.

Voltage	AC	DC
12V	-	01
24V	12	02
48V	13	03
110V	14	04
230V	15	05

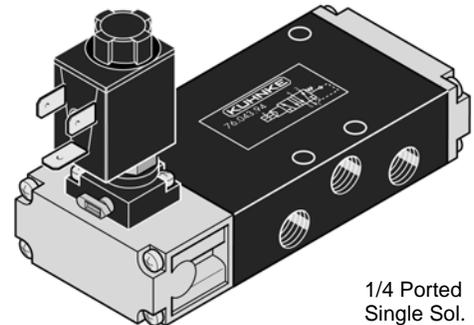
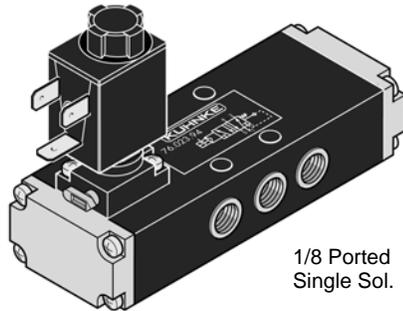
* External Air Pilot: valves have an auxiliary 10-32 port for connecting a separate air pilot supply for the solenoid section. For use when switching air pressures below 35 PSI.

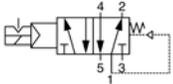
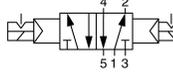
Operating pressure range is 35 to 145 PSI. (Use valves with external pilot for switching lower pressures).

Through body mounting holes are 3/16" for 1/8 and 1/4 ported valves, 1/4 " for 1/2 ported valves.

For valve specifications see appendix. See accessory section for electrical connectors. For detail dimensions contact factory.

Directional Control Valves (4 Way), Solenoid Operated (Spool Design, Flat Mounting)



Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Single Solenoid Spring Return-air assisted 	6mm (8S)	4 1/4 x 1 5/8 x 3 3/8	1/8	75023-94-00	76023-94-00
	8mm (5S)	4 7/8 x 2 x 3 1/4	1/4	75043-94-00	76043-94-00
	--	--	--	--	--
Double Solenoid With Detent 	6mm (8S)	4 1/4 x 1 5/8 x 3 3/8	1/8	75023-95-00	76023-95-00
	8mm (5S)	5 1/2 x 2 x 3 1/4	1/4	75043-95-00	76043-95-00
	--	--	--	--	--

Valves have the same features as In-Line Directional Control Valves on page 43, but are designed for mounting on flat surfaces.

Order Coils Separately

Valve catalog numbers do not include solenoid coils. Coils are supplied loose and unmounted as separate items. (Double solenoid types require 2 coils.)

AC Coil Catalog No. 76410-02-**

DC Coil Catalog No. 76410-00-**

** - Add the required coil voltage suffix code from the chart below to complete the coil catalog number.

Voltage	AC	DC
12V	-	01
24V	12	02
48V	13	03
110V	14	04
230V	15	05

Operating pressure range is 35 to 145 PSI.
Through body mounting holes are 3/16".

For valve specifications see appendix. See accessory section for electrical connectors. For detail dimensions contact factory.

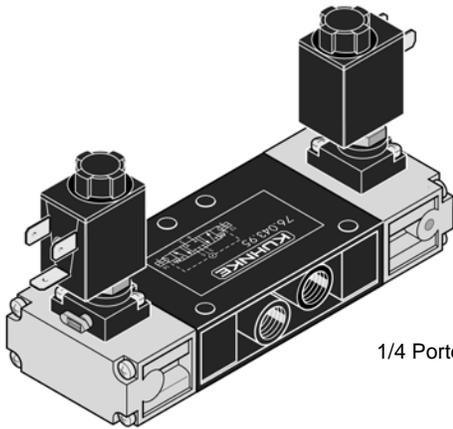
Electrically Operated Valves

General Purpose

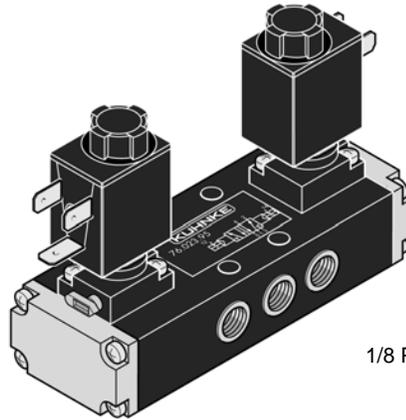
Kuhnke Power Valves

3 Position Valves (4 Way), Solenoid Operated

(Spool Design, Flat Mounting)



1/4 Ported



1/8 Ported

Three position valves can be used to position cylinder piston rods or switch air supplies to alternate devices. Flat mounted spool valves are available in 2 versions; with all ports open or all ports closed in the center (off) position. Springs return the valve to the center position when the coil power is switched off.

Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Double Solenoid All ports <i>open</i> in center position. 	6mm (8S)	4 1/4 x 1 5/8 x 3 3/8	1/8	75024-05-00	76024-05-00
	8mm (5S)	4 7/8 x 2 x 3 1/4	1/4	75044-05-00	76044-05-00
	--	--	--	--	--
Double Solenoid All ports <i>closed</i> in center position. 	6mm (8S)	4 1/4 x 1 5/8 x 3 3/8	1/8	75024-15-00	76024-15-00
	8mm (5S)	4 7/8 x 2 x 3 1/4	1/4	75044-15-00	76044-15-00
	--	--	--	--	--

Order Coils Separately

Valve catalog numbers do not include solenoid coils. Coils are supplied loose and unmounted as separate items. (Double solenoid types require 2 coils.)

AC Coil Catalog No. 76410-02--**

DC Coil Catalog No. 76410-00--**

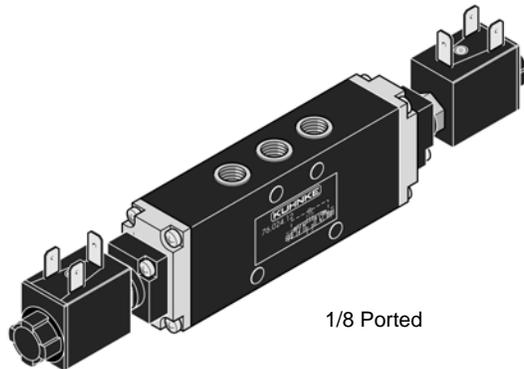
** - Add the required coil voltage suffix code from the chart below to complete the coil catalog number.

Voltage	AC	DC
12V	-	01
24V	12	02
48V	13	03
110V	14	04
230V	15	05

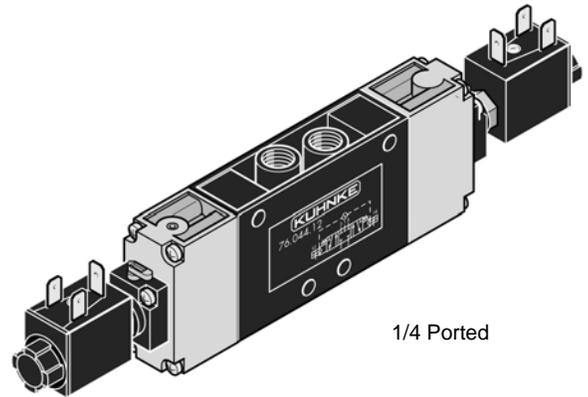
Operating pressure range is 35 to 145 PSI.
Through body mounting holes are 3/16".

For valve specifications see appendix. See valve accessory section for electrical connectors. For detail dimensions contact factory.

3 Position Valves (4 Way), Solenoid Operated (Spool Design, In Line Mounting)



1/8 Ported



1/4 Ported

Description	Orifice (Body No.)	Dimensions (Approx. inches) L x W x H	Port Size	Catalog Number	
				NPT Ports (USA Std.)	Metric Ports (European Std.)
Double Solenoid All ports <i>open</i> in center position. 	6mm (8S)	8 5/8 x 1 1/8 x 1 5/8	1/8	75024-02-00	76024-02-00
	6mm (1MS)	8 1/2 x 1 x 1 5/8	1/8	(Not Available)	76124-02-00
	8mm (5S)	10 x 1 x 2	1/4	75044-02-00	76044-02-00
Double Solenoid All ports <i>closed</i> in center position. 	6mm (8S)	8 5/8 x 1 1/8 x 1 5/8	1/8	75024-12-00	76024-12-00
	6mm (1MS)	8 1/2 x 1 x 1 5/8	1/8	(Not Available)	76124-12-00
	8mm (5S)	10 x 1 x 2	1/4	75044-12-00	76044-12-00
Double Solenoid External Air Pilot * All ports <i>open</i> in center position. 	6mm (8S)	9 7/8 x 1 1/8 x 1 5/8	1/8	75344-02-00	76344-02-00
	6mm (1MS)	9 3/4 x 1 x 1 5/8	1/8	(Not Available)	76524-02-00
	--	--	--	--	--

Three position valves can be used to position cylinder piston rods or switch air supplies to alternate devices. In line spool valves are available in 2 versions; with all ports open or all ports closed in the center (off) position. Springs return the valve to the center position when the coil power is switched off. Valves can be individually mounted using through body holes or assembled on manifolds.

Order Coils Separately

Valve catalog numbers do not include solenoid coils. Coils are supplied loose and unmounted as separate items. (Double solenoid types require 2 coils.)

AC Coil Catalog No, 76410-02-**
DC Coil Catalog No, 76410-00-**

** - Add the required coil voltage suffix code from the chart below to complete the coil catalog number.

Voltage	AC	DC
12V	-	01
24V	12	02
48V	13	03
110V	14	04
230V	15	05

* External Air Pilot: valves have an auxiliary 10-32 port for connecting a separate air pilot supply for the solenoid section. For use when switching air pressures below 35 PSI.

Operating pressure range is 35 to 145 PSI. (Use valves with external pilot for switching lower pressures).
 Through body mounting holes are 3/16".

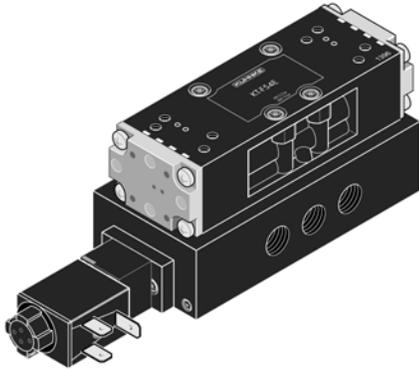
For valve specifications see appendix. See accessory section for connectors and manifolds. For detail dimensions contact factory.

Electrically Operated Valves

Special Applications

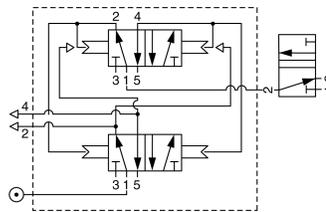
Kuhnke Power Valves

Solenoid Operated Flip Flop Valve



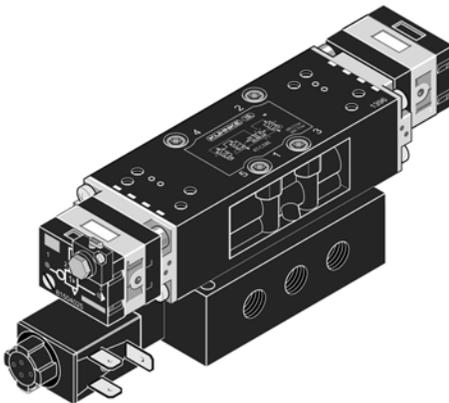
75083-89-00 NPT Ports
76083-89-00 Metric Ports

The Monostable Flip-Flop valve provides a 4 way switched output from an electrical pulse signal of at least 300 ms in length. When the solenoid is energized, the valve output position changes. The valve maintains position until the next electrical pulse signal is applied. Minimum operating pressure 35 PSI.



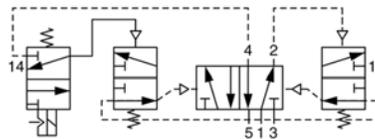
Port Size- 1/4
Orifice- 8mm
Body No.- 5S
Dimensions-
6 1/2" L x 2" W x 2 3/8" H.

Solenoid Operated Oscillator Valve



75083-90-00 NPT Ports
76083-90-00 Metric Ports

Valve can be used to oscillate a double acting cylinder. Applications include mixing, stirring or sawing devices where time critical cycling is not required. While the solenoid is energized, the valve oscillates. Speed is dependent on connected volume and line pressure, and can be controlled by the addition of flow control valves on the cylinder input ports. Typical speed is 16 cycles per minute at 90 PSI. Minimum operating pressure 35 PSI.



Port Size- 1/8
Orifice- 6mm
Body No.- 8S
Dimensions-
6 3/4" L x 2" W x 2 1/8" H.

Order Coils Separately

See inset chart on page 47 for catalog numbers.

Operating pressure range 35 to 145 PSI. Actuation force (pilot pressure): 35 PSI minimum.

Pilot port size is 1/8. Mounting via 4 through body holes 3/16" Dia.

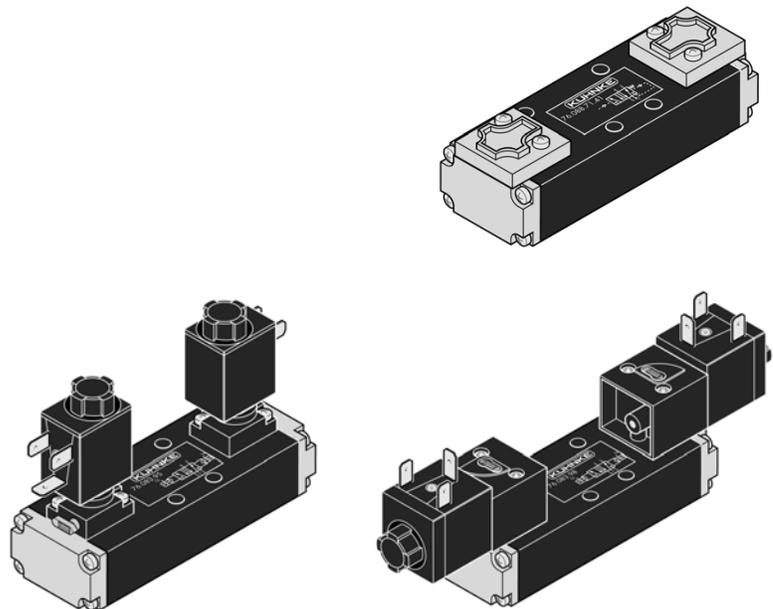
Oscillator valve will not operate if applied on vented applications such as an air gun. Working ports must have a connected defined volume.

For valve specifications see appendix. For detail dimensions contact factory.

ISO and NAMUR Replacement Valves

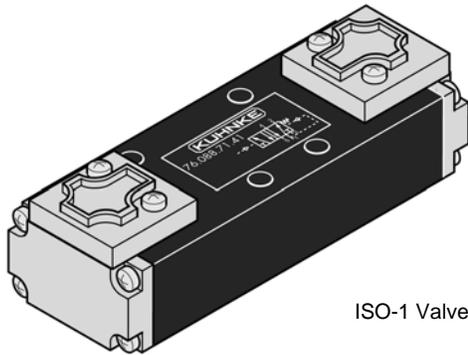
ISO valves are manifold or sub base mounted types designed to a European specification standardizing air flow, drillings and valve body size requirements in order to have interchangeability amongst valve manufacturers. Kuhnke manufactures a complete line of ISO-1 and ISO-2 valves and accessories used for new or replacement installations.

A set of ¼ inch ported valves are also available which meet the European NAMUR which standardizes mounting hole patterns.



Directional Control Valves (4 Way), Pneumatic Actuation, ISO

Valves are constructed to the European ISO standard, fit on ISO manifolds or sub-plates and are interchangeable amongst manufacturers. Standard pneumatically operated valves are listed, for other types see notes below.

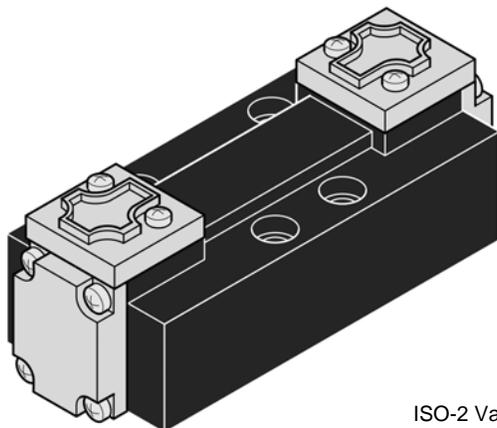


ISO-1 Valve

Description	Size	Catalog Number	
		Poppet Design	Spool Design
Single Air Pilot Spring Return * 	ISO-1	76087-71-41	76083-71-41
	ISO-2	76097-71-41	76093-71-41
Double Air Pilot With Detent 	ISO-1	76087-71-42	76083-71-42
	ISO-2	76097-71-42	76093-71-42
Double Air Pilot With Priority 	ISO-1	76087-71-47	76083-71-47
	ISO-2	76097-71-47	76093-71-47

3 Position Valves (4 Way), Pneumatic Actuation, ISO

Valves are constructed to the European ISO standard, fit on standard ISO manifolds or sub-plates.



ISO-2 Valve

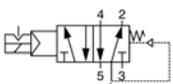
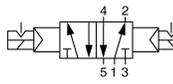
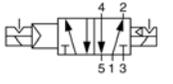
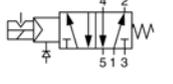
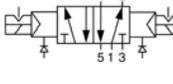
Description	Size	Catalog Number	
		Poppet Design	Spool Design
Double Air Pilot All ports <i>open</i> in center position. 	ISO-1	(Not Available)	76084-71-28
	ISO-2	(Not Available)	76094-71-28
Double Air Pilot All ports <i>closed</i> in center position. 	ISO-1	(Not Available)	76084-71-38
	ISO-2	(Not Available)	76094-71-38

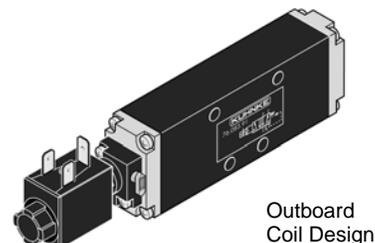
*Single air piloted valves have an air supported spring return. Actuation force must be equal to or greater than the pressure at port 1 (air supply). Single air piloted ISO 1 and ISO 2 valves are available with manual resets (ISO pump valves). A pneumatic "not/not" valve is also available. Contact factory for details.

For technical details of ISO valves contact factory. See accessory section for manifolds and sub bases.

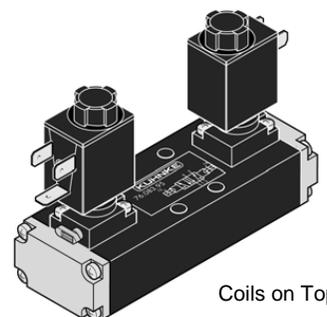
Directional Control Valves (4 Way), Solenoid Operated, ISO

Valves are constructed to the European ISO standard permitting interchangeability between manufacturers. ISO valves have a standard mounting configuration. Valves are also available with a European automotive standard coil configuration (CNOMO).

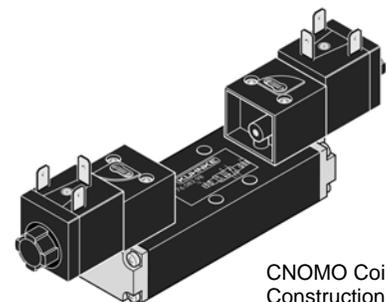
Description	Size	Type	Catalog Number	
			Poppet Design	Spool Design
Single Solenoid Spring Return- air assisted 	ISO-1	Outboard coil	76087-91-00	76083-91-00
		Coil on top	76087-94-00	76083-94-00
		CNOMO Coil	76087-97-00	76083-97-00
	ISO-2	Outboard coil	--	--
		Coil on top	--	--
		CNOMO Coil	76097-97-00	76093-97-00
Double Solenoid With Detent 	ISO-1	Outboard coil	76087-92-00	76083-92-00
		Coil on top	76087-95-00	76083-95-00
		CNOMO Coil	76087-98-00	76083-98-00
	ISO-2	Outboard coil	--	--
		Coil on top	--	--
		CNOMO Coil	76097-98-00	76093-98-00
Double Solenoid With Priority Detent 	ISO-1	Outboard coil	--	--
		Coil on top	76087-96-00	--
		CNOMO Coil	--	--
	ISO-2	Outboard coil	--	--
		Coil on top	--	--
		CNOMO Coil	--	--
Single Solenoid External Air Pilot * Spring Return 	ISO-1	Outboard coil	--	--
		Coil on top	--	--
		CNOMO Coil	76387-97-00	76383-97-00
	ISO-2	Outboard coil	76397-97-00	76393-97-00
		Coil on top	--	--
		CNOMO Coil	--	--
Double Solenoid External Air Pilot * Detent 	ISO-1	Outboard coil	--	--
		Coil on top	--	--
		CNOMO Coil	76387-98-00	--
	ISO-2	Outboard coil	--	76393-98-00
		Coil on top	--	--
		CNOMO Coil	--	--



Outboard
Coil Design



Coils on Top



CNOMO Coil
Construction

Order Coils Separately

Valve catalog numbers do not include solenoid coils. Coils are supplied loose and unmounted as separate items. (Double solenoid types require 2 coils.)

Std. AC Coil Cat. No. 76410-02-**

Std. DC Coil Cat. No. 76410-00-**

CNOMO AC Coil Cat. No. 76411-02-**

CNOMO DC Coil Cat. No. 76411-00-**

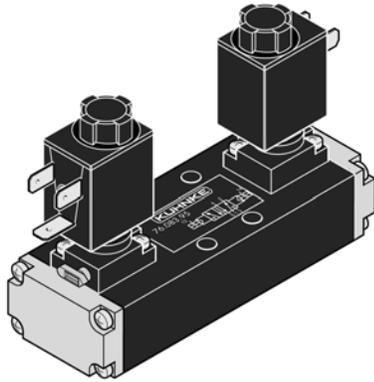
** - Add the required coil voltage suffix code from the chart below to complete the coil catalog number.

Voltage	AC	DC
12V	-	01
24V	12	02
48V	13	03
110V	14	04
230V	15	05

*External Air Pilot: valves have an auxiliary port for connecting a separate air pilot supply for the solenoid section. Use when switching air pressures below 35 PSI

For technical details of ISO valves contact factory. See accessory section for manifolds and sub bases.

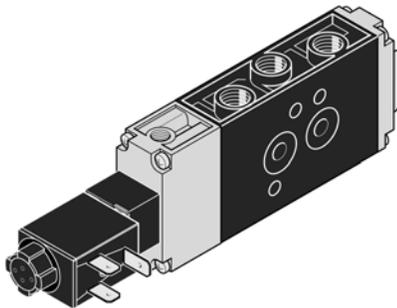
3 Position Valves (4 Way), Solenoid Operated, ISO



ISO standard valves, solenoid operated, are available in 2 versions of 3 position valves; with all ports open or all ports closed in the center (off) position.

Description	Size	Type	Catalog Number	
			Poppet Design	Spool Design
Double Solenoid All ports <i>open</i> in center position. 	ISO-1	Outboard coil	(Not Available)	76084-02-00
		Coil on top		76084-05-00
		CNOMO Coil		76084-08-00
	ISO-2	Outboard coil	(Not Available)	--
		Coil on top		--
		CNOMO Coil		76094-08-00
Double Solenoid All ports <i>closed</i> in center position. 	ISO-1	Outboard coil	(Not Available)	76084-12-00
		Coil on top		76084-15-00
		CNOMO Coil		76084-18-00
	ISO-2	Outboard coil	(Not Available)	--
		Coil on top		--
		CNOMO Coil		76094-18-00

NAMUR Valves



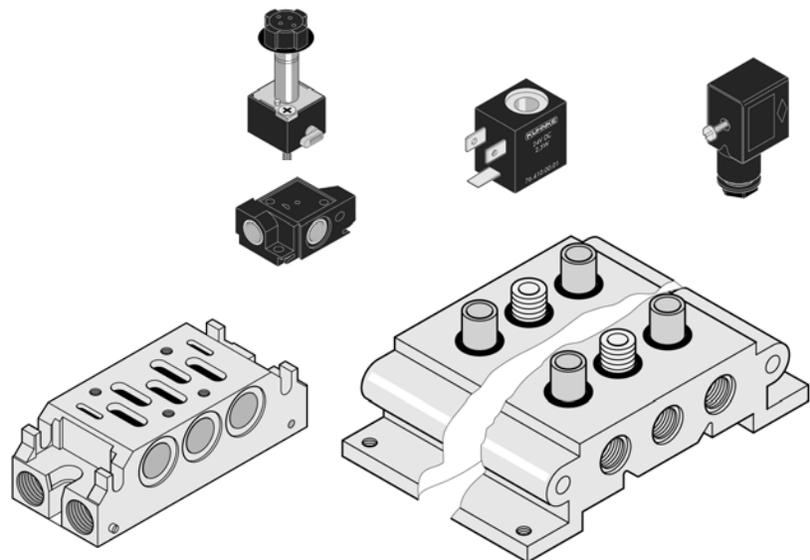
NAMUR ¼ ported valves are designed to a European specification that standardizes the mounting holes amongst manufacturers. Valves are in line mounted and are available in several configurations.

Description	Catalog Number	
	Poppet Design	Spool Design
Pneumatically Operated, Double Air Pilot	76077-81-42	--
Single Solenoid, Spring Return	76077-91-00	76073-91-00
Double Solenoid, Spring Return	76077-92-00	76073-92-00
Double Solenoid, 3 Position, all Ports Open in Center Pos.	--	76074-02-00
Double Solenoid, 3 Position, all Ports Closed in Center Pos.	--	76074-12-00

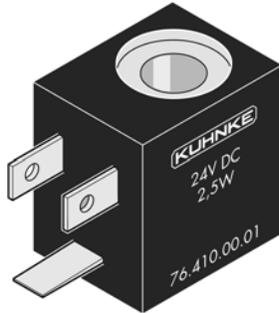
Order Coils Separately

See inset chart on page 51 for catalog numbers.

Accessories and Replacement Parts



Standard Solenoid Coils

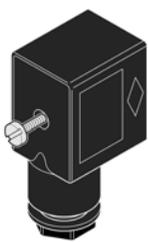


Standard coils fit all general purpose solenoid valves, except ISO valves with CNOMO air pilots. Coils are encapsulated to keep out water, oil and other contaminants providing splash proof protection when used with sockets below. The 3-prong plug includes a ground connection for the coil frame. Terminals can also be connected using crimp-on wire terminals with a ¼" spade dimension. Coil power consumption: AC (60Hz) is 3.5VA, DC is 2.5 W.

For electrical characteristics of solenoids see valve specifications in the appendix.

Voltage	Catalog Number	
	AC	DC
12	--	76410-00-01
24	76410-02-12	76410-00-02
48	76410-02-13	76410-00-03
110	76410-02-14	76410-00-04
230	76410-02-15	76410-00-05

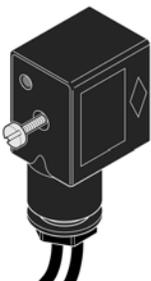
Electrical Connectors



Socket



Socket with Cable



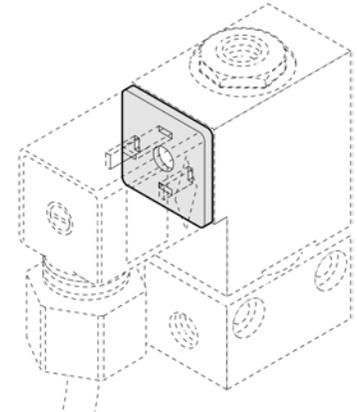
Socket with Cable and LED/ Surge Suppressor

Plug in sockets are constructed of a flame resistant, black molded material and include a sealing ring which provides splash proof protection (NEMA 12, IP65). The socket has screw terminals for a maximum wire size of No. 12 stranded (.75mm²). Maximum cable size for sealing ring is 5/16 inch.

Description	Catalog No.
Socket Only	65495-00
Pre Wired Socket with 9 ft cable (3 meter)	65495-01
Pre Wired Socket 9 ft. cable (3 meter) with built in yellow LED and surge suppressor for 24V AC or DC Max.	65495-02

Luminous Seal/Surge Suppressor

The luminous seal design provides surge suppression, a visual indication of valve on/off state, and forms a seal between coil and socket. Unit has 2 green LED's and a diode bridge, encapsulated in a poly-urethane/silicone material. The seal is approx. 1/8" thick and is sandwiched between coil and socket.



Coil Voltage (AC or DC)	Catalog No.
12 to 24V	65553-00
42 to 48V	65553-01
110 to 120V	65553-02
220 to 230V	65553-03

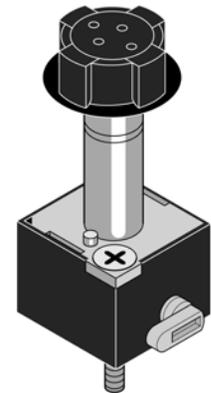
Replacement Air Pilot Valve

Catalog No. **76136-01-00**

Fits all standard valves except ISO valves with CNOMO air pilots and coils.

The 3 way pilot valve section of standard solenoid-operated valves can also be used as a remote air pilot valve when mounted on a sub base or manifold shown below. The valve has an orifice of 1mm and a flow of approximately 2 CFM at 90 PSI. Operating pressure range is 0-145 PSI. The valve includes a red lever for manual operation. Also available in a normally *open* version, catalog number **76136-02-00**.

Order coils separately from the chart on the opposite page.



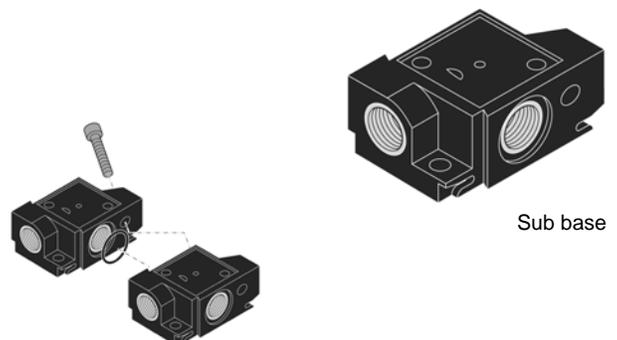
Air Pilot Valve Sub base / Manifold

Sub base with 1/8 metric port- **76420-03-01**

Sub base with push-in fitting for 5/32 tubing- **76420-03-02**

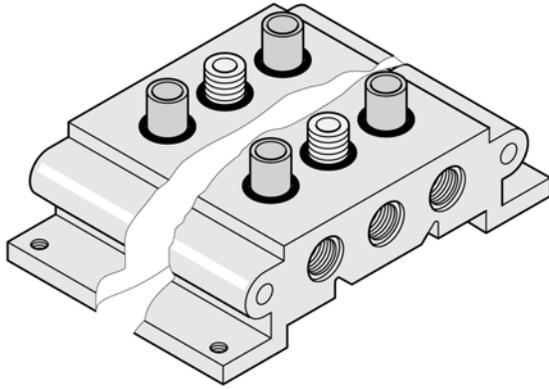
Valves can be mounted on sub base for remote piloting of pneumatically operated valves or used as stand alone 3 way valves. Air pilot section is fastened to sub base with 2 included screws. Base can be mounted on a surface using (2) 5/32" through body holes. Dimensions are 1 5/8" L x 1 1/8" W. With valve mounted, the height is 2 7/8".

Modular manifolds can be constructed using this base design to centralize valves with a common input air supply. Contact factory for details.

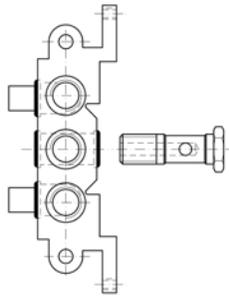


Modular Manifold System

Standard Manifold Kits



Two sizes of manifold kits are available (1/8 and 1/4 ported) for standard directional control valves, pneumatically or electrically operated (4 way, In-Line type, 2 or 3 position, except valve types 76123, 76124, 76127). Manifolds are single piece aluminum bases with common supply and exhaust ports on each end (1/8 or 1/4 metric respectively). For NPT supply ports, order supply line adaptor kit separately. Manifold kits include all valve mounting hardware, which accommodates both NPT, or Metric ported versions of valves. A hollow bolt is used to connect the valve to the base and supply the line air pressure. Two brass sleeves, sealed with O-rings, connect the exhaust ports. If a valve station is unoccupied (for future use), a blanking bar kit must be used to block manifold ports. Manifolds can be fastened down by 4 threaded M5 holes. Two or more 1/8 ported manifolds can be linked together with the use of connecting nipples and threaded tie rods (up to 3/16" dia.) using the through body holes on the sides of the manifold to increase the number of stations.



Valve Station
Hardware Assembly

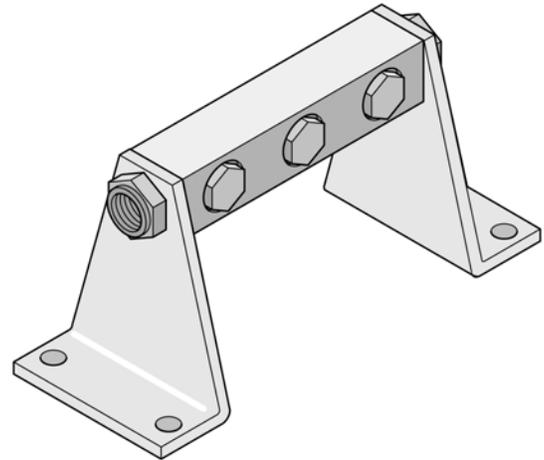
Number of Stations	For 1/8 Ported Valves		For 1/4 Ported Valves	
	Dimensions 4" W. x 1 1/8" H x L Dim. Below	Catalog Number	Dimensions 4" W. x 1 1/8" H x L Dim. Below	Catalog Number
1	1 3/8"	76420-02-01	1 5/8"	76440-02-01
2	2 1/2"	76420-02-02	2 3/4"	76440-02-02
3	3 5/8"	76420-02-03	3 3/4"	76440-02-03
4	4 3/4"	76420-02-04	4 7/8"	76440-02-04
5	5 7/8"	76420-02-05	5 7/8"	76440-02-05
6	7"	76420-02-06	6 7/8"	76440-02-06
7	8 1/8"	76420-02-07	8"	76440-02-07
8	9 1/4"	76420-02-08	9"	76440-02-08
9	10 3/8"	76420-02-09	10"	76440-02-09
10	11 1/2"	76420-02-10	11"	76440-02-10

Manifold Accessories

	Catalog Number	
	<u>1/8 Ported</u>	<u>1/4 Ported</u>
Supply line NPT adaptor kit (3 Plugs, 3 Adapters)	75420-00-97	75440-00-97
Spare set of valve mounting hardware (for one station)	76420-00-34	76420-00-35
Blanking Bar Kit for empty station	76420-00-46	76420-00-47
Linking nipples (3), for connecting 1/8 manifolds together	76420-00-48	--

Common Input Manifolds

Two sizes of common input manifolds are available. Manifolds are aluminum bars, predrilled and tapped; with common 1/4 metric supply ports on each end. For NPT supply ports, order supply line adaptor kit separately. Manifold kits include valve mounting hardware, which accommodates both NPT, or Metric ported versions of valves. A hollow bolt is used to connect the valve to the bar and supply the line air pressure. Optional mounting bracket kits for supporting the manifold are available in 2 heights to accommodate the size of valves used.



Number of Stations	For 1/8 Ported Valves		For 1/4 Ported Valves	
	Dimensions 13/16" Sq. x L Dim. Below	Catalog Number	Dimensions 13/16" Sq. x L Dim. Below	Catalog Number
2	3 3/4"	76420-01-02	3 3/4"	76440-01-02
3	5"	76420-01-03	5"	76440-01-03
4	6 1/4"	76420-01-04	6 1/4"	76440-01-04
5	7 1/2"	76420-01-05	7 1/2"	76440-01-05
6	8 3/4"	76420-01-06	8 3/4"	76440-01-06
7	10"	76420-01-07	10"	76440-01-07
8	11 1/4"	76420-01-08	11 1/4"	76440-01-08
9	12 1/2"	76420-01-09	12 1/2"	76440-01-09
10	13 3/4"	76420-01-10	13 3/4"	76440-01-10

Manifold Accessories

Supply line 1/4 NPT adaptor kit (1 Plug, 1 Adapter)	75440-00-99
Spare set of 1/8 valve mounting hardware (set of 3)	76420-00-34
Spare set of 1/4 valve mounting hardware (set of 3)	76420-00-35
Mounting Bracket Kit 2 3/8" High (For 1/8 ported valves)	76420-00-09
Mounting Bracket Kit 5 1/2" High (For 1/8 or 1/4 ported valves)	76440-00-10

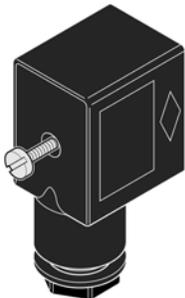
ISO (CNOMO) Solenoid Replacement Coils



For use on ISO valves with CNOMO air pilots.

Voltage	Catalog Number	
	AC	DC
12	--	76411-00-01
24	76411-02-12	76411-00-02
48	76411-02-13	76411-00-03
110	76411-02-14	76411-00-04
230	76411-02-15	76411-00-05

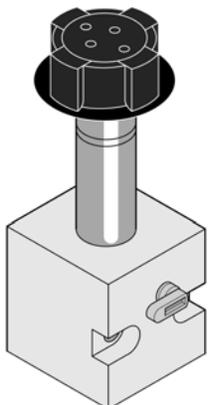
Plug-in Sockets for ISO valves with (CNOMO) Coils



Maximum wire size No. 12 stranded, max. cable diameter for plug sealing ring is 5/16 inch.

Description	Catalog No.
Socket Only	67499-00
Pre Wired Socket with 9 ft cable (3 meter)	67499-01
Pre Wired Socket 9 ft. cable (3 meter) with built in yellow LED and surge suppressor for 24V AC or DC Max.	67499-02

Replacement Air Pilot Valve (CNOMO)



Catalog No. **76136-21-00**

Valve has mounting holes according to CNOMO standards. Operating pressure range is 0-145 PSI.

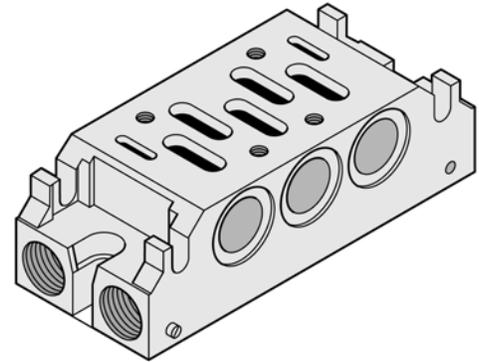
Order coils separately from the chart above.

ISO Sub bases and Manifolds

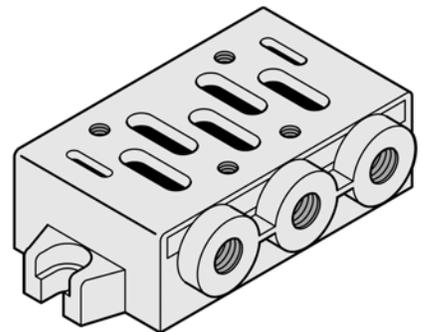
- Sub base ISO 1 **76420-00-11**
- Sub base ISO 2 **76420-00-12**
- Manifold Section ISO 1 **76420-00-13**
- Manifold Section ISO 2 **76420-00-14**

Manifold sections can be used to extend existing systems. Units include the necessary hardware for mounting. Sub bases can be used to individually mount ISO valves.

For a complete list of components including headers, interconnecting parts, blanking plates and hardware for new ISO valve installations, contact the factory.



ISO Manifold Section



ISO Sub Base

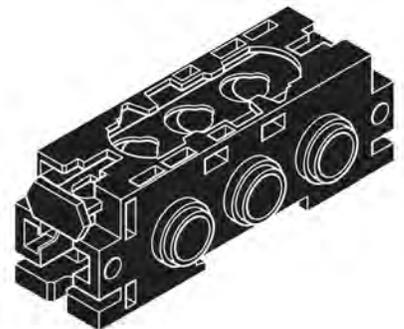
Manifold Components for Molded Valves

(For Valves 76123-xx, 76124-xx, 76127-xx)

- Add on Manifold Section **76420-00-01**

Additional manifold sections can be used to add valves to existing systems. This molded base system is used for valve types 76123, 76124, 76127 and is constructed of a black molded material. Manifold section includes 3 linking elements for mounting valve in place.

For a complete list of components for new valve installations contact the factory.



Replacement Operators for Manual/Mechanical Valves

- 76136-60-00** Air piloted plunger actuator set
- 76136-63-00** Air piloted antenna actuator set
- 76136-64-00** Air piloted shrouded head pushbutton actuator set
- 76136-67-00** Air piloted Mushroom head pushbutton actuator set

Appendix

Valve Flow Information

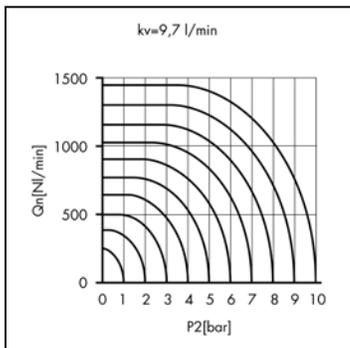
Spool Valves

Body Number (From Cat. Charts)	1S, 2S, 8S, 1MS	3S, 4S, 5S
Port Size-	1/8	1/4
Orifice-	mm: 6	8
	Inches: .236	.315
Cv-	.68	.87
Kv-	9.7	12.4
Flow SCFM -	@ 45 PSI: 17.6	22.4
	@ 90 PSI: 31.7	39.2
	@ 145 PSI: 51.5	63.5
Flow l/m (Liters per Min.)-	@ 3 Bar: 500	635
	@ 6 Bar: 900	1110
	@ 10 Bar: 1460	1800

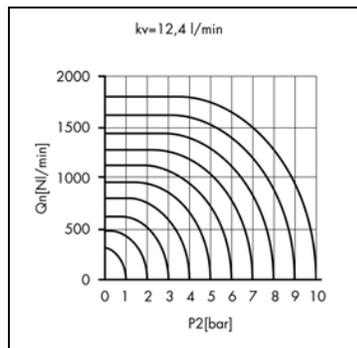
Poppet Valves

1aP, 1bP	9P, 10P, 1MP	6P, 7P	11P, 12P
1/8	1/8	1/4	1/2
4	6	8	15
.078	.236	.315	.59
.44	.86	1.11	4.83
6.3	12.3	15.8	68.8
12.7	22.6	28.9	129.4
21.0	39.5	50.5	227.1
32.8	63.7	81.9	359.0
360	640	820	3665
595	1120	1430	6430
930	1805	2320	10165

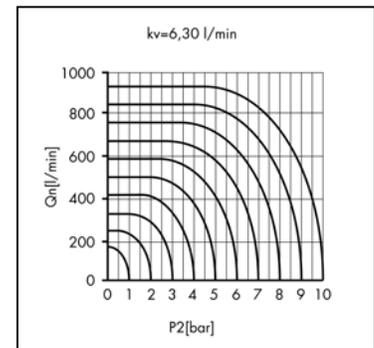
Flow Graphs in Bar and Liters per Minute



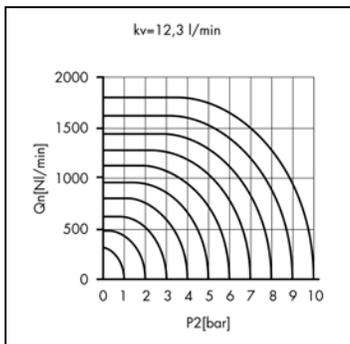
Valve Bodies 1S 2S 8S 1MS



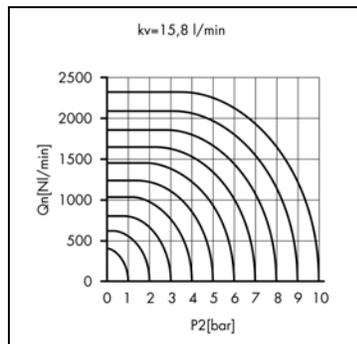
Valve Bodies 3S 4S 5S



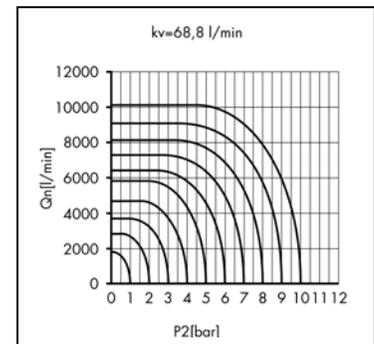
Valve Bodies 1aP 1bP



Valve Bodies 9P 10P 1MP



Valve Bodies 6P 7P



Valve Bodies 11P 12P

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

**Electrically Operated Valves
Standard Solenoid Coils**

Coil Power Consumption-
 DC: 2.5 W
 AC: 4 VA 50Hz / 3.5 VA 60 Hz

Pull in power DC: 2.5 W
 Minimum Holding Power: 0.1 W
 Coil Inrush Current AC: 1.5 x Coil Current

Operating Range @ 20°C-
 DC and AC 50Hz coils: 80 to 110% of rated Voltage
 AC 60 Hz coils: 85 to 110% of rated Voltage

Operating time-
 Pick-up time: 15-20 ms
 Drop out time: 15-20 ms

Duty cycle: Continuous - 100%
 Insulation Class: F (155° C)

Voltage	Resistance (Ohms-Ω)	Coil Power Consumption mA		
		60 Hz	50 Hz	
AC	24	56	146	167
	48	220	73	84
	110	1280	32	37
	230	4750	16	18
DC	12	56	214	
	24	220	109	
	48	900	53	
	110	4300	25.5	
	220	8700	13	

Valve Information

Operating Pressure: 0 to 145 PSI (0 to 10 Bar)
 (Air piloted valves- 35 PSI/ 2.5 Bar min.)

Operating Ambient: -15° C to +50° C
 (5° F to 120° F)

Mounting: Any position

Materials-

Body: Die cast aluminum alloy
 (1aP, 1bP valves –cast zinc)
 (1MP, 1MS valves-molded)

Seals: Buna N (NBR)
 (1aP, 1bP valves –PUR)

Spools: Spool valves- Stainless
 Steel, Poppet valves- Brass

End caps: Zinc, steel or Makrolon

Lubricant: NILS Dimension Grease
 (Blue marker, Silicone Free)

Recommended Media: 5 micron filtered, lubricated or non-lubricated compressed air, or other neutral gases.

General Information

Intended Use- Series 75 and 76 valves are intended for general purpose industrial applications utilizing normal shop air supply systems. For special applications with other media or other environments, contact Kuhnke.

Media- Compressed air or other neutral gases, properly filtered. For applications on liquids contact Kuhnke.

Lubrication- Valves operate on lubricated or non-lubricated systems. After using components in a lubricated system, do not switch to an unlubricated system. Avoid over lubrication.

Vacuum Applications- Spool Valve designs can be applied on vacuum systems. For applications using poppet valves, use only specially assembled valves shown in the catalog.

Dimensions and Design Changes- All dimensions in this catalog are approximate, if necessary, detailed drawings can be obtained from Kuhnke or from one of the Kuhnke websites. Dimensions, valve design and materials are subject to change without notice.

Metric and NPT threads- Although similar in size, valve port threads in metric ported valves are different from NPT versions. NPT versions have a tapered thread that is used to form a seal with the fitting thread. Metric thread is straight, and the seal is provided by an o-ring or washer normally included with the connection fitting. Metric fittings can be used on NPT threaded valves, but NPT fittings cannot be used on metric threaded valves.

Series 75/76 Catalog Number Listing

75 Series	76 Series	Page	75 Series	76 Series	Page	75 Series	76 Series	Page
6549500	---	54	750226121	760226121	6	750235341	760235341	15
6549501	---	54	750226123	760226123	6	750235441	760235441	16
6549502	---	54	750226124	760226124	6	750235541	760235541	16
6555300	---	55	750226221	760226221	6	750235641	760235641	18
6555301	---	55	750226223	760226223	6	750235741	760235741	18
6555302	---	55	750226224	760226224	6	750235841	760235841	17
6555303	---	55	750226521	760226521	7	750235941	760235941	17
6749900	---	58	750226523	760226523	7	750236141	760236141	6
6749901	---	58	750226524	760226524	7	750236143	760236143	6
6749902	---	58	750226621	760226621	7	750236144	760236144	6
750222121	760222121	21	750226623	760226623	7	750236241	760236241	6
750222122	760222122	21	750226624	760226624	7	750236243	760236243	6
750222221	760222221	22	750227121	760227121	32	750236244	760236244	6
750222310	760222310	25	750227122	760227122	32	750236541	760236541	7
750222321	760222321	25	750227147	760227147	32	750236543	760236543	7
750222322	760222322	25	750232110	760232110	21	750236544	760236544	7
750222421	760222421	28	750232141	760232141	21	750236641	760236641	7
750222500	760222500	10	750232142	760232142	21	750236643	760236643	7
750222521	760222521	10	750232241	760232241	22	750236644	760236644	7
750222522	760222522	10	750232310	760232310	25	750237141	760237141	35
750222621	760222621	8	750232341	760232341	25	750237142	760237142	35
750222700	760222700	9	750232342	760232342	25	750237147	760237147	35
750222721	760222721	9	750232441	760232441	28	---	760237272	*
750222722	760222722	9	750232540	760232540	10	750239100	760239100	43
750223221	760223221	23	750232541	760232541	10	750239200	760239200	43
750223321	760223321	26	750232542	760232542	10	750239400	760239400	45
750223421	760223421	29	750232641	760232641	8	750239500	760239500	45
750224121	760224121	14	750232740	760232740	9	750240200	760240200	47
750224221	760224221	15	750232741	760232741	9	750240500	760240500	46
750224321	760224321	15	750232742	760232742	9	750241200	760241200	47
750224421	760224421	16	750233241	760233241	23	750241500	760241500	46
750224521	760224521	16	750233341	760233341	26	750242528	760242528	11
750224621	760224621	18	750233441	760233441	29	750242529	760242529	11
750224721	760224721	18	750234141	760234141	14	750242538	760242538	11
750224821	760224821	17	750234241	760234241	15	750242539	760242539	11
750224921	760224921	17	750234242	760234242	15	750247128	760247128	36
750225121	760225121	14	750234341	760234341	15	750247138	760247138	36
750225221	760225221	15	750234441	760234441	16	750247158	760247158	36
750225321	760225321	15	750234541	760234541	16	750252121	760252121	20
750225421	760225421	16	750234641	760234641	18	750252131	760252131	20
750225521	760225521	16	750234741	760234741	18	750252321	760252321	24
750225621	760225621	18	750234841	760234841	17	750252331	760252331	24
750225721	760225721	18	750234941	760234941	17	750252421	760252421	27
750225821	760225821	17	750235141	760235141	14	750252431	760252431	27
750225921	760225921	17	750235241	760235241	15	750260100	760260100	40

* - Item is not shown in this catalog. Contact factory for information.

Series 75/76 Catalog Number listing

75 Series	76 Series	Page	75 Series	76 Series	Page	75 Series	76 Series	Page
750261100	760261100	40	750422500	760422500	10	750466931	760466931	13
750262121	760262121	20	750422521	760422521	10	750467021	760467021	26
750262131	760262131	20	750422522	760422522	10	750467031	760467031	26
750262321	760262321	24	750422700	760422700	9	750467121	760467121	33
750262331	760262331	24	750422721	760422721	9	750467131	760467131	33
750262421	760262421	27	---	760428121	*	750467421	760467421	29
750262431	760262431	27	---	760428122	*	750476010	760476010	23
750262721	760262721	20	750432540	760432540	10	750476041	760476041	23
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750266321	760266321	30	---	760437272	*	750476949	760476949	13
750266331	760266331	30	750438141	760438141	35	750477041	760477041	26
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---	760266721	*	750439100	760439100	43	750478141	760478141	34
---	760266731	*	750439200	760439200	43	750478142	760478142	34
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750266829	760266829	12	750439500	760439500	45	750479100	760479100	42
750266921	760266921	12	750440200	760440200	47	750479200	760479200	42
750266929	760266929	12	750440500	760440500	46	750479400	760479400	44
750267121	760267121	33	750441200	760441200	47	750479500	760479500	44
750267131	760267131	33	750441500	760441500	46	750660100	760660100	40
---	760272141	*	750442528	760442528	11	750661100	760661100	40
---	760272341	*	750442529	760442529	11	750668121	760668121	33
---	760272741	*	750442538	760442538	11	750668131	760668131	33
750276010	760276010	23	750442539	760442539	11	750678141	760678141	34
---	760276041	*	750448128	760448128	36	750678142	760678142	34
---	760276441	*	750448138	760448138	36	750678147	760678147	34
---	760276741	*	750460100	760460100	40	750679100	760679100	42
---	760277041	*	750461100	760461100	40	750679200	760679200	42
750277141	760277141	34	750466021	760466021	23	750679400	760679400	44
750277142	760277142	34	750466031	760466031	23	750679500	760679500	44
750277147	760277147	34	750466321	760466321	30	---	760739100	52
---	760277241	*	---	760466421	*	---	760739200	52
---	760277441	*	---	760466431	*	---	760740200	52
750279100	760279100	42	---	760466721	*	---	760741200	52
750279200	760279200	42	---	760466731	*	---	760778142	52
750279400	760279400	44	750466821	760466821	13	---	760779100	52
750279500	760279500	44	750466829	760466829	13	---	760779200	52
---	760360100	*	750466921	760466921	13	---	760837141	50
750367121	760367121	32	750466929	760466929	13	---	760837142	50
750367131	760367131	32	750466930	760466930	13	---	760837147	50

* - Item is not shown in this catalog. Contact factory for information.

Series 75/76 Catalog Number Listing

75 Series	76 Series	Page	75 Series	76 Series	Page	75 Series	76 Series	Page
---	760837152	*	---	760977142	50	753279200	763279200	42
---	760837272	*	---	760977147	50	753439100	763439100	43
---	760838800	*	---	760977241	*	753439200	763439200	43
---	760838900	48	---	760979700	51	753440200	763440200	47
---	760838942	37	---	760979800	51	753460100	763460100	40
---	760839000	48	---	761067132	*	753461100	763461100	40
---	760839042	37	---	761236341	30	753479100	763479100	42
---	760839100	51	---	761237141	35	753479200	763479200	42
---	760839200	51	---	761237142	35	753660100	763660100	40
---	760839400	51	---	761237147	35	753661100	763661100	40
---	760839500	51	---	761239100	43	753679100	763679100	42
---	760839700	51	---	761239200	43	753679200	763679200	42
---	760839800	51	---	761239300	43	753679500	763679500	44
---	760840200	52	---	761240200	47	---	763839700	51
---	760840500	52	---	761241200	47	---	763879700	51
---	760840800	52	---	761247128	36	---	763879800	51
---	760841200	52	---	761247138	36	---	763939700	51
---	760841500	52	---	761276341	30	---	763939800	51
---	760841800	52	---	761277141	34	---	763979700	51
---	760847128	50	---	761277142	34	---	764100001	54
---	760847138	50	---	761277147	34	---	764100002	54
---	760877141	50	---	761279100	42	---	764100003	54
---	760877142	50	---	761279200	42	---	764100004	54
---	760877147	50	---	761279300	43	---	764100005	54
---	760877152	*	---	761360100	55	---	764100212	54
---	760877241	*	---	761360200	55	---	764100213	54
---	760879100	51	---	761361100	*	---	764100214	54
---	760879200	51	---	761362100	58	---	764100215	54
---	760879400	51	---	761366000	60	---	764110001	58
---	760879500	51	---	761366300	60	---	764110002	58
---	760879600	51	---	761366400	60	---	764110003	58
---	760879700	51	---	761366700	60	---	764110004	58
---	760879800	51	752260100	762260100	41	---	764110005	58
---	760937141	50	752267121	762267121	33	---	764110212	58
---	760937142	50	752460100	762460100	41	---	764110213	58
---	760937147	50	752461100	762461100	41	---	764110214	58
---	760937272	*	752467121	762467121	33	---	764110215	58
---	760938152	*	752660100	762660100	41	---	764120001	*
---	760939700	51	752661100	762661100	41	---	764120002	*
---	760939800	51	752668121	762668121	33	---	764120003	*
---	760940800	52	753239100	763239100	43	---	764120004	*
---	760941800	52	753239200	763239200	43	---	764120212	*
---	760947128	50	753260100	763260100	40	---	764120213	*
---	760947138	50	753261100	763261100	40	---	764120214	*
---	760977141	50	753279100	763279100	42	---	764120215	*

* - Item is not shown in this catalog. Contact factory for information.

Series 75/76 Catalog Number listing

75 Series	76 Series	Page	75 Series	76 Series	Page	75 Series	76 Series	Page
---	764200001	59	---	764200048	56	---	764400109	57
---	764200003	*	---	764200049	*	---	764400110	57
---	764200004	*	---	764200050	*	---	764400201	56
---	764200005	*	---	764200051	*	---	764400202	56
---	764200006	*	---	764200075	*	---	764400203	56
---	764200007	*	---	764200085	*	---	764400204	56
---	764200008	*	---	764200093	*	---	764400205	56
---	764200009	57	754200097	---	56	---	764400206	56
---	764200011	59	---	764200098	*	---	764400207	56
---	764200012	59	---	764200099	*	---	764400208	56
---	764200013	59	---	764200102	57	---	764400209	56
---	764200014	59	---	764200103	57	---	764400210	56
---	764200015	*	---	764200104	57	---	765239100	43
---	764200016	*	---	764200105	57	---	765240200	47
---	764200017	*	---	764200106	57	---	765279100	42
---	764200018	*	---	764200107	57	---	765279200	42
---	764200019	*	---	764200108	57			
---	764200020	*	---	764200109	57			
---	764200021	*	---	764200110	57			
---	764200022	*	---	764200201	56			
---	764200023	*	---	764200202	56			
---	764200024	*	---	764200203	56			
---	764200025	*	---	764200204	56			
---	764200026	*	---	764200205	56			
---	764200027	*	---	764200206	56			
---	764200028	*	---	764200207	56			
---	764200029	*	---	764200208	56			
---	764200030	*	---	764200209	56			
---	764200031	*	---	764200210	56			
---	764200032	*	---	764200301	55			
---	764200033	*	---	764200302	55			
---	764200034	56	---	764200303	*			
---	764200035	56	---	764200304	*			
---	764200036	*	---	764200305	*			
---	764200037	*	---	764200306	*			
---	764200038	*	---	764400010	57			
---	764200039	*	754400097	---	56			
---	764200040	*	754400099	---	57			
---	764200041	*	---	764400102	57			
---	764200042	*	---	764400103	57			
---	764200043	*	---	764400104	57			
---	764200044	*	---	764400105	57			
---	764200045	*	---	764400106	57			
---	764200046	56	---	764400107	57			
---	764200047	56	---	764400108	57			

* - Item is not shown in this catalog. Contact factory for information.

Series 75/76 Power Valves

Accessories	49	Plunger Operators	20
Air Pilot Valve	55	Plunger, Pneumatic Reset	21,23
Antenna Valves	30	Pneumatic Reset Knob	9
Coils	54	Pneumatic Reset Lever	10
Common Input Manifold	57	Pneumatic Reset Plunger	21,23
Directional Control Valves	42	Pneumatic Reset Roller Lever	25
Electrical Connectors	54	Pneumatic Reset Pushbutton	15
Electrically Operated Valves	39	Pneumatically Operated Valves	31
Emergency Stop Button	16	Pneumatically Operated 3 Position	36
European Standards Valves	49	Pneumatically Operated 3 Way	32
Flat lever	20	Pneumatically Operated 4 Way	34
Flip Flop	37,48	Pneumatically Operated Flip Flop	37
Flush Head Pushbutton	6	Pneumatically Operated for Vacuum	33
Foot Pedal	12	Pneumatically Operated Oscillator	38
ISO Manifolds	59	Pneumatically Operated Priority Port	32,34,35
ISO Pneumatically Operated	50	Pneumatically Operated Valves	31
ISO Solenoid Operated	51	Punch Button	16
ISO Solenoid Operated 3 Position	52	Pushbuttons	6,7,14
ISO Valve Parts	58	Push-Pull Knob	9
Joystick	17	Roller Lever Air Pilot Assisted	26
Key Operated Valve	17	Roller Lever Body Mount	25
Knob Operator	9	Roller Lever Compact	24
Latching Pushbutton	16	Roller Lever Double Operator	25
Lever	10,11	Roller Lever Pneumatic Reset	25
Lever 3 Position	11	Shrouded Head Pushbutton	7,15
Limit Switch Valves	24	Selector Switch	18
Luminous Seal	55	Sockets, Electric	54
Manifolds	56	Solenoid 3 Position	46
Manually Operated Valves	5	Solenoid 3 Way	40
Mechanically Operated Valves	20	Solenoid Directional Control (4 way)	42
Mushroom Head Pushbutton	6,7,15	Solenoid External Air Pilots	40,42,44
NAMUR Valves	52	Solenoid Flip Flop	48
Oil Tight Pushbuttons	14	Solenoid Operated Valves	39
One Way Roller Lever	27	Solenoid Oscillator	48
One Way Roller Lever Air Pilot Assist	29	Solenoid Priority Over Ride	42
One Way Roller Lever Compact	27	Solenoid for Vacuum	41
One Way Roller Operators	27	Specifications	62
Oscillator Valve	38,48	Surge Suppressors	55
Plugs, Electric	54	Technical Details, Valves	62
Plunger Air piloted	23	Three Position Valves	11,36,46
Plunger Body Mounted	21	Toggle Lever	8,10,11
Plunger Compact	20	Whisker Valve	30
Plunger Double Operator	21,23	Wobble Head Pushbutton	16
Plunger Nose Mounted	22,23	Wobble Stick	17