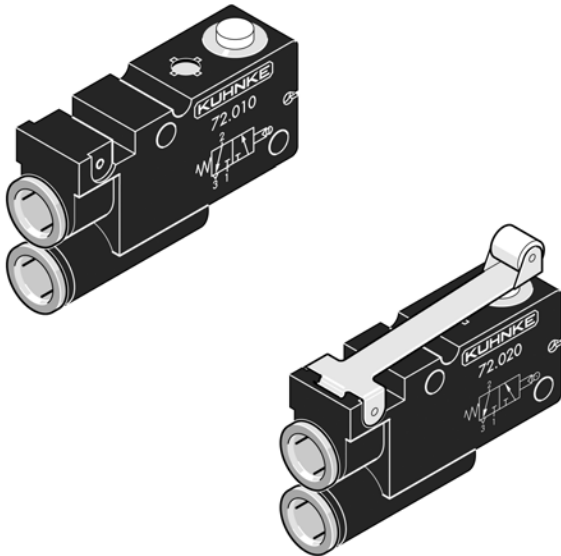


Miniature Valves

Series 72 – 3 Way Micro

Kuhnke Miniature Valves

Mechanically Operated Micro Valves



The Series 72 micro air valve was developed as a low cost, reliable signal element for mounting in confined spaces. The valve has an air assisted servo plunger design providing a low actuation force of 3.5 ozs.

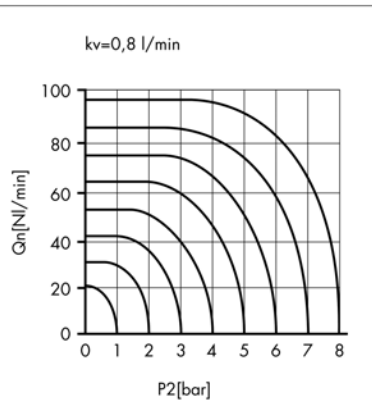
Valves are designed to match the dimensions of standard electrical micro switches and have similar actuating forces. Mounting is via through body holes which minimize the need for brackets and allow the valve to be mounted in very tight spaces.

These valves are equipped with instant push in fittings to accommodate flexible 5/32" (4mm) O.D. tubing, eliminating the need for extra fittings. The exhaust port (3) is internal and non accessible.

An air assisted servo controlled pilot consumes approximately .025 CFM and provides an air cushion for the plunger operator. The pilot supply is internally connected to port 1 (air supply) of the valve.

Technical Specifications

Flow in Bars and Liters per Minute



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

Operating Pressure:

25 to 115 PSI

Vacuum:

Not applicable.

Flow Rate:

2.5 CFM @ 100 PSI

Cv / Kv:

Cv - .06

Kv - .8

Orifice:

2mm

Connection:

Push in fittings for 5/32" (4mm) flexible tubing. Exhaust port 3 is non accessible.

Media:

Filtered air.

Operation:

Air assisted servo controlled element. Supply pressure must be connected to port 1.

Operating time:

65 ms @ 90 PSI

Actuation Force:

3.5 ozs @ 115 PSI.

Actuator Travel:

Approx. 1/32 inch.

Total Travel (override):

3/64 inch.

Air Consumption:

Approx. .025 CFM @ 90 PSI.

Materials:

Polyamide housing, aluminum plunger, Buna N seals, brass fitting inserts.

Average Mechanical Life:

10 million operations

Operating Ambient:

-10°C to 60°C (12°F to 140°F)

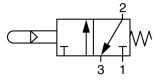
Dimensions:

Valve body- 1 3/8" L x 13/32" W x 5/8" H.

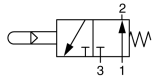
Mounting:

(2) 1/8" through body mounting holes.

72010
Norm. Closed
Plunger Operator



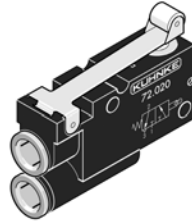
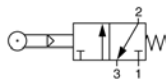
72015
Norm. Open
Plunger Operator



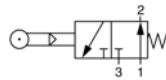
Plunger operated valve can be used as a trigger mechanism on air guns, or to detect end of travel on machinery, tool in position functions, etc. Actuator travel is 3/64" and actuation occurs at 1/32" of travel.

Weight: .125 oz.

72020
Norm. Closed
Roller Lever



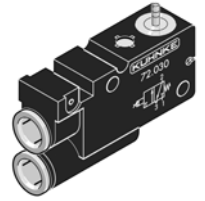
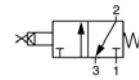
72025
Norm. Open
Roller Lever



Roller lever allows valve to be mounted in small parts conveyors or moving rail applications. Roller has an override of 3/64". Actuation occurs at 1/32" of travel.

Weight: .25 oz.

72030
Air Jet Detector



Valve is actuated by remote air jet nozzle, connected to valve via a 5/32" (4mm) O.D. hose equipped with a special nozzle. Air jet is supplied by valve. A stream of air is sent from the nozzle. When an object blocks off the flow of air at the nozzle, the build up of back pressure activates the valve. Any length of hose can be used, however, length of tube (volume) determines valve switch over time. Uses hose kit cat. no. 43138, see accessories.

Weight: .5 oz.