

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

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

Contact Details

Kuhnke sales and service in North America

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

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

Important Note

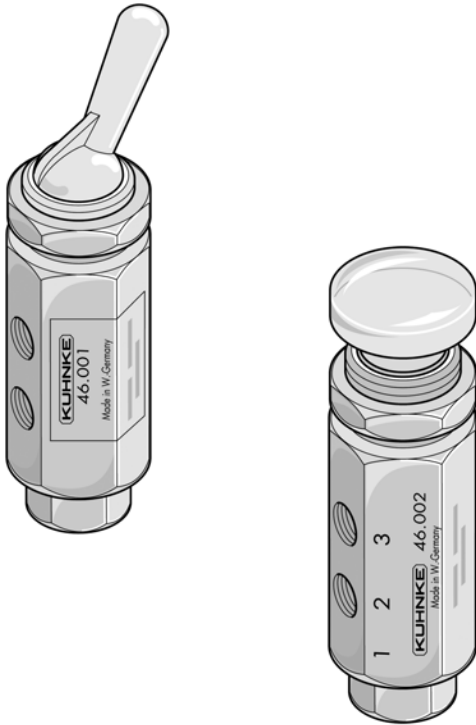
The information shown in these documents is for guidance only. No liability is accepted for any errors or omissions. The designer or user is solely responsible for the safe and proper application of the parts, assemblies or equipment described.

Miniature Valves

Series 46 - 3 Way Brass

Kuhnke Miniature Valves

Brass Poppet Valves, Manually and Mechanically Operated



The Series 46 valve is a rugged general purpose 2 or 3 way device. The valve series is available with 7 types of mechanical actuators and 2 types with pneumatic actuation to suit a variety of application requirements.

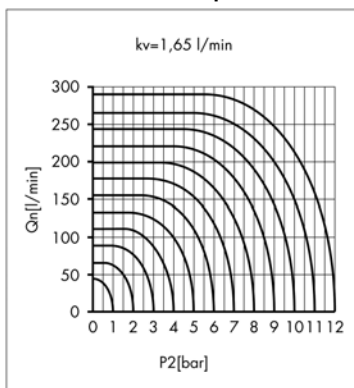
Series 46 valves can be used for normally closed, normally open or diverter circuits as well as on vacuum or liquid applications.

Constructed from a hex brass bar, valves have 10-32 (M5) ports on its side and rear for easy connections. A nickel chromium plunger and buna N seals provide long life.

Valves can be panel mounted or used with mounting brackets. Standard mounting brackets are available. A hex nut is included for panel or bracket mounting in a 1/2 inch diameter hole.

Technical Specifications

Flow in Bars and Liters per Minute



2mm Orifice
Cv - .13 / Kv - 1.65

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

Operating Pressure:

0 to 175 PSI

Vacuum:

Up to 90%, consult factory with specific application.

Flow Rate:

7 CFM @ 100 PSI
2.5 CFM @ 45 PSI

Cv / Kv:

Cv - .13
Kv - 1.65

Orifice:

2mm

Connection:

10-32 or M5 ports

Media:

All neutral liquid or gaseous media. (Consult factory before use on liquids.)

Actuation:

Mechanical or pneumatic force required depends on model.
Spring assisted return.

Materials:

Brass housing, buna N seals,
Nickel chromium plunger.

Average Mechanical Life:

100 million operations

Operating Ambient:

-10°C to 70°C (12°F to 160°F)

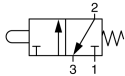
Dimensions:

Valve body- 1 11/16" L x 9/16" Hex.
For operator dimensions see valve descriptions.

Mounting:

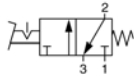
Valve mounts in a 1/2" dia. hole.

46000
Plunger Operated



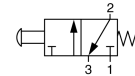
Valve is operated by a plunger. Travel approx. 5/64" for actuation, spring return. Plunger force is dependent on line pressure (force at 90 PSI is 3 lbs.). Ideal for "end of travel" applications. Above panel dimension 13/32". Weight: 1.5 ozs.

46001
Toggle Switch



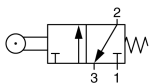
Toggle switch (2 pos.) operated. Ideal for switching air supplies on small equipment. Weight: 2 ozs. Above panel dimension 1".

46002
Pushbutton



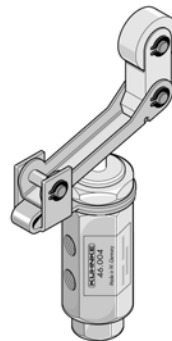
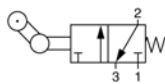
Pushbutton operated, (spring return). Used for momentary air pressure switching. Pushbutton force approx. 3 lbs. @ 90 PSI. Weight 2 ozs. Above panel dimension 9/16".

46003
Roller Lever Operated



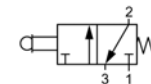
Used as pneumatic limit switch or position detector. Actuator travel 5/32" for valve operation. Actuation force approx. 1.3 lbs. Weight: 5 ozs. Dimension above valve body is 7/8".

46004
1 Way Roller Lever Operated



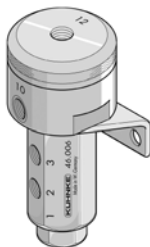
Roller lever operates valve only in one direction. Can be used for limiting travel on machinery. Actuator travels and force, same as 46003. Weight: 5.1 ozs. Dimension above valve body is 1 1/2".

46005
Ball Operator



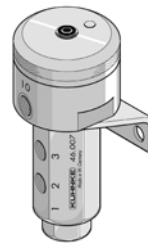
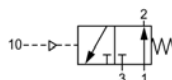
Actuated by pressure on a ball bearing. Travel approx. 5/64" for actuation. Ball bearing rolls with mass as it moves by. Force required (vertical to valve axis) is 3 lbs. at 90 PSI. Can be used for detecting items on conveyors. Weight: 2.6 ozs. Dimension above valve body is 23/32".

46006
Pneumatic Operator
Normally Closed Valve



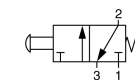
Pneumatically actuated valves can be used for piloting secondary systems. Valves are supplied with mounting bracket. Actuated by applying a pilot pressure between 22 and 85 PSI to the control port. Weight: 5 ozs.

46007
Pneumatic Operator
Normally Open Valve



Same as 46006 except equipped with a normally open valve,

46010-03
Valve for Oil-Tight
Pushbuttons



Valve is designed for use with standard miniature size (7/8" dia.) pushbutton operators. Enables pneumatic switching to be combined with electromechanical switching on control consoles. Fits *Moeller* operators, see *accessories*. Weight (valve only): 2.5 ozs.