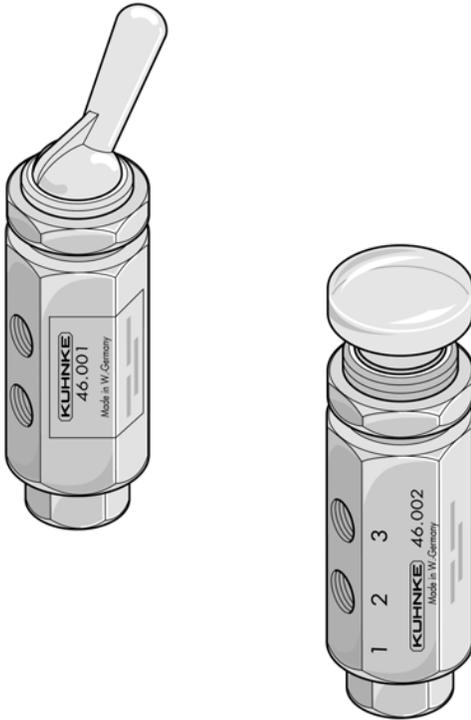


# Miniature Valves

## 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.

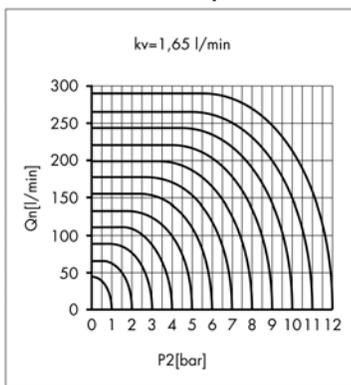
Series 46 valves can be used for normally closed, normally open or diverter circuits as well as on vacuum or liquid applications.

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)

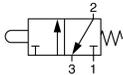
#### Dimensions:

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

#### Mounting:

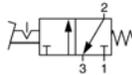
Valve mounts in a 1/2" dia. hole.

**46000**  
Plunger Operated



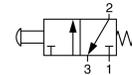
Valve is operated by a plunger. Travel approx. 5/64" for actuation, spring return. Plunger force is dependent on line pressure (force at 90 PSI is 3 lbs.). Ideal for "end of travel" applications. Above panel dimension 13/32". Weight: 1.5 ozs.

**46001**  
Toggle Switch



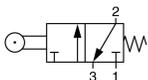
Toggle switch (2 pos.) operated. Ideal for switching air supplies on small equipment. Weight: 2 ozs. Above panel dimension 1".

**46002**  
Pushbutton



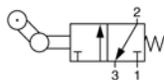
Pushbutton operated, (spring return). Used for momentary air pressure switching. Pushbutton force approx. 3 lbs. @ 90 PSI. Weight 2 ozs. Above panel dimension 9/16".

**46003**  
Roller Lever Operated



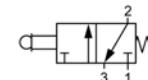
Used as pneumatic limit switch or position detector. Actuator travel 5/32" for valve operation. Actuation force approx. 1.3 lbs. Weight: 5 ozs. Dimension above valve body is 7/8".

**46004**  
1 Way Roller Lever Operated



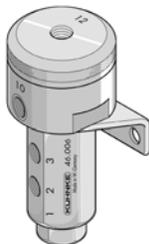
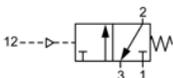
Roller lever operates valve only in one direction. Can be used for limiting travel on machinery. Actuator travels and force, same as 46003. Weight: 5.1 ozs. Dimension above valve body is 1 1/2".

**46005**  
Ball Operator



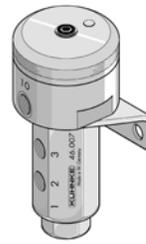
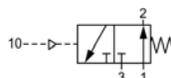
Actuated by pressure on a ball bearing. Travel approx. 5/64" for actuation. Ball bearing rolls with mass as it moves by. Force required (vertical to valve axis) is 3 lbs. at 90 PSI. Can be used for detecting items on conveyors. Weight: 2.6 ozs. Dimension above valve body is 23/32".

**46006**  
Pneumatic Operator  
Normally Closed Valve



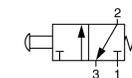
Pneumatically actuated valves can be used for piloting secondary systems. Valves are supplied with mounting bracket. Actuated by applying a pilot pressure between 22 and 85 PSI to the control port. Weight: 5 ozs.

**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.