

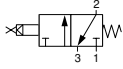
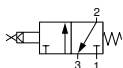
# Miniature Pneumatic Valves

## Kuhnke 79 Series Valve - 3/2 Way Air Jet Detector

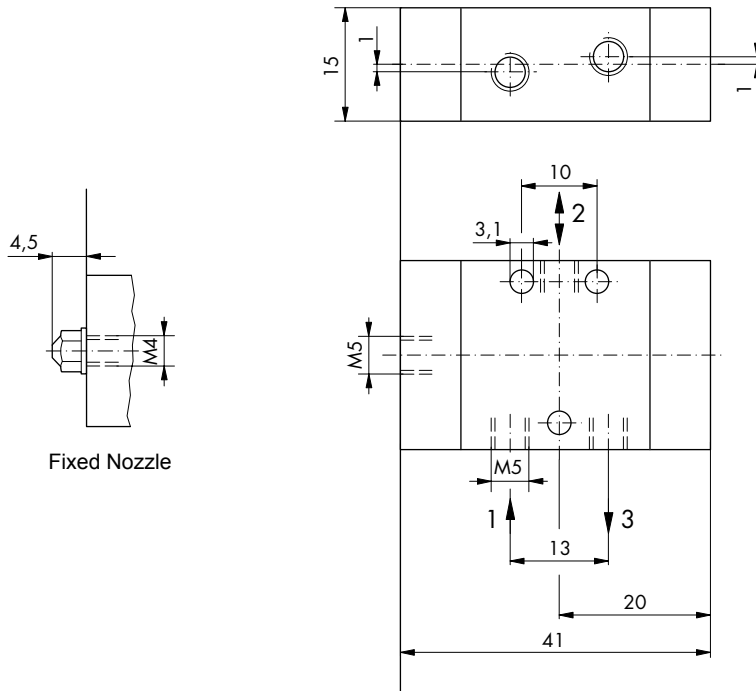
### Technical information

<b>Air consumption:</b>	Approx. 2 l/min
<b>Actuation time:</b>	Depends on volume of tubing*
<b>Pressure range:</b>	2-10 bar - air pilot assisted
<b>Temperature range:</b>	0°C...+70°C
<b>Housing:</b>	Aluminium alloy/Zinc alloy/Makrolon
<b>Spool &amp; liner:</b>	Steel, corrosion resistant
<b>Lubricant:</b>	Not required
<b>Operating medium:</b>	5 micron filtered, lubricated or non-lubricated compressed air
<b>Necessary accessories:</b>	Tube nipple, nozzle, hose (Order code 43.138)



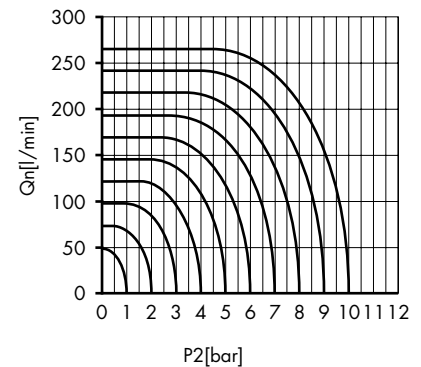
Symbol	Description	Type	Orifice	Ports	Order code
	3/2 way spring return normally closed, M5 threaded nozzle Order code 43.138 required.	Spool	2mm	M5	<b>79.025</b>
	3/2 way spring return normally closed, fixed nozzle	Spool	2mm	M5	<b>79.026</b>

### Dimensional drawings



Air jet detectors are used for contact sensing of parts and tools and often used for sensing delicate components. A stream of air is sent from a nozzle, as an object touches off the nozzle the stream is blocked causing back pressure which operates the valve. When using the M5 threaded nozzle, any length of tube can be used, however, the tube length and volume will determine the valve switch time.

kv=1,80 l/min (NW 2)



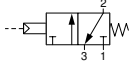
# Miniature Pneumatic Valves

## Kuhnke 79 Series Valve - 3/2 Way Amplifier Valve

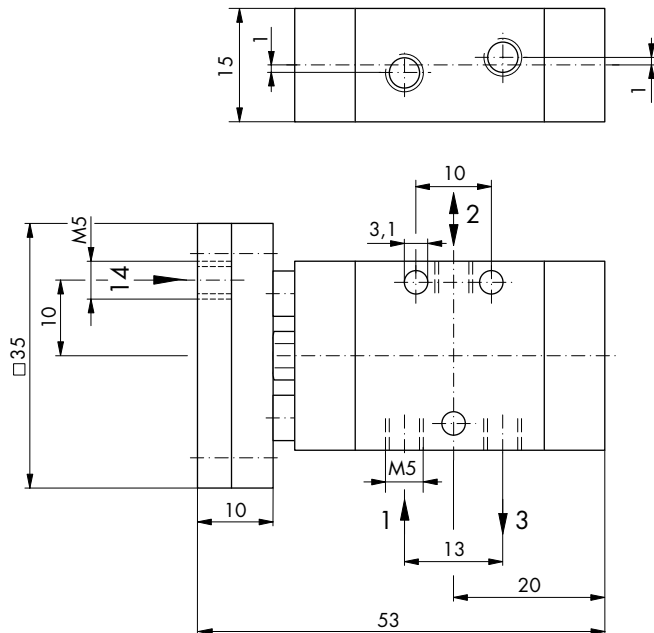
### Technical information

<b>Air consumption:</b>	Approx. 2 l/min
<b>Pressure range:</b>	2-10 bar
<b>Control pressure:</b>	5... 100 mbar
<b>Temperature range:</b>	-10°C...+70°C
<b>Housing:</b>	Aluminium alloy/Zinc alloy/Makrolon
<b>Spool &amp; liner:</b>	Steel, corrosion resistant
<b>Lubricant: Operating medium:</b>	Not required 5 micron filtered, lubricated or non-lubricated compressed air

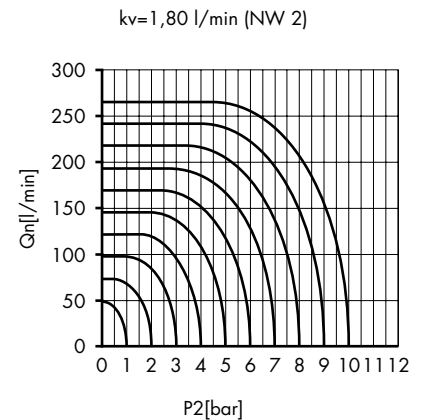


Symbol	Description	Type	Orifice	Ports	Order code
	3/2 way spring return normally closed	Spool	2mm	M5	<b>79.024</b>

### Dimensional drawings



Amplifier valves are used to switch line pressure valves from a low pilot pressure signal. A pressure signal between 5-100 mbar applied to the control port operates the valve.



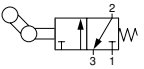
# Miniature Pneumatic Valves

## Kuhnke 79 Series Valve - One Way Roller Lever

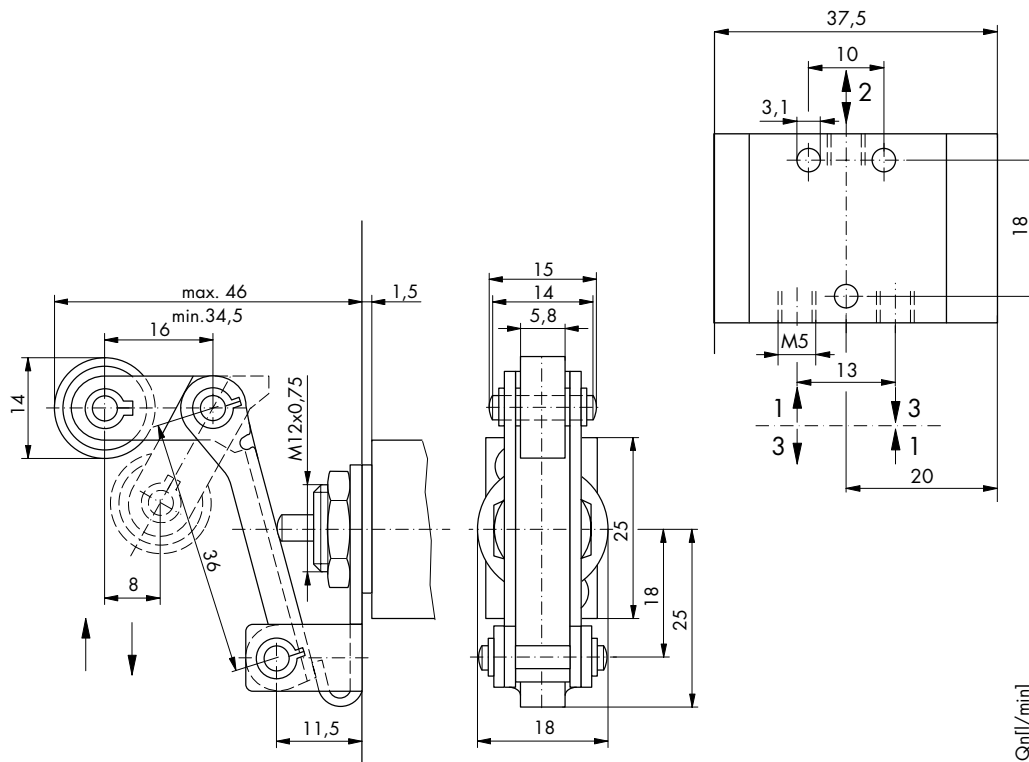
### Technical information

<b>Actuation force:</b>	Approx. 4N
<b>Pressure range:</b>	0-10 bar
<b>Temperature range:</b>	-10°C...+70°C
<b>Housing:</b>	Aluminium alloy/Zinc alloy/Makrolon
<b>Spool &amp; liner:</b>	Steel, corrosion resistant
<b>Lubricant:</b>	Not required
<b>Operating medium:</b>	5 micron filtered, lubricated or non-lubricated compressed air



Symbol	Description	Type	Orifice	Ports	Order code
	3/2 way roller (one way) spring return normally closed	Spool	2mm	M5	<b>79.023</b>

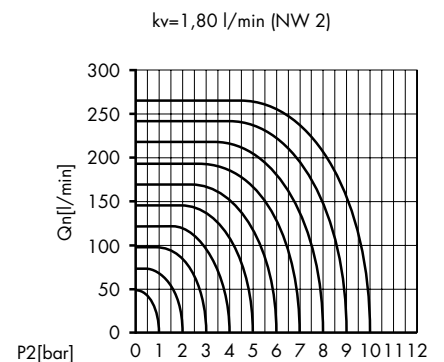
### Dimensional drawings



Spare roller levers are available:

One Way

Order code: MM4930016



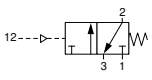
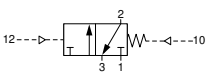
# Miniature Pneumatic Valves

## Kuhnke 79 Series Valve - 3/2 Way Pilot Operated

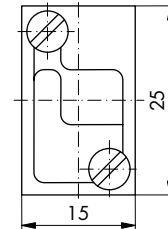
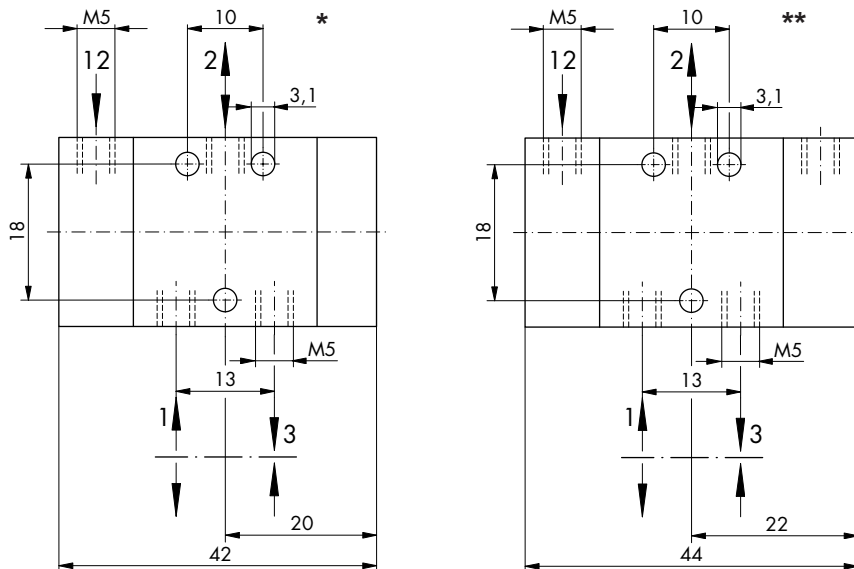
### Technical information

<b>Pressure range:</b>	0-10 bar
<b>Control pressure:</b>	Min. 2 bar
<b>Temperature range:</b>	-10°C...+70°C
<b>Housing:</b>	Aluminium alloy/Zinc alloy/Makrolon
<b>Spool &amp; liner:</b>	Steel, corrosion resistant
<b>Lubricant:</b>	Not required
<b>Operating medium:</b>	5 micron filtered, lubricated or non-lubricated compressed air.

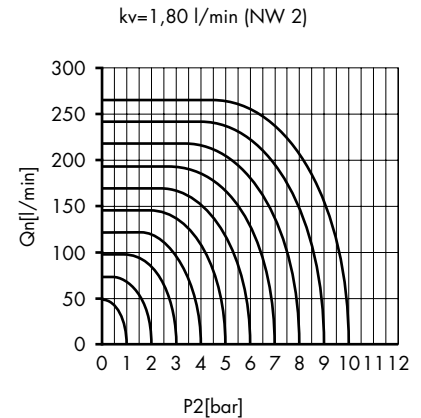


Symbol	Description	Type	Orifice	Ports	Order code
	3/2 way spring return normally closed spring return*	Spool	2mm	M5	<b>79.012</b>
	3/2 way double pilot differential pressure valve**	Spool	2mm	M5	<b>79.016</b>

### Dimensional drawings



\*\*Differential pressure valves are used in pressure compensating circuits, valves can be used to maintain pressure in balancing or levelling applications. When both pilot pressures are equalised the valve is closed by the return spring.



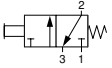
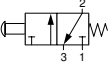
# Miniature Pneumatic Valves

## Kuhnke 79 Series Valve - Plunger & Push Button

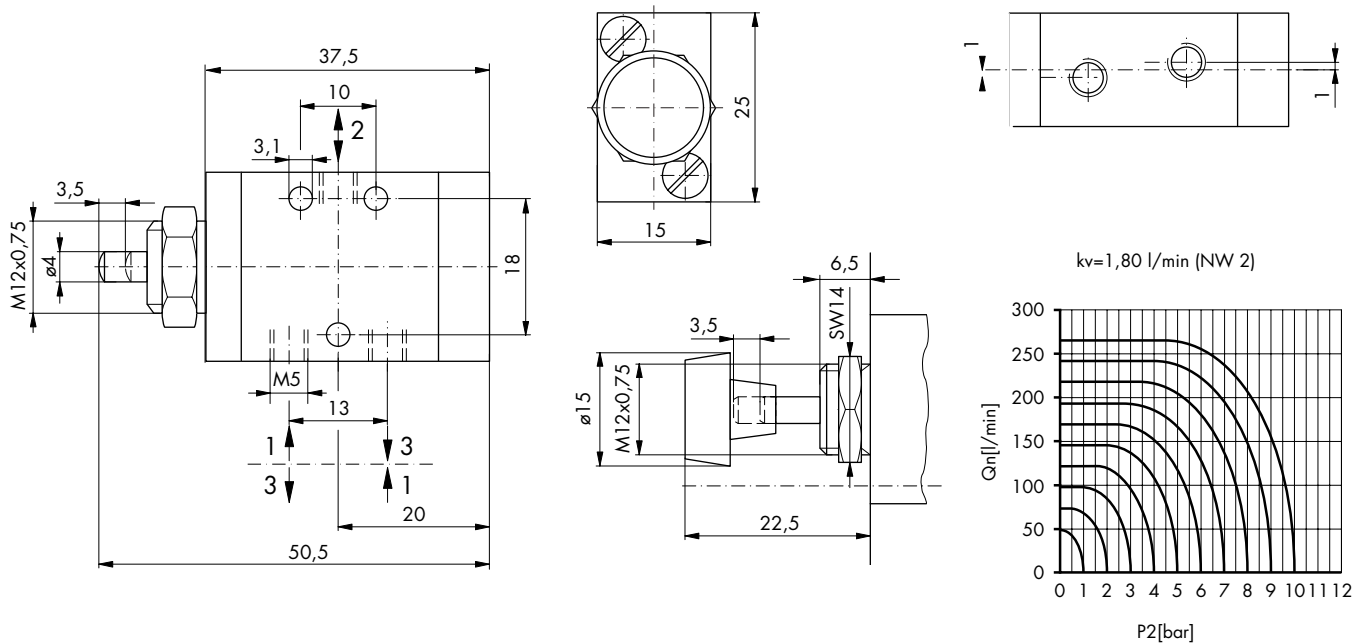
### Technical information

<b>Actuation force:</b>	Approx. 8N
<b>Actuation stroke:</b>	Approx. 3.5 mm
<b>Pressure range:</b>	0-10 bar
<b>Temperature range:</b>	-10°C...+70°C
<b>Housing:</b>	Aluminium alloy/Zinc alloy/Makrolon
<b>Spool &amp; liner:</b>	Steel, corrosion resistant
<b>Lubricant:</b>	Not required
<b>Operating medium:</b>	5 micron filtered, lubricated or non-lubricated compressed air



Symbol	Description	Type	Orifice	Ports	Order code
	3/2 way plunger spring return normally closed	Spool	2mm	M5	<b>79.020</b>
	3/2 way push button spring return normally closed	Spool	2mm	M5	<b>79.021</b>

### Dimensional drawings



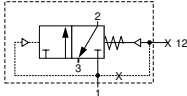
# Miniature Pneumatic Valves

## Kuhnke 79 Series Valve - 3/2 Way Pulse Shaper

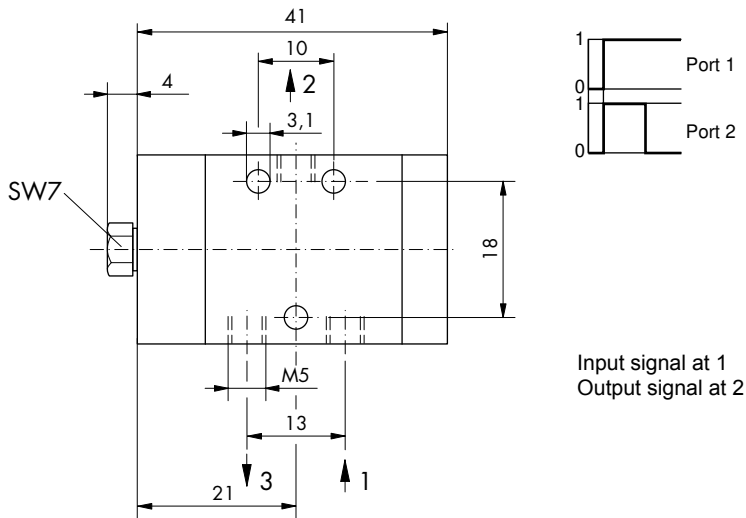
### Technical information

<b>Pressure range:</b>	3-10 bar
<b>Pulse length:</b>	Approx. 80-140 ms @ 8 bar without added volume
<b>Temperature range:</b>	-10°C...+70°C
<b>Housing:</b>	Aluminium alloy/Zinc alloy/Makrolon
<b>Spool &amp; liner:</b>	Steel, corrosion resistant
<b>Lubricant:</b>	Not required
<b>Operating medium:</b>	5 micron filtered, lubricated or non-lubricated compressed air.

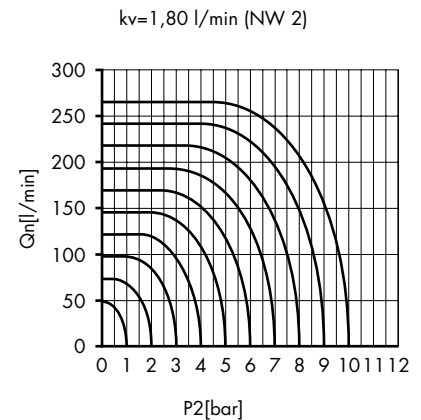


	Description	Type	Orifice	Ports	Order code
	3/2 way spring return pulse shaper valve	Spool	2mm	M5	<b>79.036</b>

### Dimensional drawings



The pulse shaper valve converts a continuous signal into a pulse signal. This is particularly useful for providing count pulses to predetermining or totalising pneumatic counters. The typical pulse duration is between 80-140ms. The pulse duration can be lengthened by connecting an additional volume to port 12.



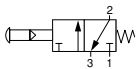
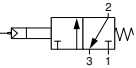
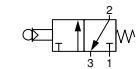
# Miniature Pneumatic Valves

## Kuhnke 79 Series Valve - Button, Roller & Whisker

### Technical information

<b>Actuation force @ 6 bar:</b>	Approx. 0.25N (0.05N at tip for whisker type)
<b>Actuation stroke:</b>	Approx. 1 mm for button & roller ball types
<b>Air consumption @ 6 bar:</b>	Approx. 2 l/min
<b>Pressure range:</b>	2-10 bar - air pilot assisted
<b>Temperature range:</b>	0°C...+70°C
<b>Housing:</b>	Aluminium alloy/Zinc alloy/Makrolon
<b>Spool &amp; liner:</b>	Steel, corrosion resistant
<b>Lubricant:</b>	Not required
<b>Operating medium:</b>	5 micron filtered, lubricated or non-lubricated compressed air.

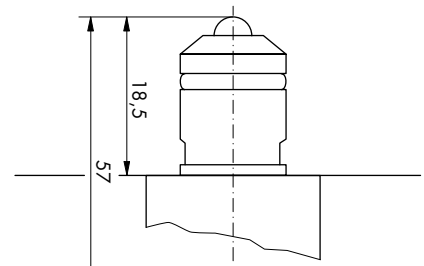
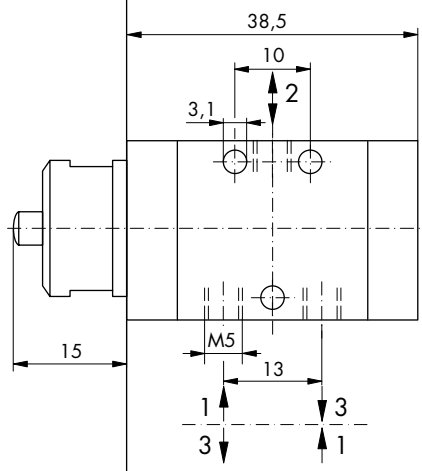
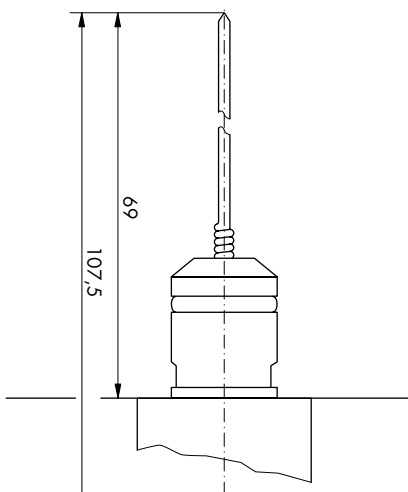


Symbol	Description	Type	Orifice	Ports	Order code
	3/2 way button operated spring return normally closed	Spool	2mm	M5	<b>79.027</b>
	3/2 way whisker operated spring return normally closed	Spool	2mm	M5	<b>79.028</b>
	3/2 way roller ball operated spring return normally closed	Spool	2mm	M5	<b>79.029</b>

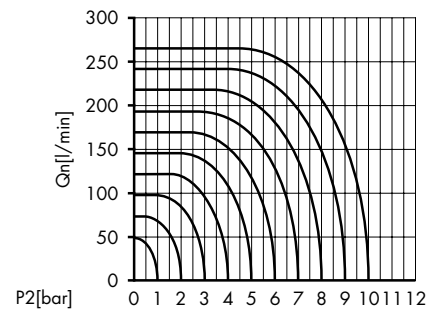
### Dimensional drawings

Spare whiskers are available

Order code: MM4920003



kv=1,80 l/min (NW 2)



# Miniature Solenoid Valves

## Kuhnke 79 Series Valve - 3/2 Way Single Solenoid

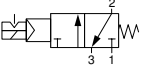
### Technical information

<b>Pressure range:</b>	2-8 bar
<b>Temperature range:</b>	-10°C...+50°C
<b>Duty cycle:</b>	Continuous 100%
<b>Housing:</b>	Aluminium alloy/Zinc alloy/Makrolon
<b>Spool &amp; liner:</b>	Steel, corrosion resistant
<b>Lubricant:</b>	Not required.
<b>Earthing contact:</b>	Part of the standard device.
<b>Operating medium:</b>	5 micron filtered, lubricated or non-lubricated compressed air.

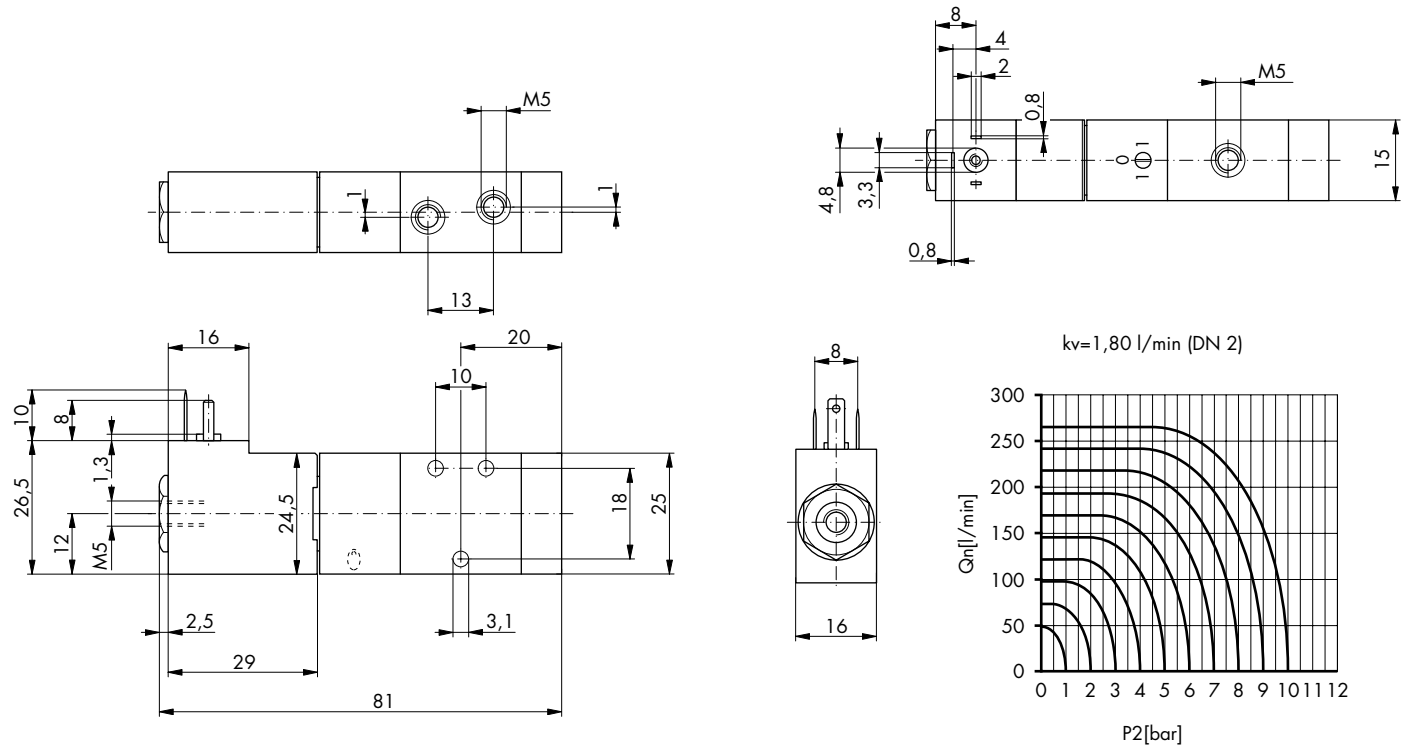


### Other information

Insert coil voltage required to complete the order code, example 79.040.01 24VDC.  
Standard voltages are 12 and 24 VDC: 24, 110 and 230 VAC.  
Order connecting plugs separately, part number 64.230.01.

Symbol	Description	Ports	Coil Power	Type	Orifice	Order code
	3/2 way spring return normally closed DC coil	M5	1.8 W	Spool	2mm	<b>79.040.01</b>
	3/2 way spring return normally closed AC coil	M5	5.5 VA	Spool	2mm	<b>79.040.02</b>

### Dimensional drawings





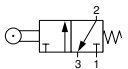
# Miniature Pneumatic Valves

## Kuhnke 79 Series Valve - Two Way Roller Lever

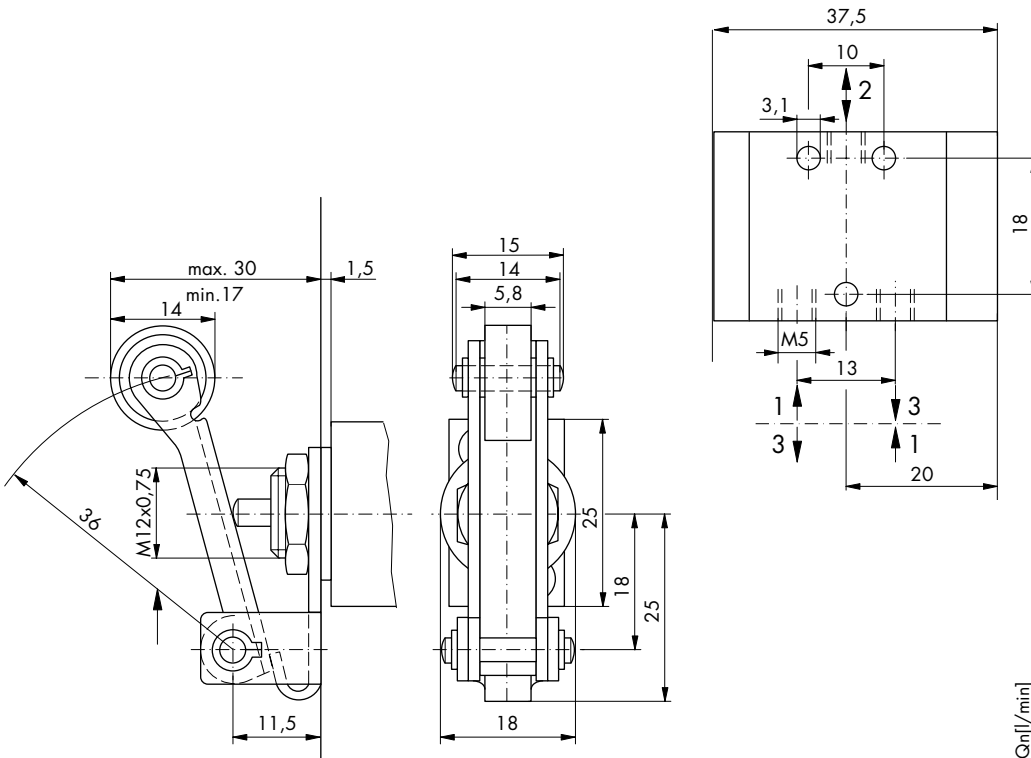
### Technical information

<b>Actuation force:</b>	Approx. 4N
<b>Pressure range:</b>	0-10 bar
<b>Temperature range:</b>	-10°C...+70°C
<b>Housing:</b>	Aluminium alloy/Zinc alloy/Makrolon
<b>Spool &amp; liner:</b>	Steel, corrosion resistant
<b>Lubricant:</b>	Not required
<b>Operating medium:</b>	5 micron filtered, lubricated or non-lubricated compressed air



Symbol	Description	Type	Orifice	Ports	Order code
	3/2 way roller (two way) spring return normally closed	Spool	2mm	M5	<b>79.022</b>

### Dimensional drawings



Spare roller levers are available:

Two Way

Order code: MM4930017

