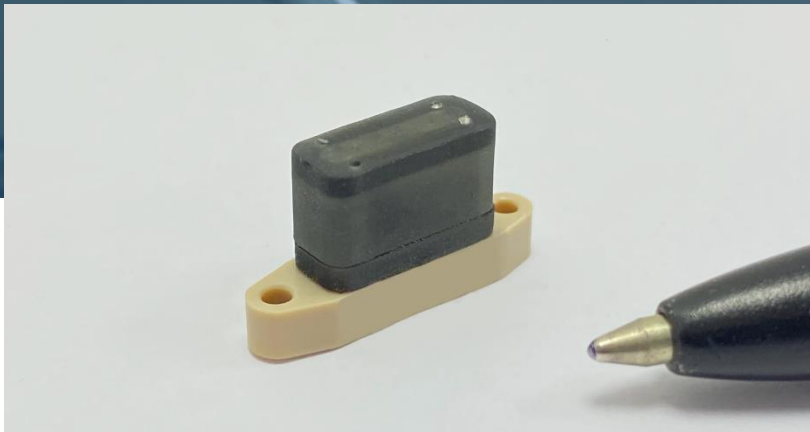


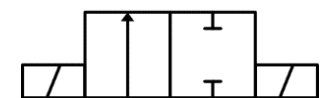
# BV1101 2/2-way Bistable Valve



The memetis ultracompact 2/2-way media separated bistable valve enables complex fluidic systems with extremely low power consumption. The valve is a perfect fit for fluidics in life-sciences and other small but complex fluidic applications.

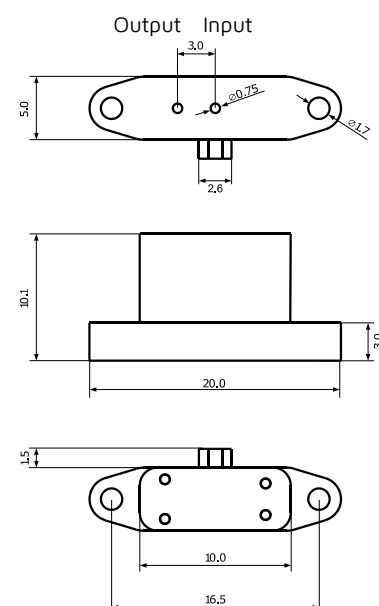
## Specifications

Parameter	Value
Functionality	2/2-way seat valve, <b>bistable</b> , <b>media separated</b>
Media	Liquids, gases
Dimensions	20 x 5 x 10.1 mm <sup>3</sup>
Internal volume	< 4 µl
Nominal width DN	0.75 mm
Max. pressure @input	2.0 bar
Max. back-pressure @output	1.1 bar
Switching time: open / close	0.04 s / 0.13 s @ 1 bar *
Typical flow rates (@ Δp 1 bar)	4500 ml/min (air) 135 ml/min (water)
K <sub>v</sub> value	> 0.01 m <sup>3</sup> /h
Temperature range	10 – 50 °C **
Lifetime	> 1 000 000 cycles
Housing material	PEEK ***
Sealing material	PDMS ***
Fluidic connection	Flange / M1.6 screws
Energy per switching	0.17 J
Nominal current	0.6 A for 0.4 s
Electrical connections	Soldering pads / cable



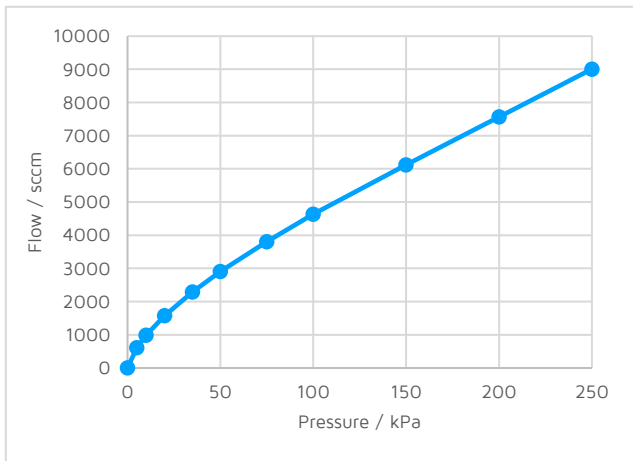
bistable valve

## Drawings

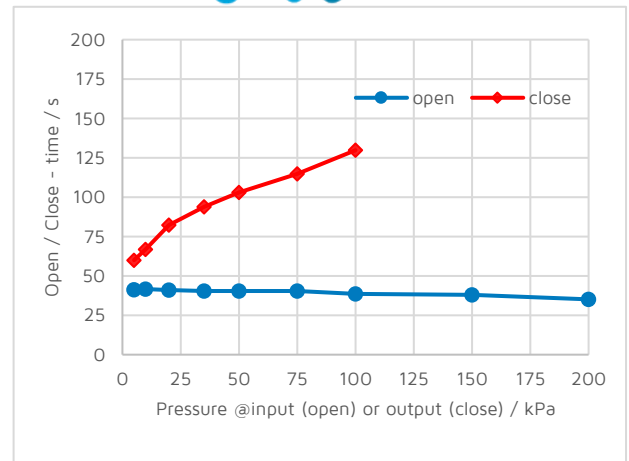


\* reducible to 0.01 s / 0.04 s by increased short power pulse

\*\* contact us for lower temperatures \*\*\* contact us for other material requirements



Graph 1: Flow rate of a memetis 2/2-way bistable valve for pressures of 0.05 bar up to 2.5 bar (input pressure) for air at room temperature with open outlet.



Graph 2: Opening and closing time of a memetis 2/2-way bistable valve for pressures of 0.05 bar up to 2 bar (input pressure) for air at room temperature.

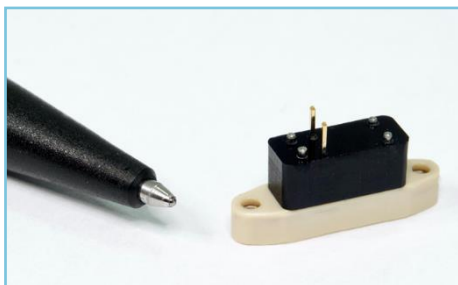
## Complementary memetis products



**Electrical control unit**, powered by USB-port, to control up to two memetis bistable valves or four normally closed (NC) valves. The control set includes adapter cables and has a display.



memetis offers customer-specific **smart valve manifolds** to enable easy operation of complex fluidic systems.



The memetis ultracompact **2/2-way** media separated **NC valve** enables complex fluidic systems with very low power consumption and noiseless switching.

For alternative fluidic connectors contact us directly by sending us an email to [support@memetis.com](mailto:support@memetis.com)

## Contact information