## Bistable, Servo-controlled 2/2-Way Valve, DN 5



# A. u. K. Müller

Solenoid valves Control valves Special valves and systems

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## Characteristics

- Servo-controlled
- Pretested functional unit
- Suitable for the thermal as well as chemical disinfection
- Long term performance capability
- Optimized flow factor Kv for DN 5 (9 - 10 l/min at 1 bar)
- Optimized water hammer characteristic by low noise emission according to EN 60730
- Easy to assemble and service
- Low power consumption Battery operation possible
- Suitable for spray and jet water
- High operating safety through the use of high quality material and hygiene benefit by 100% final testing with air

## Description

Series 50.005.126 bi

2/2-way solenoid servo-controlled valve of DN 5 in bistable version, for the control of potable water. The valve is especially suitable for use in electronically controlled, battery driven sanitary fittings.

There is no need to create a mounting contour, as is the case with a cartridge valve.

The power consumption is minimised by the use of impulse control (pwm) to increase long term performance, durability and battery life.

The flow rate of the cartridge valve has been optimized in such a way, that the nominal diameter of DN 5 fulfils the standard requirements for sanitary tap ware.

A wide range of connection options can be realised through the valve body.

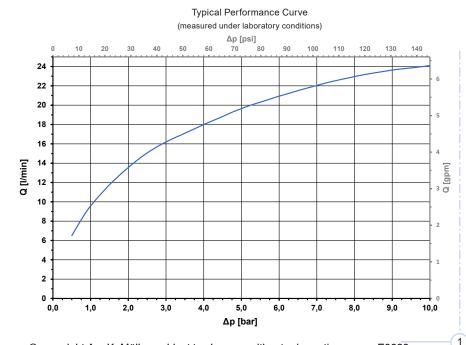
## Applications

- Automatic fittings
- Sanitary fittings
- Pilot system for valves with a larger nominal diameter

## Approvals

Approved versions available on request:

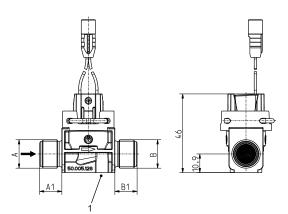
- KTW-BWGL
- Others on request

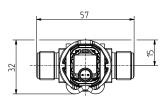


# Bistable, Servo-controlled 2/2-Way Valve, DN 5



## Series 50.005.126 bi





1) Fixing possibility for self tapping screw  $\emptyset$  4,2

| Materials                |                               |  |  |  |
|--------------------------|-------------------------------|--|--|--|
| Valve body               | PA 6/6 glass fibre reinforced |  |  |  |
| Injector                 | PPSU                          |  |  |  |
| Plunger guide            | LCP                           |  |  |  |
| Plunger                  | stainless steel               |  |  |  |
| Membrane and<br>sealings | EPDM                          |  |  |  |
| Filter (on request)      | stainless steel               |  |  |  |

### Note:

The upper part of the valve cannot be dismantled. The metal bracket must not be removed from the housing!

#### Note:

The filtration of the medium must be ensured by the user. Alternatively, the valve can be equipped with a filter in the inlet.

| Options |       |    |       |    |                          |                          |
|---------|-------|----|-------|----|--------------------------|--------------------------|
| ID      | Α     | A1 | в     | B1 | Connection type          | Cable length L           |
| 065820  | G 3/8 | 13 | G 3/8 | 13 | with leads and connector | $85 \pm 5$ mm (standard) |
|         |       |    |       |    |                          |                          |

### Others variants on request

### Male connector

**Polarity of connector:** strand color **RED** Pin 1 strand color **BLACK** 

PLUS(+) pulse to open MINUS(-)

| Те                        | chnical   | Data             |        |
|---------------------------|---|------------------|--------|
| Туре                      | servo-controlled valve  |                  |        |
| Construction              | 2/2-way   |                  |        |
| Function                  | bistable, pulse controlled  |                  |        |
| Connection                | 3/8" thread (other connection variants e.g. nozzles or PushFit on request)                      |                  |        |
| Fitting position          | any   |                  |        |
| Media                     | cold and heated potable water and physically and chemically similar media                       |                  |        |
| T-Medium                  | 5 - 70<br>(5 - 80   | °C<br>°C max. 10 | ) min) |
| T-Ambient                 | 5 - 60  | °C               |        |
| DN                        | 5   | mm               |        |
| p-Operating (PN)          | 0,5 - 10,0  | bar              |        |
| Flow factor Kv            | 9 - 10  | l/min            |        |
| Pressure surge            | according to EN IEC 60730-2-8<br>and EN 15091 (5 l/min)   |                  |        |
| Burst pressure<br>(5x PN) | according to EN IEC 60730-2-8   |                  |        |
| Durability                | according to ASME A112.18.1-2018<br>500,000 switching operations<br>under laboratory conditions |                  |        |
| Nominal voltage           | 6   | V DC             |        |
| Operating<br>voltage      | 4,0 - 6,9 V DC open/close<br>at T-ambient 25 °C   |                  |        |
| Pulse shape/-time         | 9   |                  |        |
| 10 ms                     |   |                  |        |

| 10 ms<br>ON      |       |                                  |
|------------------|-------|----------------------------------|
| -U               |       | OFF<br>12 ms                     |
| Nominal power    | 1,4 W | @6V                              |
| Protection Type  | IP 65 |                                  |
| Insulation class | В     | according to<br>EN IEC 60730-2-8 |
| Protection class | Ш     | according to<br>EN IEC 60730-2-8 |

Good resistance to thermal (e.g., T-medium 80  $^\circ\text{C}$  / 10 minutes / once daily) and chemical disinfection.

Hygiene advantage by air testing prior to delivery.

