

## Flipper Solenoid Valve Type 6144

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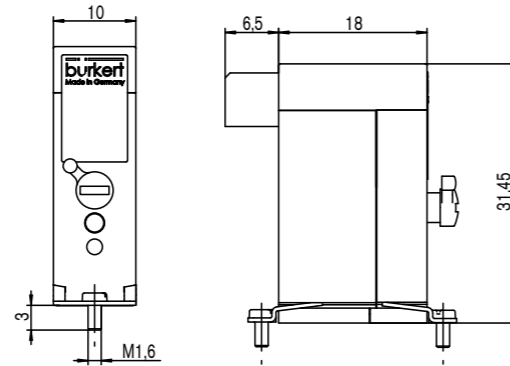
- **Maximum Reliability**
- **Media Separation**
- **Guaranteed Safety**
- **Optimal Design**

# Maximum Reliability ...

## for liquid and pneumatic applications

The 3/2-way micro valve Type 6144 is very unique for many reasons. With a life-time of up to 500 Million switching cycles, it offers optimal reliability in any application. It can be used in liquid as well as in pneumatic applications at a wide pressure range. The media separating membrane prevents the contact between liquid or gas media and the actuator, protecting your medium as well as your valve. Don't take any risks, and choose Type 6144 for your application.

- Compact design with 10mm width
- Pressure range: vacuum to 10bar
- Up to 500 Million switching cycles
- Media separation
- Low power consumption
- Standard, EEx ia Version



## Your advantages

### Maximum Reliability

Do you want components that are integrated into your device without the need for maintenance or replacement? Do you want to simply install and forget? Then Type 6144 is the right choice for you. With up to 500 Million switching cycles life span, it will not disappoint. Whether its an automation system, analysis system or printing system, downtime is not part of this valve. It gives you the flexibility that you need, operating at a wide pressure range of up to 10 bar and with high flow rates. With the multiple material options such as EPDM seal material, the valve can control aggressive media such as MEK inks in printing applications.



### Media Separation

Media separation in microfluidics valves for liquid applications is nothing new. However, Type 6144 also offers media separation in pneumatic applications, allowing for the control of a wider range of neutral and aggressive gas and liquid media because both the medium and the internal parts of the valve are protected. In addition, the body material PPS and seal material FKM and EPDM are highly chemical resistant assuring a long lifetime of the valve. Low internal volume provides excellent flushability preventing residue and carryover.



### Guaranteed Safety

To simplify your certification process, it is ideal that the individual components are already certified. The Type 6144 EEx ia-Version complies to the ATEX Directive and carries the CE Marking for safe operation in hazardous, explosive areas. In addition, it carries the UL Class certification, guaranteeing electric safety in your device. The KTW certification assures the safe use with drinking water. Type 6144 guarantees safety in your demanding application and operating environment.



### Optimal Design

A compact design and low power consumption makes Type 6144 an ideal component for compact, portable devices where the outer dimensions leave no room for large components and where power is consumed from a finite battery source. However, this micro valve is also optimal for the use directly on or near the patient, in Point-of-Care applications. Its quiet switching contributes to a peaceful atmosphere for greater concentration such as in the laboratory or optimal resting such as in the hospital.



### Technical data & features

Kv-Value	Kv = 0,0075 m³/h
Cv-Value	Cv = 0,0087 GPM
Body material	PPS (Polyphenylensulfid)
Seal material	FKM / EPDM
Media	Compressed air lubricated, oil-free or dry; neutral gases and liquids (5µm filtering); technical vacuum
Media temperature	-10 to +55°C
Ambient temperature	-10 to +55°C
Port connection	· Bürkert flange · Lateral flange · UNF 1/4-28
Electrical connection	Rectangular plug as standard; on request: · Circular plug M8x1 · Flying lead 0.2 mm², 300 mm · Blank connector (5.08 mm)
Type of protection	without
Standard version	II 2G Ex ia IIC T4 T5 T6 PTB01 ATEX 2048
Ex version	IECEX PTB 07.0063
Operating voltage	24V/DC 12V/DC on request Further voltages on request
Power Consumption	0.8W (0.4W on request)
Switching function	Monostable Bistable (impulse) on request
Duty cycle	100% continuous rating
Response times	Measurement at the valve outlet, at 20°C and 6 bar inlet pressure, according to DIN ISO 12238:
Open (Pressure rise 0 to 10%)	ca. 8 ms (Standard) ca. 14 ms (Ex version)
Close (Pressure rise 100 to 90%)	ca. 10 ms (Standard) ca. 18 ms (Ex version)