# Ultra Slim Design for Analysis Technology 2/2- and 3/2-way Flipper Solenoid Valve 6650



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- Just 4.5 mm width per station
- Outstanding flushability
- Low internal volume
- The highest chemical resistance
- Ultra short response times

## The slender lines will convince you

This wide-ranging performance with a width of just 4.5 mm sets the standard in miniaturized design for media-separated solenoid valves! With the flipper valve 6650, we provide a fast-switching valve for reproducible and precise dosing in aggressive environments, which has never been available in this magnitude, or rather minitude. Based on the innovative flipper principle, the history of success of the now almost legendary valve type 127 continues, now in its completely new design.

#### Miniaturizing carries maximum benefits

Wherever the highest fluidic performance is required within the smallest amount of space, our 2- or 3-way solenoid valve with a width of just 4.5 mm is first choice from now on. With its optimized design, it enables reproducible, precise dosing and offers very good flushability. Since it is made from high-quality materials, it further recommends itself for use with aggressive media. Ultra short response times complete the performance profile of our latest innovation.

#### Requested in many places

The need for particularly space-saving and fast-switching dosing valves is growing in the fields of

- medical engineering
- clinical diagnostics
- and biotechnical research,
- as well as industrial microdosing technology

and with it the demand for a higher performance spectrum "en miniature".

### A systematic "Diet"

The flipper valve type 6650 completely satisfies the expectations mentioned above and, in addition to these, opens up new possibilities for dosing in 384-well micro-titer plates. One of the many advantages: the narrow width allows for smaller devices and a lower channel volume in the manifolds, and thereby altogether enables substantially increased utilization of the media used. When you consider the price of some chemicals, you will soon discover the cost advantage of this technology. The need for very little space also opens up further fields of application. The valve can also be used to its full performance capacity with hand-held units.



The design principle allows three ports in one plane and very fast switching, thanks to the pressurecompensating design.



# **Technical Data**

#### NOMINAL DIAMETER

DN 0.4 and 0.8 mm

#### **BODY MATERIAL**

Body material: PEEK Seal material: FFKM

### MEDIA

Resistant to neutral and aggressive fluids and gases; see Bürkert Resistance Table

# INTERNAL VOLUME

approx.  $30\,\mu l$ 

### PORT CONNECTION

Flange

### ELECTRICAL CONNECTION

Plug with flying leads and power reduction electronics

OPERATING VOLTAGE

### **VOLTAGE TOLERANCE**

± 10%

# POWER RATING

5.7 W inrush (for < 5 ms), 0.7 W holding power

### DUTY CYCLE

Continuous operation 100% duty with power reduction electronics

#### INSTALLATION POSITION

As required, line up with uniform polarity when on block

PROTECTION TYPE

IP40

# SWITCHING FREQUENCY Max. 80Hz, for a frequency > 40Hz a cooling plate is needed

1ax. UVI 12, 101 a frequency > 40 Tz a cooling plate is needed

# **RESPONSE TIME (ISO 12238)**

Opening: < 5 ms (pressure build-up 0 - 10%) Closing: < 5 ms (pressure reduction 100 - 90%)



The minimum width allows the valve to be positioned over the cavities of a 384-well micro-titer plate. Advantage: the fast filling of individual cavities, independent of one another and with different quantities and media. This opens up new and more efficient possibilities for analytic and diagnostic procedures in many fields of biochemistry.