6650



2/2 and 3/2 way flipper solenoid valve for analytical applications

FLUID CONTROL SYSTEMS

- Only 4.5 mm wide
- Medium isolation, for aggressive fluids
- Direct-acting
- Vacuum up to 7 bar
- Short response times

Hit and hold electronic Type 2504

Type 6650 can be combined with...

Multiple manifolds

With a width of only 4.5 mm, Type 6650 sets a new standard in medium isolation miniature solenoid valves. The optimized design enables reproducible and precise dosing, good rinsing capability and is suitable for the application of aggressive chemicals owing to the high quality ot the materials used. With the two nominal sizes of 0.4 and 0.8 mm, as well as the selection between 2/2 way and 3/2 way function, it is ideal for applications where the highest fluid performances are required in the smallest space. Type 6650 opens up new possibilities, owing to the 4.5 mm station width, in particular in connection with dosing in 384-well microtiterplates.

Circuit function A



2/2 way direct-acting solenoid valve, normally closed

3/2 way direct-acting

solenoid valve, flow direction optional

Circuit function T



Circuit function F



3/2 way direct-acting, distribution solenoid valve

Technical data					
Orifice	DN0.4 and 0.8 mm				
Body material	PEEK				
Seal material	FFKM (Simriz)				
Medium	Resistant to neutral and aggressive fluids and gases; see Bürkert resistance table				
Medium temperature	emperature + 15 to + 50 °C				
Ambient temperature	+ 10 to + 50 °C				
Internal volume	approx. 30 μl				
Port connection	Flange				
Electrical connection	Bürkert Plug Type 2504				
Operating voltages	24 V (12 V on request)				
Voltage tolerance	±10%				
Nominal power	5.7 W For 100% duty cycle power has to be reduced exter- nally. See accessories table and operating instructions for details.				
Duty cycle	100% continuous operation only with external power reduction				
Installation	As required; with side by side connection standard polarity is adhered to				
Protection class	IP65				
Switching frequency	80 Hz (for mechanical limit observe maximum temperature) 15 Hz (continous with external power reduction, for more information see manual)				
Response times	< 5ms (acc. to ISO 12238)				

Ordering chart

	Circuit function	Orifice [mm]	K, value water [m³/h] ∜	Pressure range [bar] ²⁾	Max. pressure difference [bar]	Voltage [V]	Nominal power [W] (Inrush-/ nominal holding power)	Article no.
A	2/2 way valve NC	0.4 3)	0.004	Vac7	7	24	5.7/0.7	182284 🛒
		0.8 4)	0.010	Vac3	3	24	5.7/0.7	226664 💬
т	3/2 way valve universal version	0.8	0.010	Vac1	1	24	5.7/0.7	189292 ፵
F	3/2 way valve distributor valve	0.8	0.010	Vac3	3	24	5.7/0.7	227020

 $^{\scriptscriptstyle 1)}$ Measured at + 20 °C, 1 bar pressure at valve inlet and free outlet.

²⁾ Measured as overpressure to the atmospheric pressure.

³⁾ With orifice 0.4 mm flow permitted in both directions ⁴⁾ With orifice 0.8 mm flow direction according to label.

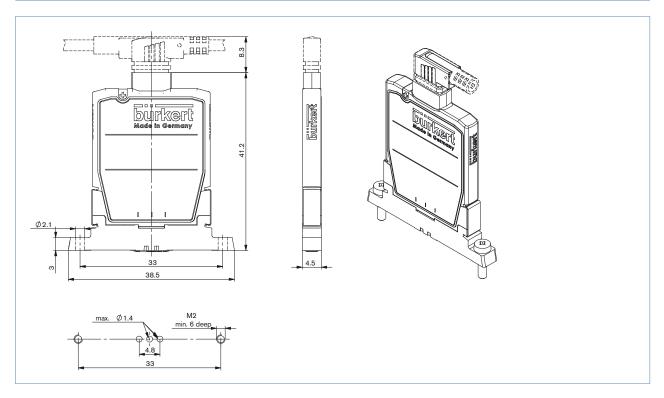
Mounting screws: VA $2x M2 \times 8$

H Further versions on request

- 12 V on request (external power reduction necessary, not possible with ID 670178)

Dimensions [mm]

4



6650

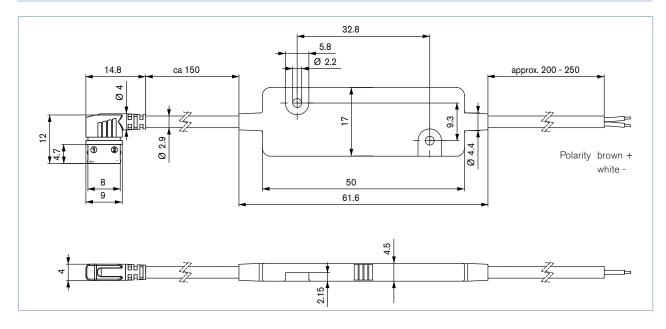


Ordering chart for accessories

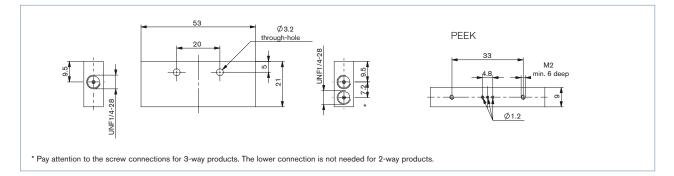
Description	Article no.
Cable plug type 2504 with integrated hit and hold electronic, 24 V DC, 500 mm long, Power reduction to 0.7 W after 5 ms	670178 🛒
Cable plug type 2504, single cable, 500 mm long ¹⁾	670164 🛒
Cable plug type 2504, single cable, 5000 mm long ¹⁾	680840 🛒
Single manifold material Peek	670181 📜

¹⁾ The valve must be operated with external power reduction. Please refer to the manual for further details.

Dimensions for accessories [mm]



Single manifold for Bürkert flange



Manifold for Type 6650

Please contact your nearest sales office for guidance with the design of your specfic manifold requirements.

To find your nearest Bürkert facility, click on the orange box \rightarrow

www.burkert.com

In case of special application conditions, please consult for advice

We reserve the right to make technical changes without notice @ Christian Bürkert GmbH & Co. KG

1802/13_EU-en_00895073