



# Micro Pump 11 mm

- self-priming
- nearly pulsation free
- for continuous pump applications
- diaphragm pump

The Burkert series 7604 is a unique, selfpriming, adjustable, diaphragm pump with a long service life and quiet operation that is ideally qualified for aggressive media. The pump is perfectly suited for continuous liquid low flow applications. Variations in flow rate are achieved by simply varying the frequency input. With a maximum frequency input of about 40 Hz, the fluid flows virtually pulsation free. Perfluorelastomer seals and a PEEK body are the only wetted parts, allowing the pump to be used for a wide range of aggressive fluids, organic and inorganic solvents and other difficult to handle media. The compact design (only 11 mm wide) allows for ease of mounting with standard bodies designed for surface mount (manifold) or tube connections. The low power consumption allows the device to be easily incorporated into mobile devices, and virtually eliminates any heat transfer passed from the actuator to the fluid. "Manufactured by Burkert" ensures the user the same high quality products and proven reliability they have depended on in today's innovative market.

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Micro dosing

Probe preparation e.g. for HPLC

Replacement of peristaltic pumps

Lubricant dosing

Technical data				
Body material	PEEK			
Seal material	FFKM			
Fluids	resistance to a wide range of organic and inorganic solvents (see chemical resistance chart) suitable for particles < 20 µm <sup>1)</sup>			
Fluids temperature	+10 +60 °C			
Ambient temperature	+10 +55 ℃			
Max. life cycle	> 1 milliard (10°)			
Max. flow rate	> 5 ml/min <sup>2)</sup>			
Min. flow rate	1 ml/min <sup>2)</sup>			
Flowrate at 35Hz	≥ 4,5ml/min <sup>2)</sup>			
Reproducibility	± 5 %			
Max. pressure	200 mbar <sup>3)</sup>			
Pump frequency	max. 40 Hz			
Nominal voltage	12, 24 V/DC, pulsing by max. 40 Hz (use impulse generator, pulse duty factor 50:50)			
Voltage tolerance	± 10 %			
Power consumption	1.5 W (P <sub>eff</sub> = 400 mW)			
Elec. connections	Rectangular connector			
Fluid connections	Bürkert-Flange Barb tubes UNF 1/4"-28			
Installation position	as required			
Mounting pitch	11 mm			
Protection class	IP40			

<sup>1)</sup> Please use an appropriate filter.

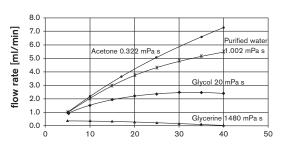
<sup>2) 22 °</sup>C, purified water

<sup>3) [</sup>bar]: overpressures with respect to atmospheric pressure



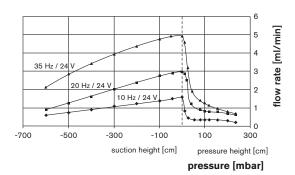
## **Restart points**

# Flow rate against frequency for different viscosities

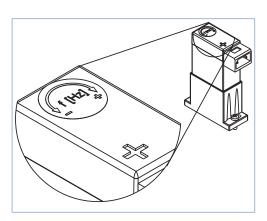


frequenzy [Hz]

# Flow rate against suction and pressure height



#### Integrated impulse generator



The optional integrated impulse generator is built in the cover of the pump. To change the frequency turn the pre-set potentiometer.

Technical Data			
Frequency range	5 40 Hz		
Nominal voltage	24 V/DC		
Voltage tolerance	± 10 %		

## **Ordering chart Accessoires**

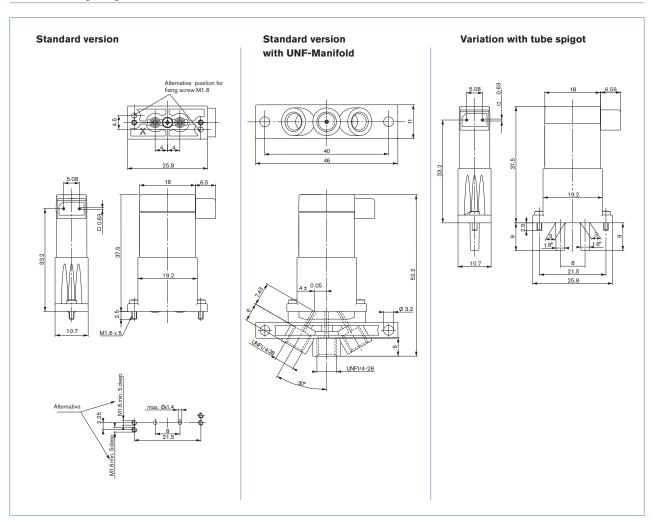
Version			Item no.	
24 V	PEEK/FFKM	flange version	rectangular plug 5.08 mm	156 992
24 V	PEEK/FFKM	barb tubes	rectangular plug 5.08 mm	156 993
24 V	PEEK/FFKM	UNF 1/4"-28	rectangular plug 5.08 mm	155 781
12 V	PEEK/FFKM	flange version	rectangular plug 5.08 mm	169 489
12 V	PEEK/FFKM	UNF 1/4"-28	rectangular plug 5.08 mm	164 991
24 V	PEEK/FFKM	flange version	rectangular plug 5.08 mm with integrated impulse generator	161 399
24 V	PEEK/FFKM	barb tubes	rectangular plug 5.08 mm with integrated impulse generator	161 398
24 V	PEEK/FFKM	UNF 1/4"-28	rectangular plug 5.08 mm with integrated impulse generator	163 782



## **Ordering chart Accessoires**

Accessory	Item no.
Rectangular plug 5.08 mm with 3 m cable	133 486
Rectangular plug 5.08 mm with 300 mm leads	644 068
Rectangular plug 5.08 mm with 2 single contacts	644 067
Fittings and Tubes	see data sheet type 1013

# Dimension [mm]



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