





## Micro Pump 11 mm

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

The Burkert series 7604 is a unique, self-priming, 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.

### Applications

-  continuous pumping
-  Probe preparation e.g. for HPLC
-  Replacement of peristaltic pumps
-  Lubricant dosing

Technical data	
<b>Body material</b>	PEEK
<b>Seal material</b>	FFKM
<b>Fluids</b>	resistance to a wide range of organic and inorganic solvents (see chemical resistance chart) suitable for particles < 20 µm <sup>1)</sup>
<b>Fluids temperature</b>	+ 10 to + 60 °C
<b>Ambient temperature</b>	+ 10 to + 55 °C
<b>Max. life cycle</b>	> 1 milliard (10 <sup>9</sup> )
<b>Max. flow rate</b>	> 5 ml/min <sup>2)</sup>
<b>Min. flow rate</b>	1 ml/min <sup>2)</sup>
<b>Flowrate at 35 Hz</b>	≥ 4.5 ml/min <sup>2)</sup>
<b>Reproducibility</b>	± 5 % <sup>2)</sup>
<b>Pressure</b>	> 200 mbar <sup>3)</sup>
<b>Suction pressure (pump dry)</b>	> 100 mbar <sup>4)</sup>
<b>Pump frequency</b>	8 - 40 Hz
<b>Nominal voltage</b>	12, 24 V DC, pulsing by max. 40 Hz (use impulse generator, pulse duty factor 50:50)
<b>Voltage tolerance</b>	± 10 %
<b>Power consumption</b>	1.5 W (P <sub>eff</sub> = 400 mW)
<b>Elec. connections</b>	Rectangular plug, flying leads
<b>Fluid connections</b>	Bürkert-Flange Barb tubes Ø 2.8 mm und Ø 1.7 mm UNF ¼"-28
<b>Installation position</b>	as required
<b>Mounting pitch</b>	11 mm
<b>Protection class</b>	IP40

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

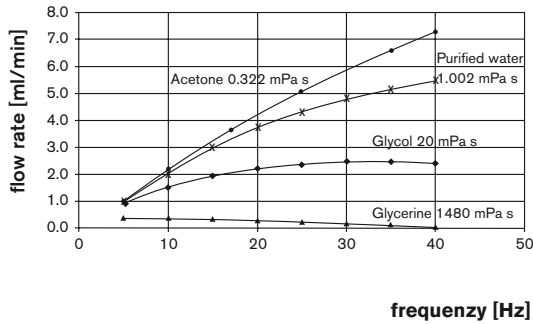
<sup>2)</sup> 22 °C, purified water

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

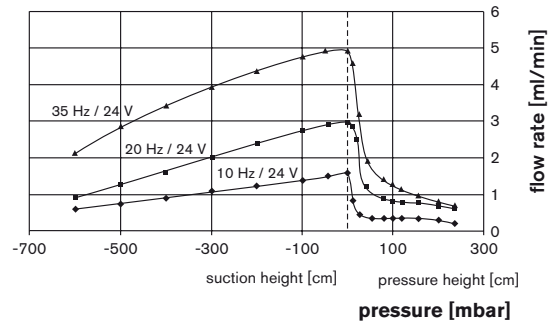
<sup>4)</sup> Measured at 35 Hz.

## Restart points

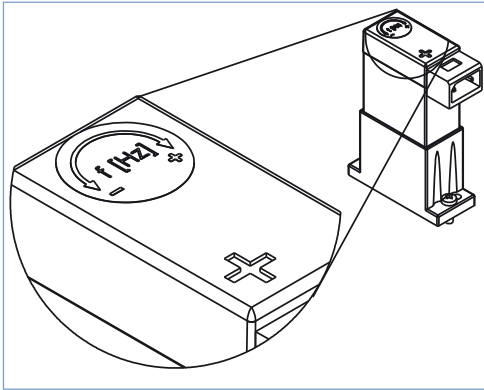
### Flow rate against frequency for different viscosities



### Flow rate against suction and pressure height (pump wet)



## 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 to 40 Hz
Nominal voltage	24 V DC, 12 V DC
Voltage tolerance	± 10%

## Ordering chart

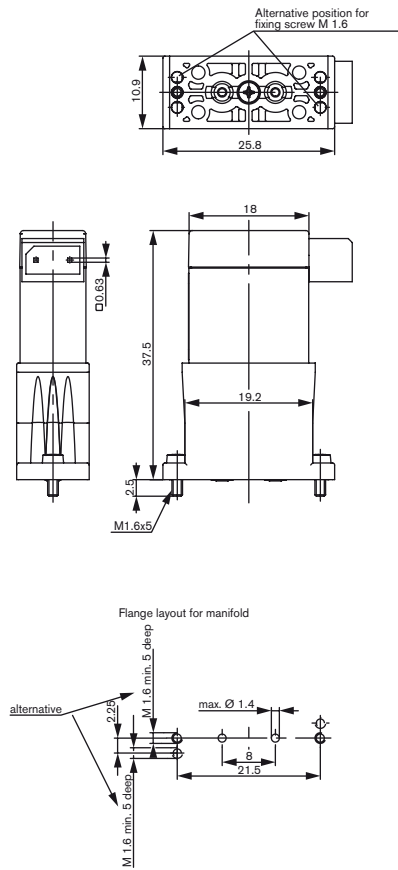
Port connection	Seal material	Body material	Electrical connection	Voltage/V	Article no.
Flange	FFKM	PEEK	Rectangular plug	24 V	156992 <a href="#">🛒</a>
Flange	FFKM	PEEK	Rectangular plug with integrated Clock generator	24 V	161399 <a href="#">🛒</a>
Flange	FFKM	PEEK	Rectangular plug	12 V	169489 <a href="#">🛒</a>
Flange	FFKM	PEEK	Rectangular plug with integrated Clock generator	12 V	208104 <a href="#">🛒</a>
Tube spigot Øa=2.8 mm	FFKM	PEEK	Rectangular plug	24 V	156993 <a href="#">🛒</a>
Tube spigot Øa=2.8 mm	FFKM	PEEK	Rectangular plug with integrated Clock generator	24 V	161398 <a href="#">🛒</a>
Tube spigot Øa=2.8 mm	FFKM	PEEK	Flying leads	24 V	176635 <a href="#">🛒</a>
Tube spigot Øa=2.8 mm	FFKM	PEEK	Rectangular plug	12 V	171568 <a href="#">🛒</a>
Tube spigot Øa=2.8 mm	FFKM	PEEK	Rectangular plug with integrated Clock generator	12 V	246567 <a href="#">🛒</a>
Tube spigot Øa=1.7 mm	FFKM	PEEK	Flying leads	24 V	234668 <a href="#">🛒</a>
UNF	FFKM	PEEK	Rectangular plug	24 V	155781 <a href="#">🛒</a>
UNF	FFKM	PEEK	Rectangular plug with integrated Clock generator	24 V	163782 <a href="#">🛒</a>
UNF	FFKM	PEEK	Flying leads	24 V	189519 <a href="#">🛒</a>
UNF	FFKM	PEEK	Rectangular plug	12 V	164991 <a href="#">🛒</a>
UNF	FFKM	PEEK	Rectangular plug with integrated Clock generator	12 V	183561 <a href="#">🛒</a>
UNF	FFKM	PEEK	Flying leads	12 V	210613 <a href="#">🛒</a>

Ordering chart Accessoires

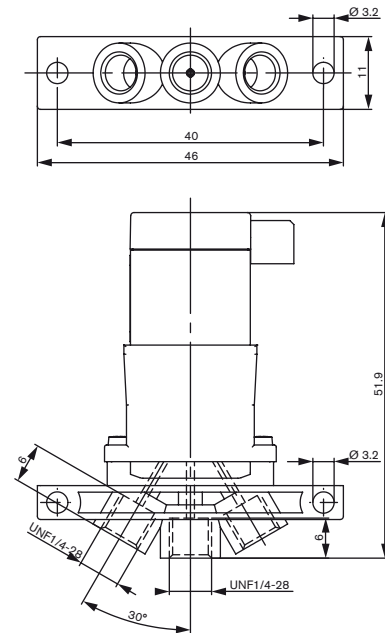
Accessory	Article no.
Rectangular plug 5.08 mm with 3 m cable	133486 
Rectangular plug 5.08 mm with 300 mm leads	644068 
Rectangular plug 5.08 mm with 2 single contacts	644067 
Fittings and Tubes	see data sheet TVU003

Dimension [mm]

Flange version (FB05)

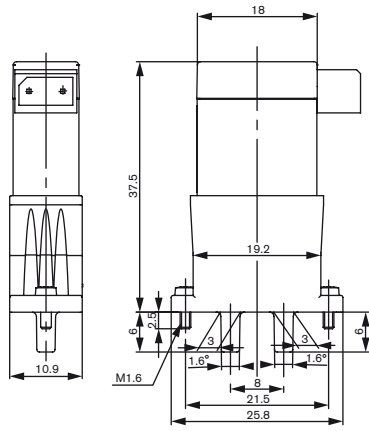


Standard version with UNF-Manifold (UNFB)

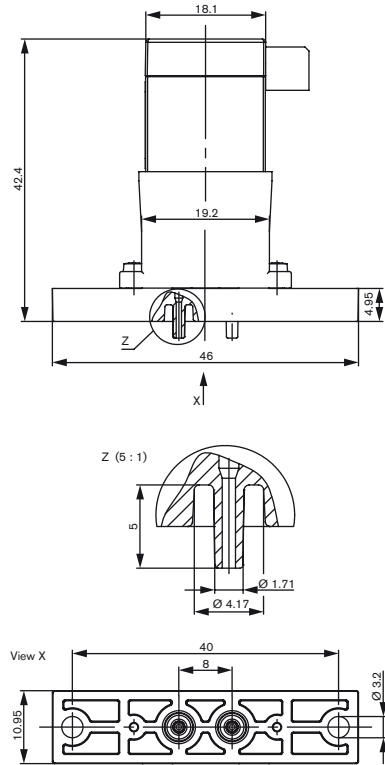


Dimension [mm]

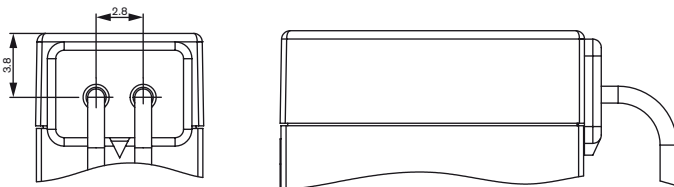
Variation with tube spigot (DA14)



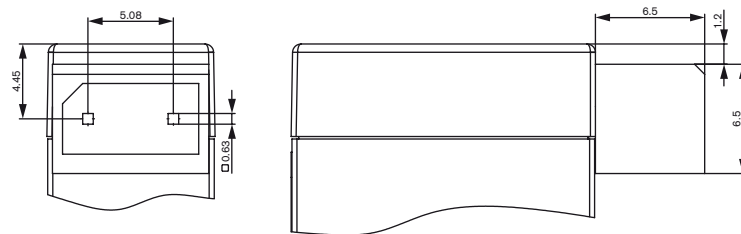
Variation with tube spigot (DA20)



Electrical connection: Flying leads (JC09)



Electrical connection: Rectangular plug (JF80)



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In case of special application conditions, please consult for advice.

Subject to alterations  
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