

- self-priming
- nearly pulsation free
- for continuous pump applications (max. 5 ml/min)
- 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 low flow
- Micro dosing
- Probe preparation e.g. for HPLC
- Replacement of peristaltic pumps
- Lubricant dosing

Technical Data	
<b>Wetted materials</b>	
Body	PEEK
Sealing	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>Fluid temperature</b>	+10 ... +60 °C
<b>Ambient temperature</b>	+10 ... +55 °C
<b>Max. life cycle</b>	> 10 <sup>9</sup> cycles
<b>Max. flow rate</b>	5 ml/min <sup>2)</sup>
<b>Min. flow rate</b>	1 ml/min <sup>2)</sup>
<b>Accuracy</b>	± 10 %
<b>Reproducibility</b>	± 5 %
<b>Max. pressure</b>	200 mbar <sup>3)</sup>
<b>Pump frequency</b>	max. 40 Hz
<b>Duty cycle</b>	100 %
<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 connector
<b>Fluid connection</b>	Bürkert-Flange Barb tubes UNF 1/4"-28
<b>Installation position</b>	as required
<b>Mounting pitch</b>	11 mm
<b>Protection class</b>	IP40

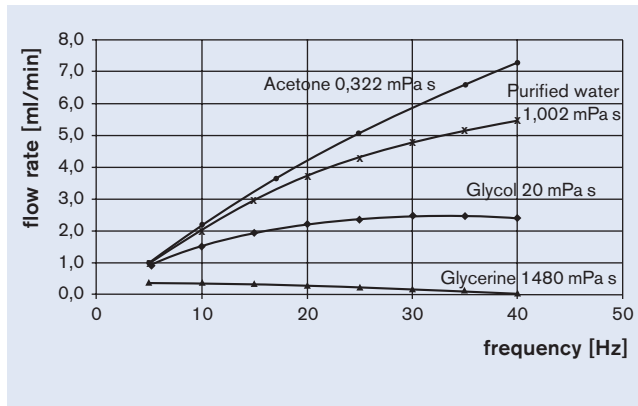
<sup>1)</sup>Please use an appropriate filter.

<sup>2)</sup>22 °C, purified water

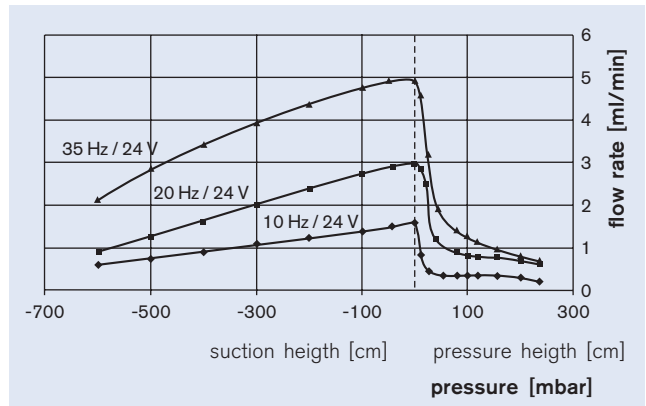
<sup>3)</sup>[bar]: overpressures with respect to atmospheric pressure

Characteristics

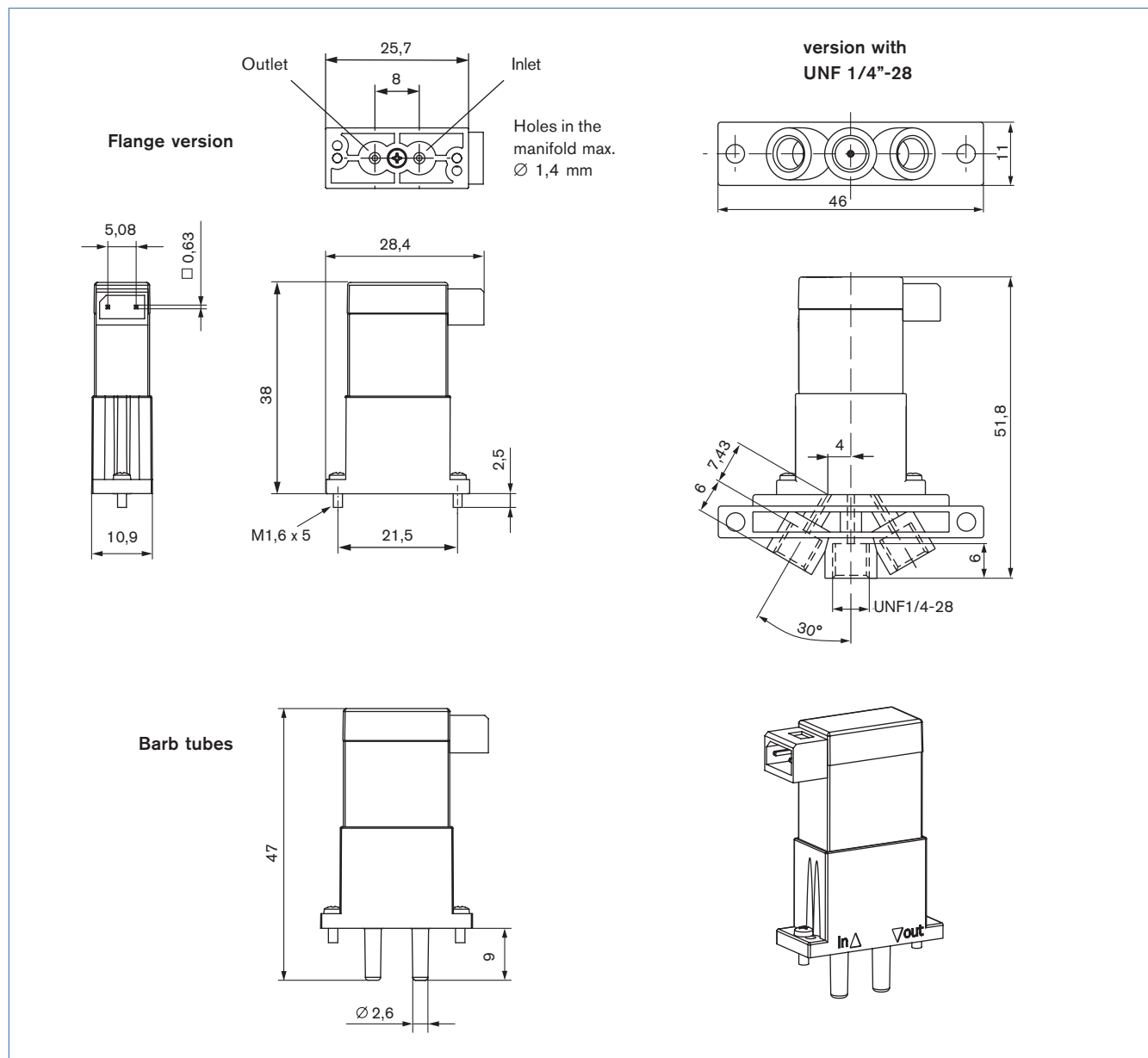
Flow rate against frequency for different viscosities



Flow rate against suction and pressure height

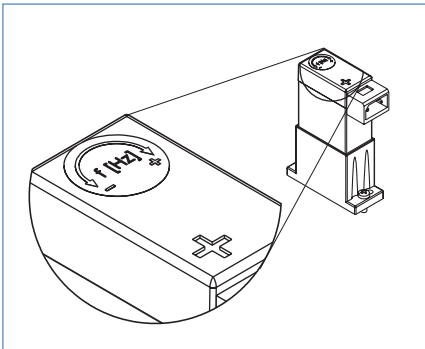


Dimension [mm]



DTS 1000011780 EN Version: F Status: RL (released | freigegeben | validé) printed: 13.08.2008

## 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

Accessory	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

Delivery incl. flange sealing (flange version) and 2 connection screws M 1.6 x 5.

## Ordering chart Accessories

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

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