

- Self-Priming
- Nearly pulsation free
- For continuous pump applications (max. 5 ml/min)

DTS 1000082458 EN Version: - Status: RL (released | freigegeben | validé) printed: 13.08.2008

The Burkert series 7604 is a unique, self-priming, adjustable, diaphragm pump with a long service life and quiet operation that is ideally suited for aggressive media. The pump is designed for continuous low flow liquid 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) makes mounting easy 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 between the actuator and 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 syringe and peristaltic pumps
- Lubricant dosing

Technical Data	
Wetted materials	
Body	PEEK
Sealing	FFKM
Fluids	resistance to a wide range of organic and inorganic solvents (see chemical resistance chart) suitable for particles < 20 µm ¹⁾
Fluid temperature	50°F to 140°F (+10°C to +60°C)
Ambient temperature	50°F to 131°F (+10°C to +55°C)
Max. life cycle	> 10 ⁹ cycles
Max. flow rate	5 ml/min ²⁾
Min. flow rate	1 ml/min ²⁾
Accuracy	± 10%
Reproducibility	± 5%
Max. pressure	2.9 PSI (200 mbar) ³⁾
Pump frequency	max. 40 Hz
Duty cycle	100 %
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 _{eff} = 400 mW)
Elec. connections	Rectangular connector
Fluid connection	Manifold mount Barb tubes UNF 1/4"-28
Installation position	as required
Mounting pitch	11 mm
Protection class	IP40

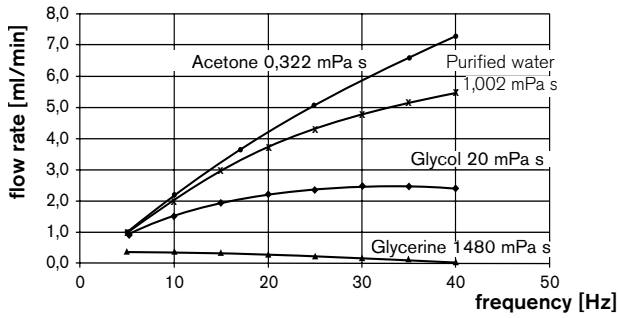
¹⁾ Please use an appropriate filter.

²⁾ 22 °C, purified water

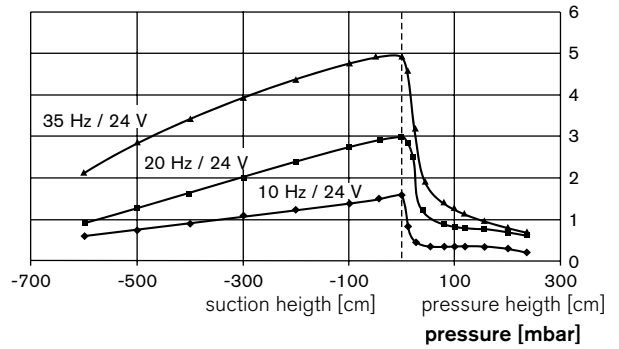
³⁾ [bar]: overpressures with respect to atmospheric pressure

Characteristics

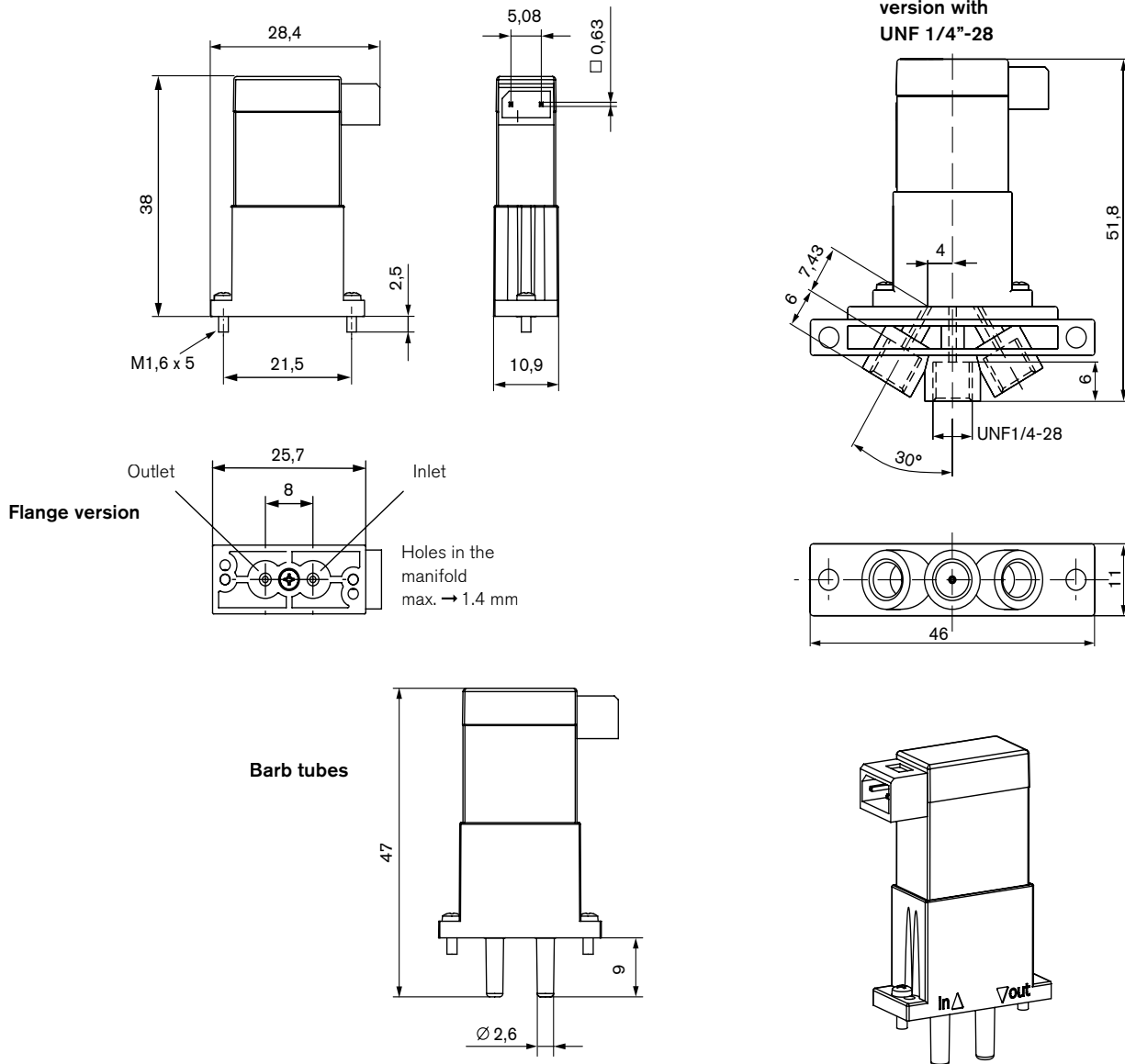
Flow rate against frequency for different viscosities



Flow rate against suction and pressure height

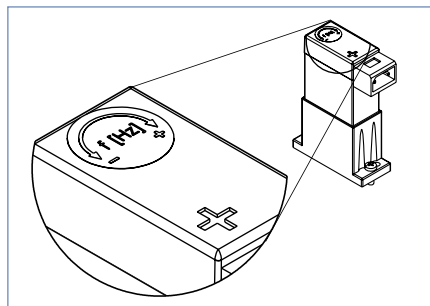


Dimension [mm]



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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

Voltage/ Frequency [V/Hz]		Accessory	Type 7604, FFKM PEEK body, rectangular plug	Item no.
24 V/DC	PEEK/FFKM	flange version	rectangular plug 5.08 mm	156 992 R
24 V/DC	PEEK/FFKM	barb tubes	rectangular plug 5.08 mm	156 993 J
24 V/DC	PEEK/FFKM	UNF 1/4"-28	rectangular plug 5.08 mm	155 781 U
12 V/DC	PEEK/FFKM	flange version	rectangular plug 5.08 mm	169 489 E
12 V/DC	PEEK/FFKM	UNF 1/4"-28	rectangular plug 5.08 mm	164 991 Q
24 V/DC	PEEK/FFKM	flange version	rectangular plug 5.08 mm with integrated impulse generator	161 399 B
24 V/DC	PEEK/FFKM	barb tubes	rectangular plug 5.08 mm with integrated impulse generator	161 398 A
24 V/DC	PEEK/FFKM	UNF 1/4"-28	rectangular plug 5.08 mm with integrated impulse generator	163 782 V

Delivery incl. bottom seal and 2 mounting screws M 1.6 x 5, for manifold mount version

Ordering chart for Accessories

Accessory	Item no.
Rectangular plug 5.08 mm with 3 m cable	133 486 F
Rectangular plug 5.08 mm with 300 mm leads	644 068 N
Rectangular plug 5.08 mm with 2 single contacts	644 067 D
Single manifold PEEK with UNF 1/4"-28 connections	645 754 K
Fittings and Tubes see	Datasheet Type 1013

Accessory

