

Product information

mzr-7265 · Magnetic hermetic pump series



Description

The micro annular gear pump mzr-7265 is suitable for handling crystallizing, oxygen or moisture sensitive liquids, because the pump has no shaft seal. This functionality is made possible thanks to a liquid-separating cup surrounding the magnetic drive. The compact dimension of this magnetic hermetic pump is achieved by a completely new product design and optimal matching with an integrated speed and position controller. The pump has a length of 84 mm and a weight of 580 g. The pump handles flow rates from 0,048 to 288 ml/min with a high precision and low pulsation. The pump is suitable for applications where an avoidance of leakage and a long service life as well as low energy consumption are important requirements. The pump is supplied with a terminal box for speed control and LED status indicator.

Advantages

- Hermetic pump design pump without shaft seal
- Magnetic drive inner magnet system driven by rotating magnetic field
- Integrated motion controller programmable motion controller for speed and position control with RS-232 interface
- Compact dimensions length 84 mm
- Long service life wear-resistant, ultra-hard materials

Applications

- Fuel cells
- Dosing of AdBlue
- Mobile analytics
- Biotechnology
- Marine technology
- Metering of liquefied gases
- Aerospace industry
- Filling electrolytes into battery cells

Technical data

Flow rate	0.048 - 288 ml/min
Smallest dosage volume	30 µl
Displacement volume	48 µl
Maximum system pressure	30 bar (435 psi)* (inlet pressure + differential pressure)
Differential pressure range	0 - 15 bar (218 psi)
Ambient temperature range	-20 ... +65 (-4 ... +149 °F) °C
Liquid temperature range	-15 ... +60 °C (+5 ... +140 °F)
Viscosity range	0.3 - 500 mPas
Velocity range	1 - 6,000 rpm
Fluid connection	manifold assembly M4
Wetted parts	stainless steel 316L, 318LN, ceramics, tungsten carbide Ni-based, epoxy resin; static seals: FPM, optional: EPDM, FFPM
Motor	canned BLDC-motor, 24 V DC, 21 W
Controller	integrated 16-bit microcontroller
Interface	0–10 V, RS-232, 1 digital input/output, CANopen*
Electrical connection	8-pole connector, Wago, cable length 1 m
Dimensions (L x W x H)	approx. 84 x 52 x 40 mm
Weight	approx. 580 g
Remarks	* Customized solution on request.

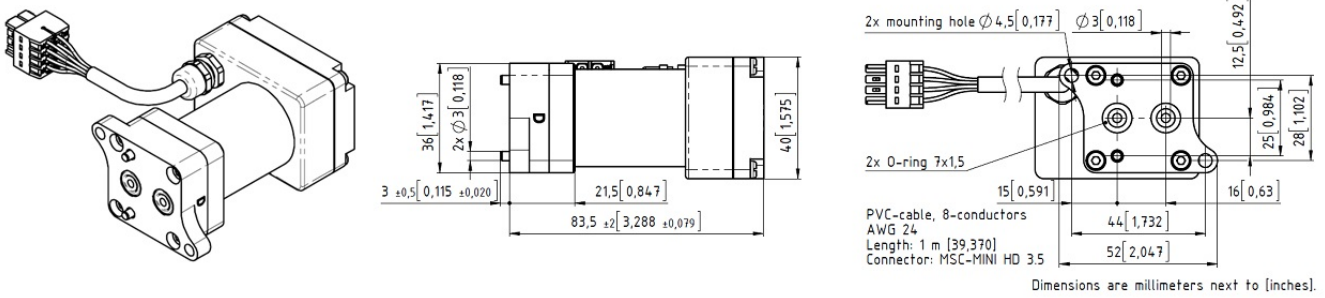
Notice

Even if single parameters are within the indicated performance range of technical data, certain parameter combinations may not be achievable. Single parameters may exceed their indicated performance range under adequate circumstances. For detailed evaluation please contact HNP Mikrosysteme. Actual performance may vary. Specifications are subject to change without notice. This document is subject to change without notice.

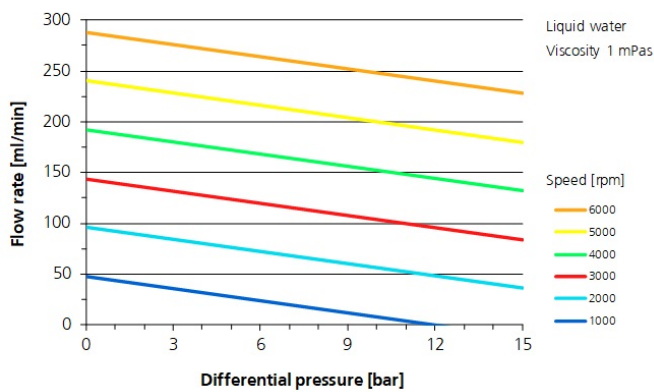
Accessories

- Terminal box S-G05
- mzr-Touch Control

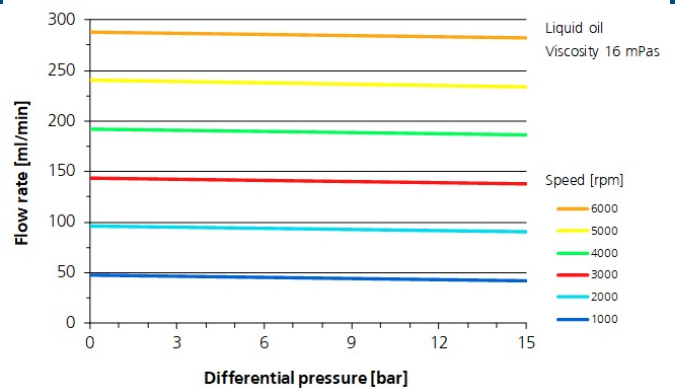
Dimensions



Liquid water



Liquid oil



Patents and trademarks

Micro annular gear pumps (and housings) are protected by assigned patents: EP 1 354 135 B1; US 7,698,818 B2; DE 10 2011 001 041 B4; CN 103 348 141 B; US 10,012,220 B2; CN 103 732 921 B; US 9,404,492 B2; US 6,520,757 B1.

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Contact

HNP Mikrosysteme GmbH
Bleicherufer 25
19053 Schwerin
Germany

T +49 385 52190-300
F +49 385 52190-333
sales@hnp-mikrosysteme.de

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