Product information

mzr-7242 · Modular pump series

Description

The micro annular gear pump mzr-7242 of the modular pump series is suitable for dosing and metering in low to medium pressure and viscosity ranges. To the main assets of this series belong low pulsation, high precision low volume dosage of non-lubricating liquids, compact design with smallest dimensions and low price. These pumps are suitable for dosing and dispensing deionized water, aqueous solutions, solvents as well as low to highly viscous oils, lubricants or dyes.

Advantages

- Compact dimensions length 132 mm
- High dosage precision precision CV 1 % at low volumes
- Small dosage volumes, high flow rates smallest volume 30 µl, flow up to 288 ml/min
- Long service life wear-resistant tungsten carbide
- Low pulsation delivery, low shear stress rotary micro annular gear technology

Applications

- Analytical instrumentation
- Fuel cells
- Biotechnology
- Laboratory automation
- In vitro diagnostics

Technical data

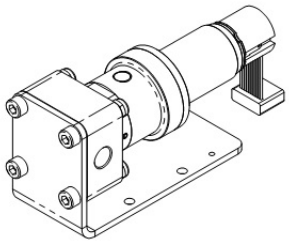
Flow rate	4.8 - 288 ml/min
Smallest dosage volume	30 µl
Displacement volume	48 µl
Differential pressure range	0 - 5 bar (73 psi)
Maximum inlet pressure	1 bar (15 psi)
Liquid temperature range	-20 ... +60 °C (-4 ... +140 °F)
Viscosity range	0,3 - 100 mPas
Precision CV	1 % (Coefficient of variation CV)
Velocity range	100 - 6,000 rpm
Fluid connection	1/8" NPT internal thread, lateral
Wetted parts	Pump case: stainless steel 316L, rotors: tungsten carbide Ni-based; bearing: ceramics; epoxy resin; shaft seal: graphite-reinforced PTFE, stainless steel 316; static seals: FPM, optional: EPDM, FFPM
Motor	DC-motor with graphite brushes, assigned power rating 21 W, nominal voltage 12 V, digital optical encoder 256 counts per turn, Line Driver
Dimensions (L x W x H)	approx. 132 x 42 x 60 mm
Weight	approx. 800 g
Remarks	Customized solutions on request.

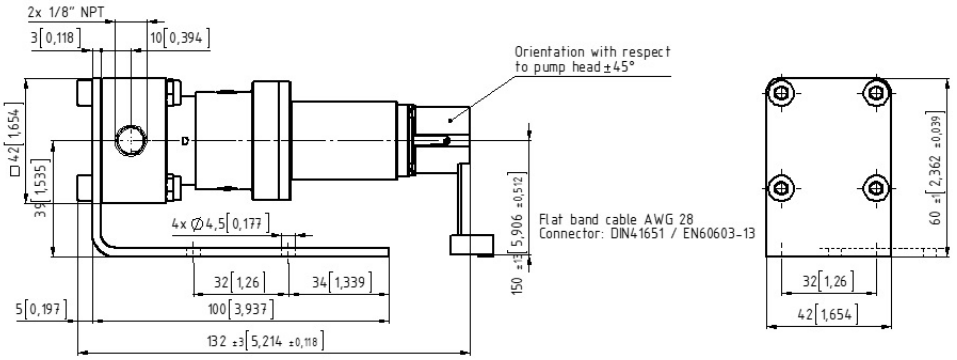
Notice
Even if single parameters are within the indicated performance range of technical data, certain parameter combinations may not be achievable. Single parameters may exceed their indicated performance range under adequate circumstances. For detailed evaluation please contact HNP Mikrosysteme. Actual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

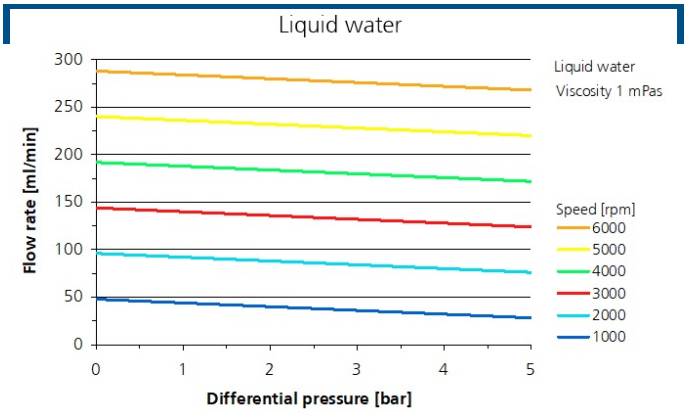
Accessories

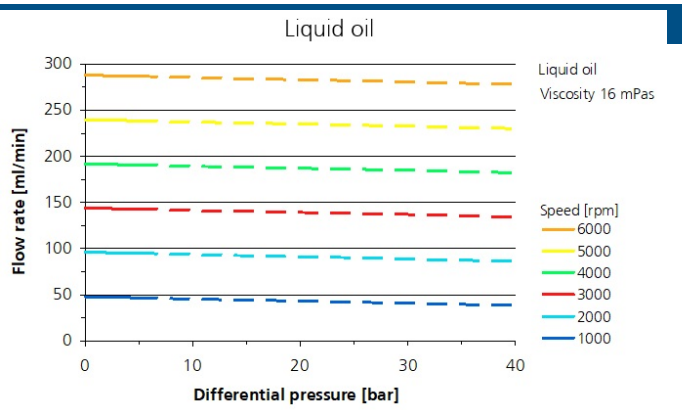
- mzr-Touch Control
- S-HD
- S-HD-KL

Dimensions









Patents and trademarks

Our products are protected by the following national and international patents: DE 10 2018 129 631.2 B3; EP 3 884 162; CN 113 302 399 B; DE 10 2018 129 633.9 B3; EP 3 884 160; CN 113 272 553 B; DE 10 2018 129 634.7 B3; EP 3 884 527; DE 10 2018 129 635.5 B3; EP 3 762 165; DE 10146 793.1; EP 1 354 135 B1; US 7,698,818 B2; DE 10 2011 051 486 B4; EP 2 726 740 B1; US 9,404,492 B2; CN 103 732 921B; EP 2 640 977 B1; US 10,012,220 B2; CN 103 348 141 B; HK 1 185 648 B.

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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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