

## Product information

### mzr-7241 · Modular pump series



#### Description

The micro annular gear pump mzr-7241 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

- Customized material selection  
pump components in stainless steel/tungsten carbide, aluminium/tungsten carbide or alloy C22/ceramics
- Long service life  
wear- and corrosion-resistant materials
- Compact dimensions  
length 128 mm
- Dynamic smart drive and control  
brushless DC-motor
- Low pulsation delivery, low shear stress  
rotary micro annular gear technology, no valves

#### Applications

- Chemical processing
- Industrial and plant engineering
- Packaging
- Dispensing of adhesives

## Technical data

Flow rate	9.6 - 288 ml/min
Displacement volume	48 µl
Differential pressure range	0 - 0 - 5 bar (72.5 psi); max. 40 bar * (max. 580 psi *)
Maximum inlet pressure	0 - 1 bar (15 psi); max. 5 bar * (max. 72.5 psi *)
Liquid temperature range	-10 ... +50 °C (+14 ... +122 °F)
Viscosity range	0.3 - 10,000 (0.3 - 50,000*) mPas
Precision CV	1 % Coefficient of Variation CV% (Coefficient of variation CV)
Velocity range	200 - 6,000 rpm
Fluid connection	1/8" NPT internal thread, lateral optional: flanged connection with pipe socket, frontal
Wetted parts	Pump case: stainless steel 316L, optional: aluminium anodized, alloy C22; rotors: tungsten carbide Ni-based, optional: ceramics; bearing: ceramics; epoxy resin; shaft seal: graphite-reinforced PTFE, stainless steel 316L; static seals: FPM, optional: EPDM, FFPM
Motor	Brushless DC-motor, 17 V DC, 40 W
Dimensions (L x W x H)	approx. 128 x 42 x 60 mm
Weight	approx. 850 g (Aluminum version approx. 430 g)
Remarks	* with optional additional axial bearing support

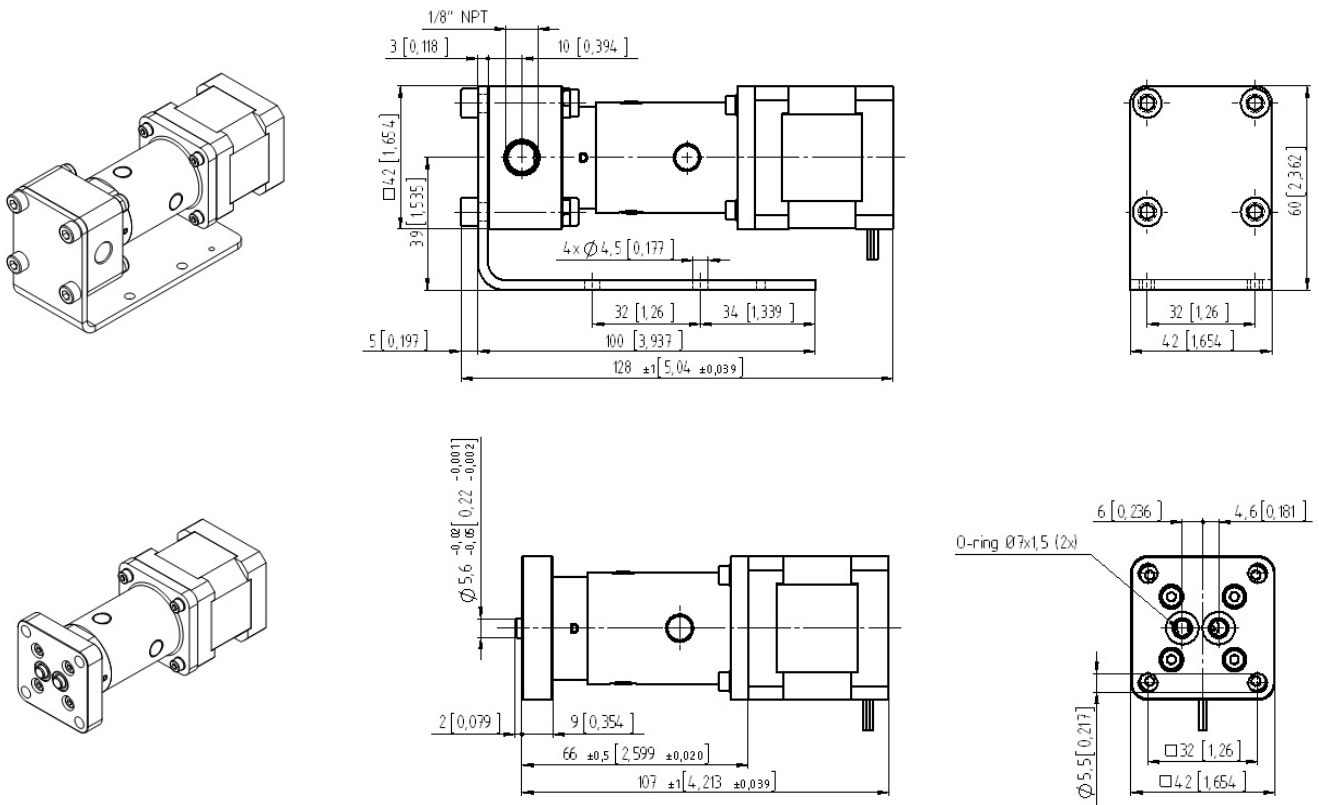
### Notice

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.

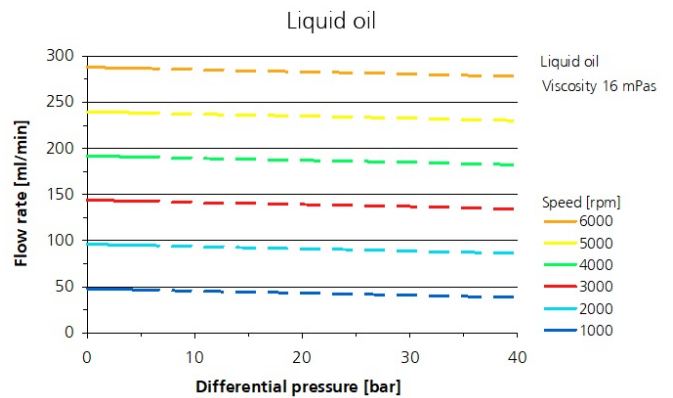
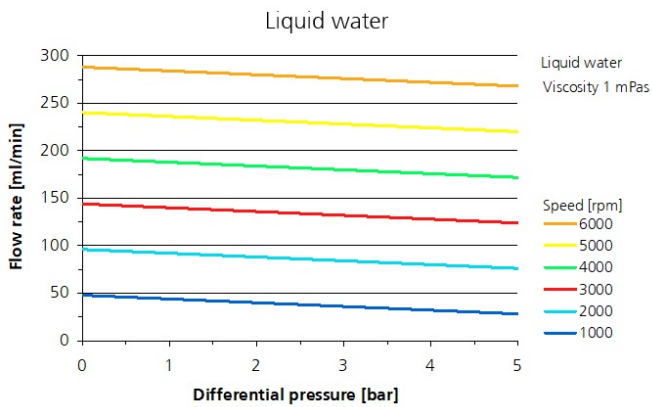
## Accessories

- Reservoir Plastic
- S-KB-4
- Additional axial bearing support

## Dimensions



## Flow charts



## 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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