

Low Pressure Series

Model 7223

- **compact measurements**
diameter 25 mm, length 130 mm
- **small dosage volumes – high flow rates**
smallest volume 5 µl – flow up to 288 ml/min
- **high dosage precision**
precision CV 1 %
- **high service life**
wear resistant tungsten carbide
- **pulseless delivery – low shear stress**
rotary micro annular gear technology



The compact micro annular gear pumps mzs-7223 out of the low pressure series is an attractive and innovative pump option in analytical instrumentation. The mzs-pump generates a pulseless,

highly precise but also dynamic flow with low shear stress. It is capable of dispensing smallest volumes in the micro liter range at high precision. With its compact design smallest measurements can

be achieved. The pumps are suitable for dosage of low viscous fluids such as deionized water, watery solutions, methanol, solvents, oil and lubricants.

Applications

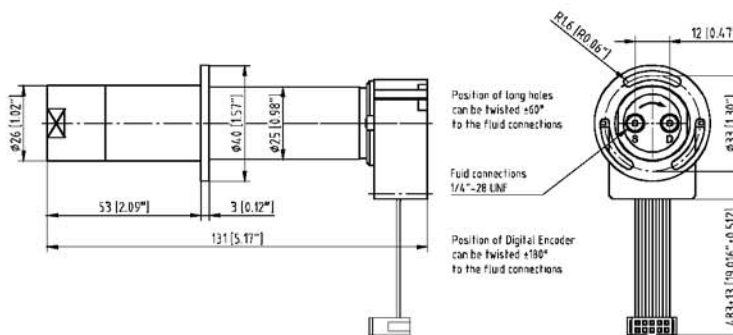
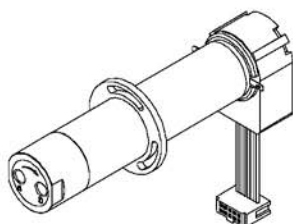
- Analysis technology
- Fuel cells
- Biotechnology
- Laboratory automation
- Micro reaction technology

Technical data

Flow rate	0,048 * – 288 ml/min
Smallest dosage volume	5 µl
Displacement volume	48 µl
Differential pressure range	0 – 8 bar (116 psi)
Max. inlet pressure	1 bar (15 psi)
Pulsation	6 %
Operating temperature range	-20 ... +60°C
Viscosity range	0.5 ... 100 mPas (max. 1000 mPas *)
Precision	1 % Coefficient of Variation CV
Speed range	1 * – 6000 rpm
Fluid connections	1/4" – 28 UNF optional: slip fittings with outside diameter 5 mm
Wetted parts	nickel-silver/ stainless steel 316L, ceramics, tungsten carbide Ni-based, epoxy resin shaft seal: graphite reinforced Teflon®, 316L static seals: FPM Viton®, optional: EPDM, FFPM
Motor	DC-motor with graphite brushes, assigned power rating 20 W, nominal voltage 24 V, digital optical encoder 100 counts per turn
Electrical connection	10-pole connector
Measurements	diameter 25 mm, length 130 mm
Weight	approx. 370 g

Customized solutions on request. * with accessories

Measurements

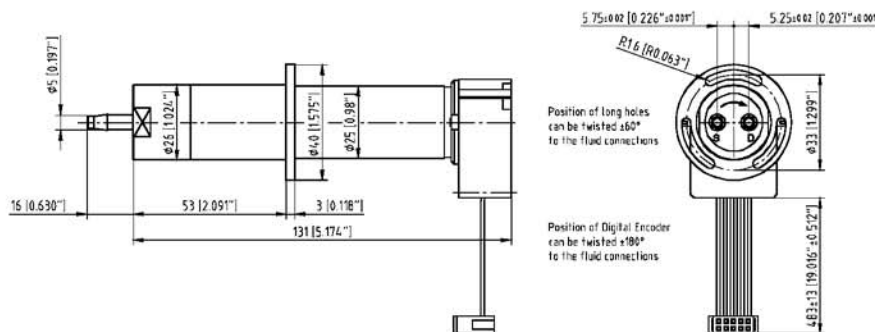
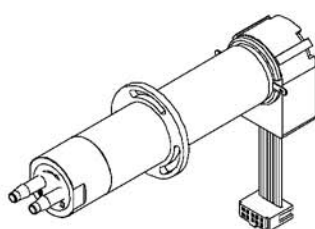


Position of long holes can be twisted $\pm 60^\circ$ to the fluid connections

Fluid connections 1/4"-28 UNF

Position of Digital Encoder can be twisted $\pm 90^\circ$ to the fluid connections

Configuration fittings 1/4"-28 UNF



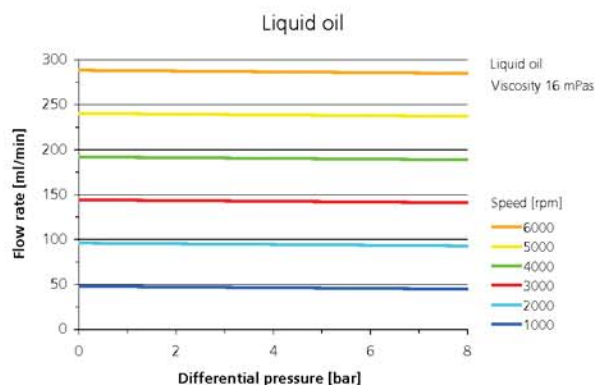
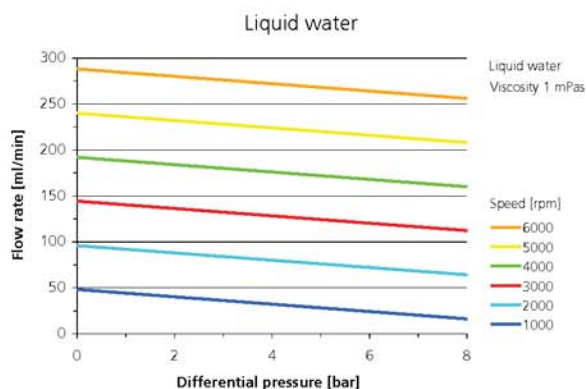
Position of long holes can be twisted $\pm 60^\circ$ to the fluid connections

Position of Digital Encoder can be twisted $\pm 90^\circ$ to the fluid connections

Configuration slip fittings OD 5 mm

Subject to technical changes.

Flow charts



Accessories

Fluid accessories
Control
Console drive module
Multiplexer module

tubes, filters etc.
S-KD-23; control for continuous dosage
diecast aluminum chassis mzs-S06 E for laboratory and testing
operation of up to 255 pumps with a single RS-232 interface

ACTUAL PERFORMANCE MAY VARY

Specifications are subject to change without notice.

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