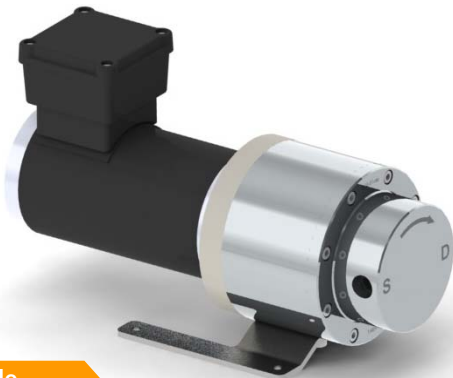


Hermetic, chemically inert pump series

## Micro annular gear pump mzm<sup>®</sup>-11557

For microreaction technology and flow chemistry



Available  
May 2011

- **High resistance to corrosion**  
oxidizing and reducing media, acids and bases
- **Long service life**  
wear-resistant ceramic components
- **Hermetically sealed**  
magnetic coupling (NdFeB)
- **Thermal heating**  
optional double shell technology
- **Chemically inert pump head**  
alloy C22, SSiC, Al<sub>2</sub>O<sub>3</sub> and ZrO<sub>2</sub> ceramics
- **High-power motor**  
AC-motor for use with external frequency inverter
- **Precise dosage, low pulsation**  
rotary micro annular gear technology, no valves

The mzm-11557 micro annular gear pump of the hermetic and chemically inert series is, considering its almost universal suitability for aggressive and corrosive media, a revolution in the pump

technology. Its rotors and functional elements being made of ceramics, the pump shows the highest chemical resistance and an outstanding resistance to wear. Thanks to the use of ceramics as

bearing and shaft material, a magnetic coupling, and case components made out of alloy C22 (DIN 2.4602), this pump will take up any challenge in the chemical industry applications.

### Application fields

- Flow chemistry
- Microreaction technology

### Technical data

Flow rate	29 – 1152 ml/min
Smallest dosage volume	100 µl
Displacement volume	192 µl
Max. system pressure	60 bar (870 psi) (inlet pressure+differential pressure)
Differential pressure range	0 – 60 bar
Operating temperature range	-5 ... +60 °C (-20 ... +150 °C *)
Viscosity range	0.3 – 1000 mPas
Dosage precision	< 1 % Coefficient of variation CV
Pulsation	< 6 %
Speed	150 – 6000 rpm
Fluid connection	3/8" NPT internal thread, lateral
Wetted parts	Pump case alloy C22 (2.4602), optional: stainless steel 316L; seals FPM (Kalrez <sup>®</sup> Spectrum <sup>™</sup> 6375), optional: FPM, EPDM; shaft sintered silicon carbide (SSiC); bearing and wetted functional parts Al <sub>2</sub> O <sub>3</sub> ceramics; rotors partially stabilized ZrO <sub>2</sub> , optional: tungsten carbide Ni-based
Motor	AC motor, IEC-Size 056, 4 poles, IP 55, rated voltage 240/400 V, rated frequency 100 Hz, 240 W
Coupling	6-pole NdFeB magnetic coupling
Temperature protection	thermal contact (NC)
Measurements (L x B x H)	291 x 130 x 171 mm
Weight	approx. 11 kg

Customized version on request.

\* Additional modules / depending on operating parameters

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