

# MKP-Bio Stainless Steel Magnetic Drive Biotech Process Pump



The sealless MKP-Bio magnetic drive pump has been engineered for sterile fluid handling in the pharmaceutical, biotechnology and food industries. Designed to EHEDG recommendations, the MKP-Bio complies fully with DIN EN 12462 and 3-A Sanitary Standards.

As the pump has no shaft seal, microorganisms cannot penetrate into its interior. Torque is transmitted by an inverted magnetic drive coupling. With its special design, the pump also does not require a plain bearing carrier. The pumped fluid provides optimum lubrication and cooling of the single, centrally located impeller bearing assembly, ensuring excellent running characteristics.

The pump impeller rotates stably about a stationary axis on the gyroscopic principle, maintaining a perfect hydraulic balance. This minimises bearing loads, increasing the reliability of operation.

Compact in design, the MKP-Bio pump has no dead areas and its interior is constructed with just a few, robust components. For process validation, the impeller can be removed without the use of tools. Mounted vertically, the MKP-Bio is fully self-draining through the suction port without needing additional flush, drain or vent connections. The ports are suitable for CIP and SIP. All wetted materials are FDA certified. A wide array of options is available for the MKP-Bio.

### Configurations

Close-coupled

#### Mounts

- Tripod with sprung, vibration-damping legs and ball feet
- Angle stand
- Vertical

## Casing materials

- Stainless steel 1.4404/1.4435 (316L)
- Stainless steel (e.g. 1.4306, Uranus® B6)
- Nickel-base alloys (e.g. Hastelloy® C-4, C-22)

#### **Pump protection**

- Containment shell thermocouple
- Engine load sensor

#### Industries, processes and fluids

Learn more about typical applications:





for a Centrifugal Pump with Magnetic Drive Test: No. 10/11.98 CP Pumpen AG, Zofingen, Switzerland Lehrstuhl für Verfahrenstechnik disperser Systeme (VDS)

## EHEDG Sterilisability Test

for a Centrifugal Pump with Magnetic Drive Test: No. 10/11.98 CP Pumpen AG, Zofingen, Switzerland Lehrstuhl für Verfahrenstechnik disperser Systeme (VDS)



Technical data	
Capacities (min./max.)	0.5 to 60 m <sup>3</sup> /h   2.2 to 264.2 gpm
Heads (min./max.)	5 to 80 m   16.4 to 262.4 ft
Temperatures (min./max.)	-20 to +150°C   -4 to +302°F
Kinematic viscosities	0.5 to 350 mm <sup>2</sup> /s   cSt
Solids handling	after technical clarification

#### **Directives and standards**

EC Machinery Directive

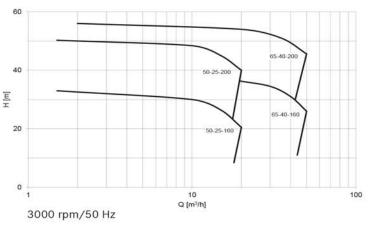
**EC ATEX Directive** 

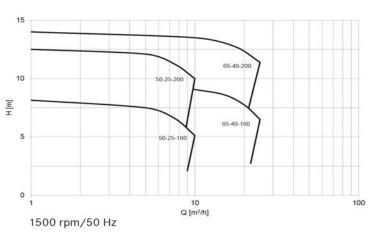
Hygiene standards 3-A, EHEDG, FDA 21 CFR §177, USP Class VI

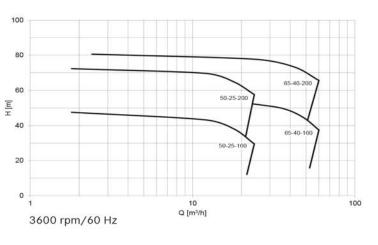
**DIN EN ISO 12462** 

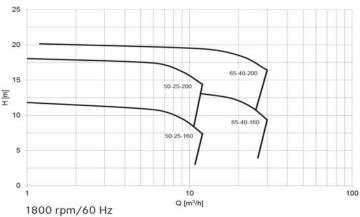
**DIN EN ISO 5199** 

**DIN EN ISO 15783** 









Greensboro Division/ Corporate Headquarters Phone: 336.393.0100 / 800.334.0231 Louisville Division Phone: 502.459.7475 / 800.459.7475 Nashville Division Phone: 615.822.3030 / 855.749.4820