

# Innovative pump for server cooling

MY3-MM-Plus series



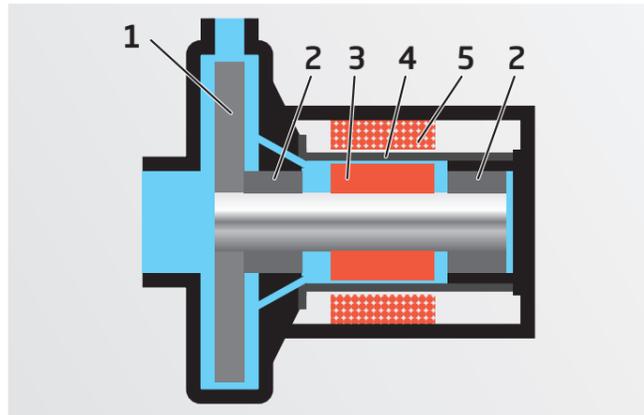
**draft  
design of  
pump**



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- Tempering technology
- Industrial cooling
- Heating and cooling technology
- Medical technology
- Plastics industry
- Food and beverage industry
- Rail and road
- Energy technology
- Chemical and pharmaceutical industry
- OEM





Construction

- 1 Hydraulics
- 2 Plain bearing
- 3 Rotor on pump shaft
- 4 Can
- 5 Motor winding

Design

- » Permanent magnet energized synchronous motor (PM)
- » Motor housing in die-cast aluminum
- » No shaft sealing, leak-free
- » Separation of the liquid-loaded rotor to the dry stator package via a statically sealed glass-fiber reinforced PPS separating can
- » Mounting of the pump shaft in sleeve bearings made from SiC lubricated with conveyed medium
- » Suction/discharge Connections: Threaded connections G, PT, Rc, NPT
- » Pressure level PN 10
- » Liquids from -30 °C up to +80 °C (from -22 °F up to 176 °F)
- » Ambient temperature from -30 up to +60 °C (from -22 °F up to 140 °F)
- » Noise level at 4,000 rpm below 51 dB (A)
- » Low service life costs
- » Service life at least 40,000 h

Drive

- » 3~Permanent magnet energized synchronous motor (PM)
- » P2: 370 W, 48V, 1,000-7,000 rpm
- » Stator with 3-phase, concentrated winding, rotor with permanent magnets
- » Compact design
- » Motor efficiency analog IE4
- » Inbuilt speed controller (FC)
- » Motor run time synchronous, no slip and no losses on the rotor, rotor and shaft remain cool
- » Via frequency converter speed of the motor selectable between 1,000 and 7,000 rpm, thus adjustable operating point of the pump
- » UL approval on request
- » Motor cast with epoxy resin
  - » No condensate formation
  - » Improved heat transfer
  - » Protection from vibrations and oscillations

Materials

Suction/discharge casing	Stainless steel (1.4301)
Impeller	Stainless steel (1.4301)
Separating can	PPS GF40
Shaft	Steel (1.4122)
Motor housing	Die-cast aluminum
O-rings	FKM, other materials on request
Axial/radial sleeve bearings	SiC

Other

- 1 Connections G, PT, Rc or NPT
- 2 Stainless steel casing
- 3 Power supply 48 VDC
- 4 Hermetically sealed canned motor
- 5 Position of the foot freely adjustable



Characteristic curves

Within the characteristic curve every operating point can be selected by parameterizing the drive. Measurements in accordance with EN ISO 9906 Class II. The characteristic curves apply for conveying water with a temperature of 20 °C (68 °F). If the characteristics of the conveyed medium are different, the characteristic curves change

