# **MAGNETICALLY COUPLED ROTARY SLIDING VANE PUMP**

Series VANE-MAG MPA

## MPA 1014 - 1514 - 2014 - 2414 (MPA III°R)



#### **PERFORMANCE DATA**

Nominal speed: 1450 1/min / 1750 1/min

50 Hz / 60 Hz Nominal frequency:

Nominal flow rate:

950 l/h / 1150 l/h (304 US aph) MPA 1014: MPA 1514: 1150 l/h / 1850 l/h (489 US aph) MPA 2014: 1950 l/h / 2350 l/h (621 US gph) MPA 2414: 2400 l/h / 2800 l/h (740 US gph)

Discharge pressure, max: 13 bar (188,55 psi) PN 16 bar (232,06 psi) Design pressure: >16 bar on request

> 120°C (248°F) >120°C on regeust

Viscosity, max.: 5000 mPa s

1,9 kg/dm<sup>3</sup> Density, max.:

## **APPLICATIONS**

Temperature, max.:

The VANE-MAG® sliding vane pumps have proven their performance in every application that requires lower flow rates at high discharge pressure, when corrosive liquids must be metered.

Typical Applications:

- Ammonia metering in Flue-Gas Denitrification Plants
- Pentane metering in Polyurethane Insulation Production
- · Metering pump for Sodium Methylate in Biodiesel production
- Pump for cooling agents in refrigeration technology
- Dosing / metering applications
- Plant Engineering
- · Equipment Engineering
- · Pharmaceutical-, Medical-, Bio- Engineering

#### **MATERIALS**

Stainless steel AISI316Ti Housing: EPDM, Viton, Kalrez, FEP O-Rings: Stainless steel AISI316Ti Rotor: Stator, Vanes:: Carbon-Graphite SiC coated

Bearings: SiC

### **CONNECTIONS**

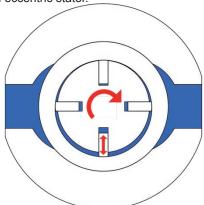
Threads: G1" female, 1" NPT DN25 PN16, 1" ANSI Lap Joint Flanges:

#### **DESIGN FEATURES**

- · Rotating positive displacement pump
- Sliding Vane Pump
- · Metallic housing materials
- · Magnetically coupled
- Leak-Free
- Rugged
- Wet self-priming
- · Dry running capable
- · For pure liquids w/o abrasive solids
- · Compact block design
- · Approximately no pulsation
- · Middle to high discharge pressure
- · Low capacity flow rates
- · Metering capable

#### **PRODUCT DESCRIPTION**

MARCH Series: VANE-MAG® MPA pumps are rotary positive displacement pumps, magnetically coupled and made of stainless steel AISI316Ti. Characteristic wise, rotary sliding vane pumps generate low volumetric flows with middle to high discharge pressures and approximately no pulsation. The operating principle is based on radial sliding vanes, which are rotating in an eccentric stator.



The pump housings are machined of solid block materials.

The motor power is transmitted by a frictional connection to the hydraulic part of the pumps by strong Neodynium-Permanent-Magnets. The pump is able to work without any shaft seals, which guarantees a save and maintenance-free transfer of the liquid without any leakage of corrosive, toxic and explosive fluids.

Pumps for hazardous explosive areas, zone 1 or 2, are available upon request.

#### **MOTOR ADAPTION**

IEC Size 90 B5, 1,5kW EU Version:

1500 1/min

US Version: NEMA143/145TC, 2.0 HP

1750 1/min

