# MAGNETICALLY COUPLED, NON-METALLIC GEAR PUMPS

Series TEF-MAG®

# **TEF-MAG 1501**



#### **TECHNICAL DATA**

Nominal speed: 1450 1/min (50Hz)

1750 1/min (60Hz)

Nominal flow: 1375 l/h (363 us gph)

1675 l/h (442 us gph)

Differential pressure, max.:10 bar (145 psi)
Design pressure: PN 16 bar (232 psi)

Temperature, max.:

Density, max.:

Viscosity, max.:

NPSHR:

Drive power:

10 bar (202

65°C (149°F)

1,9 kg/dm³

5000 cP

0,5 m

1,5 kW

## **APPLICATIONS**

The pumps have proven their performance in every application that requires lower flow rates and high discharge pressures in combination with corrosive liquids and pulsation-free supplies.

# Typical Applications:

- · Metering corrosive catalysts in Biodiesel Plants
- Waste Water Treatment, neutralisation, flocculation
- Environment Engineering
- Metering Applications
- Plant Engineering
- Equipment Engineering
- Pharmaceutical-, Medical-, Bio- Engineering

#### **CONNECTIONS**

Threaded: G1" female Flanged: DN25 PN10/16

ANSI 1"

#### **MATERIALS**

Housings: PP, PE, PVC, PVDF, PEEK O-Rings: EPDM, Viton, Kalrez

Shafts: Al2O3 >99%, SSiC Gears: PTFEC, PVDF, PEEK

Bearings: PTFEC, Graphite, PEEK, SSiC

FDA compliant materials are available upon request.

### **FEATURES AND BENEFITS**

- European Patent No. 3786416
- USA Patent No. US 10,189,005 B2
- No need in expensive high alloys like Duplex, Hastelloy C or Titanium
- Rotary positive displacement pump
- External gear pump
- Nearby pulsation free
- · Leak-free
- · Magnetically coupled
- Low NPSHR-value
- · Designed for Industrial Heavy Duty
- Corrosion restistant
- Self-priming (wet)
- Dry-run capable
- · Small and compact design
- High discharge pressures
- Low flow rates
- Integrated Variable Frequency Drive (available on request)
- Pump acc. to ATEX 2014/34/EU

### **PRODUCT DESCRIPTION**

MARCH Series TEF-MAG® gear pumps are chemical resistant, non-metallic, rotating positive displacement pumps, external gear type and magnetically coupled. TEF-MAG® gear pumps generate low volumetric flows with middle to high differential pressures and approximately no pulsation. The pump housings are machined from chemical resistant solid block polymers like PP, PE, PVC, PVDF or PEEK. The internal hydraulic parts like gears and shafts are also made of highly corrosion resistant non-metallic materials. The power transmission of drive and pump happens in a contactless way with strong NdFeB permanent magnets. So the pump is able to work without any mechanical shaft seals, which guarantees save supplies without any leakage of corrosive, toxic and explosive fluids.

Pumps for potentially explosive ATEX Zones 1 or 2, are available in non-metallic materials

