

# MAGNETICALLY COUPLED, NON-METALLIC GEAR PUMPS

## Series TEF-MAG®

### TEF-MAG 1500



#### TECHNICAL DATA

Nominal speed:	1450 1/min (50Hz) 1750 1/min (60Hz)
Nominal flow:	1350 l/h (356.63 us gph) 1650 l/h (435.88 us gph)
Discharge pressure, max.:	10 bar (145 psi)
Design pressure:	PN 16 bar (232 psi)
Temperature, max.:	65°C (149°F)
Density, max.:	1,9 kg/dm <sup>3</sup>
Viscosity, max.:	10000 cP

#### 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 PN16 ANSI 1"

#### MATERIALS

Housings: PP, PVC, PVDF, PTFE  
O-Rings: EPDM, Viton, Kalrez  
Shafts: Al<sub>2</sub>O<sub>3</sub> >99%, SSiC  
Gears: PTFEC, PEEK  
Bearings: PTFEC, Graphite, PEEK

#### FEATURES AND BENEFITS

- 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 of 0,5m only
- Rugged
- Corrosion-resistant
- Self-priming (wet)
- Dry-run capable
- Small and compact design
- Linear performance curves while variable speed controlling
- 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 corrosion 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 discharge pressures and approximately no pulsation. The pump housing is made of resistant solid block plastics like PP, PVDF, PVC or PTFE. 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 firm NdFeB permanent magnets. So the pump is able to work without any mechanical shaft seals, which guarantees safe 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 also.

