# **Rotational Speed Pick-up NM 510**

with alternating voltage output



- Detection of rotational speeds and direct indication on instruments with alternating voltage input or connection to transmitters
- For high rotational speeds
- Voltage or frequency output proportional to rotational speed
- High output power
- No power supply required
- Direct reading possible
- Maintenance-free and rugged

Rotational speed pick-ups with alternating voltage output are small alternating voltage generators with a stationary winding. A carefully balanced permanent magnet is used as rotor.

## Description

In order to couple the rotational speed pick-up with the shaft to be measured, one end of the shaft must be accessible, or a non-slip drive system operating through a gear wheel, chain drive, or toothed belt drive must be possible.

When direct coupling in an axial direction is employed, be sure that the shafts are carefully aligned. The use of a clutch is recom-

mended. Depending on the model the torque requirement ranges between 7 Nmm and 60 Nmm.

The signal voltage delivered is practically a sinusoidal alternating voltage, the amplitude and frequency of which are exactly proportional to the rotational speed. The ratio of output voltage/rotational speed is given with the individual models.

### **Technical Data**

# Type designation NM 510

Number of poles

Drive speed

max. 5000 min<sup>-1</sup>

Starting torque 10 Nmm

Voltage generated

10 V, 66<sup>2</sup>/<sub>3</sub> Hz per 1000 min<sup>-1</sup>

Balancing tolerance

±1%

Internal resistance

 $12 \Omega$ 

Test voltage

2000 V against housing

Temperature range -20 °C...+100 °C

Degree of protection

shaft outlet IP 40 - housing IP 54

Weight

0.650 kg

Electrical connection

srew terminals (E 3 DIN 41 000)

### Stock version

Type Catalog No.

Rotational speed pick-up NM 510

with 100 mm flange Ø

14625-8008100

## Dimensional drawing (dimensions in mm)

