

# Magnetic sensors for rotative applications

## MDFK 08

### features

- competitively priced angular measurement solution using ring magnet or magnetic rotor
- 2 and 3 channel version
- channel A/B 90° shifted and zero pulse
- 8-/10-fold interpolation
- 160'000 Hz switching frequency

### description

Magnet encoders provide angular information by non-contact tracking of a multi-pole ring magnet based on a magneto resistive sensor. Depending on the angle between the sensor and the magnetic field, the device generates analog signals containing the angular information. These signals are further fed into an electronics circuit for additional conditioning and processing. The rugged and easy to mount sensor generates 1024 pulses (1280 pulses for the 8101 version) when used in conjunction with a ring magnet of 16 pole pairs. Angular resolution of the device can be partly determined by selecting appropriate ring magnets. The IP 67 protected sensor contains absolutely no moving parts and is not subject to any wear when in operation. Air gap between magnet and sensor can be up to 0,8 mm without sacrificing system accuracy.

### pin assignment 3 channel complementary RS 422

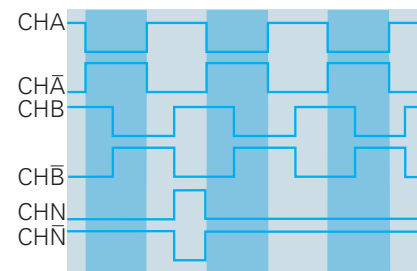
| color  | abbreviation | signals      |
|--------|--------------|--------------|
| brown  | BN           | +Vs          |
| green  | GN           | CH A         |
| red    | RD           | CH $\bar{A}$ |
| yellow | YE           | CH B         |
| blue   | BU           | CH $\bar{B}$ |
| pink   | PK           | CH N         |
| grey   | GY           | CH $\bar{N}$ |
| white  | WH           | GND          |



### output type      part numbers

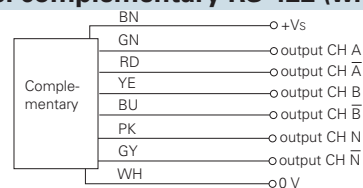
|                                |                     |
|--------------------------------|---------------------|
| 3 channel complementary RS 422 | <b>MDFK 08T8101</b> |
|--------------------------------|---------------------|

### output signals RS 422



3 channel version with zero pulse  
CHN / CHN $\bar{}$   
(2 channel version without zero pulse  
CHN / CHN)

### 3 channel complementary RS 422 (with zero impulse)



### accessories 3 channel version

magnet rotor 32 poles (zeropulse)      part nr. 132124

For more information consult the accessories page.