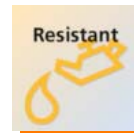


Speed sensors for drives and axes



Magnetic measuring principle for non-contact detection of speed and direction of rotation

- Switching frequencies up to 15,000 Hz
- Precise detection and reduced phase shift
- Wide temperature range: -32...125 °C
- Installation within seconds thanks to flanged housing
- Flexible combinations of housings, connections and signals



Advantages and customer benefits

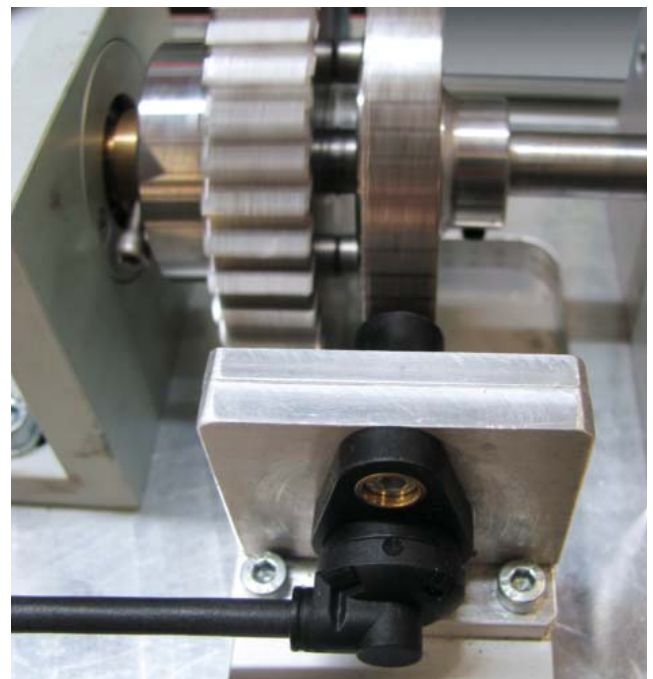
The high switching frequency of 15,000 Hz as well as the extended temperature range of -32...125 °C make ifm's new magnetic MX5 type speed sensors your ideal partner for the detection of speed and direction of rotation on drives, axes and shafts.

The sensors use Hall measuring cells, so that they function reliably and without contact even in cases of heavy soiling.

Quickly integrated everywhere

The sophisticated housing concept offers different combinations of housing lengths, connections, such as straight or angled cable outlet and AMP connectors. These are available on request.

Toothed wheel modules made of metal are standardised and have a defined tooth width and distance.



Installation length [mm]	f [kHz]	I _{load} [mA]	Connection	Ambient temperature sensor [°C]	Protection rating housing	Order no.
Speed sensors · magnetic measuring principle						
30	0.005...15	< 50	radial, pigtail AMP Junior Timer	-32...+140	IP 69K	MX5015
35	0.005...15	< 50	connector, AMP Junior Timer	-32...+140	IP 69K	MX5004
35	0.005...15	< 50	axial, pigtail 0.15 m	-32...+140	IP 69K	MX5017
45	0.005...15	< 50	connector, AMP Junior Timer	-32...+140	IP 69K	MX5000

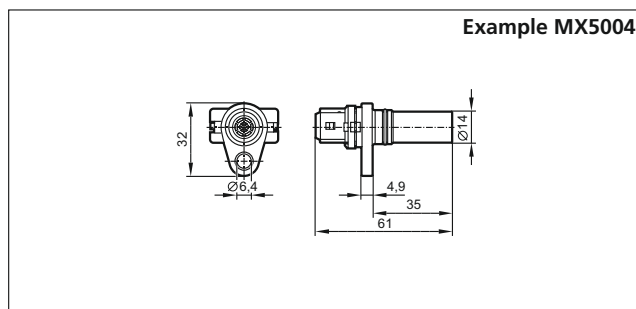
Moreover, the sensors can be used to select one or two-channel speed detection. Besides speed, the direction of rotation can also be detected using two channels.

Also, apart from an NPN or PNP switching output the speed sensor family covers various module sizes of toothed wheels.

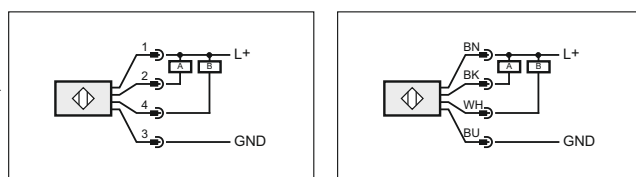
The new sensors are adjusted to module 1.25.

The flanged housing offers quick mounting and accurate adjustment of the sensor with only one screw. This reduces phase shift and guarantees precise detection of the toothed wheel.

Dimensions




Wiring diagram



Further technical data

Operating voltage	[V DC]	7...30
Sensing range	[mm]	0.4...1.5
Module (toothed wheel)		1.25
Phase shift	[°]	90 ± 20
Output		2 x open collector

Accessories

Type	Description	Order no.
	Connection cable, AMP socket, 10 m	E60303