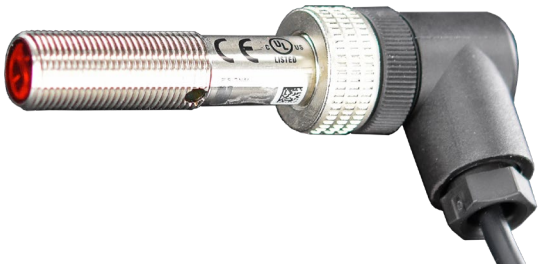
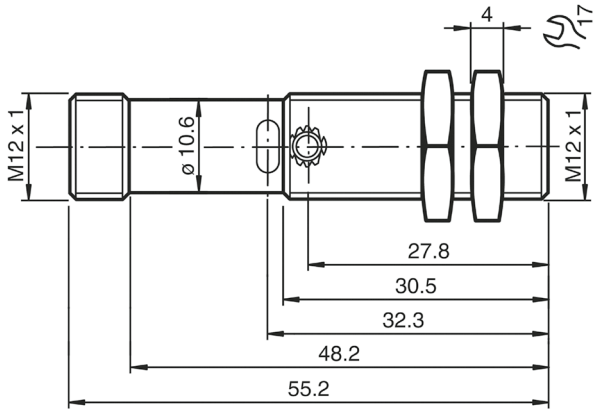
Rotational Speed Sensor FUA 919-3





- Optical probe for measurements of rotational speed, designed as retroreflective photoelectric sensor for photoelectric detection of rotational speeds.
- For evaluation of the pulses, the tachometer probe is equipped with a specific frequency meter module that calculates the number of revolutions per minute from the time period between two pulses. A stable read-out is achieved by averaging over a minimum of 500 ms.
- Easy application: A reflective adhesive tape is attached to the moving part and the probe is aligned with it. For function control purposes a yellow signal lamp at the rear side of the probe will be on when the reflective adhesive tape is recognised.
- To increase the operation reliability the sensitivity can be adjusted through a potentiometer.

Technical Data:

Measuring range:	8 to 30000 rpm
Resolution:	1 rpm
Accuracy:	
up to 15000 rpm:	± 0.02 % of m.v. ± 1 digit
up to 30000 rpm:	± 0.05 % of m.v. ± 1 digit
Detection range:	20 to 300 mm (depending on the reflector)
Reference object:	standard white 100 mm x 100 mm
Sensitivity:	adjustable with potentiometers
Detectable object:	opaque or reflector
Type of light:	red light 640 nm
Light spot diameter:	appr. 20 mm at intervals of 300 mm
Aperture angle:	appr. 4 °
Limit for foreign light:	EN 60947-5-2: 10000 lux
Display switching status:	LED yellow

Switching frequency:	< 1000 Hz
Ambient temperature:	–30 °C to +60 °C
Storage temperature:	–40 °C to +70 °C
Protection system:	IP 67
No-load current:	≤ 15 mA
Supply voltage:	via ALMEMO® connector
Connection:	Device connector M 12 x 1 including socket M 12 x 1, angled, with 1.5 meters cable and ALMEMO® connector
Material:	
Housing:	brass, nickel plated,
Lens opening:	PMMA
Dimensions:	
Diameter:	M 12 x 1 mm,
length:	55 mm

Accessories

	Order no.
Extension cable, 1 meter long	**ZA9060VK1**
Extension cable, 2 meters long	**ZA9060VK2**

Types

	Order no.
Rotational Speed Sensor up to 30000 rpm max., incl. 5 reflective adhesive tapes Connecting cable 1.5 m long with ALMEMO® connector	**FUA9193**

DAkkS accredited calibration or factory calibration KU90xx rotational speed for digital sensor, see chapter „Calibration certificates“.
DAkkS accredited calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.