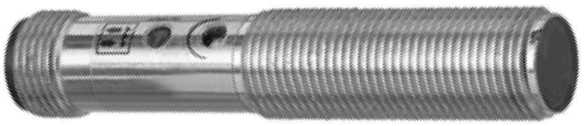
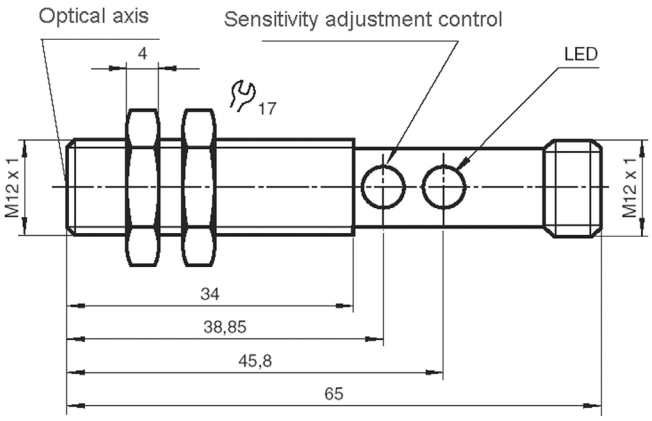
Rotational Speed Sensor FUA 9192





- Optical probe for measurements of rotational speed, designed as retroreflective photoelectric sensor for photoelectric detection of rotational speeds or events.
- 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 30000rpm (maximum)
Bright-up pulse time:	> 1ms
Resolution:	1rpm
Accuracy:	up to 15000rpm: ± 0.02% of m.v. ± 1 digit up to 30000rpm: ± 0.05% of m.v. ± 1 digit
Detection range:	20 to 200mm (depending on the reflector)
Sensitivity:	adjustable with potentiometers
Detectable object:	opaque or reflector
Distance hysteresis:	≤ 10%
Indication of switching status:	LED yellow
Type of light:	red light 660nm
Limit for foreign light:	sun light: ≤ 20000lux halogen light: ≤ 5000lux
Ambient/storage temperature:	–25/–40°C to +55/+70°C
Protection system:	IP 67 (accord. to EN 60529)

Optics:	2-lens system PC
Permissible shock load:	b ≤ 30g, T ≤ 1ms
Permissible vibrational load:	f ≤ 55Hz, a ≤ 1mm
No-load current:	≤ 20mA
Supply voltage:	> 8.5VDC via instrument, mains adapter recommended
Connection:	Device connector M12x1 including socket M12x1, angled, with 1.5 meters cable and ALMEMO® connector
Material:	housing: brass, nickel plated, lens opening: PMMA
Dimensions:	diameter: M12 x 1mm, length: 55mm
Weight:	15g
Meets standards:	EN 60 947-5-2

Accessories

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

Types

	Order no.
For rotational speeds up to 30000rpm max., incl. 5 reflective adhesive tapes Connecting cable 1.5m long with ALMEMO® connector	**FUA9192**

DAkkS / DKD or factory calibration KU90xx rotational speed for digital sensor (see chapter Calibration certificates)