



- 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 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: $\leq 20000$ lux halogen light: $\leq 5000$ lux	
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:	$b \le 30g, T \le 1ms$	
Permissible vibrational load:	$f \le 55Hz$ , $a \le 1mm$	
No-load current:	$\leq$ 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 <sup>®</sup> 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	Order no.
Connecting cable 1.5m long with ALMEMO <sup>®</sup> connector	FUA9192

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