

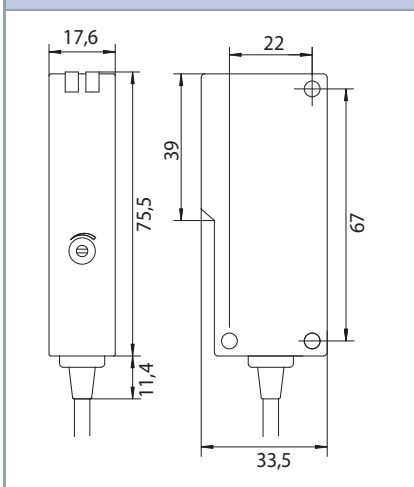
## Rotational speed sensor with reflection tag detection



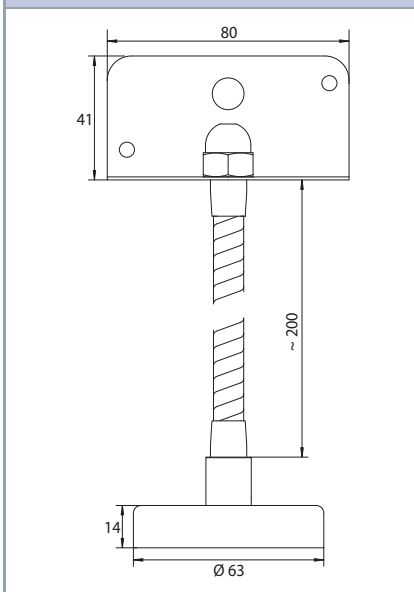
### Rotational speed measurement for many applications

The rotational speed sensor RS 110 uses pulsating red light (LED) reflected by a special tag at the rotating target. By using a polarisation filter, only the reflected light impulses are evaluated, disturbing reflections (e.g. unevenness of the surface, bright metal parts, keyways or high-contrast areas) are not detected. This achieves a reliable rotational speed measurement from distances between 0 and 500 mm. 25 reflection tags are included. Enter the number of used reflection tags as calibration value into the measuring instrument.

### Dimensions



### Dimensions magnetic holder (option)



### Applications

- Recording the hydraulic efficiency of pumps
- Rotational speed measurement of fans of hydraulic cooling devices

### Qualities

Measuring principle	auto-collimation
Light source	power LED with visible red light
Supply voltage $U_b$	10 ... 30 VDC
Ripple	< 5 Vss
Current consumption	< 30 mA
Output current max.	< 100 mA
Response time	500 $\mu$ s
Switching sequence	1,000 Hz
Range	0 ... 500 mm
Protection type	IP 67
Signal repetition frequency	max. 500 Hz
Output signal	frequency (rectangular signal) / 4 ... 20 mA
Electrical measuring connector	5 pole device connector, M16 x 0.75
Environmental temperature	-40 ... +60 °C
Storage temperature	-40 ... +75 °C
Weight	141 g

### Pin assignment

	RS 110 (frequency)	RS 110 (4 ... 20 mA)
	Pin 1 = signal +	Pin 1 = signal +
	Pin 2 = - $U_b$ / GND	Pin 2 = signal - / GND
	Pin 3 = + $U_b$	Pin 3 = + $U_b$
	Pin 4 = free	Pin 4 = free
	Pin 5 = free	Pin 5 = free

Measuring range	Weight	Order number
	g	
Frequency	140	3130-02-01.00
4 ... 20 mA	320	3130-06-01.00

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