

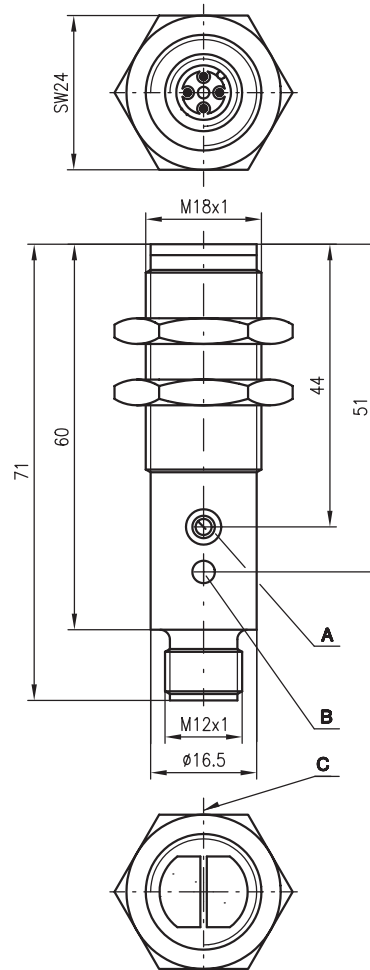


PRK 618

Retro-reflective photoelectric sensors



Dimensioned drawing



- A Sensitivity adjustment
- B Indicator diode
- C Optical axis

Electrical connection

PRK 618/4-S12

10-30V DC+	10-30V DC+	1	br/BN
GND	10-30V DC+	2	ws/WH
GND	GND	3	bl/BU
● ◊	○ ◊	4	sw/BK



0 ... 7.0m



- Retro-reflective photoelectric sensor with light/dark switching
- With visible red light and polarisation filter
- Robust cylindrical metal housing M18x1
- Sensitivity adjustment for optimal adaptation to the application
- Dual LED display for easy commissioning
- M12 connector for fast installation



Accessories:

(available separately)

- M12 connectors (KD ...)
- Ready-made cables (KB ...)
- Reflectors
- Reflective tapes
- 90° deflection head

We reserve the right to make changes • 618_b01e.fm

Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) ¹⁾	0 ... 7.0m
Operating range ²⁾	see table
Light beam characteristic	divergent
Light source	LED (modulated light)
Wavelength	660nm (visible red light, polarised)

Timing

Switching frequency	500Hz
Response time	1ms
Delay before start-up	≤ 100ms

Electrical data

Operating voltage U_B	10 ... 30VDC (incl. residual ripple)
Residual ripple	≤ 10% of U_B
Bias current	≤ 30mA
Switching output	PNP transistor output
Function characteristics ³⁾	light/dark switching via control line
Signal voltage high/low	≥ ($U_B - 2.5V$) / ≤ 2.5V
Output current	max. 100mA
Sensitivity	adjustable

Indicators

Dual LED green	ready
Dual LED yellow	light path free
Dual LED yellow flashing	light path free, no performance reserve

Mechanical data

Housing	nickel-faced brass
Optics cover	plastic
Weight	40g
Connection type	M 12 connector, 4-pin

Environmental data

Ambient temp. (operation/storage)	-25°C ... +55°C / -30°C ... +70°C
Protective circuit	Short circuit and overload protection
Protection class	IP 67
Standards applied	IEC 60947-5-2

- 1) Typ. operating range limit: max. attainable range without performance reserve
- 2) Operating range: recommended range with performance reserve
- 3) light switching for control line (ws/WH): not connected or connected to U_B
dark switching for control line (ws/WH): connected to GND

Tables

Reflectors			Operating range	
1	TK(S)	100x100	0 ...	5.0m
2	MTK(S)	50x50	0 ...	2.3m
3	TK(S)	30x50	0.03 ...	2.1m
4	TK(S)	20x40	0 ...	1.7m
5	Tape 2	100x100	0.05 ...	2.0m

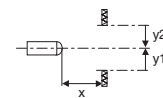
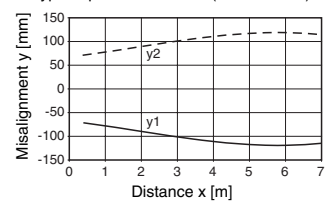
1	0		5.0	7.0
2	0		2.3	3.3
3	0.03	2.1	3.0	
4	0	1.7	2.4	
5	0.05	2.0	2.8	

- Operating range [m]
- Typ. operating range limit [m]

TK ... = adhesive
TKS ... = screw type
Tape 2 = adhesive

Diagrams

Typ. response behaviour (TK 100x100)



Order guide

Designation	Part No.
PRK 618/4-S12	500 38450

Remarks