

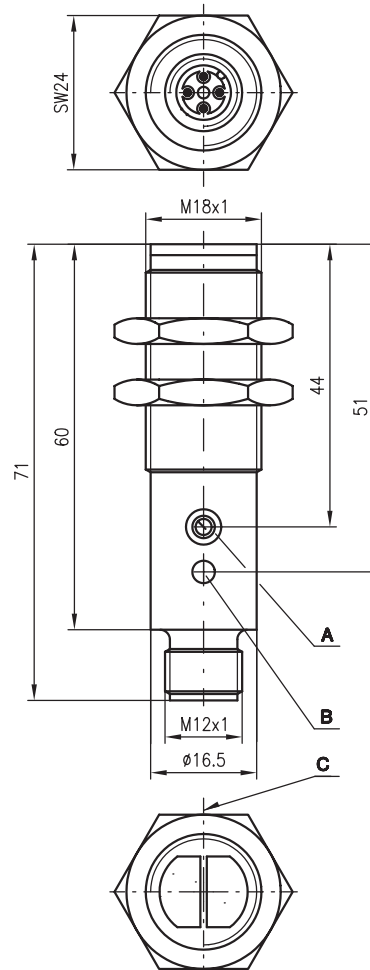


## PRK 618

## 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) <sup>1)</sup>	0 ... 7.0m
Operating range <sup>2)</sup>	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 <sup>3)</sup>	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

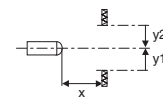
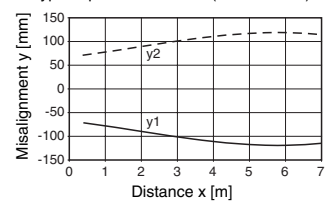
1	0		5.0	7.0
2	0	2.3	3.3	
3	0.03	2.1	3.0	
4	0	1.7	2.4	
5	0.05	2.0	2.8	

- 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