

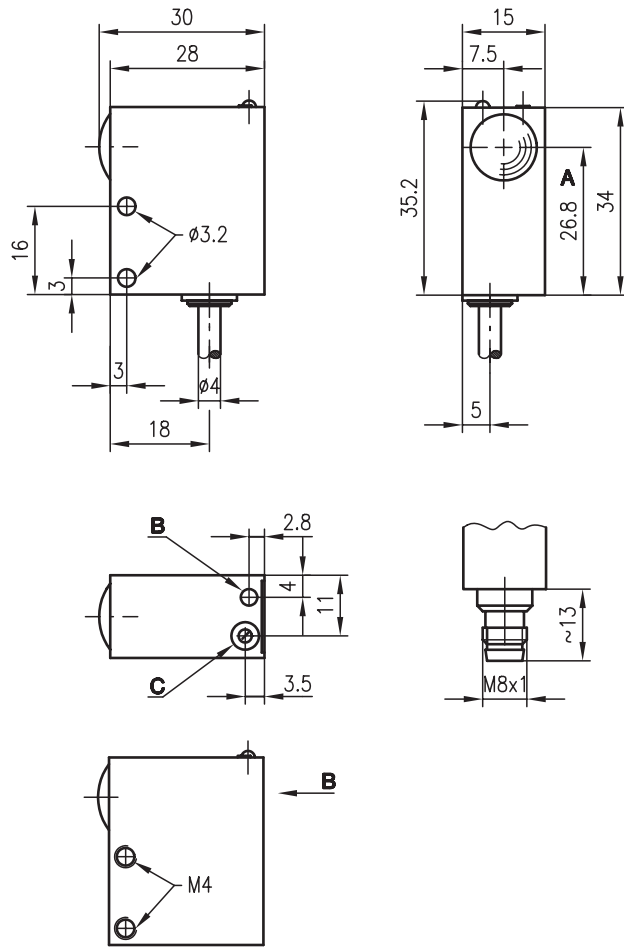


PRK 713

Retro-reflective photoelectric sensors with polarisation filter



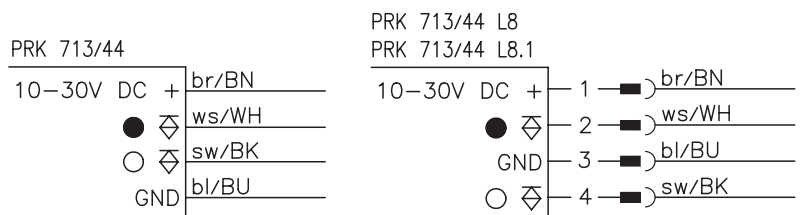
Dimensioned drawing



PRK 713/xx L8.1

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

Electrical connection



0 ... 5m



- Retro-reflective photoelectric sensors using visible red light
- High switching frequency of 2.5kHz for detection of fast events
- Sensitivity adjustment



Accessories:

(available separately)

- Mounting system (BT 713)
- Wobble plate (SET BT 713-66 + BT 66)
- M8 connectors (KD ...)
- Ready-made cables (KB ...)
- Reflectors
- Reflective tapes

We reserve the right to make changes • 713_b01e.fm



Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) ¹⁾ 0 ... 5m
 Operating range ²⁾ see tables
 Light source LED (modulated light)
 Wavelength 660nm (visible red light)

Timing

Switching frequency 2.5kHz
 Response time 0.2ms
 Delay before start-up ≤ 100ms

Electrical data

Operating voltage U_B 10 ... 30VDC (incl. residual ripple)
 Residual ripple ≤ 15% of U_B
 Bias current ≤ 30mA
 Switching output 2 PNP transistor outputs, complementary
 Function characteristics light/dark switching
 Signal voltage high/low ≥ (U_B -2V) ≤ 2V
 Output current max. 200mA
 Sensitivity see order guide

Indicators

LED yellow light path free

Mechanical data

Housing metal
 Optics glass
 Weight 100g
 Connection type M8 connector (4-pin)
 cable 2000mm, 4x0.14mm²

Environmental data

Ambient temp. (operation/storage) -20°C ... +60°C/-40°C ... +80°C
 Protective circuit ³⁾ 1, 2, 3, 4
 VDE safety class III
 Protection class IP 67
 LED class 1 (acc. to EN 60825-1)
 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) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection for all outputs, 4=interference blanking

Tables

Reflectors			Operating range
1	TK(S)	100x100	0 ... 4.0m
2	TK(S)	47x47	0 ... 3.5m
3	TK(S)	30x50	0 ... 1.7m
4	TK(S)	20x40	0 ... 1.5m
5	Tape 2	100x100	0 ... 0.7m

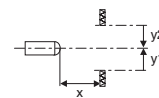
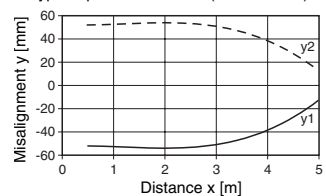
1	0.01		4	5
2	0.01		3.5	4
3	0.01	1.7	2.2	
4	0.01	1.5	2	
5	0.01	0.7	1	

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

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

Diagrams

Typ. response behaviour (TK 100x100)



Order guide

Selection table		Order code →								
Equipment ↓		PRK 713/44 Part No. 500 25820	PRK 713/44 L8 Part No. 500 80320	PRK 713/44 L8.1 Part No. 500 80691						
Light spot	divergent	●	●	●						
	focussed									
LED	on top	●	●							
	at the back			●						
Connection	cable	●								
	M8 connector		●	●						
Features	shiny reflection			●						
	polarisation	●	●	●						
	sensitivity adjustment	●	●							

Remarks