



## Specifications

### Optical data

Typ. operating range limit (TK(S) 100x100) <sup>1)</sup> 0 ... 2m  
 Operating range <sup>2)</sup> see tables  
 Light source LED (modulated light)  
 Wavelength 620nm (visible red light)

### 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 ≤ 15% of  $U_B$   
 Bias current ≤ 20mA  
 Switching output/function /66 ... 2 push-pull switching outputs <sup>3)</sup>  
 pin 2: PNP dark switching, NPN light switching  
 pin 4: PNP light switching, NPN dark switching  
 $\geq (U_B - 2V) / \leq 2V$   
 max. 100mA  
 adjustable with multiturn potentiometer

Signal voltage high/low  
 Output current  
 Operating range

### Indicators

Yellow LED light path free

### Mechanical data

Housing plastic  
 Optics cover plastic  
 Weight (plug/cable) 15g/55g  
 Connection type M8 and M12 connector, 4-pin, or cable: 2.000mm, 4x0.2mm<sup>2</sup>

### Environmental data

Ambient temp. (operation/storage) -20°C ... +55°C/-40°C ... +70°C  
 Protective circuit <sup>4)</sup> 2, 3  
 VDE safety class <sup>5)</sup> II, all-insulated  
 Protection class IP 67, IP 69K <sup>6)</sup>  
 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) The push-pull switching outputs must not be connected in parallel
- 4) 2=polarity reversal protection, 3=short-circuit protection for all outputs
- 5) Rating voltage 250VAC
- 6) IP 69K test acc. to DIN 40050 part 9 simulated, high pressure cleaning conditions without the use of additives, acids and bases are not part of the test

## Order guide

|   | Designation           | Part No.  |
|---|-----------------------|-----------|
| With M12 connector                            | PRK 25/66.41-S12      | 501 01457 |
| With M8 connector                             | PRK 25/66.41-S8       | 501 01978 |
| With 2m cable                                 | PRK 25/66.41          | 501 01977 |
| Cable with M12 connector, cable length: 150mm | PRK 25/66.41, 150-S12 | 501 08049 |

## Tables

| Reflectors |        |         | Operating range |
|------------|--------|---------|-----------------|
| 1          | TK(S)  | 100x100 | 0 ... 1.7m      |
| 2          | MTK(S) | 50x50   | 0 ... 1.2m      |
| 3          | TK(S)  | 30x50   | 0 ... 0.9m      |
| 4          | TK(S)  | 20x40   | 0 ... 0.7m      |
| 5          | Tape 2 | 100x100 | 0 ... 0.2m      |

|   |   |     |      |
|---|---|-----|------|
| 1 | 0 | 1,7 | 2    |
| 2 | 0 | 1,2 | 1,4  |
| 3 | 0 | 0,9 | 1,1  |
| 4 | 0 | 0,7 | 0,8  |
| 5 | 0 | 0,2 | 0,25 |

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

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

## Diagrams

## Remarks

- Preferably use MTK(S) ...
- **Approved purpose:**  
 The photoelectric sensors are optical electronic sensors for optical, contactless detection of objects.