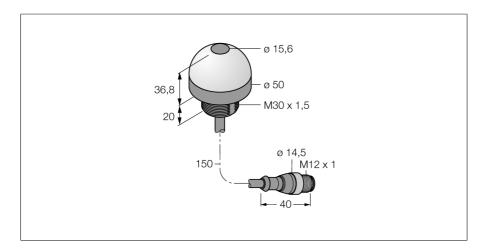


# Pick-to-Light Placement Sensor Retroreflective Sensor with Polarizing Filter K50RPLPGYCQPMA



Туре	K50RPLPGYCQPMA
ID	3076127

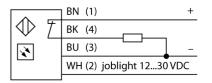
Signal and display data		
Purpose	Pick-to-Light	
Function	Retroreflective Sensor	
Max. range	2000 mm	
Light type	Red	
Number of beams	1	
Switch Function	Momentary	
Features of color 1	Green, Permanently on	
Features of color 2	Yellow	
Special features	I/O module-compatible	
	Wash down	

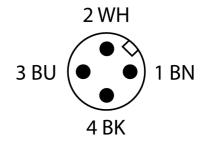
Dimensions	Ø 50 v 56 8 mm	
Design	Dome, K50	
Mechanical data		
Response time typical	< 3 ms	
Input type	PNP	
Output function	NC contact, PNP	
Max. current consumption per color	75 mA	
DC rated operating current I <sub>e</sub>	≤ 150 mA	
Operating voltage U <sub>B</sub>	1230 VDC	
Electrical data		

Mechanical data		
Design	Dome, K50	
Dimensions	Ø 50 x 56.8 mm	
Housing material	Plastic, PC, Black	
Window material	Polycarbonate, diffuse	
Electrical connection	Cable with connector, M12 × 1, 0.15 m, PUR	
Number of cores	4	
Ambient temperature	-40+50 °C	
Relative humidity	090%	
Protection class	IP67	
	IP69	

- Protection class IP67
- Cable with male end M12 x 1, 4-pin, PUR, 150 mm
- Job light: green
- Mispick: not signalled
- Actuation: yellow
- Operating voltage 12...30 VDC
- PNP switching
- NC contact

### Wiring Diagram





### - Functional principle

The K50 pick-and-place sensor is suitable for many mounting and component placement applications. The green work light or other signal lights are reflected perfectly by the entire dome (depending on the version). The transistor output can be easily connected to a system control, which is programmed for a special task sequence. The work light of the sensor is located in or next to every bin at the operator's workstation and indicates: 1. The bins with the components to be picked up for a particular work step and 2. the sequence in which the components have to be picked up. If the operator removes a part from the bin, the K50 detects the hand in the bin and sends a signal to the control unit. The system then checks if the correct component has been picked up and - depending on the configuration – switches the corresponding work light off and the next one on, according to the assembly sequence. The work sequence control



Tests/approvals	
MTTF	146 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cULus listed

leads to increased efficiency, improved quality control and reduces rework and testing expenses.

The term **work light** therefore refers to the visual indicator of the bin from which a part should be removed next. The **actuation indicator** confirms the removal with a different color. The **mispick indicator** illuminates if a bin was reached into when the work light was not set.



## **Accessories**

Type code	Ident no.		Dimension drawing
SMB30A	3032723	Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread	o 30.5 6.3 wide o 6.3 7.5 R 40 69
SMB30SC	3052521	Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable	12.7 M30 x 1,5 9 7 50.8 29
SMB30FA	3074005	Montagewinkel; Werkstoff VA 1.4401	78.4 60.3 19 0 30,1 3/8-16 UNC

# **Function accessories**

Type code	Ident no.		Dimension drawing
BRT-51X51BM	3071791	Rectangular reflector, reflection coefficient 2.0, material acrylic, ambient temperature -20 +60 °C, microprism geometry	61 51 61 61 61 61 61 61 61 61 61 61 61 61 61
BRT-84	3058979	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 +60 °C	7.4 0 0 0 4,5