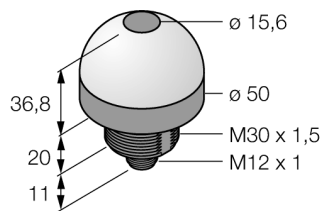
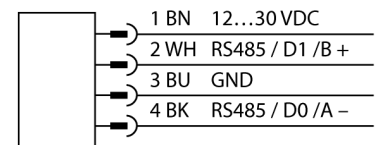


Pick-to-Light Placement Sensor Retroreflective Sensor with Polarizing Filter K50LPGRYS1Q



- Protection class IP67
- Male M12 x 1, 4-pin
- Job light, green
- Mispick, red
- Actuation, yellow
- Operating voltage 12...30 VDC
- RS485 interface
- Supports Modbus RTU

Wiring Diagram

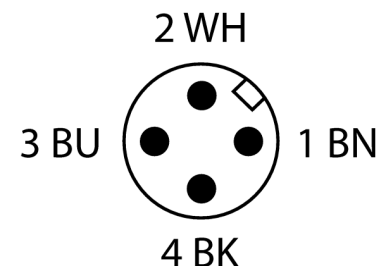


Type	K50LPGRYS1Q
ID	3093511

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, Programmable
Features of color 2	Red
Features of color 3	Yellow
Special features	Wash down

Electrical data	
Operating voltage U_s	12...30 VDC
DC rated operating current I_s	≤ 150 mA
Max. current consumption per color	110 mA
Communication protocol	Modbus RTU
Output function	NO contact, PNP/NPN
Input type	Communication protocol
Response time typical	< 3 ms

Mechanical data	
Design	Dome, K50
Dimensions	Ø 50 x 67.8 mm
Housing material	Plastic, PC, Black
Window material	Polycarbonate, diffuse
Electrical connection	Connector, M12 x 1, PVC
Number of cores	4
Ambient temperature	-40...+50 °C
Relative humidity	0...90%
Protection class	IP67 IP69



Functional principle

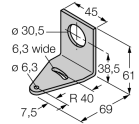
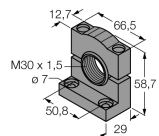
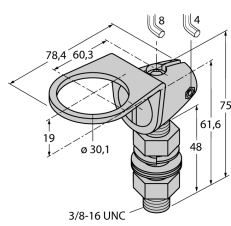
The K50 pick-and-place sensor is suitable for many mounting and component placement applications. The green work light or other signal lights are reflected perfectly by the entire dome (depending on the version). The transistor output can be easily connected to a system control, which is programmed for 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 leads to increased efficiency, improved quali-

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

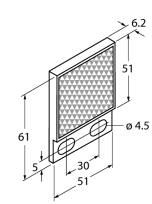
ty control and reduces rework and testing expenses.

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	
SMB30SC	3052521	Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable	
SMB30FA	3074005	Montagewinkel; Werkstoff VA 1.4401	

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	
BRT-84	3058979	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C	