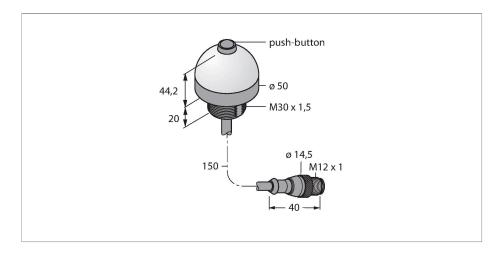


# K50APPBGYCQPMA Pick-to-Light – Placement Sensor





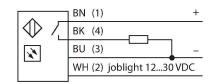
ID         3075545           Signal and display data         Pick-to-Light           Function         Pushbutton           Switch Function         Momentary           Features of color 1         Green, Permanently on           Features of color 2         Yellow           Special features         Wash down           Electrical data         Wash down           Dorating voltage U <sub>8</sub> 1230 VDC           DC rated operating current I <sub>8</sub> ≤ 150 mA           Max. current consumption per color         75 mA           Output function         NO contact, PNP           Input type         PNP           Response time typical         < 3 ms           Mechanical data         Dome, K50           Dimensions         Ø 50 x 63.7 mm           Housing material         Plastic, PC           Thermoplastic material, 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 %	Туре	K50APPBGYCQPMA	
Purpose Pick-to-Light Function Pushbutton  Switch Function Momentary  Features of color 1 Green, Permanently on  Features of color 2 Yellow  Special features Wash down  Electrical data Operating voltage U <sub>8</sub> 1230 VDC  DC rated operating current I <sub>6</sub> ≤ 150 mA  Max. current consumption per color 75 mA  Output function NO contact, PNP  Input type PNP  Response time typical <3 ms  Mechanical data  Design Dome, K50  Dimensions Ø 50 x 63.7 mm  Housing material Plastic, PC Thermoplastic material, 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	ID	3075545	
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Features of color 1  Features of color 2  Yellow  Special features  Wash down  Electrical data  Operating voltage U <sub>B</sub> DC rated operating current I <sub>B</sub> Max. current consumption per color  Output function  NO contact, PNP  Input type  PNP  Response time typical  Nome, K50  Dimensions  Ø 50 x 63.7 mm  Housing material  Polycarbonate, diffuse  Electrical connection  Cable with connector, M12 × 1, 0.15 m, PUR  Number of cores  4  Ambient temperature  Green, Permanently on  Wash  Green, Permanently on  Features  Green, Permanently on  Bernander Strellow  Wash down  Electrical data  Doma  PNP  1230 VDC  2 150 mA  75 mA  Output function  NO contact, PNP  PNP  Response time typical  < 3 ms  Mechanical data  Design  Dome, K50  Thermoplastic material, 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	Function	Pushbutton	
Features of color 2  Special features  Wash down  Electrical data  Operating voltage U <sub>s</sub> DC rated operating current I <sub>s</sub> Max. current consumption per color  Output function  NO contact, PNP  Input type  PNP  Response time typical  Mechanical data  Design  Dome, K50  Dimensions  Ø 50 x 63.7 mm  Housing material  Plastic, PC Thermoplastic material, 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	Switch Function	Momentary	
Special features Wash down   Electrical data 1230 VDC   DC rated operating current I₀ ≤ 150 mA   Max. current consumption per color 75 mA   Output function NO contact, PNP   Input type PNP   Response time typical < 3 ms	Features of color 1	Green, Permanently on	
Electrical data  Operating voltage U <sub>8</sub> DC rated operating current I <sub>e</sub> ≤ 150 mA  Max. current consumption per color  Output function  NO contact, PNP  Input type  PNP  Response time typical  Design  Dome, K50  Dimensions  Ø 50 x 63.7 mm  Housing material  Plastic, PC Thermoplastic material, Black  Window material  Polycarbonate, diffuse  Electrical connection  Cable with connector, M12 × 1, 0.15 m, PUR  Number of cores  4  Ambient temperature	Features of color 2	Yellow	
Operating voltage U <sub>B</sub> 1230 VDC         DC rated operating current I <sub>B</sub> ≤ 150 mA         Max. current consumption per color       75 mA         Output function       NO contact, PNP         Input type       PNP         Response time typical       < 3 ms	Special features	Wash down	
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Dimensions  Ø 50 x 63.7 mm  Housing material  Plastic, PC Thermoplastic material, 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	Mechanical data		
Housing material  Plastic, PC Thermoplastic material, 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	Design	Dome, K50	
Thermoplastic material, 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	Dimensions	Ø 50 x 63.7 mm	
Electrical connection  Cable with connector, M12 × 1, 0.15 m, PUR  Number of cores  4  Ambient temperature  -40+50 °C	Housing material	<b>,</b> -	
1, 0.15 m, PUR  Number of cores 4  Ambient temperature -40+50 °C	Window material	Polycarbonate, diffuse	
Ambient temperature -40+50 °C	Electrical connection		
<u> </u>	Number of cores	4	
Relative humidity 090 %	Ambient temperature	-40+50 °C	
	Relative humidity	090 %	

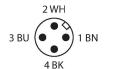


#### **Features**

- ■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
- ■NO 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

## Technical data

Protection class	IP67 IP69
Tests/approvals	
MTTF	146 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE

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 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

### Accessories

SMB30A 3032723

Mounting bracket, rectangular, stainless steel, for sensors with 30mm

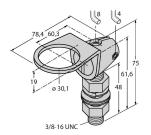
thread

SMB30SC 3052521

Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable



SMB30FA 3074005



Montagewinkel; Werkstoff VA 1.4401

#### Accessories

Dimension drawing	Туре	ID	
M12x1 e 15 /5 14	RKC4.4T-2/TEL	6625013	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
8 15 26.5 32 32	WKC4.4T-2/TEL	6625025	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval