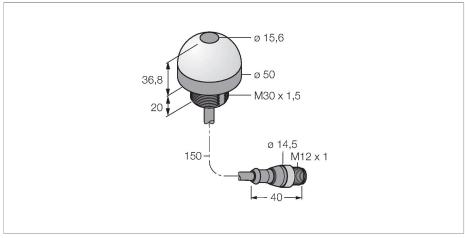


K50RPFF100GXDQP Pick-to-Light - Placement Sensor Diffuse Mode Sensor with Fixed-field Background Suppression



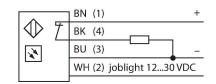
Technical data

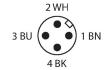
| Туре | K50RPFF100GXDQP |
|---|--|
| ID | 3076008 |
| Signal and display data | |
| Purpose | Pick-to-Light |
| Function | Diffuse mode sensor with fixed-field back- ground suppression |
| Max. range | 100 mm |
| Light type | IR |
| Number of beams | 1 |
| Switch Function | Momentary |
| Features of color 1 | Green, Permanently on |
| Special features | I/O module-compatible Wash down |
| Electrical data | |
| Operating voltage U _B | 1230 VDC |
| DC rated operating current I _o | ≤ 150 mA |
| Max. current consumption per color | 75 mA |
| Output function | NC contact, PNP |
| Input type | PNP |
| Response time typical | < 3 ms |
| Mechanical data | |
| Design | Dome, K50 |
| Dimensions | Ø 50 x 56.8 mm |
| Housing material | Plastic, PC, Black |
| Window material | Polycarbonate, diffuse |
| | |

Features

- Protection class IP67
- Cable with M12 × 1 male connector, 4-pin, 150 mm
- Fixed background suppression at 100 mm
- Job light: green
- Mispick: not signalled
- ■Actuation: not signalled
- 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 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

Technical data

Electrical connection Cable with connector, M12 × 1, 0.15 m, PVC 4 Number of cores Ambient temperature -40...+50 °C 0...90 % Relative humidity Protection class **IP67 IP69** Tests/approvals **MTTF** 146 years acc. to SN 29500 (Ed. 99) 40 Approvals CE, cULus listed

color. The mispick indicator illuminates if a bin was reached into when the work light was not set

Accessories

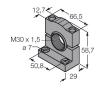
SMB30A 3032723

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

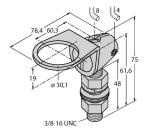
stainless steel, for sensors with 30mr thread

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 |
|-------------------|---------------|---------|
| | RKC4.4T-2/TEL | 6625013 |



Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

ID

6625025