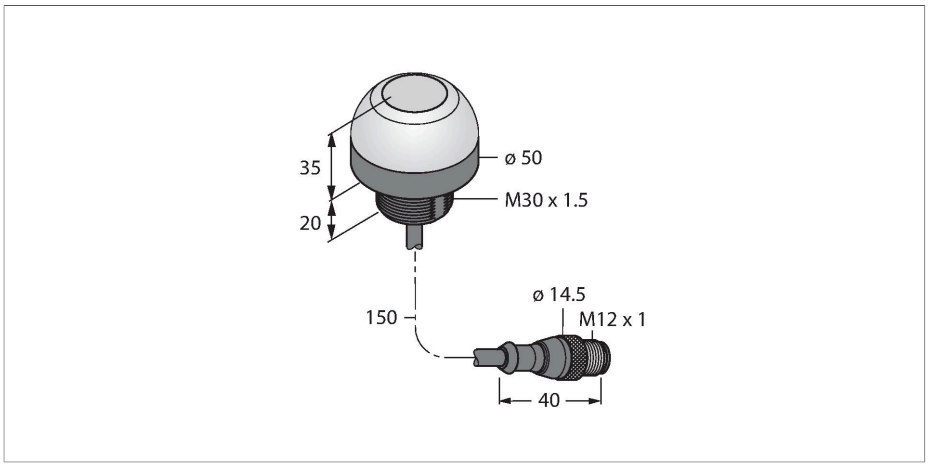
K50PTKQP
Pick-to-Light – Placement Sensor
Capacitive Sensor



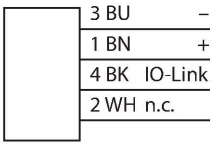
Technical data

Type	K50PTKQP
ID	3806182
Signal and display data	
Purpose	Pick-to-Light
Function	Touch Button
Light type	RGB
Switch Function	Programmable
Dimmable	Programmable
Features of color 1	RGB, Programmable
Special features	I/O module-compatible Wash down
Electrical data	
Operating voltage	12…30 VDC
DC rated operational current	≤ 150 mA
Max. current consumption per color	115 mA
Communication protocol	IO-Link
Output function	Programmable, PNP/NPN
Input type	Communication protocol
Response time typical	< 300 ms
IO-Link	
IO-Link specification	V 1.1
Communication mode	COM 2 (38.4 kBaud)
Process data width	16 bit
Frame type	Type_2_2
Function pin 4	IO-Link
Maximum cable length	20 m

Features

- Protection classes IP67 IP69K
- Cable with M12 x 1 male connector, 4-pin, 150 mm
- RGB LED display
- Control of user-defined or predefined light colors
- Flashing function, alternation, 2-color display, intensity check and other animations
- Parameterizable via IO-Link
- Capacitive sensor of the second generation
- High immunity to false actuation by splashing, detergents, oils and other contaminants

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

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Technical data

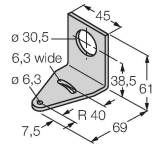
Included in the SIDI GSDML	Yes
Mechanical data	
Design	Dome, K50
Dimensions	Ø 50 x 55 mm
Housing material	Plastic, PC, Black
Window material	Polycarbonate, diffuse
Electrical connection	Cable with connector, M12 × 1, 0.15 m, PVC
Number of cores	4
Ambient temperature	-40…+50 °C
Relative humidity	0…90 %
Protection class	IP67 IP69
Tests/approvals	
MTTF	146 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cULus listed

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 set.

Accessories

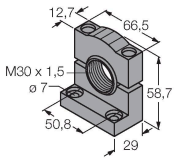
SMB30A 3032723

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



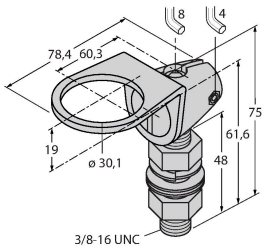
SMB30SC 3052521

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



SMB30FA 3074005

Montagewinkel; Werkstoff VA 1.4401



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