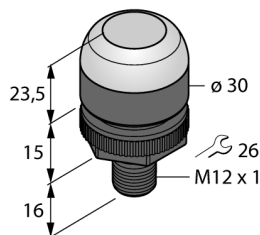


Pick-to-Light Placement Sensor Capacitive Sensor K30RNT2GRCQ



Type	K30RNT2GRCQ
ID	3096535

Signal and display data	
Purpose	Pick-to-Light
Function	Touch Button
Light type	Green Red
Switch Function	Momentary
Features of color 1	Green, Permanently on, 4.4 lm
Features of color 2	Red, 1.7 lm
Special features	Wash down

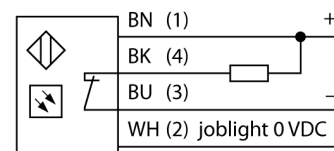
Electrical data	
Operating voltage U_s	12...30 VDC
DC rated operating current I_s	≤ 150 mA
Max. current consumption per color	55 mA
Output function	NC contact, NPN
Input type	minus-schaltend
Response time typical	< 150 ms

Mechanical data	
Design	Dome, K30
Dimensions	Ø 30 x 54.5 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

Tests/approvals	
Approvals	CE, cULus listed

- Protection class IP67/IP69K
- M12 × 1 connector, 4-pin
- Job light: green
- Mispick: -
- Actuation: red
- Operating voltage 12...30 VDC
- NPN switching
- NC contact
- Capacitive sensor of the second generation
- High immunity to false actuation by splashing, detergents, oils and other contaminants

Wiring Diagram



Functional principle

The K30 pick-and-place sensor is suitable for many assembly and placement sequences. 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 oper-

ator removes a part from the bin, the K30 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 set.

Accessories

Type code	Ident no.		Dimension drawing
SMB22A	3079414	Mounting bracket, stainless steel, for K30L series	