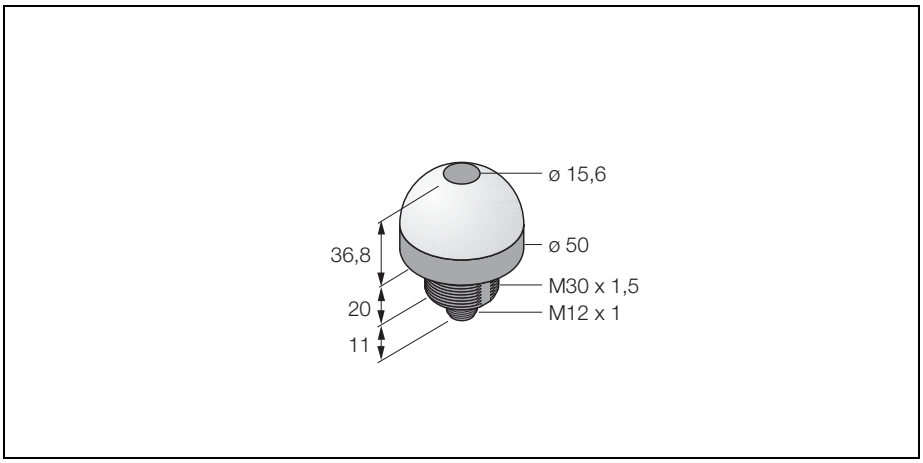
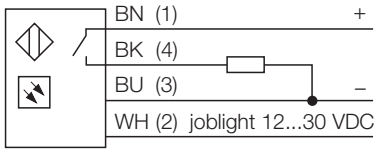
photoelectric sensor
diffuse mode sensor for picking processes
K50APFF100GXDQ



- **Light operation**
- **pnp switching output**
- **green job light**
- **no actuation display**

Wiring diagram



Type	K50APFF100GXDQ
Ident-No.	3075979
Operating mode	diffuse mode sensor with fixed-field background suppression
Light type	IR
Wavelength	880 nm
Max. sensing range [mm]	0… 100 mm
Ambient temperature	-20…+ 50 °C
Operating voltage	12… 30 VDC
DC rated operational current	≤ 150 mA
No-load current I_0	≤ 60 mA
Output function	light operation, PNP
Switching frequency	≤ 160Hz
Housing	cylindrical/threaded, K50
Housing diameter	50mm
Housing material	Plastic, PC
Lens	plastic, acrylic
Electrical connection	Connectors, M12 x 1
Protection class	IP67

Functional principle

The K50 placement sensor is suitable for many mounting and component placement applications. The entire dome indicates the highly visible green job light or another signal (depending on the version). The transistor output can be easily connected to a system control which is programmed for a special task sequence. The job light of the sensor is located in or beside every container of the component placement station and signals: 1. which containers contain components which have to be picked for a certain step in the process and 2. the sequence in which they are to be picked. If an assembler removes a part in the assembly sequence, the K50 detects a hand in the container and sends a signal to the control. The system then checks if the correct component has been picked and switches – depending on the configuration – the corresponding job light off and switches on the next job light of the container which is next in the assembly sequence. The control of the working procedure leads to increased efficiency, improved quality control and reduces the rework and testing expense.

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