

1) Display and control panel, 2) Optical axis emitter, 3) Optical axis receiver, 4) rotatable 270°



Basic features

| | |
|------------------------|-------------------------------------|
| Approval/Conformity | CE cULus EAC WEEE |
| Basic standard | IEC 60947-5-2 |
| Principle of operation | Color sensor |
| Series | 26K |
| Style | Square Connection can be rotated |

Display/Operation

| | |
|----------|---|
| Adjuster | Key (2x) |
| Display | Output function- LED yellow (3x) Ready - LED green Tolerance level: LED red (3x) |
| Setting | Factory setting (Reset) Time function on/off Color tolerance level Color channel (output) Color (switchpoint) Color teach-in mode/Color scan Normal mode/ET |

Electrical connection

| | |
|-----------------------------|------------------------------|
| Connection | Connector, M12x1-Male, 8-pin |
| Polarity reversal protected | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|-------------------------------------|---|
| Input function | Teach color (switchpoint) Key disable on/off Emitter on/off |
| No-load current I_0 max. at U_e | 40 mA |
| Operating voltage U_b | 12...28 VDC |
| Protection class | II |
| Rated insulation voltage U_i | 75 V DC |
| Rated operating current I_e | 100 mA |
| Rated operating voltage U_e DC | 24 V |
| Ready delay t_v max. | 300 ms |
| Ripple max. (% of U_e) | 10 % |
| Switching frequency | 500 Hz |
| Turn-off delay t_{off} max. | 1.0 ms |
| Turn-on delay t_{on} max. | 1.0 ms |
| Utilization category | DC -13 |
| Voltage drop U_d max. at I_e | 2.4 V |

Environmental conditions

| | |
|-------------------------|---------------------------------|
| Ambient temperature | -10...55 °C |
| EN 60068-2-27, Shock | Half-sinus, 30 gn, 11 ms, 3x6 |
| EN 60068-2-6, Vibration | 55 Hz, amplitude 1 mm, 3x30 min |
| Protection degree | IP67 |

Functional safety

| | |
|--------------|-----|
| MTTF (40 °C) | 7 a |
|--------------|-----|

Material

| | |
|--------------------------|------|
| Housing material | ABS |
| Material sensing surface | PMMA |

Mechanical data

| | |
|-----------|-----------------|
| Dimension | 17 x 50 x 50 mm |
| Mounting | Screw M4 |

Optical features

| | |
|--------------------------------|-----------------------------|
| Ambient light max. | 5000 Lux |
| Beam characteristic | Focused |
| Color resolution tolerance | Adjustable in 5 steps |
| Light spot size | 2 x 2 mm at 22 mm |
| Light type | White light |
| Principle of optical operation | Diffuse sensor, fixed focus |

Output/Interface

| | |
|---------------------------------------|---------------------------|
| Duration of time function | 50 ms |
| Supplementary output | Acknowledgment output PNP |
| Switch function, supplementary output | Normally open (NO) |
| Switching output | 3x PNP normally open (NO) |
| Time function | switch-off delay |

Range/Distance

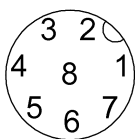
| | |
|----------------------------|-----------------------------------|
| Range | 15...30 mm |
| Sensing distance tolerance | ±5 mm at 22 mm, tolerance level 3 |

Remarks

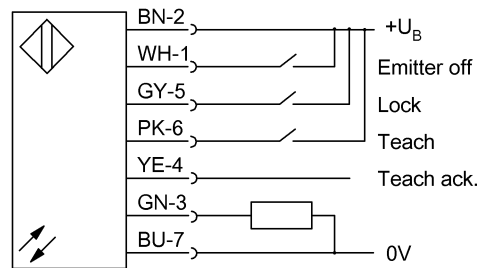
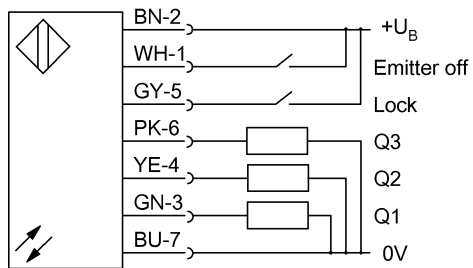
Do not press key using a pointed tool.
Order accessories separately.
For additional information, refer to user's guide.
With connector, e.g. BKS-S 138-... total length = switch length +17.5 mm.
Reference object (target): gray card, 100 x 100, 18 % remission, axial approach.
The sensor is functional again after the overload has been eliminated.
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

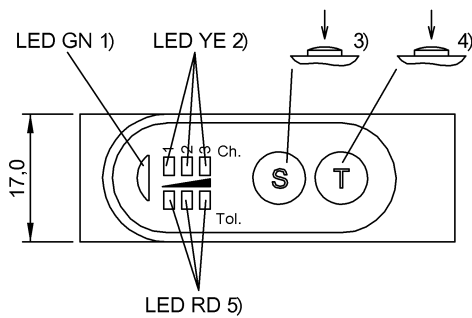
Connector Drawings



Wiring Diagrams



Help Views



- 1) Readiness
- 2) Output function
- 3) Confirm teach-in/selection
- 4) Function/mode select
- 5) Tolerance level indicator

Opto Symbols

