

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



### Basic features

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

### Display/Operation

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

### Electrical connection

<b>Connection</b>	Connector, M12x1-Male, 8-pin
<b>Polarity reversal protected</b>	yes
<b>Short-circuit protection</b>	yes

**Electrical data**

<b>Input function</b>	Emitter on/off Key disable on/off Teach color (switchpoint)
<b>No-load current I<sub>o max.</sub> at U<sub>e</sub></b>	40 mA
<b>Operating voltage U<sub>b</sub></b>	12...28 VDC
<b>Protection class</b>	II
<b>Rated insulation voltage U<sub>i</sub></b>	75 V DC
<b>Rated operating current I<sub>e</sub></b>	100 mA
<b>Rated operating voltage U<sub>e DC</sub></b>	24 V
<b>Ready delay t<sub>v max.</sub></b>	300 ms
<b>Ripple max. (% of U<sub>e</sub>)</b>	10 %
<b>Switching frequency</b>	500 Hz
<b>Turn-off delay t<sub>off max.</sub></b>	1.0 ms
<b>Turn-on delay t<sub>on max.</sub></b>	1.0 ms
<b>Utilization category</b>	DC -13
<b>Voltage drop U<sub>d max.</sub> at I<sub>e</sub></b>	2.4 V

**Environmental conditions**

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

**Functional safety**

<b>MTTF (40 °C)</b>	7 a
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**Material**

<b>Housing material</b>	ABS
<b>Material sensing surface</b>	PMMA

**Mechanical data**

<b>Dimension</b>	17 x 50 x 50 mm
<b>Mounting</b>	Screw M4

**Optical features**

<b>Ambient light max.</b>	5000 Lux
<b>Beam characteristic</b>	Focused
<b>Color resolution tolerance</b>	Adjustable in 5 steps
<b>Light spot size</b>	Ø 4 mm at 22 mm
<b>Light type</b>	White light
<b>Principle of optical operation</b>	Diffuse sensor, fixed focus

**Output/Interface**

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

**Range/Distance**

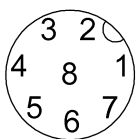
<b>Range</b>	12...32 mm
<b>Sensing distance tolerance</b>	±6 mm at 22 mm, tolerance level 3

**Remarks**

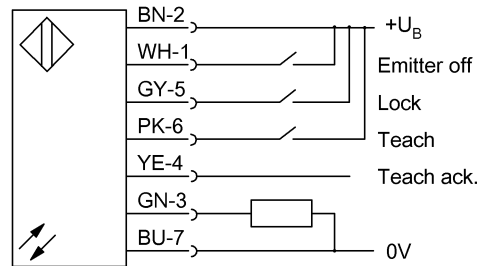
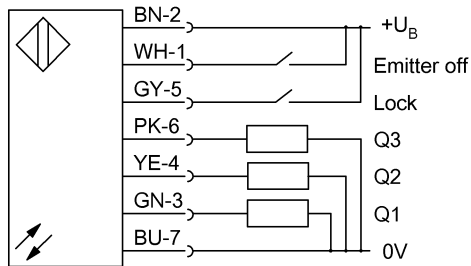
Do not press key using a pointed tool.  
 Order accessories separately.  
 For additional information, refer to user's guide.  
 With connector, e.g. BKS-S 138-... total length = switch length +17.5 mm.  
 Reference object (target): gray card, 100 x 100, 18 % remission, axial approach.  
 The sensor 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.

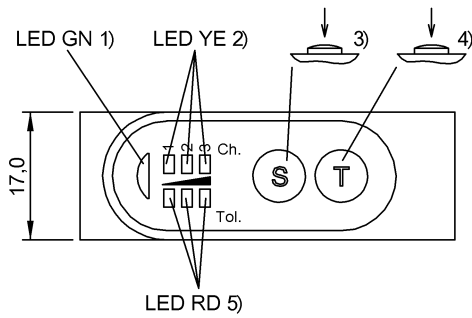
**Connector Drawings**



**Wiring Diagrams**



**Help Views**



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

**Opto Symbols**

