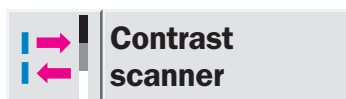
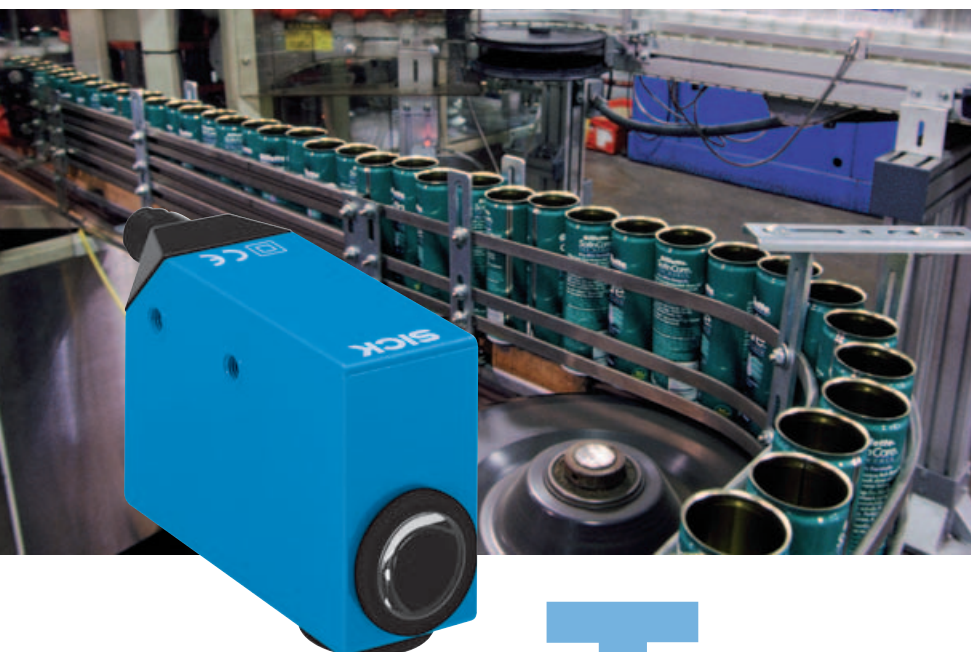


# KT 8 CAN: communication without limits



The KT 8 CAN is distinguished by its ability to communicate. This makes it possible for users to adapt the sensor specifically to their requirements and integrate additional functions conveniently into their machines.


Almost any number of parameter records, i.e. taught-in sensor settings (e.g. for different packaging or printed materials), can be stored via the CAN interface. If required, these parameters are

transmitted to the sensor. At the same time, this procedure simplifies the validation process in accordance with "CFR21 part 11" (e.g. in the pharmaceutical industry). The sensor setting is stored as a reproducible parameter record directly in the automation system of the machine. Therefore, there is no longer need to maintain the settings in written form. In addition, important process data such as contamination level or the current switching threshold can also be accessed via modem or internet.

The advantage: Setup times are reduced, critical sensor settings are detected at an early stage and preventative measures become possible. As a result, malfunctions can be corrected quickly and efficiently in emergencies.

Three colour LED, gloss adjustment, automatic drift correction and short response time round off this product.

# SICK

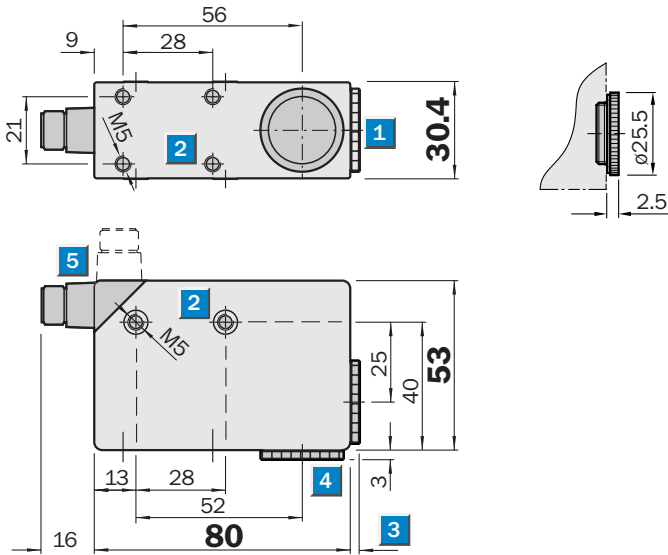

**Scanning distance**  
**10 mm**  
 (housing 10 mm)

Contrast scanner

- CAN-interface
  - Parameter administration
  - Process documentation
  - Process adaption
- Automatic drift correction
- Short response time
- Precise light spot
- Red, green, blue emission LED
- 2 light exits (changeable)

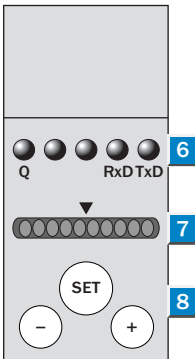
**Dimensional drawing**

All types



**Adjustments possible**

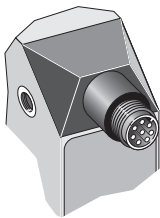
All types



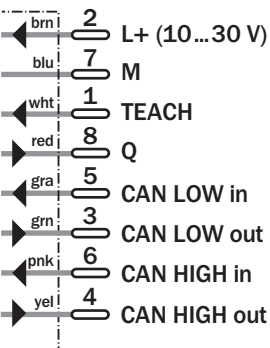
- 1 Lens (light transmission), can be exchanged for pos. 3
- 2 M5 mounting holes, 5.5 mm deep
- 3 See dimensional drawing of lens
- 4 Blind screw can be replaced by lens 1
- 5 8-pin, M12 x 1 plug (rotatable through 90°)
- 6 Functional signal indicators (yellow)
- 7 Bar display (green)
- 8 Teach-in button/“+” and “-” button

**Connection type**

All types



8-pin, M12 x 1



Technical data		KT8W-	P111C	N111C								
<b>Scanning distance</b>	12.5 ± 3 mm											
from front edge of lens												
<b>Light source <sup>1)</sup>; light type</b>	LED; red, green, blue											
Wave length (nm)	640, 525, 470											
Light spot dimensions	4.2 x 1.2 mm											
<b>Light spot position</b>	Longitudinal											
<b>Supply voltage V<sub>S</sub></b>	10 ... 30 V DC <sup>2)</sup>											
Residual ripple <sup>3)</sup>	< 5 V											
Current consumption <sup>4)</sup>	< 80 mA											
<b>Switching outputs</b>	PNP: HIGH = V <sub>S</sub> - < 2 V / LOW = 0 V											
	NPN: HIGH = V <sub>S</sub> / LOW = < 2 V											
Output current I <sub>A</sub> max.	< 100 mA											
<b>Output logic</b>	Light/dark via											
	teach-in procedure (default)											
(Adjustable)	Light switching											
	Dark switching											
Switching frequency max. <sup>6)</sup>	20000/s											
Response time <sup>5)</sup>	25 μs											
<b>Teach-in input ET</b>	PNP: Teach > 10 V ... < V <sub>S</sub>											
	Run 0 V or unswitched											
	NPN: Teach 0 V											
	Run V <sub>S</sub> or unswitched											
<b>Teach-in procedure</b>	Dynamic-teach-in (default)											
(Adjustable)	2-point-teach-in											
<b>Timer deactivation delay</b>	None (default)											
	20 ms (adjustable)											
<b>Interface</b>	CAN (with CANopen features)											
<b>Blanking input AT</b>												
Blanked	PNP: AT > 10 V											
Free running	AT > 2 V or unswitched											
Blanked	NPN: AT < 2 V											
Free running	AT > 10 V or unswitched											
<b>Retention time</b>	25 ms non-volatile memory											
<b>Connection type</b>	M12 plug, 5-pin											
<b>VDE protection class <sup>8)</sup></b>	□											
<b>Circuit protection <sup>9)</sup></b>	A, B, C, D											
<b>Enclosure rating</b>	IP 67											
<b>Ambient temperature T<sub>A</sub></b>	Operation -10 ... +55 °C											
	Storage -25 ... +75 °C											
<b>Shock load</b>	To IEC 68											
<b>Weight</b>	Approx. 400 g											
<b>Housing material</b>	Cast zinc											

<sup>1)</sup> Average service life 100,000 h at T<sub>A</sub> = + 25 °C  
<sup>2)</sup> Limit values  
<sup>3)</sup> May not exceed or fall short of V<sub>S</sub> tolerances

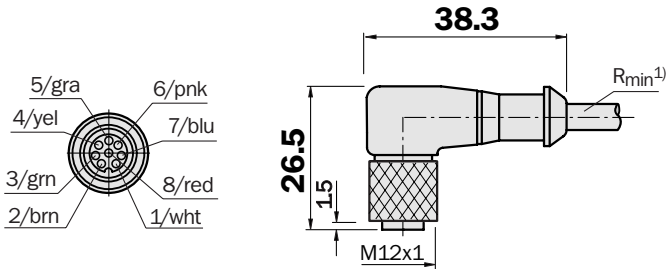
<sup>4)</sup> Without load  
<sup>5)</sup> With resistive load  
<sup>6)</sup> With light/dark ratio 1:1  
<sup>7)</sup> Do not bend below 0 °C  
<sup>8)</sup> Reference voltage 50 V DC

<sup>9)</sup> A = V<sub>S</sub> connections reverse-polarity protected  
 B = Outputs short-circuit protected  
 C = Interference pulse suppression  
 D = Outputs overcurrent and short-circuit protected

Order information	
Type	Order no.
KT8W-P111C	1 027 919
KT8W-N111C	1 028 223

Accessories

Round connector M12, 8-pin, shielded



1) Minimum bend radius in dynamic use  
 $R_{min} = 20 \times \text{cable diameter}$

Technical data

Nominal voltage $U_b$	30 V AC/36 V DC
Contact resistance	$\leq 5 \text{ m}\Omega$
Nominal power	1.5 A
Test voltage	1.5 kV eff./60 s.
Insulation group	C acc. VDE 0110
Insulation resistance	$> 10^9 \Omega$
Temperature range	In fixed position $-25 \text{ }^\circ\text{C} \dots +80 \text{ }^\circ\text{C}$ In flexible motion $+5 \text{ }^\circ\text{C} \dots +80 \text{ }^\circ\text{C}$
Molded cable	
Bend radius	$> 20 \times \text{diameter of cable}$
Contact	CuZn, 0.3 $\mu\text{m}$ gold plated
Locking nut	CuZn, nickeled
Cable	PUR, colour orange (7 x 0.25 mm <sup>2</sup> and shield)
Connector	TPU, colour orange
Terminal screwed connector	
Contact	CuZn, pre-nickeled, 2 ... 4 $\mu\text{m}$ CuSnZn
Connection type	Connector
Housing	CuZn, brass nickeled

Order information

Round connectors M12, 8-pin shielded

Type	Order no.	Description	Shield	Cable length [m]	Cable
DOL-1208-W02MAS01	6 029 224	Female connector angled	360° on locking nut	2	PUR

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