



Contrast sensors KT8, KT8 CAN

KT8W-P121C



Model Name > [KT8W-P121C](#)
Part No. > [1043689](#)



At a glance

- The CAN interface helps set parameters, process documentation and adaptation
- Automatic drift correction
- Fast response time
- Precise light spot
- 3-color RGB LED technology
- Two interchangeable light exits

Your benefits

- Easy integration into machine designs due to standard CAN protocol
- Access to the sensor via the control system saves the machine operator time and effort during configuration
- Individual, application-specific configuration and settings
- Automatic drift correction ensures high production reliability with faded print marks and other difficult-to-detect marks
- Reliable operation, even with high-gloss reflective surfaces
- Long-lasting, tough metal housing



Features

Dimensions (L x W x H):	80 mm x 30.4 mm x 53 mm
Sensing distance ¹⁾ :	20 mm
Sensing distance tolerance:	± 3 mm
Light source ^{2), 3)} :	LED red, green, blue
Light emission:	Long and short side of housing, exchangeable
Light spot size:	1.5 mm x 5.5 mm
Light spot direction ⁴⁾ :	Vertical
Adjustment:	Static 2-point teach-in, Dynamic teach-in (min/max)
Function:	Deactivation delay, 10 ms/20 ms/40 ms, adjustable, Automatic drift correction, CAN interface

¹⁾ From front edge of lens ²⁾ Average service life of 100,000 h at $T_A = +25^\circ\text{C}$ ³⁾ Wave length: 470 nm, 525 nm, 640 nm ⁴⁾ In relation to long side of housing

Mechanics/electronics

Supply voltage V_s ¹⁾ :	DC 10 V ... 30 V
Ripple ²⁾ :	≤ 5 Vpp
Power consumption ³⁾ :	< 120 mA
Switching frequency ⁴⁾ :	22.5 kHz
Response time ⁵⁾ :	22 μs

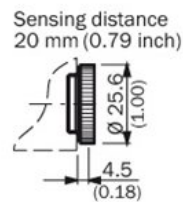
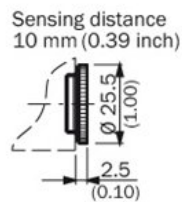
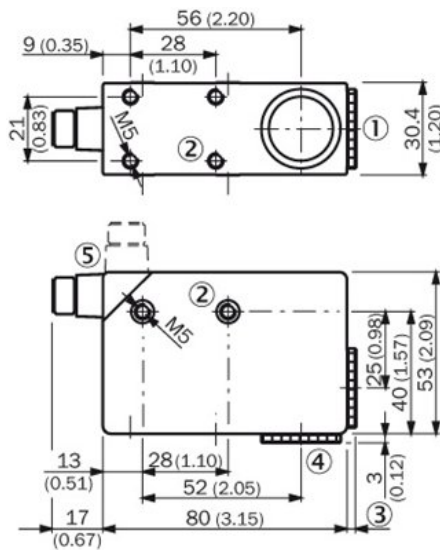
Jitter:	< 11 µs
Output type:	PNP: HIGH = VS- ≤ 2 V/LOW approx. 0 V
Switching mode:	PNP
Input, teach-in (ET):	PNP: Teach: U = 10 V ... < U _V Run: U < 2 V
Retention time (ET):	25 ms, non-volatile memory
Connection type:	Connector M12, 8-pin
Protection class ⁶⁾ :	II
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Enclosure rating:	IP 67
Weight:	Ca. 400 g
Housing material:	Die-cast zinc
Output current I _{max} :	100 mA

¹⁾ Limit values: operation in short-circuit protected network max. 8 A ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Without load ⁴⁾ With light/dark ratio 1:1 ⁵⁾ Signal transit time with resistive load ⁶⁾ Reference voltage DC 32 V

Ambient data

Ambient temperature:	Operation: -10 ... 55 °C Storage: -10 ... 75 °C
Shock load:	According to IEC 60068

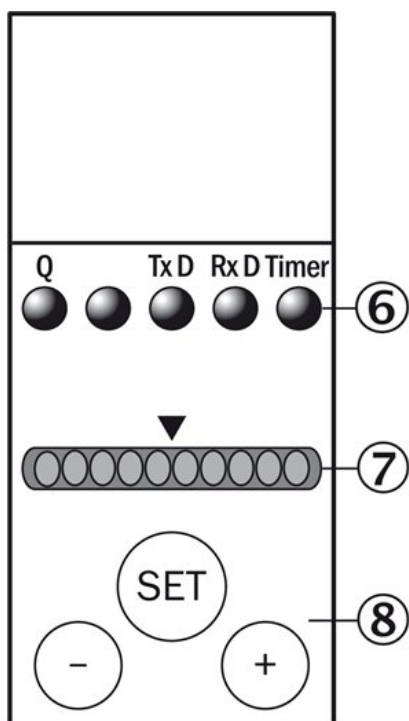
Dimensional drawing



- [1] Lens (light transmission), can be exchanged for pos. 4
- [2] M5 threaded mounting hole, 5.5 mm deep
- [3] See dimensional drawing for lens
- [4] Blind screw can be replaced by pos. 1
- [5] Connector M12 (rotatable up to 90°)

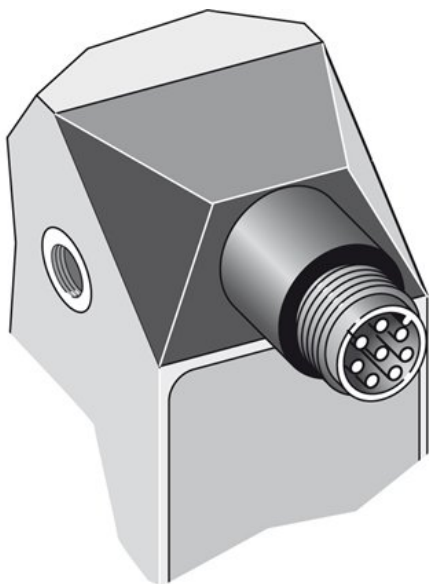
All dimensions in mm (inch)

Adjustments

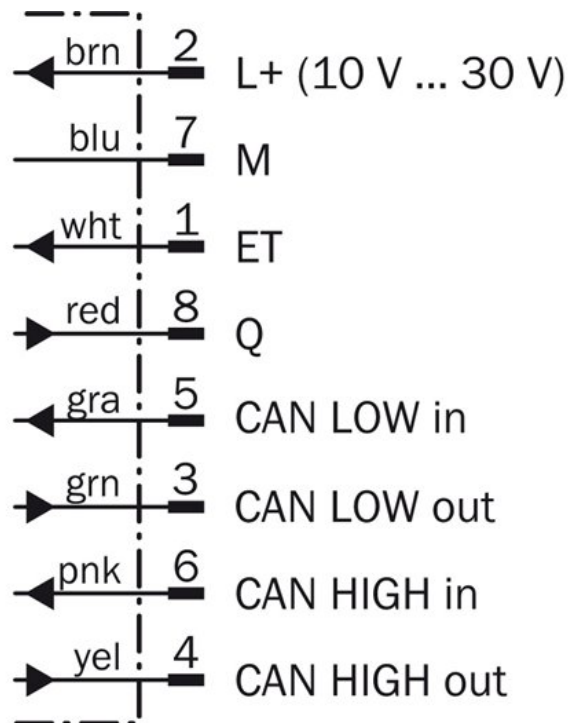


- |6| Function signal indicators (yellow)
- |7| Bar graph (green)
- |8| Teach-in button/"+" and "-" button

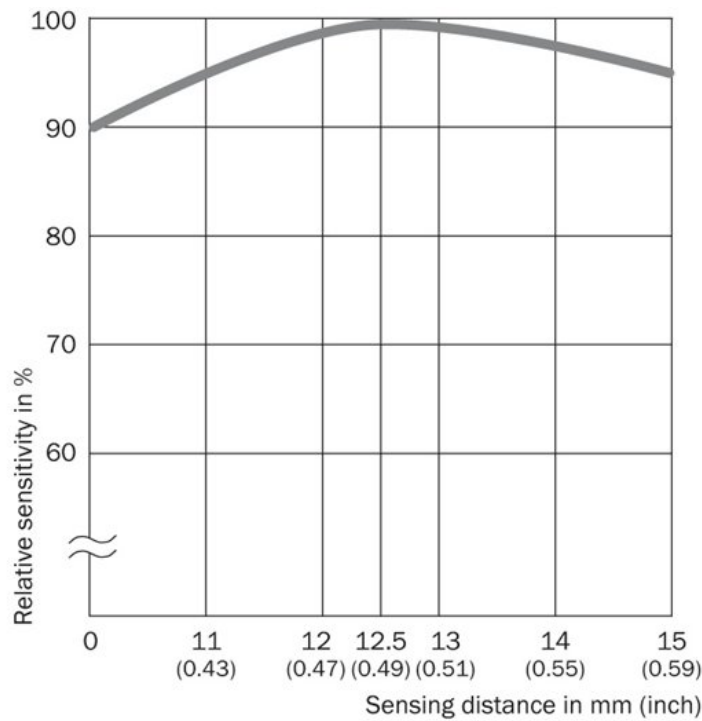
Connection type



Connection diagram



Sensing distance



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