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DATA SHEET

KT3W-P1115

KT3
Contrast sensors

SICK Sensor Intelligence



Illustration may differ

CONTRAST SENSORS

KT3W-P1115

ORDERING INFORMATION

Type	part no.
KT3W-P1115	1025326

Further device versions and accessories at www.sick.com/KT3

DETAILED TECHNICAL DATA

FEATURES

Housing design	Middle
Dimensions (W x H x D)	12 mm x 40 mm x 22 mm
Light source	LED, RGB [1]
Light spot size	1.5 mm x 6.5 mm
Light spot direction	Vertical [2]
Wave length	470 nm, 525 nm, 640 nm
Sensing distance	≤ 12.5 mm
Sensing distance tolerance	± 2 mm
Adjustment	Teach-in button
Teach-in mode	Dynamic teach-in (min/max)

[1] Average service life: 100,000 h at T_U = +25 °C.

[2] In relation to long side of housing.

ELECTRONICS

Supply voltage	12 V DC ... 24 V DC [1]
Ripple	≤ 5 V_{pp} [2]
Current consumption	< 35 mA [3]
Switching frequency	10 kHz [4]

[1] Limit values: DC 12 V (–10 %) ... DC 24 V (+20 %). Operation in short-circuit protected network max. 8 A.

[2] May not fall below or exceed U_V tolerances.

[3] Without load.

[4] With light/dark ratio 1:1.

[5] Reference voltage DC 50 V.

Response time	50 µs
Switching output	PNP
Switching output (voltage)	PNP: HIGH = U_V ≤ 2 V / LOW approx. 0 V
Output current $I_{max.}$	100 mA
Input, teach-in (ET)	PNP Teach: U = 10 V ... < U_V Run: U < 2 V
Retention time (ET)	25 ms, non-volatile memory
Time delay	None
Protection class	II [5]
Circuit protection	U_V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
Connection type	 Male connector M12, 4-pin

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[3] Without load.

[4] With light/dark ratio 1:1.

[5] Reference voltage DC 50 V.

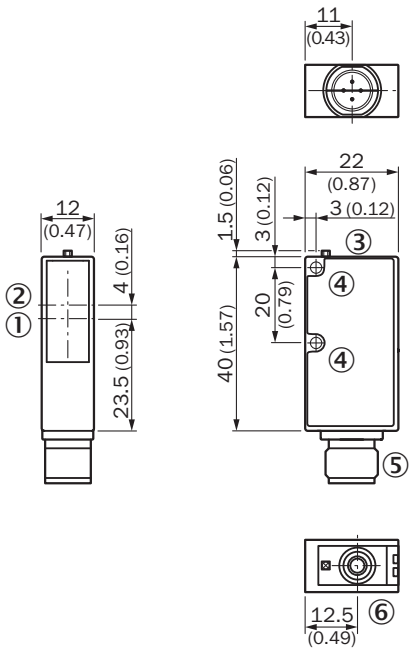
MECHANICS

Housing material	ABS
Weight	11 g

AMBIENT DATA

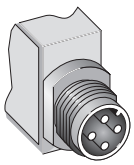
Ambient operating temperature	–10 °C ... +55 °C
Ambient temperature, storage	–20 °C ... +75 °C
Shock load	According to IEC 60068
Enclosure rating	IP67
UL File No.	NRKH.E181493 & NRKH7.E181493

DIMENSIONAL DRAWING

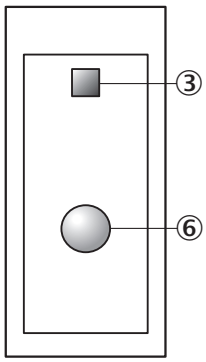


Dimensions in mm (inch)
① Center of optical axis, sender
② Center of optical axis, receiver
③ LED signal strength indicator
④ Mounting hole, Ø 3 mm
⑤ Male connector M12
⑥ Teach-in button

PINOUTS

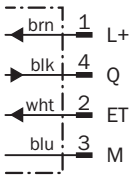


ADJUSTMENTS

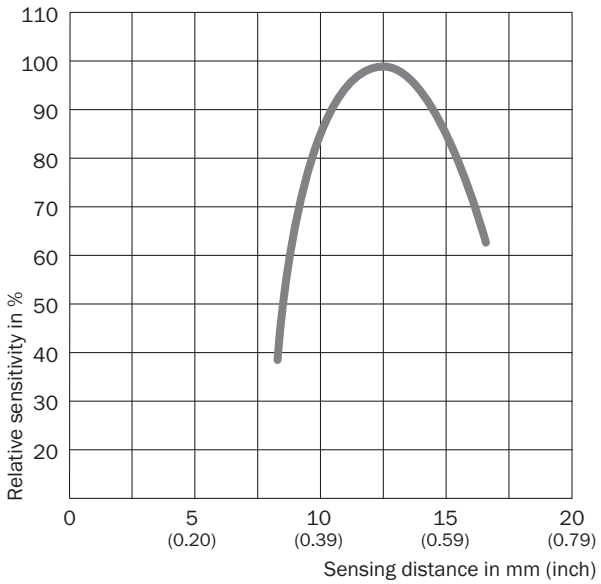


③ LED signal strength indicator
⑥ Teach-in button

CONNECTION DIAGRAM



SENSING DISTANCE



Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1025326

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SICK AT A GLANCE

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Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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