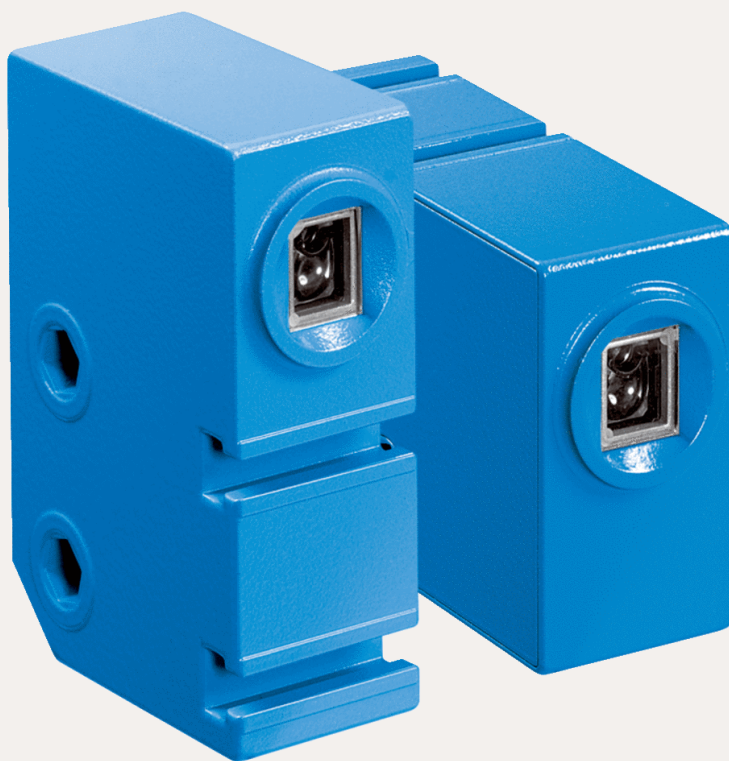


SICK.COM



DATA SHEET

KT6W-P6116

KT6
Contrast sensors

SICK

Sensor Intelligence



Illustration may differ

CONTRAST SENSORS

KT6W-P6116

ORDERING INFORMATION

Type	part no.
KT6W-P6116	1028183

Further device versions and accessories at www.sick.com/KT6

DETAILED TECHNICAL DATA

FEATURES

Housing design	Middle
Dimensions (W x H x D)	30.4 mm x 53 mm x 80 mm
Light source	LED, RGB ¹⁾
Light emission	Long side of housing
Light spot size	1.5 mm x 6.5 mm
Light spot direction	Vertical ²⁾
Wave length	640 nm, 525 nm, 470 nm
Sensing distance	≤ 10 mm ³⁾
Sensing distance tolerance	± 3 mm

¹⁾ Average service life: 100,000 h at T_u = +25 °C.

²⁾ In relation to long side of housing.

³⁾ From front edge of protection ring.

ELECTRONICS

Supply voltage	10 V DC ... 30 V DC ¹⁾
Ripple	≤ 5 V _{pp} ²⁾
Current consumption	< 40 mA ³⁾

¹⁾ Limit values when operated 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 32 V.

Switching frequency	5 kHz ⁴⁾
Response time	100 µs
Switching output	PNP
Switching output (voltage)	PNP: HIGH = $U_v \leq 2 \text{ V}$ / LOW approx. 0 V
Output current I_{max}	100 mA
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

¹⁾ Limit values when operated 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 32 V.

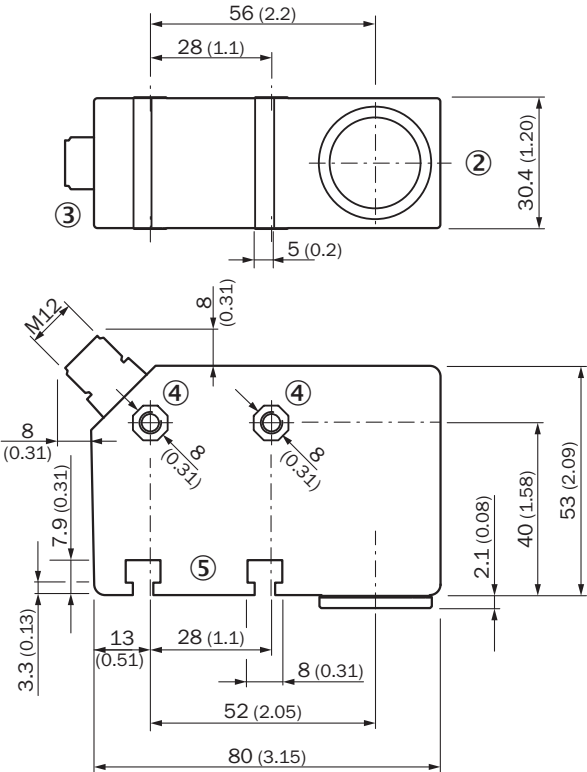
MECHANICS

Housing material	Zinc diecast
Weight	400 g

AMBIENT DATA

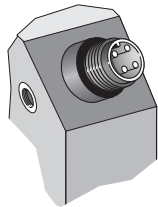
Ambient operating temperature	-10 °C ... +55 °C
Ambient temperature, storage	-25 °C ... +75 °C
Shock load	According to IEC 60068
Enclosure rating	IP67

DIMENSIONAL DRAWING KT6W-2X6XXX

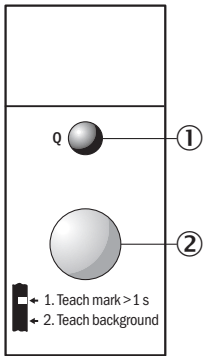


- Dimensions in mm (inch)
- ② Lens (light transmission), length side
 - ③ Male connector M12
 - ④ SW8 mounting hole for M5 nut
 - ⑤ SW8 T-slot for M5 nut

PINOUTS

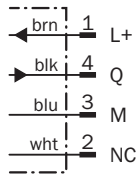


ADJUSTMENTS

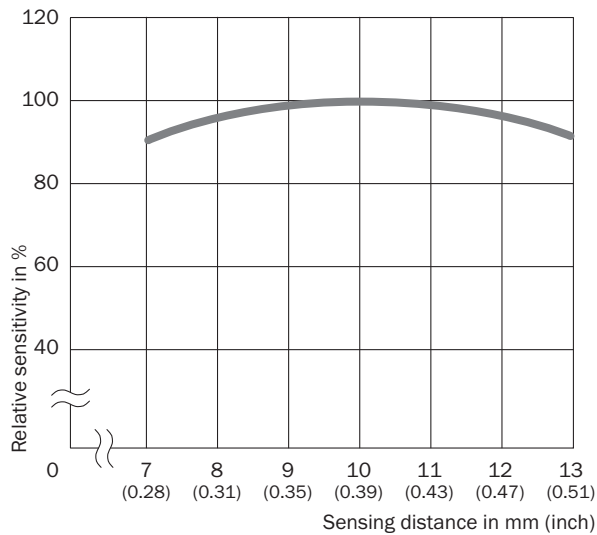


- ① function indicator
- ② Teach-in button

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/1028183



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

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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