



KTM Core

Mini, easy, speedy

CONTRAST SENSORS

SICK
Sensor Intelligence.



Technical data overview

Dimensions (W x H x D)	12 mm x 31.5 mm x 21 mm
Sensing distance	12.5 mm / 11 mm (depending on type)
Type of light	LED ¹⁾ White
Light spot size	Ø 2 mm (12.5 mm) Ø 1 mm (10 mm)
Switching frequency	10 kHz ²⁾
Response time	50 µs ³⁾
Switching output	PNP, NPN
Connection type	Male connector M8, 4-pin Cable with M12 male connector, 4-pin 0.2 m Cable open end, 4-wire 2 m

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

²⁾ With light/dark ratio 1:1.

³⁾ Signal transit time with resistive load.

Product description

Top performance for universal, space-saving use in the packaging industry: The new KTM core contrast sensor from SICK features a high grayscale resolution and is integrated into a small, tried-and-tested housing. The optimized OES4 ASIC technology and a response time of 50 µs ensure reliable and accurate detection of contrast marks, even on glossy materials. The easy adjustment method ensures greater flexibility during commissioning. The KTM reliably detects marks even in conditions with weak contrast ratios and is therefore ideal for use in a wide range of applications.

At a glance

- Small, tried-and tested housing
- High grayscale resolution
- Very large dynamic range means reliable detection of contrasts on glossy materials
- Switching frequency: 10 kHz
- White light

Your benefits

- Small housing allows installation even where space is limited
- Powerful, fast contrast sensor ensures high machine throughput
- Good contrast resolution and a very large dynamic range ensure good detection performance on glossy materials, thus increasing the range of application possibilities
- Quick and easy configuration

Fields of application

- Universal use in contrast detection applications
- Packaging industry
- Print mark detection on continuous materials for controlling the cutting process
- Positioning tubes
- Label alignment on bottles

Ordering information

Other models and accessories → www.sick.com/KTM_Core

- **Adjustment:** Potentiometer, screw driver
- **Light source:** LED, White (Average service life: 100,000 h at $T_U = +25\text{ °C}$.)

Sensing distance	Switching output	Light spot size	Connection type Detail	Light emission	Type	Part no.
≤ 12.5 mm	PNP, NPN	Ø 2 mm (12.5 mm)	Cable with M12 male connector, 4-pin	Long side of housing	KTM-MB31112P	1070053
			Male connector M8, 4-pin	Long side of housing	KTM-MB31111P	1062202

- **Adjustment:** Potentiometer
- **Light source:** LED, White (Average service life: 100,000 h at $T_U = +25\text{ °C}$.)

Sensing distance	Switching output	Light spot size	Connection type Detail	Light emission	Type	Part no.
≤ 11 mm	PNP, NPN	Ø 1 mm (10 mm)	Male connector M8, 4-pin	Long side of housing	KTM-MB8A191P	1066885
≤ 12.5 mm	PNP, NPN	Ø 2 mm (12.5 mm)	Cable open end, 4-wire	Long side of housing	KTM-MB31194P	1078048
			Male connector M8, 4-pin	Long side of housing	KTM-MB31191P	1062203

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com