Product family overview




# 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, white [1] |
| **Light spot size** | Ø 2 mm (12.5 mm)<br>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<br>Cable with M12 male connector, 4-pin<br>0.2 m<br>Cable open end, 4-wire<br>2 m |
| **Communication interface** | - |

[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

- **Communication interface:** -
- **Adjustment:** Potentiometer, screw driver
- **Light source:** LED, white
- **Sensing distance:** ≤ 12.5 mm
- **Switching output:** PNP, NPN
- **Light spot size:** Ø 2 mm (12.5 mm)
- **Light emission:** Long side of housing

| Connection type Detail | Type | Part no. |
|---|---|---|
| Cable with M12 male connector, 4-pin | KTM-MB31112P | 1070053 |
| Male connector M8, 4-pin | KTM-MB31111P | 1062202 |

- **Communication interface:** -
- **Adjustment:** Potentiometer
- **Light source:** LED, white
- **Switching output:** PNP, NPN
- **Light emission:** Long side of housing

| Sensing distance | Light spot size | Connection type Detail | Type | Part no. |
|---|---|---|---|---|
| ≤ 11 mm | Ø 1 mm (10 mm) | Male connector M8, 4-pin | KTM-MB8A191P | 1066885 |
| ≤ 12.5 mm | Ø 2 mm (12.5 mm) | Cable open end, 4-wire | KTM-MB31194P | 1078048 |
| | | Male connector M8, 4-pin | 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