



KTS

High-performance contrast and color detection in a small, compact housing

SICK
Sensor Intelligence.



Technical data overview

Communication interface	-
Dimensions (W x H x D)	26 mm x 62 mm x 47.5 mm
Sensing distance	13 mm
Type of light	LED, RGB ¹⁾
Switching output	Push-pull: PNP/NPN NPN PNP, NPN (depending on type)
Connection type	Male connector M12, 4-pin

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

Product description

The best performance KTS contrast sensors can be used in many applications, even under demanding conditions. The sensors in the KTS product family with RGB technology and VISTAL® housing feature good performance, high switching frequency and grayscale resolutions, as well as various teach-in variants. Some models come with TwinEye-Technology®, a display, and IO-Link for providing diagnostics and analysis data. Response times of just 10 µs and minimal jitter of 3 µs ensure positionally accurate color and contrast detection even at high machine speeds and for highly glossy materials. The color mode integrated into several variants and variable sensor settings ensure quick commissioning and high process stability. This makes KTS an ideal companion for digital machine environments.

At a glance

- RGB technology for best possible detection
- Switching frequency: up to 70 kHz, jitter: 3 µs
- TwinEye-Technology® for high depth of field and sensing distance tolerance
- Various teach-in variants
- Color mode
- IO-Link and flexible sensor settings
- Display for easy sensor operation

Your benefits

- High contrast and color resolution for best possible performance, even when detecting complex materials
- Various teach-in procedures for application-specific sensor and process settings
- Diagnostics, visualization, and simple format change via IO-Link
- Sensor data can be stored in the device: allows flexible process design and quick format change
- Multi-functional sensor adjustment for individual sensor adjustment
- TwinEye-Technology® for better performance in detecting glossy or fluttery materials, thereby resulting in fewer machine down-times and more process stability
- Space-saving due to compact design

Fields of application

- Applications in which contrast is a distinguishing feature
- Print mark detection for controlling cutting processes
- Print control in the print and paper industry
- Positioning of tubes when filling
- Label alignment
- Splice detection in packaging and battery production
- Roll end monitoring

Ordering information

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

- **Housing design:** middle
- **Communication interface:** -
- **Sensing distance:** ≤ 13 mm
- **Light emission:** Long side of housing

Switching output	Light spot size	Light spot direction	Connection type Detail	Type	Part no.
NPN	1.2 mm x 3.9 mm	Vertical	Male connector M12, 4-pin	KTS-WN41141142ZZZZ	1219611
				KTS-WN61141142ZZZZ	1118456
					1130332
					1132744
				KTS-WN71141142ZZZZ	1118454
PNP, NPN	1.2 mm x 3.9 mm	Vertical	Male connector M12, 4-pin	KTS-WS41141142ZZZZ	1221031
				KTS-WS61141142ZZZZ	1119944
				KTS-WS71141142ZZZZ	1119945
Push-pull: PNP/NPN	1.2 mm x 3.9 mm	Vertical	Male connector M12, 4-pin	KTS-WB41141142ZZZZ	1218200
				KTS-WB51141142ZZZZ	1219064
				KTS-WB61141142ZZZZ	1115363
				KTS-WB71141142ZZZZ	1118457
				KTS-WB81141142ZZZZ	1078120

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