

the sensor people



## **KRT 18B**

Color mark sensor for fast and reliable mark detection



# FLEXIBILITY MEETS USABILITY

Reliable color mark detection, large function reserve and optimized handling all come together in the new KRT 18B.

### easyhandling.

### MASTERS THE HIGHEST REQUIREMENTS

The packaging industry demands maximum performance from all components with respect to flexibility, reliability and usability. With its extremely easy handling, automatic sensitivity readjustment and an integrated dual-channel IO-Link interface, the KRT 18B is ideally equipped to meet these requirements.

Moreover, its compact metal housing predestines it both for use in confined spaces and in applications with stringent demands on hygiene.







### COMPACT AND COMFORTABLE

The KRT 18B color mark sensor is configured using the teach buttons or potentiometers on the device or directly at the control system via the dual-channel IO-Link interface. For this purpose, the sensor has a clearly visible bar graph signal indicator on its rear side. Furthermore, an integrated color selector can pick out the optimum setting for the respective application automatically from the three available light colors.

#### easyhandling.

- Bar graph indicator on the rear side to indicate the signal strength
- Simple adaptation of the sensitivity via two alternative teach processes
- Fine adjustment option using the multiturn potentiometer with bar graph indicator and color selection
- Comfortable format switchover via dual-channel IO-Link, e.g. with recipe change
- Fast commissioning by means of alignment aid
- Many options for side and front mounting on a mounting bracket or a series 18 rod using M4 screws
- Optional adapter plate for simple attachment to market-standard mounting brackets

#### powerreserve.

- Multicolor color mark sensor with high precision and robust switching behavior
- Sensitivity readjustment by means of tracking for increased availability even with faded marks
- Efficient temperature compensation for maximum switching point stability thanks to the extremely compact housing
- High IP67 and IP69K degrees of protection with ECOLAB

#### think modular.

Broad range of functions for optimum adaptation to your specific application:

- Powerful entry-level models for many different standard applications
- Fast and low-jitter models for high-speed processes and precise switching points
- Tracking variants for automatic readjustment in demanding environments

# STATE-OF-THE-ART COLOR MARK DETECTION

Our optimized device usability makes your work faster and more efficient.

### BAR GRAPH FOR SIMPLE ADJUSTMENT OF OPTIMUM SWITCHING POINT

- Variants with digital configuration:
  Simple adjustment using two teach buttons for mark (M) and background (B)
- Optimum switching point is determined automatically
- Optional variants with multiturn potentiometer and bar graph for intuitive adjustment:
  - Large, removable knurled knob for adjustment without tools
  - Lockable operating elements prevent tampering or unintentional changes
  - Selection of the detection color via a selection button (C)

### COMFORTABLE RECIPE CHANGE BY MEANS OF DUAL-CHANNEL IO-LINK

- Fast packaging change / format change by changing parameters via the interface
- Comfortable configuration on the PLC
- Real-time signal information and diagnosis

### AUTOMATIC SENSITIVITY READJUSTMENT FOR FADING MARKS

- Automatic readjustment saves repeated setting in the case of varying contrast, thereby ensuring better system availability
- Significantly higher functional reliability by means of switching point optimization
- Reduced downtimes owing to contrast variations













### COMPACT METAL HOUSING

- Compact design for optimized compensation of temperature fluctuations and for maximum switching point stability
- Robust, coated metal housing
- IP67 / 69K degrees of protection with ECOLAB
- Integrated fastening concept with M4 internal threads



### MULTICOLOR TECHNOLOGY INTEGRATED AS STANDARD

- Best possible contrast thanks to integrated three-color technology (red, green, blue)
- High signal stability even in the case of difficult applications
- Teach variants with automatic determination of the maximum contrast
- Manual color selection and intuitive fine adjustment with multiturn potentiometer for optimum application control
- Powerful luster suppression

# ALWAYS THE RIGHT SENSOR

With six device models, we are able to offer the optimum solution for every conceivable type of application.

### DEVICE MODELS

- Standard: for simple applications
- Teach: for universal use
- Multiturn: for manual optimization

- Tracking: for maximum availability with difficult marks
- Speed: precise positioning with fast processes
- Analog: for signal evaluation in the PLC

	KRT18B Standard	KRT18B Teach	KRT18B Multiturn potentiometer	KRT18B Tracking	KRT18B Speed	KRT18B Analog
Setting	Teach-in	Teach-in	Spindle	Teach-in	Teach-in	Spindle
Bar graph	No	Yes	Yes	Yes	Yes	Yes
Switching frequency	15 kHz	15 kHz	15 kHz	15 kHz	22 kHz	15 kHz
Response time	33µs	33µs	33µs	33µs	22.5µs	100µs
IO-Link version	No	Yes	No	Yes	Yes	No
Scanning range	13 ± 3 mm	13 ± 3 mm	13 ± 3 mm	13 ± 3 mm	13 ± 3mm	13 ± 3 mm
Dimensions	15×57.5× 32.5 mm	15 × 57.5 × 32.5 mm	15×57.5× 32.5 mm	15×57.5× 32.5 mm	15 × 57.5 × 32.5 mm	15×57.5× 32.5mm
Temperature range	-40 to +60 °C	-40 to +60 °C	-40 to +60 °C	-40 to +60 °C	-40 to +60 °C	-40 to +60 °C

Alignment of tube packaging







Reliable mark detection when cutting sleeve labels



# OUR PROMISE TO YOU

### SMARTER PRODUCT USABILITY

With regard to our product developments, we systematically place emphasis on the especially good usability of all devices. To this end, simple mounting and alignment are taken into account – just as the uncomplicated integrability of the sensors in existing field bus systems and easy configuration, e.g. via a web browser, are.

### SMARTER APPLICATION KNOW-HOW

Whoever can do it all, can do nothing right. Which is why we concentrate on selected target sectors and applications. There, we are specialists and know all aspects inside out. For this purpose, we optimize our solutions and offer a comprehensive product range that makes it possible for our customers to obtain the absolute best solutions from a single source.

### SMARTER CUSTOMER SERVICE

The technical and personal proximity to our customers, and a skilled, straightforward handling of queries and problems, are among our strengths – and will remain so. Consequently, we will continue to expand our service offerings and, indeed, also forge ahead in new directions to persistently redefine the utmost in customer service. Whether on the phone, on the Internet or on-site with our customers – regardless of when and where the expertise of the sensor people is needed at any time.

### Info at: www.leuze.com



Katrin Rieker, Sales Methods, Processes, Tools

### Switching Sensors

Optical Sensors Ultrasonic Sensors Fiber Optic Sensors Inductive Switches Forked Sensors Light Curtains Special Sensors

#### **Measuring Sensors**

Distance Sensors Sensors for Positioning 3D Sensors Light Curtains Forked Sensors

### Products for Safety at Work

Optoelectronic Safety Sensors Safe Locking Devices, Switches and Proximity Sensors Safe Control Components Machine Safety Services

### Identification

Bar Code Identification 2D-Code Identification RF Identification

### Data Transmission/

Control Components MA modular connection units Data Transmission Safe Control Components Signaling Devices Connection Technology and Passive Distribution Boxes

#### Industrial Image Processing Light Section Sensors Smart Camera

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