

CNTX-30-TP

CONTRAST SENSOR

Increase process throughput with high-speed, accurate and reliable contrast differentiation. The CNTX™ combines a broad-spectrum light source, small spot size and fast response to achieve high-speed contrast differentiation of both neutral and color targets. The CNTX employs our field-proven, patented technology, for effective detection of registration marks, glossy surfaces, cap inserts, date codes and sorting of product by color in many industrial applications. The durable plastic case and polycarbonate lens provide robust construction expected in an industrial environment.

The CNTX provides simple, two-button teach with mark and background keys. The flexibility of the CNTX makes it easy to set-up in a wide variety of printing, packaging and converting applications. The CNTX is a perfect fit for many applications that require the ability to differentiate between two conditions that vary in contrast.

The CNTX includes both a discrete PNP/NPN output and an analog output. The discrete output is automatically set for PNP or NPN operation. The analog output signal may be used to access targets based on their reflectance characteristics.

CNTX





Applications

- Sort products by color
- Detect registration marks
- Confirm presence of date codes
- Detection of glossy surfaces
- Detects cap inserts

Design & Features

- 3.0mm spot size
- 25uS response time
- Two-button teach
- Broad spectrum white LED
- Automatic LED intensity adjustment
- PNP/NPN
- Discrete output
- Analog output
- Small size

Ordering Information



CNTX-30-TP
Contrast Sensor, 3mm spot



CNTX-35-TP
Contrast Sensor, 0.5mm spot

Accessories



130-10140362
Bracket

Functions

- OPERATING MODE**
- MARK**
- BACKGROUND**
- RED LED ON**
- GREEN LED ON**
- YELLOW LED ON**
- RED FLASHING**
- GREEN FLASHING**
- YELLOW FLASHING**

- The CNTX-30-TP is in operating mode in detect or undetect state
- Sets mark level
- Sets background level
- Mark detected
- Background detected
- Mark or background measurement in progress
- Background set, measure mark
- Mark set, measure background
- Insufficient contrast

Specifications

White Light source

Broad spectrum LED,
min. 100,000 hours
28mm

Sensing distance Spot size

CNTX-30-TP 3.0mm dia.
CNTX-35-TP 0.5mm dia.

Depth of field Response time

+/- 3mm
25uS

Switching Frequency

40kHz

LED intensity

3 levels

Gray Scale

0 to 50

Digital Output

Auto-Detect NPN/PNP

Analog Output

0...5V (20mV resolution)

Security

LOCK/UN-LOCK keypad

Background indicator

Green LED

Detect indicator

Yellow LED

Data retention

EEPROM non-volatile memory

Dimensions

2.0" (51mm) x 2.4" (61mm) x 1.0" (25mm)

Weight

0.21 lbs. (95g)

Supply Voltage

10-24 VDC

Operating Current

60 mA

Short Circuit Protection

Discrete output

Overload / Reverse Polarity Protection

Supply voltage

Operating temperature

-20°C...55°C

Storage temperature

-20°C...70°C

Housing

Plastic

Mechanical Protection

IP65 NOT FOR PRESSURE WASH DOWN

Indicators

- Green LED
- Yellow LED

Power
Detect

Connector M12

- Pin 1
- Pin 2

Power 10 to 24VDC
Analog output 0 to
5V DC

- Pin 3
- Pin 4

Ground
Discrete output
PNP/NPN

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PERSONAL SAFETY APPLICATIONS.

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