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

EMX
INDUSTRIES

EMX Industries, Inc.
4564 Johnston Parkway, Cleveland, Ohio 44128
P. 800 426 9912 **F.** 216 518 9884
Sales Inquiries: salessupport@emxinc.com **Technical Support:** technical@emxinc.com
www.emxinc.com

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	The CNTX-30-TP is in operating mode in detect or undetect state
MARK	Sets mark level
BACKGROUND	Sets background level
RED LED ON	Mark detected
GREEN LED ON	Background detected
YELLOW LED ON	Mark or background measurement in progress
RED FLASHING	Background set, measure mark
GREEN FLASHING	Mark set, measure background
YELLOW FLASHING	Insufficient contrast

Specifications

White Light source	Broad spectrum LED, min. 100,000 hours	**Indicators**	
Sensing distance	28mm	Green LED	Power
Spot size	CNTX-30-TP 3.0mm dia. CNTX-35-TP 0.5mm dia.	Yellow LED	Detect
		Connector M12	
Depth of field	+/- 3mm	Pin 1	Power 10 to 24VDC
Response time	25uS	Pin 2	Analog output 0 to 5V DC
Switching Frequency	40kHz		
LED intensity	3 levels	Pin 3	Ground
Gray Scale	0 to 50	Pin 4	Discrete output
Digital Output	Auto-Detect NPN/PNP		PNP/NPN
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		

NOT INTENDED FOR USE IN PERSONAL SAFETY APPLICATIONS.

MADE IN THE USA