



# TLU

## 954151330

TL $\mu$ -415C

ALL REGISTRATION MARK DETECTION APPLICATIONS

## OVERVIEW

- Teach-in, Remote settings
- Red/green or white LED emission
- Various interchangeable lenses and fiber-optic models
- Metal housing with orientable optics and connector

## TECHNICAL FEATURES

### Detection properties

Nominal sensing distance	9mm
Spot dimension	Ø 3 mm
Sensitivity adjustment	Teach-in

### Application

Function Principle	Contrast mark detection
Description	Standard case - circular spot
Optic position	axial

Functions	Contrast mark detection
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#### Outputs

Output type	NPN L/D Selectable
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Output Function	L/D Selectable
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Response time	0,025 (20 kHz)
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#### Electrical data

Operating Voltage	10...30VDC
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No-Load supply current	$\leq 80\text{mA}$
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Output voltage drop	$\leq 1\text{V}$
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LED indicators	red OUTPUT greenREADY
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Short-circuit protection	YES
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Reverse Polarity Protection	Yes
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Emission	LED White
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Interference to external light	according to EN 60947-5-2 : 2020
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Impulsive Overvoltage Protection	Yes
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Insulation resistance	$>20\text{ M}\Omega$ 500 Vdc, between electronics and housing
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Contact resistance	500 Vac 1 min., between electronics and housing
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#### Mechanical data

Dimensions	31x58x82
Housing Material	Metal - Zamak
Connections	M12 plug
Active Head Material	Glass
Storage temperature	- 20°C...+70°C
Material	
Diameter/Dimension	Cubic

#### Test/Approvals

Approvals	CE cULus
Shocks and vibrations	0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)

#### Generical Data

Dimensions	31x58x82
Operating Temperature	-10°C ... 55°C
Mechanical Protection	IP67

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