



# TLU

## 964401010

TL $\mu$ -011L

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	1,5 x 5mm
Sensitivity adjustment	Teach-in

### Application

Function Principle	Contrast mark detection
Description	Standard case - horizontal spot
Optic position	Radial 90°

Functions	Contrast mark detection
-----------	-------------------------

#### Outputs

Output type	NPN L/D Selectable
-------------	--------------------

Output Function	L/D Selectable
-----------------	----------------

Response time	0,05 (10kHz)
---------------	--------------

#### Electrical data

Operating Voltage	10...30VDC
-------------------	------------

No-Load supply current	≤ 80mA
------------------------	--------

Output voltage drop	≤1V
---------------------	-----

LED indicators	red OUTPUT greenREADY
----------------	-----------------------

Short-circuit protection	YES
--------------------------	-----

Reverse Polarity Protection	Yes
-----------------------------	-----

Emission	LED RGB
----------	---------

Interference to external light	according to EN 60947-5-2 : 2020
--------------------------------	----------------------------------

Impulsive Overvoltage Protection	Yes
----------------------------------	-----

#### Mechanical data

Dimensions	31x58x82
------------	----------

Housing Material	Metal - Zamak
------------------	---------------

Connections	2m cable
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

## **Datasensing S.r.l.**

Strada S.Caterina, 235  
41122 Modena (MO)  
Tel. 059 420411  
Fax 059 253973  
E-mail  
info@datasensing.com

**date of  
printing**  
22/04/2026  
03:23:25