

TL46

954600005

TL46-W-815-PZ

HIGH PERFORMANCE CONTRAST SENSOR FOR COLORED REGISTRATION MARK DETECTION

OVERVIEW

- Fastest and accurate low jitter model (TL46-WJ)
- Color mode enhanced model (TL46-WE)
- Wide-spectrum RGB or white LED emission
- 5 different models: basic, standard, enhanced, low jitter, color mode
- Automatic, manual and dynamic settings
- 10, 15, 20, 30 or 50 kHz switching frequencies
- Very low jitter down to 7µs (TL46-WJ...)
- NPN/PNP and analog outputs
- Standard mounting, M12 connector rotatable to 5 positions

TECHNICAL FEATURES

Detection properties

Nominal sensing distance	12mm
Spot dimension	0,8 x 4mm
Sensitivity adjustment	Teach-in

Application

Function Principle	Contrast mark detection

Description	Standard case - vertical spot
Optic position	axial
Functions	Contrast mark detection

Outputs

Output type	NPN/PNP - IO-LINK
Switching frequency	15kHz
Response time	0,02 (25kHz low jitter)

Electrical data

Operating Voltage	10…30VDC
No-Load supply current	≤ 50mA
Load current	≤100mA
Output voltage drop	≤2V
Max ripple content	≤ 2Vpp
LED indicators	Yellow (output state) Green (Ready) orange (delay or keylock)
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
Insulation resistance	>20 MΩ 500 Vdc, between electronics and housing
Contact resistance	500 Vac 1 min., between electronics and housing

Mechanical data

Dimensions	32x60x82
Material	
Housing material	Metal - Aluminium / Glass
Connections	M12 plug
Active Head Material	Glass
Storage temperature	- 20°C…+70°C
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	32x60x82
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

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