

# LTRN016RD | DATASHEET

# Ring LED illuminator, inner diameter 37.7mm, straight type, red, 630 nm





#### SPECIFICATIONS

#### Lighting specifications

Illumination area outer diameter	(mm)	107.0
Illumination area inner diameter	(mm)	57.0
Optimal working distance (min-max)	(mm)	85-150
Number of LED rows		1
Emission angle	(°)	0
Light color, peak wavelength		red, 630 nm
Illuminance at min WD <sup>1</sup>	(lux)	5450
Illuminance at max WD <sup>1</sup>	(lux)	2450

#### **Electrical specifications**

Supply voltage <sup>2</sup>	(V)	24
Current	(mA)	300
Power consumption	(W)	7.2
Estimated MTBF <sup>3</sup>	(hours)	> 20000
Max pulse voltage <sup>4</sup>	(V)	24-48 (36 recomended)
Max pulse current <sup>5</sup>	(mA)	900
Max duty cycle	(%)	10
Max pulse duration	(ms)	10
Connector <sup>6</sup>		Flying leads
Cable length	(mm)	1000

# Mechanical specifications

Outer diameter	(mm)	120.6
Inner diameter	(mm)	37.7
Height	(mm)	39.6
Mass	(g)	371

#### **KEY ADVANTAGES**

Mechanically fitting Opto Engineering® optics Each lens integrates specific mechanical interfaces.

**Specific illumination geometry** Illumination path matches Opto Engineering lenses viewing angle and numerical aperture.

**High performance to price ratio** Cost-effective, without quality compromises.

**LTRNST series** are LED ring illuminators specifically designed for a wide range of Opto Engineering products. Especially the stray type models perfectly fit Opto Engineering® telecentric lenses.

#### Environment

Operating temperature	(°C)	0-35
Operating humidity	(%)	20-85, non condensing

Exempt

#### Eye safety

Risk group (CEI EN 62471:2010)

<sup>1</sup> ±15%.

<sup>2</sup> Tolerance  $\pm 2\%$ .

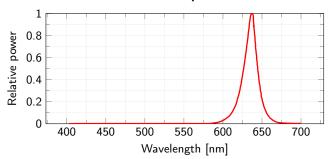
<sup>3</sup> At 25°C.

<sup>4</sup> Constant voltage power supply.

<sup>5</sup> Constant current power supply.

<sup>6</sup> Red Cable is V+, white cable is V-.

LED color spectrum



### **COMPATIBLE PRODUCTS**

## Full list of compatible products available here.



A wide selection of innovative machine vision components.

All product specifications and data are subject to change without notice to improve reliability, functionality, design or other. Photos and pictures are for illustration purposes only. Data are reported by design, actual lens performance may vary due to manufacturing tolerances.

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