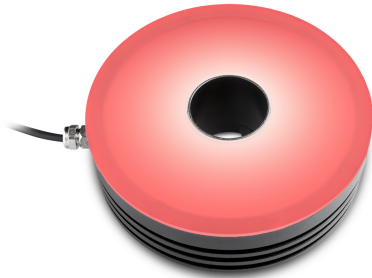


# LTRN023RD | DATASHEET

Ring LED illuminator, inner diameter 28.0mm, straight type, red, 630 nm



## SPECIFICATIONS

### Lighting specifications

Illumination area outer diameter	(mm)	90.0
Illumination area inner diameter	(mm)	40.0
Optimal working distance (min-max)	(mm)	55-85
Number of LED rows		1
Emission angle	(°)	0
Light color, peak wavelength		red, 630 nm
Illuminance at min WD <sup>1</sup>	(lux)	6860
Illuminance at max WD <sup>1</sup>	(lux)	3970

### Electrical specifications

Supply voltage <sup>2</sup>	(V)	24
Current	(mA)	200
Power consumption	(W)	4.8
Estimated MTBF <sup>3</sup>	(hours)	> 20000
Max pulse voltage <sup>4</sup>	(V)	24-48 (36 recommended)
Max pulse current <sup>5</sup>	(mA)	600
Max duty cycle	(%)	10
Max pulse duration	(ms)	10
Connector <sup>6</sup>		Flying leads
Cable length	(mm)	1000

### Mechanical specifications

Outer diameter	(mm)	104.0
Inner diameter	(mm)	28.0
Height	(mm)	39.6
Mass	(g)	283

## 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.

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

## Environment

Operating temperature	(°C)	0-45
Operating humidity	(%)	20-85, non condensing

## Eye safety

Risk group (CEI EN 62471:2010)	Exempt
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<sup>1</sup> ±15%.

<sup>2</sup> Tolerance ±2%.

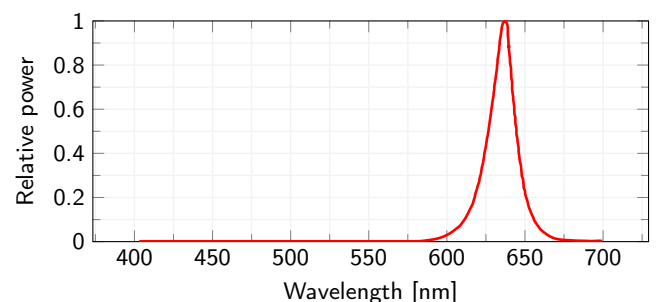
<sup>3</sup> At 25°C.

<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.