

DL1 series – LED matrix direct illuminators for machine vision applications

The DL5 series illuminators are designed to be easily integrated into various vision systems and to offer a low-cost, highly customizable lighting solution.

High brightness in a small space : the DL1 series consists of a matrix of high-density, high-brightness LEDs. The DL1 series illuminators are used in confined spaces, where direct, high-intensity illumination is required. The DL1 series is designed for system integrators and OEMs who need to integrate the illuminator into a machine or custom devices.

RCCR© current driver : The DL1 series of illuminators integrates the RCCR© current driver (Roder Constant Current Regulator) that stabilises and equalises the current in each LED in the matrix . This provides high uniformity of light output and stabilises the LED current even with small variations in supply voltage. In contrast to traditional technologies (resistor in series with the LED string), the RCCR©current driver achieves optimal control of the current in the LED and a consequent improvement in the homogeneity characteristics of the emitted light.

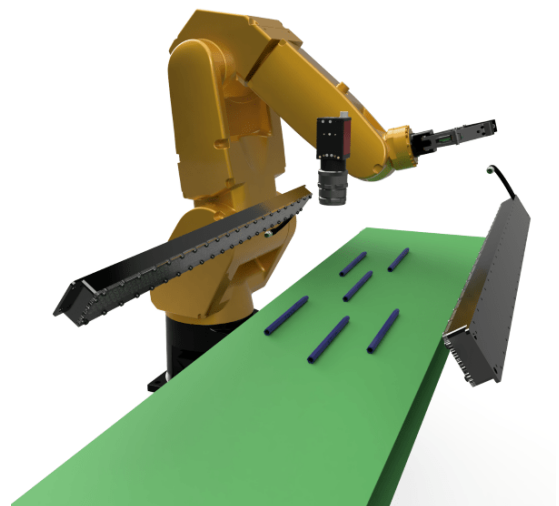
HTTM© technology : use of HTTM© technology (High Thermal Transmission Material) to dissipate the heat generated by LEDs. Proper heat dissipation enables the light sources and control electronics to maintain optimum working conditions. A special material layer is used inside the illuminator for contact between the LEDs and the housing. In this way, the temperature of the LEDs is kept constant, the brightness is stable over time, and the LED has a longer service life.



Caratteristiche

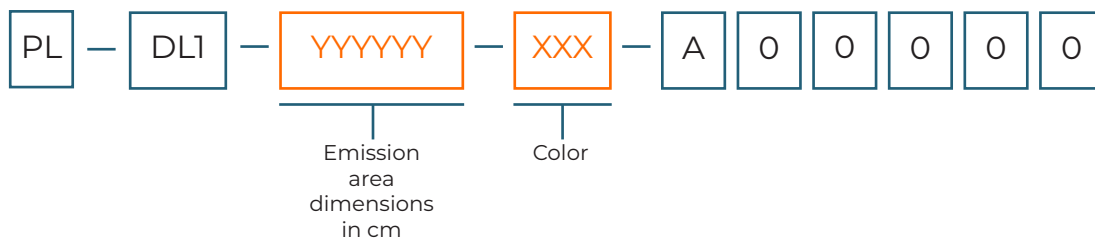
- HTTM technology for efficient disposal of heat produced by LEDs
- Integrated driver for LED current stabilization
- Aluminum body with side mounting points and mounting brackets
- Industrial connector connection and screw ring fastening
- Low profile

High brightness in a small space !



Composition of the product identification code

The acronyms in orange are to be filled in according to the desired configuration



Catalog models

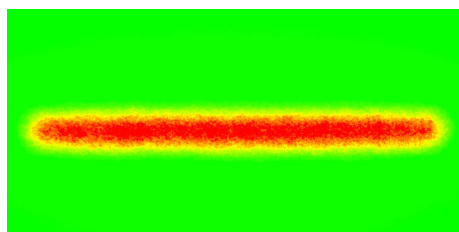
Highlighted models are from normal production - Others are on request and may have longer production times

Active light area (mm)					
25 x 100 (025100)	25 x 200 (025200)	25 x 300 (025300)	25 x 400 (025400)	25 x 500 (025500)	25 x 600 (025600)
25 x 700 (025700)	25 x 800 (025800)	50 x 50 (050050)	50 x 100 (050100)	50 x 200 (050200)	50 x 300 (050300)
100 x 100 (100100)	100 x 200 (100200)	100 x 300 (100300)	200 x 700 (020070)		

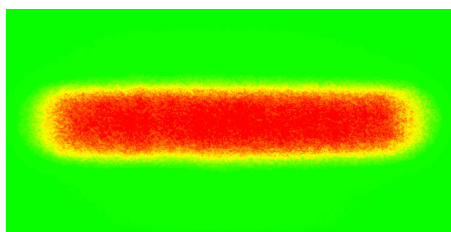
LED type

WHI : Neutral White
 BLU : Standard Blue 465 nm
 RED : Standard Red 630 nm

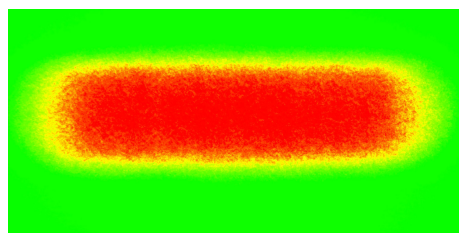
LED emission



Reference 24 x 400 - 80 mm distance

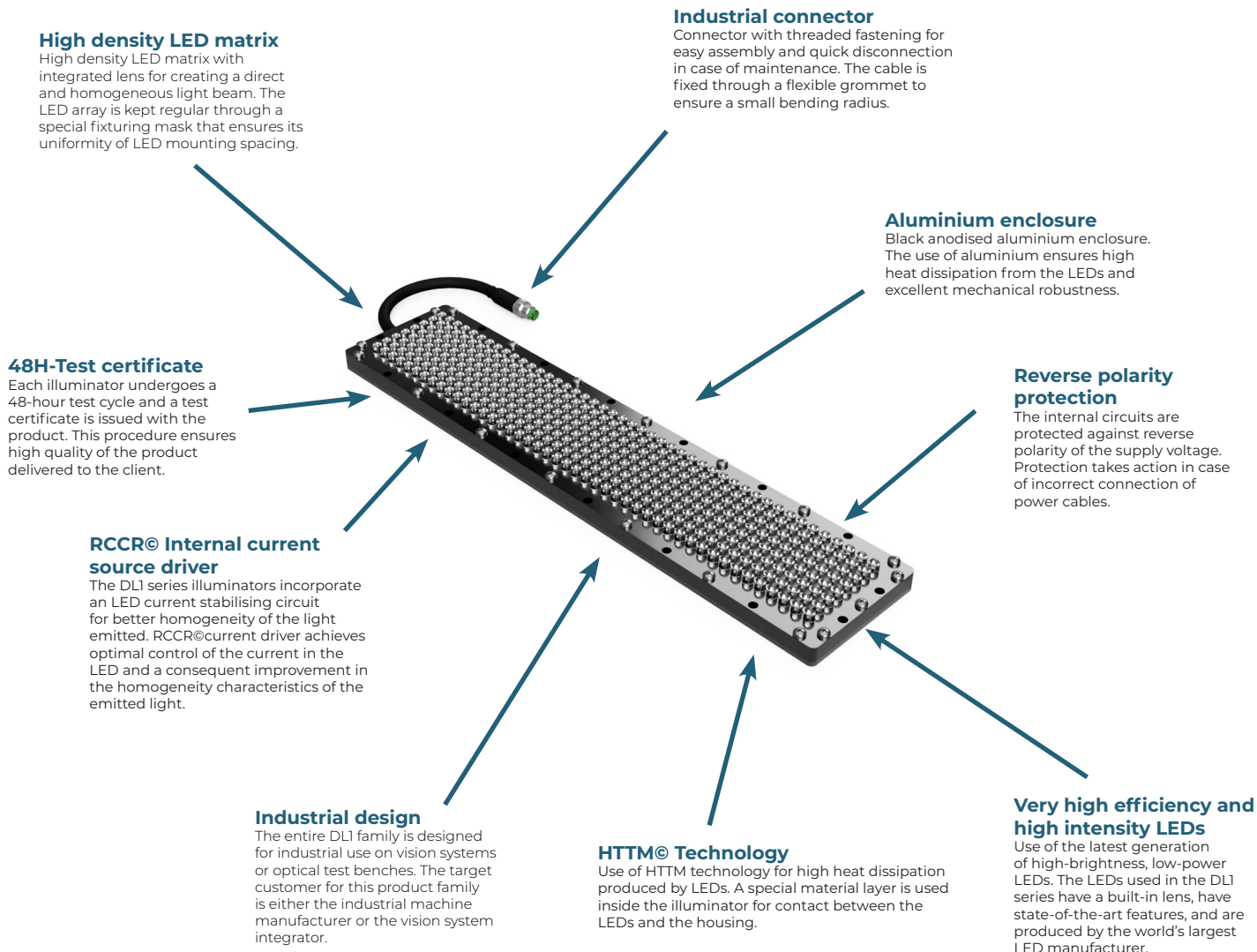


Reference 24 x 400 - 180 mm distance



Reference 24 x 400 - 260 mm distance

Why choose a RODER DL5 series illuminator ?



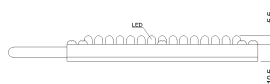
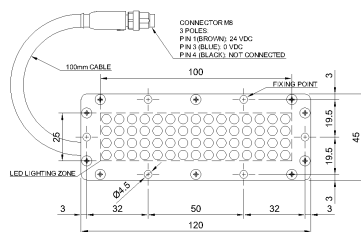
Main features common to the DL1 family

Features	Value
Supply voltage	24 Vdc +/- 5%
IP rating	IP40
Temperature range	0° - 50° C
Electrical connection	M16 3-pin connector with threaded ring nut

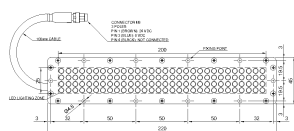
DL1 series - standard models



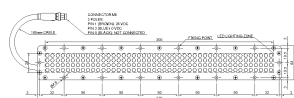
DL1 25 x 100



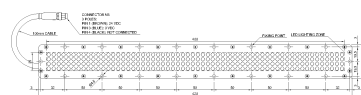
DL1 25 x 200



DL1 25 x 300



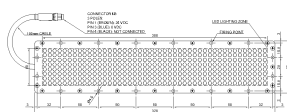
DL1 25 x 400



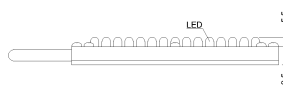
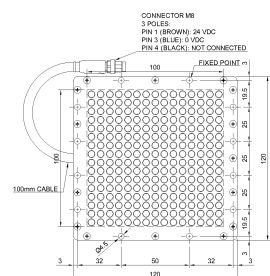
DL1 series - standard models



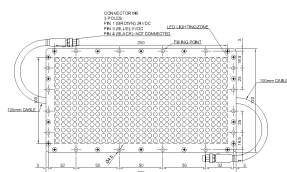
DL1 50 x 300



DL1 100 x 100



DL1 100 x 200



DL1 100 x 300

