PRODUCT DATASHEET

LTCLHP036-B

Telecentric HP illuminator, beam diameter 45 mm, blue

SPECIFICATIONS

Optical specifications

Beam diameter	(mm)	45
Working distance range	(mm)	70 - 140
Light color, peak wavelength (1)		blue, 460 nm

Mechanical specifications

Length (2)	(mm)	152.1
Outer diameter	(mm)	61
Mass	(g)	398

Electrical specifications

Device power ratings

DC voltage minimum (3)	(V)	12
DC voltage maximum (3)	(V)	24
Power consumption	(W)	< 2.5
Max LED forward current (4)	(mA)	350
Cables		CB244P1500 included

LED power ratings

Forward voltage (typical) (5)	(V)	3.3
Forward voltage (max) (5)	(V)	4.00
Max pulse current (6)	(mA)	2000

Eye safety

Risk group according to CEI EN 62471:2010	Risk group 2

Last update: 2021-06-22

CONNECTION

PIN 1 — PIN 2
PIN 4 — PIN 3

Device side - male pins
Front view

Pinout reference

Pin	Function
1	Earth
2	GND
3	LED Anode
4	Power supply (+12÷24 V)

REACH COMPLIANT

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.

NOTES

1. Opto Engineering® recommends green light for high precision measurement applications
2. Nominal value, with no spacers in place
3. Tolerance ± 10%
4. Used in continuous (not pulsed) mode
5. At max forward current. Tolerance is ±0.06V on forward voltage measurements
6. At pulse width <= 10 ms, duty cycle <= 10% condition. Built-in electronics board must be bypassed (see tech info)

COMPATIBLE PRODUCTS

Despite the efforts made to generate an error-free compatibility list, we always recommend to consult the Opto Engineering® technical support department before purchasing a compatible product. Opto Engineering® shall not be liable for any damage or malfunctioning caused by the incorrect selection of a compatible product.

TCEL series

Telecentric optics with liquid lenses technology

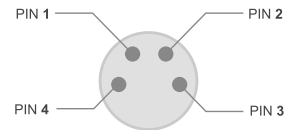|	
TCEL23036	Telecentric lens for 2/3" sensors with integrated liquid lens, mag. 0.243X

TC series

Bi-telecentric lenses for sensors up to 2/3"

TC13036	Bi-telecentric lens for 1/3" detectors, magnification 0.133 x, C-mount
TC12036	Bi-telecentric lens for 1/2" detectors, magnification 0.177 x, C-mount

TC23036	Bi-telecentric lens for 2/3" detectors, magnification 0.243 x, C-mount

 TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC1MHR036-C	High resolution telecentric lens for 1/1.2" detectors, magnification 0.295x, C-mount
TC2MHR036-C	High resolution telecentric lens for 1" detectors, magnification 0.353x, C-mount
TC2MHR036-F	High resolution telecentric lens for 1" detectors, magnification 0.353x, F-mount
TC2MHR036-E	High resolution telecentric lens for 1" detectors, magnification 0.353x, mount M42X1 FD=16
TC3MHR036-C	High resolution telecentric lens for 1.1" detectors, magnification 0.392x, C-mount
TC4MHR036-C	High resolution telecentric lens for 4/3" detectors, magnification 0.486x, C-mount
TC4MHR036-F	High resolution telecentric lens for 4/3" detectors, magnification 0.486x, F-mount
TC4MHR036-E	High resolution telecentric lens for 4/3" detectors, magnification 0.486x, mount M42X1 FD=16

 TC16M series

Telecentric lenses for sensors up to 43.3 mm and 8k line scan cameras

TC16M036	Telecentric lens for 35 mm detectors, magnification 1.000 x, F-mount
TC16M036-Q	Telecentric lens for 35 mm detectors, magnification 1.000 x, mount M58x0.75 FD =6.56
TC16M036-K	Telecentric lens for 45.72 mm detectors, magnification 1.00 x, M58x0.75 FD 12.96-mount

 TC12M series

Telecentric lenses for sensors up to APS-H and 4k line scan cameras

TC12M036-F	High resolution telecentric lenses, magnification 0.838, WD 101.9, F mount
TC12M036-J	High resolution telecentric lenses, magnification 0.838, WD 101.10, M42x1 FD12

 CMBS series

45° beam splitters

CMBS036	45° beam splitter with mount for 61 mm clamping diameter optics

 Accessories

Accessories and add-ons to make the most of Opto Engineering® lenses.

LED1W-B	Replacement LED source, blue
	Diffuser cap for LTCLHP illuminators

 CMMR series

45° first surface mirrors

CMMR036	45° first surface mirror for 61 mm clamping diameter optics

 WI series

Protective windows for lenses

WI036	Protective window for 61 mm clamping diameter optics

 CMHO series

Clamping mechanics for lenses

CMHO036	Clamping mechanics for TCxx036 lenses and LTCLHP036-X illuminators

 LTSCHP series

High-performance replacement LED modules

LTSCHP1W-B	Replacement LED module, blue

 PS series

Power supplies

RT-SDR-120-24	24VDC DIN rail power supply

CB series

Cables

CB244P1500	Power cable, side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels
CB244P1500L	Power cable, side 1 M8 connector angled, side 2 cable end - 2 m - type 1 labels

LTIC series

LED lighting controllers

LTIC1CH-A1-4	Analogue lighting controller unit, 4A, 24V
LTIC1CH-D1-4	Digital lighting controller unit, 4A, 24V
LTICOBUL1000CH1-24VUSTB	24VDC analog lighting controller 1 channel, UK power cord, Illumination cable, side A SM 3 way male connector, side B terminal blocks connector, 24V - 3m
LTICOBUL1000CH1-24VEUTB	24VDC analog lighting controller 1 channel, UK power cord, Illumination cable, side A SM 3 way male connector, side B terminal blocks connector, 24V - 3m
LTICOBUL1000CH1-24VUKTB	24VDC analog lighting controller 1 channel, UK power cord, Illumination cable, side A SM 3 way male connector, side B terminal blocks connector, 24V - 3m