

LTCLHP036-R

Telecentric HP illuminator, beam diameter 45 mm, red

SPECIFICATIONS

Optical specifications

Beam diameter	(mm)	45
Working distance range	(mm)	70 - 140
Light color, peak wavelength (1)		red, 630 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)	2.4
Forward voltage (max) (5)	(V)	3.00
Max pulse current (6)	(mA)	2000

Eye safety

Risk group according to CEI EN 62471:2010	Exempt
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Last update: 2021-06-22

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

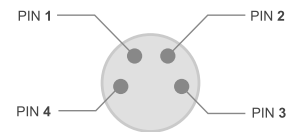
Bi-telecentric lenses for sensors up to 2/3"

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



CONNECTION



Device side - male pins

Front view

Pinout reference

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



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.

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



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



CMMR series

45° first surface mirrors

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



Accessories

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

Diffuser cap for LTCLHP illuminators

LED1W-R Replacement LED source, red



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-R Replacement LED module, red



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
