# LTCLHP023-B

Telecentric HP illuminator, beam diameter 16 mm, blue

# SPECIFICATIONS

Optical specifications		
Beam diameter	(mm)	16
Working distance range	(mm)	45 - 90
Light color, peak wavelength (1)		blue, 460 nm
Mechanical specifications		
Length (2)	(mm)	96.8
Outer diameter	(mm)	28
Mass	(g)	156
Electrical specifications		
Device power ratings		
DC voltage minimum (3)	(V)	12
DC voltage maximum (3)	(V)	24
Power consumption	(VV)	< 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 undates 2021 OC 22		



# CONNECTION



Device side - male pins

## Front view Pipout reference

_	Pinoutre	Terence
	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.

Risk group according to CEI EN 62471:2010	Risk group 2
Last update: 2021-06-22	

## NOTES

- 1. Opto  ${\sf Engineering} @$  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  $\label{eq:constraint} \mbox{Opto Engineering} \ensuremath{\mathbb{R}} \ensuremath{ \mbox{technical support}}\xspace$ Engineering® shall not be liable for any damage or malfunctioning caused by the incorrect selection of a compatible product.



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

TC23004	Bi-telecentric lens for 2/3" detectors, magnification 2.000 ×, C-mount
TC23007	Bi-telecentric lens for 2/3" detectors, magnification 1.333 x, C-mount
TC23009	Bi-telecentric lens for 2/3" detectors, magnification 1.000 x, C-mount
TC23012	Bi-telecentric lens for 2/3" detectors, magnification 0.735 x, C-mount



TC1MHR-TC4MHR series

Telecentric lenses for sensors up to 4/3"

TC4N4004 (		
TC4M004-0	Telecentric le	ens for 4/3" detectors, magnification 4.000 x, C-mount
TC4M004-F	Telecentric le	ens for 4/3" detectors, magnification 4.000 x, F-mount
FC4M007-0	Telecentric le	ens for 4/3" detectors, magnification 2.667 x, C-mount
FC4M007-F	Telecentric le	ens for 4/3" detectors, magnification 2.667 x, F-mount
ГС4М009-0	Telecentric le	ens for 4/3" detectors, magnification 2.000 x, C-mount
C4M009-F	Telecentric le	ens for 4/3" detectors, magnification 2.000 x, F-mount
	Accessories	
	Accessories and ac	ld-ons to make the most of Opto Engineering $^{\! (\! \! \! R)}$ lenses.
ED1W-B	Re	olacement LED source, blue
20	CMHO series	
	Clamping mechani	cs for lenses
CMHO023	Clamping med	hanics for TCxx004, 007, 009, 012 and LTCLHP023-X
Ċ.	LTSCHP series	
High-perfo	ormance replaceme	nt LED modules
TSCHP1W	-В	Replacement LED module, blue
	PS series	
and the second		
	Power supplies	
T-SDR-12		24VDC DIN rail power supply
RT-SDR-12	)-24	24VDC DIN rail power supply
T-SDR-120		24VDC DIN rail power supply
T-SDR-120	)-24	24VDC DIN rail power supply
	CB series Cables	24VDC DIN rail power supply side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels
CB244P150	CB series Cables 0 Power cable,	
CB244P150	CB series Cables 00 Power cable, 10L Power cable,	side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels
CB244P150	CB series Cables 0 Power cable,	side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels
CB244P150	CB series Cables 00 Power cable, 10L Power cable,	side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels side 1 M8 connector angled, side 2 cable end - 2 m - type 1 labels
CB244P150 CB244P150	CB series Cables 0 Power cable, 0L Power cable, LTIC series LED lighting contro	side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels side 1 M8 connector angled, side 2 cable end - 2 m - type 1 labels
CB244P150 CB244P150 CB244P150	CB series Cables 00 Power cable, 00L Power cable, LTIC series LED lighting contro	side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels side 1 M8 connector angled, side 2 cable end - 2 m - type 1 labels llers
RT-SDR-12/ CB244P15( CB24) CB2( CB24) CB2( CB24) CB2( CB24) CB2( CB2( CB2) CB2( CB2( CB2) CB2) CB2( CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2( CB2) CB2) CB2) CB2( CB2) CB2) CB2) CB2( CB2) CB2) CB2) CB2( CB2) CB2) CB2) CB2( CB2) CB2) CB2) CB2( CB2) CB2) CB2) CB2) CB2) CB2) CB2) CB2)	CB series Cables 00 Power cable, 00L Power cable, LTIC series LED lighting contro	side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels side 1 M8 connector angled, side 2 cable end - 2 m - type 1 labels llers Analogue lighting controller unit, 4A, 24V
CB244P150 CB244P150 CB244P150 LTIC1CH-A LTIC1CH-A LTIC1CH-D LTICOBUL1	CB series Cables 00 Power cable, 10L Power cable, LTIC series LED lighting contro	side 1 M8 connector straight, side 2 cable end - 2 m - type 1 labels side 1 M8 connector angled, side 2 cable end - 2 m - type 1 labels llers Analogue lighting controller unit, 4A, 24V Digital lighting controller unit, 4A, 24V 24VDC analog lighting controller 1 channel, UK power cord, Illumination cable, side A SM 3 way male connector, side B terminal blocks