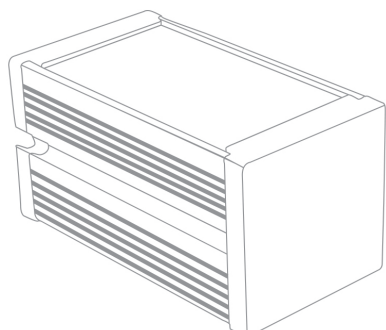


## FLOOD TYPE BAR LIGHT

### ELBC SERIES



The ELBC Series is a **high-power** flood type bar light with innovative design features to answer the needs of many machine vision applications.

Built with flexibility in mind, the ELBC Series makes it possible to easily adjust the product — mechanically, optically and electronically — to adapt to any application requirements. The ELBC Series is shipped with **three diffuser plates** so the uniformity can be adjusted to the needs of the user. The **lens position** can also be adjusted to change the angle of emission.

Furthermore, the **integrated controller** with **Auto-strobe** feature allows for 300% increased intensity while being strobed when compared to continuous mode.

## MAIN FEATURES

Standard product delivered with diffusers included as a **package**

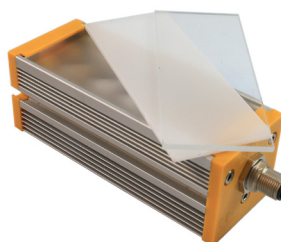
Very **intense** and **uniform** illuminated area

**Direct connection** for strobe use with *COGNEX In-Sight 7000 Series*

Long lifetime and minimal maintenance

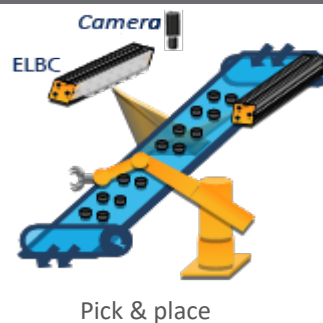
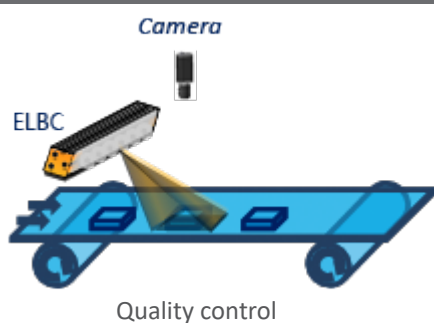
Standard connections and fasteners

**Flexibility:** 4 adjustable illumination angles & 3 different window options



Connector	M12 - 4 contacts
Power supply	24V DC
Illumination mode	Continuous or Overdrive strobe mode
Electronical mode	Auto-strobe
Available wavelengths	White, Blue, Green, Red, IR (other wavelengths upon request)
Available sizes	60mm, 100mm, 300mm (other sizes upon request)
Width x Height	51mm x 49mm
Mounting	One T-slot on the back for M6 T-nuts 8mm slot (2x M6 T-nuts included), and one slot on the side for M6 hex nuts
Material	Device body: Aluminum alloy & ABS; Window: PMMA
Working temperature	0° to 50° C
IP code	IP50

## APPLICATIONS



## OPTICAL FLEXIBILITY

### How to change the configuration of the ELBC



1 Unscrew the M4 screws



2 Slide out the window



3 Slide out all lenses



4 Replace the window and lenses in desired configuration

### Window

The ELBC Series is shipped with three different diffusers. Depending on the uniformity necessary for the application, the user can easily change the diffuser to one that fulfills the application requirements.

Clear window (CW)



Semi-diffuse window (SD)



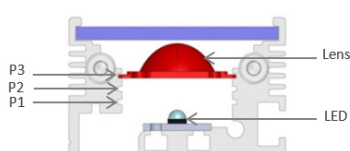
Diffuse window (DF)



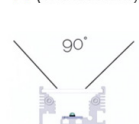
+ Powerful ← → + Homogeneous

### Lens Position

The ELBC Series offers flexible lens positioning to control the beam angle, which can be widened by moving the lens closer to the LEDs or narrowed by moving the lens further away from the LEDs.



P0 (Without lens)



P1



P2



P3



### Optical Accessories

#### Polarizer insert:

Using the polarizer accessory, it is possible to eliminate glare from your workpiece making it easier to acquire a suitable image for the application.



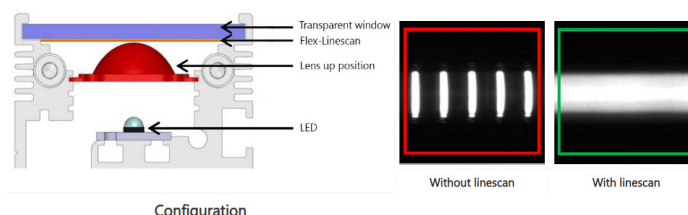
Without polarizer



With polarizer

#### Linescan insert:

With the lens in the upper position, the linescan accessory transforms the ELBC Series light into a uniform line light ideal for either brightfield or darkfield illumination.



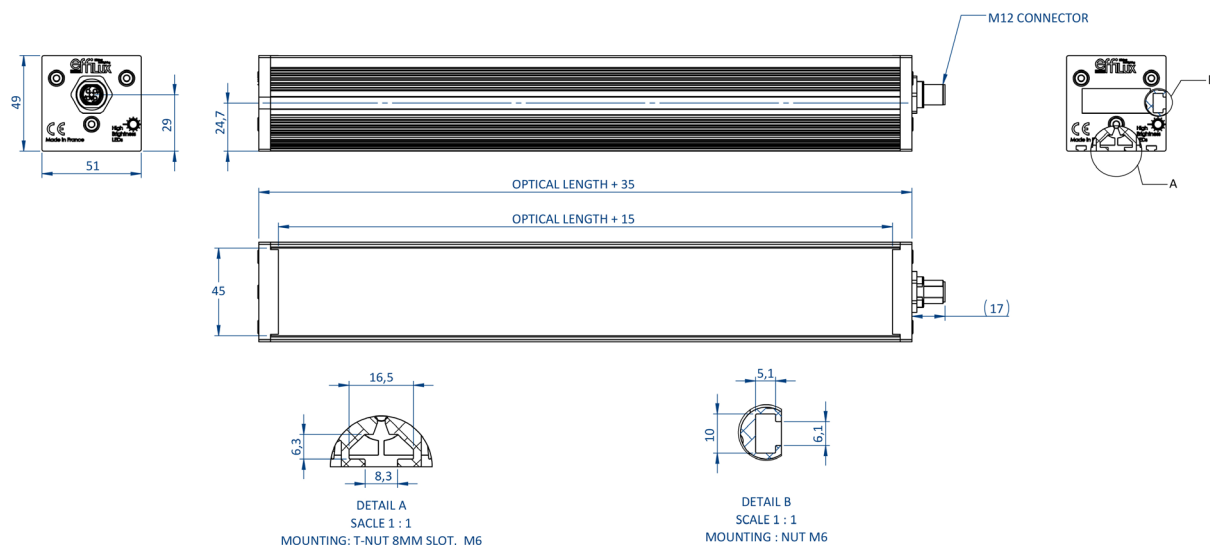
Configuration

Without linescan

With linescan

When the lens is in position P3, the polarizer and the linescan accessory cannot be used together. If necessary, a thinner polarizer is available.

### DIMENSIONS (MM)



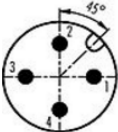
The ELBC Series is delivered with two M6 T-nuts.

## ELECTRONICAL SPECIFICATIONS

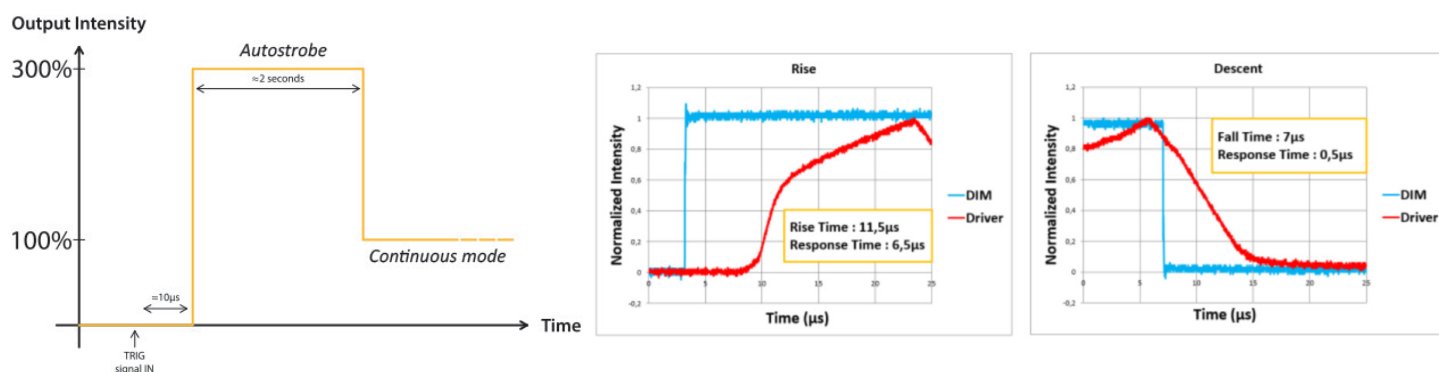


## Connector pinout

The ELBC Series requires 24V DC input power. Note the trigger pin **needs to be connected** either to the 24V DC signal for Continuous mode or to a PNP Trigger signal for Overdrive strobe mode.

Connector pinout	Number	Color Contact	Designation
 <p>M12 male connector</p>	1	Brown	+24V DC
	2	White	N/A
	3	Blue	GND
	4	Black	<b>PNP TRIGGER [trigger for rising edge] for Auto-strobe</b> Light ON if $V_{PNP} > 3V$ DC (max 24V DC)

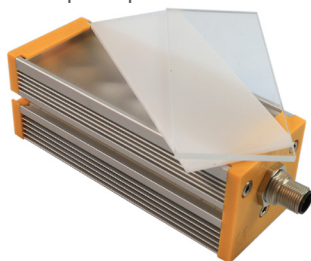
## Autostrobe feature



**Note:** Use a duty cycle lower than 30% in strobe mode.

## PRODUCT LINE UP - PACKAGES

The standard ELBC Series is delivered as a package including: SD, DF and CW diffusers, lens plate, and light. The light is delivered assembled in the default configuration with the lens plate positioned at P2 and the SD diffuser.



### ELBC Series

Series	Part Number	Color	Wavelength / Color temperature	Max Power Consumption		Connector	Weight	Optical Length (L <sub>op</sub> )
				Strobe	Continuous			
ELBC	ELBC-60SW	White	5500 K ± 500 K	15W	6W	M12	300g	60mm
ELBC	ELBC-60BL	Blue	465nm	15W	6W			
ELBC	ELBC-60GR	Green	525nm	15W	6W			
ELBC	ELBC-60RD	Red	625nm	15W	6W			
ELBC	ELBC-60IR	Infrared	850nm	10W	4W			
ELBC	ELBC-100SW	White	5500 K ± 500 K	20W	8W	M12	400g	100mm
ELBC	ELBC-100BL	Blue	465nm	20W	8W			
ELBC	ELBC-100GR	Green	525nm	21W	9W			
ELBC	ELBC-100RD	Red	625nm	18W	8W			
ELBC	ELBC-100IR	Infrared	850nm	15W	6W			
ELBC	ELBC-300SW	White	5500 K ± 500 K	60W	20W	M12	1000g	300mm
ELBC	ELBC-300BL	Blue	465nm	55W	20W			
ELBC	ELBC-300GR	Green	525nm	62W	21W			
ELBC	ELBC-300RD	Red	625nm	45W	15W			
ELBC	ELBC-300IR	Infrared	850nm	35W	12W			

## OPTICAL ACCESSORIES

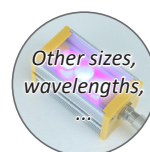
Type	Part Number	Applicable LED Unit
POLARIZER	PL-ELBC-60-HDY	ELBC-60
	PL-ELBC-100-HDY	ELBC-100
	PL-ELBC-300-HDY	ELBC-300
LINESCAN KIT	CL-ELB-300-KIT	ELBC-300

For cables refer to the ECB cables datasheet.

For fasteners refer to the BK-EL fasteners datasheet.

## CUSTOM - ON REQUEST

### OPTIONS AVAILABLE ON REQUEST



### EXAMPLE OF CUSTOM



## EU DIRECTIVE



In accordance with EU machinery directive, EMC directive, and low voltage directive, machines and electronic devices not marked with the CE logo are subject to distribution restrictions within the EU. All EL Series products will maintain the EU mandate compatibility of our customers' machinery and electronic devices.

## ROHS DIRECTIVE

All products from the EL Series comply with the RoHS Directive.

## CONTACT INFORMATION

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