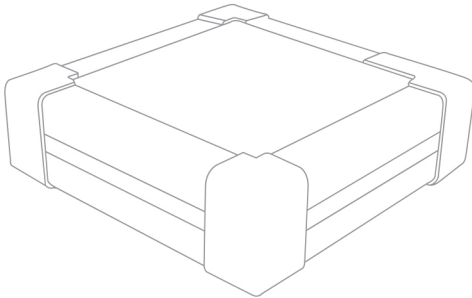


**HOMOGENEOUS BACKLIGHT**

**ELF SERIES**



The ELF Series offers large area **backlights** with high uniformity and is designed with **high powered LED**.

It offers a **homogeneity** of more than 90% on the emitting surface, making it ideal for applications where uniform and diffused illumination is key. This gives the user the ability to accurately see shapes of work pieces in their application.

The ELF Series is designed with an **integrated controller**, offering intensity control to the user.

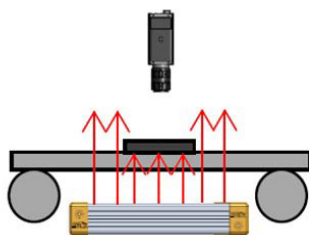
**MAIN FEATURES**

- Intense and homogeneous illumination
- Anti-reflection coating on the diffusive window
- Standard connections and fasteners
- Long life time and few maintenance



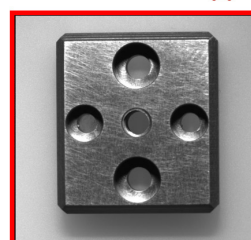
Connector	M12 - 4 contacts or M12P - 4 contacts (depending on the size)
Power supply	24V DC
Illumination mode	Continuous with a DIM process [0-24V] - Analog voltage or Strobe mode
Cable length	500mm
Available wavelength	White, Blue, Red, IR
Available sizes	From 200mmx200mm to 600mmx600mm
Thickness	43.2mm
Fastener	Built-in M6 T-nut slot profile
Material	Device body: Aluminum alloy & ABS; Window: Acrylic
Working temperature	0° to 50° C
IP code	IP50

**APPLICATIONS**

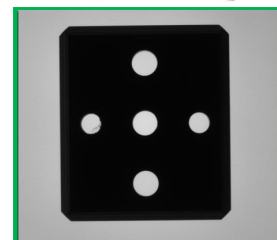


Inspection & Robotics

Direct illumination ❌

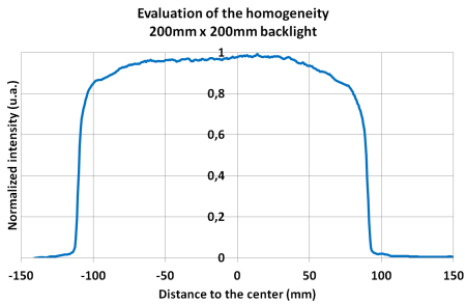


ELF backlight illumination ✅

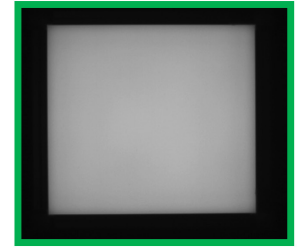
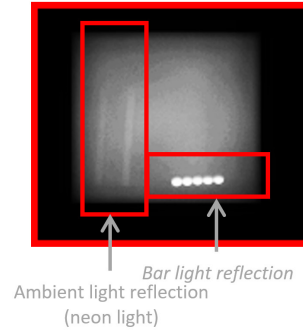


## OPTICAL CONSIDERATIONS

### Homogeneity

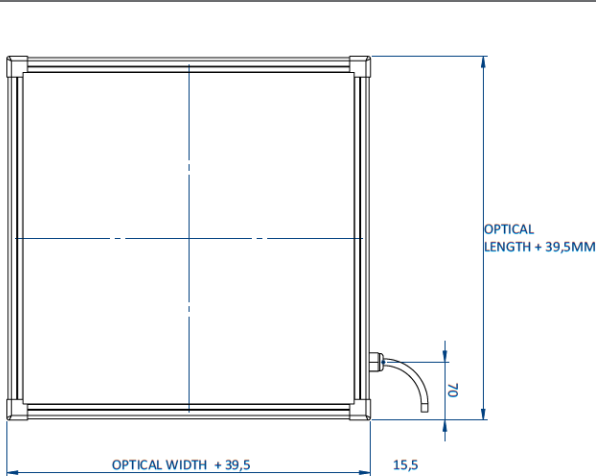


### Anti-reflection surface



EFFI-BL has an anti-reflection system which reduces reflections of parasite lighting around the system.

## DIMENSIONS (MM)



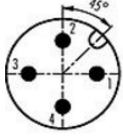
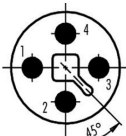
Length M12 Cable (Cable gland → Connector) : 500mm

## ELECTRONICAL SPECIFICATIONS

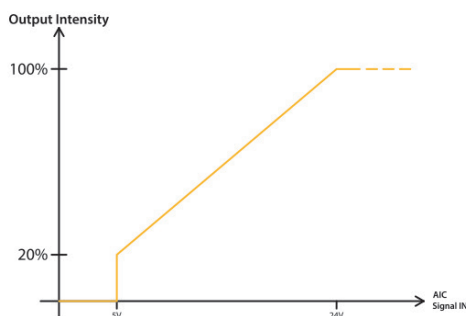


### Contact arrangement

When using the ELF Series, please use a 24V DC. Please note that needs AIC contact to be connected when using the ELF Series.

Contact arrangement	Number	Color Contact	Designation
 M12 male connector  M12 Power male connector  <small>TYPE OF CONNECTOR DEPENDS ON THE SIZE OF THE ELF</small>	1	Brown	+24V
	2	White	n.a.
	3	Blue	GND
	4	Black	<b>AIC: Analog Intensity Control for Dimming Control</b> Consumption depending on the size (between 0.3mA to 10mA) max 24V - Analog Voltage

### Dimming control feature



## PRODUCT LINE UP

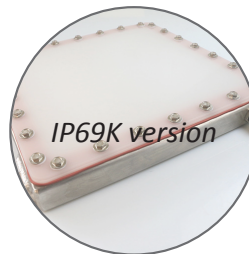
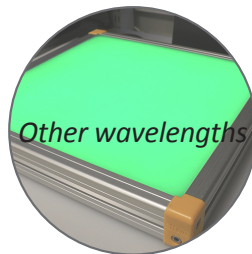
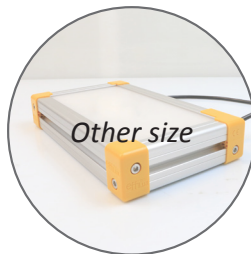
Series	Part Number	Color	Wavelength / Color temperature	Max Power Consumption	Connector	Weight	Optical Width	Optical Length
ELF	ELF-200X200SW	White	5500 K ± 500 K	30W	M12	1 900g	200mm	200mm
ELF	ELF-200X200BL	Blue	465nm					
ELF	ELF-200X200RD	Red	625nm					
ELF	ELF-200X200IR	Infrared	850nm					
ELF	ELF-300X300SW	White	5500 K ± 500 K	65W	M12	3 500g	300mm	300mm
ELF	ELF-300X300BL	Blue	465nm					
ELF	ELF-300X300RD	Red	625nm					
ELF	ELF-300X300IR	Infrared	850nm					
ELF	ELF-400X400SW	White	5500 K ± 500 K	110W	M12P	5 000g	400mm	400mm
ELF	ELF-400X400BL	Blue	465nm					
ELF	ELF-400X400RD	Red	625nm					
ELF	ELF-400X400IR	Infrared	850nm					
ELF	ELF-500X500SW	White	5500 K ± 500 K	175W	M12P	7 900g	500mm	500mm
ELF	ELF-500X500BL	Blue	465nm					
ELF	ELF-500X500RD	Red	625nm					
ELF	ELF-500X500IR	Infrared	850nm					
ELF	ELF-600X600SW	White	5500 K ± 500 K	250W	M12P	12 800g	600mm	600mm
ELF	ELF-600X600BL	Blue	465nm					
ELF	ELF-600X600RD	Red	625nm					
ELF	ELF-600X600IR	Infrared	850nm					

For cables cf. the datasheet of the ECB cables series.

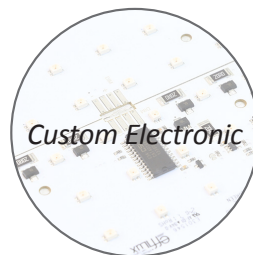
For fasteners cf. the datasheet of the BK fasteners series.

## 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. These 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.

## MICRO WEBSITE

[www.el-series.com](http://www.el-series.com)



**Vision Light Tech**  
creating optical solutions