

LINESCAN HOMOGENEOUS FLAT LIGHT

ELFB SERIES



The ELFB Series is a line light with **high uniformity**, ideal for **linescan** applications where high uniformity is key.

Whether it is used as a front light or back light, the ELFB Series is flexible in its use. As such, it can be used for applications such as paper inspection, but also for inspection for foreign materials on clear film.

The ELFB Series is designed with an **integrated dimming controller**, allowing for easy intensity adjustments.

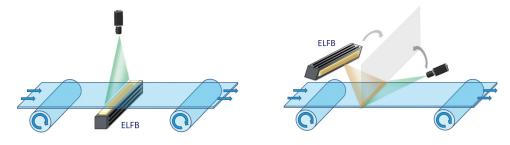
MAIN FEATURES

Very intense and uniform linescan LED light illumination Anti-reflection coating on the emitting surface Standard connections and fasteners Long life time and minimal maintenance



Connector	M12 - 4 contacts or M12P - 4 contacts (depending on the length)		
Power supply	24VDC		
Illumination mode	Continuous with a DIM process [0-24V] - Analog voltage or Strobe mode		
Electronic mode	Dimming control [0-24V]		
Available wavelength	White, Blue, Green, Red, IR		
Available sizes	From 100mm to 1600mm		
Width x height	51mm x 49mm		
Fastener	One rail for M4 T-nut on the back and one rail for M6 T-nut on the side		
Material	Device body: Aluminum alloy & ABS; Window: Acrylic		
Working temperature	0° to 50° C		
IP code	IP50		

APPLICATIONS

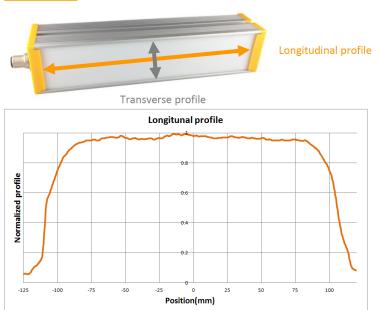


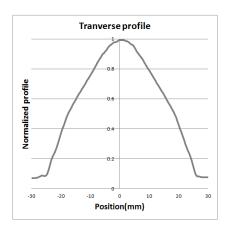
Linescan Inspection



OPTICAL CONSIDERATIONS

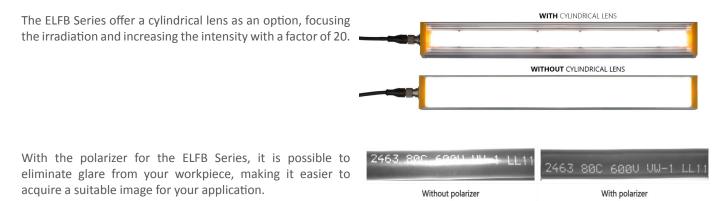
Homogeneity



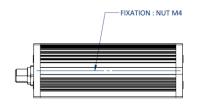


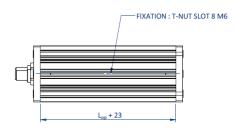
Longitudinal profil for the ELFB-200SW.

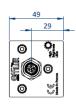
Optical options



DIMENSIONS (MM)









DIRECT ILLUMINATION

ELECTRONICAL SPECIFICATIONS

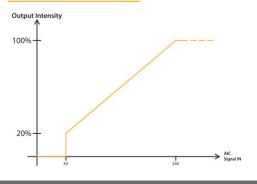
Contact arrangement

When using the ELFB Series, please use a 24VDC power supply.

Please note that the AIC contact needs to be connected when using the ELFB Series.

Contact arrangement	Number	Color Contact	Designation
	1	Brown	+24V
	2	White	n.a.
M12 male connector M12 Power male connector	3	Blue	GND
TYPE OF CONNECTOR DEPENDS ON THE SIZE OF THE ELFB	4	Black	AIC: Analog Intensity Control for Dimming Control Consumption : 0.5mA every 500mm length Suggested dimming range: min 5V - max 24V

Dimming control feature



PRODUCT LINE UP

The power consumption is given for white products, and may differ for other wavelengths. The power consumption will be specified on the products.

Series	Part Number	Color	Wavelength / Color temperature	Max Power Consumption	Connector	Weight	Optical Length (L _{op})	
ELFB	ELFB-100SW	White	5500 K ± 500 K					
ELFB	ELFB-100BL	Blue	465nm		M12	400g	100mm	
ELFB	ELFB-100GR	Green	525nm	5W				
ELFB	ELFB-100RD	Red	625nm					
ELFB	ELFB-100IR	Infrared	850nm					
ELFB	ELFB-200SW	White	5500 K ± 500 K					
ELFB	ELFB-200BL	Blue	465nm		M12	700g	200mm	
ELFB	ELFB-200GR	Green	525nm	10W				
ELFB	ELFB-200RD	Red	625nm					
ELFB	ELFB-200IR	Infrared	850nm					
ELFB	ELFB-300SW	White	5500 K ± 500 K		M12	1000g	300mm	
ELFB	ELFB-300BL	Blue	465nm					
ELFB	ELFB-300GR	Green	525nm	15W				
ELFB	ELFB-300RD	Red	625nm					
ELFB	ELFB-300IR	Infrared	850nm					
ELFB	ELFB-400SW	White	5500 K ± 500 K		M12	1300g	400mm	
ELFB	ELFB-400BL	Blue	465nm					
ELFB	ELFB-400GR	Green	525nm	20W				
ELFB	ELFB-400RD	Red	625nm					
ELFB	ELFB-400IR	Infrared	850nm					
ELFB	ELFB-500SW	White	5500 K ± 500 K					
ELFB	ELFB-500BL	Blue	465nm					
ELFB	ELFB-500GR	Green	525nm	25W	M12	1600g	500mm	
ELFB	ELFB-500RD	Red	625nm					
ELFB	ELFB-500IR	Infrared	850nm					





ELFB	ELFB-600SW ELFB-600BL ELFB-600GR ELFB-600RD ELFB-600IR ELFB-700SW ELFB-700BL ELFB-700GR ELFB-700RD ELFB-700R ELFB-700IR ELFB-700IR ELFB-800SW ELFB-800GR ELFB-800GR ELFB-800RD ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800SW ELFB-900SW ELFB-900BL ELFB-900BL	White Blue Green Red Infrared White Blue Green Red Infrared White Blue Green Red Infrared White	temperature 5500 K ± 500 K 465nm 525nm 625nm 850nm 5500 K ± 500 K 465nm 525nm 625nm 5500 K ± 500 K 465nm 525nm 625nm 850nm 5500 K ± 500 K 465nm 5500 K ± 500 K 625nm 625nm 625nm 625nm 625nm 850nm	30W 35W 40W	M12 M12 M12	1900g 2200g 2500g	600mm 700mm 800mm	
ELFB	ELFB-600GR ELFB-600RD ELFB-600R ELFB-700SW ELFB-700BL ELFB-700GR ELFB-700RD ELFB-700IR ELFB-800SW ELFB-800BL ELFB-800GR ELFB-800GR ELFB-800RD ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR	Green Red Infrared White Blue Green Red Unfrared White Blue Green Red Infrared	525nm 625nm 850nm 5500 K ± 500 K 465nm 525nm 625nm 5500 K ± 500 K 465nm 525nm 525nm 625nm	35W	M12	2200g	700mm	
ELFB ELFB	ELFB-600RD ELFB-600IR ELFB-700SW ELFB-700BL ELFB-700GR ELFB-700IR ELFB-700IR ELFB-800SW ELFB-800BL ELFB-800GR ELFB-800RD ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR	Red Infrared White Blue Green Red Infrared White Blue Green Red Infrared	625nm 850nm 5500 K ± 500 K 465nm 525nm 625nm 5500 K ± 500 K 465nm 525nm 625nm	35W	M12	2200g	700mm	
ELFB	ELFB-600IR ELFB-700SW ELFB-700BL ELFB-700RD ELFB-700IR ELFB-700IR ELFB-800SW ELFB-800BL ELFB-800GR ELFB-800RD ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR	Infrared White Blue Green Red Infrared White Blue Green Red Infrared	850nm 5500 K ± 500 K 465nm 525nm 625nm 850nm 5500 K ± 500 K 465nm 525nm 625nm					
ELFB	ELFB-700SW ELFB-700BL ELFB-700GR ELFB-700RD ELFB-700IR ELFB-800SW ELFB-800BL ELFB-800GR ELFB-800RD ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR	White Blue Green Red Infrared White Blue Green Red Infrared	5500 K ± 500 K 465nm 525nm 625nm 850nm 5500 K ± 500 K 465nm 525nm 625nm					
ELFB	ELFB-700BL ELFB-700GR ELFB-700RD ELFB-700IR ELFB-800SW ELFB-800BL ELFB-800GR ELFB-800RD ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR	Blue Green Red Infrared White Blue Green Red Infrared	465nm 525nm 625nm 850nm 5500 K ± 500 K 465nm 525nm 625nm					
ELFB	ELFB-700GR ELFB-700RD ELFB-700IR ELFB-800SW ELFB-800GR ELFB-800GR ELFB-800GR ELFB-800RD ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-900SW ELFB-900BL	Green Red Infrared White Blue Green Red Infrared	525nm 625nm 850nm 5500 K ± 500 K 465nm 525nm 625nm					
ELFB	ELFB-700RD ELFB-700IR ELFB-800SW ELFB-800GR ELFB-800GR ELFB-800GR ELFB-800RD ELFB-800IR ELFB-800IR ELFB-800IR ELFB-800IR ELFB-900SW ELFB-900BL	Red Infrared White Blue Green Red Infrared	625nm 850nm 5500 K ± 500 K 465nm 525nm 625nm					
ELFB	ELFB-700IR ELFB-800SW ELFB-800GR ELFB-800GR ELFB-800RD ELFB-800IR ELFB-800IR ELFB-900SW ELFB-900BL	Infrared White Blue Green Red Infrared	850nm 5500 K ± 500 K 465nm 525nm 625nm	40W	M12	2500g	800mm	
ELFB	ELFB-800SW ELFB-800BL ELFB-800GR ELFB-800RD ELFB-800IR ELFB-900IR ELFB-900BL	White Blue Green Red Infrared	5500 K ± 500 K 465nm 525nm 625nm	40W	M12	2500g	800mm	
ELFB ELFB ELFB ELFB ELFB ELFB ELFB ELFB ELFB	ELFB-800BL ELFB-800GR ELFB-800RD ELFB-800IR ELFB-900SW ELFB-900BL	Blue Green Red Infrared	465nm 525nm 625nm	40W	M12	2500g	800mm	
ELFB ELFB ELFB ELFB ELFB ELFB ELFB	ELFB-800GR ELFB-800RD ELFB-800IR ELFB-900SW ELFB-900BL	Green Red Infrared	525nm 625nm	40W	M12	2500g	800mm	
ELFB ELFB ELFB ELFB ELFB ELFB	ELFB-800RD ELFB-800IR ELFB-900SW ELFB-900BL	Red Infrared	625nm	40W	M12	2500g	800mm	
ELFB ELFB ELFB ELFB	ELFB-800IR ELFB-900SW ELFB-900BL	Infrared						
ELFB ELFB ELFB ELFB	ELFB-900SW ELFB-900BL		850nm					
ELFB ELFB ELFB	ELFB-900BL	White						
ELFB ELFB	ELFB-900BL	1	5500 K ± 500 K					
ELFB ELFB		Blue	465nm				900mm	
ELFB		Green	525nm	45W	M12	2800g		
	ELFB-900RD	Red	625nm			20005		
	ELFB-900IR	Infrared	850nm					
ELFB	ELFB-1000SW	White	5500 K ± 500 K					
ELFB	ELFB-1000BL	Blue	465nm		M12	3100g	1000mm	
ELFB	ELFB-1000GR	Green	525nm	50W				
ELFB	ELFB-1000RD	Red	625nm					
ELFB	ELFB-1000IR	Infrared	850nm					
ELFB	ELFB-1100SW	White	5500 K ± 500 K		M12	3400g	1100mm	
ELFB	ELFB-1100BL	Blue	465nm	- - 55W				
ELFB	ELFB-100GR	Green	525nm					
ELFB	ELFB-1100RD	Red	625nm					
ELFB	ELFB-1100IR	Infrared	850nm					
ELFB	ELFB-1200SW	White	5500 K ± 500 K		M12	3700g	1200mm	
ELFB	ELFB-1200BL	Blue	465nm					
ELFB	ELFB-1200GR	Green	525nm	60W				
ELFB	ELFB-1200RD	Red	625nm					
ELFB	ELFB-1200IR	Infrared	850nm					
ELFB	ELFB-1300SW	White	5500 K ± 500 K					
ELFB	ELFB-1300BL	Blue	465nm		M12	4000g	1300mm	
ELFB	ELFB-1300GR	Green	525nm	65W				
ELFB	ELFB-1300RD	Red	625nm					
ELFB	ELFB-1300IR	Infrared	850nm	-				
ELFB	ELFB-1400SW	White	5500 K ± 500 K					
ELFB	ELFB-1400BL	Blue	465nm		M12	4300g	1400mm	
ELFB	ELFB-1400GR	Green	525nm	70W				
ELFB	ELFB-1400RD	Red	625nm					
ELFB	ELFB-1400IR	Infrared	850nm					
ELFB	ELFB-1500SW	White	5500 K ± 500 K					
ELFB	ELFB-1500BL	Blue	465nm		M12 4		1500mm	
ELFB	ELFB-1500GR	Green	525nm	75W		4600g		
ELFB	ELFB-1500RD	Red	625nm				1500mm	
ELFB	ELFB-1500IR	Infrared	850nm					
ELFB	ELFB-1600SW	White	5500 K ± 500 K					
ELFB	ELFB-1600BL	Blue	465nm					
ELFB	ELFB-1600BL	Green	525nm	80W	M12P	4900g	1600mm	
ELFB	ELFB-1600GR	Red	625nm		IVI12F	49008	1600mm	
ELFB	ELFB-1600RD	Infrared	850nm					



OPTICAL ACCESSORIES

Polarizer				
Part Number	Applicable LED Unit			
PL-ELB-100	ELB-100 / ELFB-100			
PL-ELB-200	ELB-200 / ELB-L2-200 / ELFB-200			
PL-ELB-300	ELB-300 / ELFB-300			
PL-ELB-400	ELB-400 / ELB-L2-400 / ELFB-400			
PL-ELB-500	ELB-500 / ELFB-500			
PL-ELB-600	ELB-600 / ELB-L2-600 / ELFB-600			
PL-ELB-700	ELB-700 / ELFB-700			
PL-ELB-800	ELB-800 / ELB-L2-800 / ELFB-800			
PL-ELB-900	ELB-900 / ELFB-900			
PL-ELB-1000	ELB-1000 / ELB-L2-1000 / ELFB-1000			
PL-ELB-1100	ELB-1100 / ELFB-1100			
PL-ELB-1200	ELB-1200 / ELB-L2-1200 / ELFB-1200			
PL-ELB-1300	ELB-1300 / ELFB-1300			
PL-ELB-1400	ELB-1400 / ELB-L2-1400 / ELFB-1400			
PL-ELB-1500	ELB-1500 / ELFB-1500			
PL-ELB-1600	ELB-1600 / ELB-L2-1600 / ELFB-1600			

For cables, please refer to the datasheet of the ECB cables series. For fasteners and camera supports, please refer to 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 LED illumination products excluding power supply conform to corresponding EN regulations. 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.