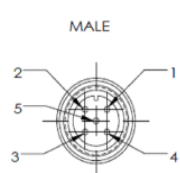
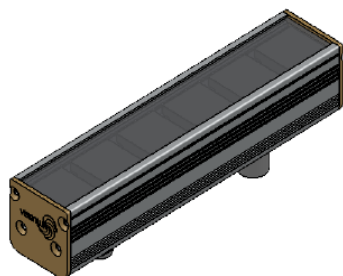
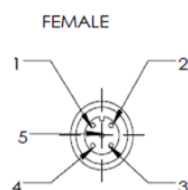


HBL3-00-160-1-W-24V

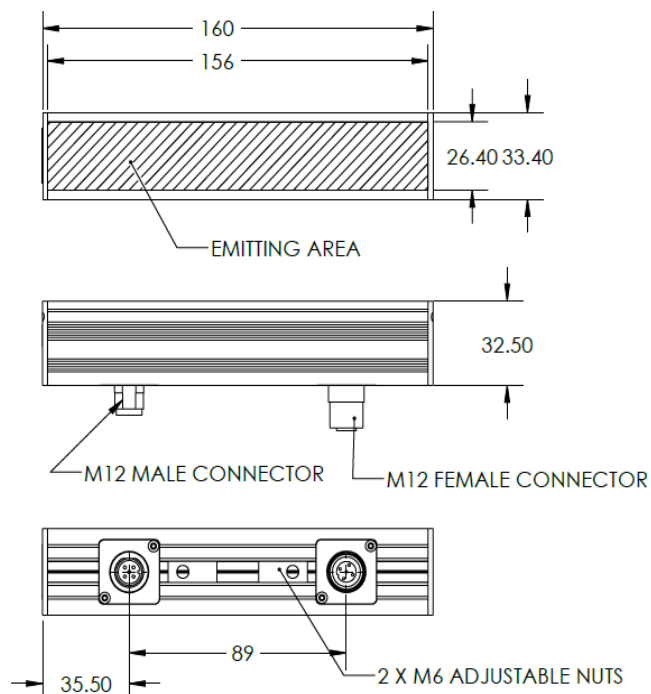
Lighting Dimension



PIN 1	BROWN	24V
PIN 2	WHITE	-
PIN 3	BLUE	GND
PIN 4	BLACK	-
PIN 5	GRAY	-





PIN 1	BROWN	24V
PIN 2	WHITE	-
PIN 3	BLUE	GND
PIN 4	BLACK	-
PIN 5	GRAY	-



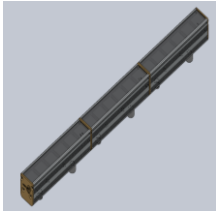

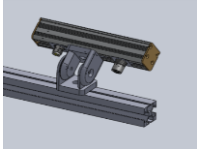
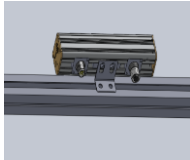
Mechanical Information	
Casing Material	Aluminium
Storage & Operating Temperature Range	Temp 0-60°C, Humidity 20-85%
Weight	270 g
Length / Outer Diameter	160 mm
Width / Inner Diameter	33.4 mm
Thickness / Height	32.5 mm



HBL3-00-160-1-W-24V

Optical Information											
Part Number		HBL3-00-160-1-W-24V									
LED Colour		WHITE									
Wavelength	(nm)	*Refer to the Chromaticity Table below									
Intensity (±15%)	(Lux)	5481					3402				
Working Distance	(mm)	300					400				
Illumination (number of rows)		1									
Illumination Active Area											
Active Length / Outer Diameter	(mm)	156									
Active Width / Inner Diameter	(mm)	26.4									
Emission Angle	(deg.)	0									
Eye Safety Class (IEC62471)		EXEMPT									
*CHROMATICITY TABLE		X	0.296	0.287	0.307	0.311	X	0.311	0.307	0.33	0.33
		Y	0.276	0.295	0.315	0.294	Y	0.294	0.315	0.339	0.318
Electrical Information											
Lighting Supply Voltage (constant voltage mode)		24V ± 2%									
Continuous Current	(mA)	160									
Power Consumption	(W)	3.84									
Lighting Casing Temperature, Operating after 60 minutes	°C	53.6									
Strobe Mode Specification											
Pulse Operation		YES									
Max. Lighting Supply Voltage (constant voltage power supply)	(V)	Pulsing at 24VDC to 48VDC, 0-10% Duty Cycle Recommended at 36VDC									
Pulse Current, (Max. 10 msec) (constant current power supply)	(mA)	480									
Max. Trigger Pulse Duration	(msec)	10									
Duty Cycle		0-10%									
Additional Information											
Additional Cooling Method		Attached to machine part for better heat dissipation									
Intensity Controller Selection		SD/SDA-Series									
CE Conformity		YES									
RoHS Compliance		YES									
Connection											
Connector Type (default)		M12 5PIN MALE CONNECTOR					M12 5 PIN FEMALE CONNECTOR				
Cable Length (out from lighting)	(mm)	-					-				
Pin Configuration		Pin	Colour	Signal		Pin	Colour	Signal			
		1	Brown	24V		1	Brown	24V			
		2	White	-		2	White	-			
		3	Blue	GND		3	Blue	GND			
		4	Black	-		4	Black	-			
		5	Gray	-		5	Gray	-			
											
Extension Cable											
Connector Type (default)		M12 5 PIN CONNECTOR (FEMALE)									
Part Number		EXT-FL-M12F-3M-24V									
Cable Length (out from female connector)	(mm)	3000									
Extension Cable (connect to M12 5 Pin Male Connector from lighting)											
Application											
Illumination Type		High Luminosity Line Bar Light									
Application Use		Robotic picking, inspection for parts identification & missing parts, visual inspection for large workpiece, measuring stamp dimensions for press products									

HBL3-00-160-1-W-24V

Advantages	
Cascade Illuminator	 
Easy Mounting	<div> Join Bracket (Angle Mount)  </div> <div> L-shaped Plate (Horizontal Mount)  </div>

Uniform Graph (Relative Irradiation Strength) - Representative pattern

LENS FOCAL LENGTH, F = 6 mm

CWD = 400 mm

LWD = 400 mm

Lighting Angle = 20°

COLOUR	TOLERANCE	L X W
Yellow	± 15 %	130 X 120
Green	± 20 %	155 X 135
Blue	± 25 %	175 X 160
Purple	± 30 %	430 X 320

A schematic diagram of the experimental setup. A camera is positioned vertically at a distance CWD from a horizontal target surface. A lighting source is positioned at a distance LWD from the same target surface, angled at 20.00° relative to the vertical axis. The target surface is indicated by a hatched line at the bottom.

A uniform graph representing the irradiation strength pattern. It features a central yellow circle, surrounded by concentric rings of green, blue, and purple, all set against a dark purple background. The pattern is composed of a fine grid of small squares.

* Each individual box is 5 X 5 mm.

**Disclaimer : The graph portrayed is for reference only and does not in any way guarantee the quality of this product.*