

# WIN THE BATTLE OF BRIGHTNESS VS HOMOGENEITY !



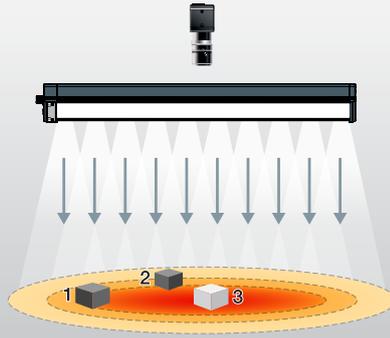
## EBAR Curve



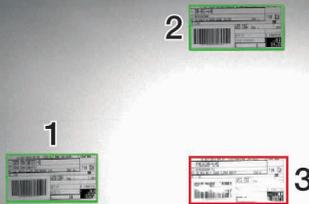
**EASILY**  
ILLUMINATE  
THE **ENTIRE**  
FIELD OF VIEW



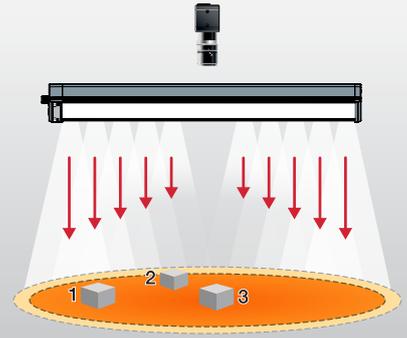
### WITH A STANDARD BAR LIGHT\*



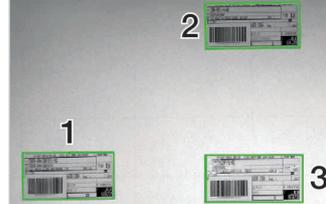
1: ✓ 2: ✓ 3: ✗



### WITH A EBAR **CURVE**\*

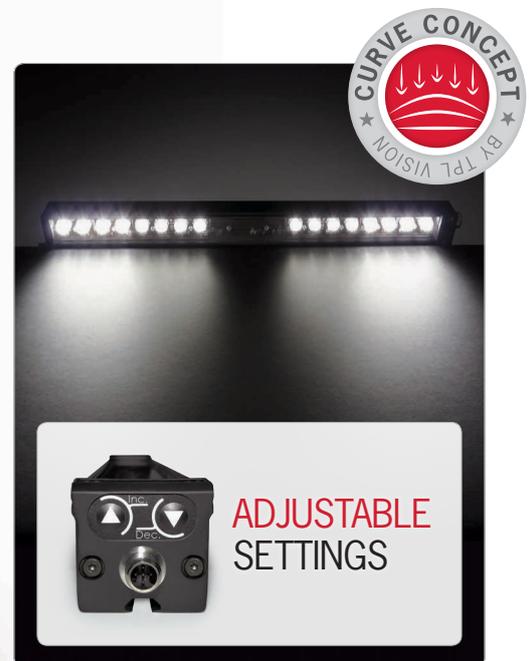
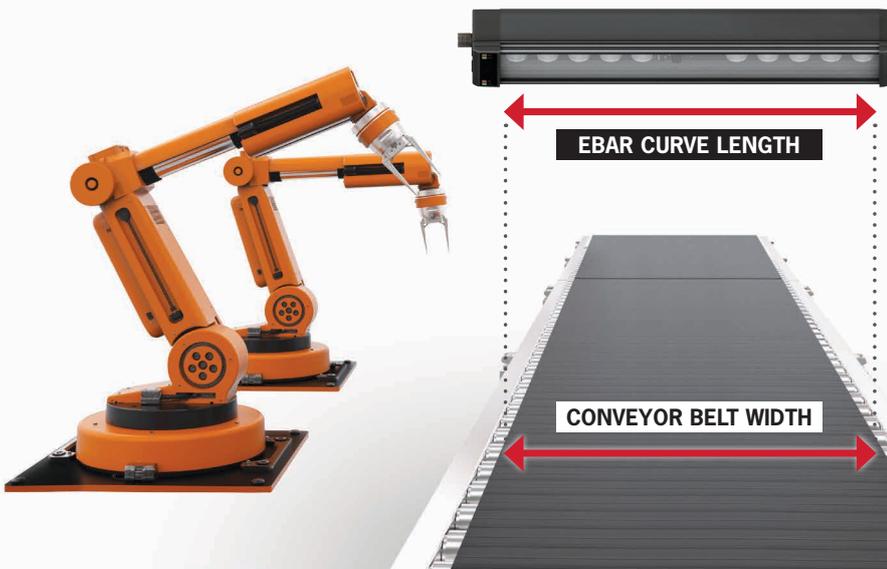


1: ✓ 2: ✓ 3: ✓



\* Homogeneity perceived by the camera.

➤ LENGTH OF EBAR CURVE = WIDTH OF CONVEYOR



The EBAR Curve is a high power LED solution. It has been developed to ease the integration process and helps you achieve the best balance between brightness and homogeneity. The curve effect works by reducing the saturated light spot in the centre of a camera's Field of View (FoV). By reducing this spot, uniform illumination across the FoV can be achieved. This new development in machine vision illumination allows for smaller barlights to be used, giving you savings spatially and economically.

The EBAR Curve has manually adjustable Curve settings for increasing and decreasing the brightness of the centre LEDs to fine tune your results. We have given recommendations to follow for the working distance and the FoV that will be generated. The product will increase productivity and efficiency through time savings, high quality results and an increased FoV per barlight.

The selection process is simple, find your required FoV and follow the part configurator to select the best solution for you.

## APPLICATION EXAMPLES:

<ul style="list-style-type: none"> <li>&gt; CODE READING</li> <li>&gt; PICK &amp; PLACE</li> <li>&gt; QUALITY INSPECTION</li> </ul>	<b>STANDARD</b>			
	<b>CURVE</b>			

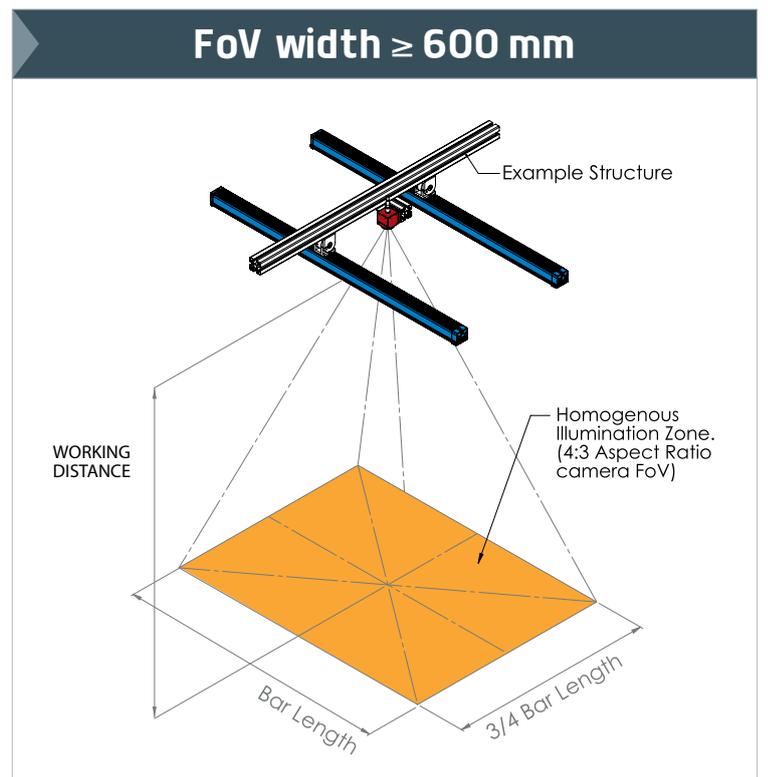
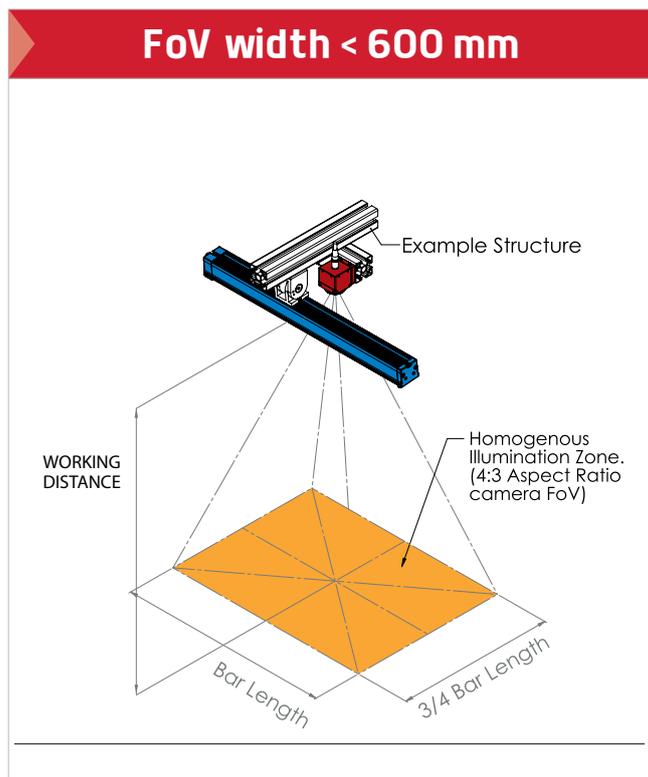
## HOW TO SELECT THE CORRECT SIZE:

> **FOV WIDTH** = EBAR LENGTH

> **WORKING DISTANCE** = EBAR LENGTH **x 1.25**

> **FOV DEPTH** = EBAR LENGTH **x 0.75**

Recommended setup according to FoV dimensions:



## EBAR CURVE PART NUMBER CONFIGURATOR:

EBAR	VERSION	USEFUL DIMENSION	COLOUR	LENS/ OPTIC ANGLE
	<b>C</b> CURVE	200	<b>WHI</b> 	<b>17</b> ± 17°
		300	<b>630</b> 	
		400	<b>525</b> 	
		500	<b>470</b> 	
		600*	<b>850</b> 	
		800*		
		1000*		

### EXAMPLE PART NUMBER:

EBAR Curve 300 mm white LED ± 17° lenses → **EBAR-C-300-WHI-17**  
 EBAR Curve 500 mm red LED ± 17° lenses → **EBAR-C-500-630-17**  
 EBAR Curve 800 mm blue LED ± 17° lenses → **EBAR-C-800-470-17**

\* 600, 800 and 1000 mm Bars require 2 bars to fill the full FoV.

## DIFFUSORS:

DIFFUSER	BAR	DIMENSION
<b>DT</b> TRANSPARENT		200
<b>DO</b> OPAQUE		300
<b>DS</b> SATIN		400
<b>POL</b> POLARIZER		500
		600
		800
		1000

### EXAMPLE PART NUMBER:

Transparent diffuser for EBAR Curve 300 mm:  
 → **DT-BAR-300**  
 Satin diffuser for EBAR Curve 600 mm:  
 → **DS-BAR-600**



## MOUNTING DEVICES:



## CABLES:

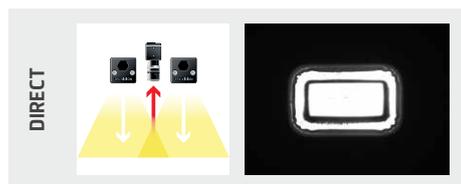
**M12 female 5 pins cable**

<b>2 meters</b>	Ref: C-M12-5P-2M
<b>5 meters</b>	Ref: C-M12-5P-5M
<b>10 meters</b>	Ref: C-M12-5P-10M

## PROTECTION:



## LIGHTING METHODS



## TECHNICAL SPECIFICATIONS:

	200	300	400	500	600	800	1000
<b>Electronics</b>							
Power supply	24 VDC $\pm$ 10%						
Max. Consumption (W)	11	16	22	26.5	27	41	54
Modes	CW and Strobe (Trigger PNP or NPN)						
Overdrive	No						
Maximum rising time	15 $\mu$ s						
Maximum falling time	15 $\mu$ s						
Wiring	1x male M12 – 5 poles						
<b>Colours</b>							
Colours	White ; 470 ; 525 ; 630 ; 850						
<b>Mechanics</b>							
Useful length (mm)	200	300	400	500	600	800	1000
Overall length (mm)	233	333	433	533	633	833	1033
Width x Height (mm)	47.6 x 45						
Body materials	Aluminum						
Window	Transparent protective window						
Fixing	2 M4 nuts to insert in the groove located on the back of the light or directly use M4 screws						
<b>Environment</b>							
Operating temperature	-10° to +40°C / 80% of humidity without condensation No thermal shock (max temperature variation: 10°C in 24h)						
Storage temperature	-20° to +60°C / 80% of humidity without condensation No thermal shock (max temperature variation: 10°C in 24h)						
IP protection	IP 65						
Labels	RoHS-CE-DEEE						

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#### Other available documents :

- PDF, DWG, DXF, STEP DRAWINGS (on demand)
- USER GUIDE

**EBAR CURVE**

