

# BKN SERIES

## Linear backlights

Backlight system for linescan sensors in applications that inspect materials manufactured in continuous such as paper, cloth, glass or wire mesh. The light produced by BKN system is very intense, diffuse and homogeneous to inspect object's shape, transmittance or impurities.

### Technical specifications<sup>1</sup>






Lighting model	BKN0nn*0A	BKN2nn*0A
Dimensions	Length (L) = 100 x nn + 30 Width = 29.5	Length (L) = 100 x nn + 50 Width = 36
Active surface	Length (L) = 100 x nn Width = 5	Length (L) = 100x nn Width = 16
Weight	60g + (97.5g x nn)	90g + (440g x nn/2)
IP rating	IP40	IP40
Mounting holes	nn x M3I5	T-nut 8mm along aluminium profile
Connection (Type C)	2P aerial male connector. L= 150mm. PIN 1 = +24V ±3% PIN 2 = 0V	2P Flying leads L= 3000m. PIN 1 = +24V ±3% PIN 2 = 0V
Power cable (Not-included)	VCB Series	N/A
Modifiers <sup>2</sup>	N/A	N/A
Accessories <sup>3</sup>	N/A	N/A
iBlueDrive tech.	N/A	N/A

(\*) Customizable lighting system composed by segments of 200mm of light emission window. The required length for each application is assembled from manufacturing preserving light homogeneity. The lighting model name will depend on the number of segments and will be composed as it is shown in the table below:

Lighting model	nn	L = n x 100mm (Length)
BKN0020A / BKN2020A	02	200
BKN0040A / BKN2040A	04	400
BKN0nn0A / BKN2nn0A	nn	(nn x 100)
BKN0300A / BKN2300A	30	3000

### Instantaneous consumption<sup>4</sup> (max.)

\*WT

Lighting model					BKN0nn0A	BKN2nn0A	
TYPE C 24VDC		2.65W x nn	13.75W x nn			-470C	
		2.65W x nn	13.75W x nn			-525C	
		2.05W x nn	11.6W x nn			-630C	
		2.35W x nn	N/A			-850C	
		2.65W x nn	13.75W x nn			-W00C	
TYPE P		No 'Type P' standard LED lighting systems in this series					
TYPE S		No 'Type S' standard LED lighting systems in this series					
TYPE i		No 'Type i' standard LED lighting systems in this series					

(1) Environmental specifications and iconography legend in additional annex Z1.4 and Z2 respectively.

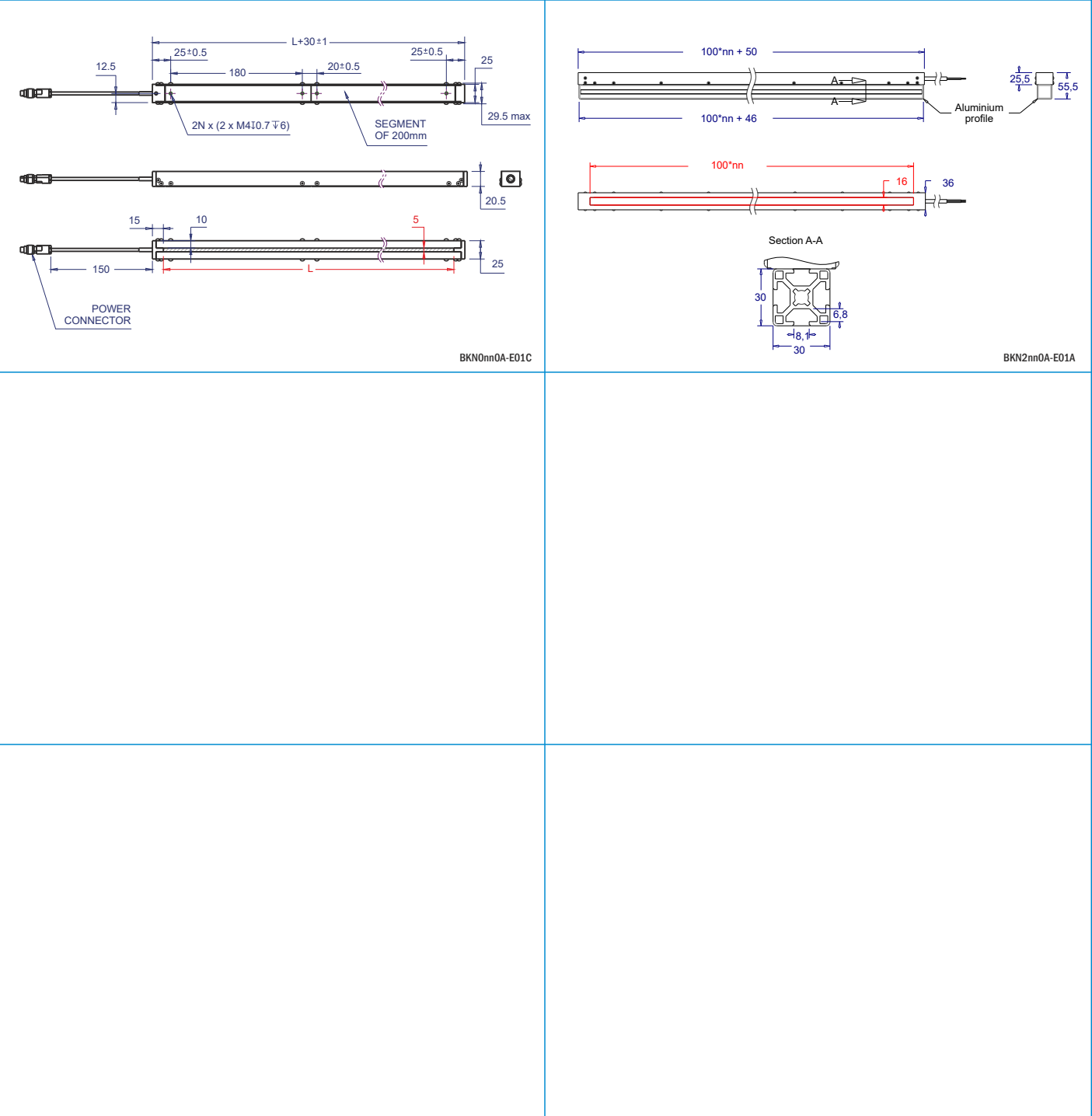
(2) Prior to manufacturing optional modifications in standard lighting systems. Please, consult the code before ordering (additional annex Z2.1).

(3) Accessories are not-included. More information in accessories section.

(4) Bear in mind that consumption table is only to be used as a guide. To refer to real values, please, consult product label when purchasing.



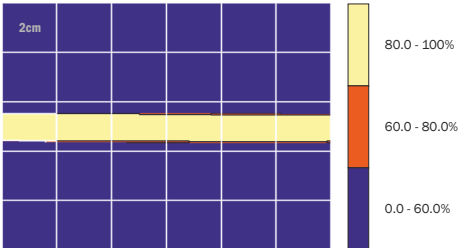
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All units in millimeters, if not indicated.





Example of BKN captured image




















Brightness distribution of BKN array section at 630C















### ► Z3.1 - Environmental Specifications

Max. Operating Humidity	85% non-condensing
Operating Temperature	0 - 40°C
Storage Temperature	0 - 60°C
Housing material	Anodized aluminium
Standards	 






### ► Z3.2 - Modifiers legend

icon	Description	Code
	Narrow angle of emission	/AN
	Medium angle of emission (default)	/AM
	Wide angle of emission	/AW
	Oval angle of emission = 23-24° (x) 17-18° (y)	/AO
	Diffuse emission	/AD
	Polarizer filter	/FPL
	Diffuser filter	/FDR
	Backlight hole of 42mm	/H
	Backlight hole of 65mm	/H1
	Dome hole of 46mm	/CC1
	Dome hole of 40mm	/CC2
	IP Rating = IPxx = IP65 / IP67	/65 / 67
	PNP input model	/P
	50mm focal Length	/F1
	150mm focal Length	/F2
	Infinite focal Length	/F3
	Lighting by sectors = 2 or 4 sectors	/2S / 4S


### ► Z3.3 - Accessories legend

icon	Description	Serie
	Power cable/s	VCB, VCC, VCD Series
	Other cable/s	VCU, VCL
	Strobe and RGB controller/s	VST, VSC Series
	Polarizer filter	VPF, VPC
	Diffuser filter	VDF
	Collimator filter on x axis	VCFx
	Collimator filter on y axis	VCFy
	Collimator filter on xy axis	VCFxy
	Darkfield converter	VRF
	Protector filter	VPT
	Heat dissipator	VHD
	Fixing bracket	VBA, VBB, VBC Series








### ► Z3.4 - Technical drawings legend

icon	Description
	Optical axis
	Viewing window dimensions
	Lighting elements
	Light emission center
	Lighting surface dimensions




### ► Z3.5 - Colours & Wavelegths legend

icon	Wavelength	Colour	Code
	365nm	UV-	-365
	400nm	UV	-400
	470nm	BLUE	-470
	525nm	GREEN	-525
	630nm	RED	-630
	850nm/880nm	IR	-850/-880
		WHITE	-W00
		RGB	-RGB

### ► Z3.6 - Types of lighting legend

icon	Description
	Radial lighting
	'Darkfield' lighting effect. Low angle illumination
	Backlight illumination
	'Cloudy day' lighting effect
	'Bright field' lighting effect
	Projector lighting
	Axial lighting

### ► Z3.7 - Types of light legend

icon	Description
	Direct light
	Diffuse light
	Ultra-diffuse light