ALU19.01





**ALU SERIES** 



# Ultra diffuse ringlights

Ringlights are used to illuminate objects from camera axis providing a ULTRA-DIFFUSE and uniform frontal light, ideal to obtain contrast and uniformity in order to inspect brightly or specular shining objects.

Eliminates brightness and shadows.

### Technical specifications¹

Lighting model	ALU0502A	ALU0704A	ALU1006A
	6	0	
Dimensions	55x55x20	75x75x22	100x100x28
Inner O	20	37	61
RWD (mm)	<115	<120	<190
Weight	85g	130g	260g
IP rating	IP40 <sup>2</sup>	IP40 <sup>2</sup>	IP40 <sup>2</sup>
Mounting holes	(x3)M4×6	(x4)M4×6	(x4)M4×6 (x3)DIN913 M5@120°
Connection	2P male chassis connector PIN 1 = +24V ±3% PIN 2 = 0V	2P male chassis connector PIN 1 = +24V ±3% PIN 2 = 0V	2P male chassis connector PIN 1 = +24V ±3% PIN 2 = 0V
Power cable (Not-included)	VCB Series	VCB Series	VCB Series
Modifiers <sup>3</sup>	N/A	N/A	N/A
Accessories <sup>4</sup>	(II) (8)	(II) (8)	(11) ⊗
iBlueDrive tech.	inline	inline	inline
iBlueDrive connection	3P aerial male inline connector. L= 715mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control <sup>5</sup>	3P aerial male inline connector. L= 715mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control <sup>5</sup>	3P aerial male inline connector. L= 715mm. PIN 1 = $+24V \pm 8\%$ PIN 2 = $0V$ PIN 3 = $0V$
iBlueDrive power cable (Not-included)	VCC Series	VCC Series	VCC Series
iBlueDrive accessories <sup>4</sup>	<b>%</b> @(1)	<b>%</b> @ <b>1</b>	<b>%</b> @ <b>①</b>

#### Instantaneous consumption<sup>6</sup> (max.)

istantancous co	niodinip	mon (max.)			VV 1
Lighting model		ALU0502A	ALU0704A	ALU1006A	
TVDE C	<b>B</b>	2.2W	3.4W	5.5W	-470C
TYPE C	G	2.2W	3.4W	5.5W	-525C
24VDC	ß	2.5W	3.8W	6.4W	-630C
	0	2.5W	3.8W	6.4W	-850C
	w	2.2W	3.4W	5.5W	-WOOC
TYPE P		No 'Type P' standard Ll	ED lighting systems in this seri	es	
TVDE C	B	350mA/8.4W	530mA/13W	880mA/21W	-470S
TYPE S	G	350mA/8.4W	530mA/13W	880mA/21W	-525\$
Dmax= ½0 Ton max= 2ms	ß	350mA/8.4W	530mA/13W	880mA/21W	-630S
1011 IIIdx = 21113	0	835mA/20W	1255mA/30W	2090mA/50W	-850\$
	w	350mA/8.4W	530mA/13W	880mA/21W	-W00S
	•	N/A	600mA/14W channel	1000mA/24W channel	-RGBS
TYPE i <sup>7</sup>	<b>B</b>	2.2W[10W/1.7W]	3.1W[15W/2.4W]	4.8W[24W/3.6W]	-470i
_	<b>G</b>	3.4W[10W/2.4W]	4.8W[15W/3.4W]	7.7W[24W/5.3W]	-525i
<b>9</b>	ß	3.4W[10W/2.4W]	4.8W[15W/3.4W]	7.7W[24W/5.3W]	-630i
iBlue	0	6.2W[20W/3.4W]	9.1W[29W/4.8W]	15W[48W/7.7W]	-850i
Drive	W	3.4W[10W/2.4W]	4.8W[15W/3.4W]	7.7W[24W/5.3W]	-W00i

N/A= Not available CUS = Custom

<sup>(7)</sup> Values of maximum instantaneous consumption of 'Type i' lighting systems in Powered mode [Strobe mode / Continuous mode]



\*WT

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

<sup>(2)</sup> IP43 if the system is positioned so that the light falls vertically.

<sup>(3)</sup> Prior to manufacturing optional modifications in standard lighting systems. Please, consult the code before ordering (additional annex Z2.1).

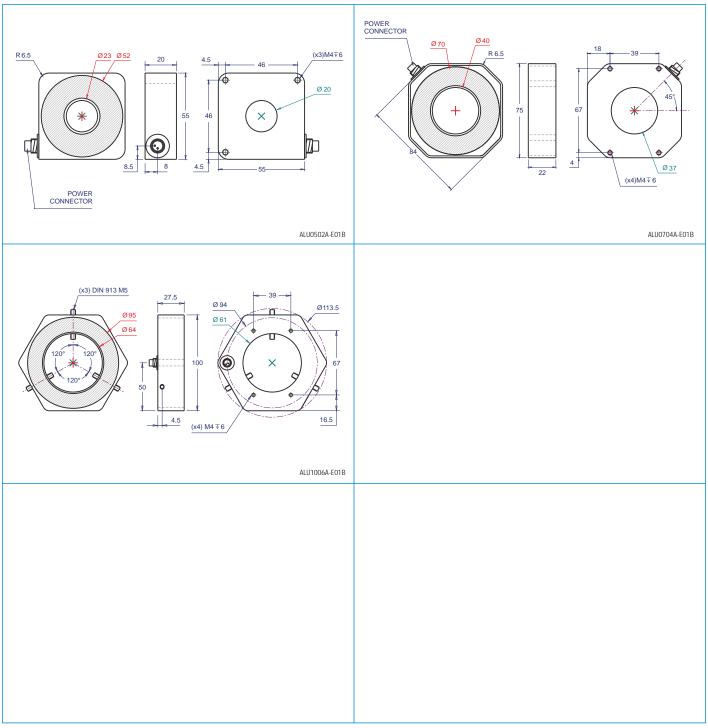
<sup>(4)</sup> Accessories are not-included. More information in accessories section.

<sup>(5)</sup> iBlueDrive control input wiring specifications in additional annex Z1.2.

<sup>(6)</sup> 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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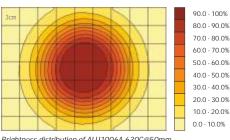
**ALU SERIES** 



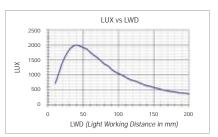
All units in millimeters, if not indicated.



Example of ALU captured image



Brightness distribution of ALU1006A-630C@50mm



ALU1006A-630C light intensity.

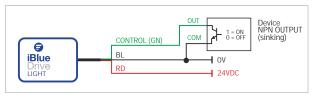


ZXA17.03

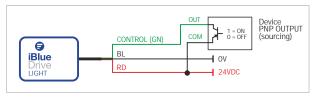
### ► Z1.2 - iBlueDrive control input wiring

All iBlueDrive products come together with a quick-start guide for connection and working conditions. Refer to iBlueDrive Manual for extended information.

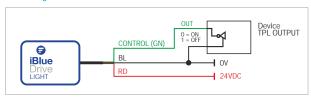
#### NPN wiring for strobe or ON/OFF mode



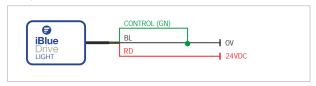
#### PNP wiring for strobe or ON/OFF mode



#### TTL wiring for strobe or ON/OFF mode



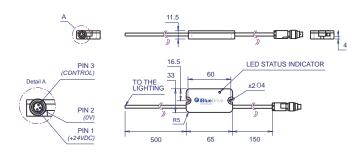
### Wiring for continuous mode



#### ► Z1.3 - iBlueDrive inline

iBlueDrive inline is the driver for iBlueDrive technology integrated as a box of 65x33mm to the cable that goes from the lighting system to the connector. It is used when iBlueDrive driver can not be integrated on chassis. See diagram:





**WARNING!:** In continuous and powered mode, clamp driver to a metal surface for heat dissipation. In Strobe mode is not required, but recommended.



## ► Z1.4 - Environmental Specifications

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

## ▶ Z2.1 - Modifiers legend

icon	Description	Code
$\bigcirc$ N	Narrow angle of emission	/AN
<b>∠</b> M	Medium angle of emission (By default)	/AM
∆w)	Wide angle of emission	/AW
<u>a</u>	Oval angle of emission = 23-24° (x) 17-18° (y)	/AO
<u>(10)</u>	Diffuse emission	/AD
$\boxtimes$	Polarizer filter	/FPL
<u></u>	Diffuser filter	/FDR
CC1	Dome hole of 46mm	/CC1
CC2	Dome hole of 40mm	/CC2
IP67	IP Rating = IP67	/67
PNP	PNP input model	/P
<i>f</i> 1	50mm focal Length	/F1
<i>f</i> 2	150mm focal Length	/F2
f3	Infinite focal Length	/F3

## ► Z2.2 - 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
Collimater filter on x axis	VCFx
Collimater filter on y axis	VCFy
Collimater filter on xy axis	VCFxy
Darkfield converter	VRF
Protector filter	VPT
Heat dissipator	VHD
Fixing bracket	VBA, VBB, VBC Series

## ➤ Z2.3 - iBlueDrive Accessories legend

icon	Description	Serie/Product
<b>Q</b> <sub>0</sub>	Accessorie to configure iBlueDrive devices: iBlueDrive Box, iBlueDrive USB	VTA0005A, VTA0006A, VTA0007A
1	iBlueDrive optocoupler	VTA0020A
0	iBlueDrive potentiometer	VTA0030B

## ► Z2.4 - Technical drawings legend

	icon	Description	
★ Optical axis			
	₽ <sup>A</sup>	Viewing window dimensions	
<ul> <li>Lighting elements</li> <li>Light emission center</li> <li>∠ Lighting surface dimensions</li> </ul>		Lighting elements	
		Light emission center	
		Lighting surface dimensions	

## ▶ Z2.5 - Colours & Wavelegths legend

icon	Wavelength	Colour	Code
<b>①</b>	365nm	UV-	-365
0	400nm	UV	-400
B	470nm	BLUE	-470
G	525nm	GREEN	-525
ß	630nm	RED	-630
•	850nm/880nm	IR	-850/-880
w		WHITE	-W00
<b>P</b>		RGB	-RGB

### ► Z2.6 - Types of lighting legend

icon	Description
<u> </u>	Radial lighting
7 4	'Darkfield' lighting effect. Low angle illumination
1	Backlight illumination
₹ VV	'Cloudy day' lighting effect
	'Bright field' lighting effect
77	Projector lighting
	Axial lighting

## ► Z2.7 - Types of light legend

icon		Description
-	<b>3</b>	Direct light
	<b>(5)</b>	Diffuse light
	<b>(%)</b>	Ultra-diffuse light

