ALB21.01

ALB SERIES

Direct high-powered ringlights

Series of direct ringlights with high-powered leds. Designed with iBlueDrive technology for illuminating from the camera axis the non-reflective objects. These systems provide greater amount of light than ALD Series, which make them suitable for lighting objects from further distances. They highlight textures and contours and are available in several angles of emission and various suplementary filters for being much more versatile.

▶ **Technical specifications[1]**

Lighting model	ALB0804A	ALB0810A	ALB1716A
Dimensions	94.5x77x16.5	94.5x77x16.5	168x168x38.5
Inner ∅	40	40	76
RWD (mm)	>50	>50	>50
Weight	120g	124g	940g
IP rating	IP40	IP40	IP65
Mounting holes	(x2)M4⌶5	(x2)M4⌶5	(x9)M4⌶6
Connection *(Type C)*	3P aerial male connector. L=150mm PIN 1= +24V ±8% PIN 2= 0V PIN 3= Control	N/A	3P aerial male connector. L=150mm PIN 1= +24V ±8% PIN 2= 0V PIN 3= Control
Power cable *(Not-included)*	VCC Series	N/A	VCC Series
Modifiers[2]	ⓝ ⓜ ⓦ ⓓ PNP	ⓝ ⓜ ⓦ ⓓ 4S	ⓝ ⓜ ⓦ ⓓ PNP 4S Ip67
Accessories[3]	↗ ↗ ⦻	↗ ↗ ⦻	↗ ↗ ⦻
iBlueDrive tech.	Built-in	Built-in	Built-in
iBlueDrive connection	3P aerial male connector. L= 150mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control[4]	3P aerial male connector. L= 150mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control[4]	3P aerial male connector. L= 150mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control[4]
iBlueDrive power cable *(Not-included)*	VCC Series	VCC Series	VCC Series
iBlueDrive accessories[3]	⚙ ◎ ▯	⚙ ◎ ▯	⚙ ◎ ▯

▶ **Instantaneous consumption[5] (max.)**

*WT

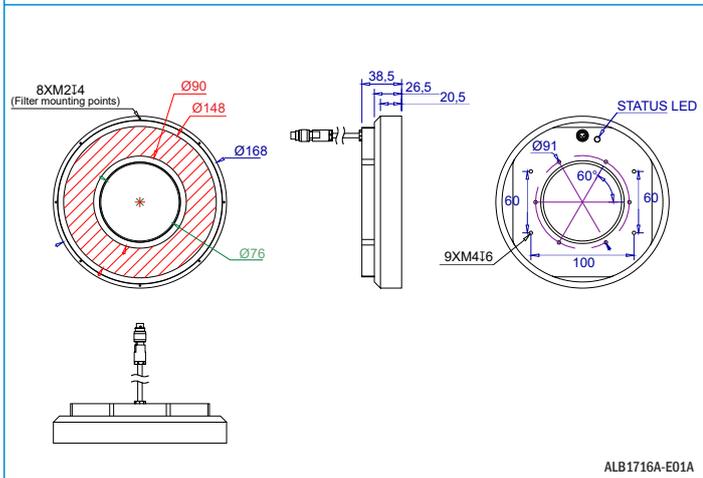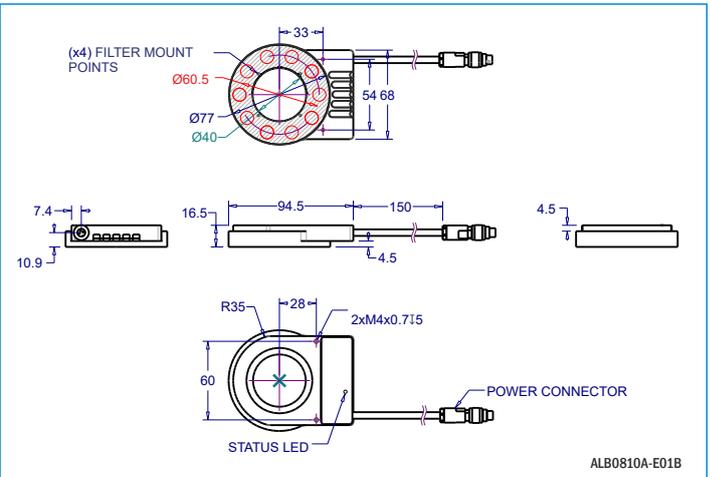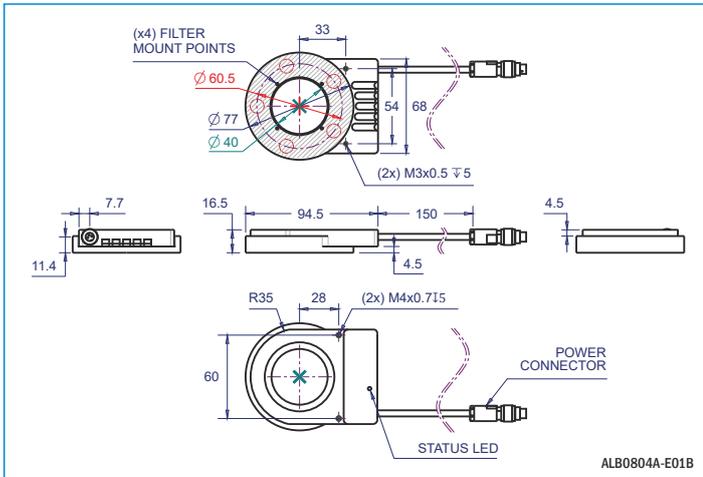| Lighting model		ALB0804A	ALB0810A	ALB1716A	
TYPE C 24VDC	◑u	5.5W	N/A	20W	-365C
	u	5.5W	N/A	22W	-400C
	B	5.5W	N/A	20W	-470C
	G	5.5W	N/A	20W	-525C
	R	5.5W	N/A	20W	-630C
	i	5W	N/A	10W	-850C
	W	5.5W	N/A	17W	-W00C
TYPE P		No 'Type P' standard LED lighting systems in this series			
TYPE S		No 'Type S' standard LED lighting systems in this series			
TYPE i[6] iBlue Drive	◑u	12W [24W/7.7W]	15W [48W/10W]	48W [96W/24W]	-365i
	u	12W [24W/7.7W]	15W [48W/10W]	48W [96W/24W]	-400i
	B	12W [24W/7.7W]	15W [48W/10W]	48W [96W/24W]	-470i
	G	12W [24W/7.7W]	15W [48W/10W]	26W [96W/13W]	-525i
	R	12W [17W/7.7W]	15W [34W/10W]	26W [96W/13W]	-630i
	i	12W [24W/7.7W]	12W [24W/6,5W]	26W [48W/13W]	-850i
	W	12W [24W/7.7W]	15W [48W/10W]	26W [96W/13W]	-W00i

N/A= Not available

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

(2) Angles of emission of ALB series ringlights. If not indicated, default angle will be /AM. Please, consult the code to select a different angle of emission before ordering (additional annex Z2.1).

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

(4) iBlueDrive control input wiring specifications in additional annex Z1.2.

(5) 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.

(6) Values of maximum instantaneous consumption of '**Type i**' lighting systems in *Powered mode [Strobe mode / Continuous mode]*
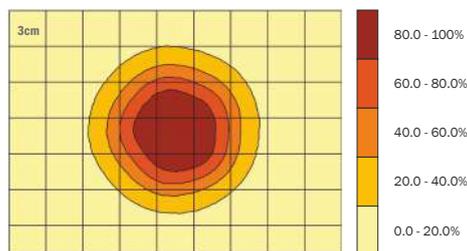
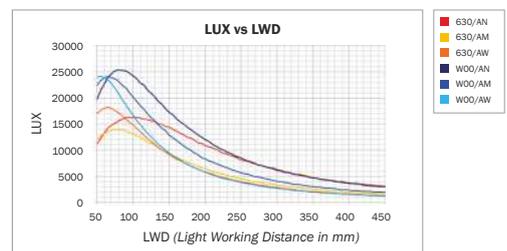*ORDER REFERENCE = Lighting model + WT / MODIFIERS

DCM sistemes

ALB SERIES

(x4) FILTER MOUNT POINTS
33
Ø 60.5
Ø 77
Ø 40
(2x) M3x0.5 ∇5
54 68
7.7
11.4
16.5
94.5
150
4.5
4.5
R35
28
(2x) M4x0.7Ɩ5
60
POWER CONNECTOR
STATUS LED
ALB0804A-E01B

(x4) FILTER MOUNT POINTS
33
Ø60.5
Ø77
Ø40
54 68
7.4
10.9
16.5
94.5
150
4.5
4.5
R35
28
2xM4x0.7Ɩ5
60
POWER CONNECTOR
STATUS LED
ALB0810A-E01B

8XM2Ɩ4
(Filter mounting points)
Ø90
Ø148
Ø168
Ø76
38,5
26,5
20,5
STATUS LED
Ø91
60%
60
60
9XM4Ɩ6
100
ALB1716A-E01A

All units in millimeters, if not indicated.

Example of ALB captured image

3cm

80.0 - 100%
60.0 - 80.0%
40.0 - 60.0%
20.0 - 40.0%
0.0 - 20.0%

Brightness distribution of ALB0804A-630i/AM@100mm

LUX vs LWD

630/AN
630/AM
630/AW
W00/AN
W00/AM
W00/AW

LUX
30000
25000
20000
15000
10000
5000
0
50 100 150 200 250 300 350 400 450
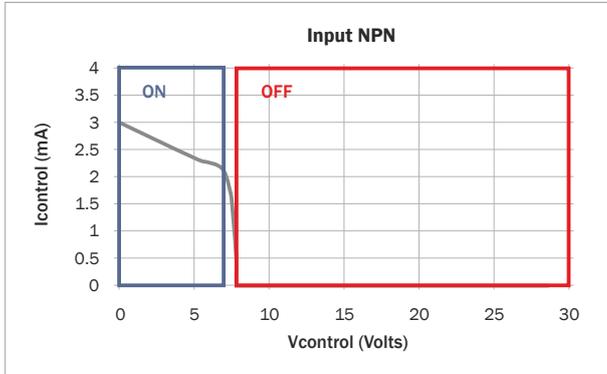LWD *(Light Working Distance in mm)*

ALB0804A-630i light intensity.

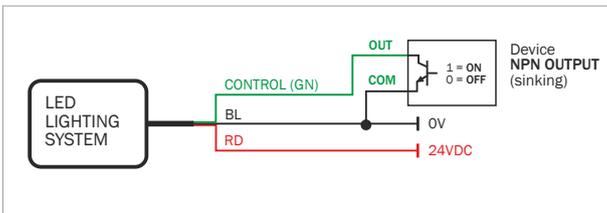▶ **Z1.1 - Control input NPN/PNP for 'Type C' lighting systems of DOL, PLA (PLA0513A and PLA1026A), PLC, PRC (PRC0604C and PRC0606B), PRH and PRK series.**

■ **NPN model (by default)**

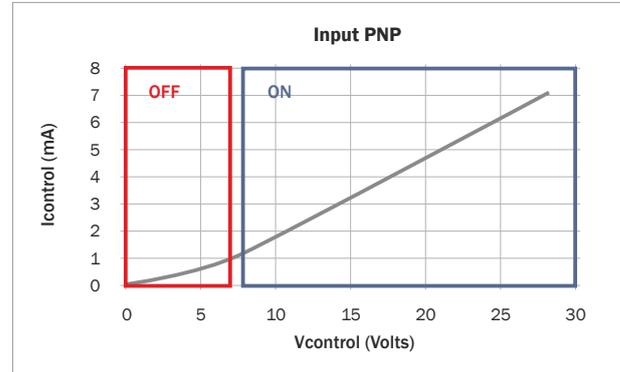*NPN chart of Vcontrol (Volts) vs Icontrol (mA)*
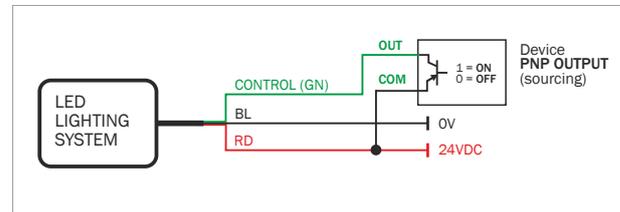

NPN wiring for ON/OFF mode

Electrical specifications

0V to +6.8V	Light ON
+7.2V to +24V	Light OFF
Working conditions	25ºC, VIN = 24V
Connection	Direct to a NPN output
Delay from OFF to ON state	<5 µs
Delay from ON to OFF state	<5 µs
Bias voltage in control input	7.9V
Input impedance	7K9 Ω

■ **PNP model (lighting systems with PNP modifier =/P)**

PNP chart of Vcontrol (Volts) vs Icontrol (mA)

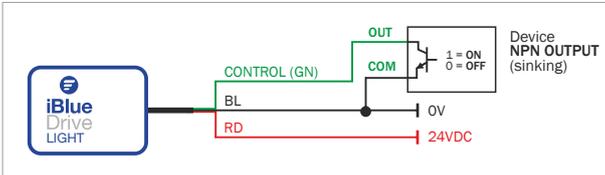*PNP wiring for ON/OFF mode*

Electrical specifications

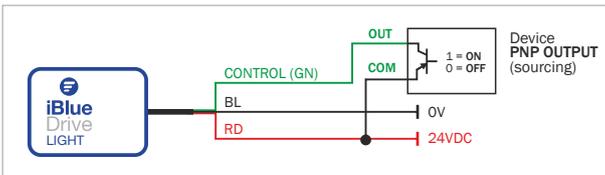|	
0V to +6.8V	Light OFF
+7.2V to +24V	Light ON
Working conditions	25ºC, VIN = 24V
Connection	Direct to a PNP output
Delay from OFF to ON state	<5 µs
Delay from ON to OFF state	<5 µs
Bias voltage in control input	0V
Input impedance	4K Ω
Compliance	IEC1131-2 Type 1, 2 and 3

▶ Z2.1 - 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.
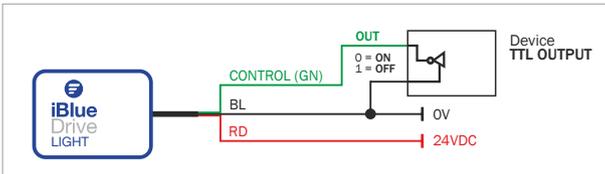
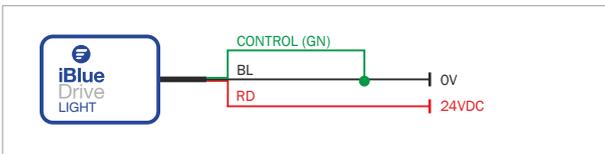*NPN wiring for strobe or ON/OFF mode*

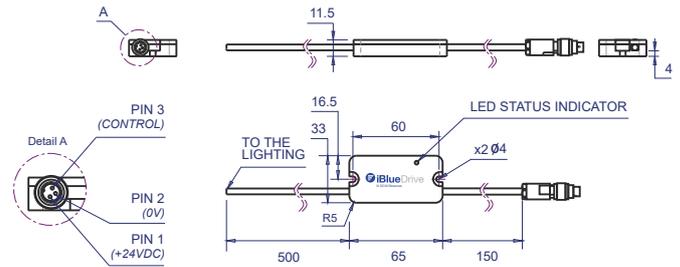*PNP wiring for strobe or ON/OFF mode*

TTL wiring for strobe or ON/OFF mode

Wiring for continuous mode

▶ Z2.2 - 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.

▶ Z2.3 - iBlueDrive Accessories legend

icon	Description	Serie/Product
⚙	Accessorie to configure iBlueDrive devices: **iBlueDrive Box, iBlueDrive USB**	**VTA0005A, VTA0006A, VTA0007A**
▯	iBlueDrive optocoupler	**VTA0020A**
◎	iBlueDrive potentiometer	**VTA0030B**

▶ 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	CE ⊠ RoHS COMPLIANT

▶ 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
	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

▶ 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
U	365nm	UV-	-365
U	400nm	UV	-400
B	470nm	BLUE	-470
G	525nm	GREEN	-525
R	630nm	RED	-630
I	850nm/880nm	IR	-850/-880
W		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

Polytec