

## **ALD SERIES**

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

## Direct ringlights

ALD19.01

Lighting systems to light from camera axis. They provide a huge quantity of light from a distant point so can be used to light objects from a further distance that those of use diffuse light. Designed to stand out shadows, textures and edges.

Lighting model	ALD0303A	ALD0606A	ALD0707A	ALD0907A	ALD1108A
$\oslash$	1	0	0	6	
Dimensions	48x48x27	n73x21	n90x21	n126x41	n145x41
Inner O	21	40	60	34	49
RWD (mm)	>40	>100	>120	>120	>160
Weight	75g	145g	175g	410g	525g
IP rating	IP40 <sup>2</sup>	IP40	IP40	IP30	IP30
Mounting holes	(x2)M4×6 (x3)DIN913 M5@120°	(x2)M4×6 (x3)DIN913 M5@120°	(x2)M4×6 (x3)DIN913 M5@120°	(x2)M4×6 (x3)DIN913 M5@120°	(x2)M4×6 (x3)DIN913 M5@120º
Connection	2P male chassis connector PIN 1 = $+24V \pm 3\%$ PIN 2 = OV	2P male chassis connector PIN 1 = $+24V \pm 3\%$ PIN 2 = OV	2P male chassis connector PIN 1 = $+24V \pm 3\%$ PIN 2 = OV	2P male chassis connector PIN 1 = $+24V \pm 3\%$ PIN 2 = OV	2P male chassis connector PIN 1 = +24V ±3% PIN 2 = 0V
Power cable (Not-included)	VCB Series	VCB Series	VCB Series	VCB Series	VCB Series
Modifiers <sup>3</sup>	$\bigotimes$	N/A	N/A	$\bigotimes$	$\bigotimes$
Accessories <sup>4</sup>					
iBlueDrive tech.	inline	inline	inline	Built-in	Built-in
iBlueDrive connection	$\begin{array}{l} 3P \mbox{ aerial male inline} \\ connector. \mbox{ L= 715mm.} \\ PIN \mbox{ 1 = +24V } \pm 8\% \\ PIN \mbox{ 2 = 0V} \\ PIN \mbox{ 3 = Control}^5 \end{array}$	$\begin{array}{l} 3P \mbox{ aerial male inline} \\ connector. \mbox{ L= 715mm.} \\ PIN \mbox{ 1 = +24V } \pm 8\% \\ PIN \mbox{ 2 = 0V} \\ PIN \mbox{ 3 = Control}^5 \end{array}$	$\begin{array}{l} 3P \mbox{ aerial male inline} \\ \mbox{ connector. L= 715mm.} \\ PIN \ 1 = +24V \ \pm 8\% \\ PIN \ 2 = 0V \\ PIN \ 3 = Control^5 \end{array}$	3P male chassis connector PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control <sup>5</sup>	3P male chassis connector PIN 1 = $+24V \pm 8\%$ PIN 2 = OV PIN 3 = Control <sup>5</sup>
iBlueDrive power cable (Not-included)	VCC Series	VCC Series	VCC Series	VCC Series	VCC Series
iBlueDrive accessories <sup>4</sup>	<b>®(</b>	<b>®</b> ©I	<b>®</b>	<b>®(</b>	\$@1

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

		(					
Lighting model		ALD0303A	ALD0606A	ALD0707A	ALD0907A	ALD1108A	
	B	0.8W	2.5W	2.5W	7.6W	10W	-4700
TYPE C	G	0.8W	2.5W	2.5W	7.6W	10W	-5250
24VDC	ß	1.3W	3.5W	3.5W	7.6W	9.5W	-6300
	0	1.3W	2W	2W	6.4W	8.2W	-8500
TYPE P	0	1.1W	2.6W	2.6W	9.5W	13W	-365P
Dmax= 1/2	0	1.1W	3.1W	3.1W	9.5W	13W	-400F
Ton max= 60s	W	1.1W	3.1W	3.1W	8W	11W	-WOOI
	0	175mA/4.2W	530mA/13W	530mA/13W	1585mA/38W	2110mA/51W	-3655
TYPE S	0	175mA/4.2W	530mA/13W	530mA/13W	1585mA/38W	2110mA/51W	-4005
Ton max= 2ms	8	175mA/4.2W	530mA/13W	530mA/13W	1585mA/38W	2110mA/51W	-470S
	G	110mA/2.6W	330mA/7.9W	330mA/7.9W	990mA/24W	1320mA/32W	-5255
	ß	175mA/4.2W	530mA/13W	530mA/13W	1585mA/38W	2110mA/51W	-6305
	0	420mA/10W	625mA/16W	625mA/16W	2300mA/55W	2925mA/70W	-8505
	W	175mA/4.2W	530mA/15W	530mA/13W	1585mA/38W	2110mA/51W	-W003
	6	N/A	200mA/4.8W channel	200mA/4.8W channel	1200mA/29W channel	1500mA/36W channel	-RGBS
TYPE i <sup>7</sup> (1) (2) (3) (3) (4) (5) (5) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7	0	1.1W[5.3W/0.9W]	2.2W[15W/1.6W]	2.2W[15W/1.6W]	5.7W[44W/3.9W]	7.2W[48W/5.2W]	-365i
	0	1.4W[5.3W/1W]	3.4W[15W/1.9W]	3.4W[15W/1.9W]	9.1W[44W/4.8W]	12W[48W/6.2W]	-400i
	B	1.3W[5.3W/1.1W]	3.1W[15W/2.2W]	3.1W[15W/2.2W]	8.3W[44W/5.7W]	11W[48W/7.4W]	-470i
	G	1.2W[2.9W/0.9W]	2.6W[7.7W/1.6W]	2.6W[7.7W/1.6W]	7W[22W/3.9W]	9.1W[29W/5.1W]	-525i
	ß	1.9W[5.3W/1.4W]	4.8W[15W/3.4W]	4.8W[15W/3.4W]	13W[44W/7.4W]	18W[48W/9.7W]	-630i
	0	3.1W[10W/1.9W]	4.4W[15W/2.6W]	4.4W[15W/2.6W]	14W[48W/7.1W]	17W[48W/8.9W]	-850i
	W	1.4W[5.3W/1W]	3.4W[15W/1.9W]	3.4W[15W/1.9W]	9.1W[44W/4.8W]	12W[48W/6.2W]	-WOOi

N/A= Not available CUS = Custom

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

(2) IP43 if the system is positioned so that the light falls vertically.

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

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

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

(6) 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.

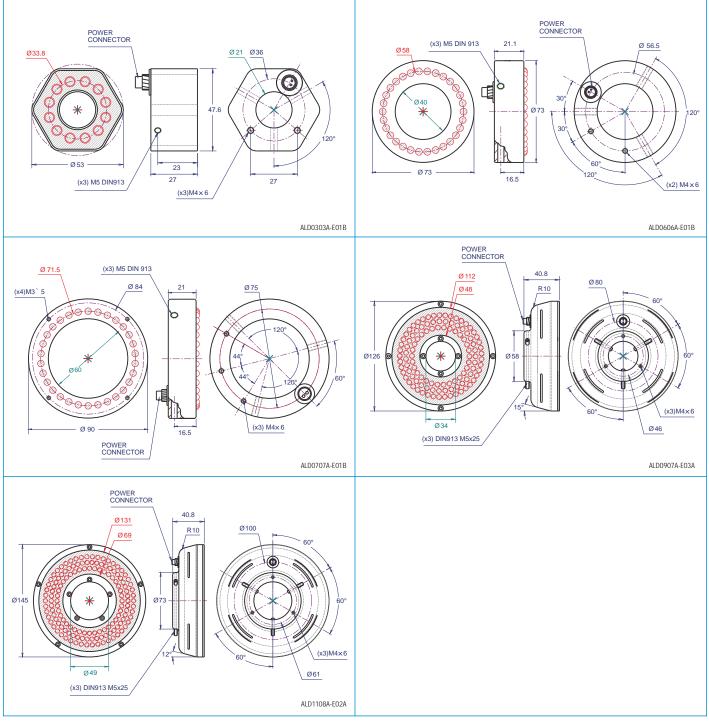
(7) Values of maximum instantaneous consumption of 'Type i' lighting systems in Powered mode [Strobe mode / Continuous mode]



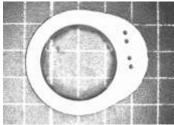
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# ALD SERIES

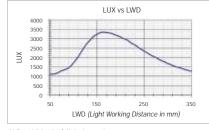


All units in millimeters, if not indicated.



Example of ALD captured image

Brightness distribution of ALD1108A-630C@165mm



ALD1108A-630C light intensity.

90.0 - 100%

80.0 - 90.0%

70.0 - 80.0% 60.0 - 70.0%

50.0 - 60.0%

40.0 - 50.0%

30.0 - 40.0%

20.0 - 30.0%

10.0 - 20.0%

0.0 - 10.0%

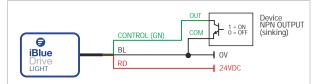
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ZXA17.03

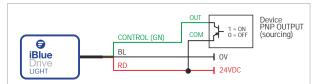
Z1.2 - iBlueDrive control input wiring

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

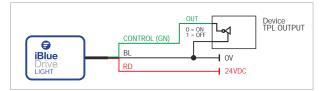
NPN wiring for strobe or ON/OFF mode



PNP wiring for strobe or ON/OFF mode



TTL wiring for strobe or ON/OFF mode



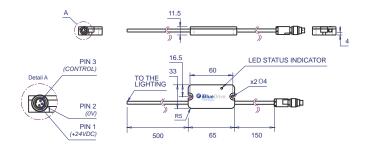
Wiring for continuous mode



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.

#### ZXA17.01

#### 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	

#### Z2.1 - Modifiers legend

icon	Description	Code
	Narrow angle of emission	/AN
	Medium angle of emission (By default)	/AM
	Wide angle of emission	/AW
	Oval angle of emission = 23-24° (x) 17-18° (y)	/A0
(1D)	Diffuse emission	/AD
$\bigotimes$	Polarizer filter	/FPL
2	Diffuser filter	/FDR
001	Dome hole of 46mm	/CC1
002	Dome hole of 40mm	/CC2
(IP67)	IP Rating = IP67	/67
PNP	PNP input model	/P
$f_1$	50mm focal Length	/F1
<i>f</i> 2	150mm focal Length	/F2
<i>f</i> 3	Infinite focal Length	/F3

#### Z2.2 - Accessories legend

icon	Description	Serie
<b>(m</b> )	Power cable/s	VCB, VCC, VCD Series
(v*)	Other cable/s	VCU, VCL
	Strobe and RGB controller/s	VST, VSC Series
$\bigotimes$	Polarizer filter	VPF, VPC
2	Diffuser filter	VDF
	Collimater filter on x axis	VCFx
	Collimater filter on y axis	VCFy
	Collimater filter on xy axis	VCFxy
(%)	Darkfield converter	VRF
$\bigcirc$	Protector filter	VPT
*	Heat dissipator	VHD
${}^{\bigotimes}$	Fixing bracket	VBA, VBB, VBC Series

#### Z2.3 - iBlueDrive Accessories legend

icon	Description	Serie/Product
	Accessorie to configure iBlueDrive devices: iBlueDrive Box, iBlueDrive USB	VTA0005A, VTA0006A, VTA0007A
	iBlueDrive optocoupler	VTA0020A
$\bigcirc$	iBlueDrive potentiometer	VTA0030B

#### Z2.4 - Technical drawings legend

icon	Description
×	Optical axis
R.	Viewing window dimensions
_	Lighting elements
+	Light emission center
R.	Lighting surface dimensions

#### Z2.5 - Colours & Wavelegths legend

icon	Wavelength	Colour	Code
•	365nm	UV-	-365
0	400nm	UV	-400
в	470nm	BLUE	-470
G	525nm	GREEN	-525
R	630nm	RED	-630
0	850nm/880nm	IR	-850/-880
W		WHITE	-W00
•		RGB	-RGB

### Z2.6 - Types of lighting legend

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

#### Z2.7 - Types of light legend

icon	Description
$\bigtriangledown$	Direct light
	Diffuse light
	Ultra-diffuse light

