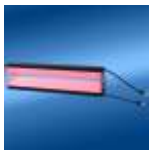
DOL19.01

DOL SERIES

Linear dome lights

Diffuse and linear domes for linear cameras use. They provide powerful and uniform light with no shades along the whole scanning line. The independent control of their two halves plus the flexibility of iBlueDrive technology to control LED lights gives this series the best adaptability in adjusting lighting parameters.

Technical specifications[1]

Lighting model	DOL0250A*	DOL0400A*
		
Dimensions	254x103x38	404x103x38
Active surface	(x2) 250x35	(x2) 400x35
RWD (mm)	<20	<20
Weight	788g	1225g
IP rating	IP40	IP40
Mounting holes	(x4)M4 x 5	(x5)M4 x 5
Connection	(x2) 3P aerial male connector. L= 150mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control[2]	(x2) 3P aerial male connector. L= 150mm. PIN 1 = +24V ±8% PIN 2 = 0V PIN 3 = Control[2]
Power cable	(x2) VCC Series	(x2) VCC Series
Modifiers[3]	PNP	PNP
Accessories[4]	N/A	N/A
iBlueDrive tech.	N/A	N/A

(*) It has a LED indicator that informs you about the device state. This LED is normally OFF. In red, it indicates the overheating of the system. The system will switch off until it is cool again.

Instantaneous consumption[5] (max.)

*WT

Lighting model		DOL0250A	DOL0400A	
TYPE C 24VDC	B	29W	29W	-470C
	G	29W	29W	-525C
	R	21W	42W	-630C
	i	24W	24W	-850C
	W	29W	29W	-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) Control input specifications of DOL series in additional annex Z1.1.

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

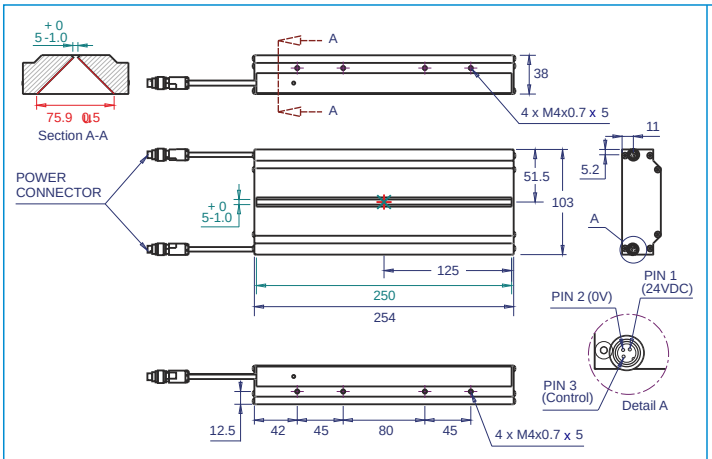
(4) Accessories are not-included. More information in accessories section.

(5) 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.

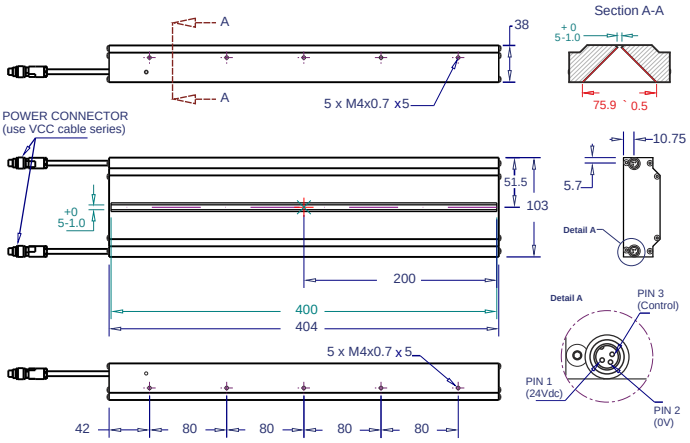
*ORDER REFERENCE = Lighting model + WT / MODIFIERS

DOL19.01

DOL SERIES

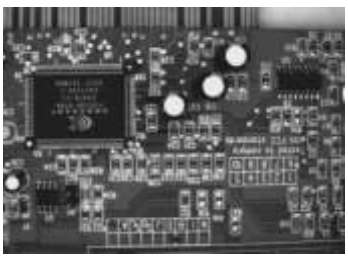


DOL0250A-E01A

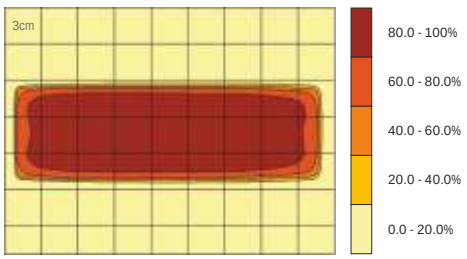


DOL0400A-E01A

All units in millimeters, if not indicated.



Example of DOL captured image

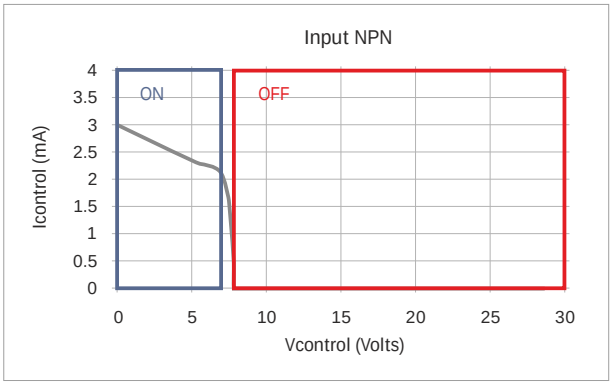


Brightness distribution of DOL0250A-630C@5mm

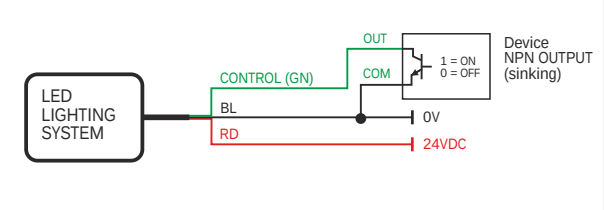
▶ Z1.1 - Control input NPN/PNP for 'Type C' lighting systems of DOL, PLA (PLA0513A and PLA1026A), PLC, PRC (PRC0604C and PRC0606B), PRH and PRK series.

■ NPN model (by default)

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



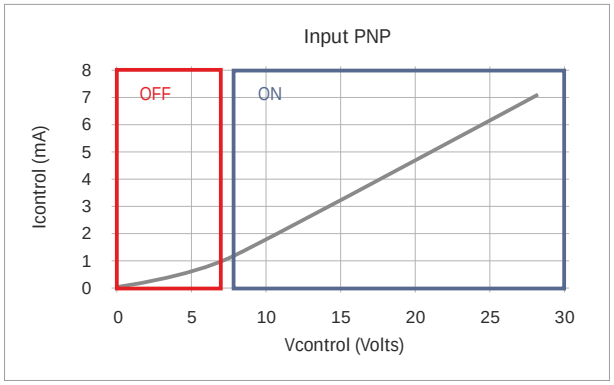
NPN wiring for ON/OFF mode



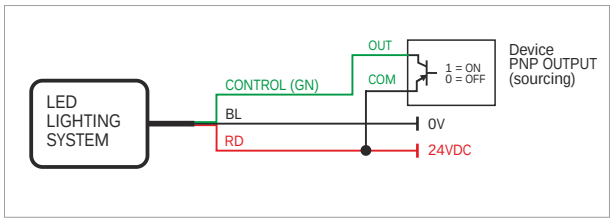
Electrical specifications	
0V to +6.8V	Light ON
+7.2V to +24V	Light OFF
Working conditions	25ºC, VIN = 24V
Connection	Direct to a NPN output
Delay from OFF to ON state	<5 µs
Delay from ON to OFF state	<5 µs
Bias voltage in control input	7.9V
Input impedance	7K9 ?

■ 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 ?
Compliance	IEC1131-2 Type 1, 2 and 3

Z1.4 - Environmental Specifications

Max. Operating Humidity	85% non-condensing
Operating Temperature	0 - 40ºC
Storage Temperature	0 - 60ºC
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 = 23-24º (x) 17-18º (y)	/AO
	Diffuse emission	/AD
	Polarizer filter	/FPL
	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
f1	50mm focal Length	/F1
f2	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
	Accessorie to configure iBlueDrive devices: iBlueDrive Box, iBlueDrive USB	VTA0005A, VTA0006A, VTA0007A
	iBlueDrive optocoupler	VTA0020A
	iBlueDrive potentiometer	VTA0030B

Z2.4 - Technical drawings legend

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

Z2.5 - 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

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
	Projector lighting
	Axial lighting

Z2.7 - Types of light legend

icon	Description
	Direct light
	Diffuse light
	Ultra-diffuse light