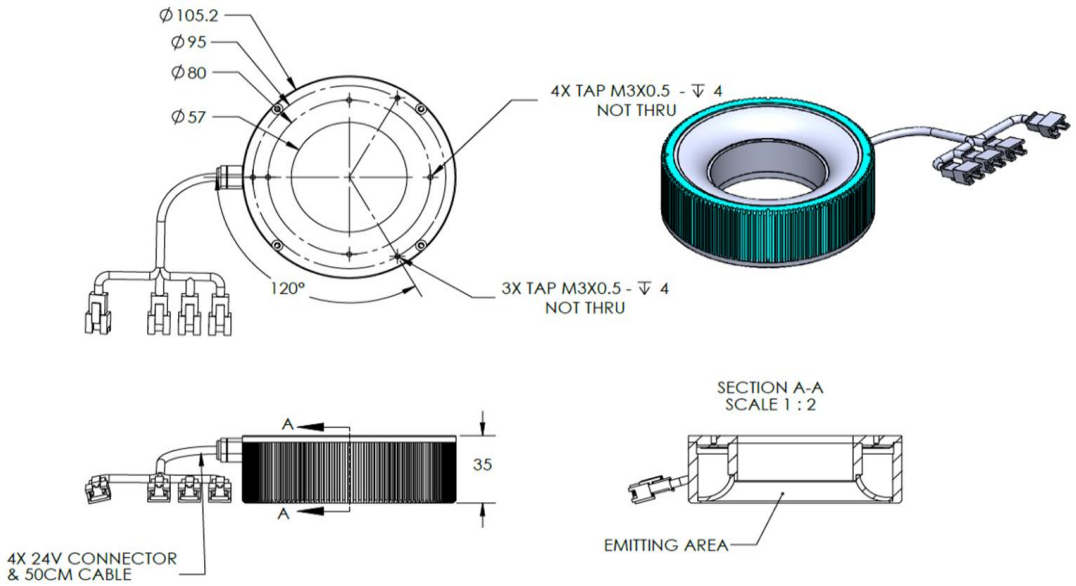
ILLUMINATOR DATA (ID)

HPD2-00-100-1-RGBW-24V

Lighting Dimension



RoHS COMPLIANT CE

Mechanical Information	
Casing Material	Aluminium
Storage Temperature Range	0 - 45°C
Storage Humidity Range	20 - 85%
Weight	210 g
Length / Outer Diameter	105.2 mm
Width / Inner Diameter	57 mm
Thickness / Height	35 mm

ILLUMINATOR DATA (ID)

HPD2-00-100-1-RGBW-24V

Lighting Information												
Part Number	HPD2-00-100-1-RGBW-24V											
LED Color	Red			Green			Blue			White		
Wavelength	630			525			470			refer to chormaticity table		
Working Distance	18 mm	44 mm	122 mm	18 mm	44 mm	122 mm	18 mm	44 mm	122 mm	18 mm	44 mm	122 mm
Intensity (±15%)	2220 lx	1890 lx	600 lx	6030 lx	4850 lx	1550 lx	6280 lx	530 lx	1550 lx	5260 lx	4140 lx	1270 lx
Illumination (number of row)	1											
Illumination Active Area	Active Length / Outer Dia.			93.2 mm								
	Active Width / Inner Dia.			59 mm								
Emission angle	0											
Eye Safety Class (IEC62471)	EXEMPT			EXEMPT			II			EXEMPT		
Chromaticity Table For White colour only				X 0.296 0.287 0.307 0.311 Y 0.276 0.295 0.315 0.294			X 0.311 0.307 0.33 0.33 Y 0.294 0.315 0.339 0.318					

Electrical Information				
Rated Constant Voltage	24V±2%			
Rated Constant Current	120 mA	120 mA	120 mA	120 mA
Power Consumption	2.88 W	2.88 W	2.88 W	2.88 W
Casing temperature, After 60 minutes operation	48.9 C			
Max. continous current of RED, GREEN & BLUE LEDs on at the same time	*It is not recommended to turn on Red, Green and Blue colour at the same time. Refer to Maximum Simultaneous Current Output section in the last page for maximum current that can be supplied for each colour. Failure in following this may results in damaging the lighting.			

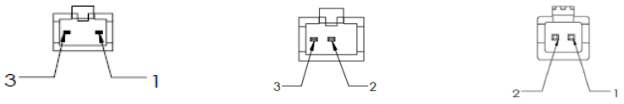
Strobe Mode Specification								
**Normal Strobe Voltage	24 V							
**Normal Strobe Current	120 mA		120 mA		120 mA		120 mA	
Overdrive Voltage Range	Min: 36 V	Max: 48 V	Min: 36 V	Max: 48 V	Min: 36 V	Max: 48 V	Min: 36 V	Max: 48 V
Overdrive Current Range	Min: 240 mA	Max: 299 mA	Min: 269 mA	Max: 328 mA	Min: 325 mA	Max: 395 mA	Min: 314 mA	Max: 385 mA
Max. pulse current of RED, GREEN & BLUE LEDs on at the same time	*It is not recommended to turn on Red, Green and Blue colour at the same time. Refer to Maximum Simultaneous Current Output section in the last page for maximum current that can be supplied for each colour. Failure in following this may results in damaging the lighting.							
Recommended Overdrive Voltage	36 V							
***Max. Trigger Pulse Duration	10 msec							
***Max. Duty Cycle	10%							

**Normal strobe means the lighting is operated using the rated power. Overdrive means the power supplied to the lighting exceeded the rated power.

***Overdrive condition must not exceed the max. trigger pulse duration and max. duty cycle. Failure in following this may results in damaging the lighting.

ILLUMINATOR DATA (ID)

HPD2-00-100-1-RGBW-24V

Connection Information			
Connector Type (Default)	JST SMR-03V		
Cable Length	50 cm		
Pin Configuration	Pin	Signal	Cable Colour
	1	LED +	Red
	2	N.C	-
	3	LED -	White
	4	-	-
	5	-	-
			

Additional Information	
Additional Cooling Method	Attached to machine part for better heat dissipation
Intensity Controller Selection	SD, ST, ANG, LC, SDA, SDP series
CE Conformity	YES
RoHS Compliance	YES

Application	
Illumination Type	Diffused Ring Illumination
Application Use	Shining Surface and Food Packaging Inspection

ILLUMINATOR DATA (ID)

HPD2-00-100-1-RGBW-24V

Maximum Simulteneous Current Output Information		
Colour	Current	Remarks
SINGLE COLOUR : RED	0.5 A	TOTAL CURRENT OUTPUT : 0.5 A RECOMMENDED OVERDRIVE CURRENT : 1 A (36 V) ** OPTIMUM FOR SINGLE COLOUR
SINGLE COLOUR : GREEN	0.4 A	TOTAL CURRENT OUTPUT : 0.4 A RECOMMENDED OVERDRIVE CURRENT : 1.17 A (36 V) ** OPTIMUM FOR SINGLE COLOUR
SINGLE COLOUR : BLUE	0.45 A	TOTAL CURRENT OUTPUT : 0.45 A RECOMMENDED OVERDRIVE CURRENT : 1.21 A (36 V) ** OPTIMUM FOR SINGLE COLOUR
COMBINE 2 COLOUR: RED & BLUE	0.5 A	TOTAL CURRENT OUTPUT : 0.5 A ****(EXAMPLE : RED = 0.25 A , BLUE = 0.25 A) ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.5 A , BLUE = 0.5 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A
COMBINE 2 COLOUR: RED & GREEN	0.5 A	TOTAL CURRENT OUTPUT : 0.5 A ****(EXAMPLE : RED = 0.25 A , GREEN = 0.25 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A
COMBINE 2 COLOUR: GREEN & BLUE	0.5 A	TOTAL CURRENT OUTPUT : 0.5 A ****(EXAMPLE : GREEN = 0.25 A , BLUE = 0.25 A) ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.5 A , BLUE = 0.5 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A
COMBINE COLOUR: RED, GREEN & BLUE	0.5 A	TOTAL CURRENT OUTPUT : 0.5 A ****(EXAMPLE : RED = 0.16 A , GREEN = 0.16 A, BLUE = 0.16 A) ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.33 A , GREEN = 0.33 A, BLUE = 0.33 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A

ILLUMINATOR DATA (ID)

HPD2-00-100-1-RGBW-24V

Lighting Pattern	
Working Distance	TBA
Display and Image	**TBA**
Data Results	

Horizontal	Meas.(mm)
90%	
80%	
70%	
60%	
50%	
40%	
30%	
20%	
10%	

Vertical	Meas.(mm)
90%	
80%	
70%	
60%	
50%	
40%	
30%	
20%	
10%	

	Meas.(cd/m2)
Max.	

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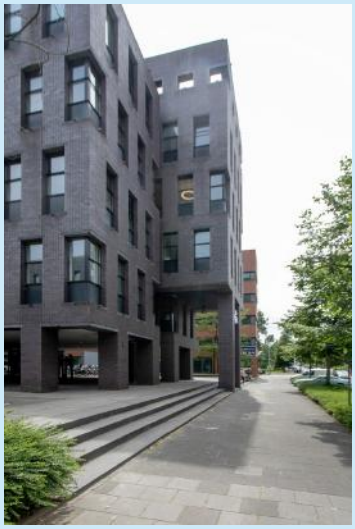
Natascha Overhof

Christian Crompvoets



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