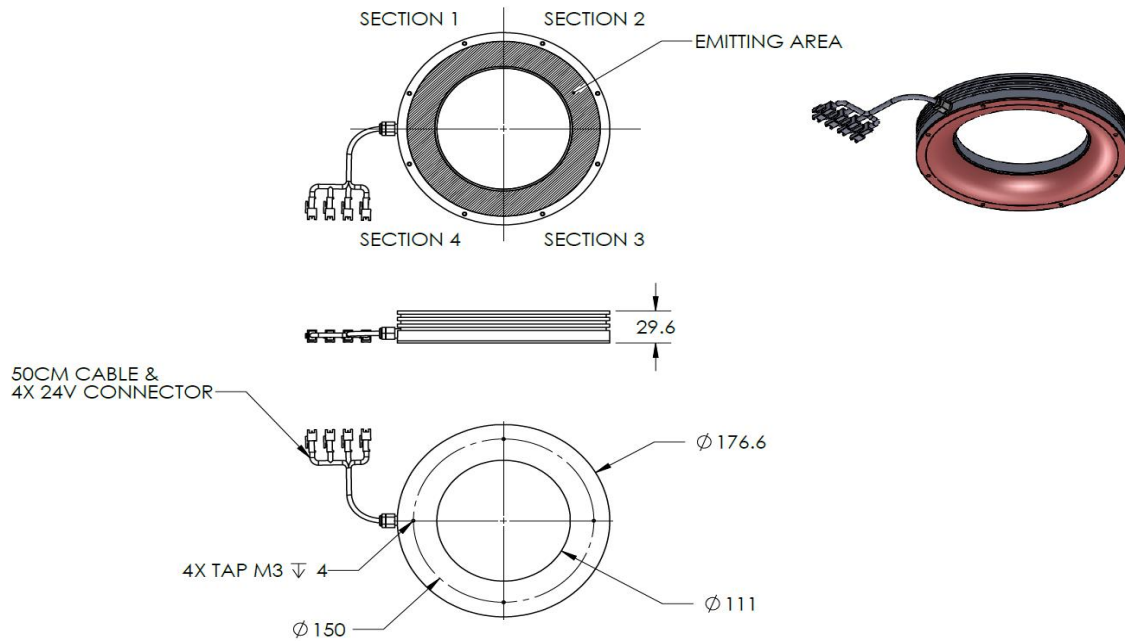




ILLUMINATOR DATA (ID)

HPD-00-170-1-W-24V-4CH

Lighting Dimension



Mechanical Information

Casing Material	Aluminium
Storage Temperature Range	0 - 45°C
Storage Humidity Range	20 - 85%
Weight	544 g
Length / Outer Diameter	176.6 mm
Width / Inner Diameter	111 mm
Thickness / Height	29.6 mm



ILLUMINATOR DATA (ID)

HPD-00-170-1-W-24V-4CH

Lighting Information																															
Part Number	HPD-00-170-1-W-24V-4CH																														
Channel	CH1			CH2			CH3			CH4																					
LED Color	WHITE																														
Wavelength	* Refer to the Chromaticity Table Below																														
Working Distance	40 mm	50 mm	60 mm	40 mm	50 mm	60 mm	40 mm	50 mm	60 mm	40 mm	50 mm	60 mm																			
Intensity (±15%)	6915.4 lx	6489.4 lx	6162.8 lx	7483.4 lx	7100 lx	6631.4 lx	6659.8 lx	6333.2 lx	6177 lx	6659.8 lx	6333.2 lx	5964 lx																			
Illumination (number of row)	1																														
Illumination Active Area	Active Length / Outer Dia.			150 mm																											
	Active Width / Inner Dia.			111 mm																											
Emission angle	0																														
Eye Safety Class (IEC62471)	EXEMPT																														
Chromaticity Table	<table border="1"> <tr> <td>X</td> <td>0.296</td> <td>0.287</td> <td>0.307</td> <td>0.311</td> <td>X</td> <td>0.311</td> <td>0.307</td> <td>0.33</td> <td>0.33</td> </tr> <tr> <td>Y</td> <td>0.276</td> <td>0.295</td> <td>0.315</td> <td>0.294</td> <td>Y</td> <td>0.294</td> <td>0.315</td> <td>0.339</td> <td>0.318</td> </tr> </table>											X	0.296	0.287	0.307	0.311	X	0.311	0.307	0.33	0.33	Y	0.276	0.295	0.315	0.294	Y	0.294	0.315	0.339	0.318
X	0.296	0.287	0.307	0.311	X	0.311	0.307	0.33	0.33																						
Y	0.276	0.295	0.315	0.294	Y	0.294	0.315	0.339	0.318																						
For White colour only																															

Electrical Information				
Rated Constant Voltage	24V±2%			
Rated Constant Current	150 mA	150 mA	150 mA	150 mA
Power Consumption	3.6 W	3.6 W	3.6 W	3.6 W
Casing temperature, After 60 minutes operation	44.6 °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	150 mA	150 mA	150 mA	150 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: 2 A Max: 2 A	Min: 2 A Max: 2 A	Min: 2 A Max: 2 A	Min: 2 A Max: 2 A
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%			


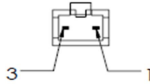
**Normal strobe means the lighting is operated using the rated power. Overdrive means the power supplied to the lighting exceeded the rated power.

***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)

HPD-00-170-1-W-24V-4CH

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
			








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 Illumination
Application Use	Character Recognition on Shining Surface, Lead Inspection



ILLUMINATOR DATA (ID)

HPD-00-170-1-W-24V-4CH

Maximum Simultaneous Current Output Information		
Colour	Current	Remarks
 SINGLE COLOUR : RED	0.24 A	TOTAL CURRENT OUTPUT : 0.24 A RECOMMENDED OVERDRIVE CURRENT : 0.55 A (36 V) ** OPTIMUM FOR SINGLE COLOUR
 SINGLE COLOUR : GREEN	0.24 A	TOTAL CURRENT OUTPUT : 0.24 A RECOMMENDED OVERDRIVE CURRENT : 0.55 A (36 V) ** OPTIMUM FOR SINGLE COLOUR
 SINGLE COLOUR : BLUE	0.24 A	TOTAL CURRENT OUTPUT : 0.24 A RECOMMENDED OVERDRIVE CURRENT : 0.55 A (36 V) ** OPTIMUM FOR SINGLE COLOUR
 COMBINE 2 COLOUR: RED & BLUE	0.24 A	TOTAL CURRENT OUTPUT : 0.24 A ****(EXAMPLE : RED = 0.12 A , BLUE = 0.12 A) ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.28 A , BLUE = 0.28 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A
 COMBINE 2 COLOUR: RED & GREEN	0.24 A	TOTAL CURRENT OUTPUT : 0.24 A ****(EXAMPLE : RED = 0.12 A , GREEN = 0.12 A) ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.28 A , GREEN = 0.28 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A
 COMBINE 2 COLOUR: GREEN & BLUE	0.24 A	TOTAL CURRENT OUTPUT : 0.24 A ****(EXAMPLE : GREEN = 0.12 A , BLUE = 0.12 A) ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.28 A , BLUE = 0.28 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A
 COMBINE COLOUR: RED, GREEN & BLUE	0.24 A	TOTAL CURRENT OUTPUT : 0.24 A ****(EXAMPLE : RED = 0.08 A , GREEN = 0.08 A , BLUE = 0.08 A) ****(OVERDRIVE STROBE MODE EXAMPLE : RED = 0.18 A , GREEN = 0.18 A , BLUE = 0.18 A) FOR COMBINE COLOUR TEMPERATURE CANNOT EXCEED MORE THAN 60°C ENSURE CURRENT MUST NOT EXCEED 0.5 A



ILLUMINATOR DATA (ID)

HPD-00-170-1-W-24V-4CH

Lighting Pattern																																											
Working Distance	For further details please contact us																																										
Display and Image																																											
Data Results	<table border="1"> <thead> <tr> <th>Horizontal</th> <th>Meas.(mm)</th> </tr> </thead> <tbody> <tr><td>90%</td><td></td></tr> <tr><td>80%</td><td></td></tr> <tr><td>70%</td><td></td></tr> <tr><td>60%</td><td></td></tr> <tr><td>50%</td><td></td></tr> <tr><td>40%</td><td></td></tr> <tr><td>30%</td><td></td></tr> <tr><td>20%</td><td></td></tr> <tr><td>10%</td><td></td></tr> </tbody> </table>	Horizontal	Meas.(mm)	90%		80%		70%		60%		50%		40%		30%		20%		10%		<table border="1"> <thead> <tr> <th>Vertical</th> <th>Meas.(mm)</th> </tr> </thead> <tbody> <tr><td>90%</td><td></td></tr> <tr><td>80%</td><td></td></tr> <tr><td>70%</td><td></td></tr> <tr><td>60%</td><td></td></tr> <tr><td>50%</td><td></td></tr> <tr><td>40%</td><td></td></tr> <tr><td>30%</td><td></td></tr> <tr><td>20%</td><td></td></tr> <tr><td>10%</td><td></td></tr> </tbody> </table>	Vertical	Meas.(mm)	90%		80%		70%		60%		50%		40%		30%		20%		10%		
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