



# Spot Lights

## HLV2-14/HLV2-22/HLV2-22-3W Series

### High-output Spot Light

Lightweight and compact with a low power consumption and long service life.



### Broad Lineup to Match Your Applications

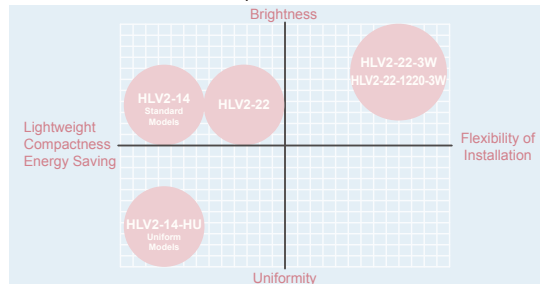
Saving Space / Demands for Small Spotlights  
 Demands for Bright Spotlights / Demands for Spotlights with Uniform Illumination  
 Reducing operating Costs / Reducing CO<sub>2</sub> Emissions

The HLV2 Series can be chosen to meet your specific needs and application environment.

HLV2 Series Evaluation Chart

	Brightness	Uniformity	Lightweight	Compactness	Flexibility of Installation	Energy Saving
HLV2-14	○	○	◎	◎	○	◎
HLV2-14-HU Highly Uniform Model	△	◎	◎	◎	○	◎
HLV2-22 (for comparison)	○	○	○	○	○	○
HLV2-22-3W	◎	○	△	△	◎	○
HLV2-22-1220-3W	◎	○	△	△	◎	○

HLV2 Series Evaluation Graph



\*Comparison of CCS products

### High-output Spot Light

Improving the optics and boosting the light generation efficiency have yielded high-output illumination.

Previous Model(HLV-24SW-3W)



Previous models lacked sufficient output for some applications.

HLV2-22SW-3W



The HLV2 Series provides more than enough illumination for imaging.

Operating conditions: Shutter speed: 1/7,000 sec. Light intensity: 100%

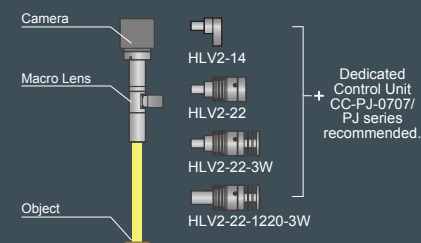
### Smallest in the Industry: HLV2-14 Series

Low weight and compact designs reduce space requirements.



### Application Example of HLV2 series

Combine this Series with our unique Macro Lenses to achieve optimal illumination solutions.



### Examples of Spot Light Images

Imaging of Alignment Marks for LCD Panels

Light used: HLV2-14RD



Shutter speed: 1/2,000 sec.  
Light intensity: 20%

Character Recognition on Wafers

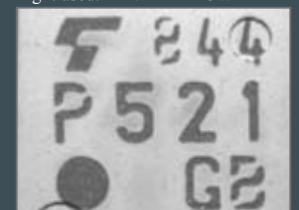
Light used: HLV2-22SW



Shutter speed: 1/20,000 sec.  
Light intensity: 35%

Character Recognition on Photocouplers

Light used: HLV2-22BL-3W



Shutter speed: 1/7,000 sec.  
Light intensity: 50%

Direct Number : A direct number is a 7-digit number assigned to a CCS product. You can easily access the web page providing information on any desired product by simply entering the direct number in the space provided on the CCS website pages for machine vision. (Refer to the back cover of this brochure.)

## Product Lineup Table

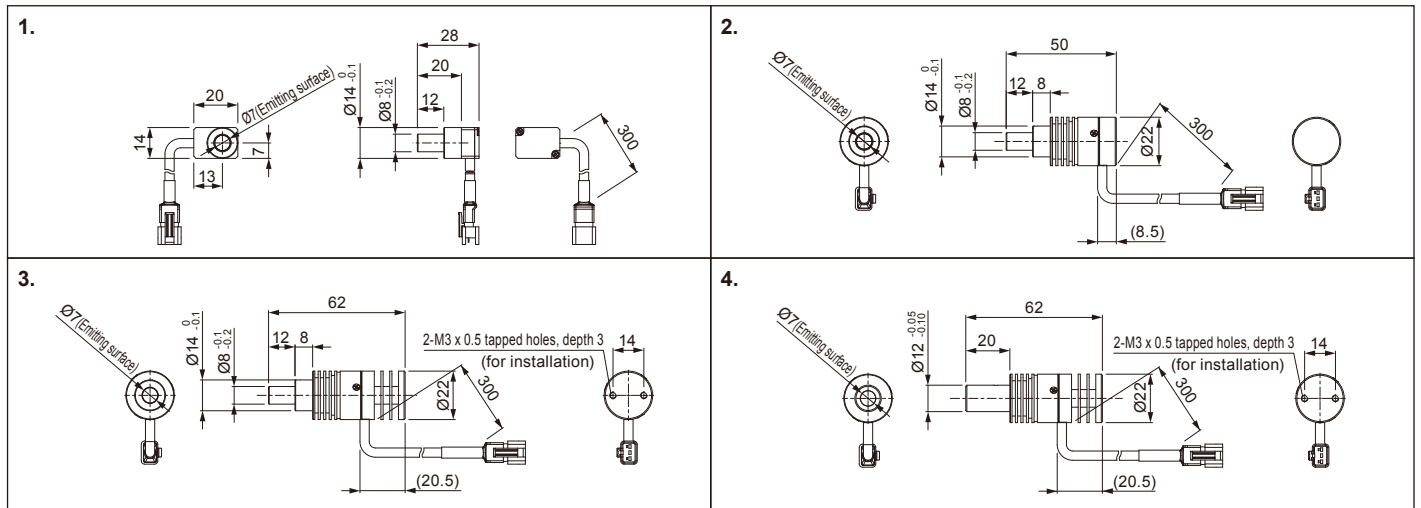
Series	Direct Number	Model Name	Color	Power Consumption	Option	Dimension
HLV2-14	1004853	HLV2-14RD	●	0.9W	—	1
	1004854	HLV2-14SW	○			
	1004855	HLV2-14BL	●			
	1004856	HLV2-14GR	●			
	1004857	HLV2-14RD-HU	●			
	1004858	HLV2-14SW-HU	○			
	1004859	HLV2-14BL-HU	●			
	1004860	HLV2-14GR-HU	●			
HLV2-22	1004512	HLV2-22RD	●	1.4W	—	2
	1004513	HLV2-22SW	○			
	1004514	HLV2-22BL	●			
	1004515	HLV2-22GR	●			

Series	Direct Number	Model Name	Color	Power Consumption	Option	Dimension
HLV2-22-3W	1004516	HLV2-22RD-3W	●	2.8W	—	3
	1004517	HLV2-22SW-3W	○			
	1004518	HLV2-22BL-3W	●			
	1004519	HLV2-22GR-3W	●			
HLV2-22-1220-3W	1004524	HLV2-22RD-1220-3W	●	2.8W	—	4
	1004525	HLV2-22SW-1220-3W	○			
	1004526	HLV2-22BL-1220-3W	●			
1004527	HLV2-22GR-1220-3W	●				

Series	Direct Number	Model Name	Outline
HL	4000249	HL-30	Condensing Lens Dedicated to the HLV2-22/-3W Series
	4000248	HL-24-21	

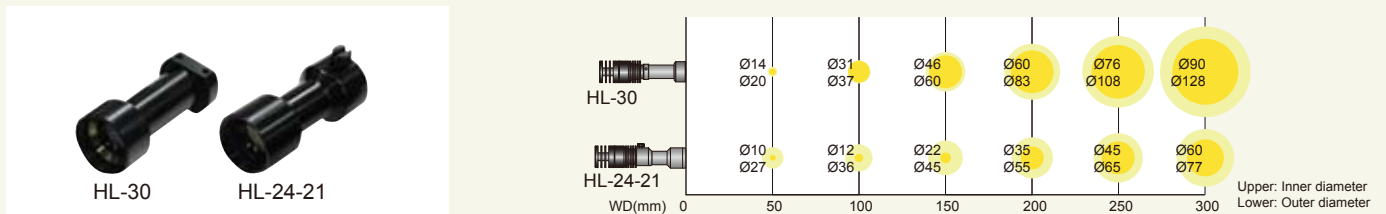
Please use CC-PJ-0707 or PJ Series control unit for HLV2 Spotlights.  
Refer to pages 101 and 102 for details on Control Units for HLV2 Spotlights.

## Dimension Diagrams (Unit: mm)



## Condensing Lens for the HLV2-22 Series: HL-30/HL-24-21

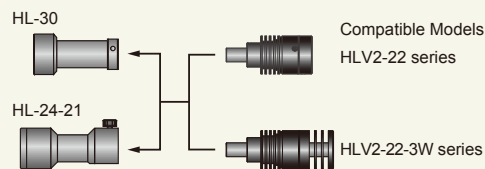
Illumination Range of the HL-30/HL-24-21



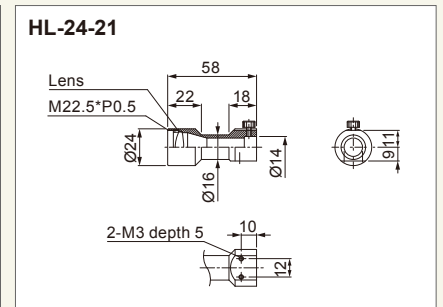
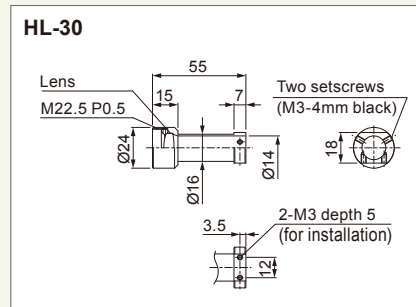
\*The data shown here represents actual measurements. Value is not guaranteed.

## Dimension Diagrams (Unit: mm)

Mounting to the HLV2-22 Series



\*Cannot be used with the HLV2-14, HLV2-22-1220-3W, or HLV2-22-NR-3W Series.



## Optional Extension Cable

Standard models	Models with robot cables
FCB-1/-2/-3/-5 (1m/2m/3m/5m) *Refer to Page 106.	FRCB-1/-2/-3/-5 (1m/2m/3m/5m) *Refer to Page 106.

### Using an Extension Cable

Do not connect longer than 5 m of Extension Cables.  
\*If you need to use an Extension Cable longer than 5 m, please contact a CCS sales representative.  
Branch cables cannot be used.

Refer to pages 101 and 102 for details on Control Units for HLV2 Spotlights.