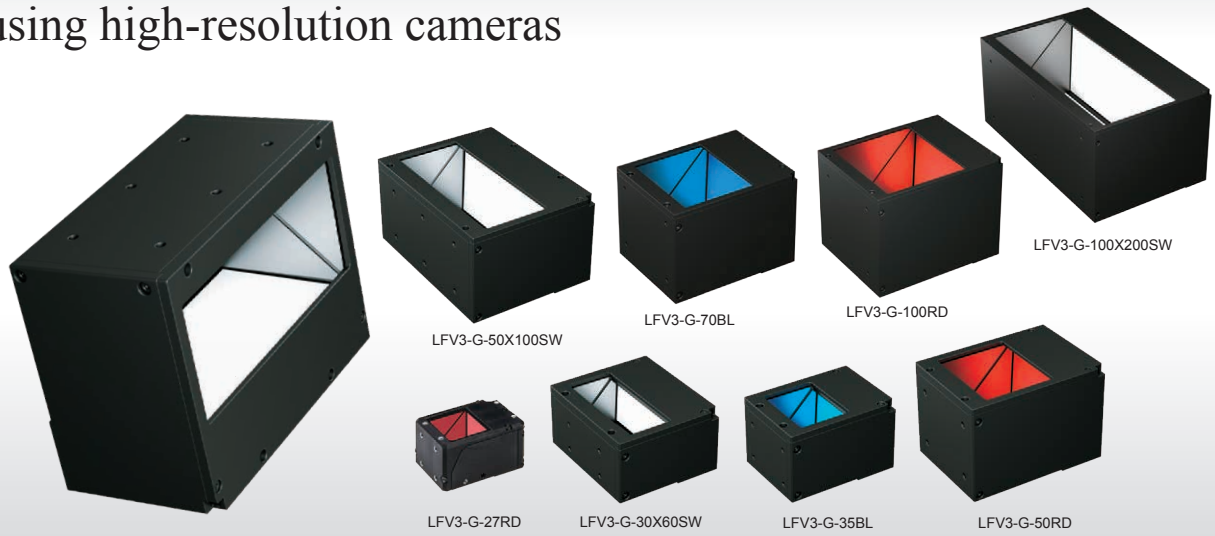




Equipped with a slim half mirror to support imaging using high-resolution cameras

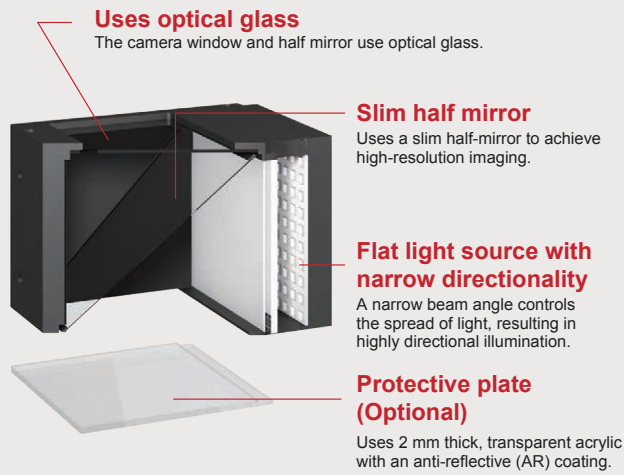


Applications

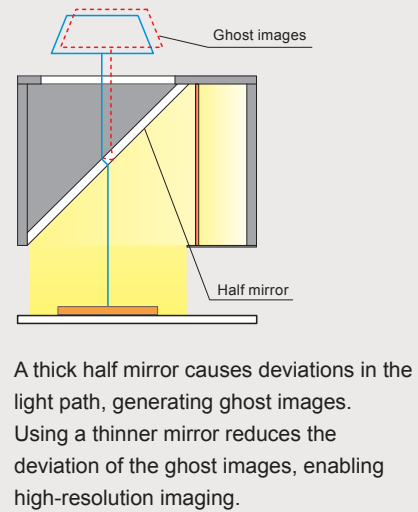
Inspection for damage, scratches, or dents on glossy surfaces or mirrors; pattern inspection on printed circuit boards; dimension measuring of glass; inspection for damage and dents on resin molded products; etc.

Prevents ghost images and achieves higher resolution imaging than conventional products.

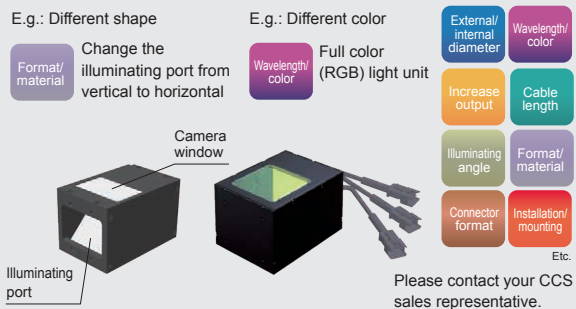
LFV3-G Series structure (example)



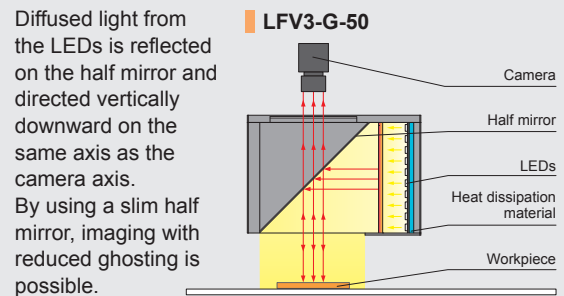
Causes of ghost images (example)



Custom Order Example

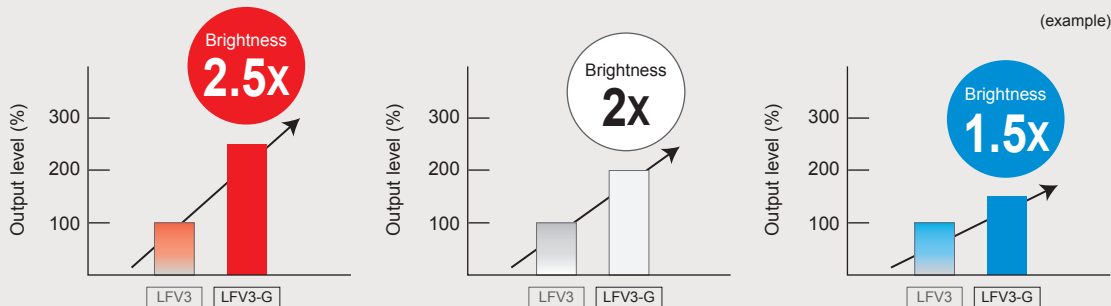


Example Configuration



➤ Achieves up to 2.5 Times Higher Output Compared to LFV3

Can be combined with the strobe overdrive power supply POD Series to further increase the brightness several times more.



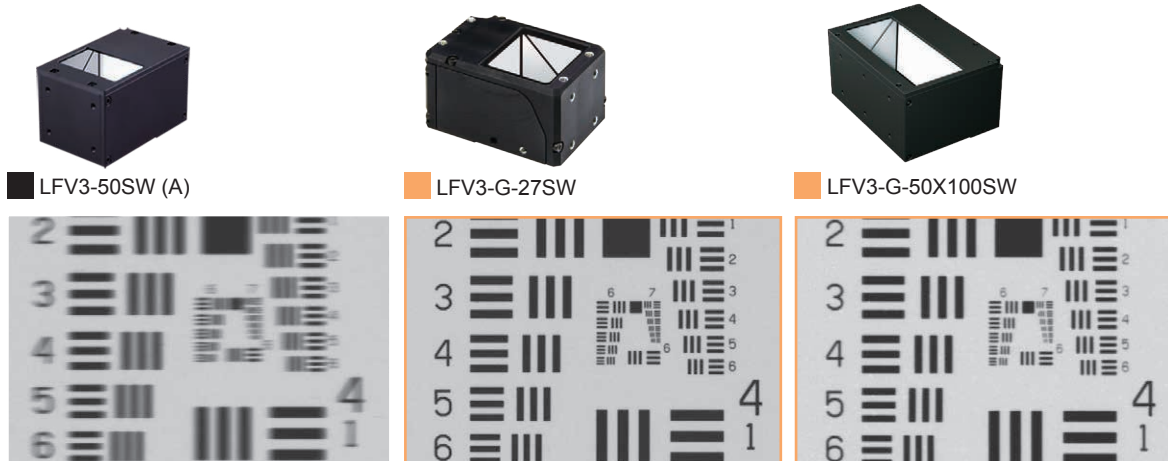
In comparison with light colors of the LFV3 Series. (These values are for reference only and are not guaranteed values.)

Strobe Overdrive Power Supply
POD Series

▶ P.329



➤ Imaging Example: Imaging Comparison of Resolution Evaluation Chart



[Imaging conditions] Camera: 2448x2048 3.45 μm monochrome camera, Lens: 2x telecentric lens, Field of view: 4.2 x 3.5 mm (the image is a cutout of about 1.3 x 1.0 mm at the center), Resolution: 1.7 μm/pixel, WD: 110 mm, LWD: 25 mm. * The shutter speed and light intensity are adjusted for each image.

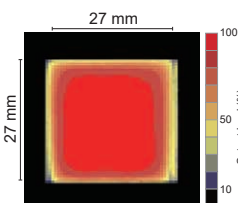
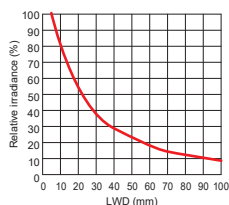
➤ Data: Relative Irradiance Graph and Uniformity (Representative Example)

The data included is for reference only. Actual values may vary.

LFV3-G-27RD

Relative irradiance graph (LWD characteristics)^{*1}
Uniformity (Relative radiance)^{*2}

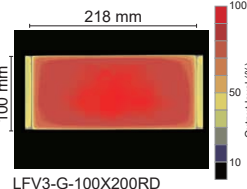
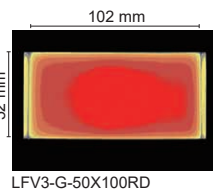
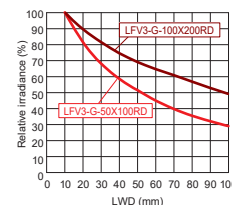
*1 Irradiance on the optical axis
*2 Illuminating distance from the light unit to the workpiece



LFV3-G-50X100RD (Red) / 100X200RD (Red)

Relative Irradiance Graph (LWD characteristics)^{*1}
Uniformity (Relative radiance)^{*2}

*1 Irradiance on the optical axis
*2 Illuminating distance from the light unit to the workpiece



| | |
|---|-------------------------------|
| LDR2 LDR2-LA LDR-LA1 SQR SQR-TP | Ring (Direct) |
| HLDR3 HPR2 LFR LKR FPR | Ring (Convergent/Diffused) |
| FPQ3 | Square |
| LDL2 LDLB HLDL3 LB | Bar |
| TH2 (5 types) LFL | Flat |
| HPD2 LDM2 LAV PDM LFXV LFX3 LFX3-PT | Dome |
| LFV3 | Coaxial |
| LFV3-G | Coaxial |
| MSU MFU | Coaxial |
| PF | Strobe |
| HLDR-IP HSL-PCL | Water-proof |
| Small COB Lights | COB |
| UV3/UV3 LNSP-UV3-FN | UV / Violet |
| IR2 (Under 1000-nm Type) IR (Over 1000-nm Type) CIR | Infrared |
| IU | Intensity Control |
| HLV3 LV LSP HFS/HFR HLV3-22-4-NR HLV3-3M-RGB-4 PFBR-600SW2 PFBR-150 PFBR3 | Spot, Etc. |
| LNL LNSP2 Coaxial Units LNSP-FN LN/LN-HK | Line (Convergent) |
| LNSD LND2 LT LNV LFXV (Rectangular Type) TH2 (Rectangular Type) | Line (Diffused) |
| LNDG LNS2 LNIS LNIS-FN | Line (Oblique Angled) |
| Telecentric Lens Macro Lens | Lenses |

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- Light Unit Selection
- Free Product Trial
- Custom Orders
- Product Details
- Pricing/Quotation
- Discontinued Products

Inquire on our website here. <https://www.ccs-grp.com/contact/>

LFV3-G Series



Refer to our website for product details.

CCS LFV3-G

Search



Lineup

| Model Name*1 | Input Voltage | Power Consumption | | | Options*2 | Extension Cables | Recommended Control Units | | Weight |
|------------------|---------------|-------------------|------------|-----------|------------------|--|---------------------------|----------------|--------|
| | | RD (Red) | SW (White) | BL (Blue) | | | Control Unit 1 | Control Unit 2 | |
| LFV3-G-27□□ | 24 V | 5.0 W | 5.0 W | 5.0 W | Protective Plate | FCB*5 Straight Cable FCB-W*6 2-Branch Cable FCB-F 4-Branch Cable FRCB Robot Cable | PD4 | PD3 | 110 g |
| LFV3-G-30X60□□ | 24 V | 12 W | 11 W | 8.1 W | | | CC-ST-1024 | POD*3 | 165 g |
| LFV3-G-35□□ | 24 V | 8.4 W | 8.3 W | 7.1 W | | | PD4 | PD3 | 140 g |
| LFV3-G-50□□ | 24 V | 17 W | 17 W | 15 W | | | CC-ST-1024 | POD*3 | 285 g |
| LFV3-G-50X100□□ | 24 V | 34 W | 34 W | 29 W | | | PD4 | PD3 | 445 g |
| LFV3-G-70□□ | 24 V | 28 W | 25 W | 22 W | | | POD*3 | 570 g | |
| LFV3-G-100□□ | 24 V | 40 W | 37 W | 32 W | | | 990 g | | |
| LFV3-G-100X200□□ | 24 V | 59 W | 59 W | 59 W | | | 1,730 g | | |

Extension Cables ▶ P.371

Control Unit Selection Guide ▶ P.305

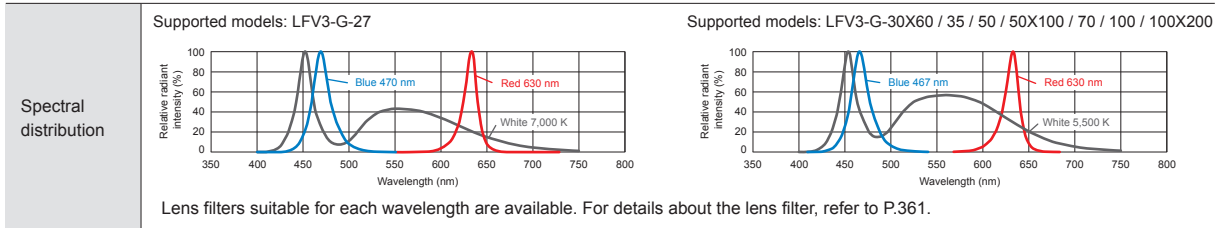
List of Control Unit Specifications ▶ P.307

*1 □□ in the model name contains the LED color. (RD: Red, SW: White, BL: Blue)

*2 If you need to replace the diffusion plate or install a polarizing plate, we can do so as a custom-order.

*3 For information on the combination of the LFV3-G and POD Series, please refer to the CCS website. <https://www.ccs-grp.com/lnk/qr/pod>

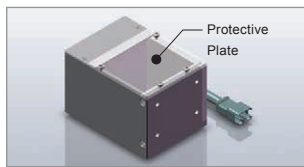
LED Properties



Be sure to read the User Manual included with the product before use and follow the safety precautions upon use. The data included is for reference only. Actual values may vary.

For details on the effective field of view when using coaxial lights, see "Effective Field of View of Coaxial Lights" on P. 393.

Options



Protective plates are available to prevent any reductions in performance due to intrusion of foreign matter into the lights. Anti-reflective (AR coating) has been applied.
* Be aware that installing a protective plate may reduce image resolution.

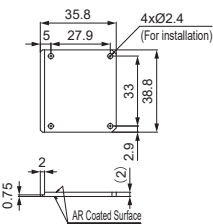
Protective Plate

Accessories:
Pan Head Screws x 5

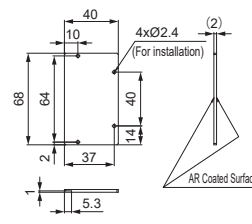
| Model Name | Applicable Light Unit (Common for all colors) |
|-----------------|---|
| PR-LFV3-27 | LFV3-G-27 |
| PR-LFV3-30X60 | LFV3-G-30X60 |
| PR-LFV3-35 | LFV3-G-35, LFV3-35(A), LFV-G-PF-35 |
| PR-LFV3-50 | LFV3-G-50, LFV3-50(A) |
| PR-LFV3-50X100 | LFV3-G-50X100, LFV3-50X100(A) |
| PR-LFV3-70 | LFV3-G-70, LFV3-70(A) |
| PR-LFV3-100 | LFV3-G-100, LFV3-100(A) |
| PR-LFV3-100X200 | LFV3-G-100X200 |

* Protective plates for products other than the applicable light units listed above are available by custom order.

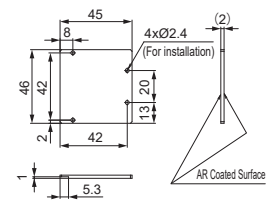
PR-LFV3-27



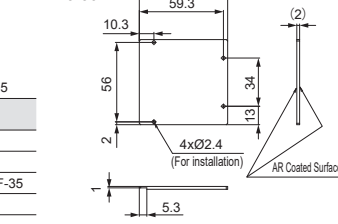
PR-LFV3-30X60



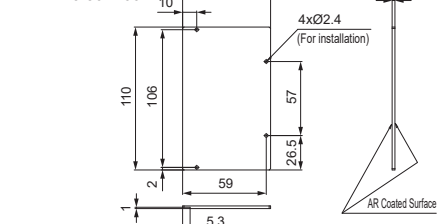
PR-LFV3-35



PR-LFV3-50



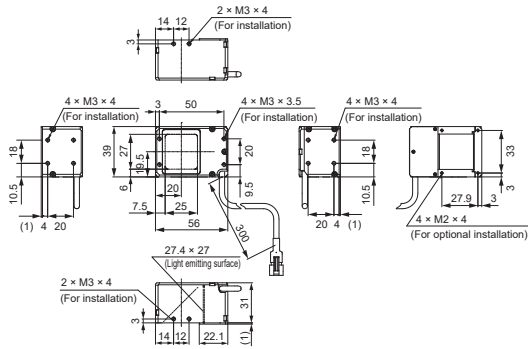
PR-LFV3-50X100



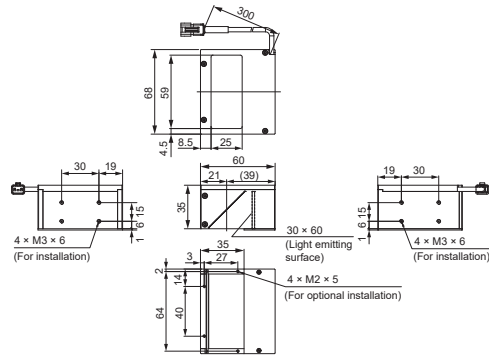
Refer to our website for other external dimensions. <https://www.ccs-grp.com/products/series/318>

➤ Dimensions (mm)

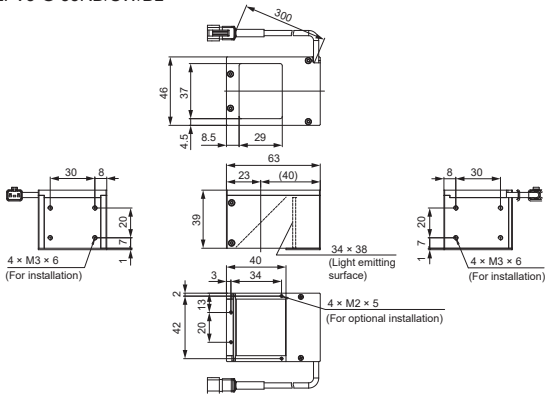
LFV3-G-27RD/SW/BL



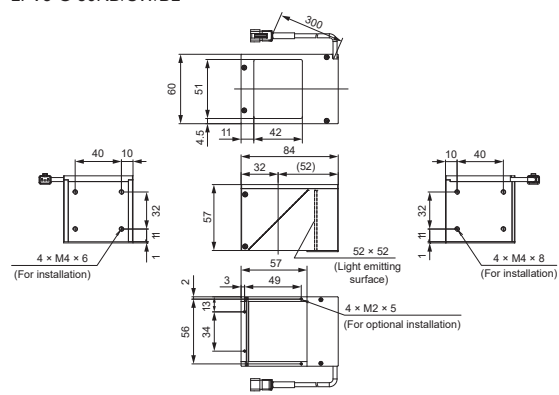
LFV3-G-30X60RD/SW/BL



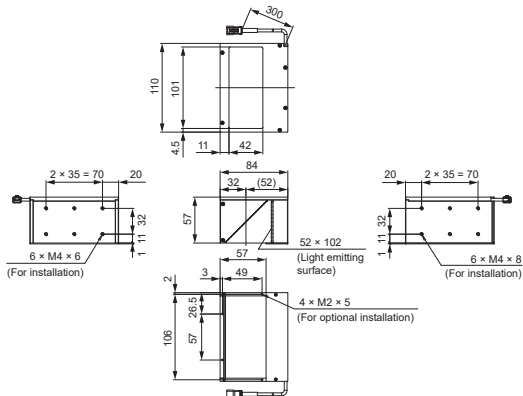
LFV3-G-35RD/SW/BL



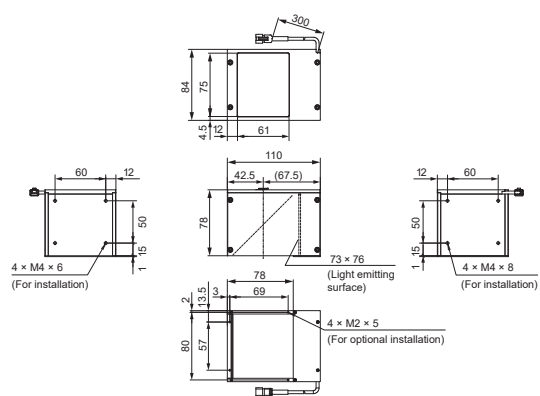
LFV3-G-50RD/SW/BL



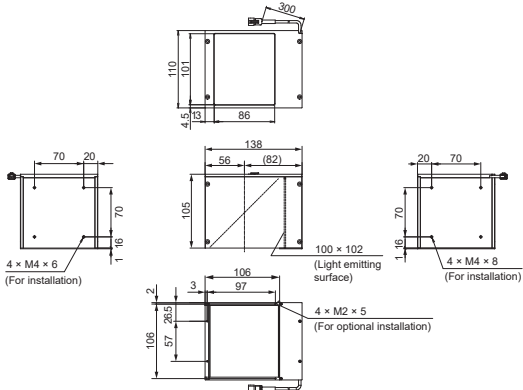
LFV3-G-50X100RD/SW/BL



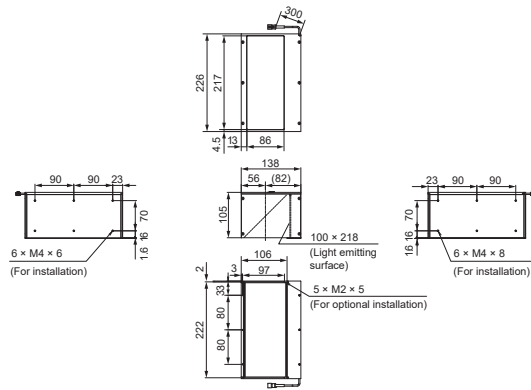
LFV3-G-70RD/SW/BL



LFV3-G-100RD/SW/BL



LFV3-G-100X200RD/SW/BL



You can change the connectors of the light unit cable. Choose between M12 connectors and flying leads. Refer to P.19 for details.

| | |
|-------------------------|----------------------------|
| LDR2 | Ring (Direct) |
| LDR-LA | Ring (Direct) |
| SQR | Ring (Direct) |
| SQR-TP | Ring (Direct) |
| HLDR3 | Ring (Convergent/Diffused) |
| HPR2 | Ring (Convergent/Diffused) |
| LFR | Ring (Convergent/Diffused) |
| LKR | Ring (Convergent/Diffused) |
| FPR | Ring (Convergent/Diffused) |
| FPQ3 | Square |
| LDL2 | Bar |
| LDLB | Bar |
| HLDL3 | Bar |
| LB | Bar |
| TH2 (5 types) | Flat |
| LFL | Flat |
| HPD2 | Dome |
| LDM2 | Dome |
| LAV | Dome |
| PDM | Dome |
| LFXV | Dome |
| LFX3 | Dome |
| LFX3-PT | Coaxial |
| LFV3 | Coaxial |
| LFV3-G | Coaxial |
| MSU | Coaxial |
| MFU | Coaxial |
| PF | Strobe |
| HLDR-IP | Water-proof |
| HSL-PCL | Water-proof |
| Small COB Lights | COB |
| UV3/VL3 | UV / Violet |
| UV | UV / Violet |
| LNSP-UV3-FN | UV / Violet |
| IR2 | Infrared |
| (Under 1000-nm Type) | Infrared |
| IF | Infrared |
| (Over 1000-nm Type) | Infrared |
| CIR | Infrared |
| IU | Intensity Control |
| HLV3 | Spot, Etc. |
| LV | Spot, Etc. |
| LSP | Spot, Etc. |
| HFS/HFR | Spot, Etc. |
| HLV3-22-4-NR | Spot, Etc. |
| HLV3-3M-RGB-4 | Spot, Etc. |
| PFBR-600SW2 | Spot, Etc. |
| PFBR-150 | Spot, Etc. |
| PFB3 | Spot, Etc. |
| LNL | Line (Convergent) |
| LNLN | Line (Convergent) |
| Coaxial Units | Line (Convergent) |
| LNSP-FN | Line (Convergent) |
| LN/LN-HK | Line (Convergent) |
| LNSD | Line (Diffused) |
| LND2 | Line (Diffused) |
| LT | Line (Diffused) |
| LNV | Line (Diffused) |
| LFXV (Rectangular Type) | Line (Diffused) |
| TH2 (Rectangular Type) | Line (Diffused) |
| LNDG | Line (Oblique Angled) |
| LNIS2 | Line (Oblique Angled) |
| LNIS | Line (Oblique Angled) |
| LNIS-FN | Line (Oblique Angled) |
| Telecentric Lens | Macro Lens |
| Macro Lens | Macro Lens |

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