

Indirect Coaxial Lights / Line Lights with Coaxial System LFV/LFV2 Series / LNV Series



Bright, even illumination across the entire field of view makes on-axis illumination systems ideally suited for inspecting mirror-finish work for scratches etc.



LFV/LFV2/LFV2-CP Series

LFV2 / LFV2-CP Series Features

■ The use of CCS's unique heat dissipating construction minimizes temperature increases due to the heat generation in LEDs, increasing the service life of the LED. (Refer to page 103.)

LFV/LFV2-CP Series Features

- The use of a half mirror with an anti-reflection coating eliminates ghost images.
- The viewing window is protected with optical glass, preventing dust entry.
- Coaxial lights with a lens mounting ring are available. These lights can be mounted directly to the threaded part of the lens commonly used for mounting a filter and are best suited for installation in confined places. (Available in M25.5, M27, and M30.5 models.)





The LNV-300 provides coaxial drop illmination for line sensors. Chip LEDs are used to achieve ultra-even illumination.



LFV2-5 Series

LFV2-5 Series.

- The micro lens and illumination system are combined in one unit, making the system much easier to use than a separate illumination system combined with a standard f50 lens
- The field of view can be adjusted by changing the macro lens on the lens barrel.



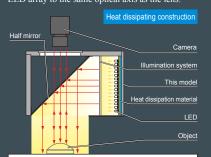
Example of installation

Magnification / Field of View

	Magnification	L	WD	1/3 inch sensor	1/2 inch sensor	
LFV2-5-2	2.4 X	1	28 _{mm} or less	Field of View:1.5mm	Field of View:2mm	
LFV2-5-5	1.1 X	0 _{mm}	45mm or less	Field of View:3.2mm	Field of View:4.2mm	
	}	>	}	}	}	
	3 X	70mm	23mm or less	Field of View:1.2mm	Field of View:1.6mm	
LFV2-5-12	1 X	0 _{mm}	22mm or less	Field of View: 3.5mm	Field of View:4.6mm	
		?	}	}	>	
	0.4 X	20 _{mm}	53mm or less	Field of View:9.3mm	Field of View:12.2mm	

Illumination structure of LFV2-100

A half mirror aligns the diffused light from the LED array to the same optical axis as the lens



Examples of Coaxial Light Images

Inspecting for Bearing Face Damage

clearly visible, using an on-axis illumination system.

Light used: LFV2-70RD



Bearing Periphery Inspection

With standard coaxial illumination, the light is concentrated at the center of the illumination area.



With the LNV-300, even lumination is achived over a wide area.

Light used: LNV-300



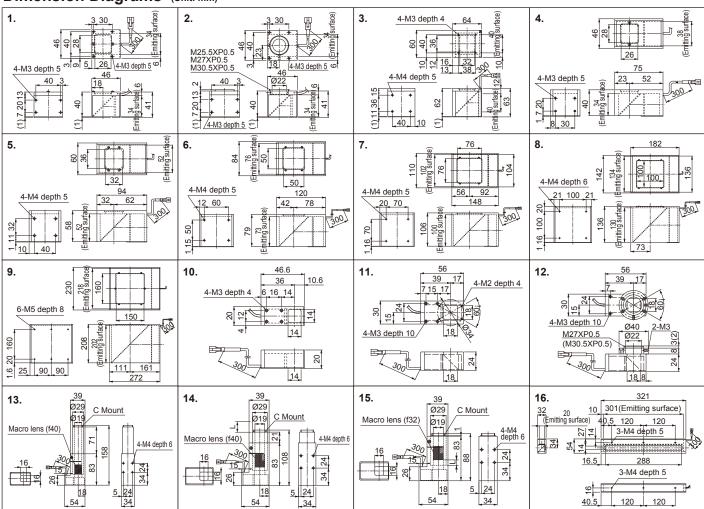
Product Lineup Table

Series	Direct Number	Model Name	Color	Power Consumption	Option	Dimension
	1001830	LFV-34	•	12V / 2.9W	_	1
	1002739	LFV-34SW2	0	24V / 2.2W		
	1001838	LFV-34-BL		24V / 2.4W		
	1001843	LFV-34-GR	•	240/2.400		
	1001848	LFV-34-M25	•		_	2
LFV	1001849	LFV-34-M27	•	12V / 2.9W		
	1001850	LFV-34-M30	•			
	1001867	LFV-40	•	12V / 2.4W	_	3
	1002763	LFV-40SW2	0	24V / 3.1W		
	1001868	LFV-40-BL		24V / 3.3W		
	1001869	LFV-40-GR				
	1002006	LFV2-35RD	•	12V / 2.4W	P·L	4
	1002764	LFV2-35SW2	0	24V / 3.1W		
	1002002	LFV2-35BL		24V / 3.3W		
	1002004	LFV2-35GR				
	1002024	LFV2-50RD	•	12V / 6.6W		5
	1002740	LFV2-50SW2	0	24V / 8.4W		
	1002022	LFV2-50BL		24\/ / 0 0\//		
LFV2	1002023	LFV2-50GR	•	24073.000		
LIVZ	1002030	LFV2-70RD	•	12V / 9.3W	P·L	6
	1002741	LFV2-70SW2	0			
	1002027	LFV2-70BL		24V / 14W		
	1002028	LFV2-70GR	•			
	1001990	LFV2-100RD	•	12V / 18W	/	
	1002765	LFV2-100SW2	0	24V / 23W P·L		7
	1001987	LFV2-100BL		24V / 24W		
	1001988	LFV2-100GR		2-TV / 2-TVV		

Series	Direct Number	Model Name	Color	Power Consumption	Option	Dimension
	1001995	LFV2-130RD	•	12V / 28W		8
	1002766	LFV2-130SW2	0	24V / 38W	P·L	
	1001993	LFV2-130BL		24V / 41W	P.L	
LFV2	1001994	LFV2-130GR	•	24074100		
LFVZ	1002000	LFV2-200RD	•	24V / 42W		9
	1002767	LFV2-200SW2	0		P·L	
	1001998	LFV2-200BL		24V / 46W		
	1001999	LFV2-200GR	•			
	1002034	LFV2-CP-13RD	•	12V / 0.9W		10
	1002762	LFV2-CP-13SW2	0	12V / 0.6W		
	1002032	LFV2-CP-13BL		12V / 0.7W		
	1002033	LFV2-CP-13GR	•	12 0 7 0.7 00		
LFV2-CP	1002040	LFV2-CP-18RD	•	12V / 1.2W		11
LI VZ-CF	1002738	LFV2-CP-18SW2	0		_	
	1002036	LFV2-CP-18BL		24V / 1.6W		
	1002038	LFV2-CP-18GR	•			
	1002041	LFV2-CP-18RD-M27	•	12V / 1.2W	_	12
	1002042	LFV2-CP-18RD-M30	•	120/1.200		
	1002016	LFV2-5-2RD	•	12V / 1.2W	_	13
LFV2-5	1002020	LFV2-5-5RD	•	12V / 1.2W	_	14
	1002012	LFV2-5-12RD	•	12V / 1.2W	_	15
	1002285	LNV-300	•	24V / 5.4W		16
1817	1002289	LNV-300-SW	0		_	
LNV	1002286	LNV-300-BL		24V / 10W		
	1002288	LNV-300-GR	•			

^{*}LNV-300 Red Lights cannot be used with a CCS Strobe Control Unit (such as the PTU2 Series). The Lights can be turned ON and OFF with a normal Control Unit.

Dimension Diagrams (Unit: mm)



^{*}The following letters indicate options.

P: Polarizing Plate, L: Light Control Film

^{*}For further details on these options, refer to page 99 to 101.