



Diffusion Plates

Can prevent glare, which is a problem when making images of glossy workpieces.



For the Ring Lights
LDR2 / LDR-PF Series



For the Low-angle Ring Lights
LDR2-LA Series



For the Bar Lights
LDL2-19X4 Series
LDL2-33X8 Series



LDL2 Series
LDL-PF Series



For the Ring Lights LDR2 / SQR / LDR-PF Series

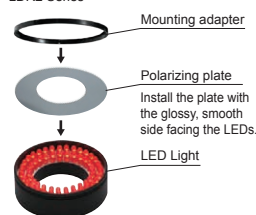
Model name	Applicable Light Unit (Common for all colors)	Dimensions		Thickness
		A	B	
DF-LDR-32*1	LDR2-32	Ø32	Ø9	(2)
DF-LDR-42*1	LDR2-42	Ø42	Ø14	
DF-LDR-50*1	LDR2-50	Ø50	Ø25	
DF-LDR-70	LDR2-70	Ø66	Ø35	
DF-LDR-90*1	LDR2-90	Ø90	Ø40	
DF-LDR-90-H28*2	LDR2-90-30	Ø90	Ø28	
DF-LDR-120-45*1	LDR2-120	Ø120	Ø45	
DF-SQR-56	SQR-56	Refer to the drawing		
DF-LDR-PF-36*1	LDR-PF-36	Ø36	Ø10	
DF-LDR-PF-54*1	LDR-PF-54	Ø54	Ø22	
DF-LDR-PF-75*1	LDR-PF-75	Ø75	Ø35	

*1 An AD Series adapter is needed when installing light units. (Product Page ▼ P. 368)

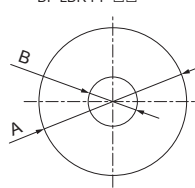
*2 This is a custom order product. Contact our local sales office for details.

Example installation

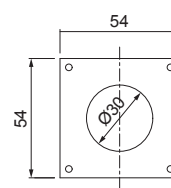
Example: Attachment of Ring Lights
LDR2 Series



● Dimensions (mm)
DF-LDR-□□
DF-LDR-PF-□□



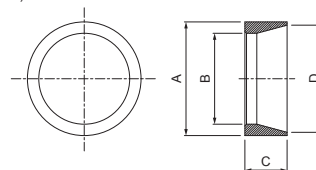
DF-SQR-56



For the Low-Angle Ring Lights LDR2-LA / LDR-PF-LA Series

Model name	Applicable Light Unit (Common for all colors)	Dimensions			
		A	B	C	D
DF-LDR-48LA	LDR2-48-LA	Ø22	Ø13	18.5	Ø21.77
DF-LDR-74LA	LDR2-74-LA	Ø48	Ø40	24	Ø50
DF-LDR-100LA	LDR2-100-LA	Ø70	Ø56	26	Ø66
DF-LDR-132LA	LDR2-132-LA	Ø98	Ø82		Ø92
DF-LDR-170LA	LDR2-170-LA	Ø133.5	Ø120		Ø130
DF-LDR-208LA	LDR2-208-LA	Ø173.5	Ø152	32	Ø174.3
DF-LDR-PF-75-LA	LDR-PF-75-LA	Please check the web page for details.			
DF-LDR-PF-100-LA	LDR-PF-100-LA				
DF-LDR-PF-150-LA	LDR-PF-150-LA				

● Dimensions (mm)

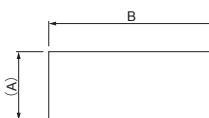


For the Bar Lights LDL2 / LDL-PF Series

Model name	Applicable Light Unit (Common for all colors)	Dimensions	
		A	B
DF-LDL2-19X4	LDL2-19X4	6.4	28
DF-LDL2-33X8	LDL2-33X8	10.4	44
DF-LDL2-41X16	LDL2-41X16	23.2	46
DF-LDL2-80X16	LDL2-80X16		84.7
DF-LDL2-119X16	LDL2-119X16		123.7
DF-LDL2-158X16	LDL2-158X16	22	162.7
DF-LDL-PF-52X18	LDL-PF-52X18		58
DF-LDL-PF-102X18	LDL-PF-102X18		108
DF-LDL-PF-152X18	LDL-PF-152X18		158

Model name	Applicable Light Unit (Common for all colors)	Dimensions	
		A	B
DF-LDL2-26X30	LDL2-26X30	37.2	30.7
DF-LDL2-50X30	LDL2-50X30		54.7
DF-LDL2-74X30	LDL2-74X30		79
DF-LDL2-98X30	LDL2-98X30		102.7
DF-LDL2-122X30	LDL2-122X30		126.7
DF-LDL2-146X30	LDL2-146X30		150.7
DF-LDL2-218X30	LDL2-218X30		222.7
DF-LDL2-266X30	LDL2-266X30		270.7
DF-LDL-PF-52X30	LDL-PF-52X30	34	58
DF-LDL-PF-102X30	LDL-PF-102X30		108
DF-LDL-PF-152X30	LDL-PF-152X30		158

● Dimensions (mm)



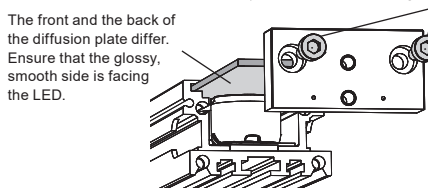
For the Bar Lights HLDL3 Series

Lights are shipped with a low-uniformity, high-transmissivity diffusion plate mounted. Light characteristics can be changed by changing the diffusion plate. * White wide-type lights are shipped with the DF-HLDL3 Series diffusion plate mounted.

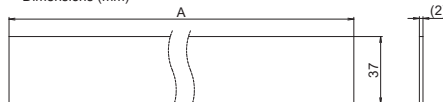
Model name	Applicable Light Unit (Common for all colors)	Dimension A
DF-HLDL3-150(-HU)	HLDL3-150X28	154
DF-HLDL3-300(-HU)	HLDL3-300X28	304
DF-HLDL3-450(-HU)	HLDL3-450X28	454
DF-HLDL3-600(-HU)	HLDL3-600X28	604
DF-HLDL3-750(-HU)	HLDL3-750X28	754
DF-HLDL3-900(-HU)	HLDL3-900X28	904
DF-HLDL3-1050(-HU)	HLDL3-1050X28	1054
DF-HLDL3-1200(-HU)	HLDL3-1200X28	1204
DF-HLDL3-1350(-HU)	HLDL3-1350X28	1354
DF-HLDL3-1500(-HU)	HLDL3-1500X28	1504
DF-HLDL3-1650(-HU)	HLDL3-1650X28	1654
DF-HLDL3-1800(-HU)	HLDL3-1800X28	1804

Series	Uniformity	Transmissivity
DF-HLDL3 Series	Medium	Medium
DF-HLDL3-HU Series	High	Low

M4 screw (recommended screw tightening torque: 0.6 N·m)



● Dimensions (mm)



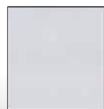
Caution

Diffusion plates are consumables. Heat may cause deformation or discoloring depending on the use environment. Make sure that countermeasures against overheating are implemented and that the temperature does not exceed the operating limit.

Can prevent glare, which is a problem when making images of glossy workpieces.



Diffused Bar Lights
LB Series



For the Coaxial Lights
LFV3 / LFV-PF Series



For the Coaxial Lights
LFV3 / LFV-PF Series
(End of the model name: -UF)

For Diffused Lighting Bar Lights LB Series

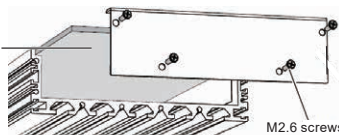
Light characteristics can be changed by changing the diffusion plate.

The DF-LB Series diffusion plates have lower uniformity and higher transmissivity than the standard type diffusion plates installed at the time of shipment.

For high power type lighting, DF-LB Series diffusion plates are installed at the time of shipment.

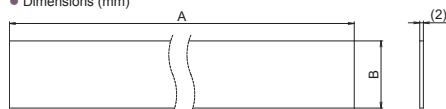
Model name	Applicable Light Unit (Common for all colors)	Dimensions		Model name	Applicable Light Unit (Common for all colors)	Dimensions		Model name	Applicable Light Unit (Common for all colors)	Dimensions	
		A	B			A	B			A	B
DF-LB-200X50	LB-200X50	214	55	DF-LB-200X100	LB-200X100	214	105.5	DF-LB-200X150	LB-200X150	214	155.5
DF-LB-300X50	LB-300X50	314		DF-LB-300X100	LB-300X100	314		DF-LB-300X150	LB-300X150	314	
DF-LB-400X50	LB-400X50	414		DF-LB-400X100	LB-400X100	414		DF-LB-400X150	LB-400X150	414	
DF-LB-500X50	LB-500X50	514		DF-LB-500X100	LB-500X100	514		DF-LB-500X150	LB-500X150	514	
DF-LB-600X50	LB-600X50	614		DF-LB-600X100	LB-600X100	614		DF-LB-600X150	LB-600X150	614	
DF-LB-700X50	LB-700X50	714		DF-LB-700X100	LB-700X100	714		DF-LB-700X150	LB-700X150	714	
DF-LB-800X50	LB-800X50	814		DF-LB-800X100	LB-800X100	814		DF-LB-800X150	LB-800X150	814	
DF-LB-900X50	LB-900X50	914		DF-LB-900X100	LB-900X100	914		DF-LB-900X150	LB-900X150	914	
DF-LB-1000X50	LB-1000X50	1014		DF-LB-1000X100	LB-1000X100	1014		DF-LB-1000X150	LB-1000X150	1014	
DF-LB-1100X50	LB-1100X50	1114		DF-LB-1100X100	LB-1100X100	1114		DF-LB-1100X150	LB-1100X150	1114	
DF-LB-1200X50	LB-1200X50	1214		DF-LB-1200X100	LB-1200X100	1214		DF-LB-1200X150	LB-1200X150	1214	
DF-LB-1300X50	LB-1300X50	1312		DF-LB-1300X100	LB-1300X100	1312		DF-LB-1300X150	LB-1300X150	1312	
DF-LB-1400X50	LB-1400X50	1412		DF-LB-1400X100	LB-1400X100	1412		DF-LB-1400X150	LB-1400X150	1412	
DF-LB-1500X50	LB-1500X50	1512		DF-LB-1500X100	LB-1500X100	1512		DF-LB-1500X150	LB-1500X150	1512	
DF-LB-1600X50	LB-1600X50	1612		DF-LB-1600X100	LB-1600X100	1612		DF-LB-1600X150	LB-1600X150	1612	
DF-LB-1700X50	LB-1700X50	1712		DF-LB-1700X100	LB-1700X100	1712		DF-LB-1700X150	LB-1700X150	1712	
DF-LB-1800X50	LB-1800X50	1812		DF-LB-1800X100	LB-1800X100	1812		DF-LB-1800X150	LB-1800X150	1812	
DF-LB-1900X50	LB-1900X50	1912		DF-LB-1900X100	LB-1900X100	1912		DF-LB-1900X150	LB-1900X150	1912	
DF-LB-2000X50	LB-2000X50	2012		DF-LB-2000X100	LB-2000X100	2012		DF-LB-2000X150	LB-2000X150	2012	
DF-LB-2100X50	LB-2100X50	2111		DF-LB-2100X100	LB-2100X100	2111		DF-LB-2100X150	LB-2100X150	2111	
DF-LB-2200X50	LB-2200X50	2211		DF-LB-2200X100	LB-2200X100	2211		DF-LB-2200X150	LB-2200X150	2211	
DF-LB-2300X50	LB-2300X50	2311		DF-LB-2300X100	LB-2300X100	2311		DF-LB-2300X150	LB-2300X150	2311	
DF-LB-2400X50	LB-2400X50	2411		DF-LB-2400X100	LB-2400X100	2411		DF-LB-2400X150	LB-2400X150	2411	
DF-LB-2500X50	LB-2500X50	2510.5		DF-LB-2500X100	LB-2500X100	2510.5		DF-LB-2500X150	LB-2500X150	2510.5	
DF-LB-2600X50	LB-2600X50	2610.5		DF-LB-2600X100	LB-2600X100	2610.5		DF-LB-2600X150	LB-2600X150	2610.5	
DF-LB-2700X50	LB-2700X50	2710.5		DF-LB-2700X100	LB-2700X100	2710.5		DF-LB-2700X150	LB-2700X150	2710.5	

For sizes ≥ 1000 , the diffusion plate has a front side and a back side. Install it with the glossy, smooth side facing the LEDs.



M2.6 screws
(Recommended tightening torque: 0.2 N·m)

● Dimensions (mm)



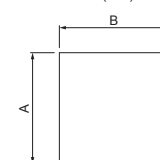
For the Coaxial Lights LFV3 / LFV-PF Series

Model name	Transmission	Applicable Light Unit (Common for all colors)	Dimensions		
			A	B	Thickness
DF-LFV3-35	High	LFV3-35 / LFV-PF-35	34	42	(2)
DF-LFV3-35-UF	Low				
DF-LFV3-50	High	LFV3-50 / LFV-PF-50	52	56	
DF-LFV3-50-UF	Low				
DF-LFV3-50X100	High	LFV3-50X100	73	106	
DF-LFV3-50X100-UF	Low				
DF-LFV3-70	High	LFV3-70 / LFV-PF-70	73	80	(2)
DF-LFV3-70-UF	Low				

Model name	Transmission	Applicable Light Unit (Common for all colors)	Dimensions		
			A	B	Thickness
DF-LFV3-100	High	LFV3-100 / LFV-PF-100	100	106	(2)
DF-LFV3-100-UF	Low				
DF-LFV3-130	High	LFV3-130	130	138	
DF-LFV3-130-UF	Low				
DF-LFV3-200	High	LFV3-200	202	222	
DF-LFV3-200-UF	Low				

Transmission High: Standard for red and white
Transmission Low (End of the model name: -UF): Standard for blue

● Dimensions (mm)



Example of usage

Imaging of can from above



No diffusion plate

Using diffusion plate

There are two types of diffusion plates with different transmission for the Coaxial Lights LFV3 Series. Select one to match your work environment.

E.g.: If changing from a low transmission diffusion plate to a high one:

Intensity value 70%



Bright even though uniformity is low.

E.g.: If changing from a high transmission diffusion plate to a low one:

Intensity value 75%



Brightness decreases as uniformity is increased.

Caution

Diffusion plates are consumables. Heat may cause deformation or discoloring depending on the use environment. Make sure that countermeasures against overheating are implemented and that the temperature does not exceed the operating limit.

PD4
PD3
PD2
POD
PTU2
PF
CN-EPOE
CN-4024-2-EIPT
PB-2430-1
CC-ST-1024
PJ2
PJ
CC-PJ-0707
PSCC
PSB4
PSB3-30024

Lens Filters

Diffusion Plates

Polarizing Plates

Light Control Films

Fixtures, etc.

Brackets

SM/EL Cables

Options

Control Units and Controllers