


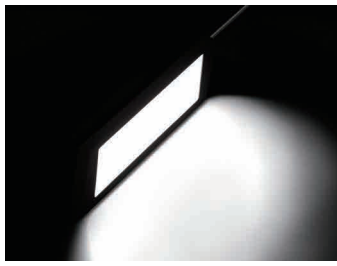
LED Flat Lights - High Illuminance

IP20

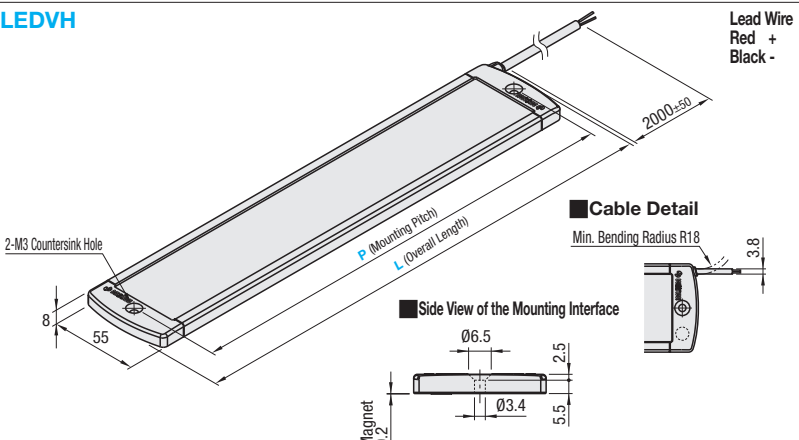
Angle Adjusting Brackets / AC Adapters / ON/OFF Switch Only



RoHS 10



LEDVH



Lead Wire
Red +
Black -

Cable Detail
Min. Bending Radius R18

Side View of the Mounting Interface

Features
The illuminance uniformity is 80% or more.

For AC Adapter and ON / OFF Switch, see **P.1054**.
Dimming not possible. For Dimming Types, see **P.1025**.

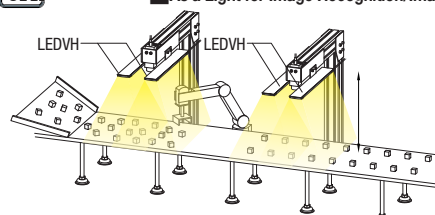
Part Name	M Material	S Surface Treatment
Main Body	Aluminum	Black Paint
Cover for Main Body	Polycarbonate	-
Surface Cover	PET	Mist Surface Treatment
Magnet	Cobalt Magnets	-
Cable	Cross-linked Polyethylene	-

Part Number	Color	Installing Method	L	Illuminance (Lux, lx)		Fluorescent lamp illumination comparison (Reference)	Input Voltage (V)	Input Current (mA)	Power Consumption (W)	Attraction Force N (kgf)	Temperature Range (°C)	Color Temperature (Kelvin, K)	Luminous Intensity Angle	Mass (g)	Unit Price	Volume Discount Rate	
				W (White)	lx/0.5m	lx/1m										1 ~ 9 pc(s).	10 ~ 50
LEDVH	W (White)	Countersunk Hole or Magnet	110	190	50	6W ~	DC24 ±10%	85	2	22.5 (2.3)	-20~45	5000	120°	140			
			210	540	160	10W ~		190	5					200			
			310	900	245			280	6.7					260			
			410	1340	400	20W ~		421	10.1					320			

- For each detail, see the glossary on **P.1055**.
For order and installation, confirm "Notes on Usage" section on **P.1056**.
As the LED elements vary on their luminous colors and luminance, they may be slightly different in their colors and brightness, though they are of the same part numbers.

Ordering Example
LEDVH190 - W

As a Light for Image Recognition/Image Inspection



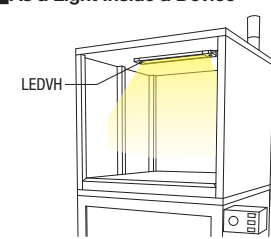
Imaging Recognition Area

- Camera imaging is performed to recognize disorderly conveyed workpieces and positional information is transmitted to a handling robot.
- Flat lights with high uniformity are effective in preventing multiple shadows as recognition error is avoided.

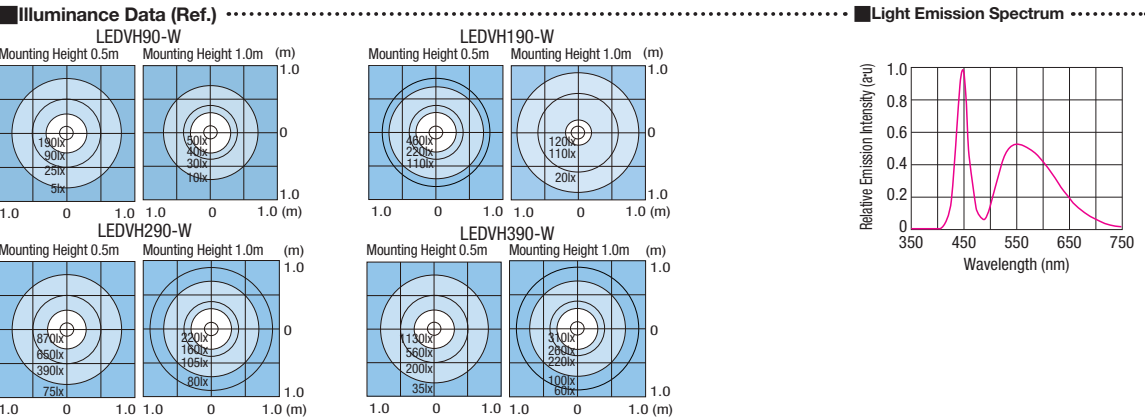
Close Distance Illuminance (Reference)


Type	P	lx/25mm	lx/50mm
LEDVH	90	19000	11000
	190	24000	17000
	390	31000	22000

As a Light Inside a Device



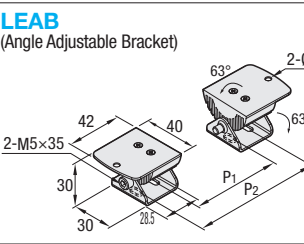
- Imaging Inspection Area**
- Camera-based inspection for "scratches" and "character recognition", etc. is performed for workpieces that has been arranged by a handling robot.
 - High illuminance flat lights are effective as they allow crisp imaging.
- As it has high illuminance with a beam angle of 120°, it is recommended as a general light inside a device.
- It illuminates highly uniform light beams that are similar to a fluorescent lamp.
- For details on Surface Emission lighting, see **P.1028**.





RoHS 10

LEAB
(Angle Adjustable Bracket)



Mounting Hole Details

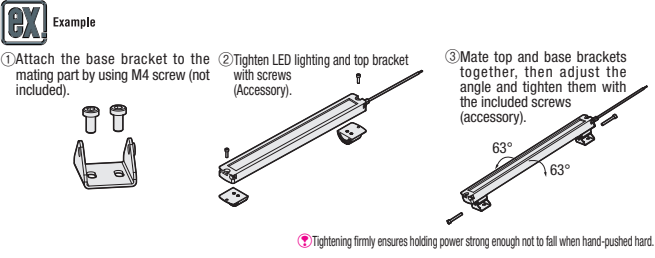
Part Name	Top (Lighting Mounting Side)	M Material	S Surface Treatment
Bracket	Base	Aluminum	Anodized
Hex Socket Head Cap Screw	For Light Mounting For Angle Adjustments	SUS304	-

For one order, one right bracket and one left bracket are shipped together.
The rotating angle is each 63° from the center, totaling 126° from the center.
LEAB (Angle Adjustable Bracket) is applicable only to LED lighting listed on **P.1029**, **1031**, **1032** and **1033**.

Part Number	Included Screw	Mass (g)	Unit Price	Volume Discount Rate		
Type	No.	For Light Mounting	For Angle Adjustments	1 ~ 4 pc(s).	5 ~ 9	10 ~ 50
LEAB (Angle Adjustable Bracket)	1	Hex Socket Head Cap Screw M4×18 (2 pcs.)	Hex Socket Head Cap Screw M5×35 (2 pcs.)	86		

For one order, one right bracket and one left bracket are shipped together. *The mass is the sum of right and left brackets.


Example



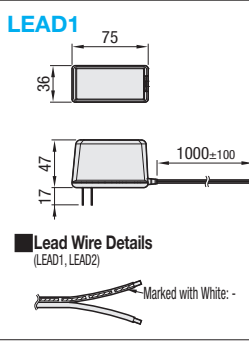
① Attach the base bracket to the mating part by using M4 screw (not included).
② Tighten LED lighting and top bracket with screws (Accessory).
③ Mate top and base brackets together, then adjust the angle and tighten them with the included screws (accessory).

Tightening firmly ensures holding power strong enough not to fall when hand-pushed hard.

LEAD1

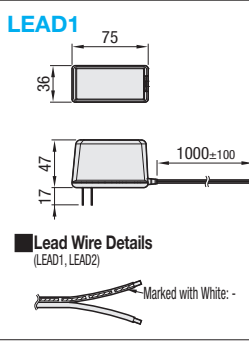


LEAD2

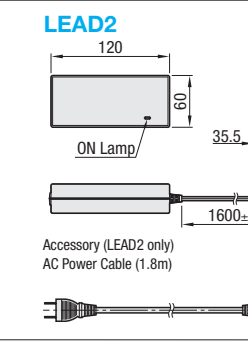


Lead Wire Details
(LEAD1, LEAD2)
Marked with White: -

LEAD1




LEAD2




AC Adapter selection standards

- Select an adapter with a capacity 20% or more than the rated current of the light to be used.
- Use 1 AC adapter per 1 LED light.
- All DC24V LEDs on **P.1029~P.1053** can be used (excluding LEDAF).

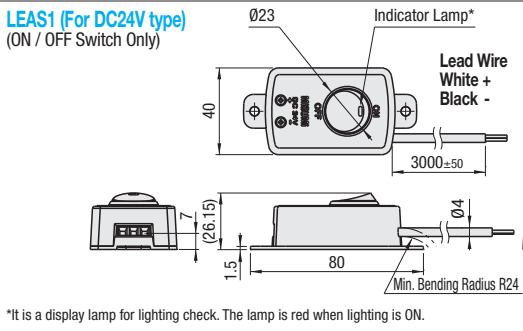
Part Name	M Material
Case	Polycarbonate
Cable	PVC

Part Number		Output Voltage (V)	Input Voltage (V)	Output Current (mA)	Power Consumption (W)	Temperature Range (°C)	Mass (g)	Unit Price	Volume Discount Rate		Ordering Example	Part Number	
Type	No.							1 ~ 4 pc(s).	5~9			10~50	LEAD1
LEAD (AC Adapter)	1	DC24	AC100~240	1000	24	0~40	148±5						
	2			2700	64.8		300±5						



RoHS 10

LEAS1 (For DC24V type)
(ON / OFF Switch Only)



Indicator Lamp*

Lead Wire
White +
Black -

Min. Bending Radius R24

Part Name	M Material
Main Body	ABS Resin
Cable	PVC

Part Number	Current Capacity (A)	Input Voltage (V)	Contact Resistance (mΩ)	Insulation Resistance (MΩ)	Breakdown voltage (V)	Contact Durability	Mass (g)	Unit Price	Volume Discount Rate	
Type	No.					Mechanical Life	Electrical Life	1 ~ 9 pc(s).	10 ~ 19	20 ~ 50
LEAS (ON / OFF Switch Only)	1	10	DC24V	20	1000	1500DC/minute	30000	10000	110	

Ordering Example
LEAS1

Example

Connection example with LED Lighting

Insert the leads and tighten the screws with a Phillips screwdriver.

- When screw tightening the leads, be sure to disconnect the power or turn the power OFF.

