



# Coaxial Lights for Collimated Backlights MFU Series

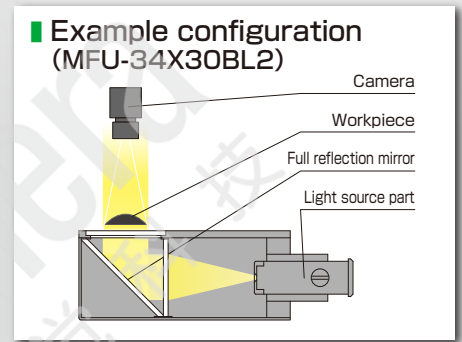
Great for highly accurate dimension measuring, inspection for fine burrs, and more!



MFU-34X30BL2-12/-24



MFU-54X40BL2-12/-24



## Light emission suitable for highly accurate dimension measuring, and inspection for fine burrs

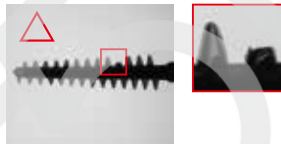
Our unique optical design achieves **highly accurate imaging that prevents light from wrapping around the workpiece**. Light convergence can be adjusted according to the lens on the imaging side.

■ Imaging example:

Inspection of the appearance of interdenal brush

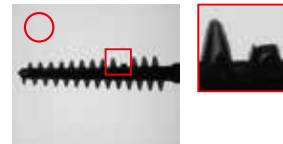


■ Flat Light (High Brightness Type) TH2-27X27BL

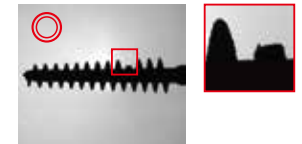


Flat lights make it difficult to emphasize the edges of the silhouette because the light wraps around the workpiece

■ Flat Light (High Directivity Type) TH2-27X27BL-PM



■ MFU-34X30BL2



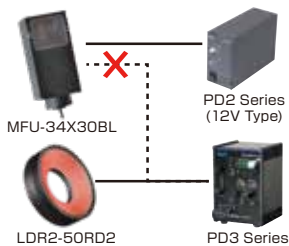
With the MFU-34X30BL2, it is possible to emphasize the edges of the silhouette by preventing light from wrapping around the workpiece.

## 12V and 24V types available

The 12V type, which is the same as the existing product, and the new 24V type are available.

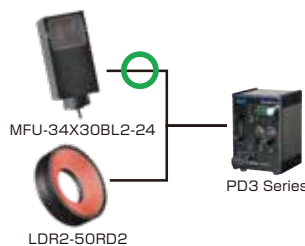
Using new 24V type MFU series with our 24V lighting equipment **alleviates the need for multiple control units**.

■ Existing Product



Using the existing 12V type MFU series with our 24V lighting equipment requires separate control units corresponding to 12V and 24V.

■ Updated Models



Using new 24V type MFU series with our 24V lighting equipment alleviates the need for multiple control units.

## KT-MFU further increases the brightness

Use the KT-MFU collimated backlight unit with the HLV series spot light to **increase brightness**.

■ Imaging example:

Observation of dust on the ND filter



■ KT-MFU-34X30BL2 Light Unit : HLV3-22BL-4C



Even workpieces with low optical transmission can be imaged with a short exposure time.

[Imaging Conditions] Camera: 2448 X 2048 3.45 μm monochromatic camera, Exposure Time: 0.9 ms  
Lens: 1x magnifying telecentric lens, Imaging Field: 8 mm (W)  
Resolution: 3 μm/pixel, WD: 110 mm, LWD: 115 mm

# Product Lineup

Model Name	LED Color	Input Voltage	Power Consumption	Extension Cable		Recommended Control Unit		Weight
MFU-34X30BL2-12	Blue	DC12 V	0.9 W	CB Straight Cable	CB-F 4-branch Cable	PD2*1	PSB*1	200 g
MFU-54X40BL2-12				CB-W 2-branch Cable	RCB Robot Cable			
MFU-34X30BL2-24		DC24 V	1.7 W	FCB*3 Straight Cable	FCB-F 4-branch Cable	PD3	CC-ST-1024	200 g
MFU-54X40BL2-24				FCB-W*4 2-branch Cable	FRCB Robot Cable	PSB*2		400 g

The MFU series cannot be used with the strobe control unit (overdrive mode).

\*1 This product is made for 12V input voltage. Please select a control unit with a 12V output voltage.

\*2 This product is made for 24V input voltage. Please select a control unit with a 24V output voltage.

\*3 Excluding products with model numbers ending in -ME7, -EL2, -PF, or -PF-EL9. \*4 Excluding products with model numbers ending in -EL2.

## Common Specifications

LED Color	Blue
Peak Wavelength (typ.)	465 nm
Cable Length	300 mm
Operating Environment (Limited to indoor use only)	Temperature: 0 ~ 40°C Humidity: 20 ~ 85%RH(no condensation)
Storage Environment	Temperature: -20 ~ 60°C Humidity: 20 ~ 85%RH(no condensation)

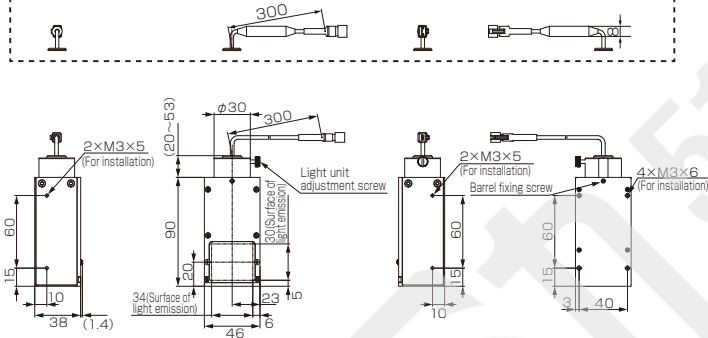
Cooling Method	Natural air-cooling
CE Marking	Safety Standards: Conforms to EN62471
Case Material	Aluminum alloy, Steel sheet, Resin
Accessories*1	Aperture (φ0.5) × 1, Aperture (φ2.0) × 1 Set screws (M2 × 2 mm black) × 3 M2 hexagon wrench × 1

\*1 An aperture (φ1.0) is attached to the light source part when shipped from the factory. Replacing with one of the additional apertures supplied (φ0.5 and φ2.0) allows the light quantity (high/low) and light distribution (wide/narrow) to be changed.

## Dimensions (mm)

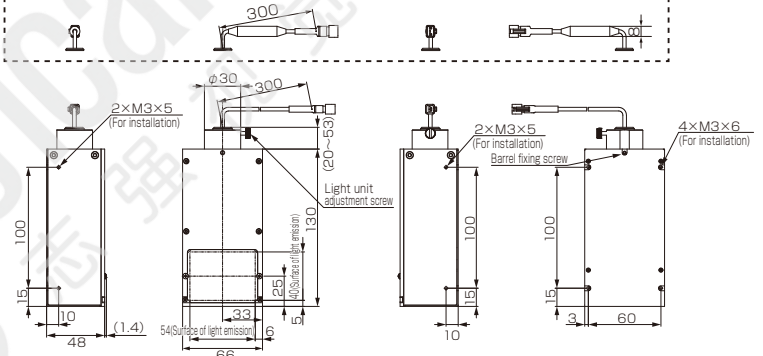
### MFU-34X30BL2-12 / -24

In the case of 24V type



### MFU-54X40BL2-12 / -24

In the case of 24V type



## KT-MFU Series (Spot lighting equipment for light units is sold separately)

KT-MFU series are collimated backlight units that can be used in combination with the HLV series spot lighting equipment. They are capable of higher power light emission than MFU series.



Model Name	Weight
KT-MFU-34X30-HLV	200 g
KT-MFU-54X40-HLV	400 g

Compatible Lights: HLV3-22-1C/ -2C/ -4C Series  
\*HLV3 (L-shape type) and HLV3-22-2C-1220 are not compatible with the KT-MFU Series.  
\*Please use the recommended light units for each HLV product.

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### Caution

- Please read the instruction guide before product use to ensure correct and safe use.
- Specifications and designs for product improvement may change without advance notice.
- Imaging examples shown on this flyer are provided as references for selecting lights. Please check the functions and conditions of the device and equipment before selecting. In addition, samples shown here are processed by CCS Inc. and may differ from the original quality and properties.



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