Coaxial Lights
MFU series

Refer to our website for product details.
CCS MFU ▶ Search
Use a search engine.
You can also use your smartphone or cell phone.

Provides light with high parallelism using original lighting technology

MFU-34X30-BL

MFU-54X40-BL

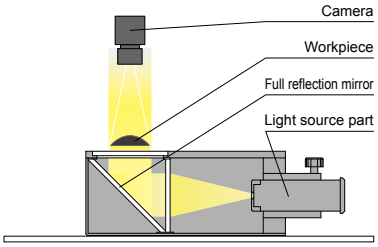
Applications Dimension measuring, dimension measuring for cylindrical objects, and inspection for fine burrs, etc.

Characteristics

We achieved collimated lighting through unique lighting technology.
It allows for highly-accurate imaging that prevents light from wrapping around the workpiece. It allows for convergence to match the imaging-side lens in use.

We accept custom orders. Please feel free to inquire.
- Change to format
- Increase brightness
- Change to wavelength, etc.

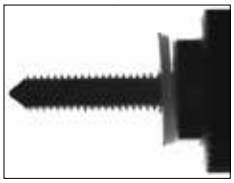
Example configuration (MFU-34×30)



Imaging example: Exterior imaging of a screw

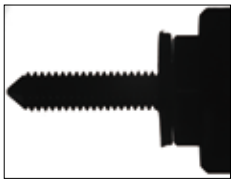
Workpiece: Knurled screw

■LED Flat Light



With a Flat Light, the illuminated light wraps around the workpieces, making it difficult to emphasize the edges.

■MFU-34X30-BL



It prevents the illuminated light from wrapping around, allowing for the edges to be emphasized.

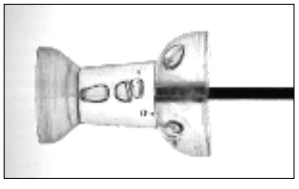
Comparison of imaging with a Flat Light and Collimated Light

Imaging example: Exterior imaging of a push pin

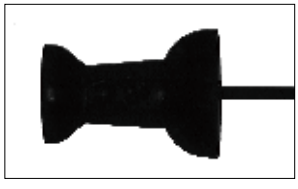
■Workpiece image

Push pin

■LED Flat Light



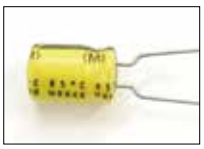
■MFU-34X30-BL



When the user looks at a clear resin push pin with diffused light from a Flat Light illuminated from the rear, the clear part appears clear. However, with collimated light, the light is refracted by the clear resin, and the whole pin appears black.

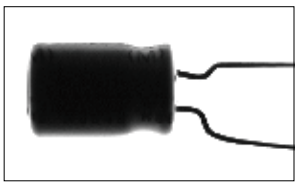
Imaging example: Imaging of the exterior and dimensions of a condenser

■Workpiece image

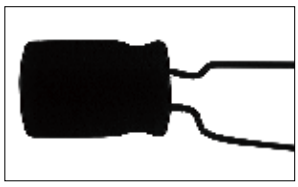


Condenser

■LED Flat Light



■MFU-34X30-BL



If you view it with diffused light of Flat Light illuminated from the rear, the light wraps around the side of the condenser body. However, with collimated light, that wrap around is prevented and the thickness of the wires is also imaged evenly.

We have various materials.
PDF Drawings | DXF Drawings | 3D CAD | Instruction Guides | Product Fliers | Imaging Samples | Data Sheets | Examples of Custom Ordered Products
Download here.
http://www.ccs-grp.com/dl/

Lineup

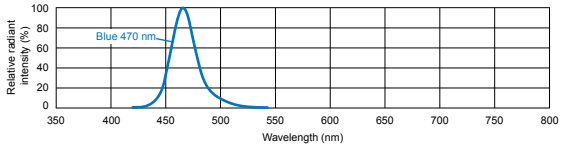
Model name	LED color	Power consumption	Peak wavelength	Options	Recommended Control Units	Weight
MFU-34X30-BL	Blue	12 V / 0.3 W	470 nm	–	PD2, PSB, PTU2	185 g
MFU-54X40-BL	Blue	12 V / 0.3 W	470 nm	–	PD2, PSB, PTU2	350 g

* Because the MFU series is for 12 V input, please select a Control Unit with a 12 V output.

Extension Cables ▶ P.222 | Control Unit Selection Guide ▶ P.181 | Control Unit Page ▶ P.185

LED properties

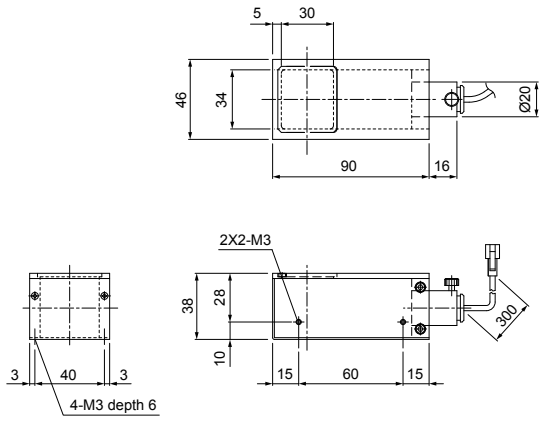
Light spectrum



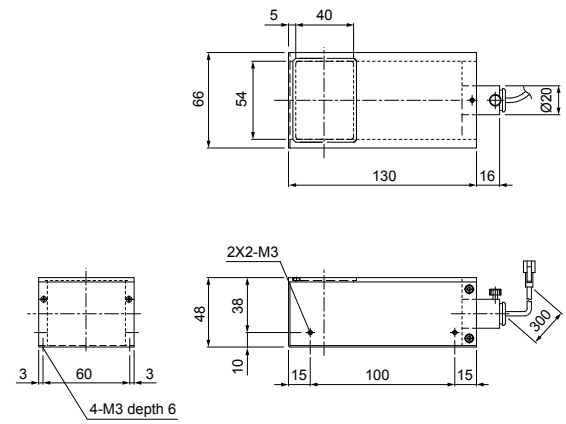
Be sure to read the "Instruction Guide" included with the product before use and observe cautionary information.
The data included is for reference only and does not guarantee the quality of this product.

Dimensions (mm)

MFU-34X30-BL



MFU-54X40-BL



Regarding the procedure for usage

1) Set the item to be inspected and determine the imaging range.
2) Set this product and determine the distance between the lens and the camera (LWD).
3) Align this product's light axis with the center of the imaging field of vision.
4) Adjust intensity.

For details about the procedure for usage, refer to the material "How to Use the MFU Series" on our website.
You can download this information from the product website page.