Other Products

Micro Fiber Heads
HFS Series

LED Fiber Light (straight) that uses original converging technology

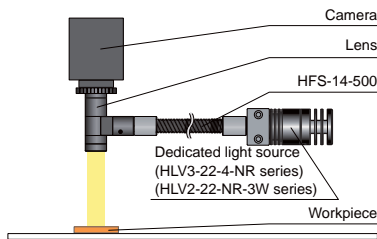| Model name	HFS-14-500
Fiber material	Multicomponent glass
Case material	Aluminum alloy
Flexible tube material	SUS
Strand diameter (μm)	50
Fiber arrangement	Random
Numerical aperture (NA)	0.56
Receiving angle (°)	68
Transmitted wavelength (nm)	300 to 1,300
Minimum bending radius (mm)	50

HFS-14-500

Applications As a light source for a telecentric lens, visual inspection for chips, alignment mark imaging, etc. (Common for the HFS and HFR series)

Features

This is a unique Light Unit system that melds the strengths of both LEDs and fibers. The HFS series, a straight type, is lightweight, compact, and easy to manage, and therefore can be used in a variety of applications.

We accept custom orders. Please feel free to inquire. • Changes in length, etc.

Example configuration (HFS-14-500)

Camera
Lens
HFS-14-500
Dedicated light source (HLV3-22-4-NR series) (HLV2-22-NR-3W series)
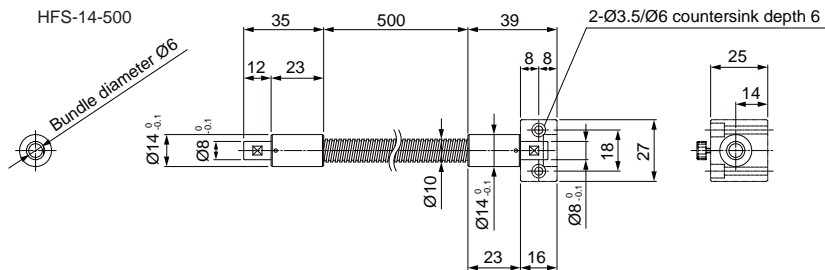Workpiece

It can be used in a variety of situations

Dedicated Light Source (HLV3-22-4-NR series) Product Page ▶ P.165
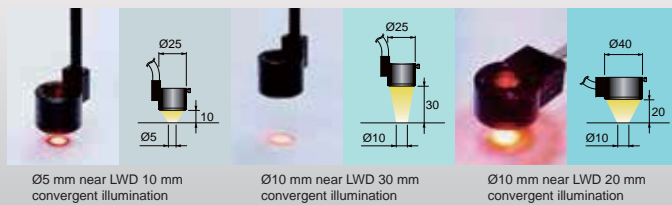Dedicated Light Source (HLV2-22-NR-3W series) Product Page ▶ P.167
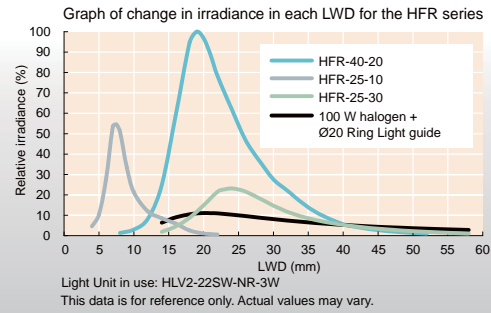
Dimensions (mm)

HFS-14-500

Bundle diameter Ø6

35 500 39 2-Ø3.5/Ø6 countersink depth 6 25
12 23 8 8 14
Ø14 $_{-0.1}^{0}$ Ø8 $_{-0.1}^{0}$ Ø10 Ø14 $_{-0.1}^{0}$ 18 27 Ø8 $_{-0.1}^{0}$
23 16

Common Specifications for the HFS/HFR Series

Model name	Operating temperature and humidity	Storage temperature and humidity	Weight
HFS-14-500			115 g
HFR-25-10	Temperature: 0 to 40°C, Humidity: 20% to 70%RH (with no condensation)	Temperature: -10 to 60°C, Humidity: 20% to 70%RH (with no condensation)	60 g
HFR-25-30			
HFR-40-20			250 g

Various technical documents available. PDF Drawings DXF Drawings Product Brochures Instruction Guides 3D CAD Data Sheets Imaging Examples Digital Catalogs

HOURS
www.hours-web.com

LED Fiber Light (ring type) that uses original converging technology

Model name	HFR-25-10/30 HFR-40-20
Fiber material	Plastic
Case material	Aluminum alloy
Flexible tube material	SUS
Strand diameter (μm)	500
Fiber arrangement	–
Numerical aperture (NA)	0.5
Receiving angle (°)	60
Transmitted wavelength (nm)	400 to 700
Minimum bending radius (mm)	30

HFR-25-10

HFR-25-30

HFR-40-20
Three dedicated light sources are required for use.
Dedicated Light Source (HLV3-22-4-NR series)
Product Page ► P.165
Dedicated Light Source (HLV2-22-NR-3W series)
Product Page ► P.167

■HFR-25-10   ■HFR-25-30   ■HFR-40-20

Ø5 mm near LWD 10 mm
convergent illumination

Ø10 mm near LWD 30 mm
convergent illumination

Ø10 mm near LWD 20 mm
convergent illumination

Graph of change in irradiance in each LWD for the HFR series

HFR-40-20
HFR-25-10
HFR-25-30
100 W halogen +
Ø20 Ring Light guide

Light Unit in use: HLV2-22SW-NR-3W
This data is for reference only. Actual values may vary.

Features

The HFR series, a ring type, does not illuminate a broad range like a halogen fiber light, but can perform convergent illumination for the required field of vision.
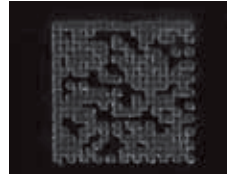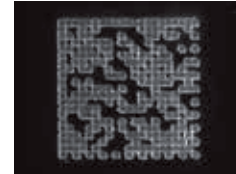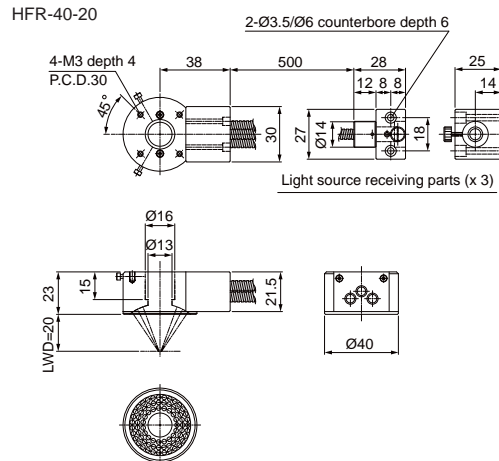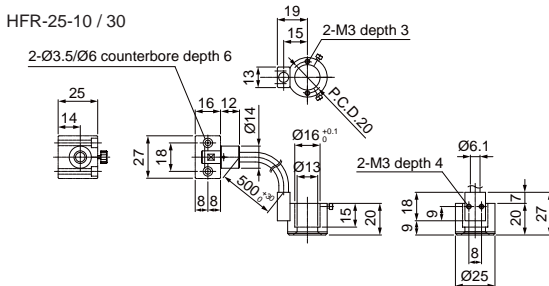
We accept custom orders. Please feel free to inquire.
• Shape modifications
• Brightness increases
• Changes in wavelength, etc.

Example configuration (HFR-25-10)

Camera
Lens
HFR-25-10
Mounting holder (Option)
Dedicated light source
(HLV3-22-4-NR series)
(HLV2-22-NR-3W series)
Workpiece
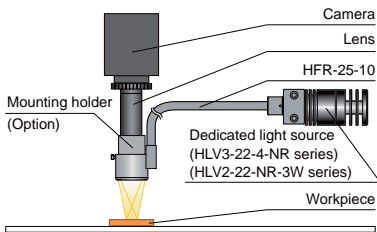
Imaging using HFR-25-10 (white)

HFR-25-10

100 W halogen + Ring Light guide:
LWD 20 mm

Intensity: 100%
Shutter speed: 1/4,000 sec

HFR-25-10 (White): LWD 10 mm

Intensity: 100%
Shutter speed: 1/4,000 sec

Dimensions (mm)

HFR-25-10 / 30

2-Ø3.5/Ø6 counterbore depth 6
2-M3 depth 3
19
15
13
P.C.D.20
25
14
16 12
Ø14
Ø16 0 +0.1
27
18
500
Ø13
2-M3 depth 4
8 8
15
20
9 18
9
8
20 7
27
Ø6.1
Ø25

HFR-40-20

2-Ø3.5/Ø6 counterbore depth 6
4-M3 depth 4
P.C.D.30
45°
38
500
28
25
12 8 8
14
Ø14
30
27
18
Light source receiving parts (x 3)
Ø16
Ø13
23
15
LWD=20
21.5
Ø40

Options

Mounting holder for HFR-25-10 / -30

Light Units can be easily installed and mounted in the position for the most efficient convergence.

HD-HFR-25-1640   HD-HFR-25-1618

Example of usage

Example of usage

Dedicated Light Source (HLV3-22-4-NR series) Product Page ► P.165
Dedicated Light Source (HLV2-22-NR-3W series) Product Page ► P.167

You can inquire using our website.

| Sample Testing | Light Unit Selection | Free Product Trial | Custom Orders | Product Details | Pricing/ Quotation | Discontinued Products |