

# FAYb Laser Marker

## LP-F SERIES

FIBER  
SENSORSLASER  
SENSORSPHOTOELECTRIC  
SENSORSMICRO  
PHOTOELECTRIC  
SENSORSAREA  
SENSORSSAFETY  
COMPONENTSPRESSURE  
SENSORSINDUCTIVE  
PROXIMITY  
SENSORSPARTICULAR  
USE SENSORSSENSOR  
OPTIONSWIRE-SAVING  
SYSTEMSMEASUREMENT  
SENSORSSTATIC CONTROL  
DEVICESLASER  
MARKERS

Related Information

■ General terms and conditions..... P.1

■ About laser beam..... P.1025~



**FDA**  
Conforming to  
FDA regulations  
(LP-F10R-A only)



This product is classified as a Class 4 Laser Product in IEC / JIS standards and a Class IV Laser Product in FDA regulations 21 CFR 1040.10. Never look at or touch the direct laser beam and its reflection.

This product is introduced to only limited countries. Please contact our office for details.

FAYb is the acronym for "Fiber Amplified Ytterbium".

## Marking on metals and coloring on resins now a reality with our new FAYb system!

### Marking onto metals and coloring onto resins now a reality

Our "FAYb" oscillation system, that excites a laser beam within the fiber, amplifies and oscillates a pulse, marking onto metals and coloring onto resins, processes that until now were only possible using a YAG laser marker, have been realized.

#### Marking onto metals

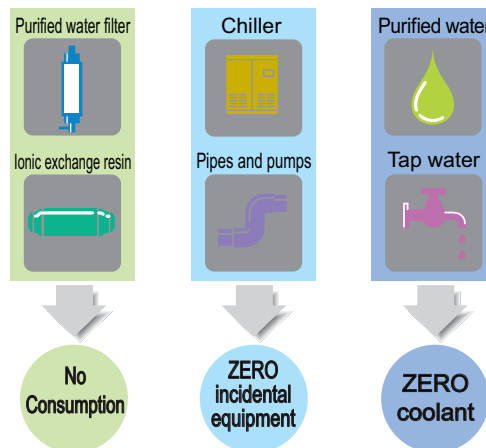


#### Coloring onto resins



### Complete air-cooling

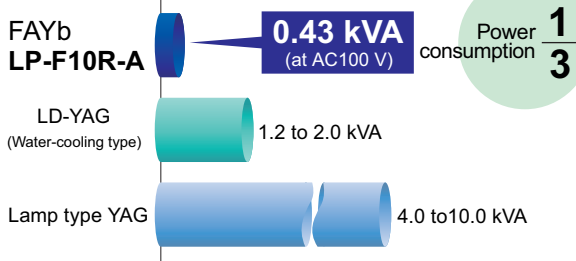
The system uses complete air-cooling without any liquid coolant rendering replacement items such as purified water or ionic exchange resins absolutely unnecessary. This helps reduce labor time and costs associated with replacement and maintenance work.



### Energy saving design

Utilizing fiber optic amplification technology to amplify the beam signal, we have realized a high level of efficiency never before seen in conventional models. Our energy saving design enables one-third the power consumption compared to the LD-YAG laser marker in the same class.

#### Comparison of power consumption



### Long life

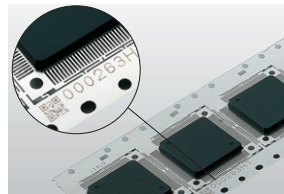
Equipped with a long product life LD, the same highly reliable LDs used for submarine cable. Because of the rational excitation method activated only for marking, the LD never needs to be replaced.

**MARKING SAMPLES**

Lighted switch (Automotive parts)



IC package (Electronic parts)



Lead frame (Electronic parts)



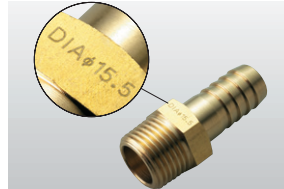
Metal package (Electronic parts)



Driver bits (Tool)



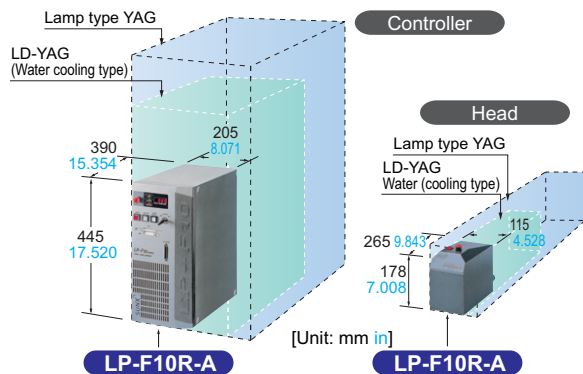
Tip saw (Tool)



Coupling (Industrial component)

**Small size**

Its wonderfully compact design enables vertical as well as lateral positioning of the head and controller. Because coolant piping is rendered unnecessary, system designing and installation costs can be minimized.



Comparison of LD-YAG (Water cooling type) laser marker

Volume ratio  
Installation area ratio  
Approx. **1/3**

Volume ratio  
Approx. **1/3**

Installation area ratio  
Approx. **1/2**

**Maintenance-free****Dustproof structure**

Because the head's structure does not have an oscillating part, work associated with opening and closing the unit to replace the LD and the lamp is unnecessary. In addition, the **LP-F** series has a dustproof structure that uses special packing. Stable marking can be maintained.

**Alignment unnecessary**

The oscillation system does not utilize an optic mirror eliminating the occurrence of beam axis misalignment. Alignment work performed by specialized engineers is also not required even when installing or moving the unit.

**Safety first****Emergency stop switch**

Emergency stop switch has been incorporated on the head and the controller.

In case of emergency, you can immediately stop laser excitation.

**Interlock input**

Even when pressing on the print start button by mistake, the laser will not be emitted as long as the interlock input is OFF.

- Refer to p.1025~ for laser beam.
- Please contact our office for details, such as specifications, dimensions, and prices.

**Extraordinarily easy to use color LCD equipped console LP-ADP40 (optional)**

A color touch panel has been adopted giving first priority to customers' usability. Stress-free operations are possible because marking and setting conditions are quickly displayed.

Equipped with VGA and mouse connectors enabling operation without using the console using a commercially available monitor and mouse.

**Higher level operation now possible with our special PC software (optional)**

We've made available PC software that enables the creation of original fonts and simple CAD editing as well as making offline marking data.

FIBER SENSORS

LASER SENSORS

PHOTOELECTRIC SENSORS

MICRO PHOTOELECTRIC SENSORS

AREA SENSORS

SAFETY COMPONENTS

PRESSURE SENSORS

INDUCTIVE PROXIMITY SENSORS

PARTICULAR USE SENSORS

SENSOR OPTIONS

WIRE-SAVING SYSTEMS

MEASUREMENT SENSORS

STATIC CONTROL DEVICES

**LASER MARKERS**Selection Guide  
FAYb**LP-V / LP-W****LP-F**CO<sub>2</sub>**LP-400****LP-300****LP-200**