Amplifier Unit

Thinnest in the Industry

A Slim, 10-mm-wide Amplifier Unit

Use of a white LED and a one-package RGB light-receiving element has made it possible to unify the Amplifier Unit, both in size and operation, with conventional models.
If detection should become unstable, the Amplifier Unit can be separately replaced to immediately regain stability.

Easy and Reliable ... Ease of Use and Smart Functions

In addition to ensuring easy use, we have added a number of smart functions, such as remote control to simplify setup, and twin sensing and output to simultaneously distinguish two registered colors. (advanced models)

Reliable
Setting guide function.

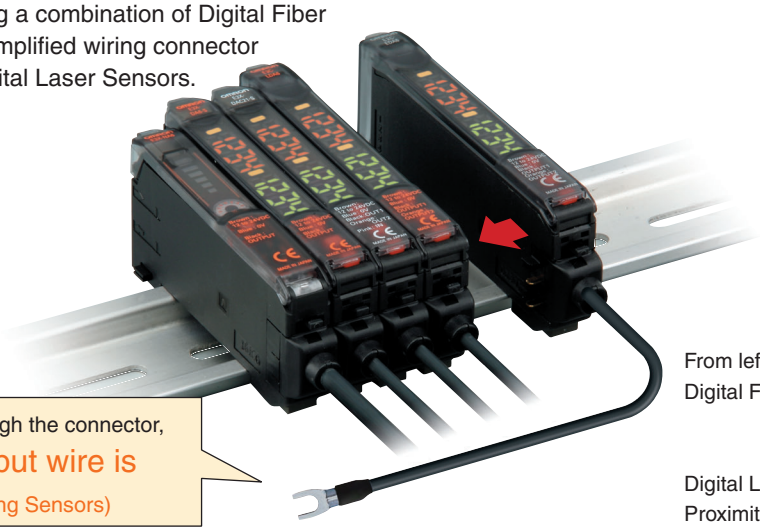
First in Its Class
This function guides the user to ensure that the workpiece is in an appropriate position for teaching. (Indicates OVER, OK, or LOW.)

Easy to Understand
A double display for easy, precise setting.

One push is all it takes.
Easy Setting

Easy and Reliable ... Simplified Wiring Connector Reduces Work Steps

OMRON's unique simplified wiring connectors provide the power for each added Sensor. Up to 16 Units can be mounted, including a combination of Digital Fiber Sensors and other simplified wiring connector products such as Digital Laser Sensors.



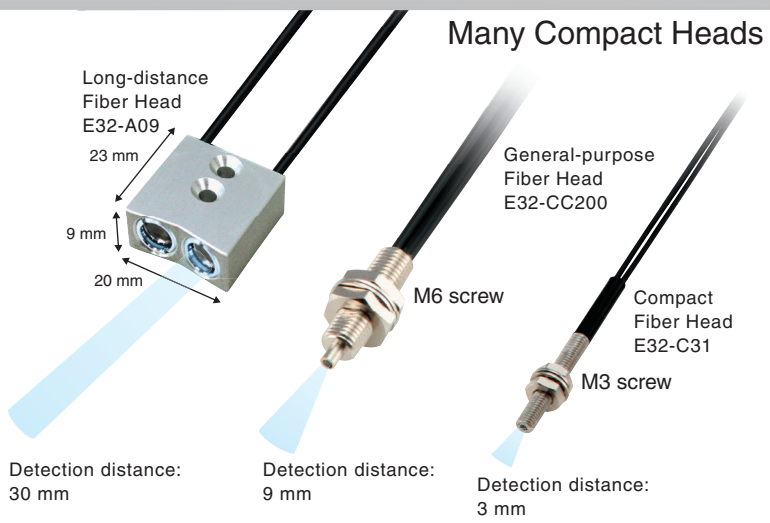
Power is supplied through the connector, so only one output wire is required. (For adding Sensors)

From left to right
Digital Fiber Sensors: E3X-NA
E3X-DA-S/MDA
E3X-DAC-S
Digital Laser Sensor: E3C-LDA
Proximity Sensor: E2C-EDA

Application

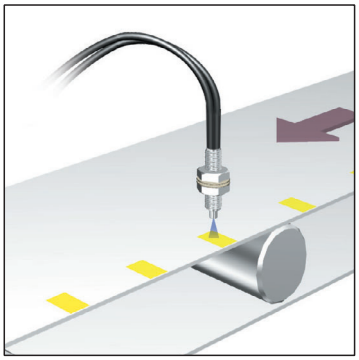
Wide Range of Fiber Heads Available

Select from a wide range of Fiber Heads to match the workpiece and working space. This makes installation possible even in small spaces.



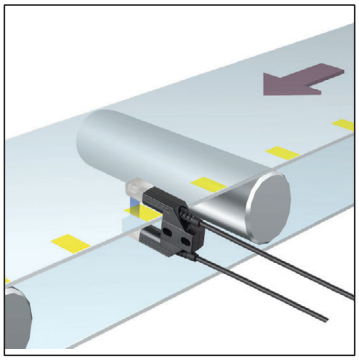
Easy and Reliable Applications (Examples)

Detecting Marks



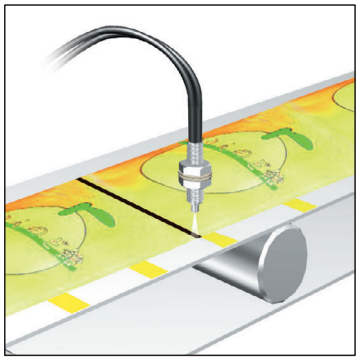
Because it distinguishes RGB ratios, detection is highly resistant to workpiece movement.

Distinguishing Semi-transparent Objects



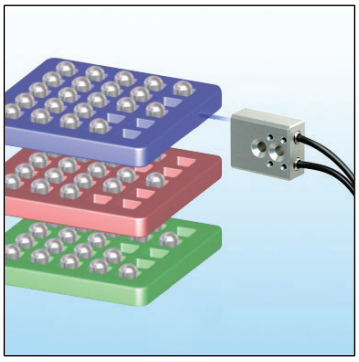
Through-beam Fiber Heads are capable of detecting color differences in semi-transparent objects.

Detecting Black Marks



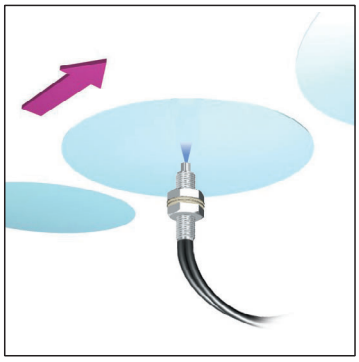
In Black Mode, black seam tape and other black marks can be detected regardless of film color or patterns.

Distinguishing Trays



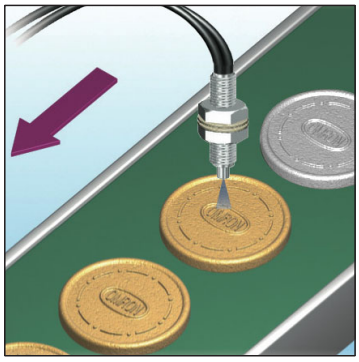
Twin sensing and remote control functions simplify setup.

Detecting Wafers



Workpieces that absorb a specific wavelength can be detected with a wide range of wavelengths.

Detecting Products on Conveyors



If you teach the conveyor (i.e., the background), you can detect workpieces even if they have different colors, shapes, or gloss.