

Export Precautions

These products are Controlled Products subject to Japanese Law.

They should not be sold, transferred, re-exported or otherwise used, disposed, and other than original usage declared to the exporter without prior notification and approval to the exporter.

General Precautions

The user must operate the product according to the performance specifications described in the brochure.

Before using the product under conditions which are not described in the brochure or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems, machines, and equipment that may have a serious influence on lives and property if used improperly, consult your OMRON representative.

Make sure that the ratings and performance characteristics of the product are sufficient for the systems, machines, and equipment, and be sure to provide the systems, machines, and equipment with double safety mechanisms.

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Authorized Distributor:

OMRON

F400 Color Vision Sensor



Detects All Specified Colors



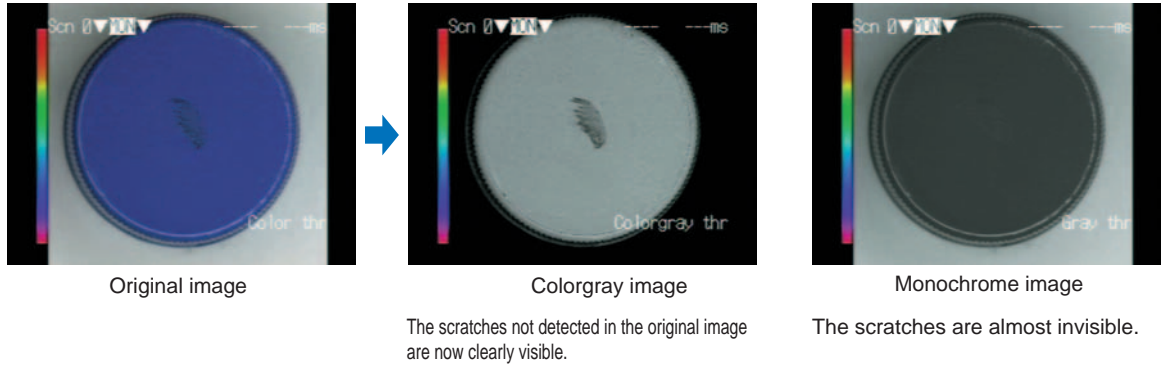
A Color Vision Sensor able to distinguish even finer differences in color, taking the field of inspection to new heights.

The F400 Color Vision Sensor features not only the conventional color pickup function but also colorgray filtering - a first in the industry. A completely new type of vision sensor, the F400 Color Vision Sensor provides easy and stable detection of fine color differences that cannot be distinguished with monochrome processing or conventional color pickup methods.

Colorgray Filter

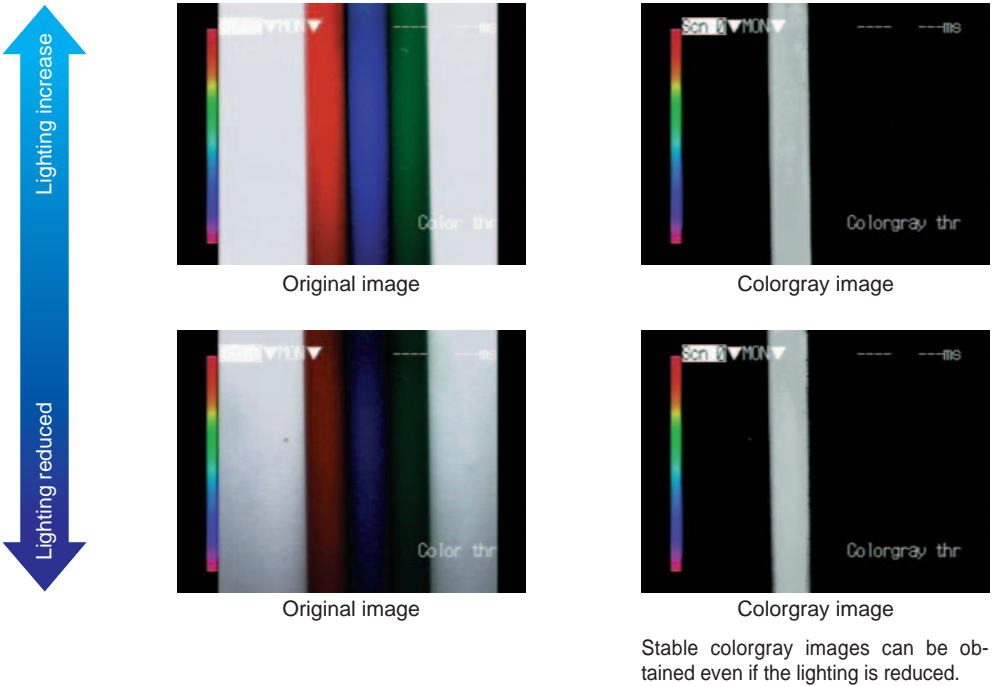
Ideal for Detecting Fine Differences in Color

Example: Inspection of Surface Defects on Bottle Caps



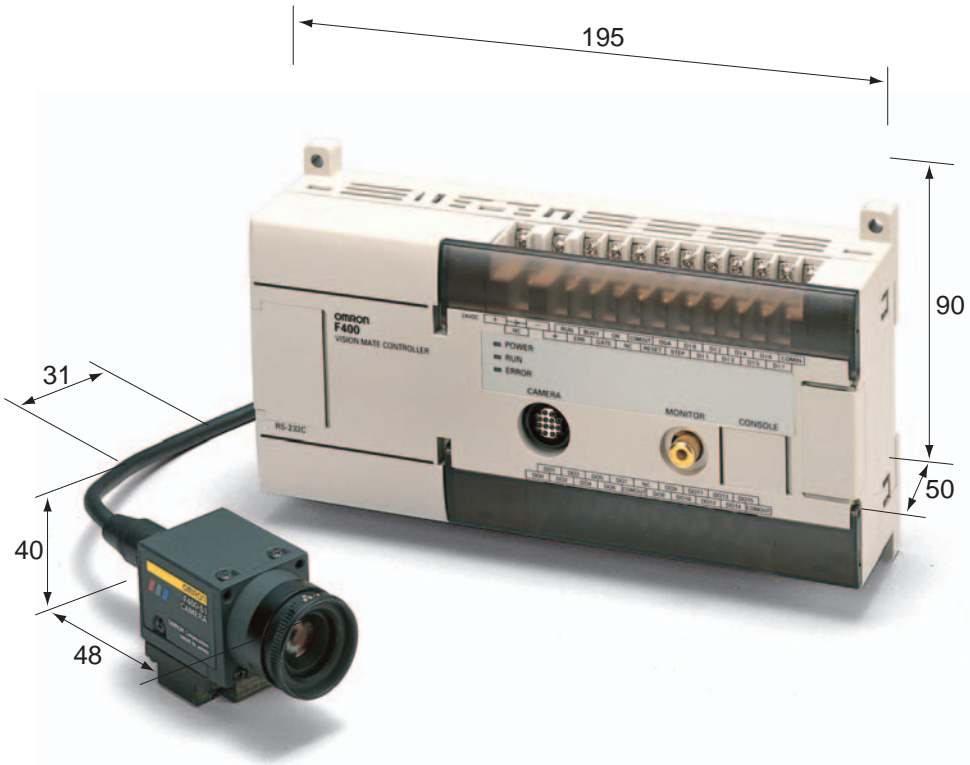
Ideal for Handling Light Fluctuations

Example: Inspection of Arrangement of Color Pencils (color set to red)



The compact F400 Color Vision Sensor incorporates additional features for improved inspection.

- RGB filters
- Color pickup function
- A variety of measurement modes



A variety of different inspections are possible with one F400 Color Vision Sensor.

RGB Filters

In addition to the colorgray filter, RGB (red, green, and blue) filters are available.

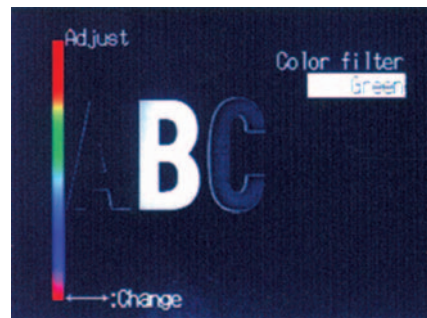
- Select a filter in accordance with the color of the inspected object and the purpose of inspection.



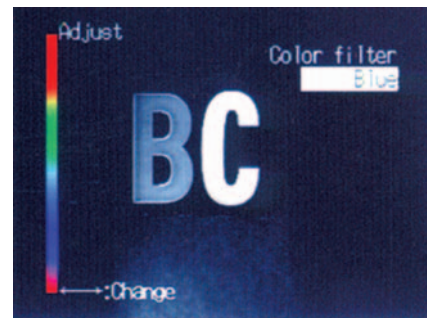
Color image (original image)



Red filter image



Green filter image

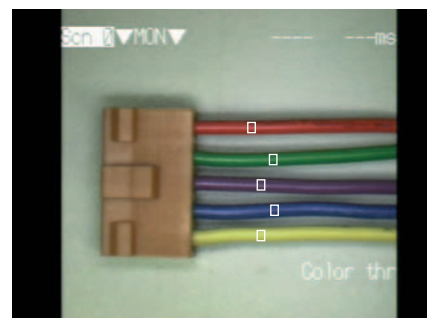


Blue filter image

Color Pickup

Detects up to eight colors simultaneously and measures area, center of gravity, and position displacement with high speed and precision.

- Ideal for distinguishing colors, checking different objects, and checking color arrangement.



Original image



Color pickup image

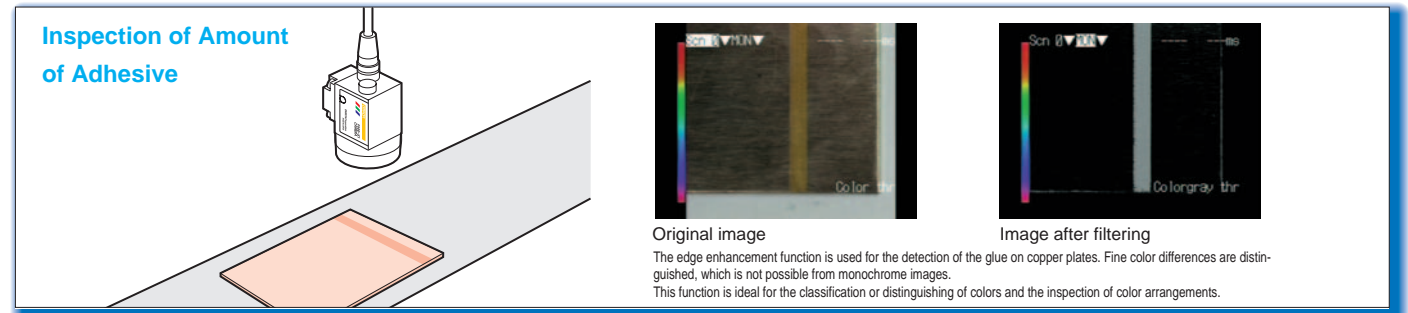
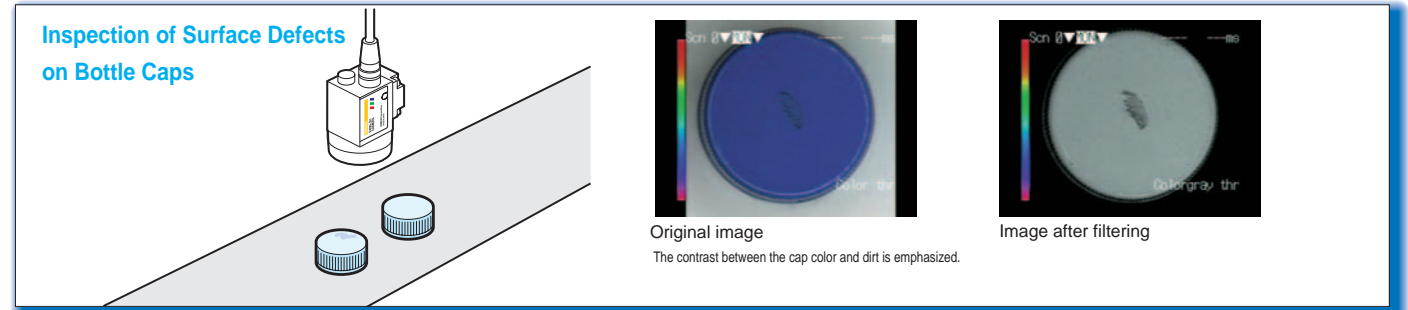
A Variety of Measurement Modes

Incorporates the same variety of measurement algorithms available with the F150-2.

- Binary measurement/gray measurement algorithms
- Surface defect measurement/edge position measurement algorithms
- Storing of NG (unacceptable) images (monochrome images after filtering)

Application Examples

● Colorgray Processing



Color Pickup Processing

