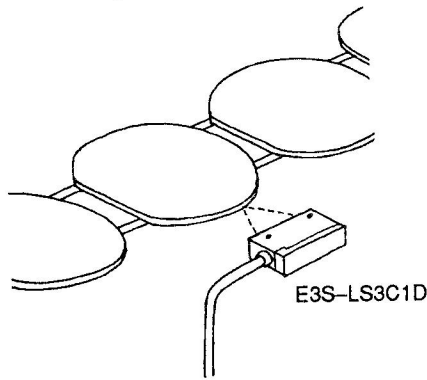


16 Wafer Detection (Edge)

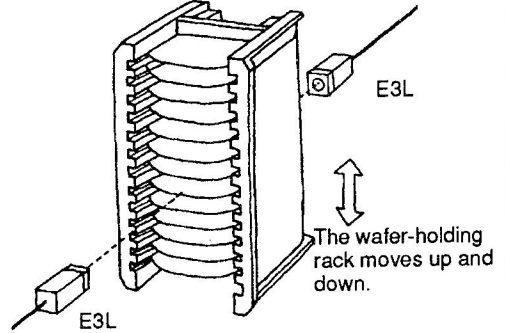
Sensor spot light is wider than the wafer edge, so it can detect wafers misaligned on the conveyor.



Amp (Internal) Photoelectric Switch
Limited Reflection Type E3S-LS3C1D

17 Wafer Number Detector

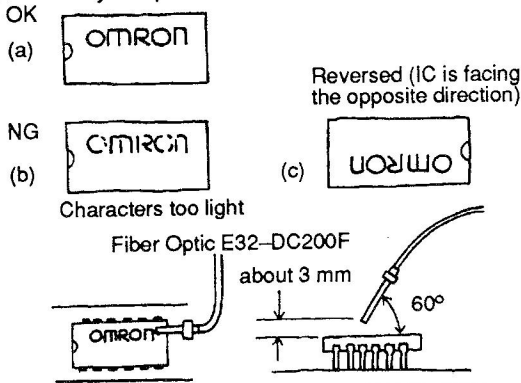
Conventional photo sensors have wide beams that may not detect properly due to reflection from other wafers. This detector uses a narrow photo laser switch beam, and has a 0.1-mm slit to focus the beam.



Laser Photoelectric Switch E3L-2E4
(with 0.1 mm dia. slit)

18 Marking Machine Print Error Detection

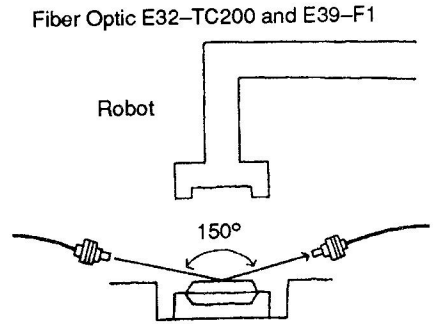
Uses a fiber sensor tilted at a 60° angle to detect light reflected by the printed letters.



Fiber Optic Photoelectric Switch E3XR-CE4
E32-DC200F

19 IC Detection

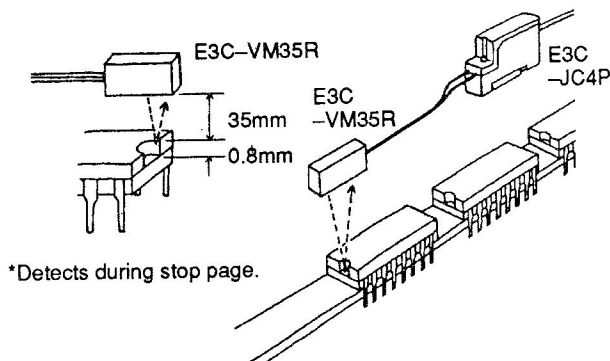
Uses a transparent optical fiber mounted diagonally to detect light reflected from the IC surface. A long-distance lens unit to gather light accurately even from low-reflectivity IC surfaces. Sensor is mounted at an angle.



Fiber Optic Photoelectric Switch E3XR-CE4
Amp Unit E32-TC200
Distant Lens Unit E39-F1

20 IC Index Detection

Detects indexes accurately with the small 1.0-mm spotlight from 35 mm.

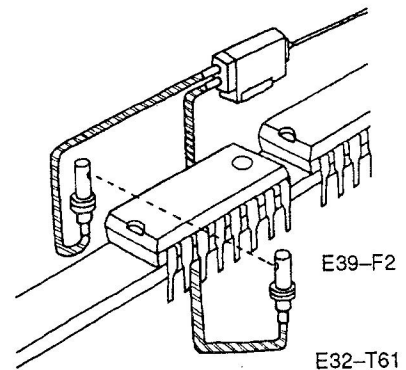


*Detects during stop page.

Small Head Photoelectric Switch Separate Amp
Photoelectric Switch E3C-VM35R (Sensor)
E3C-JC4P (Amp)

21 IC Detection in Handler

A heat-resistant fiber unit and a side-view lens unit that can be used under high temperature conditions without taking up space. E32-T61 (up to 300°C). E39-F2 (up to 200°C).



Fiber Optic Photoelectric Switch