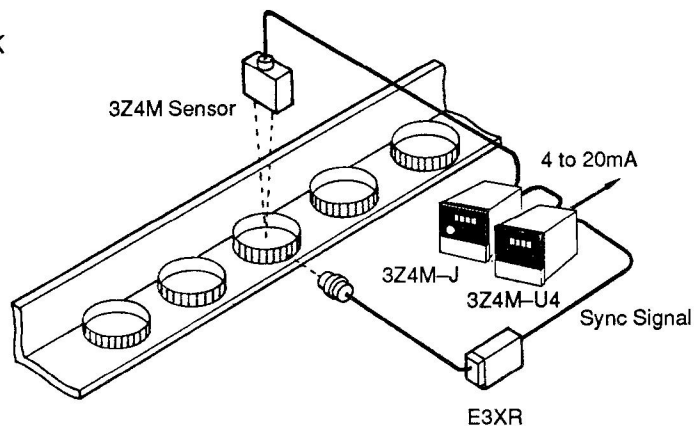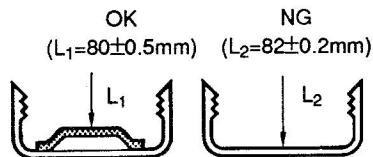## 40 Bottle Cap Packing Presence Detection

The variation in volume caused by the presence or absence of the cap's packing is used to determine OK or NG (no good). Measurement timing is taken from the photoelectric switch.

OK
($L_1=80\pm0.5mm$)

NG
($L_2=82\pm0.2mm$)

Laser Variation Meter: 3Z4M–J
Arithmetical Unit: 3Z4M–U
Fiber Optic Photoelectric Switch: E32/E3XR

3Z4M Sensor
4 to 20mA
3Z4M–J
3Z4M–U4
Sync Signal
E3XR

41 Glue Presence Detection (medicine package)

Two laser variation meters (set in the front of and tje back the medicine package), and a multiplier are used to measure the thickness of the package. If there is no glue the package top's thickness is larger and a NG signal is output.

Sensor
HPL Output
3Z4M–J
Sync Sensor
3Z4M–U2
3Z4M–U4
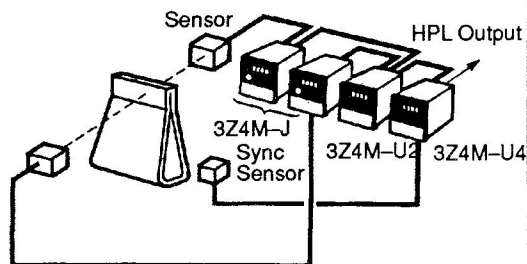
Detection Subject: Medicine Package
Laser Variation Meter: 3Z4M–J
Arithmetical Unit: 3Z4M–U
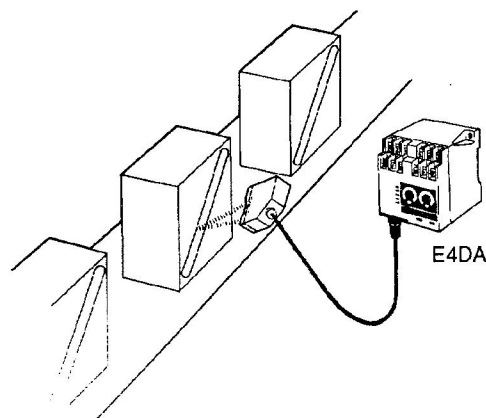
42 Ink, Resin and other Liquid Level Control

This sensor is not affected by the color of the liquid so it can be used for liquid level control of any liquid.
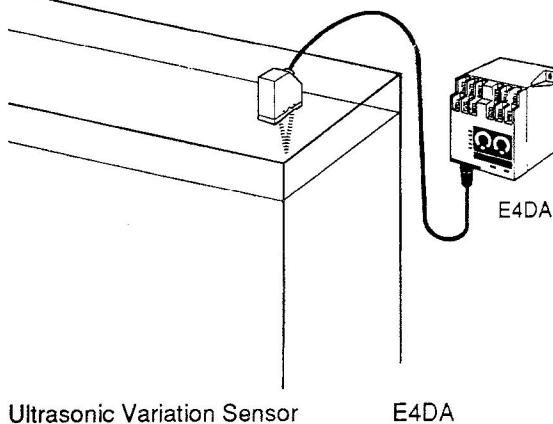
E4DA

Ultrasonic Variation Sensor   E4DA

43 Straw Detection

The presence of straw in a carton is detected. This detection is not affected by printing on the carton.

E4DA

Ultrasonic Variation Sensor   E4DA

44 Detection of Changes in Water Purity

Water purity is compared to a Standard Reference Value that has been written to the S3A2 controller. If the water purity value changes beyond a certain pre-set value it is detected.

Measurement Input
S3A2
E3SA–RS50C43A   Standard Reference Value Input
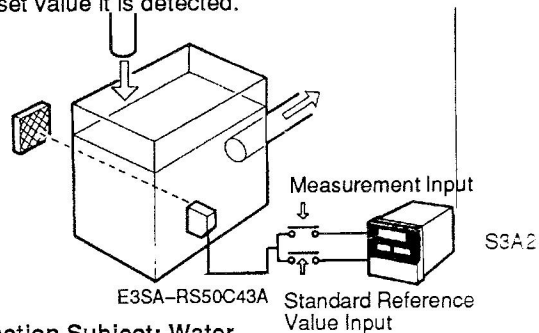
Detection Subject: Water
Analog Photoelectric Sensor E3SA
Linear Sensor Controller S3A2