Special-beam Models

Detection with Increased Reliability P10

A variety of heads incorporating the latest optical technology makes it possible to solve common problems related to detection and to increase reliability.

- Resistant to dust and dirt
- Capable of detecting small workpieces
- Resistant to workpiece vibration

Use these models to handle unstable detection conditions.

Small-spot models
E32-C42+
E39-F3A

Area-sensing models
E32-T16J

Limited-reflective models
E32-L24L

High-power models
E32-T17L

Environment-resistive Models

High Resistance to External Conditions with Fiber P14

We have developed model variations for adapting to a variety of environmental conditions. These models enable detection in high-temperature environments and vacuums.

Heat-resistant models

Chemical-resistant models

- High-temperature environments
- Environments subject to the splattering of chemicals
- Vacuums

Use these models to handle applications in special environments.

Application-corresponding Models

Fiber Units for the Food-packaging, Semiconductor, and FPD Industries P16

These models, which were developed for specific applications, offer top-quality detection performance.

- Label detection
- Liquid-level detection
- Alignment and mapping of glass substrates
- Wafer mapping

Use these models for specific applications.

Label-detection models
E32-G14

Alignment-check models
E32-L16

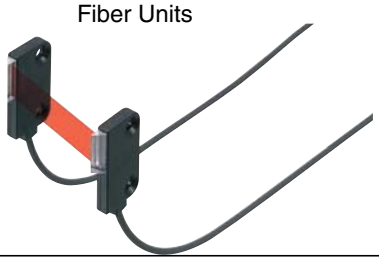
Liquid-level detection models
E32-D36T

■ Page Reference

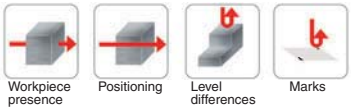
Type		Feature/ applications	Variations	Type	Ratings and performance	Dimensions
Standard models		➜ Page 6	➜ Page 8	Through-beam ➜ Page 19 Reflective ➜ Page 26	➜ Page 37	Through-beam ➜ Page 40 Reflective ➜ Page 48
Special-beam models		➜ Page 10	---	Through-beam ➜ Page 22 Reflective ➜ Page 29	➜ Page 38	Through-beam ➜ Page 43 Reflective ➜ Page 51
Environment resistant models		➜ Page 14	---	Through-beam ➜ Page 24 Reflective ➜ Page 32	➜ Page 39	Through-beam ➜ Page 46 Reflective ➜ Page 56
Application-corresponding models		➜ Page 16	---	➜ Page 33	➜ Page 39	➜ Page 57
Accessories		---	---	➜ Page 25 (Vacuum-resisitant) ➜ Page 35	---	➜ Page 47 (Vacuum-resisitant) ➜ Page 60

Selection Guide

We have developed model variations for handling a broad range of applications.



Fiber Units

Detection conditions \ Environmental conditions	Standard environments	Special environments ■ High-temperature environments (up to 400°C) ■ Environments subject to scattering of chemicals and oil ■ Vacuum environments
Standard detection ■ Workpiece presence ■ Positioning ■ Level differences and marks	Standard Models•••▶P.6 	Environment-resistive Models•••▶P.14
Special-beam ■ Long-distance sensing, resistance to dust and dirt ■ Small beam, resistance to rattling ■ Detection of transparent objects	Special-beam Models•••▶P.10	
Application-corresponding ■ Labels ■ Liquid level ■ Alignment and mapping of glass substrates ■ Wafer mapping	Application-corresponding Models•••▶P.16	

Amplifier Units

Type	Digital		Manual
Appearance		2-channel models	
Response time	48 µs, 1 ms, or 4 ms (2-output models: 80 µs, 1 ms, or 4 ms)	100 µs, 1 ms, or 4 ms	200 µs (high-speed models: 20 µs)
Light source	Red, green, blue, or infrared LED		Red or green LED
Function	Dual display (including digital, bar, percent, and hold display functions) Threshold adjustment performed manually or by teaching OFF-delay, ON-delay, one-shot timer (adjustable from 1 ms to 5 s)		LED bar display (5 levels) 8-turn sensitivity adjuster OFF delay timer (fixed at 40 ms)
	Advanced-function models are available (2-output/input models).		Water-resistant models are available.
Models	E3X-DA□-S E3X-DA□TW-S (2-output model) E3X-DA□RM-S (input model)	E3X-MDA□	E3X-NA□ E3X-NA□F (high-speed model) E3X-NA□V (water-resistant model)