

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

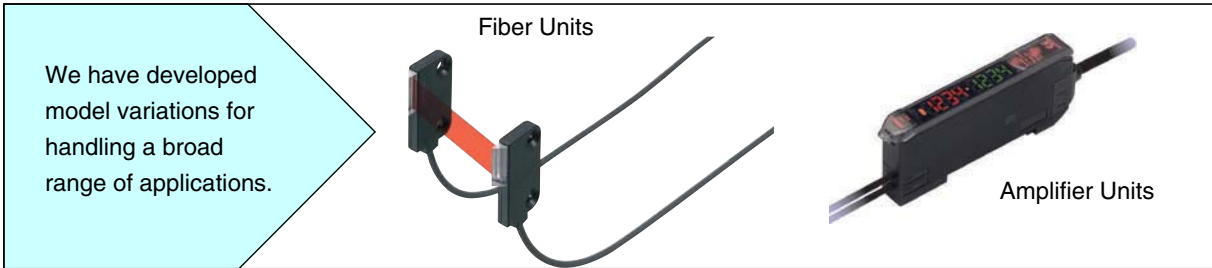


Liquid-level detection models
E32-D36T

■ 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
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Selection Guide



Fiber Units

Detection conditions	Environmental conditions	
	Standard environments	Special environments
Standard detection <ul style="list-style-type: none"> Workpiece presence Positioning Level differences and marks 	Standard Models ●●●▶ P.6 	Environment-resistant Models ●●●▶ P.14
Special-beam <ul style="list-style-type: none"> Long-distance sensing, resistance to dust and dirt Small beam, resistance to rattling Detection of transparent objects 	Special-beam Models ●●●▶ P.10 	
Application-corresponding <ul style="list-style-type: none"> Labels Liquid level Alignment and mapping of glass substrates Water 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)