E3Z-F

Compact Photoelectric Sensor with Built-in Amplifier

Customer Presentation

October 2015

Newark element 14

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Line-up

Sensing method	Appearance	Connecting method	Sensing distance	Model	
				NPN output	**PNP output**
Through-beam (Emitter + Receiver)		Pre-wired (2 m)	20 m	**E3Z-FTN11 2M** *1 Emitter E3Z-FTN11-L 2M Receiver E3Z-FTN11-D 2M	**E3Z-FTP11 2M** *1 Emitter E3Z-FTP11-L 2M Receiver E3Z-FTP11-D 2M
		Connector (M12)		**E3Z-FTN21** *1 Emitter E3Z-FTN21-L Receiver E3Z-FTN21-D	**E3Z-FTP21** *1 Emitter E3Z-FTP21-L Receiver E3Z-FTP21-D
		Pre-wired (2 m)	20 m	**E3Z-FTN12 2M** *1 Emitter E3Z-FTN12-L 2M Receiver E3Z-FTN12-D 2M	**E3Z-FTP12 2M** *1 Emitter E3Z-FTP12-L 2M Receiver E3Z-FTP12-D 2M
		Connector (M12)		**E3Z-FTN22** *1 Emitter E3Z-FTN22-L Receiver E3Z-FTN22-D	**E3Z-FTP22** *1 Emitter E3Z-FTP22-L Receiver E3Z-FTP22-D
Retro-reflective with MSR function	*2	Pre-wired (2 m)	4 m *3 (100 mm)	**E3Z-FRN11 2M**	**E3Z-FRP11 2M**
		Connector (M12)		**E3Z-FRN21**	**E3Z-FRP21**
Diffuse-reflective		Pre-wired (2 m)	100 mm	**E3Z-FDN11 2M**	**E3Z-FDP11 2M**
		Connector (M12)		**E3Z-FDN21**	**E3Z-FDP21**
		Pre-wired (2 m)	300 mm	**E3Z-FDN12 2M**	**E3Z-FDP12 2M**
		Connector (M12)		**E3Z-FDN22**	**E3Z-FDP22**
		Pre-wired (2 m)	500 mm	**E3Z-FDN13 2M**	**E3Z-FDP13 2M**
		Connector (M12)		**E3Z-FDN23**	**E3Z-FDP23**
		Pre-wired (2 m)	1 m	**E3Z-FDN14 2M**	**E3Z-FDP14 2M**
		Connector (M12)		**E3Z-FDN24**	**E3Z-FDP24**
		Pre-wired (2 m)	100 mm	**E3Z-FDN15 2M**	**E3Z-FDP15 2M**
		Connector (M12)		**E3Z-FDN25**	**E3Z-FDP25**
		Pre-wired (2 m)	300 mm	**E3Z-FDN16 2M**	**E3Z-FDP16 2M**
		Connector (M12)		**E3Z-FDN26**	**E3Z-FDP26**
		Pre-wired (2 m)	500 mm	**E3Z-FDN17 2M**	**E3Z-FDP17 2M**
		Connector (M12)		**E3Z-FDN27**	**E3Z-FDP27**
		Pre-wired (2 m)	1 m	**E3Z-FDN18 2M**	**E3Z-FDP18 2M**
		Connector (M12)		**E3Z-FDN28**	**E3Z-FDP28**

Accessories

- ## Reflector

Appearance	Sensing distance*		Model	Quantity	Remarks
	Rated value	Reference value			
	4 m (100 mm)	---	**E39-R1S**	1	for E3Z-FR☐

- ## Mounting Brackets

Applicable Sensors	Mounting method	Appearance	Model	Quantity
All models	M3 screw mounting		**E39-L189**	1
	M18 nut side mounting		**E39-L183**	1

- ## Connectors

Applicable Sensors	Size	Cable	Appearance		Cable type	Model
Connector (M12)	M12	Standard	Straight	2 m	4 conductors	**XS2F-M12PVC4S2M**
				5 m		**XS2F-M12PVC4S5M**
			L-shaped	2 m		**XS2F-M12PVC4A2M**
				5 m		**XS2F-M12PVC4A5M**

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Visible Spot

Feature

Visible spot

Benefit

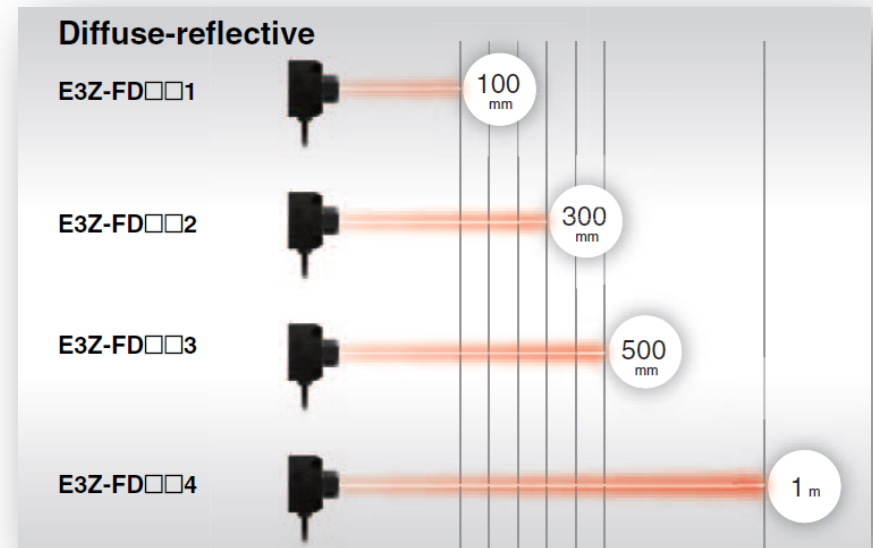- Easy installation and set-up
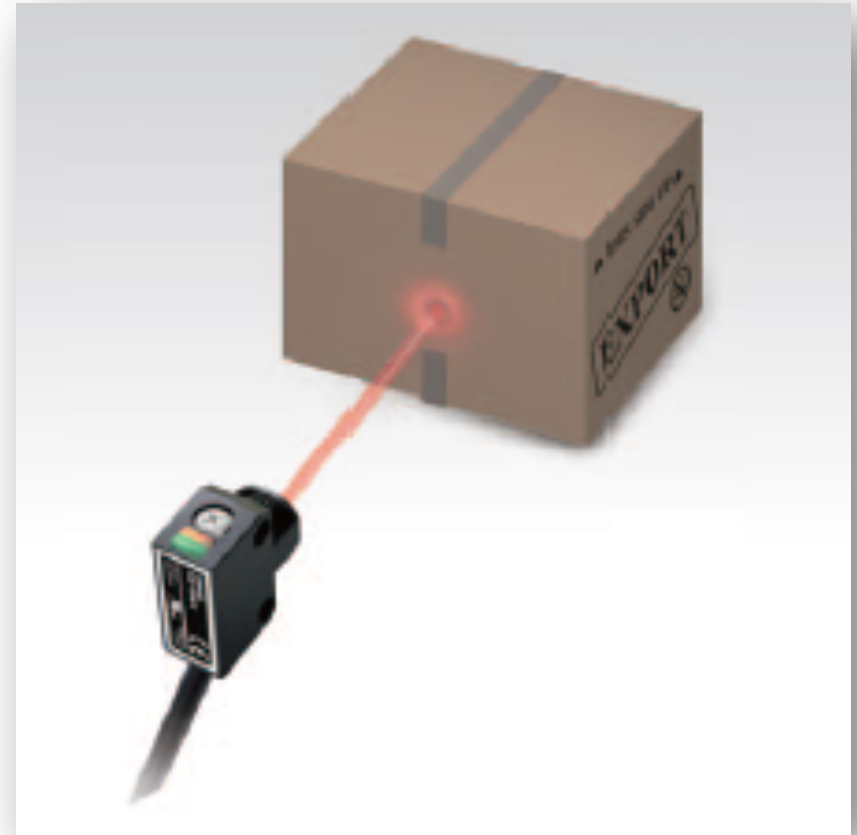
Wide Line-up

Feature

Many different sensing distances available

- Transmitted Beam: 20m

- Retro-reflective: 4m

- Diffuse-reflective:
  - 1m
  - 500mm
  - 300mm
  - 100mm

Benefit

Select the model that best fits your application

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IP69K Wash Down Rated

Feature

IP69K Rated

Benefit

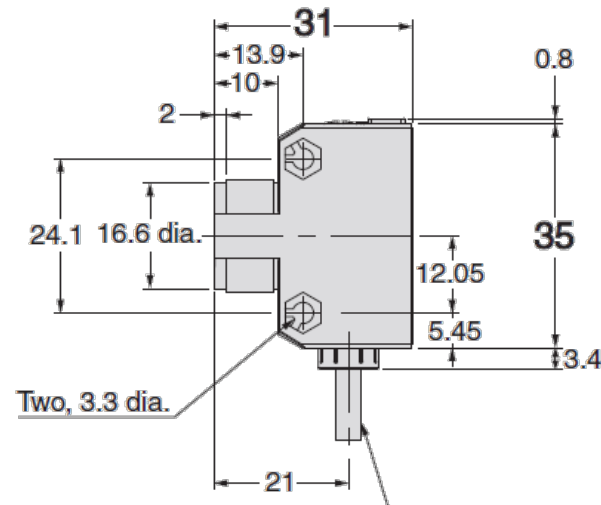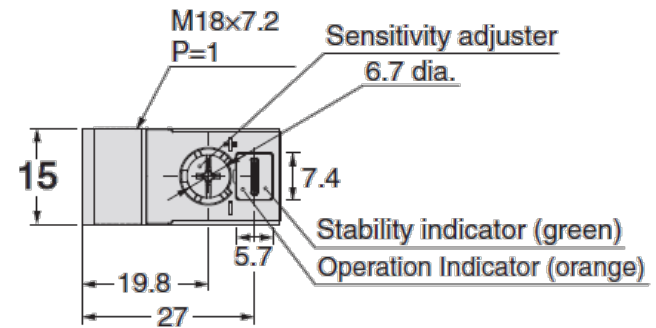- Withstands harsh environments with high temperatures and water pressures

Compact Size

Feature
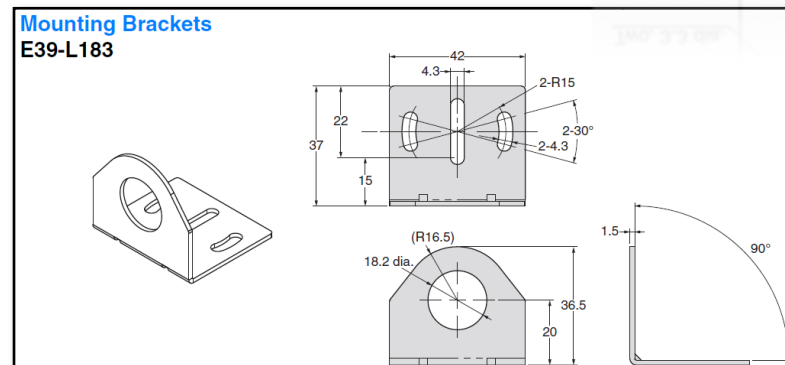
Small size

Benefit

- Mounts in tight spaces

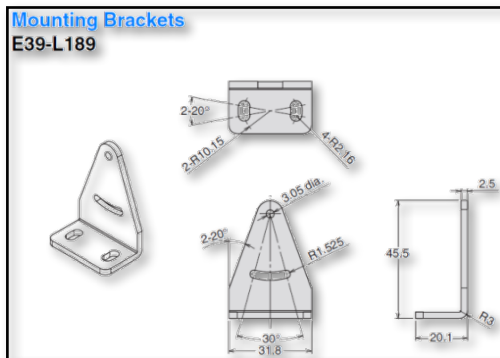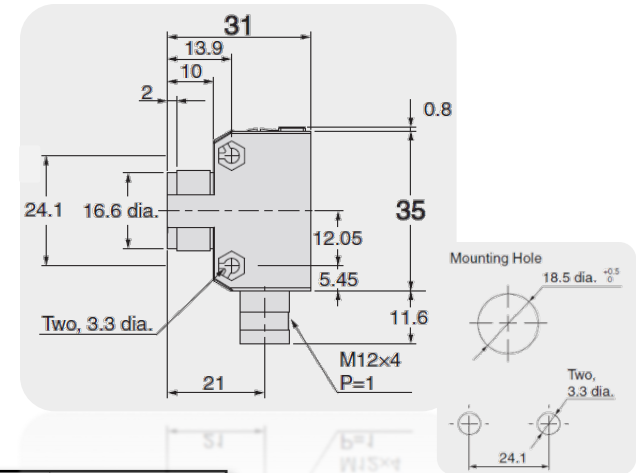# Multiple Mounting Options

Feature

Multiple mounting options

- M18 nose mounting with tightening nut

- Mounting holes

- Mounting brackets

Benefit

- Easily mounts in any configuration

Mounting Brackets
E39-L189

Mounting Brackets
E39-L183

Complements Existing E3Z Series

- **E3Z**
  - Compact photoelectric sensor with built-in amplifier

- **E3Z-L**
  - Compact and reliable laser photoelectric sensor

- **E3Z-G**
  - Grooved-type photoelectric sensor

- **E3ZM-C**
  - Oil-resistant, robust, compact

- **E3ZM**
  - Stainless steel housing ideal for food industry

- **E3ZM-V**
  - Industry's smallest color mark sensor with teaching

- **E3ZM-B**
  - Excellent PET, resin and glass bottle detection
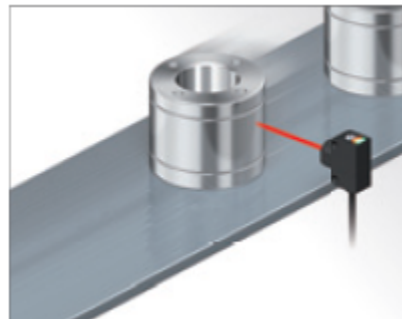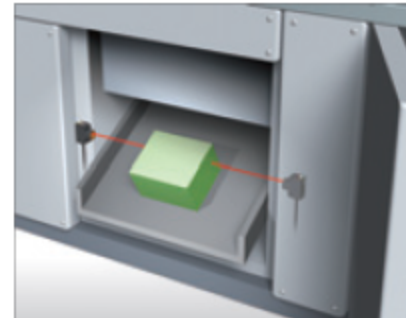
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Great in these applications

- ## Material Handling
  - Detect passing objects

- ## Automated Warehouses
  - Detect out of place items

- ## Packaging Machines
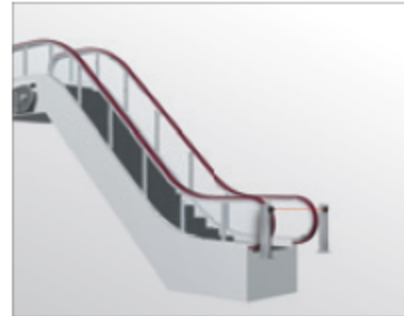 - Detect passing products
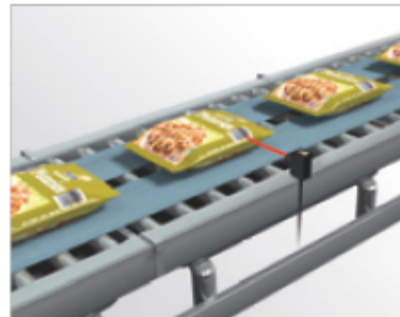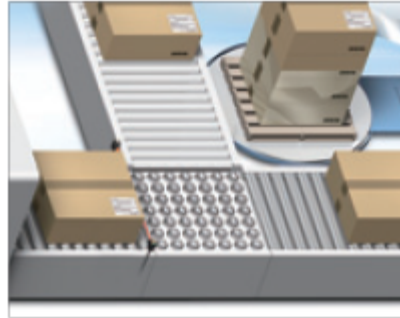
Great in these applications

- Automotive
  - Detect vehicles

- Molding Machines
  - Detect falling molded parts

- Machine Tools
  - Detect passing objects

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Great in these applications

- Spinning Machines
  - Detect discharging cloth

- Escalators
  - Detect person

Questions