



Features

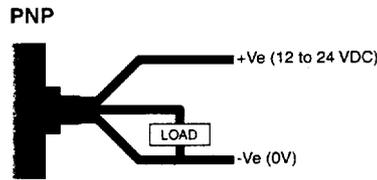
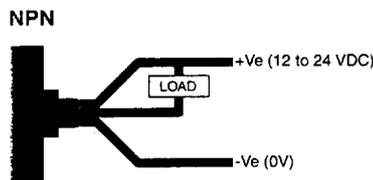
- High-performance miniature sensor with built-in amplifier.
- Visible pin-point beam.
- Through-beam, retro-reflective and diffuse models.
- Mutual interference prevention on retro-reflective and diffuse models.
- IP67.

722 6457

Specifications

	Through-beam	Retro-reflective	Diffuse	
Sensing Distance	1 m	500 mm	10 - 200 mm	5 - 30 mm
Light Source	Red "pin-point" LED (670 nm)			
Sensitivity Adjustment	Fixed			
Power Supply Voltage	12 to 24 VDC -10%			
Current Consumption	24 mA max.	20 mA max.		
Circuit Protection	Load short circuit, reverse polarity			
Control Output	NPN or PNP 24 VDC 50 mA max.			
Response Time	1 ms max. (both operation and release)			
Operation Mode(s)	Light ON/Dark ON (fixed models)			
Indicators	Light indicator (orange), stability indicator (green)			
Connection Method	2 pin			
Enclosure Rating	IP67			
Materials	Case: PBT Lens & Cover: Polycarbonate			
Ambient Temperature	-25°C to 55°C (with no icing)			
Ambient Humidity	35% to 85%			
Approvals	CE (EMC, LVD)			

Connections

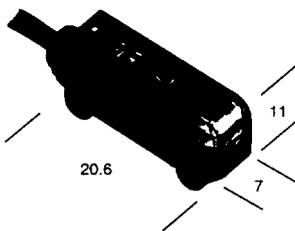


Selection table

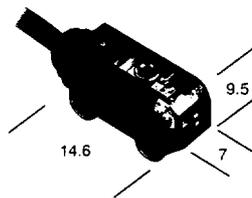
	NPN		PNP	
	Light ON	Dark ON	Light ON	Dark ON
Through-beam (side view)		E3T-ST12		E3T-ST14
	1 m			
Through-beam (flat)		E3T-FT12		E3T-FT14
	500 mm			
Retro-reflective*		E3T-SR12		E3T-SR14
	10 to 200 mm (with E39-R4)			
Diffuse (flat)	E3T-FD11	E3T-FD12	E3T-FD13	E3T-FD14
	5 to 30 mm			
Diffuse (side view)	E3T-SL11	E3T-SL12	E3T-SL13	E3T-SL14
	5 to 15 mm			
Diffuse (side view)	E3T-SL21	E3T-SL22	E3T-SL23	E3T-SL24
	5 to 30 mm			

Dimensions (mm)

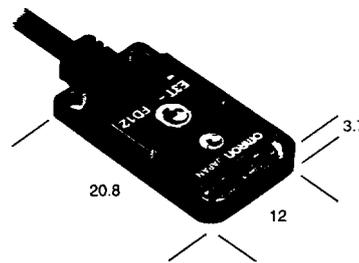
Diffuse (side view)
Retro-reflective



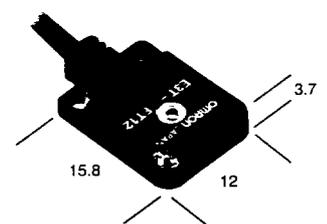
Through-beam (side view)



Diffuse (flat)



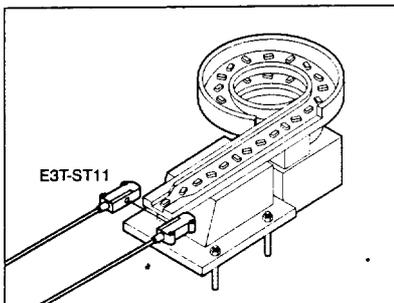
Through-beam flat)



Note: Dimensions are the same for each of the pair.

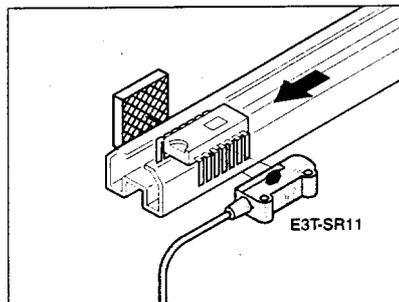
Typical applications

Through-beam



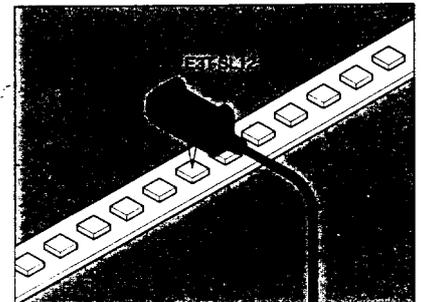
The presence of parts is detected in order to count the number being manufactured.

Retro-reflective



A sensor is used to detect the absence of ICs in automatic IC handlers.

Diffuse



With the pin-point LED a limited reflective model is used to detect IC chips on tape.