

Miniature photoelectric sensors in M5 and M6 sized housing

E3T-C

The E3T-C family of miniature photoelectric sensors is the ideal solution when mounting space is crucial.

- axial and radial M5 sized through-beam sensors
- axial M6 sized diffuse-reflective sensors
- pre-wired models in stainless steel housing



Ordering Information

M5 cylindrical housing Red light Infrared light

Sensor type	Sensing distance	Operation mode	Order code	
			NPN output	PNP output
Through-beam (axial) 	1 m	Dark-ON	E3T-CT12 2M	E3T-CT14 2M
Through-beam (radial) 	500 mm	Dark-ON	E3T-CT22S 2M	E3T-CT24S 2M

M6 cylindrical housing Red light Infrared light

Sensor type	Sensing distance	Operation mode	Order code	
			NPN output	PNP output
	3 to 50 mm	Light-ON	E3T-CD11 2M	E3T-CD13 2M

Ratings and Specifications

Item		Through-beam		Diffuse-reflective
		Cylindrical type (Top-view)	Cylindrical type (Side-view)	Cylindrical type (Top-view)
				
NPN output	Light-ON	---	---	E3T-CD11
	Dark-ON	E3T-CT12	E3T-CT22S	---
PNP output	Light-ON	---	---	E3T-CD13
	Dark-ON	E3T-CT14	E3T-CT24S	---
Sensing distance		1 m	500 mm	3 to 50 mm (100 × 100 mm white paper)
Standard sensing object		Opaque, 4-mm dia. min.	Opaque, 5-mm dia. min.	---
Hysteresis (white paper)		---		15% or less of the sensing distance
Directional angle		Receiver: 2°	Receiver: 10°	---
Light source (wavelength)		Red LED (630 nm)	Red LED (625 nm)	Infrared LED (870 nm)
Power supply voltage		12 to 24 VDC ±10%, ripple (p-p) 10% max.		
Current consumption		30 mA max. (Emitter 15 mA max., Receiver 15 mA max.)		20 mA max.
Control output		Load power supply voltage: 30 VDC max. Load current: 80 mA max. (residual voltage: 1 V max.) Open-collector output		
Protection circuits		Power supply reverse polarity protection, Output short-circuit protection		
Response time		Operate or reset: 0.5 ms max.		
Ambient illumination		Incandescent lamp: 3,000 lx max.		
Ambient temperature range		Operating: -25 to +55°C Storage: -30 to +70°C (with no icing or condensation)		
Ambient humidity range		Operating or Storage: 35% to +85% (with no condensation)		
Insulation resistance		20 MΩ min. at 500 VDC		
Dielectric strength		500 VAC, 50/60 Hz for 1 min.		
Vibration resistance (destruction)		10 to 55Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions		
Shock resistance (destruction)		500 m/s ² 3 times each in X, Y, and Z directions		
Degree of protection		IP65 (IEC 60529)		
Connection method		Pre-wired (standard length: 2 m)		
Weight (packed state)		Approx. 60 g		Approx. 40 g
Materials	Case	SUS303		
	Display window	Polysulfone		Epoxy
	Lens	Polysulfone		
	Hexagonal nuts	SUS303		
	Toothed washers	SUS303		
Accessories		Instruction manual, Hexagonal nuts, Toothed washers		Instruction manual, Hexagonal nuts, Toothed washers, Adjust-ment driver