RIGHT ANGLE





T8 Self-Contained, Right-Angle Barrel-Mount Sensors

Compact sensor provides reliable sensing without adjustments.

- · Powerful optics
- Short-range background suppression
- · Highly visible red sensing beam for easy alignment
- · Easily replaces range-limited 8 mm inductive proximity sensors
- Cordsets and brackets see page 159

Opposed T8, 10-30 V DC

Sensing Mode Connection **Output Type** Models NPN Range Models PNP 2 m **T86EV Emitter** _ 3-Pin Pico Pigtail QD **T86EVQ Emitter** 2 m T8AN6R T8AP6R 2 m LO 3-Pin Pico Pigtail QD T8AN6RQ T8AP6RQ 2 m T8RN6R T8RP6R DO 3-Pin Pico Pigtail QD T8RN6RQ T8RP6RQ

Diffuse T8, 10-30 V DC

Visible Red LED

Sensing Mode	Range	Connection	Output Type	Models NPN	Models PNP
	50 mm 2 m	2 m	LO	T8AN6D50	T8AP6D50
		3-Pin Pico Pigtail QD		T8AN6D50Q	T8AP6D50Q
DIFFUSE		2 m	DO	T8RN6D50	T8RP6D50
		3-Pin Pico Pigtail QD		T8RN6D50Q	T8RP6D50Q
		2 m	LO	T8AN6D100	T8AP6D100
	DIFFUSE 100 mm	3-Pin Pico Pigtail QD	LO	T8AN6D100Q	T8AP6D100Q
DIFFUSE		2 m	DO	T8RN6D100	T8RP6D100
		3-Pin Pico Pigtail QD		T8RN6D100Q	T8RP6D100Q

For more specifications see page 160.

Connection options: A model with a QD requires a mating cordset (see page 159.)

For 9 m cable, add suffix W/30 to the 2 m model number (example, T8AN6D50 W/30).



Cordsets







Suffix E, R and D

PHOTOELECTRIC

FEATURED

RECTANGLE

RIGHT ANGLE

BARREL

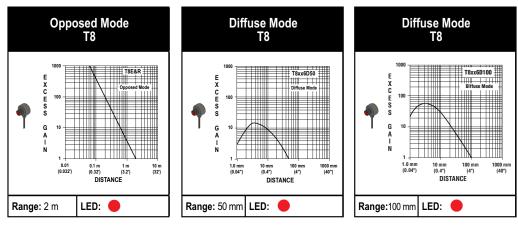
T8 Specifications

Supply Voltage and Current	10 to 30 V dc (10% max. ripple) at less than 25 mA (exclusive of load)				
Supply Protection Circuitry	Protected against reverse polarity and transient voltages				
Output Configuration	Solid-state switch NPN (current sinking) or PNP (current sourcing), depending on model. Light Operate (LO) or Dark Operate (DO), depending on model				
Output Rating	50 mA max. OFF-state leakage current: less than 1 μA at 24 V dc ON-state saturation voltage: less than 0.25 V at 10 mA dc; less than 0.5 V at 50 mA dc				
Output Protection Circuitry	Protected against false pulse on power-up and continuous overload or short circuit of outputs Overload trip point ≥ 100 mA				
Output Response Time	1 millisecond ON; 0.5 milliseconds OFF				
Delay at Power-up	Maximum 100 milliseconds (150 milliseconds for Diffuse); output does not conduct during this time				
Repeatability	Opposed: 100 microseconds Diffuse: 160 microseconds				
Indicators	Opposed: Receiver has Green and Red LED Emitter has one Green LED Solid Green: power ON Flashing green: output overloaded Solid Red: light sensed Yellow flashing: marginal excess gain				
Construction	Reinforced polycarbonate/ABS alloy housing, acrylic window with 8 mm ABS nut				
Environmental Rating	IEC IP67; NEMA 6				
Connections	2 m or 9 m attached cable, or 150 mm pigtail with 3-pin Pico-style quick-disconnect fitting. QD cordsets are ordered separately. See page 159.				
Operating Conditions	Temperature: -20° to +55° C Relative humidity: 80% at 50° C (non-condensing)				
Vibration and Mechanical Shock	Vibration: All models meet IEC 60068-2-6, IEC 60947-5-2, UL491 Section 40, MIL-STD-202F Method 201A; 10 to 60 Hz, 0.5 mm peak to peak Shock: All models meet IEC 60068-2-27, IEC 60947-5-2; 30g peak acceleration, 11 millisecond pulse duration, half-sine wave pulse shape				
Certifications					



Excess Gain Curves (Diffuse mode performance based on 90% reflectance white test card)

= Visible Red LED



Beam Patterns (Diffuse mode performance based on 90% reflectance white test card)

