

Overview—Luminescence Sensing Models



Luminescence Sensors




- Perfect for the detection of any luminescent target, even on reflective materials such as ceramics, metal or mirrored glass
- Capable of sensing from 8–20 mm from the sensor face
- Simple three-step setup routine and optional “fine setup routine” for more complicated applications
- Can function in either light operate or dark operate mode
- Standard M12 4-pin micro-connector (mating cable available on **Page V8-T5-30**)

Luminescence Sensing Basics

Luminescence is defined as visible light emission from fluorescent or phosphorescent substances. Luminescence sensors emit ultraviolet light, which is then reflected at a higher wavelength from the target surface. The UV emission from the sensor is modulated and the visible light received is synchronized, resulting in immunity against external interferences such as reflections caused by shiny objects. Luminescence sensors are used in various industries to detect labels, fluorescent marks or signs, fluorescent glues on paper, to distinguish cutting and sewing guides, and to check fluorescent paints or lubricants.

Color, Contrast and Luminescence Sensing

Color, Contrast and Luminescence Sensing Models

	Voltage Range	Sensing Range	Connection ^①	Output Type	Catalog Number
Rectangular (50 x 50 x 25 mm) 	10–30 Vdc	5–45 mm (0.19–1.77 in) ^②	8-pin micro-connector ^①	3 NO PNP outputs	E76-CLRMKP-M12
				3 NO NPN outputs	E76-CLRMKN-M12
				3 NO NPN outputs, RS485 connection ^③	E76-CLRMKRS-M12
Flat Tubular (18 mm) 	10–30 Vdc	10 mm (0.39 in) ideal	4-pin micro-connector	Light operate or dark operate, PNP output	E76-CNT010P-M12
				Light operate or dark operate, NPN output	E76-CNT010N-M12
Flat Tubular (18 mm) 	10–30 Vdc	8–20 mm (0.31–0.79 in)	4-pin micro-connector	Light operate or dark operate, PNP output	E76-UV020P-M12

Notes

- ^① For complete connector cables, see **Page V8-T5-38**.
- ^② Refer to Detection Diagram on **Page V8-T5-43**.
- ^③ Sensing parameters may be adjusted using the RS485 serial interface. The RGB color data is not available through this serial link.

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Photoelectric Sensors

IntelliView Series Sensors

Compatible Connector Cables

M12 Micro-Connector, Straight Female



Standard Cables ①

Voltage Style	Number of Pins	Gauge	Length	Pin Configuration/Wire Colors (Face View Female Shown)	PVC Catalog Number	PUR Catalog Number	IRR PUR Catalog Number
Micro-Connector, Straight Female							
DC	4-pin, 4-wire	22 AWG	6 ft (2m)		CSDS4A4CY2202	CSDS4A4RY2202	CSDS4A4I02202
			16.4 ft (5m)		CSDS4A4CY2205	CSDS4A4RY2205	CSDS4A4I02205
			32.8 ft (10m)		CSDS4A4CY2210	CSDS4A4RY2210	CSDS4A4I02210
	5-pin, 5-wire	22 AWG	6 ft (2m)		CSDS5A5CY2202	—	—
			16.4 ft (5m)		CSDS5A5CY2205	—	—
			32.8 ft (10m)		CSDS5A5CY2210	—	—
	8-pin, 8-wire	24 AWG	6 ft (2m)		CSDS8A8CB2402	—	—
			16.4 ft (5m)		CSDS8A8CB2405	—	—
			32.8 ft (10m)		CSDS8A8CB2410	—	—

Accessories

IntelliView Series Sensors

Description	Sensor Compatibility	Catalog Number
Mounting Brackets—L-Shaped		
Mounting Brackets—L-Shaped		
L-shaped mounting bracket for IntelliView sensors Mounting hardware included	All models starting with E75-PPA_	E75-MTB1
Long L-shaped mounting bracket for IntelliView sensors Mounting hardware included	All models starting with E76-CLR_ and E75-PP1MP-M12	E76-MTB1
Adjustability: Allows some adjustment in one axis and allows for aiming of the sensor through a short arc Sensor mounting: Sensor mounts with two jam nuts and washers (included with sensor) Material of construction: Aluminum with chromate finish Packaging: Two per package	All 18 mm flat tubular sensors	6161AS6501
Mounting Bracket Ball Swivel		
Mounting Bracket Ball Swivel		
Allows 360° rotation and 10° vertical tilt Hole spacing is identical to our 50 and 55 series sensors Ideal for mounting Right Angle sensors Made of Noryl®	All 18 mm flat tubular sensors	6181AS5200
Additional Mounting Brackets		
More mounting brackets compatible with IntelliView sensors, see Tab 8, section 8.2		
Dimensions , see Page V8-T5-47 .		

Note

① For a full selection of connector cables, see **Tab 10, section 10.1**.