

### IntelliView Series Sensors



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### IntelliView Series Sensors

#### Product Description

The IntelliView™ Series from Eaton is a family of compact, high performance specialty photoelectric sensors designed to solve a wide array of sensing challenges.

IntelliView encompasses a variety of new sensing technologies: color, contrast and luminescence sensing; field-adjustable foreground and background suppression sensing; short-range distance sensing with analog outputs; and long-range, high-precision laser distance sensing with analog outputs.

To fit into your application, IntelliView sensors are available in industry-standard M18 flat-tubular and compact rectangular package sizes. For ease of installation and replacement, all models are available with micro-connectors.

#### Features

- New Sensing Technologies—Now, Eaton has solutions for sensing color, contrast, luminescence and distance with great accuracy
- Small Size, Big Solutions—IntelliView sensors come in either compact rectangular or flat-tubular package sizes, both rugged sealed enclosures
- Simple “Teach In” Installation—Most models include a teach mode, allowing for quick and simple installation and setup
- Adjustable Background Suppression—For the first time, Eaton offers a fully field-adjustable background suppression photoelectric sensor capable of detecting targets as far as 3.9 ft (1.9m) away
- LED Indicators and Pushbuttons—Multiple LEDs communicate output and power status while built-in pushbuttons and adjustment potentiometers simplify the teaching of sensor settings

#### Standards and Certifications

- UL Listed
- cUL Listed
- CE



#### **⚠ DANGER**

**THIS SENSOR IS NOT A SAFETY DEVICE AND IS NOT INTENDED TO BE USED AS A SAFETY DEVICE. This sensor is designed only to detect and read certain data in an electronic manner and perform no use apart from that, specifically no safety-related use. This sensor product does not include self-checking redundant circuitry, and the failure of this sensor product could cause either an energized or de-energized output condition, which could result in death, serious bodily injury, or property damage.**

For the most current information on this product, visit our Web site: [www.eaton.com](http://www.eaton.com)

For Customer Service in the U.S. call 1-877-ETN CARE (386-2273), in Canada call 1-800-268-3578.  
For Application Assistance in the U.S. and Canada call 1-800-426-9184.

## Product Selection

### Overview—Foreground/Background Sensing



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### Adjustable Foreground/Background Suppression Models




- Ignores nuisance foreground or background objects
- Field-adjustable sensing ranges
- Compact 50x50 mm rectangular package size
- M12 micro-connector termination with 90- and 180-degree rotation options
- Sensing ranges up to 47.2 in (120 cm)

### Foreground/Background Sensing Basics

Foreground/background suppression sensors allow the user to precisely set the minimum and maximum detection distance. This allows detection of a target only when it is inside a given area, avoiding the interference of objects lying before (foreground) and behind (background). This type of sensor is ideal for suppressing the detection of box edges and bottoms, sending an output only upon the presence of goods actually contained in the box.

### Foreground/Background Sensing

#### Adjustable Foreground/Background Suppression

	Voltage Range	Output Type	Connection	Adjustable Sensing Range	Catalog Number
<b>Compact Rectangular</b> (50 x 50 x 18 mm) 	<b>Background Suppression Models</b>				
	10–30 Vdc	Light operate or dark operate (selectable), PNP	4-pin micro-connector <sup>①</sup>	3–10 cm (1.2–4.0 in)	<b>E75-PPA010P-M12</b>
				3–25 cm (1.2–9.8 in)	<b>E75-PPA025P-M12</b>
				10–50 cm (4.0–19.7 in)	<b>E75-PPA050P-M12</b>
<b>Compact Rectangular</b> (50 x 50 x 18 mm) 	<b>Extended Range Background Suppression Models</b>				
	10–30 Vdc	Light operate or dark operate (selectable), PNP	4-pin micro-connector <sup>①</sup>	6–120 cm (2.4–47.2 in)	<b>E75-PP1MP-M12</b>
<b>Compact Rectangular</b> (50 x 50 x 18 mm) 	<b>Foreground/Background Suppression Models</b>				
	10–30 Vdc	Light operate or dark operate (selectable), PNP	4-pin micro-connector <sup>①</sup>	Foreground: 5–20 cm (2.0–7.9 in) Background: 12–110 cm (4.7–43.3 in)	<b>E75-PPA110P-M12</b>

#### Note

<sup>①</sup> For compatible connector cables, see **Page V8-T5-38**.



**Overview—Distance Sensing Models with Analog Outputs****Long-Range, High-Precision Laser Distance Measurement Sensor****Short-Range Distance Sensor****Distance Sensing Models with Analog Outputs**

- When within the effective range of the sensor, outputs a 0–10V signal proportional to the target's distance from the sensor face
- Class II laser emitter detects objects from 0.3 to 4m (1 to 13.1 ft) away
- Two additional PNP outputs can be programmed to switch at predetermined ranges
- Simple three-step teach routine to program range cutoffs
- Unmatched accuracy and resolution at long sensing distances
- When within the effective range of the sensor, outputs a 0–10V signal proportional to the target's distance from the sensor face
- Visible red LED emitter detects objects from 5 to 10 cm (1.9 to 3.9 in)
- Two indicator LEDs communicate sensor status: a yellow LED with light intensity proportional to the target's distance within the sensor's range, and a red LED that activates when the target is beyond maximum sensing range
- Flat tubular package can be mounted using the body threads or flat against a surface

**Distance Sensing Explained**

Distance sensors output a 0–10V analog signal in proportion to the measurement of the distance between the sensor and target. Optical triangulation, a technology similar to that used in Eaton's Perfect Prox or diffuse sensors, is used for short- to mid-range distance sensing applications that do not require a high degree of accuracy. Time-of-flight technology, a method of measuring the time it takes for the emitted beam to bounce off the target and return to the detector, is used for longer range distance sensing applications. Time-of-flight is highly accurate with precise resolution over long sensing distances.

**Distance Sensing****Distance Sensing Models with Analog Outputs**

	Voltage Range	Output Type	Connection	Adjustable Sensing Range	Catalog Number
<b>Rectangular (80 x 53 x 31 mm)</b> 	<b>Long-Range Laser Distance Sensor with Time-of-Flight Technology</b>				
	19–28 Vdc	Analog output (0–10V), dual teachable PNP outputs, Light operate mode	5-pin micro-connector <sup>①</sup>	0.3–4.0m (1.0–13.1 ft)	<b>E75-DST400A010-M12</b> <sup>②</sup>
<b>Flat Tubular (18 mm)</b> 	<b>Short-Range Distance Sensor</b>				
	18–30 Vdc	Analog output (0–10V)	4-pin micro-connector <sup>①</sup>	5.0–10.0 cm (1.9–3.9 in)	<b>E75-DST010A010-M12</b> <sup>②</sup>

**Notes**

- <sup>①</sup> For compatible connector cables, see **Page V8-T5-38**.
- <sup>②</sup> This sensor is a Class II laser device. Eye irradiation for over 0.25 seconds is dangerous. Refer to the Class II Standard (EN60825-1) for additional safety information.

**Overview—Color and Contrast Sensing Models****Color Sensors**

- Can be programmed to recognize three different colors independently
- Capable of sensing targets 5–45 mm away from the sensor face
- Rectangular plastic package features a four-digit display, two programming buttons and output status LEDs
- Optional serial connection (RS485) allows for remote communications
- Standard M12 8-pin micro-connector (mating cable available on **Page V8-T5-28**)

**Contrast Sensors**

- Ideal for detecting different colored or grayscale contrasts, such as registration marks
- Capable of sensing targets out to 10 mm from the sensor face
- Simple three-step setup routine for quick installation or optional “fine setup routine” for more complicated applications
- Complementary outputs can function in either light operate or dark operate modes
- Standard M12 4-pin micro-connector (mating cable available on **Page V8-T5-29**)

**Color Sensing Basics**

Color sensors work by using a “chromaticity” detection algorithm. Chromaticity is determined by two characteristics: hue and saturation. Hue is determined by the reflected light’s wavelength, while saturation indicates the pureness percentage (with white representing 0%). Eaton’s color sensor goes one step further and provides an optional “chromaticity plus intensity” algorithm. This mode provides a higher sensitivity to tone variations and is recommended for detection of different colors on the same type of material. It will also better distinguish between gray tones.

The color of a target is determined by the color components of the reflected source light. The target color is identified by analyzing the red (R), green (G) and blue (B) channels of reflected light. For example, yellow can be identified by the following reflections: R=50%, G=50%, B=0%; orange can be identified by R=75%, G=25%, B=0%; pink by R=50%, G=0%, B=0%. The RGB combinations are practically limitless. Applications for color sensors are common in many industries, ranging from quality and process control, to automatic material handling for identification, to orientation and selection of objects according to their color.

**Contrast Sensing Basics**

Contrast sensors (also defined as color mark readers, according to their most popular application) go beyond simple presence/absence detection to distinguish two surfaces according to the contrast produced by their difference in reflectivity. For example, a dark reference mark (low reflectivity) can be detected by comparing it against the contrast of the lighter surface (high reflectivity). A white LED light source is used for general purpose contrast sensing, enabling detection of the very slightest of contrast variations—even those that share the same general material and color. Contrast sensors are frequently used in automated packaging applications for registration mark detection to automate the folding, cutting and sorting phases.




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

**Notes**

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

## 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
<b>Micro-Connector, Straight Female</b>							
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

Mounting Brackets—  
L-Shaped

Description	Sensor Compatibility	Catalog Number
<b>Mounting Brackets—L-Shaped</b>		
L-shaped mounting bracket for IntelliView sensors Mounting hardware included	All models starting with E75-PPA_	<b>E75-MTB1</b>
Long L-shaped mounting bracket for IntelliView sensors Mounting hardware included	All models starting with E76-CLR_ and E75-PP1MP-M12	<b>E76-MTB1</b>
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	<b>6161AS6501</b>

Mounting Bracket  
Ball Swivel

<b>Mounting Bracket Ball Swivel</b>		
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	<b>6181AS5200</b>

## 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**.

## Technical Data and Specifications

### Foreground/Background Suppression Models

Description	Specification
Input voltage	10–30 Vdc
Ripple	2 Vpp max.
Outputs	PNP, NO or NC; 30 Vdc max.
Output current	100 mA max. (short-circuit protected)
Output saturation voltage	< 2V max.
Response time	1 ms
Switching frequency	500 Hz
Indicator LEDs	For E75-PPA: Output LED (red), stability LED (green) For E75-PP1: Output LED (yellow), stability LED (green)
Gain adjustment	For E75-PPA: Adjustment screw (except for E75-PPA010P) For E75-PP1: Six-turn adjustment pot with numerical indicator
Operating temperature	–25° to 55°C (–13° to 131°F)
Storage temperature	–25° to 70°C (–13° to 158°F)
Electrical protection	Class 2
Sensing distance	Varies by model, see model selection table on <b>Page V8-T5-37</b>
Beam type	All models except E75-PPA010P-M12: Infrared LED 880 nm E75-PPA010P-M12: Red LED
Vibration	Amplitude: 0.5 mm Frequency: 10–55 Hz for every axis (EN60068-2-6)
Shock resistance	Half sine, 30 g <sub>n</sub> , 11 ms, 3 axes
Housing material	ABS
Lens material	PMMA
Enclosure ratings	For E75-PPA_: IP65 For E75-PP1_: IP67
Connections	M12 4-pin micro-connector
Weight	40g max.

### Distance Sensing Models—Long Range

Description	For E75-DST4_ (Long-Range Distance Sensor) Specification
Input voltage	16–28 Vdc
Ripple	2 Vpp max.
Current consumption (Output current excluded)	120 mA max.
Outputs	Analog, 0–10V 2 PNP outputs 30 Vdc max.
Output switching mode	Light operate (output on when target present)
Output current	100 mA max. (short-circuit protected)
Output saturation voltage	< 2V max.
Response time	12 ms
Switching frequency	42 Hz
Indicator LEDs	2 output LEDs (yellow) Power/alarm LED (green)
Distance adjustment	Dual buttons
Warm-up	15 min
Operating temperature	0° to 50°C (32° to 122°F)
Storage temperature	–20° to 70°C (–4° to 158°F)
Measurement range	0.3–4.0m (1.0–13.1 ft)
Linearity	< 1% (24 Vdc, 25°C, with 90% white target)
Repeatability	± 4 mm
Hysteresis	20 mm
Temperature drift	< 1 mm per °C
Beam type	Red laser (665 nm), Class 2 EN 60825-1 (1994) A1 (2002) A2 (2001)
Vibration	Amplitude: 0.5 mm Frequency: 10–55 Hz for every axis (EN60068-2-6)
Shock resistance	Half sine, 30 g <sub>n</sub> , 11 ms, 3 axes
Material of construction	ABS
Lens material	PMMA
Enclosure ratings	IP67
Connections	M12 5-pin micro-connector
Weight	92g max.

## Distance Sensing Models—Short Range

Description	For E75-DST0_ (Short-Range Distance Sensors) Specification
Input voltage	18–30 Vdc
Ripple	2 V <sub>pp</sub> max.
Current consumption (Output current excluded)	30 mA max.
Outputs	Analog, 0–10V
Output switching mode	Output can be inverted via button
Response time	7.3 ms
Switching frequency	68 Hz
Indicator LEDs	Output LED (yellow) Field LED (red)
Operating temperature	–10° to 55°C (14° to 131°F)
Storage temperature	–20° to 70°C (–4° to 158°F)
Measurement range	5.0–10.0 cm (1.9–3.9 in)
Beam type	Red LED (630 nm)
Vibration	Amplitude: 0.5 mm Frequency: 10–55 Hz for every axis (EN60068-2-6)
Shock resistance	Half sine, 30 g <sub>n</sub> , 11 ms, 3 axes
Material of construction	PBT
Lens material	PMMA
Enclosure ratings	IP67
Connections	M12 4-pin micro-connector
Weight	25g max.

## Color Sensing Models

Description	Specification
Input voltage	10–30 Vdc
Ripple	2V max.
Current consumption (Output current excluded)	60 mA max.
Outputs	3 PNP outputs 30 Vdc max. (short-circuit protected)
Output switching mode	100 mA max.
Output saturation voltage	< 2V
Response time	650 μs
Switching frequency	770 Hz
Indicator LEDs	4-digit display (green), Output LED (yellow), 3 status LEDs (green)
Sensing adjustment	SET, SEL buttons
Operating temperature	–10° to 55°C (14° to 131°F)
Storage temperature	–20° to 70°C (–4° to 158°F)
Protection	Class 2
Sensing distance	20 mm (0.79 in)
Beam spot dimension	Ø 4 mm
Beam type	White LED (400–700 nm)
Vibration	Amplitude: 0.5 mm Frequency: 10–55 Hz for every axis (EN60068-2-6)
Shock resistance	Half sine, 30 g <sub>n</sub> , 11 ms, 3 axes
Material of construction	ABS thermoplastic
Lens material	Glass window and lens
Mechanical protection	IP67
Connections	M12 8-pin micro-connector



## Contrast Sensing Models

Description	Specification
Input voltage	10–30 Vdc
Ripple	2V max.
Current consumption (Output current excluded)	25 mA max.
Outputs	PNP or NPN by model, NO and NC, 30 Vcc max. (short-circuit protected)
Output current	100 mA max.
Output saturation voltage	< 2V
Response time	185 $\mu$ s
Switching frequency	2.7 kHz
Indicator LEDs	Output LED (yellow) Ready/error LED (green/red)
Data retention	EEPROM non-volatile memory
Operating mode	Light operate on NO output Dark operate on NC output
Operating temperature	–10° to 55°C (14° to 131°F)
Storage temperature	–20° to 70°C (–4° to 158°F)
Operating distance	10 mm $\pm$ 2 mm
Beam type	White LED (400–700 nm)
Vibration	Amplitude: 0.5 mm Frequency: 10–55 Hz for every axis (EN60068-2-6)
Shock resistance	Half sine, 30 g <sub>n</sub> , 11 ms, 3 axes
Material of construction	PBT
Lens material	PMMA plastic
Enclosure ratings	IP67
Connections	M12 4-pin micro-connector cable
Weight	25g max.

## Luminescence Sensing Models

Description	Specification
Input voltage	10–30 Vdc
Ripple	2V max.
Current consumption (Output current excluded)	25 mA max.
Outputs	PNP or NPN by model, NO and NC, 30 Vcc max. (short-circuit protected)
Output current	100 mA max.
Output saturation voltage	< 2V
Response time	1.1 ms
Switching frequency	445 Hz
Indicator LEDs	Output LED (yellow) Relay/error LED (green/red)
Data retention	EEPROM non-volatile memory
Operating mode	Light operate on NO output Dark operate on NC output
Operating temperature	–10° to 55°C (14° to 131°F)
Storage temperature	–10° to 70°C (–4° to 158°F)
Sensing distance	8–20 mm (best signal at 10 mm)
Beam type	White LED (400–700 nm)
Vibration	Amplitude: 0.5 mm Frequency: 10–55 Hz for every axis (EN60068-2-6)
Shock resistance	Half sine, 30 g <sub>n</sub> , 11 ms, 3 axes
Material of construction	PBT
Lens material	PMMA plastic
Enclosure ratings	IP67
Connections	M12 4-pin micro-connector cable
Weight	25g max.

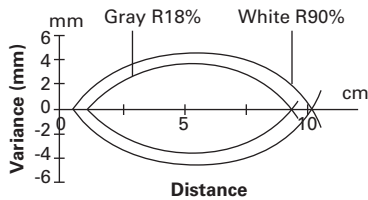
## Detection Diagrams

### Foreground/Background Suppression Models

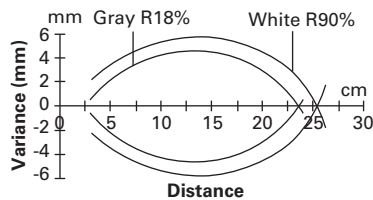
Models starting with E75-PPA\_ or E76-PP1\_

### Black/White Difference

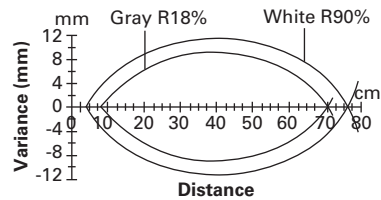
#### E75-PPA010P-M12 ①



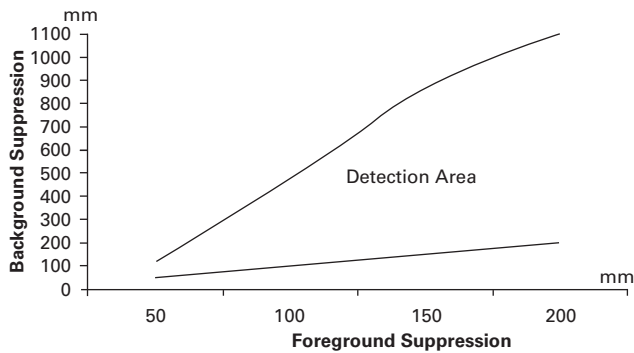
#### E75-PPA025P-M12 ①



#### E75-PPA050P-M12 ①



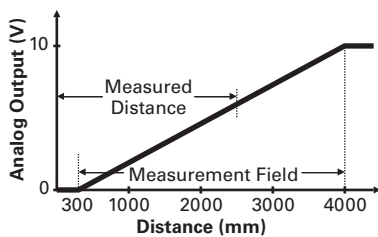
#### E75-PPA110P-M12



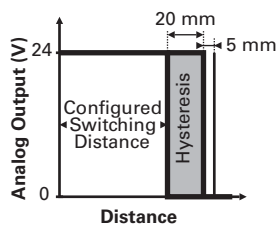
### Distance Sensing Models (Rectangular Package Only)

Models E75-DST400A010-M12

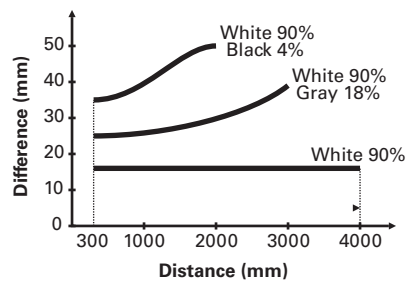
#### Analog Output Diagram



#### Digital Output Diagram



#### Black/White Difference



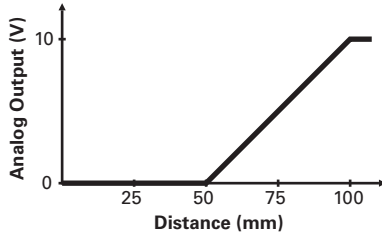
### Note

① These diagrams depict the width of the sensing beam over distance. These diagrams also show the sensing difference between white and gray targets. Because gray is less reflective than white, gray targets will typically need to come closer to the beam centerpoint to be detected.

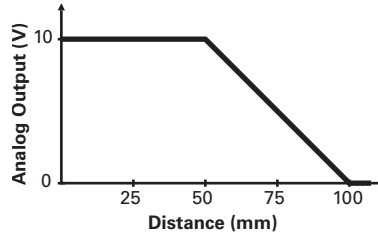
### Distance Sensing Models (Tubular Package Only)

Models E75-DST010A010-M12

#### Analog Output Diagram (Direct Proportionality—Default)



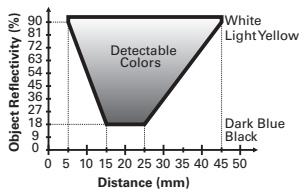
#### Analog Output Diagram (Inverted Proportionality)



### Color Sensing Models

Models E76-CLRMKN-M12,  
E76-CLRMKP-M12,  
E76-CLRMKRS-M12

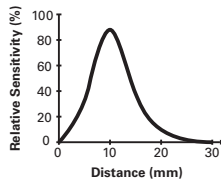
#### Color Detection Diagram



### Luminescence Sensing Models

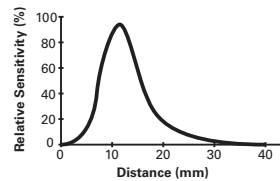
Models starting with  
E76-CN\_

#### Contrast Detection Diagram



Models starting with  
E76-UV\_

#### Luminescence Detection Diagram



### Wiring Diagrams

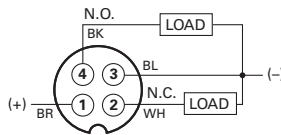
Pin numbers are for reference, rely on pin location when wiring.

### IntelliView Series Sensors

#### Micro-Connector Diagram (Face View Male Shown)

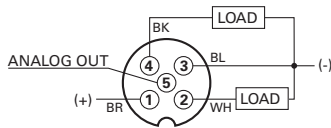
##### Foreground/Background Suppression Models

Models starting with  
E75-PPA\_ or E76-PP1\_



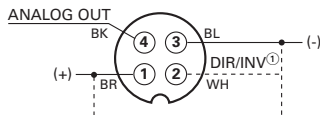
##### Distance Sensing Models (Rectangular Package Only)

E75-DST400A010-M12



##### Distance Sensing Models (Tubular Package Only)

E75-DST010A010-M12



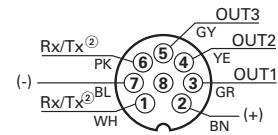
### Notes

- Direct proportionality (DIR) is activated when the white wire is connected to +Vdc. Inverse proportionality (INV) is activated when the white wire is connected to 0V. The white wire must always be connected.
- Available only on E76-CLRMKRS-M12 with RS485 serial connection.

#### Micro-Connector Diagram (Face View Male Shown)

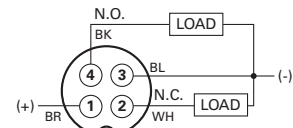
##### Color Sensing Models

E76-CLRMKN-M12,  
E76-CLRMKP-M12,  
E76-CLRMKRS-M12



##### Contrast and Luminescence Sensing Models

Models starting with  
E76-UV\_ or E76-CN\_

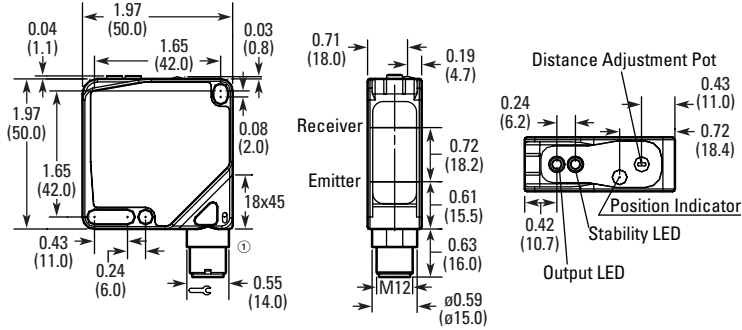


**Dimensions**

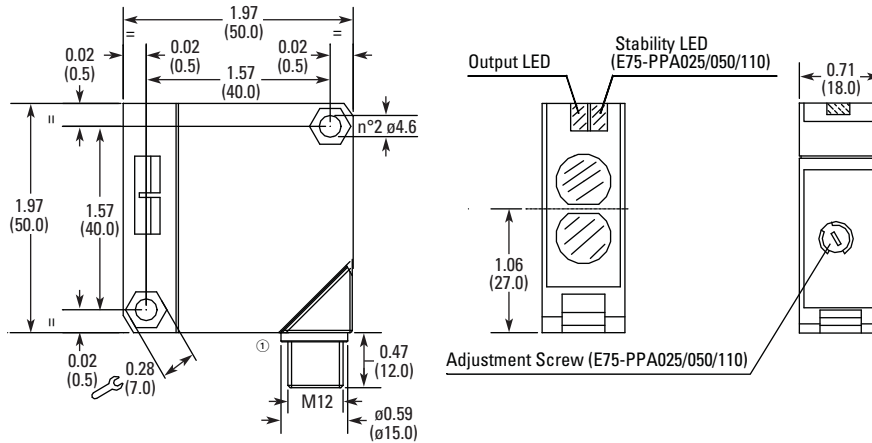
Approximate Dimensions in Inches (mm)

**Foreground/Background Suppression Models**

Models starting with E75-PP1\_



Models starting with E75-PPA\_

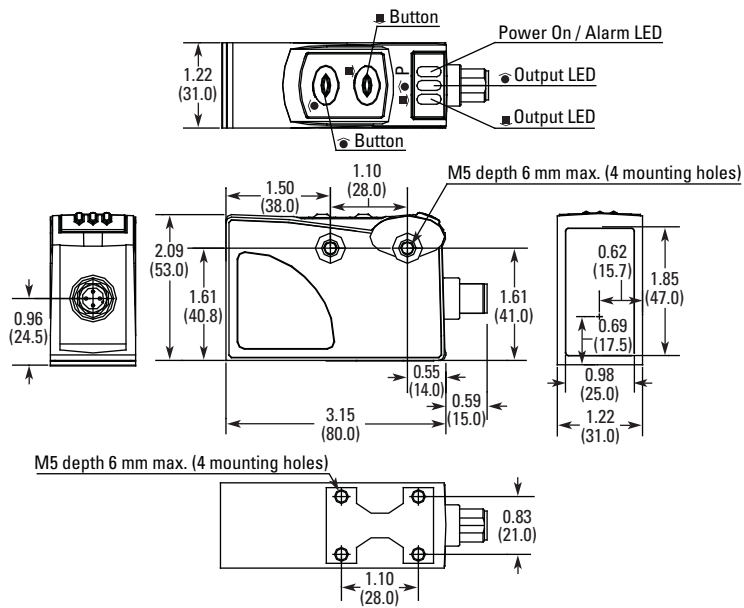
**Note**

① Connector can rotate 90 or 180 degrees to accept different sensor mounting orientations.

Approximate Dimensions in Inches (mm)

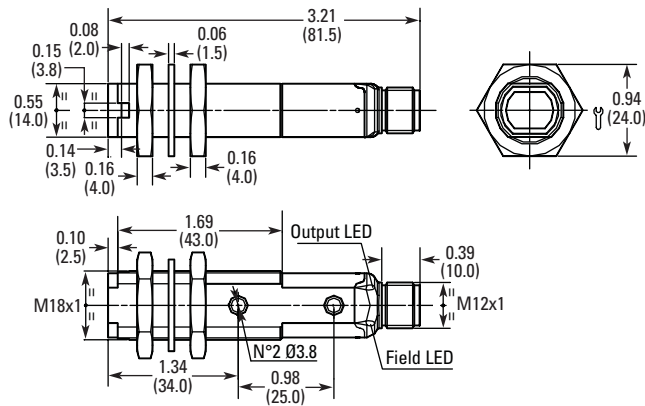
### Distance Sensing Models (Rectangular Package Only)

E75-DST400A010-M12



### Distance Sensing Models (Tubular Package Only)

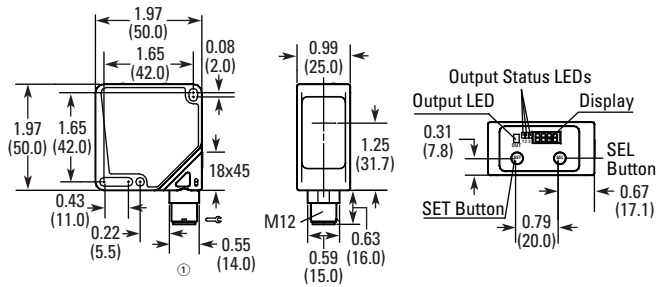
E75-DST010A010-M12



Approximate Dimensions in Inches (mm)

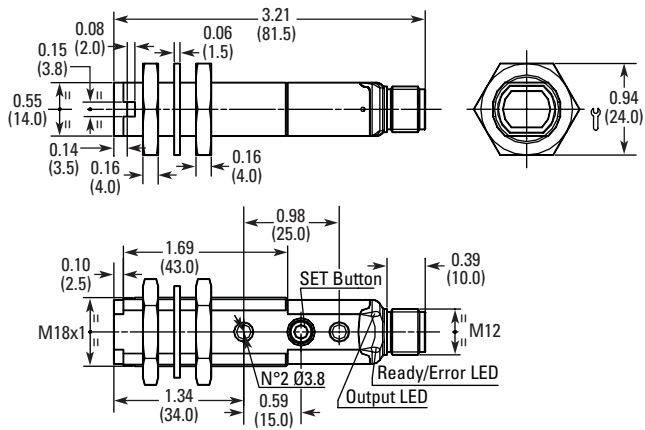
### Color Sensing Models

E76-CLRMKN-M12, E76-CLRMKP-M12, E76-CLRMKRS-M12



### Contrast and Luminescence Sensing Models

Models starting with E76-UV\_ or E76-CN\_



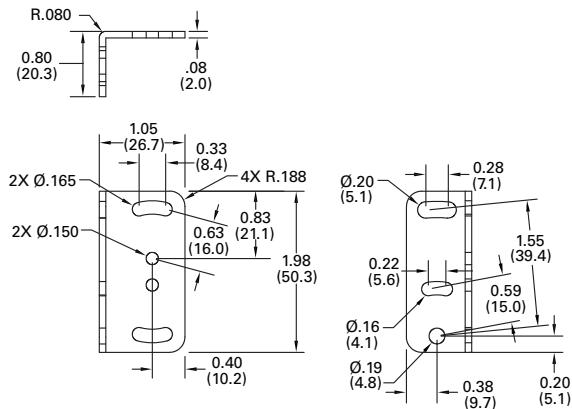
#### Note

① Connector can rotate 90 or 180 degrees to accept different sensor mounting orientations.

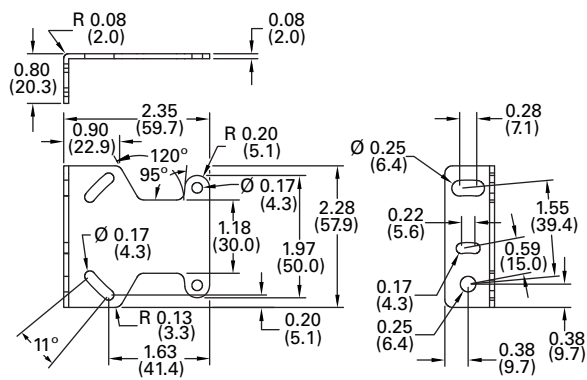
Approximate Dimensions in Inches (mm)

### Accessories—Mounting Brackets

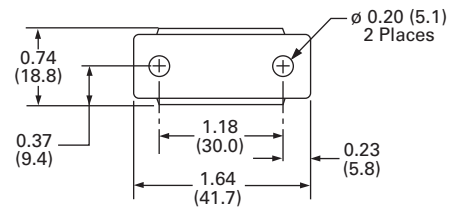
#### E75-MTB1—L-Shaped Mounting Bracket



#### E76-MTB1—Long L-Shaped Mounting Bracket



#### 6181AS5200—Ball Swivel



#### 6161AS6501—L-Shaped

