

**Model Selection — Compatible Connector Cables** ①

	Voltage Style	Number of Pins	Gauge	Length	Catalog Number			Pin Configuration/Wire Colors (Face View Female Shown)
					PVC Jacket	PUR Jacket	IRR PUR Jacket	
<b>Standard Cables — Micro Style</b>								
 Micro Style Straight Female	AC	4-pin 4-wire	22 AWG	6.0 feet (2m)	CSAS4F4CY2202	CSAS4F4RY2202	CSAS4F4IO2202	 1-Red/Black 2-Red/White 3-Red 4-Green
	DC	4-pin 4-wire	22 AWG	6.0 feet (2m)	CSDS4A4CY2202	CSDS4A4RY2202	CSDS4A4IO2202	 1-Brown 2-White 3-Blue 4-Black

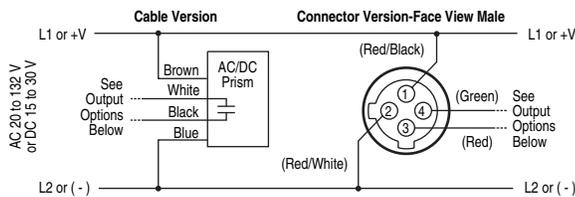
① For a full selection of connector cables, see **Section 10**.

Fast turn product with typical one day lead-time to shipment.

**Wiring Diagrams**

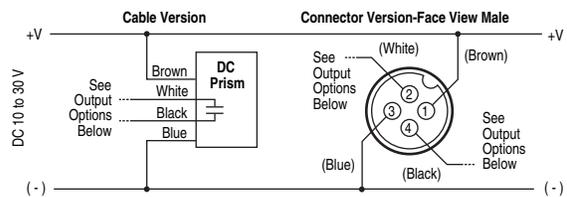
**AC/DC Models** ② ③

All AC/DC Models (except Thru-Beam)

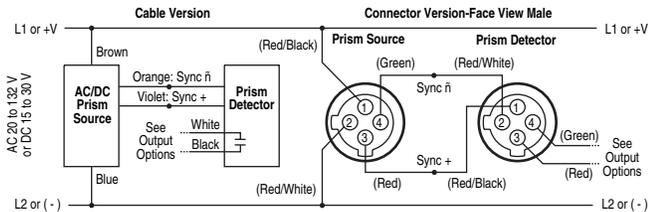


**DC Models** ② ③ ④

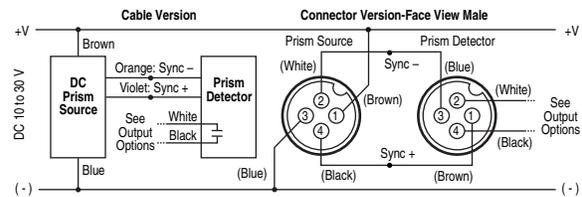
All DC Models (except Thru-Beam)



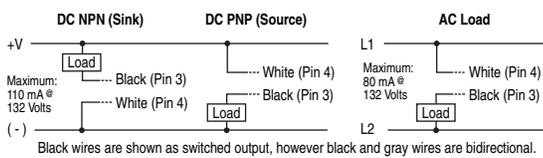
**AC/DC Thru-Beam Wiring**



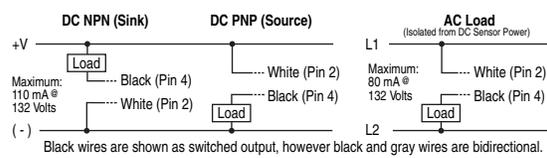
**DC Thru-Beam Wiring**



**Isolated Output Options**



**Isolated Output Options**



② Cable Versions: The color codes are the actual wire colors emanating from the sensor.

③ Connector Versions: The pin numbering and wire colors, shown in ( ), are typical of several manufacturers, however, variations are possible. **NOTE:** In case of discrepancies, rely on function indicated and pin location rather than pin number or wire color.

④ **NOTE:** Sensor operates on DC voltage, but isolated output can switch AC or DC loads.

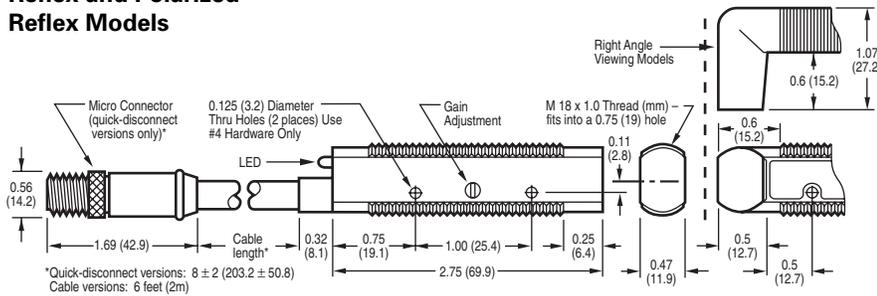
Specifications

	AC/DC Models	DC Only Models
Input Voltage	20 to 132V AC, 50/60 Hz or 15 to 30V DC	10 to 30V DC
Power Dissipation	Thru-beam: 2W maximum; All others: 1.5W maximum	Thru-beam: 1.5W maximum; All others: 1W maximum
Output Type	Solid-state relay	
Output Isolation	400V maximum	
Voltage Switching Capacity	200V AC peak; 180V DC	
Current Switching Capacity	80 mA AC load, 110 mA @ 132V DC (derate to 100 mA @ 180V DC)	
Off-State Leakage	10 $\mu$ A maximum	
On-State Resistance	25 $\Omega$ maximum	
Short Circuit Protection	Protected (current limited) for loads less than 32V AC or DC. <b>IMPORTANT:</b> Output will reset automatically when short is removed (there is no visual indication of a short circuit condition)	
Response Time	3 mS	
Light/Dark Operation	Specified by catalog number	
Temperature Range	Operating: -13° to +131°F (-25° to +55°C); Storage: -13° to +158°F (-25° to +70°C)	
Material of Construction	Lens: polycarbonate; Cable jacket: PVC; Body: structural polyurethane foam (do not expose to concentrated acids, alcohols or ketones)	
Cable Versions	2m length, 4-conductor cable; micro 4-pin male connector	
Connector Versions	Micro Connector 4-pin male AC or DC key (by model)	
Vibration and Shock	Vibration: 30g over 10 Hz to 2 kHz; Shock: 50g for 10 mS 1/2 sine wave pulse	
LED Indicator	Thru-beam source: Lights steady when power is ON; All others: Lights steady when output is ON	
Thru-Beam Alignment Aid	Detector includes a visible LED behind lens that lights steady when beam is complete	
Enclosure Ratings	NEMA 1, 2, 3, 4, 4X, 6, 12 and 13 ①	

① **NOTE:** Photoelectric sensors conform to NEMA tests as indicated above, however, some severe washdown applications can exceed these NEMA test specifications. If questions about a particular application arise, contact Eaton's Cutler-Hammer Sensor Applications Department at 1-800-426-9184.

Approximate Dimensions in Inches (mm) Except Where Noted

Reflex and Polarized  
Reflex Models



Diffuse Reflective and  
Thru-Beam Models

