August 2007

Model Selection — 70 Series Sensor Heads (Connection is by 9-foot cable) ①

Cutler-Hammer

	Sensing Range by Control Unit ②③				Field of View	Material of Construction	Operating Temperature;	Infrared Sensing Beam	Catalog Number
	A 8171B in High Gain Mode	B 8171B in Normal Gain Mode	C 8170A, 8771A or 8772A	D 8172A or 8173A Analog	Constitution	Enclosure Rating	Wavelength		
Thru-Beam Right-Angle Viewing Threaded Housing	15 feet (4.5m)	5.5 feet (1.6m)	3 feet (0.9m)	_	Source: 25° Detector: 45° Effective Beam: 0.10 inch (3 mm)	Housing: Stainless Steel Lens: Plastic	-40° to 176°F (-40° to 80°C) NEMA 4,13	925 nm	Source: 1179A-6501 Detector: 1279A-6501
Thru-Beam Forward Viewing Smooth Housing	32 feet (9.7m)	10.2 feet (3.1m)	6 feet (1.8m)	_	Source: 10° Detector: 25° Effective Beam: 0.15 inch (4 mm)	Housing: Aluminum Lens: Glass	-40° to 212°F (-40° to 100°C) NEMA 1	880 nm	Source: 1170A-300 Detector: 1270A-300
Thru-Beam Forward Viewing Threaded Housing Short Range	31.2 feet (9.5m)	10.2 feet (3.1m)	6 feet (1.8m)	_	Source: 10° Detector: 25° Effective Beam: 0.15 inch (4 mm)	Housing: Stainless Steel Lens: Lexan (Acrylic)	-40° to 176°F (-40° to 80°C) NEMA 3, 4, 6, 12, 13	940 nm	Source: 1173A-300 Detector: 1273A-300
Thru-Beam Forward Viewing Threaded Housing Medium Range	369 feet (112m)	123 feet (37.5m)	71 feet (21.6m)	_	Source: 2° Detector: 2° Effective Beam: 0.55 inch (14 mm)	Housing: Aluminum Lens: Glass	-40° to 176°F (-40° to 80°C) NEMA 4, 6, 13	880 nm	Source: 1173A-100 Detector: 1273A-100
Thru-Beam ® Forward Viewing Threaded Housing Long Range	743 feet (226m)	248 feet (75.6m)	143 feet (43.6m)	_	Source: 1° Detector: 1° Effective Beam: 0.88 inch (22.4 mm)	Housing: Aluminum Lens: Glass	-40° to 176°F (-40° to 80°C) NEMA 4, 6, 13	880 nm	Source: 1173A-200 Detector: 1273A-200
Reflex (Includes Retroreflector)	Do not use in this mode	23 feet (7m)	15 feet (4.5m)	_	0.75 inch (19 mm) diameter at 24 inches (610 mm)	Housing: Cast Zinc Lens: Acrylic	-40° to 176°F (-40° to 80°C) NEMA 1	940 nm	1470A-6501

① See Control Unit specification Page 6 on for restrictions on longer length cables, see Accessories for extension cable.

② Sensing ranges are based on a 3-inch retroreflector for reflex; 90% reflectance white card for diffuse reflective.

 $[\]ensuremath{^{\circlearrowleft}}$ For gain graphs and additional specifications, see Page 6.

⁴ Precise alignment must be maintained for this model. Catalog Number 6142A or 6168A mounting brackets shown on Page 9 are recommended.

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