

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

	Sensing Range by Control Unit ② ③				Field of View	Construction Case/ Lens	Operating Temperature; NEMA Ratings	Wave-length	Catalog Number
	A 8171B in High Gain Mode	B 8171B in Normal Gain Mode	C 8170A, 8771A or 8772A	D 8172A or 8173A Analog					
Thru-Beam Right-Angle Viewing Threaded Housing  	15 feet (4.5m)	5.5 feet (1.6m)	3 feet (0.9m)	—	<b>Source:</b> 25° <b>Detector:</b> 45° <b>Effective Beam:</b> 0.10 inch (3 mm)	Stainless Steel body; Plastic lens	-40° to 176°F (-40° to 80°C) NEMA 4, 13	925 nm	<b>Source:</b> 1179A-6501 <b>Detector:</b> 1279A-6501
Thru-Beam Forward Viewing Smooth Housing  	32 feet (9.7m)	10.2 feet (3.1m)	6 feet (1.8m)	—	<b>Source:</b> 10° <b>Detector:</b> 25° <b>Effective Beam:</b> 0.15 inch (4 mm)	Aluminum body; Glass lens	-40° to 232°F (-40° to 100°C) NEMA 1	880 nm	<b>Source:</b> 1170A-300 <b>Detector:</b> 1270A-300
Thru-Beam Forward Viewing Threaded Housing  	31.2 feet (9.5m)	10.2 feet (3.1m)	6 feet (1.8m)	—	<b>Source:</b> 10° <b>Detector:</b> 25° <b>Effective Beam:</b> 0.15 inch (4 mm)	Stainless Steel body; Lexan (Acrylic) lens	-40° to 176°F (-40° to 80°C) NEMA 3, 4, 6, 12, 13	940 nm	<b>Source:</b> 1173A-300 <b>Detector:</b> 1273A-300
Thru-Beam Forward Viewing Threaded Housing  	369 feet (112m)	123 feet (37.5m)	71 feet (21.6m)	—	<b>Source:</b> 2° <b>Detector:</b> 2° <b>Effective Beam:</b> 0.55 inch (14 mm)	Aluminum body; Glass lens	-40° to 176°F (-40° to 80°C) NEMA 4, 6, 13	880 nm	<b>Source:</b> 1173A-100 <b>Detector:</b> 1273A-100
Thru-Beam ④ Forward Viewing Threaded Housing  	743 feet (226m)	248 feet (75.6m)	143 feet (43.6m)	—	<b>Source:</b> 10° <b>Detector:</b> 25° <b>Effective Beam:</b> 0.15 inch (4 mm)	Aluminum body; Glass lens	-40° to 176°F (-40° to 80°C) NEMA 4, 6, 13	880 nm	<b>Source:</b> 1173A-200 <b>Detector:</b> 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)	Cast Zinc body; Acrylic lens	-40° to 176°F (-40° to 80°C) NEMA 1	940 nm	<b>1470A-6501</b>

① See Control Unit specification 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.

③ For gain graphs and additional specifications, see Page 6-106.

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