

Slim Sensor with Plug-in Outputs, Built-in Time Delays

- Plug-in replaceable outputs
- Light-ON/Dark-ON operation, switch selectable
- Optional solid-state outputs
- Polarized diffuse and through-beam models
- Timer models provide selectable ON-delay, OFF-delay and one-shot outputs
- Standard with 3 A relay output

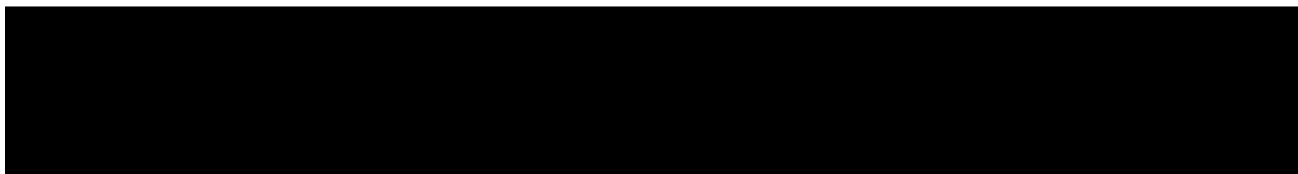


Ordering Information

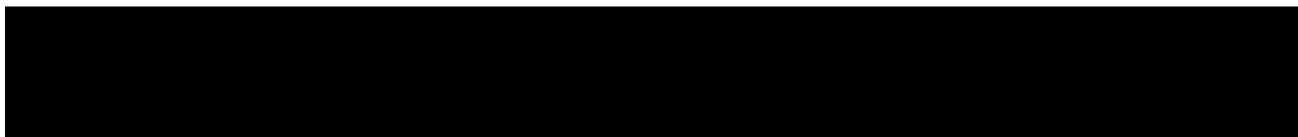
■ SENSORS

Method of detection		Through-beam	Retroreflective	Diffuse reflective
Sensing distance		10 m (32.8 ft)	3 m (9.8 ft)	70 cm (27.6 in)
Part number	Without timer	E3A2-10M4	E3A2-R3M4	E3A2-DS70M4
	ON-delay, OFF-delay, one-shot equal ON- and OFF-delays (0.1 to 5 seconds)	E3A2-10M4T	E3A2-R3M4T	E3A2-DS70M4T
	Independent ON-delays and OFF-delays (0.1 to 5 seconds)	E3A2-10M4D	E3A2-R3M4D	E3A2-DS70M4D

■ ACCESSORIES



■ REPLACEMENT PARTS



Specifications

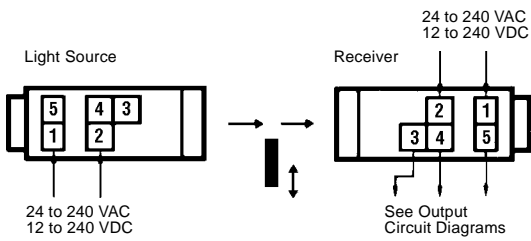
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Specifications Table - continued from previous page

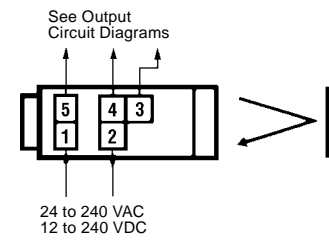


CONNECTIONS

Through-Beam Type

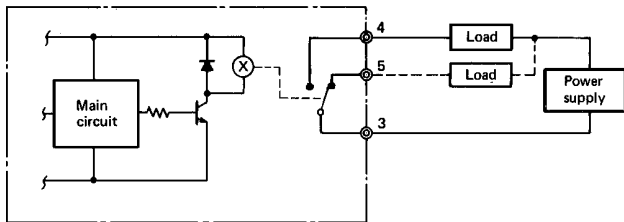


Retroreflective and Diffuse Reflective Types

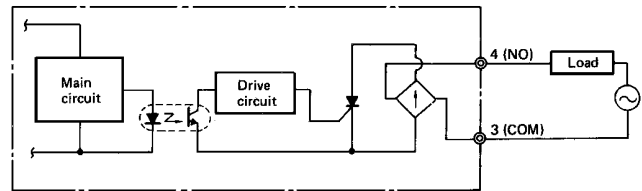


OUTPUT CIRCUIT DIAGRAMS

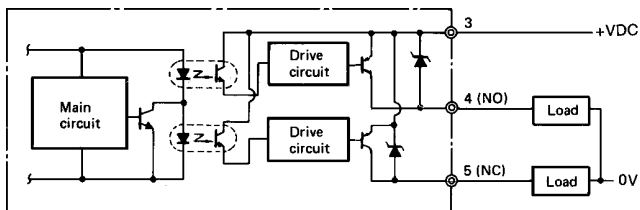
Relay output



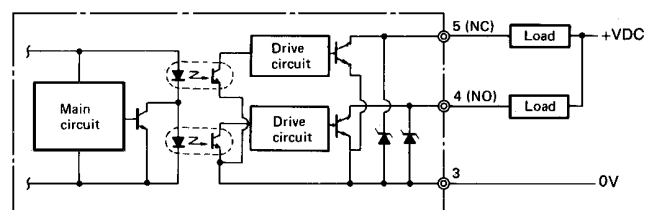
AC solid-state output



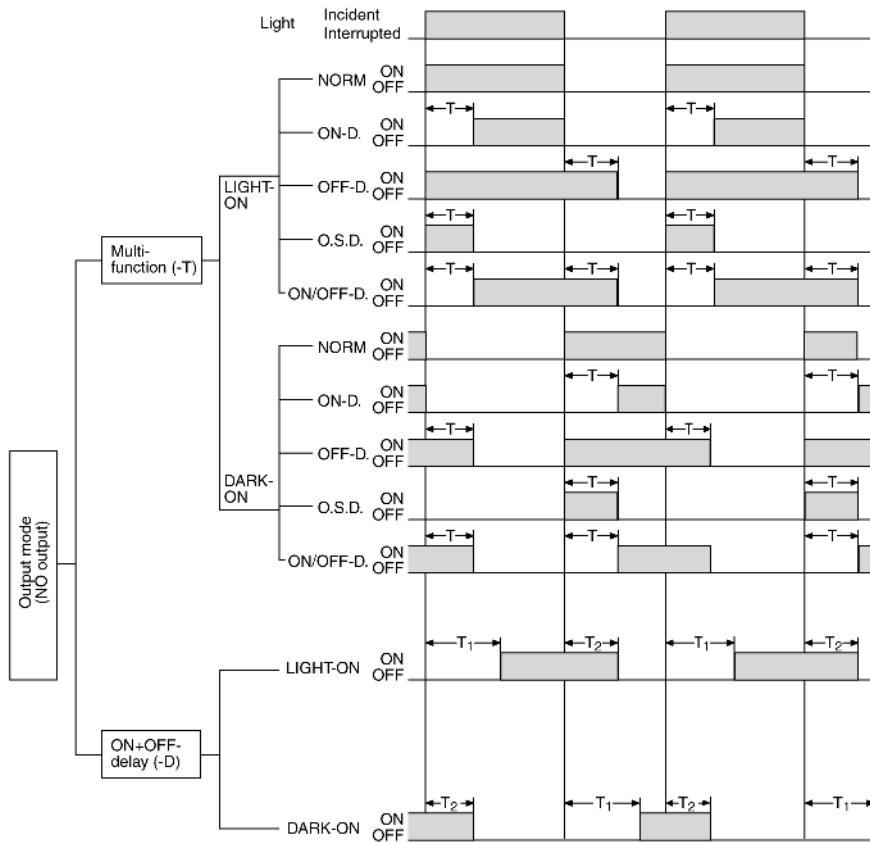
DC solid-state PNP output



DC solid-state NPN output



■ TIMING CHART



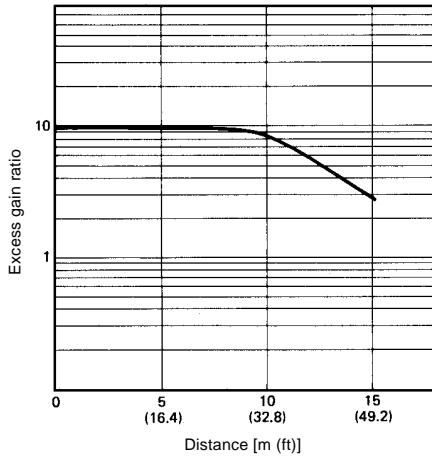
NOTE:

1. For sensors without built-in timer functions, operation follows the NORM mode shown with multi-function time delay models.
2. T_1 , T_2 and T denote set time, variable within 0.1 to 5 second range.
3. For multifunction time delay models (part numbers ending in "T"), the ON- and OFF-delay time settings will be the same.
4. For ON- and OFF-delay models (part numbers ending in "D"), T_1 and T_2 are independently variable.
5. O.S.D.: one shot delay

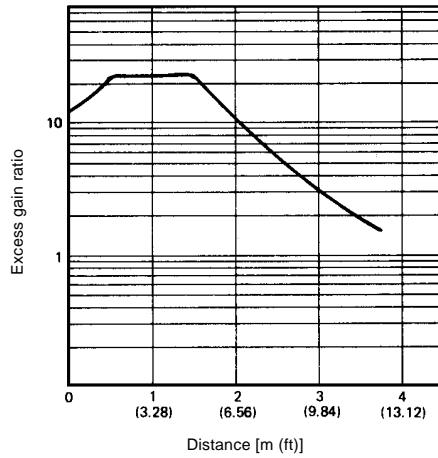
Engineering Data

■ EXCESS GAIN RATIO

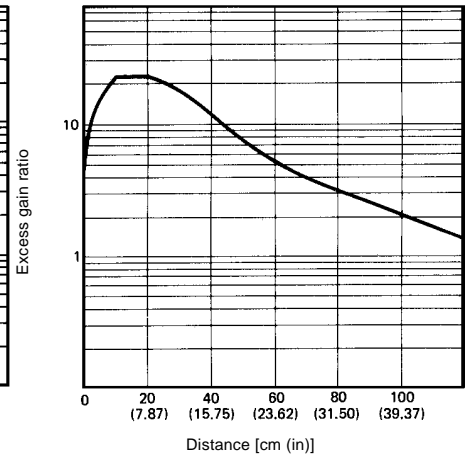
Through-Beam Type



Retroreflective Type

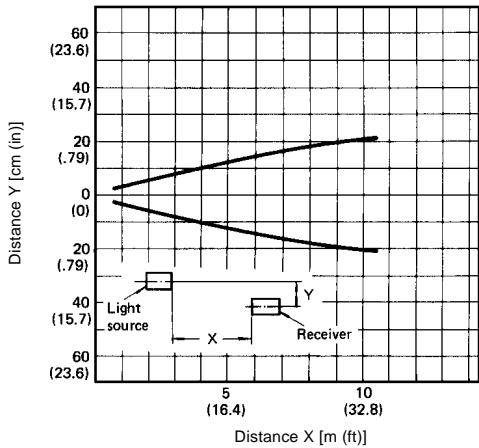


Diffuse Reflective Type



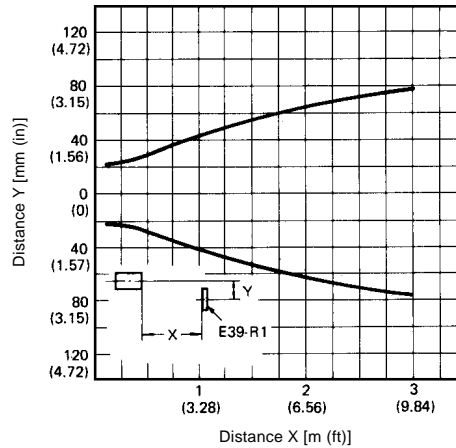
■ LIGHT SOURCE/RECEIVER SETTING RANGE

Through-Beam Type



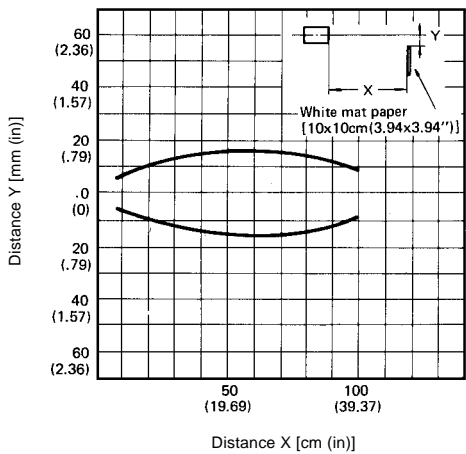
■ REFLECTOR SETTING RANGE

Retroreflective Type



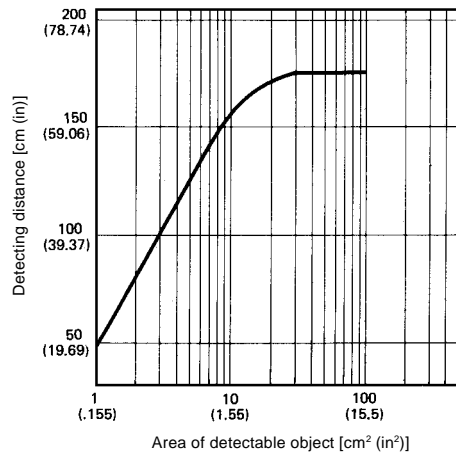
■ OPERATING RANGE

Diffuse Reflective Type



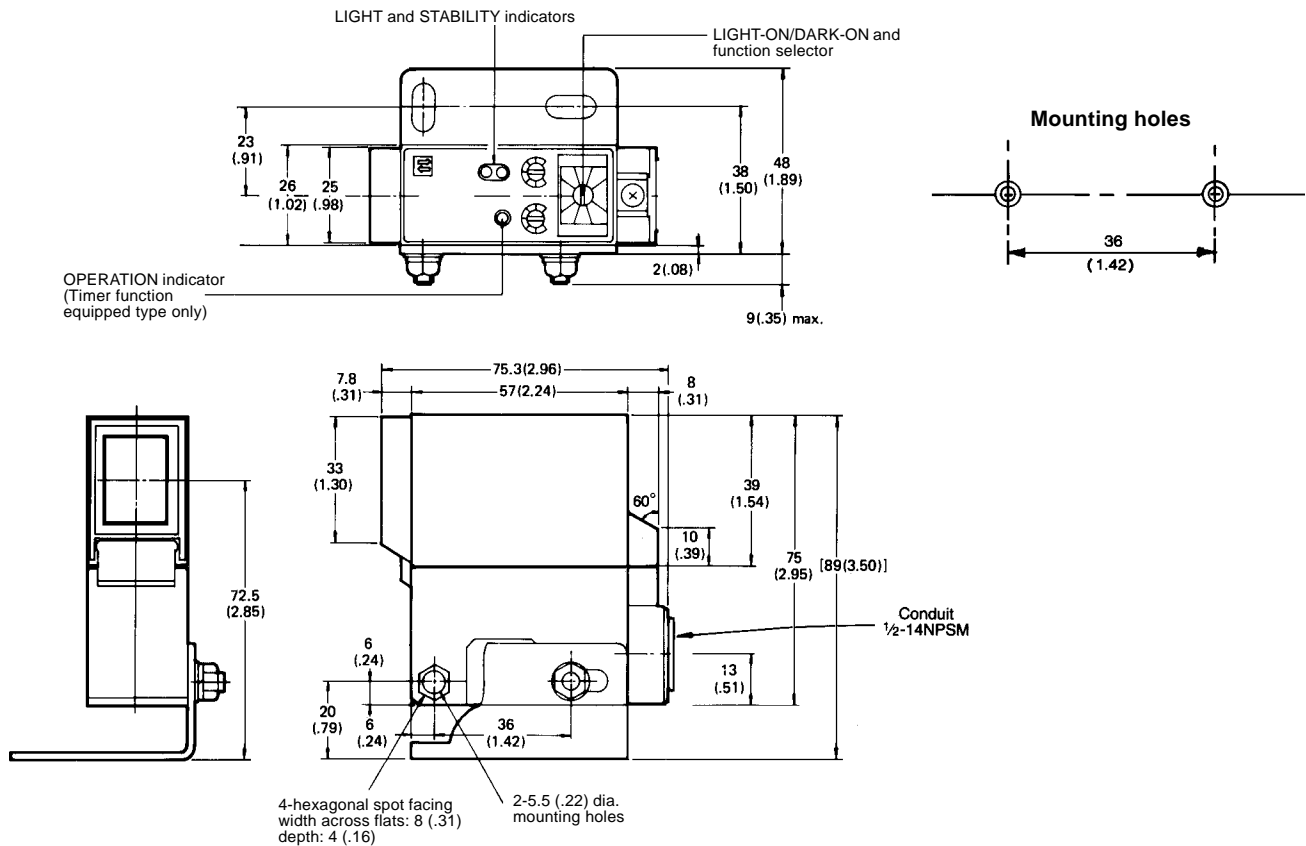
■ DETECTING DISTANCE VS. MINIMUM TARGET SIZE (AT MAXIMUM SENSITIVITY)

Diffuse Reflective Type

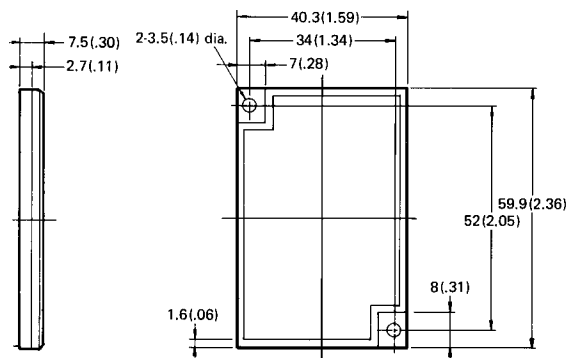


Dimensions

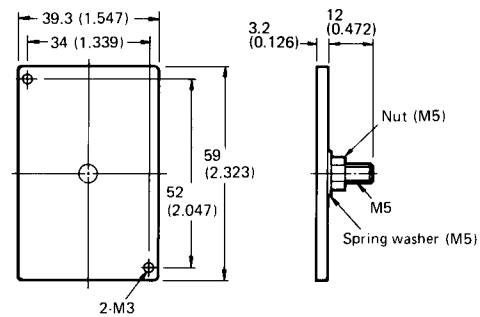
Unit: mm (inch)



E39-R1 Reflector



E39-L7 Reflector Adapter



OMRON

OMRON ELECTRONICS LLC

One East Commerce Drive
Schaumburg, IL 60173

1-800-55-OMRON

OMRON ON-LINE

Global - <http://www.omron.com>
USA - <http://www.omron.com/oei>
Canada - <http://www.omron.com/oci>

OMRON CANADA, INC.

885 Milner Avenue
Scarborough, Ontario M1B 5V8
416-286-6465