

## Photoelectric Sensor

## E3S-R

### High Performance, Retroreflective Photoelectric Sensor Incorporates Polarised Lenses to give Reliable Detection of Transparent or Shiny Objects

Both NPN and PNP outputs are wire configurable for Light-ON or Dark-ON operation.

Small die-cast metal housing (IP67) offers reliable performance in aggressive environments.

Mutual interference protection is provided to guarantee stable operation.

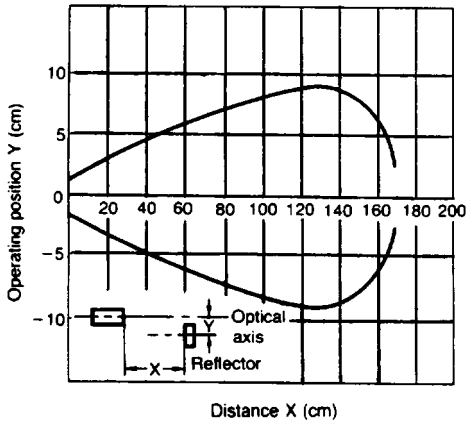
## Ordering Information

Sensing Distance	Mounting style	Output	Order Number
300 mm	Horizontal	NPN	E3S-RS30E430
		PNP	E3S-RS30B430
	Vertical	NPN	E3S-RS30E4230
		PNP	E3S-RS30B4230
1 m	Horizontal	NPN	E3S-R1E4
		PNP	E3S-R1B4
	Vertical	NPN	E3S-R1E42
		PNP	E3S-R1B42

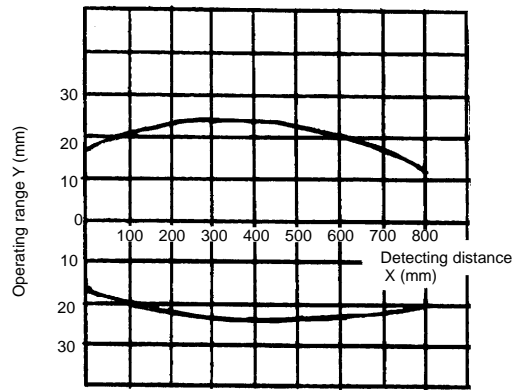
## Specifications

Model		E3S-RS30□4-30 E3S-RS30□42-30	E3S-R1□4 E3S-R1□42
Operating voltage		12 VDC-10% to 24 VDC+10%, ripple (p-p): 10% max.	
Current consumption		25 mA max.	
Sensing distance		300 mm	1 m
Standard objects		Glass tube with 10 dia. min. (t = 1.0 mm, ℓ = 30 mm)	
Control output	DC solid-state	Load	NPN output (with suffix-E: 80 mA, PNP output (with suffix-B): 100 mA
		Voltage drop	2 V max.
Response time (ON, OFF)		1 ms max.	
Sensitivity		Adjustable	
Operation mode		Wire-selectable (refer to 'Output Stage Circuit Diagram')	
Indicators		LIGHT indicator (red), STABILITY indicator (green)	
Mutual interference protection		Provided	
Degree of protection	IEC 144	IP67	
	NEMA	1, 3, 4X, 6, 12	
Housing material		Housing: zinc die-cast Lens: Polycarbonate resin	
Light source		Infrared LED	
Ambient temperature		Operating: -25° to 55°C	

E3S-R1□□



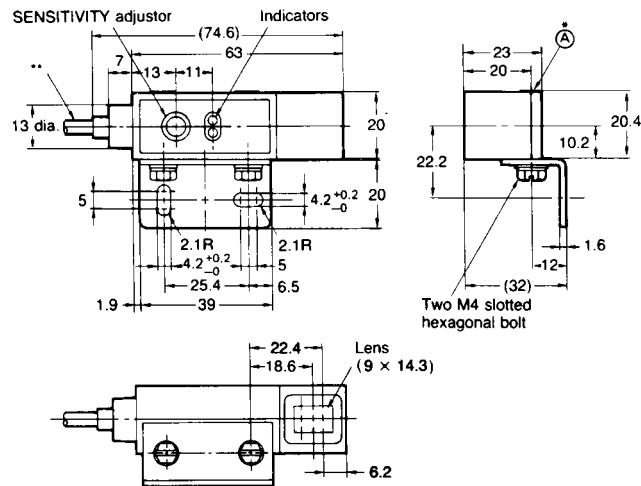
E3S-RS30□□□□



Dimensions

Vertical

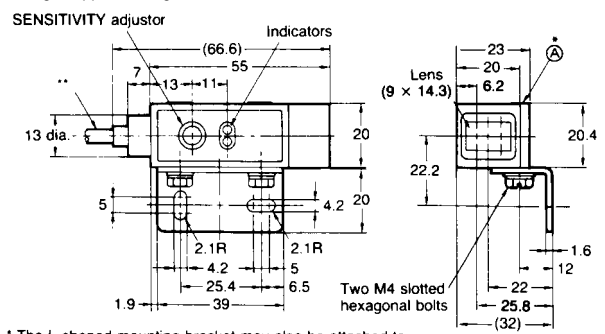
Weight: approx. 165 g



\*The L-shaped mounting bracket may also be attached to surface(A).  
 \*\* Standard cable length (with core dia. of 4, 18/0.12, 3): 2m

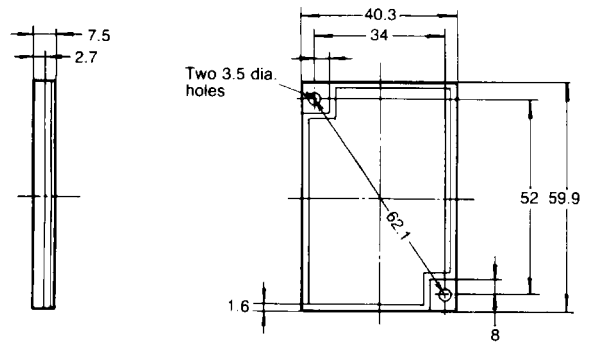
Horizontal

Weight: approx. 165 g



\* The L-shaped mounting bracket may also be attached to surface(A).  
 \*\* Standard cable length (with core dia. of 4, 18/0.12, 3): 2m

Reflector E39-R1 (included)



Connections

Output stage circuit diagram  
 E3S-R□E4 (NPN output)

