

















# Photomicrosensors Selector Guide



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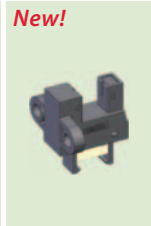
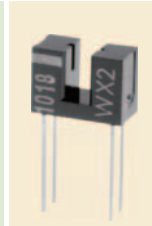
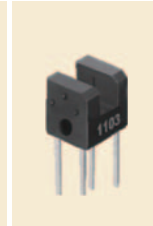
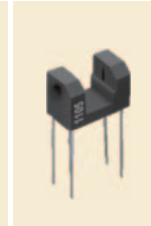
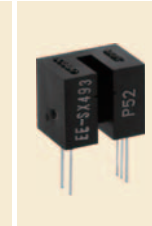
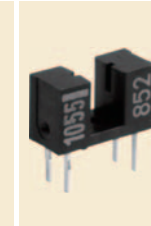
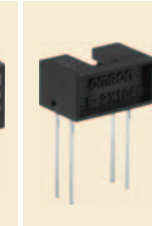
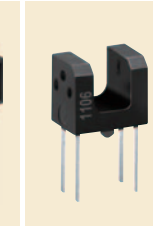
Model *1	EE-SX1107	EE-SX1108 /4134	EE-SX1131	EE-SX1109	EE-SX1350 /3350,4350	EE-SX1235A-P2 /3239-P2,4235A-P2	EE-SX460-P1	EE-SX461-P11	
Sensing Type (Termination)	Transmissive (SMD)					Transmissive (Connectors)			
					 <i>Under development</i>				
Mounting Type	Surface Mount	Surface Mount	Surface Mount	Surface Mount	Surface Mount	Snap-In	Snap-In	Snap-In	
Sensing Distance	1mm	2mm	2mm	3mm	5mm	5mm	5mm	15mm	
Output configuration *2	PTr	PTr/P-IC	PTr	PTr	PTr/P-IC	PTr/P-IC	P-IC	P-IC	
Aperture Size	0.15mm	0.3mm	0.3mm	0.5mm	0.5mm	0.5mm	0.5mm	2mm	
Dimensions (L×W×H)	3.4×3×3	5×4×4	5×4×4	6×4×5	8.8×4×9	27×8×15.9	30×11×23.6	32.5×12×23.6	
Features	Ultra-compact	Ultra-compact	Output 2ch, Ultra-compact	General purpose	General purpose	High-resolution model	High-resolution model, Easy to mount	Wide slot, Easy to mount	

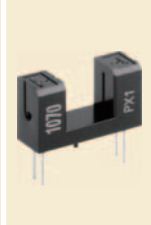
Model *1	EE-SX199	EE-SX198 /398,498	EE-SX1071 /301,401	EE-SX1057	EE-SX1128	EE-SX1081 /3081,4081	EE-SX1115	EE-SX1041
Sensing Type (Termination)	Transmissive (Terminal)							
								
Mounting Type	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole
Sensing Distance	3mm	3mm	3.4mm	3.6mm	4.2mm	5mm	5mm	5mm
Output configuration *2	PTr	PTr/P-IC	PTr/P-IC	PTr	PTr	PTr/P-IC	PTr	PTr
Aperture Size	0.5mm	0.5mm	0.5mm	2mm	0.5mm	0.5mm	0.5mm	0.5mm
Dimensions (L×W×H)	12.2×5×10	12.2×5×10	13.6×6.2×10.4 /15.4×6.2×10.4	13×6.35×11.5	13.5×5.2×9.3	13.7×5×10	14×5×14.7	14×6×10
Features	With a positioning boss	General purpose	General purpose	Dustproof	Horizontal aperture	General purpose	High profile, With a positioning boss	With a positioning boss



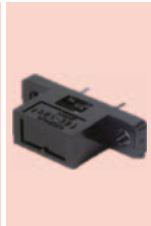
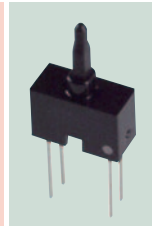
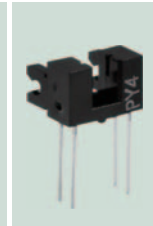
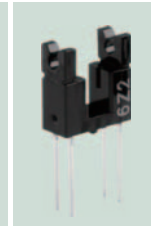



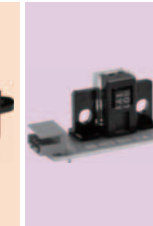
Model *1	EE-SX1161-W11 /3161-W11,4161-W11	EE-SX1088-W11 /3088-W11,4088-W11	EE-SX1096-W11 /3096-W11,4096-W11	EE-SX1160-W11 /3160-W11,4160-W11	EE-SY1200	EE-SY171	EE-SY169 ,169A,169B	EE-SY113 /313,413
Sensing Type (Termination)	Transmissive (Prewired) *Detachable connector				Reflective			
	 <i>New!</i>	 <i>New!</i>	 <i>New!</i>	 <i>New!</i>				
Mounting Type	Screw Mounting	Screw Mounting	Screw Mounting	Screw Mounting	Surface Mount	Through-hole	Through-hole	Through-hole
Sensing Distance	3.2mm	3.4mm	3.4mm	9.5mm	1mm	3.5mm	4mm	4.4mm
Output configuration *2	PTr/P-IC	PTr/P-IC	PTr/P-IC	PTr/P-IC	PTr	PTr	PTr	PTr/P-IC
Aperture Size	0.5mm	0.5mm	0.5mm	0.5mm	not applicable	not applicable	not applicable	not applicable
Dimensions (L×W×H)	12.95×23.7×12.7	25×6×10	25×6×10	31.75×6×15.5	3.2×1.9×1.1	14×4.2×3	12.5×6×8	12×6.2×6
Features	Dustproof	General purpose	Horizontal aperture	Wide slot	Ultra-compact	Thin	Red LED, A:General purpose, B:Red LED, High power	Dustproof

\*1 EE-SX3~...Dark On, EE-SX4~...Light On

\*2 PTr...Phototransistor, P-IC...Photo-IC

EE-SX3148-P1	EE-SX3009-P1 ,4009-P1	EE-SX3157-P1 ,4157E-P1	EE-SX1018	EE-SX1103	EE-SX1105	EE-SX493	EE-SX1055	EE-SX1046	EE-SX1106
Transmissive (Terminal)									
		<i>New!</i> 							
Screw Mounting	Screw Mounting	Screw Mounting	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole	Through-hole
3.6mm	5mm	5mm	2mm	2mm	2mm	2mm	2.8mm	3mm	3mm
P-IC	P-IC	P-IC	PTr	PTr	PTr	P-IC	PTr	PTr	PTr
0.5mm	0.5mm	0.5mm	0.5mm	0.4mm	0.4mm	0.2mm	0.5mm	0.5mm	0.4mm
26×6.4×13.5	34×11×21	16×13×10.5	8×4×6	5×4.2×5.2	4.9×2.6×3.3	11×8×9.7	8.9×4×5.4	10×6.5×5	6.4×4.2×5.4
A boss on one side enables securing the Sensor	High-resolution model	Connector lock mechanism	Compact	Ultra-compact	Ultra-compact	High-resolution model	Compact	Horizontal aperture	Compact

EE-SX1042	EE-SX1035	EE-SX1070 ,3070,4070	EE-SX1140	EE-SX129	EE-SH3	EE-SV3	EE-SX1088 ,3088,4088	EE-SX1096	EE-SG3 ,SG3-B
									
Through-hole	Through-hole	Through-hole	Through-hole	Screw Mounting	Screw Mounting	Screw Mounting	Screw Mounting	Screw Mounting	Screw Mounting
5mm	5.2mm	8mm	14mm	3mm	3.4mm	3.4mm	3.4mm	3.4mm	3.6mm
PTr	PTr	PTr/P-IC	PTr	PTr	PTr	PTr	PTr/P-IC	PTr	PTr
0.5mm	1mm	0.5mm	1.5mm	0.2mm	0.2/0.5/1mm	0.2/0.5/1mm	0.5mm	0.5mm	2mm
14×5×14.5	12.6×6.3×6.9	17.7×6×10	23×5×16.3	13×11×8	25.4×6.2×10.4	15.1×19×10.4	25×6×10	25×6×10	25.4×6.35×11.7
High profile	Compact with wide slot	Wide slot, With a positioning boss	Wide slot	High-resolution model	High-resolution model	High-resolution model	General purpose	Horizontal aperture	Dustproof

EE-SY110 ,310,410	EE-SF5 ,SF5-B	EE-SB5	EE-SA105	EE-SA103	EE-SA104	EE-SA407-P2	EY3A-1081	B5W-LA01	Z4D-B01
Actuator							Convergent Reflective		Micro Displacement
								<i>New!</i> 	
Through-hole	Through-hole	Screw Mounting	Through-hole	Through-hole	Through-hole	Snap-In	Screw Mounting	Screw Mounting	Screw Mounting
5mm	5mm	5mm	2.1mm	3mm	3mm	3.6mm	80mm	70mm	6.5±1mm
PTr/P-IC	PTr	PTr	PTr	PTr	PTr	P-IC	P-IC	PTr	Micro Displacement
not applicable	not applicable	not applicable	not applicable	0.5mm	0.5mm	0.5mm	not applicable	not applicable	not applicable
12×4.6×4.8	13×5.7×8	25.4×6.35×11.5	9.4×4.4×14.2	9×4×6	9×4×9.7	27×8×21.9	56.3×32×15	40×8.4×13.3	35.5×14.5×16
General purpose	Dustproof	Dustproof	Low operating force	Side attachment	Top attachment	Top attachment	Long distance	Detects transparent objects	Resolution: ±10 μm

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

**Note: Do not use this document to operate the Unit.**