**Compact Head Amplifier-separated Photoelectric Sensor** 

## Thin, Compact Head Saves Space and Mounts Closely. Built-in **Interference Protection Provided.**

• Input indicator on the Sensor Unit simplifies settings.



٨	Be sure to read Safety Precautions on	
<u>/!\</u>	Be sure to read <i>Safety Precautions</i> on page 11.	

## **Ordering Information**

#### Sensors

Sensor Units [Refer to Di		2.]				Red light Infrared light
Sensing method	Application	Appea	rance	Sensing dis	stance	Model
		10		100 mn	n	E3C-S10 2M Emitter E3C-S10L 2M Receiver E3C-S10D 2M
	Small type	25	13		<mark>∑</mark> 500 mm	E3C-S50 2M Emitter E3C-S50L 2M Receiver E3C-S50D 2M
	oniai type	12	36		\$1 m	E3C-1 2M Emitter E3C-1L 2M Receiver E3C-1D 2M
Through-beam (Emitter + Receiver) *		18	16		<b>\$</b> 2 m	E3C-2 2M Emitter E3C-2L 2M Receiver E3C-2D 2M
	Slim type	12.5	15		200 mm	E3C-S20W 2M Emitter E3C-S20LW 2M Receiver E3C-S20DW 2M
		3	8 3		E3C-S30W 2M Emitter E3C-S30LW 2M Receiver E3C-S30DW 2M	
	Side-view		15 ×	))))	300 mm	E3C-S30T 2M Emitter E3C-S30LT 2M Receiver E3C-S30DT 2M
	Small type	18	26	100 mn	n	E3C-DS10 2M
Diffuse-reflective	Slim type	19.5 2.8	11	50 mm		E3C-DS5W 2M
	Side-view	18	21	100 mn	n	E3C-DS10T 2M
Convergent-reflective	Small type	36		30±3 mm		E3C-LS3R 2M

\* Through-beam Sensors are normally sold in sets that include both the Emitter and Receiver.

Orders for individual Emitters and Receivers are accepted. (Modifications are required for some models. Ask your OMRON representative for details.)

#### Amplifier Units [Refer to Amplifier Units on page 15.] Power supply Application Appearance Model Functions E3C-A ----AC Standard models E3C-C Slim type E3C-JC4P 2M Self

DC		60	ulagnostic		
55	Small type	27.2		E3C-GE4	

## Accessories (Order Separately)

Mounting Brackets [Refer to E39-L/F39-L/E39-S/E39-R for Dimensions.]

Appearance	Model	Quantity	Remarks
51	E39-L41	2	Provided with the E3C-1.
	E39-L42	2	Provided with the E3C-2. Can be used with the E3C-DS10.
	E39-L127-T1	1	
	E39-L127-T2	1	Can be used with the E3C-S10.
000	E39-L127-T3	1	
	E39-L31	1*	Can be used with the E3C-S50.

Note: Refer to *E39-L/F39-F/E39-S/E39-R* for Dimensions. \* When using through-beam models, order one bracket for the Receiver and one for the Emitter.

#### Connector [Refer to E39-L/F39-L/E39-S/E39-R for Dimensions.]

Name	Appearance	Model	Quantity	Remarks
Front connection		PF113A	1	Provided with the E3C-A/C.
socket		PYF08A	1	Can be used with the E3C-GE4.
Rear connection socket		PY08	1	Can be used with the E3C-GE4.

## **Ratings and Specifications**

## Sensors

	Sensing method	Through-beam							
Item	Model	E3C-S10	E3C-	S20W	E3C-S50	E3C-S30T E3C-S30W	E3	C-1	E3C-2
Sensing d	listance	100 mm	200 mm		500 mm	300 mm	1 m		2 m
Standard sensing object		Opaque, 2-mm dia. min.		Opaque, 3-mm dia. min.	Opaque, 1.5-mm dia. min.	Opaque, dia. min.		Opaque, 8-mm dia. min.	
-		Emitter/Receiver:	10 to 60°	each	Emitter/Receiver:	10 to $40^{\circ}$ each	Emitter/F er: 3 to 2		Emitter/Receiv- er: 3 to 15° each
Light sou	rce (wavelength)	Infrared LED (950	nm)			Infrared LED (940 nm)	Infrared	LED (950	) nm)
Ambient i (Receiver	lluminance side)	Incandescent lam	p: 3,000 li	x max., S	unlight 10,000 lx m	ax.			
Ambient t	emperature range	Operating/Storage	e: –25°C t	o 70°C (w	ith no icing or cond	lensation)			
Ambient h	numidity range	Operating: 35% to	85%, Sto	orage: 35°	% to 95% (with no o	condensation)			
Insulation	resistance	20 M $\Omega$ min. at 500	VDC						
Dielectric	strength	500 VAC at 50/60	Hz for 1	minute					
Vibration	resistance	Destruction: 10 to	55 Hz, 1.	5-mm do	uble amplitude for 2	hours each in X, Y	/, and Z d	irections	
Shock res	sistance	Destruction: 500 r	n/s <sup>2</sup> for 3	times eac	h in X, Y, and Z dir	ections			
Degree of	protection	IEC 60529 IP64 Limited to indoor use	IEC 605 Limited t use	29 IP50 to indoor	IEC 60529 IP64 Limited to indoor use	IEC 60529 IP60 Limited to indoor use	IEC 60529 IP66		
Connectio	on method	Pre-wired models	(standard	l length: 2	! m)				
Weight (p	acked state)	Approx. 50 g				Approx. 24 g	Approx.	60 g	Approx. 120 g
	Case	Polycarbonate			ABS	Polycarbonate	rbonate Zinc die-cast		
Material	Lens	Polycarbonate			Acrylics	Polycarbonate			- <u>!</u>
Material	Mounting Brackets			-			Steel		
Accessori	ies	Instruction manual	Phillips screw M2×8, spring washer, flat washer, M2 nut, instruction manual		Instruction manual	Phillips screw M2×8, spring washer, flat washer, nut M2, instruction manual	Mounting Bracket screws), instruction manual	(with	Mounting Bracket (with screws), instruction manual
	Sensing method			Diff	use-reflective			Conve	ergent-reflective
Item	Model	E3C-DS5V	N	r	3C-DS10T	E3C-DS1	n		E3C-LS3R
Sensing d		50 mm (White pap 100 mm)	-		(White paper 100	100 mm (White pa 50 mm)	-		m (White paper 10
Differentia	al travel	20% max. of sens	ing distar		,	10% max.		±3% max.	
	rce (wavelength)	Infrared LED (950	-		LED (950 nm)				D (680 nm)
•	lluminance		,		unlight 10,000 lx m	ax.			()
Ambient t	emperature range	Operating/Storage	e: –25°C t	o 70°C (w	ith no icing or cond	lensation)			
Ambient h	numidity range	Operating: 35% to	85%, Sto	orage: 35	% to 95% (with no o	condensation)			
Insulation	resistance	20 M $\Omega$ min. at 500	VDC						
Dielectric	strength	500 VAC at 50/60	Hz for 1	minute					
Vibration	resistance	Destruction: 10 to	55 Hz, 1.	5-mm do	uble amplitude for 2	2 hours each in X, Y	/, and Z d	irections	
Shock resistance Destruction: 500 m/s <sup>2</sup> for 3 times each in X, Y, and Z directions									
Degree of	protection	IEC 60529 IP50 (I				IEC 60529 IP64 (I	_imited to	indoor us	se)
	on method	Pre-wired models							
Weight (packed state) Approx. 50 g				5	·			Approx.	55 g
	Case	Polycarbonate							<b>.</b>
Material	Lens	Polycarbonate							
Accessor		Phillips screw M2 spring washer, flat M2 nut, instructior	washer,	Instructio	on manual				

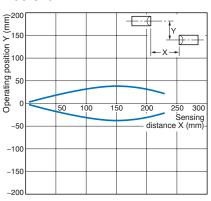
## **Amplifier Units**

Item	Model	E3C-A	E3C-C	E3C-JC4P	E3C-GE4			
Power supply voltage		100 to 240 VAC±10%, 50/60 H	Z	12 to 24 VDC±10%, ripple (p-p): 1 V max.				
Power (current) consumption		3 W max.		50 mA max.				
Control output		Load power supply voltage: 24 max., voltage output type, outp voltage: 1.2 V max.) Light-ON/Dark-ON switch selec	ut current: 1 to 4 mA (residual	Load power supply voltage: 24 VDC max., load current: 100 mA max., NPN open collector output type (residual voltage: 1 V max.) Light-ON/Dark-ON switch se- lectable	Load power supply voltage: 24 VDC max., load current: 80 mA max., voltage output type, output current: 1 to 4 mA (residual voltage: 0.7 V max.) Light-ON/Dark-ON cable con- nection selectable			
	Relay out- put	220 VAC 1 A cos  equation (resistive load) SPDT contact only		-	-			
External synchrono	us input			-				
Timer func	tion		ON/OFF, oneshot delay (se- lectable): 1 or 10 s max.	OFF-delay 0/40 ms (switch se- lectable)				
Ambient temperatur	e range	Operating: -10° to 55°C, Storage: -25° to 70°C (with no icing or condensation)						
Ambient humidity range		Operating: 35% to 85%, Storage: 35% to 95% (with no condensation)						
Insulation I	resistance	20 MΩ min. at 500 VDC						
Dielectric s	trength	500 VAC at 50/60 Hz for 1 minute						
Vibration re	esistance	Destruction: 10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions						
Shock resis	stance	Destruction: 300 ms <sup>2</sup> three times in each of X, Y and Z directions						
Degree of p	protection	IEC IP20 (limited to indoor use)		IEC IP60 (limited to indoor use)	IEC IP20 (limited to indoor use)			
Protection		Reverse polarity protection, output short-circuit protection, mutual interference prevention						
Response	No contact	Operate or reset: 1 ms max./2 r able)	ns max. each (switch select-	Operate or reset: 1 ms max.	Operate or reset: 1 ms max./2 ms max. each (switch selectable)			
time	Relay	Operate or reset: 20 ms max.						
Connection method		Terminal block		Terminal block input cable pullout (standard cable length: 2 m)	Terminal block			
Weight (packed state) Approx		Approx. 200 g		Approx. 80 g	Approx. 15 g			
	Case	ABS			Polycarbonate			
Material	Mounting Brackets	Stainless steel		Iron				
Accessorie	s	Connection Socket (PF113A) Instruction manual		Mounting Bracket, Adjustment screwdriver, Caution label, Instruction manual	Instruction manual			

\* The terminal pins are used for connection between amplifiers for synchronous operation.

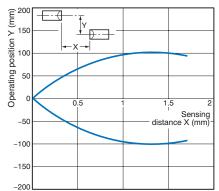
## Parallel Operating Range

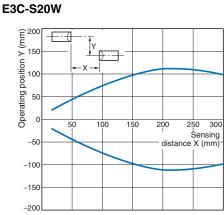
# Through-beam E3C-S10

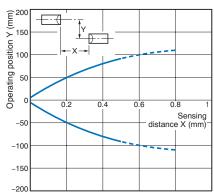






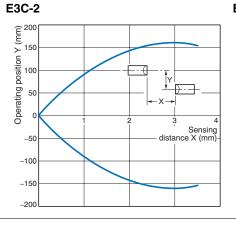








Through-beam

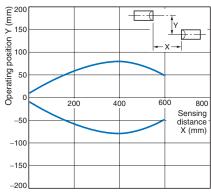


Through-beam

Through-beam

E3C-S50

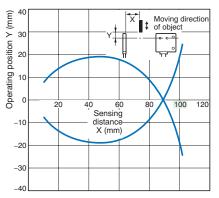




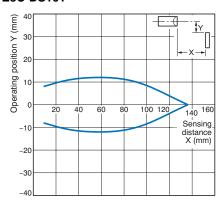
## **Operating Range**

## Diffuse-reflective

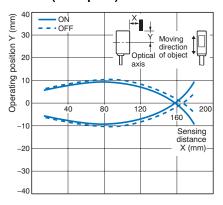
## E3C-DS5W

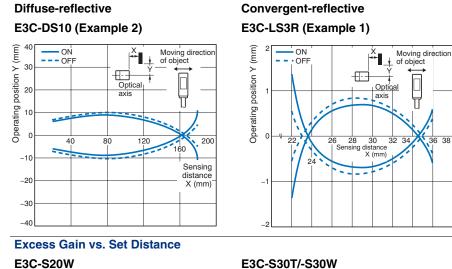


## Diffuse-reflective E3C-DS10T



## Diffuse-reflective E3C-DS10 (Example 1)





## **Convergent-reflective** E3C-LS3R (Example 2) ON OFF Operating position Y (mm) Ĵ U TT Moving direction of object Optical axis

26

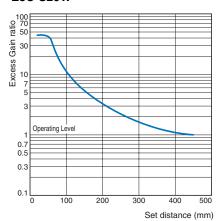
30 distan X (mi

32

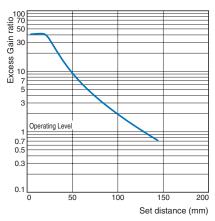
34

36 38

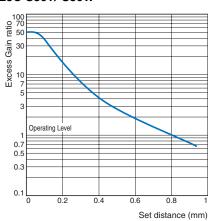
28 Sensing





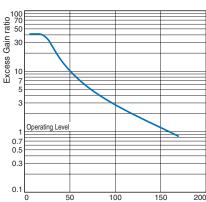












Set distance (mm)



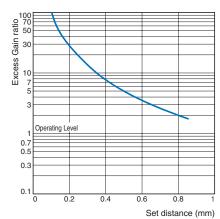
0

\_'

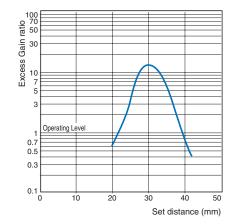
-2

22

24







## I/O Circuit Diagrams

## NPN output

Model	Operation mode	Timing charts *	Operation selector	Output circuit
E3C-A	Light-ON	Incident light No incident light Light Indicator (red) Contact Solid-state Uutput Ovput Ovp	LIGHT ON	Synchronous inputs * 1 9 
E3C-C Dark-ON		No incident light	DARK ON	* 1. E3C-C only * 2. E3C-A/-C have SPDT contact output. (About terminal number, please refer to the connection section.)
E3C-JC4P	Light-ON	Incident light No incident light Light ON Orff Output Load ON (relay etc.) OFF	L-ON (LIGHT ON)	Light indicator (red) Stability indicator (green) Photo- electric Photo- electric
200 004	Dark-ON	Incident light No incident light Light OFF Output transistor OFF Load ON (relay etc.) OFF	D-ON (DARK ON)	Sensor Main Circuit V Z1 Pink Self diagnostic output 50 mA max.
E3C-GE4	Light-ON	Incident light	Switched with wiring. (14) + - (4) (LIGHT ON)	Photo- electric electric electric
E3C-GE4	Dark-ON	Incident light	Switched with wiring. (1) - 1 + (4) (DARK ON)	Bower source

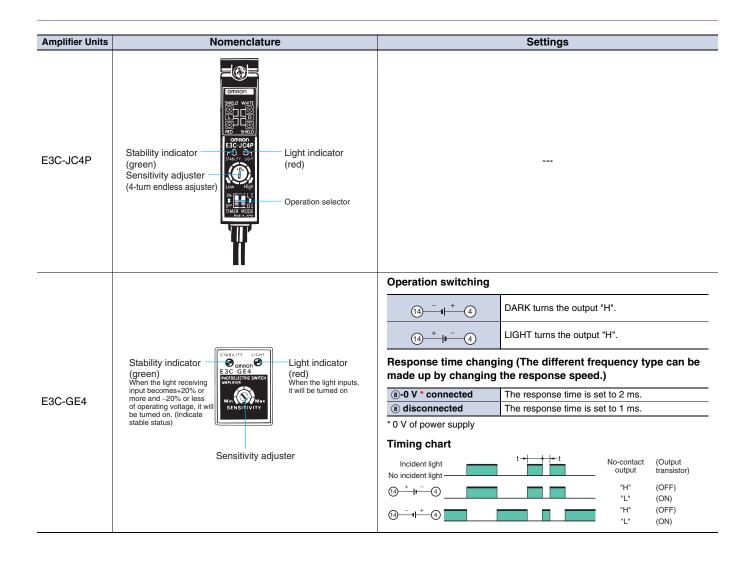
\* For t in the timing chart, refer to Part Names/Selection Method on page 9.

## Connection

Amplifier Units	Connected to the through-beam model	Connected to the reflective model	Note
E3C-A/C + PF113A	Emitter Red Shield Shield Shield White 	Solid-state output Tb Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc To Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Ta Tc Tc Tc Tc Tc Tc Tc Tc Tc Tc	<ul> <li>Note: 1. The strip-off length of the shielded cable should always be 20 mm max. on the Receiver side (white) and 50 mm max. on the Emitter side (red).</li> <li>2. The E3C-A does not have a gate input function.</li> <li>3. L when the gate input 2-9 terminals are connected, H when they are disconnected.</li> </ul>
E3C-JC4P	Emitter Receiver	Shield Red Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield Shield	Note: 1. The strip-off length of the shielded cable should always be 20 mm max. on the Receiver side (white) and 50 mm max. on the Emitter side (red).
E3C-GE4	Emitter Shield 1 4 Response time Red 5 8 selector input 9 12 Output White 13 14 $\bigcirc \oplus$	Shield 1 4 Response receiver Shield 9 12 to 24 VDC White 13 14 $\bigcirc \oplus$	<ul> <li>Note: 1. The strip-off length of the shielded cable should always be 20 mm max. on the Receiver side (white) and 50 mm max. on the Emitter side (red).</li> <li>2. The response time is 1 ms when (8) is disconnected, and 2 ms when (8) is connected to 0 V (negative side) of the power supply terminal (4) to – and (14) to +, the output turns "H" when the light is received. With the E2 mode, the output transistor turns OFF. By setting (4) to +, and (14) to +, the output transistor turns "L" when the light is received. With the E1 mode, the output transistor turns ON.</li> </ul>

## Nomenclature/Settings

Amplifier Units		Nomenclature	Settings		
			Operation switching		
	Operation indicator (red)	Stability indicator (green) When the light receiving input	DARK ON LIGHT ON DARK turns the relay ON and the transistor output "H".		
	When a relay-switch operates, the indicator turn on.	becomes +20% or more and -20% or less of operating voltage, it will be turned on. (Indicate stable statu	DARK ON LIGHT ON put "H"		
		E3C-A PHOTOELECTRIC SWITCH	Response time changing (The different frequency type can be made up by changing the response speed.)		
E3C-A	Operation OPERATION		2 ms (B) 1 ms (A) The response time is set to 2 ms.		
20071	Selector	STABULTY LIGHT (red) When the light			
	Response _	inputs, it will be turned on			
	selector switch	Min Max SENSITIVITY	No incident light Selector switch for "a" "H" (OFF)		
			operating mode         "b" "L" (ON)           LIGHT ON         "a" "I"" (OFF)           operating mode         "b" "L" (ON)		
		Sensitivity adjuster	DARK ON Note 1. Control output is produced only during input time. 2. When t exceeds 1 ms or 2 ms, solid-state output is produced. To produce relay output, t must be longer than 20 ms.		
	Operation indicator -		Operation switching		
	(red) When a relay-switch operates, the indicator turn	Stability indicator (green)	DARK ON LIGHT ON DARK turns the relay ON and the transistor output "H".		
	on. Operation —— selector	becomes +20% or more and -20% or less of operating voltage, it will be turned on. (Indicate stable status)			
	Selector switch for		Response time changing (The different frequency type can be made up by changing the response speed.)		
	time DARK ON BI2ms DELAY	Light on A linsi O F D O F D STABILITY LIGHT (red) When the light	r 2 ms (B) 1 ms (A) The response time is set to 2 ms.		
	Timer function setting	inputs,	2 ms (B) 1 ms (A) The response time is set to 1 ms.		
	switch	it will be turned or	Delay time setting		
	Delay time setting switch	Max ME SENSTIVITY	1 sec 10 sec 0.1 to 1 s can be set.		
	Delay time	adjuster Sensitivity adjuster	1 sec 1 to 10 s can be set.		
E3C-C			After setting the selector, fine-adjust the delay time with the variable adjuster. (Clockwise turn increases the delay time.		
	Timer function s	etting	Timing chart		
		DARK ON LIGHT ON ← Set a position freely	Incident light		
	When select- ing ON delay	2 ms (B) 1 ms (A) ← Set a position freely	No incident light state		
	(ON D.)	OR D. OFF D.	synchro- (9)-(2) nous in- Short circuit +T+		
		1 sec 10 sec ← Set a position freely			
		DARK ON LIGHT ON ← Set a position freely	(DARK ON		
	When select- ing OFF de-	2 ms (B) 1 ms (A) ← Set a position freely	OFF D { LIGHT ON		
	lay (OFF D.)	OR D. OFF D.	Chi B. DARK ON 		
		1 sec 10 sec ← Set a position freely	(LIGHT ON "b" "L" (OF)		
		DARK ON LIGHT ON ← Set a position freely	- O.S.D. { DARK ON		
	When select-	2 ms (B) 1 ms (A) ← Set a position freely	Note 1. t must be longer than 1 ms or 2 ms. 2. T denotes a delay time.		
	ing one-shot delay	DELAY O.S.D. Since the function has	External synchronous input operation When the external synchronous input terminal (9) is open (HIGH), the output		
	(O.S.D.)	ON D. OFF D. Stopped, it allows in both of the positions.	relay performs timer operation according to the input signals (LIGHT, DARK). When the external synchronous input terminaL (9) is connected to the 0 V ter minal (2) (LOW), the output relay turns OFF, independently of the input signals		



### Refer to Warranty and Limitations of Liability.

## <u> WARNING</u>

This product is not designed or rated for ensuring safety of persons either directly or indirectly. Do not use it for such purposes.



### **Precautions for Correct Use**

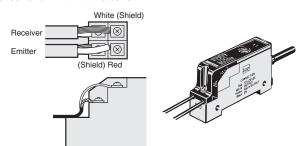
Do not use the product in atmospheres or environments that exceed product ratings.

#### Amplifier Units

#### • Wiring

#### Connection of E3C-JC4P Amplifier Unit and Sensor

Always run the shielded wires of the Emitter and Receiver separately. Also, route the sensor cable along the cable grooves of the cover and sensor and fix it with the cover.



#### **Connection Socket**

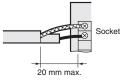
The standard socket is the PF113A for the E3C-A and -C, and the PYF08A, PYF08M or PY08 for the E3C-GE4. Avoid using any other sockets since they may not satisfy the characteristics. (There will be no problem when the STABILITY indicator turns ON)

#### **Sensor Units**

### Wiring

#### **Extension Cable**

- $\bullet$  The extension distance of the sensor connection cable should be within 10 m.
- The strip-off length of the core in the connection cable should be 20 mm max. on the Receiver side and 50 mm max. on the Emitter side, and the core should be as short as possible. Avoid using the joint terminal and connector.



• Use independent shielded wires for the Emitter and Receiver. Using a common shielded wire can cause a malfunction.



### **Extension Cable**

#### Through-beam

Cable Model	Specified cable	Replacement cable
	Polyethylene insulation shield Round cable	1-conductor shield/ vinyl wire, conduc- tor cross section:
E3C-S10 E3C-1 E3C-2 E3C-S50	2.4 dia. White (polyethylene)	0.3 mm <sup>2</sup> min. Shield White (vinyl)
	12-conductor, 0.18 dia.	Gray (vinyl sheath)
E3C-S20W	Vinyl insulation shield round cable Sheath Shield 1.7 dia. Polyethylene Conductor 12-conductor, 0.18 dia.	1-conductor shield/ vinyl wire, conduc-
E3C-S30T E3C-S30W	Vinyl insulation shield round cable (robot cable) Sheath Shield Polyethylene Conductor 30-conductor, 0.08 dia.	tor cross section: 0.3 mm <sup>2</sup> min.

#### **Reflective model**

Cable Model	Specified cable	Replacement cable
E3C-DS10 E3C-DS10T E3C-VS1G E3C-VS3R E3C-LS3R	Vinyl insulation shielded parallel ca- ble Sheath Shield Polyethylene 12-conductor, 0.18 dia.	When there is no1- conductor shielded, vinyl cable (parallel wire), use two 1- conductor shielded, vinyl wires.
E3C-DS5W E3C-VS7R E3C-VM35R	Vinyl insulation shielded parallel ca- ble Sheath Shield Polyethylene Conductor 7-conductor, 0.18 dia.	When there is no1- conductor shielded, vinyl cable (parallel wire), use two 1- conductor shielded, vinyl wires.

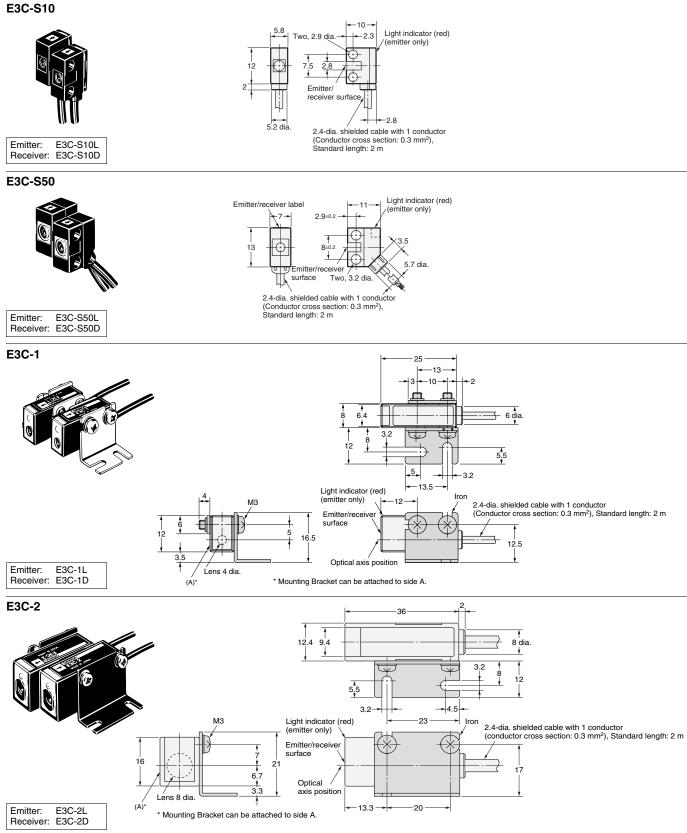
#### Others

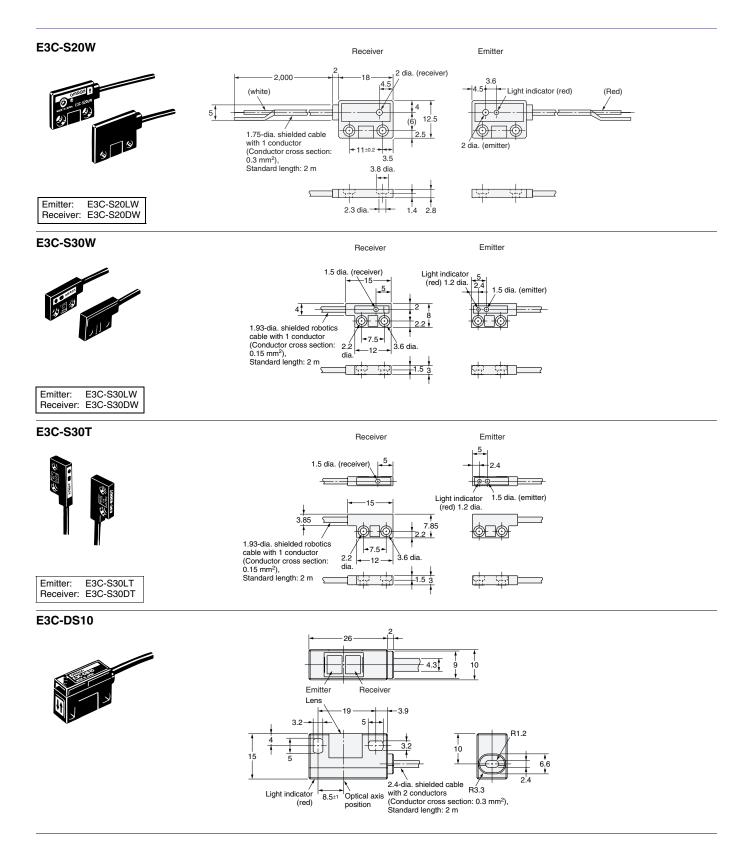
When the E3C is used in a place where high-frequency noise will be generated, e.g. ultrasonic welder, grounding the 0-V terminal (on the shield side of the connection cable) of the Receiver may avoid a malfunction caused by induction.

## **Dimensions**

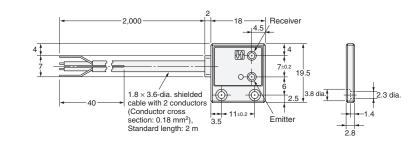
#### Sensors **Sensor Units**



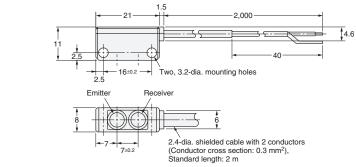




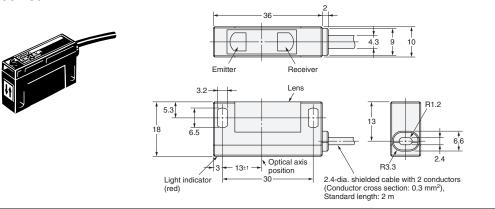
E3C-DS5W



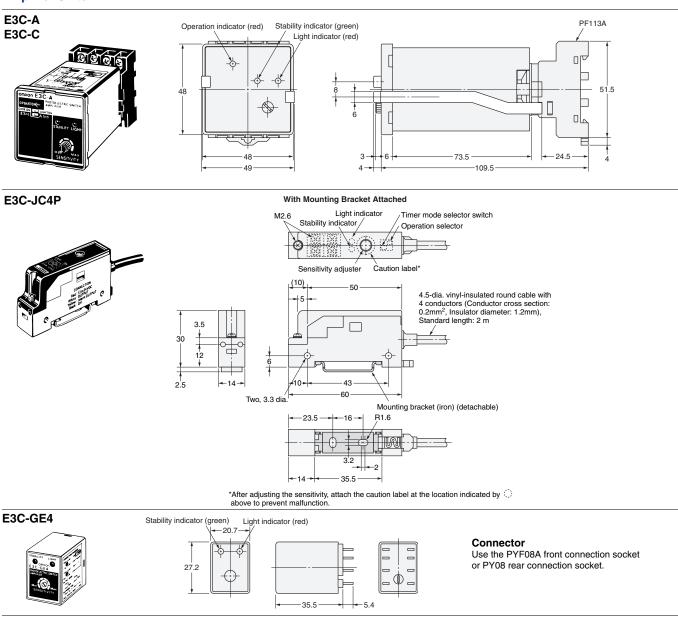
E3C-DS10T



E3C-LS3R



#### **Amplifier Units**



#### Accessories (Order Separately) Mounting Brackets

Refer to *E39-L/F39-L/E39-S/E39-R* for details. Connecting Sockets

Refer to E39-L/F39-L/E39-S/E39-R for details.

#### **Read and Understand This Catalog**

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

#### Warranty and Limitations of Liability

#### WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

#### LIMITATIONS OF LIABILITY

OMRON SHALL NOT BE RESPONSIBLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY.

In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

#### **Application Considerations**

#### SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- · Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this catalog.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- · Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

#### **PROGRAMMABLE PRODUCTS**

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

#### Disclaimers

#### CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

#### DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

#### PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

#### ERRORS AND OMISSIONS

The information in this document has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical, or proofreading errors, or omissions.

2011.9

#### OMRON Corporation Industrial Automation Company

In the interest of product improvement, specifications are subject to change without notice.

http://www.ia.omron.com/

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Omron:

<u>E3C-A</u> <u>E3C-C</u> <u>E3C-DS10T</u> <u>E3C-DS5W</u> <u>E3C-GE4</u> <u>E3C-JC4P</u> <u>E3C-LS3R</u> <u>E3C-S20DW</u> <u>E3C-S20LW</u> <u>E3C-S30T</u> E3C-S30W E3C-WE4 E3C-WH4F



#### ООО "ЛайфЭлектроникс"

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 3010181090000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный) Email: org@lifeelectronics.ru

#### www.lifeelectronics.ru