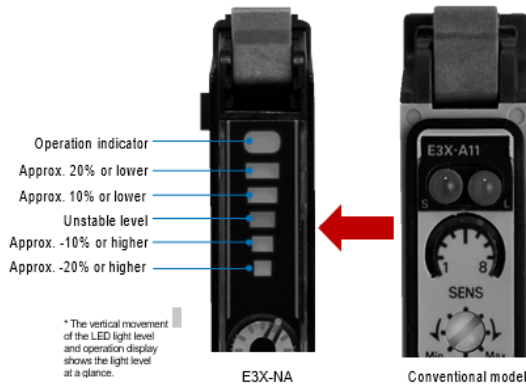


## Features

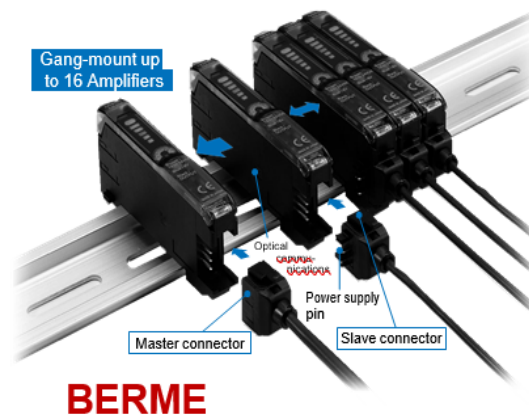
### Self-explanatory LED bar displays of light levels

The previous manual type used the stability and incident level indicators to display the light level change, which was difficult to understand at a glance. The E3X-NA uses the LED bars to display the light level, ensuring the light level change at a glance.



### Same "Wire-saving" Connector as E3X-DA-N

BERME original wiring-saving connector, which was inherited from the digital fiber amplifier E3X-DA-N, allows connection of up to 16 units.



**BERME**

## Ordering Information

### Amplifier Units

Pre-wired

Item	Shape	Control output	Model	
			NPN	PNP
Standard models		ON/OFF output	E3X-NA11	E3X-NA41
High-speed detection			E3X-NA11F	E3X-NA41F
Mark-detecting models			E3X-NAG11	E3X-NAG41
Water-resistant models			E3X-NA11V	E3X-NA41V

E3X-NA

Coordinates and more information below:

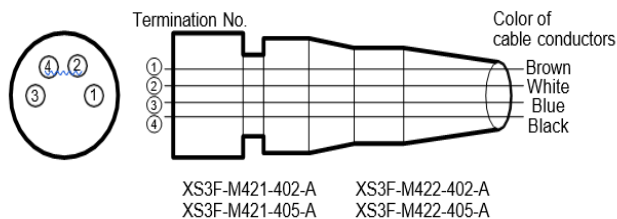
### Rating/performance

#### Amplifier Units

Item	Model	Type	Pre-wired				Connector type	
			Standard models	High-speed detection models	Mark-detecting models	Water-resistant models	Standard models	Water-resistant models (M8 Connector)
			NPN output	E3X-NA11	E3X-NA11F	E3X-NAG11	E3X-NA11V	E3X-NA6
PNP output	E3X-NA41	E3X-NA41F	E3X-NAG41	E3X-NA41V	E3X-NA8	E3X-NA44V		
Light source (wave length)	Red LED (680 nm)		Green LED (520 nm)	Red LED (680 nm)				
Power supply voltage	12 to 24 VDC ±10%, ripple (p-p): 10% max.							
Current consumption	35 mA max.	35 mA max. (at power supply voltage 24 VDC)	35 mA max.					
Control output	Load current 50 mA (residual voltage 1 V max. each) Open collector output type (depends on the NPN/PNP output format) Light-ON/Dark-ON switch selectable							
Response time	Operation or reset: 200 s max. *	Operating: 20 s max. Reset: 30 s max.	200 s max. for operation and reset respectively (See note.)					
Sensitivity adjustment	8-turn endless adjuster (with indicator)							
Protective circuits	Reverse polarity protection, output short-circuit protection, mutual interference prevention (optically synchronized)	Reverse polarity protection, output short-circuit protection	Reverse polarity protection, output short-circuit protection, mutual interference prevention (optically synchronized)					
Timer function	OFF-delay timer: 40 ms (fixed)							
Ambient illuminance	Incandescent lamp: 10,000 lux max. Sunlight: 20,000 lux max.							
Ambient temperature	Operating: Groups of 1 to 3 Amplifiers: -25 to +55°C, Groups of 4 to 11 Amplifiers: -25 to +50°C, Groups of 12 to 16 Amplifiers: -25 to +45°C Storage: -30 to +70°C (with no icing and condensation)							
Ambient humidity	Operating/Storage: 35% to 85% RH (with no condensation)							

## BERME

### Connectors (Sensor I/O connectors)



Class	Wire, outer jacket color	Connector pin No.	Application
For DC	Brown	Ⓒ	Power supply (+V)
	White	Ⓒ	-
	Blue	Ⓒ	Power supply (0 V)
	Black	D	Output

Note: Pin 2 is not used.

### Output Circuit Diagram

#### NPN output

Model	Operating status of output transistor	Timing chart	Mode selection switch	Output circuit
E3X-NA11 E3X-NA6 E3X-NAG11 E3X-NA11F E3X-NA11V E3X-NA14V	Light ON		L ON (LIGHT ON)	
	Dark ON		D ON (DARK ON)	

#### PNP output

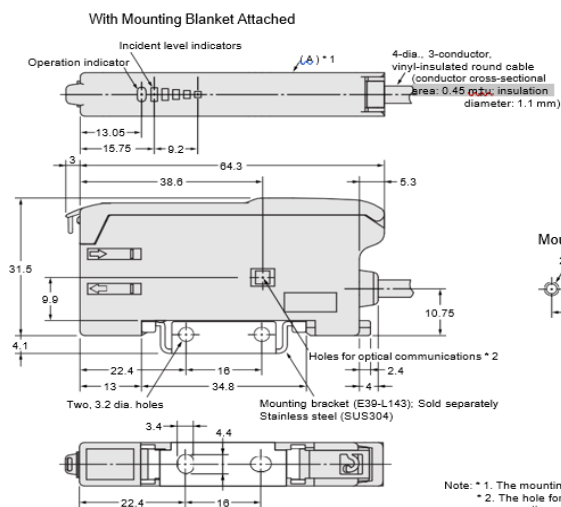
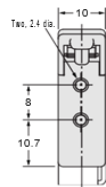
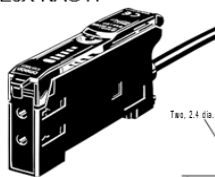
Model	Operating status of output transistor	Timing chart	Mode selection switch	Output circuit
E3X-NA41 E3X-NA8 E3X-NAG41 E3X-NA41F E3X-NA41V E3X-NA44V	Light ON		L ON (LIGHT ON)	
	Dark ON		D ON (DARK ON)	

### Dimensions (Unit: mm)

#### Amplifier Units

##### Pre-wired

E3X-NA11  
E3X-NA11F  
E3X-NA41  
E3X-NA41F  
E3X-NAG11  
E3X-NAG41



Note: \* 1. The mounting bracket can also be used on side A.  
\* 2. The hole for optical communications is for preventing mutual interference. There is no hole for E3X-NA#F models.