

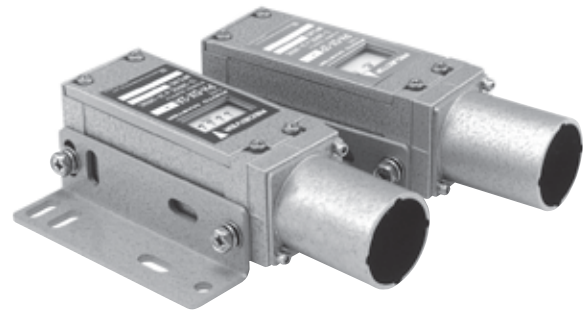
## PH-DX

Free voltage, 12 to 240VDC and 24 to 240VAC

Light-reception amount can be display with 5-point level lamp and so it is easy to check light-reception margin or dirty lens surface and dislocation of optical axis.

Self-diagnosis function that checks light-reception margin provides with projector. This output is executed.

Output will be made when level of light-reception amount is lower than specific value caused by dirty lens surface or dislocation of optical axis.



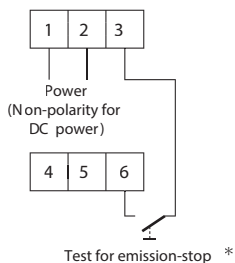
### Specifications

Type	Through-beam type			
Model	PH-DX-R-21	PH-DX-M-21	PH-DX-R-71	PH-DX-M-71
Power source	12 to 240VDC or 24 to 240VAC(10%, -15%)			
Power consumption	AC power: Projector 0.5VA or less, Receiver: 3VA or less DC power: Projector 0.5W or less, Receiver: 3W or less			
Detecting distance	30m or less(Without slit for both projector and receiver)			
Detectable objects	Opaque object with $\phi$ 30mm or more			
Response time	10msec or less	3msec or less	10msec or less	3msec or less
Operating mode	Changeover for Light-ON and Dark-ON			
Control output	1a relay 250VAC 3A, 30VDC 5A, cos $\phi$ =1	1a phot-mos relay 125VAC/DC 100mA, Residual voltage 3V or less(at 100mA)	1a relay 250VAC 3A, 30VDC 5A, cos $\phi$ =1	1a phot-mos relay 125VAC/DC 100mA, Residual voltage 3V or less(at 100mA)
Self-diagnosis output				
Sensitivity adjuster	Provided			
Connection	M3 screw terminal			
Ambient illuminance	10,000lux or less(Incandescent lamp)			
Ambient temperature/humidity	-10 to +55 $^{\circ}$ C, 45 to 85%RH(Not icing)			
Protective structure	IP66(IEC Standard)			
Case	Aluminum die-casting			
Weight	Approx. 1.5kg for both projector and receiver			
Remarks	Standard hood		Non-air dust-purge hood	

PH -DX with self-diagnosis output , 1b and PH -WX with water-cooling tank are lined -up.

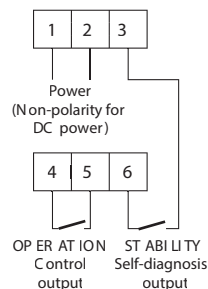
### Connection

Projector  
(Common use for all series)



\* Operation of projector can be checked

Projector(PH-DX-2A - 1)



Control output(Operating mode can be changed by inner switch )

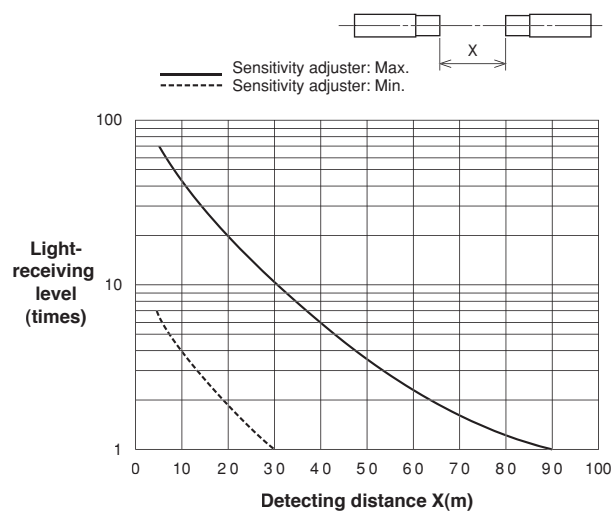
Operating mode	Light-ON		Dark-ON	
	Terminal No.	Indicator	Terminal No.	Indicator
	4—5	OPERATION	4—5	OPERATION
Power-off state	OPEN	Goes off	OPEN	Goes off
Power-on state	When light-entering	CLOSE	Lights on	OPEN
	When light-interrupting	OPEN	Goes off	CLOSE
			Lights on	

Self-diagnosis output

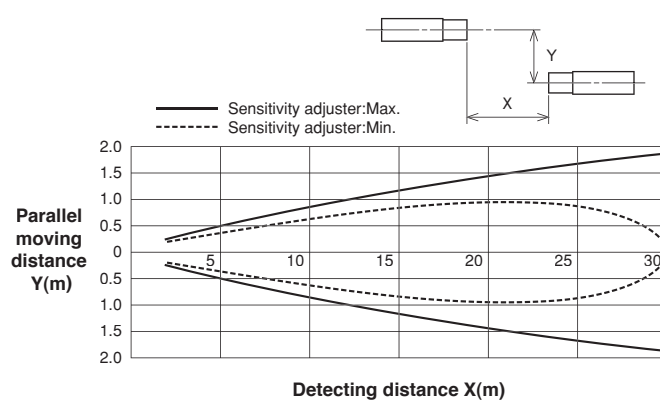
	Terminal No.	Indicator
	3—6	STABILITY
Power-off state	OPEN	Goes off
Power-on state	When normal	CLOSE
	When troubled	OPEN
		Lights on
		Goes off

## Characteristic data(Typical example)

### Operating margin characteristics



### Parallel moving characteristics



## External dimensions

### Common use for projector/receiver

