

NEW PRODUCTS

HOKUYO

PHOTOELECTRIC SWITCH

PFX series CE

SPACE-SAVING WITH THICKNESS 3.5mm! ULTRA-SMALL SIZE!

Features

* Flat type design

Thickness is 3.5mm and it is possible to install at the too narrow space.

* Easy to see the indication lamps from the back side

Stable lamp(green LED) and output lamp(orange LED) provides and it is easy to see them from the back side and to check when optical axis adjustment.

* Easy to make a wiring

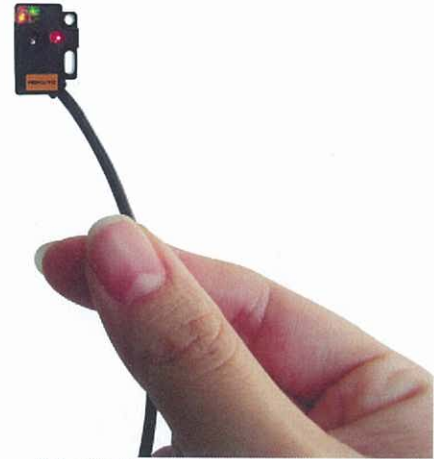
It is easy to make a wiring because cable from the sensor is tilting.

* High response time

Response time is 0.5msec.

* Water-proof structure

Protective structure is IP67.

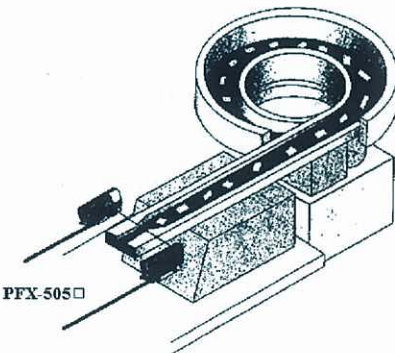


Typical applications

Through-beam type

Detection of blocked parts on parts-feeder

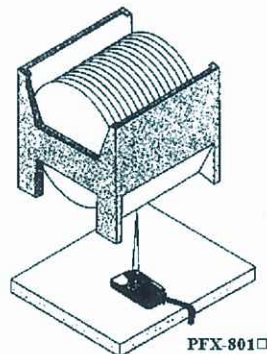
It can detect the object with 2mm in diameter stably.



Diffuse-reflection type

Position detection of wafer cassette

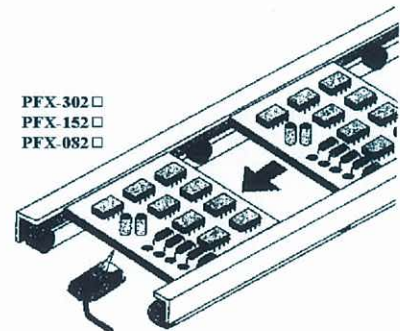
It is possible to install at the plane position.



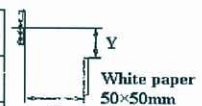
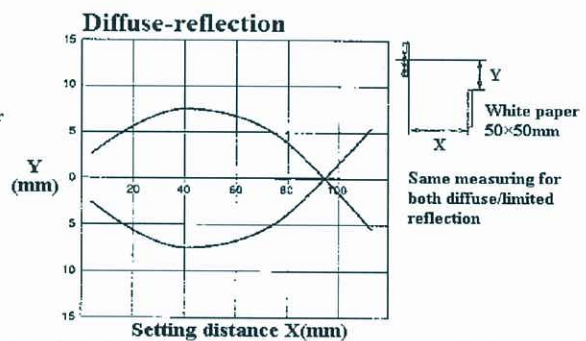
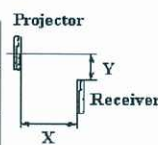
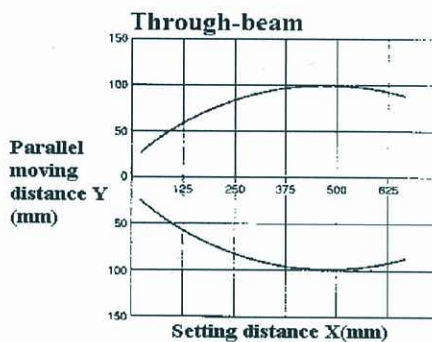
Limited-reflection type

PCB existing detection

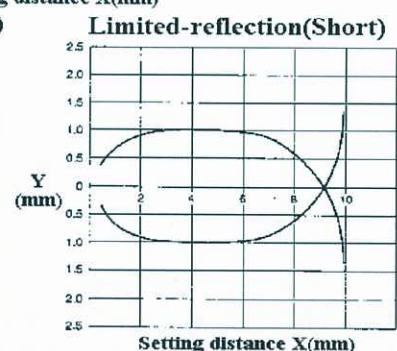
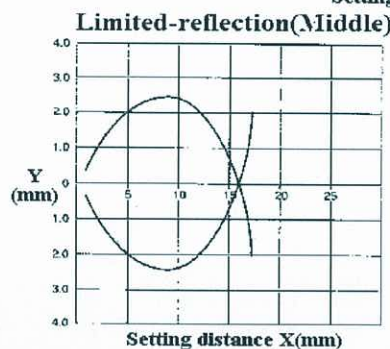
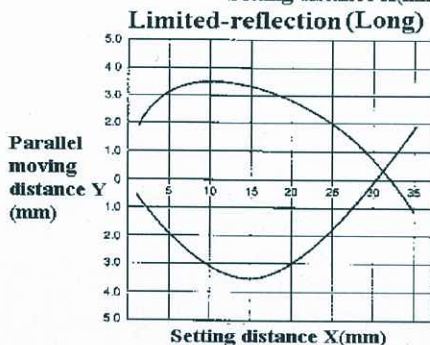
It is possible to install at the narrow space.



Characteristics data(Typical example)



Same measuring for both diffuse/limited reflection



Specifications

Kind	Through-beam		Diffuse-reflection		Limited-reflection						
					Long		Middle		Short		
Model No.	Output	NPN	PNP	NPN	PNP	NPN	PNP	NPN	PNP	NPN	PNP
	Light-ON	PFX-505T	PFX-505S	PFX-801T	PFX-801S	PFX-302T	PFX-302S	PFX-152T	PFX-152S	PFX-082T	PFX-082S
	Dark-ON	PFX-505N	PFX-505P	PFX-801N	PFX-801P	PFX-302N	PFX-302P	PFX-152N	PFX-152P	PFX-082N	PFX-082P
Power source	12 to 24VDC(Ripple 10% or less)										
Current consumption	P : 14mA or less R: 16mA or less		20mA or less								
Light source	Red LED										
Detecting distance	500mm		80mm ^{*1}		5 to 30mm ^{*1}		2 to 15mm ^{*1}		3 to 8mm ^{*1}		
Detectable object	1.0mm in diameter		Transparent/opaque objects								
Hysteresis			15% or less				10% or less				
Response time	0.5msec or less										
Control output	NPN open-collector/PNP open-collector output, 50mA 24VDC or less, Residue voltage 1.8V 50mA or less										
Indicator	Stable lamp(Green LED) ^{*2} , Output lamp(Orange LED) ^{*2} , Power lamp(Red LED)										
Connection	Cable type(2.5mm in diameter, 2m long)										
Ambient illuminance	incandescent lamp : 3,000lux or less, sun light : 10,000lux										
Ambient temperature/humidity	-25 to 55 degrees C(-40 to 70 degrees C at stored), 35 to 85%RH(35 to 95% at stored) Not icing, not condensing										
Vibration resistance	Double amplitude 1.5mm, 10 to 55Hz										
Impact resistance	500m/s ²										
Case material	Polycarbonate										
Protective structure	IP67(IEC standard)										
Weight	Each approx. 18g		Approx. 18g								
Accessory	Mounting screw(M2×12), nut, washer										

*1 Detectable is white paper with 50×50, *2 Not provided with the projector of through-beam, *3 Connector type is lined-up

External dimensions

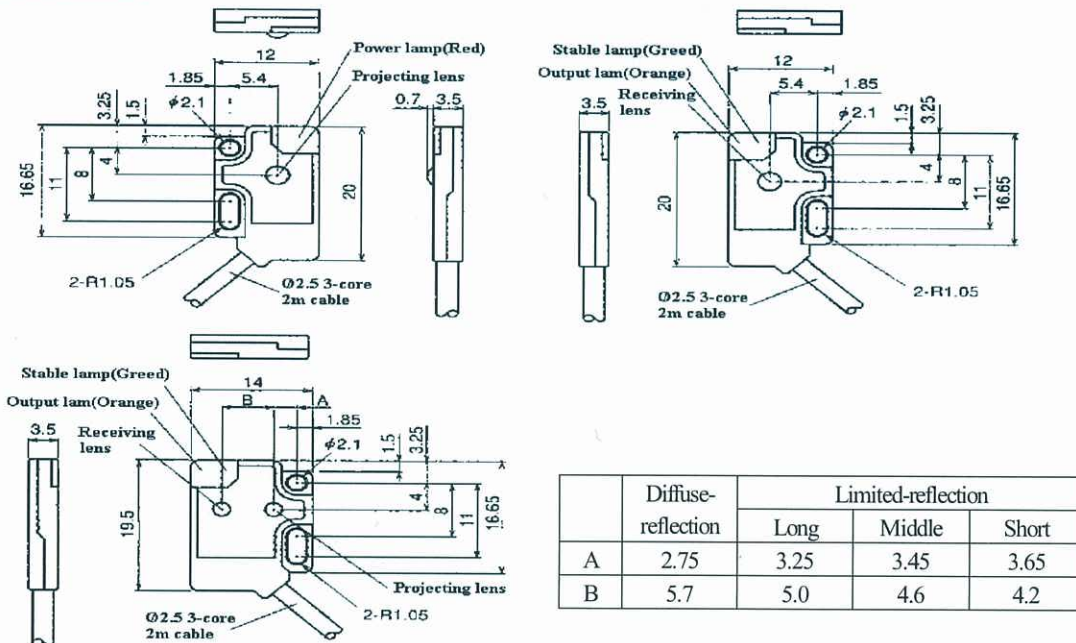


PHOTO SENSOR, LASER SENSOR, MICROWAVE SENSOR, COUNTER, AUTOMATIC DOOR



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