

D Series Laser Sensor
DT series Thru-beam type
DR series Retro reflection type

OPERATION
 MANUAL

- Confirm if the item meets your needs.
- Before the use, you should first thoroughly read this manual and operate correctly as mentioned.
- You should keep this manual at hand for the proper use.

Specifications

Type	Thru beam type	Retro reflection type	BGS type	
			Accurate type	Longer type
Cable type	DT-4000 (N,P)-(E)	DR-500 (N,P)-(E)	BGS-DL10(N,P)-(E)	BGS-DL30(N,P)-(E)
M8 connector type	DT-4000C (N,P)-(E)	DR-500C (N,P)-(E)	BGS-DL10C (N,P)-(E)	BGS-DL30C (N,P)-(E)
Setting range	40 m	5m *1	40~100mm	100~300mm
Supply voltage	DC10 ~ 30V including 10% ripple (P-P)			
Current consumption	40mA max.	30mA max.	35mA max.	
Response time	0.5ms max.		0.7ms max.	
Repeat accuracy *2	0.5mm/20m	0.3mm/5m	0.2mm/100mm	0.2mm/300mm
Light source	Red Laser diode (WL: 650nm Max. 2mW class 2)			
Indicator	Receiver : Output indicator (Orange LED) Source pilot lamp (Green LED)		Output indicator (Orange LED) , Laser emitter indication (Green LED)	
	Emitter : Laser emitter indication (Green LED)			
Control output	NPN/PNP open collector DC30V 100mA max.			
Operation mode	Light ON / Dark ON Switchable			
Sensitivity adjustment	1-turn volume			
Ambient tem/ humid	-10~40°C / 35~95%			
Protect category/material	IEC Standard IP67 housing : heat-resistant ABS(antibacterial) lens : PC button : NBR			
Weight	cable type: about 66g / connector type: about 20g			

* 1 with reflector P250F *2 in the vertical direction of optical axis (theoretical value)

Warnings

Laser beam

- This item utilizes visible light laser beam and is subject to safety standard class of JIS C6802 as well as IEC and FDA regulations.
- Must not stare into laser beam directly or reflection by mirror.
- Must not disassemble.
Automatic stop function of laser emission is not equipped.
- This product have already been registered at CDRH
(Center for Devices and Radiological Health).

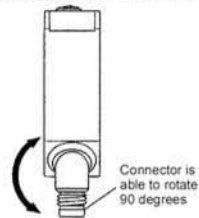
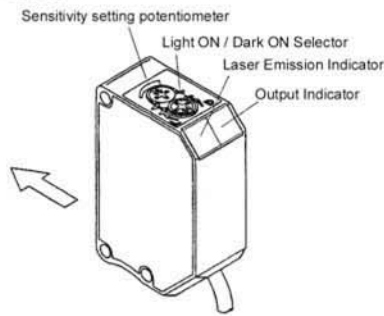


Cautions

- Warm-up period (apprx.100 msec.) must be secured.
- Should avoid parallel wiring with high-voltage wire and/ or power line.
Never install in same conduit.
- Avoid dust, oil and water adhesion to sensor lens to prevent light's insulation and refraction.
In case of adhesion, wipe with dustless cloth or lens cleaner.
- In case of switching regulator, frame ground (FG) must be grounded.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

! Must not use this item as safety equipment for The purpose of human body protection.

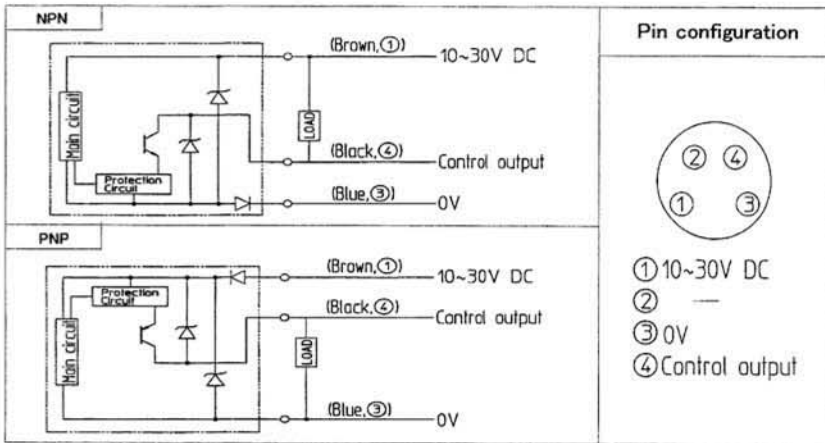
Parts name



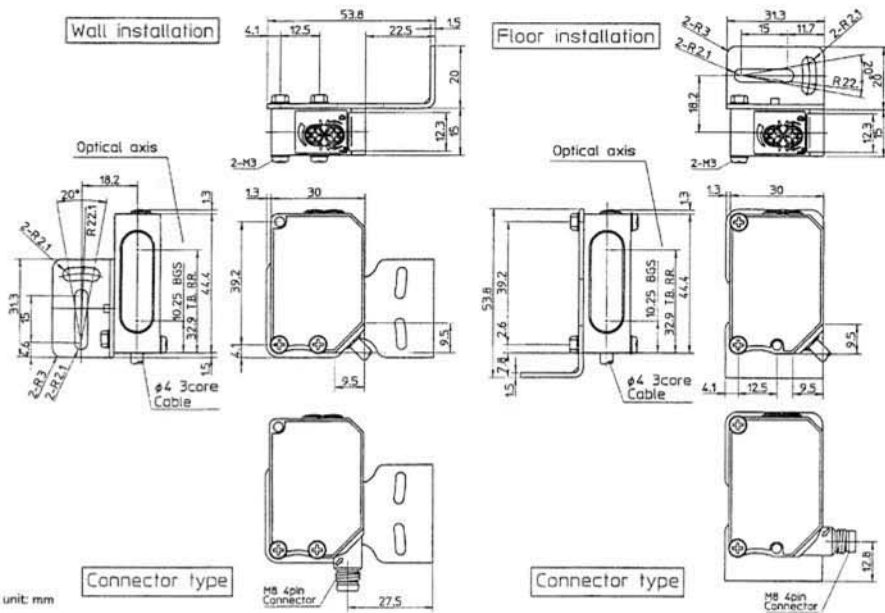
* For connector type only

Turn the connector as shown by the Arrow, otherwise you will damage the connector. The damage will be unreparable.

Input/Output circuit design



Dimensions



- Specifications and equipment are subject to change without any obligations on the part of manufacture.
- **OPTEX CO., LTD.**
- For more information, please contact us below.

