OPTEX

Photoelectric Sensor

D SERIES Laser type

Transparent type DR-Q150T DR-Q400T

INSTRUCTION MANUAL

Confirm if the item meets to 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

Туре	Accurate type	Longer type
Cable type	DR-Q150T (N,P)-(E)	DR-Q400T (N,P)-(E)
M8 connector type	DR-Q150TC (N,P)-(E)	DR-Q400TC (N,P)-(E)
Scanning range *1	1.5m	4m
Supply voltage	DC10 ~ 30V including 10% ripple (P-P)	
Current consumption	35mA max.	
Response time	0.7ms max.	
Repeat accuracy *2	0.2mm /1.5m	0.3mm / 4m
Timer	Off delay/On delay/One shot delay (1msec increment :0-999msec, 1sec increment for 1-10sec)	
Light source	Red laser diode (wave :650nm Max. 2mW class 2)	
Indicator	Output indicator (Orange LED), laser emitter indication (Green LED)	
Digital indicator	7 segment, 3 digits (function indicator, 0 ~ 999 Incoming light Q'ty)	
Control output	DC10 ~ 30V including 10% ripple (P-P) 35mA max. 0.7ms max. 0.2mm /1.5m 0.3mm / 4m Off delay/On delay/One shot delay (1msec increment .0-999msec, 1sec increment for 1-10sec) Red laser diode (wave :650nm Max. 2mW class 2) Output indicator (Orange LED), laser emitter indication (Green LED) 7 segment, 3 digits (function indicator, 0 - 999 Incoming light Q'ty) NPN/PNP open collector DC30V 100mA max. Light ON / Dark ON switchable Teaching (threshold adjustment) -10 ~ 40 / 35 ~ 95% IEC IP67 housing: heat-resistant ABS(antibacterial) lens: PC button: NBR	
Operation mode	Light ON / Dark	ON switchable
Sensitivity setting	Teaching (threshold adjustment)	
Ambient tem/humid	-10 ~ 40 / 35 ~ 95%	
Protection category/ material	IEC 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

Warnings

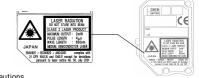
utilizes visible light laser beam and is subject to safety standard class 2 () of JIS C6802 as well as IEC and FDA regulations

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

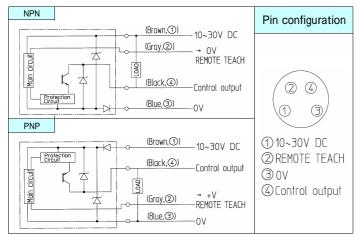
Warm-up period (approx. 100 msec.) must be secured

Should avoid parallel wiring with high-voltage wire and/ or power line. Never install in same conduit

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

Input / Output circuit design



Sensitivity setting

Teaching

Place sensor and reflector to adjust optical axis.

Push O , until is indicating. (about 2 sec.)

Setting is completed with indication - on digital display panel.

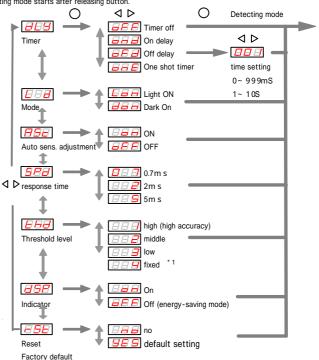
Threshold adjustment

Push or shortly (2 sec. Max.). Present threshold is blinking on digital display panel. During threshold blinking, adjust with \triangleleft or \triangleright (adjustment range: 20~ 96)

By pushing \bigcirc , go back to detecting mode. Or automatically back to detecting mode in 10 sec with no operation.

Setting chart

Push or until is indicating. (more than 2 sec.) Setting mode starts after relea



* 1 Manual adjusted threshold level is not reset by teaching The range of automatic sensitivity adjustment is limited. - FEE will blink during operation if it is out of range. When auto sensitivity adjustment function is OFF, no indication

> Specifications and equipment are subject to change without any obligations on the part of manufacture.

For more information, questions and comments regarding products, please contact us below.

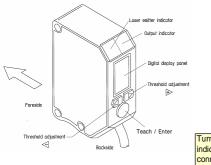
Manufactured and sold by:



607-8085 Kyoto, Yamashina, Takehanadonomaecho 46-1, JAPAN Tel: +81-(0)75-594-8123 Fax: +81-(0)75-594-8124

Website: http://www.optex-fa.com

Parts name

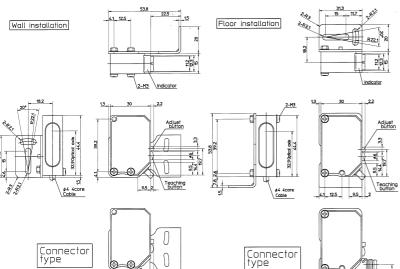




* For connector type only

Turn the connector as Green Arrow indicates, otherwise you will damage the connector. The damage will be unrepairable

Dimensions



unit: mm