OPTEX FA

Photoelectric Sensor

S SERIES

- S T-400□□
- S D-2 0□□
- S R-150□□
- BGS-S08□□
- S R-Q50□□
- BGS-S O 3 N

INSTRUCTION MANUAL

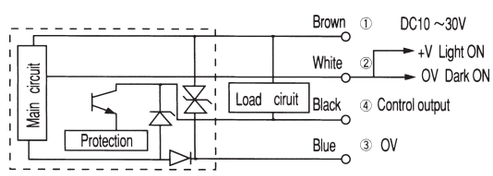
- Confirm if the item meets your needs.
- Before the use, you should first thoroughly read this manual and operate correctly as mentioned.
- You should keep this manual at hand for proper use.

SPECIFICATIONS

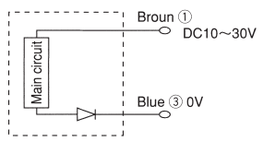
		Through beam	Diffused ref.	Retro-ref.	BGS	Transparent objects	BGS small spot
	Cable type	ST-400 (N.P)	SD-20 (N.P)	SR-150 (N.P)	BGS-S08 (N.P)	SR-Q50 (N.P) W	BGS-SO3N
	Connector type	ST-400C (N.P)	SD-20C (N.P)	SR-150C (N.P)	BGS-S08C (N.P)	SR-Q50C (N.P) W	——
Detecting distance		4m	20cm	1.5m	10～80mm	50cm	8～30mm
Supply voltage		DC10～30V					
Current consumption		30mA max.	20mA max.				
Light Source		Red LED					
Resporrse time		0.5ms max.					
Control output		NPN/PNP Open collector DC30V 100mA max.					
Operation mode		Light ON／Dark ON selectable by wiring					
Sensitivity sdjustment		1 turn volume			5 turn (endless)	1 turn volume	5 turn (endless)
Indicator		Light indicator (red)					
Ambient temp./humidity		-25～55℃／35～85%PH					
Protection category materia		IP67／Case：PSF+PBT (glass included) Front cover：PC (PMMA for Retro-ref)					

INPUT AND OUTPUT CIRCUIT DIAGRAMS

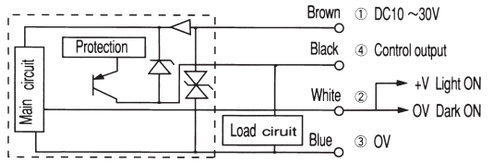
NPN type



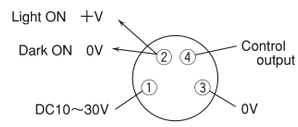
Through beam emitter



PNP type



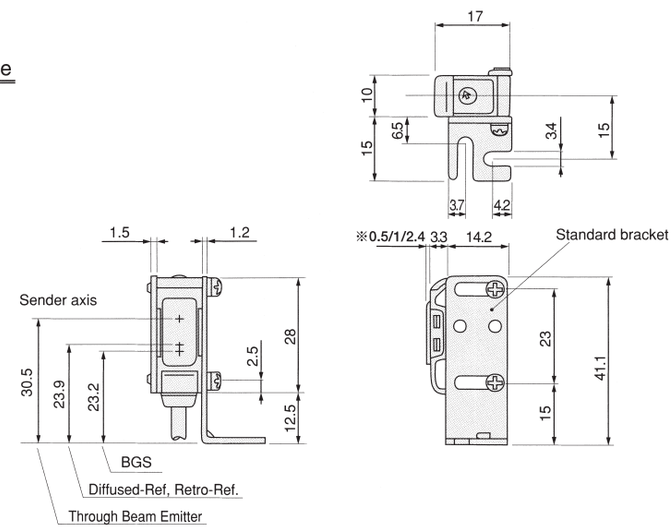
Connector pin No.



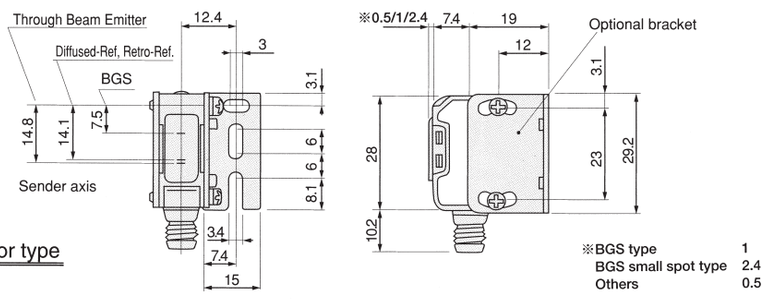
DIMENSIONS

(Unit mm)

Cable type



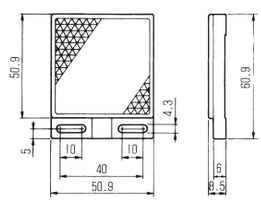
Connector type



ACCESSORIES

●Standard reflector(for Retro-ref.)

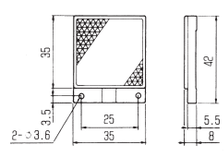
Detecting distance 1.5m Type：V－6 1



(Unit mm)

●Optional reflector

Detecting distance 80cm Type：V－4 2



(Unit mm)

●Slit for Through beam type(option)

Type：BL－150－10

Detecting distance

Slit width	0.5㎜	1㎜	2㎜
Distance (m)	0.5	1	1.8

(Slit be attached on both Emitter and Raceiver)

●Bracket assy for vertical installation

(option)

Type：BEF－W150－B

⚠ Must not use this item as safety equipment for the purpose of human body protection.

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

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OPTEX FA

Photoelectric Sensor

S2 SERIES

- S2T-1200□□
- S2R-350□□
- S2D-80□□
- S2D-60□□
- BGS-2S30□□□
- BGS-2S15□□
- BGS-2S10□□
- BGS-2S25□□

INSTRUCTION MANUAL

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SPECIFICATION 1

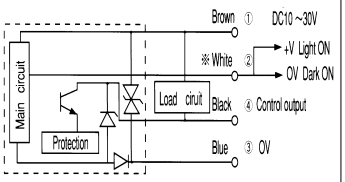
	Through beam	Retro reflection	Diffused reflection		Limited function type		BGS Type	
					Through beam type	Retro reflection type	with timer function	without timer function
Cable type	S2T-1200N・	S2R-350N・	S2D-80N・	S2D-60N・	S2T-1200N／D・	S2R-350N／D・	BGS-2S30(N,P)T	BGS-2S30(N,P)
Connector type	S2T-1200CN・	S2R-350CN・	S2D-80CN・	S2D-60CN・			BGS-2S30C(N,P)T	BGS-2S30C(N,P)
Detecting distance	12m	3.5m	80cm	60cm	12m	3.5m	25～300mm（adjustable range）	
Supply voltage	DC10～30V Including ripple（P—P）10%							
Current consumption	Sender：20mA max. / Receiver：15mA max	20mA max.			Sender：20mA max / Receiver：15mA max	20mA max.	30mA max.	
Light Source	Red LED			IR LED	Red LED			
Response time	0.5ms max.							
Contorol output	NPN／PNP Open collector 100mA max.／DC30V							
Operation mode	Light ON／Dark ON Selectable by swi				Dark ON		Light ON／Dark ON Selectable by wiring	
Sensitivity adjustment	1 turn volume				Not equippend		6 turns endless volume	
Indicator	Out put indicator（orenge LED）Stable indicator（green LED）（Green LED of BGS type is stable incident indicator）							
Ambient temp./humidity	—25～55℃／35～85%RH							
Protection category/material	IP67（IP65 for limited function type）／Case：ABS（glass included） Front cover：PMMA（PC for BGS type）							
Timer	Not equipped						0～100ms adjustable	Not equipped

SPECIFICATION 2

	BGS Type		
Cable type	BGS-2S25(N,P)	BGS-2S10(N,P)	BGS-2S15(N,P)
Connector type	BGS-2S25C(N,P)	BGS-2S10CP	BGS-2S15C(N,P)
Detecting distance	1～250mm	20～100mm	25～150mm
Supply voltage	DC10～30V Including 10% ripple（P—P）		
Current consumption	30mA max.		
Light Source	Red LED		
Response time	0.5ms max.		
Contorol output	NPN／PNP Open collector 100mA max.／DC30V		
Operation mode	Light ON／Dark ON Selectable by wiring		
Sensitivity adjustment	6 turns endless volume		
Indicator	Out put indicator (orenge LED) Stable iincident indicator (green LED)		
Ambient temp./humid	—25～55℃／35～85%RH		
Protection category/material	IP67 Case：ABS (glass included) Front cover：PC		
Timer	Not equipped		

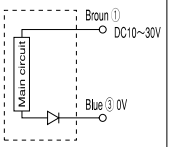
INPUT AND OUTPUT CIRCUIT DIAGRAMS

NPN type

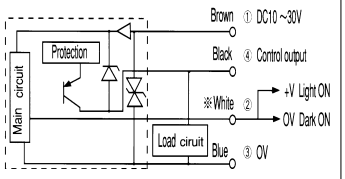


※White wire is only for BGS with timer type.

Through beam emitter

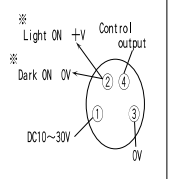


PNP type



※White wire is only for BGS with timer type.

Connector pin No.

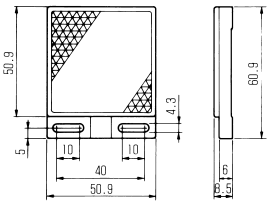


※Only for BGS with timer type.

ACCESSORIES

●Standard reflector(for Retro-ref.)

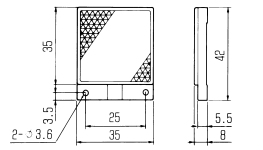
Detecting distance 3.5m Type：V—6 1



(Unit mm)

●Optional reflector

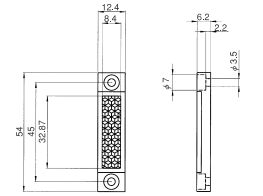
Detecting distance 2m Type：V—4 2



(Unit mm)

●Optional reflector

Detecting distance 1.2m Type：P—4 5



(Unit mm)

●Anti-interference filter for Through beam type(option)

Type：B L—1 4 0—POLF

Detecting distance：5 m

●Bracket assy for vertical installation

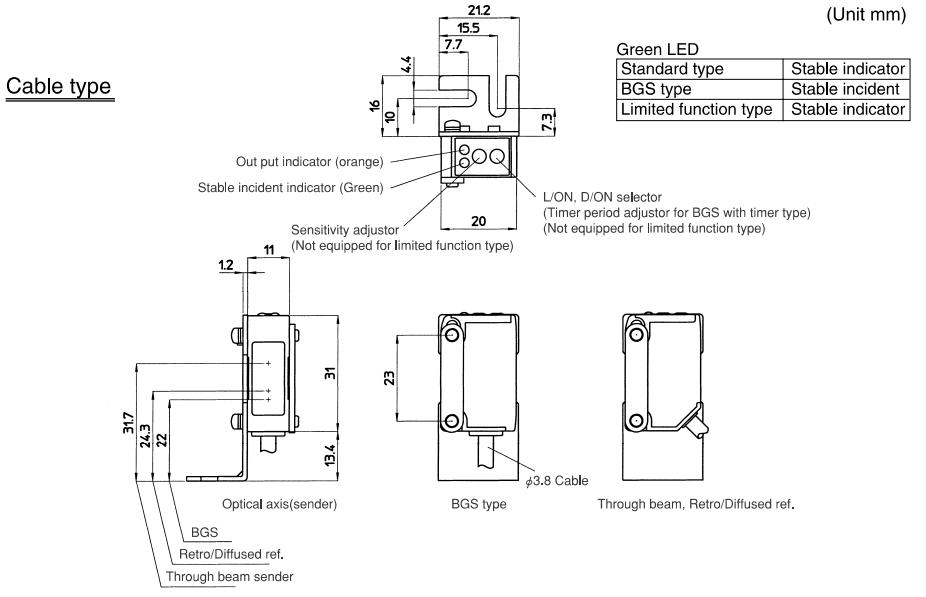
(option)

Type：B E F—W 1 4 0—B

DIMENSIONS

(Unit mm)

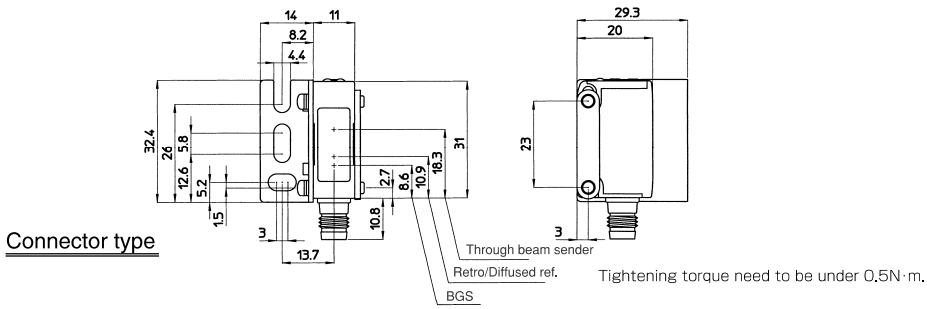
Cable type



Green LED

Standard type	Stable indicator
BGS type	Stable incident
Limited function type	Stable indicator

Connector type



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→ http://www.optex-fa.com/rohs_cn/

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