AREA SENSOR(BW SEREIS)

▣Ordering information

BW 20 - 08 P

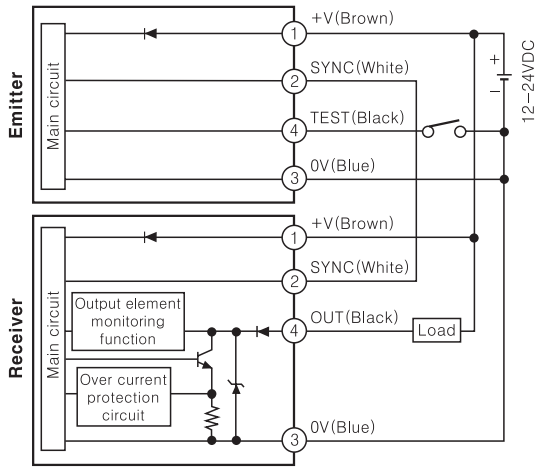
Solid state output		NPN open collector output
	P	PNP open collector output
Number of optical axis	04~48pcs	
Optical axis pitch	20	20mm Pitch
	40	40mm Pitch
Series		

▣Specifications

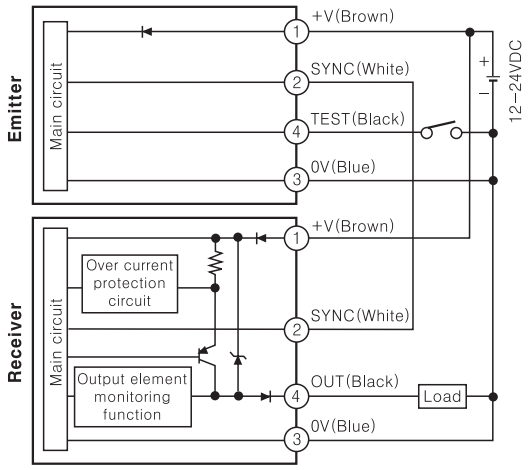
Sensing type		Transmitted beam type	
Model	NPN open collector output (Standard type)	**BW20-08 BW20-20 BW20-32 BW20-44 BW20-12 BW20-24 BW20-36 BW20-48 BW20-16 BW20-28 BW20-40**	**BW40-04 BW40-10 BW40-16 BW40-22 BW40-06 BW40-12 BW40-18 BW40-24 BW40-08 BW40-14 BW40-20**
	PNP open collector output	**BW20-08P BW20-20P BW20-32P BW20-44P BW20-12P BW20-24P BW20-36P BW20-48P BW20-16P BW20-28P BW20-40P**	**BW40-04P BW40-10P BW40-16P BW40-22P BW40-06P BW40-12P BW40-18P BW40-24P BW40-08P BW40-14P BW40-20P**
Appearances		CE  ●Optical axis pitch : 20mm [W22.5×H28.5×L□mm]	CE  ●Optical axis pitch : 40mm [W22.5×H28.5×L□mm]
Sensing distance		0.1 ~ 7m	
Sensing target		Opaque materials of min. ϕ30mm	Opaque materials of min. ϕ50mm
Optical axis pitch		20mm	40mm
Number of optical axis		8~48pcs	4~24pcs
Sensing width		140~940mm	120~920mm
Pointing angle		Within ±5° (At over 3m sensing distance)	
Power supply		12-24VDC ±10%(Ripple P-P:Max. 10%)	
Protection circuit		Reverse polarity protection	
Current consumption		Emitter : Max. 80mA, Receiver : Max. 80mA	
Control output		• NPN open collector output ☞ Load voltage:Max. 30VDC, Load current:Max. 100mA, Residual voltage:Max. 1VDC • PNP open collector output ☞ Load current:Max. 100mA, Output voltage:Min.(Power supply-2.5)VDC	
Operation mode		Light ON only	
Short-circuit protection		Built-in	
Response time		Min. 12ms	
Light source		Infrared LED(850nm modulated)	
Synchronization type		Timing method by synchronous line	
Self-diagnosis		Ambient light monitoring, Emitter/Receiver light circuit monitoring, Output circuit monitoring	

▣Input/Output circuit and connection diagram

●NPN open collector output type



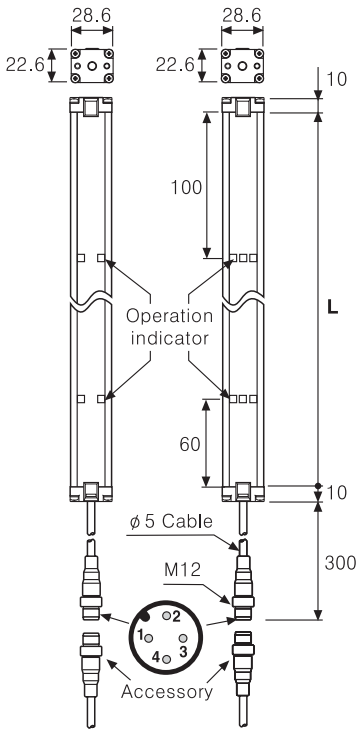
●PNP open collector output type

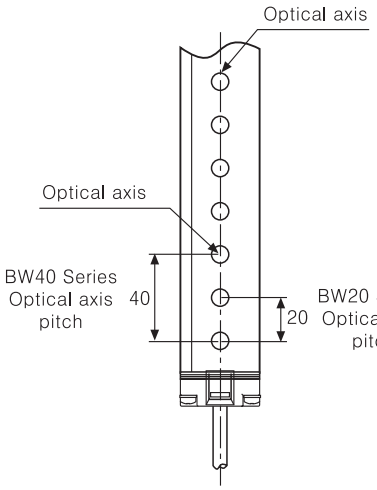


AREA SENSOR(BW SERIES)

▣Dimensions

<Emitter> <Receiver>





Model	L(mm)	Model	L(mm)
BW20-08(P)	160mm	BW20-32(P)	640mm
BW40-04(P)		BW40-16(P)	
BW20-12(P)	240mm	BW20-36(P)	720mm
BW40-06(P)		BW40-18(P)	
BW20-16(P)	320mm	BW20-40(P)	800mm
BW40-08(P)		BW40-20(P)	
BW20-20(P)	400mm	BW20-44(P)	880mm
BW40-10(P)		BW40-22(P)	
BW20-24(P)	480mm	BW20-48(P)	960mm
BW40-12(P)		BW40-24(P)	
BW20-28(P)	560mm		
BW40-14(P)			

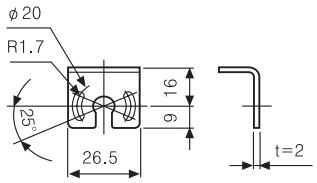
< Operation indicator >

LED color	Emitter	Receiver
Green	POWER	ON
Yellow	TEST(M/S)	UNSTABLE
Red	———	OFF

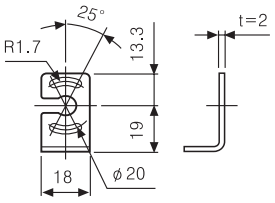
< Wiring Connection >

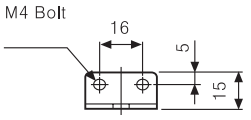
Pin No	Cable color	Emitter	Receiver
1	Brown	12-24VDC	12-24VDC
2	White	SYNC	SYNC
3	Blue	0V	0V
4	Black	TEST(M/S)	OUT

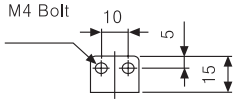
●Bracket A



●Bracket B

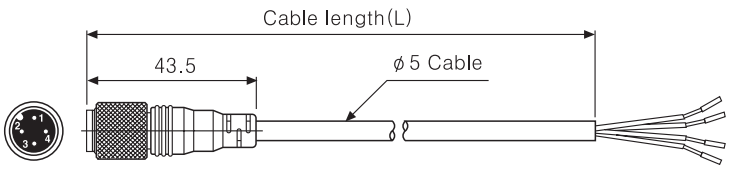






Unit:mm

▣Connecting cable(Option)



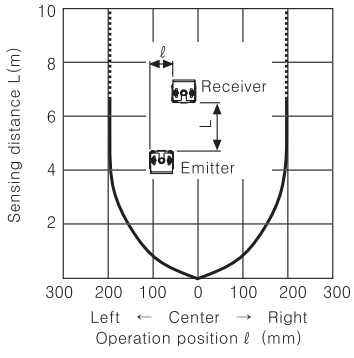
Unit:mm

Model	Cable length(L)	Connector color
CID4-3-T CID4-3-R	3m	Emitter(T) : BLACK Receiver(R) : GRAY
CID4-5-T CID4-5-R	5m	
CID4-7-T CID4-7-R	7m	
CID4-10-T CID4-10-R	10m	

※Connecting cable is packed separately.

▣Feature data

Parallel shifting characteristic



Sensor angle characteristic