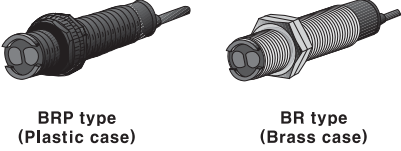
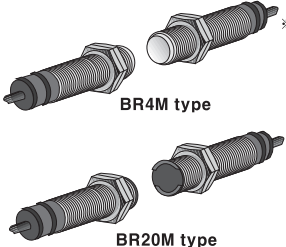


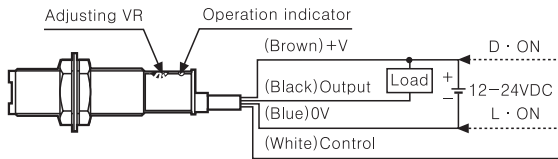
PHOTO SENSOR(BR SERIES)

Specifications

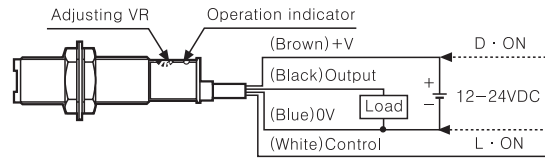
Type		Cylindrical type						
		Diffuse reflective (Narrow beam)	Diffuse reflective(Diffusion type)			Transmitted beam		
Model	NPN Output	BR200-DDTN BRP200-DDTN	BR100-DDT BRP100-DDT	BR400-DDT BRP400-DDT	BR4M-TDTD	BR4M-TDTL	BR20M-TDTD	BR20M-TDTL
	PNP Output	BR200-DDTN-P BRP200-DDTN-P	BR100-DDT-P BRP100-DDT-P	BR400-DDT-P BRP400-DDT-P	BR4M-TDTD-P	BR4M-TDTL-P	BR20M-TDTD-P	BR20M-TDTL-P
Appearances & Dimensions		 <p>BRP type (Plastic case) BR type (Brass case)</p> <p>[φ18, L74mm]</p>			 <p>BR4M type BR20M type</p> <p>[φ18, L62mm]</p> <p>NEW</p> <p>※ Environmental resistance is superior with mirror lens.</p>			
Sensing distance		200mm	100mm	400mm	4m		20m	
Sensing target		Transparent, Translucent, Opaque materials			Opaque materials of Min. φ 15mm			
Response time		Max. 1ms			Max. 3ms			
Power supply		12-24VDC ±10% (Ripple P-P:Max. 10%)						
Sensitivity adjustment		Adjustable by VR			Fixed			
Operating mode		Selectable Light ON or Dark ON by control wire			Dark ON	Light ON	Dark ON	Light ON
Control output		• NPN open collector output ≒ Load voltage:Max. 30VDC, Load current:Max. 200mA, Residual voltage:Max. 1VDC • PNP open collector output ≒ Load current:Max. 200mA, Output voltage:Min. (power voltage:-2.5)VDC						
Protection circuit		Reverse polarity protection, short-circuit protection						
Protection		IP66 (IEC standard)						
Material		BR ≒ Case:C3604BD(Brass, Cr-plate), Lens:PC BRP ≒ Case:PA(Nylon, Black), Lens:PC			BR4M type ≒ Case:C3604BD(Brass, Cr-plate) Lens:Glass, PC BR20M type ≒ Case:C3604BD(Brass, Cr-plate), Lens:PC			

Connections

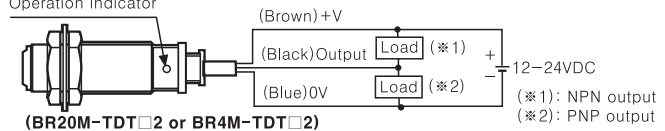
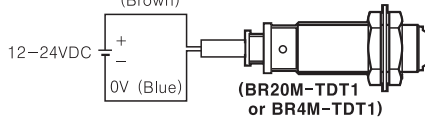
- BR100-DDT, BRP100-DDT, BR400-DDT, BRP400-DDT
- BR200-DDTN, BRP200-DDTN



- BR100-DDT-P, BRP100-DDT-P, BR400-DDT-P, BRP400-DDT-P
- BR200-DDTN-P, BRP200-DDTN-P

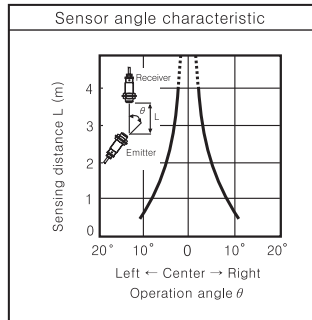
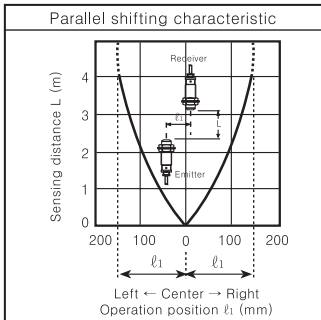


- BR4M-TDTD(L) / BR4M-TDTD(L)-P ●BR20M-TDTD(L) / BR20M-TDTD(L)-P

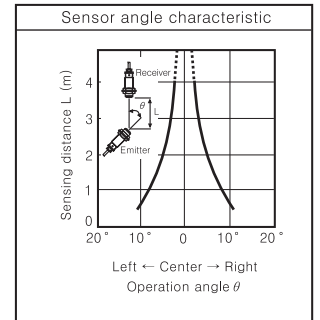
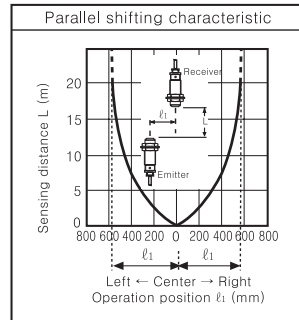


Feature data

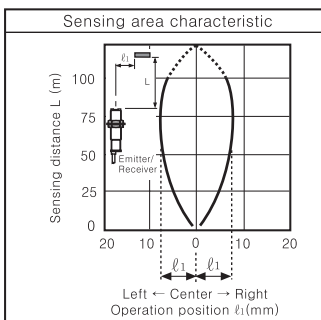
- BR4M-TDT□ / BR4M-TDT□-P



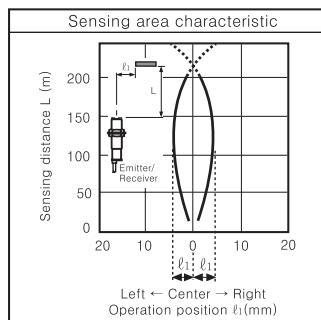
- BR20M-TDT□ / BR20M-TDT□-P



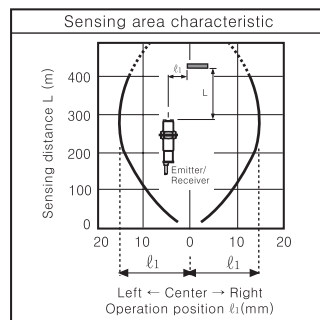
- BR100-DDT(-P)/BRP100-DDT(-P)



- BR200-DDTN(-P)/BRP200-DDTN(-P)



- BR400-DDT(-P) / BRP400-DDT(-P)



※ — : Operation level
 : Stable operation level