



Economical Type

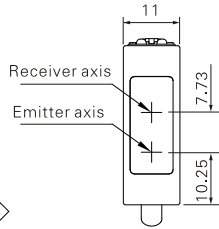
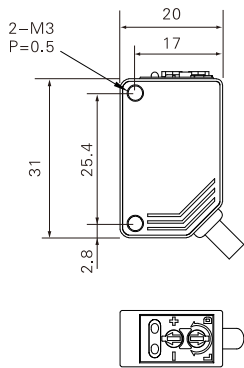
NEW!

Appearance							
Sensing type	Diffuse reflection		Convergent reflective	Retro-reflection			
Sensing distance	30cm	100cm	14cm	20cm	200cm	300cm	
Spot size	≈ φ 16mm / 300mm	≈ φ 50mm / 1000mm	≈ φ 9mm / 140mm	φ 10mm / 20cm	φ 50mm / 2m	φ 90mm / 3m	
Output type	NPN or PNP open collector, ≤100mA (30V DC)						
Switch type	L.on / D.on Switchable						
Indicator	Motion indicator: Red ; Operating indicator: Green						
Response time	<1ms			1ms	<1ms		
Sensitivity adjustment	Single-turn potentiometer						
Light source	Red light LED 623 nm (modulated)						
Operating voltage	10~30V DC						
Current consumption	≤20mA						
Ambient brightness	Sunlight ≤10000 Lux; Incandescent Lamp ≤ 3000 Lux						
Ambient temperature	-25°C~+55°C, No freezing						
Ambient humidity	35%~85%RH, No condensation						
Anti-vibration	10 ~ 50Hz, 0.5mm amplitude, 2 hours each in X, Y, Z directions						
Protective circuit	Power reverse polarity protection, output reverse polarity protection, surge protection, short circuit protection						
Degree of protection	IP65						
Connection method	2M/3 cores cable, φ 4mm						
Material	PBT+Fiberglass (Housing) , PMMA (Lens)						
Accessories	Screwdriver		Screwdriver, reflective sticker	Screwdriver, reflector			
Model No.	NPN PNP	PTE-D30N PTE-D30P	PTE-D70N PTE-D70P	PTE-X09N PTE-X09P	PTE-R20N PTE-R20P	PTE-R200N PTE-R200P	PTE-R300N PTE-R300P

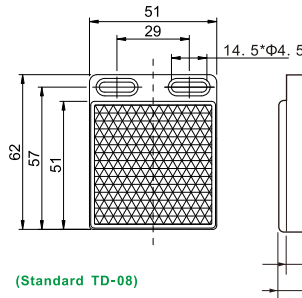
- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Vibration
- Temperature
- Annexes

Dimensions

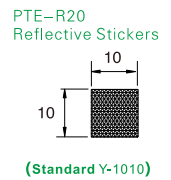
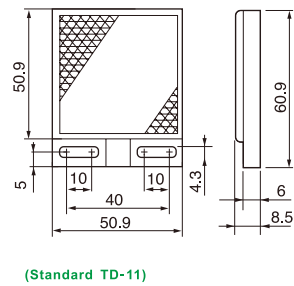
Unit: mm



Reflector for PTE-R200



Reflector for PTE-R300

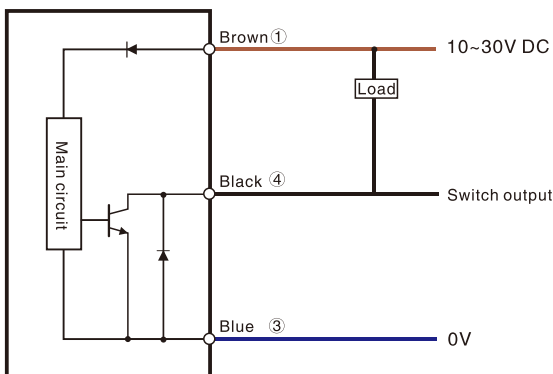


Guidance

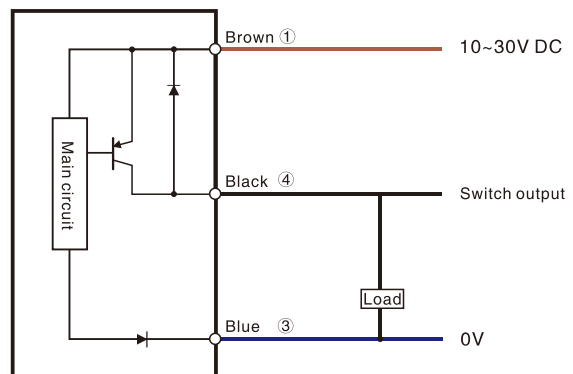
- Photoelectric
- Cylindrical
- Square
- Flat type
- Thin type
- BGS
- Transparent detection
- Color/Mark Detection
- TOF reflective
- IP69K high protection type
- Anti-glare type

Circuit diagram

NPN Output



PNP Output



Reflectors

- Reflectors

PTE Series



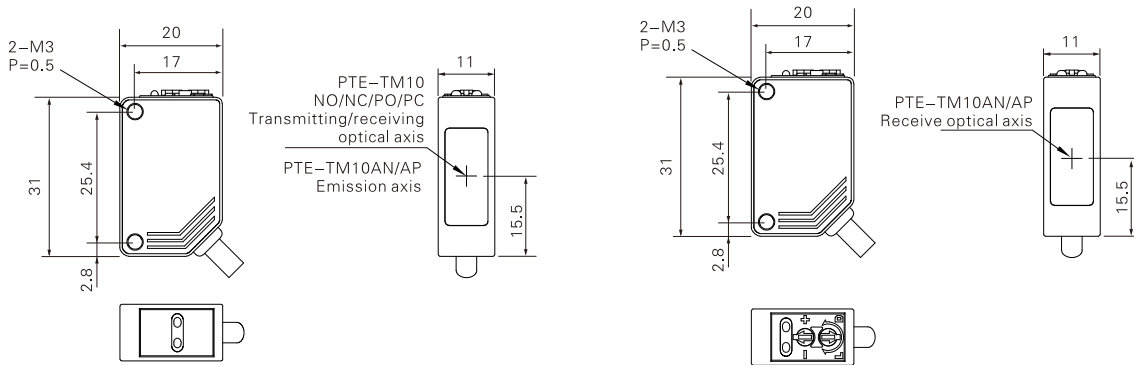
Economical Type

NEW!

Appearance			
Sensing type	Thru-beam Reflection		
Sensing distance	10m (fixed)		10m
Sensing object	$\phi > 12\text{mm}$, opaque		
Output type	NPN / PNP open collector		
Switch Type	L.on /D.on selectable		L.on /D.on Switchable
Indicator	Status indicator: green, output indicator: red		Emitter: Power: green; Receiver: Operation: green, Motion: red
Response time	150HZ		
Sensitivity	Not adjustable		Single turn potentiometer
Light source	IR LED 623nm (modulated)		
Operating voltage	10~30V DC		
Current consumption	Emitter $\leq 16\text{mA}$; Receiver $\leq 15\text{mA}$		
Ambient light	Sunlight $\leq 10,000$ Lux, Incandescent lamp $\leq 3,000$ Lux		
Ambient temperature	$-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$, No freezing		
Ambient humidity	35%~85% RH, No condensation		
Anti-vibration	10 to 50 Hz with 0.5mm amplitude for 2 hours each in X, Y, and Z directions		
Protection circuits	Power reverse polarity protection, short circuit protection		
Degree of protection	IP65		
Connection	2M / 3 cores cable 4mm diameter		
Material	Fiberglass (shell), PMMA(Window)		
Accessories	Screwdriver		
Model No.	NPN	PTE-TM10NO	PTE-TM10NC
	PNP	PTE-TM10PO	PTE-TM10PC
			PTE-TM10AN
			PTE-TM10AP

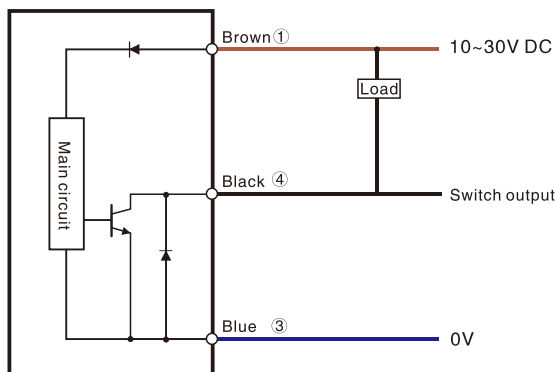
Dimensions

Unit: mm

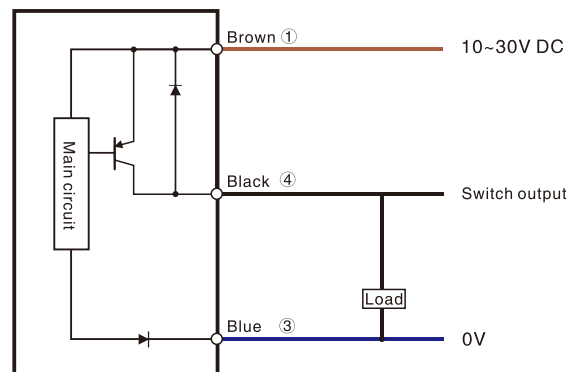


Circuit diagram

NPN Output



PNP Output





Wide Facula Type

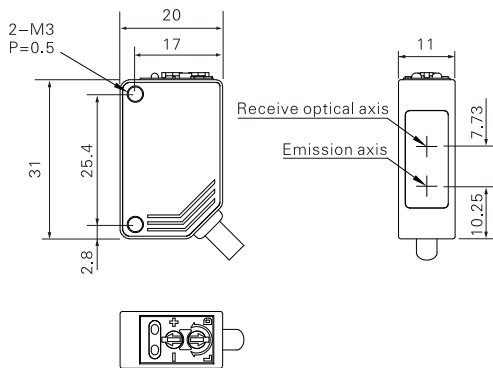
NEW!

Appearance			
Sensing type	Disffuse refection		
Sensing distance	20cm	10cm	20cm
Spot diameter	130*130mm/20cm	-	-
Output type	NPN / PNP open collector		
Switch Type	L.on /D.on selectable		
Indicator	Operation indicator: Green, Motion indicator: Red		
Response time	1ms		
Sensitivity	Single-turn potentiometer		
Light source	Red LED 623nm (modulation)	Infrared LED 940nm (modulation)	
Operating voltage	10~30V DC		
Current consumption	≤20mA		
Ambient light	Sunlight ≤10000Lux, Incandescent lamp ≤3000Lux		
Ambient temperature	-25°C ~ +55°C, No freezing		
Ambient humidity	35% ~85% RH, No condensation		
Anti-vibration	10 to 50 Hz with 0.5mm amplitude for 2 hours each in X, Y, and Z directions		
Protection circuits	Power reverse polarity protection, output reverse polarity protection, surge protection, short circuit protection		
Degree of protection	IP65		
Connection	2M / 3 wire cable 4mm diameter		
Material	PBT+Fiberglass (body), PMMA(window)		
Accessories	Screwdriver		
Model No.	NPN PTEW-D20N	PTVW-D10N PTVW-D10P	PTVW-D20N PTVW-D20P
	PNP PTEW-D20P		

- Fiber Optic
- Slot Sensors
- Photoelectric**
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Vibration
- Temperature
- Annexes

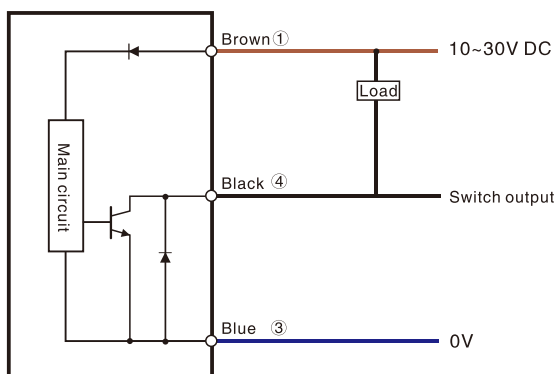
Dimensions

Unit: mm

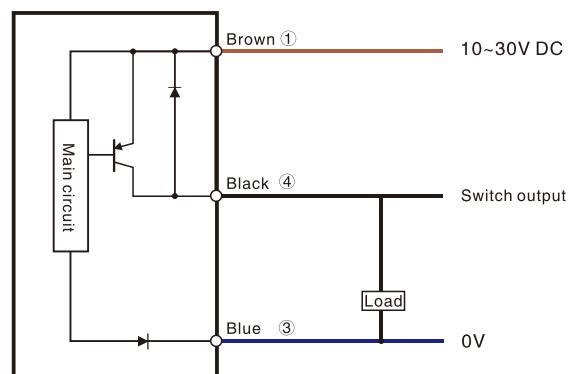


Circuit diagram

NPN Output



PNP Output



Guidance

Photoelectric

- Cylindrical
- Square**
- Flat type
- Thin type
- BGS
- Transparent detection
- Color/Mark Detection
- TOF reflective
- IP69K high protection type
- Anti-glare type

Reflectors

- Reflectors



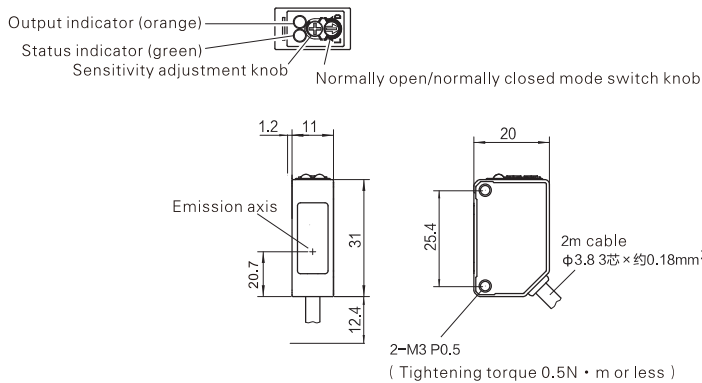
Anti-glare Type

NEW!

Appearance		
Sensing type	Diffuse reflection-BGS	
Sensing distance	5~100mm	10~300mm
Sensing distance	20~100mm	50~300mm
Spot diameter	≈ Ø10mm/100mm	≈ Ø30mm/300mm
Should be bad	≦3%	≦5%
Output type	NPN / PNP open collector	
Switch Type	L.on/D.on selectable	
Indicator	Operating indicator: orange, Status indicator: red	
Response time	≦1ms	
Sensitivity	6-turn potentiometer	4-turn potentiometer
Light source	Red LED	
Operating voltage	10~30V DC	
Current consumption	≦30mA	
Ambient light	Sunlight ≦ 50,000 Lux, Incandescent lamp ≦ 5,000 Lux	
Ambient temperature	-25°C~+55°C, No freezing	
Ambient humidity	35%~85%RH, No condensation	
Anti-vibration	10 to 50 Hz with 0.5mm amplitude for 2 hours each in X, Y, and Z directions	
Degree of protection	IP67	
Connection	ABS (body), PMMA (window)	
Accessories	Screwdriver	
Model No.	NPN PTL-D10N PNP PTL-D10P	PTL-D30N PTL-D30P

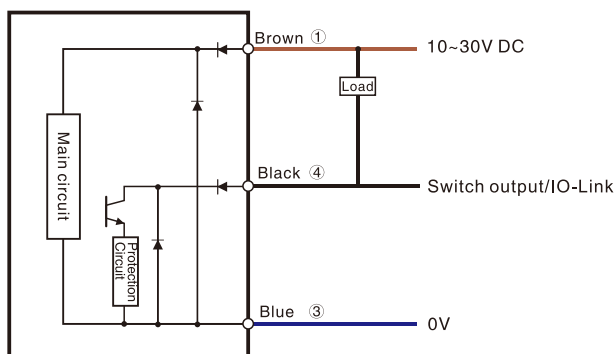
Dimensions

Unit: mm

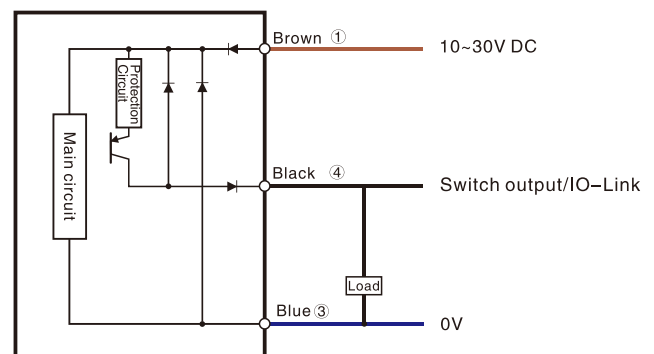


Circuit diagram

NPN Output



PNP Output





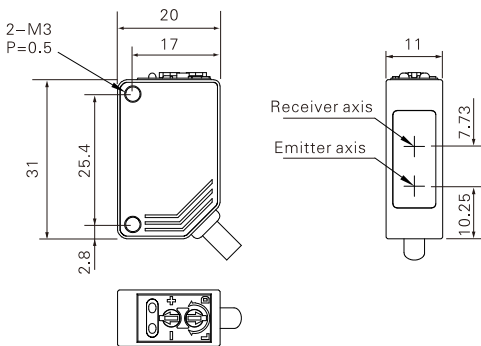
NEW!

Appearance

Sensing type	Diffuse reflection		Convergent reflective
Sensing distance	30cm	100cm	14cm
Output type	NPN/PNP Open-collector		
Switch type	Selectable L.on/D.on		
Response time	< 1ms		
Light source	Infrared light LED(940nm modulation)		
Operating voltage	10~30V DC		
No-load supply current	≤20mA		
Load current	≤100mA(24V DC)		
Ambient temperature	-20°C~+55°C, No freezing		
Ambient humidity	35%~85%RH, No condensation		
Protective circuit	Power reverse polarity,output reverse polarity,surge,short circuit		
Degree of protection	IP65		
Material	PBT+Fiberglass (Housing) , PMMA (Lens)		
Connection method	2M 3core cable		
Weight	≈50g		
Accessories	Screwdriver		
Model No.	NPN	PTV-D30N HOT	PTV-D70N
	PNP	PTV-D30P	PTV-D70P
			PTV-X09N
			PTV-X09P

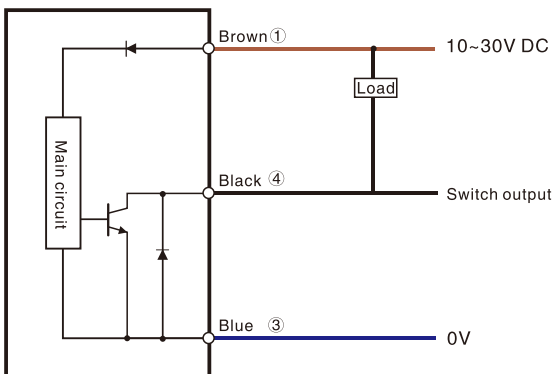
Dimensions

Unit: mm

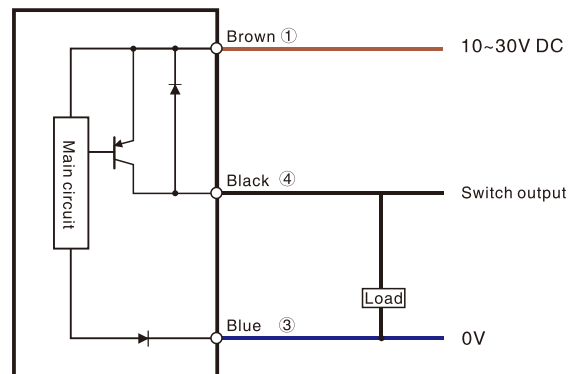


Circuit diagram

NPN Output



PNP Output



- Fiber Optic
- Slot Sensors
- Photoelectric**
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Vibration
- Temperature
- Annexes

Guidance

Photoelectric

- Cylindrical
- Square**
- Flat type
- Thin type
- BGS
- Transparent detection
- Color/Mark Detection
- TOF reflective
- IP69K high protection type
- Anti-glare type

Reflectors

- Reflectors



NEW!

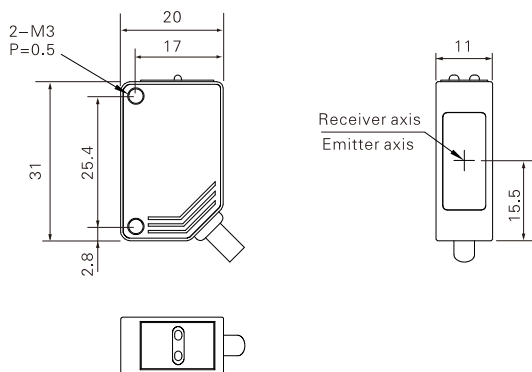
Appearance

Sensing type	Thru-beam				
Sensing distance	20m(fixed)	20m	5m		
Output type	NPN/PNP Open-collector				
Switch type	Selectable L.on/D.on, Model optional		Selectable L.on/D.on		
Response time	< 5ms				
Light source	Infrared light LED(940nm modulation)				
Operating voltage	10~30V DC				
No-load supply current	Transmitter end: ≤20mA; Receiving end: ≤20mA				
Load current	≤100mA(24V DC)				
Ambient temperature	-20°C~+55°C, No freezing				
Ambient humidity	35%~85%RH, No condensation				
Protective circuit	Power reverse polarity,output reverse polarity,surge,short circuit				
Degree of protection	IP65				
Material	PBT+Fiberglass (Housing) , PMMA (Lens)				
Connection method	2M 3core cable				
Weight	≈50g				
Accessories	Screwdriver				
Model No.	NPN	PTV-TM20NO	PTV-TM20NC	PTV-TM20AN	PTV-T500N
	PNP	PTV-TM20PO	PTV-TM20PC	PTV-TM20AP	PTV-T500P

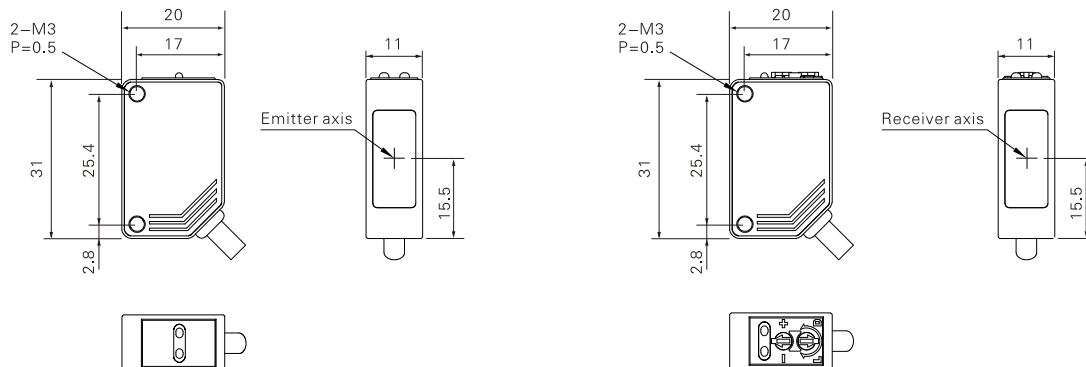
Dimensions

Unit: mm

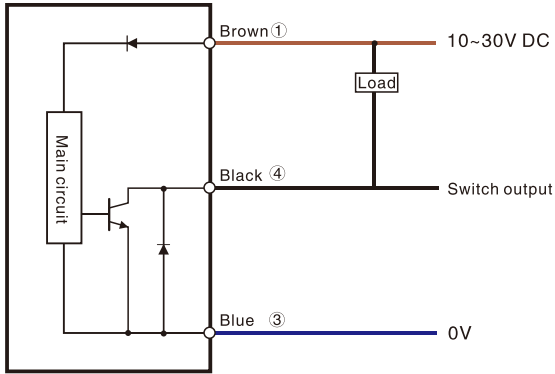
PTV-TM20NO/PO/NC/PC



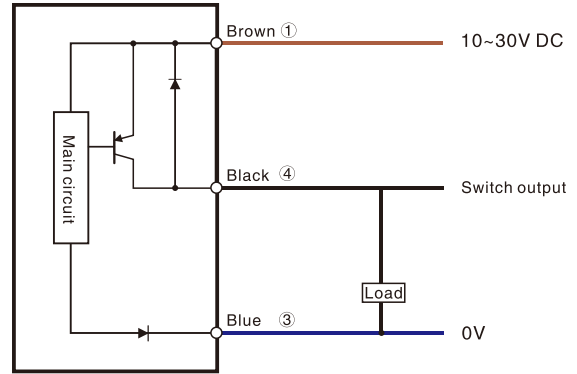
PTV-TM20AN/AP, PTV-T500N/P



NPN Output



PNP Output



- Fiber Optic
- Slot Sensors
- Photoelectric**
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- Vision
- Vibration
- Temperature
- Annexes

Guidance

Photoelectric

- Cylindrical
- Square**
- Flat type
- Thin type
- BGS
- Transparent detection
- Color/Mark Detection
- TOF reflective
- IP69K high protection type
- Anti-glare type

Reflectors

- Reflectors

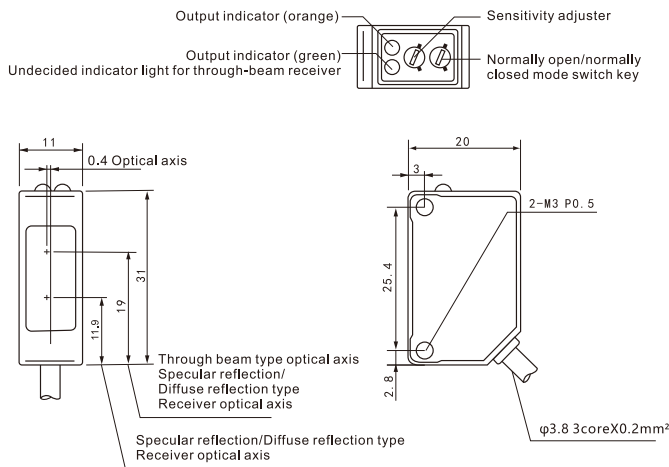
PTZ Series



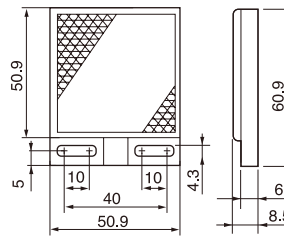
Appearance			
Sensing type	Disffuse refection	Thru-beam	Retro-reflection
Sensing distance	100cm	2000cm	400cm
Beam size	φ 75mm / 1000mm	φ 800mm / 20m	φ 200mm / 4m
Output type	NPN/PNP Open-collector, ≤ 100mA		
Switch type	Selectable L.on/D.on		
Indicator	Motion indicator:Green;Output indicator:Yellow		
Response time	0.5ms		
Sensivity adjustment	Single turn potentiometer		
Light source	Red LED 660nm		
Operating voltage	10~30V DC ± 10%		
No-load supply current	≤25mA	Emitter ≤20mA, Receiver ≤ 15mA	≤20mA
Ambient luminance	Sunlight ≤ 1000Lux, Incandescent lamp ≤ 3000Lux		
Ambient temperature	-25℃~55℃ no freezing		
Ambient humidity	35~85% RH, No coagulating		
Shock resistance	100G (1000m/s ²)		
Degree of protection	IP67		
Connection method	2M/3 core cable		
Material	ABS contain optic fiber(body);PMMA(lens)		
Accessories	None		Reflector
Model No.	NPN	PTZ-D70N HOT	PTZ-TM20N
	PNP	PTZ-D70P	PTZ-TM20P
			PTZ-R400N
			PTZ-R400P

Dimensions

Unit: mm



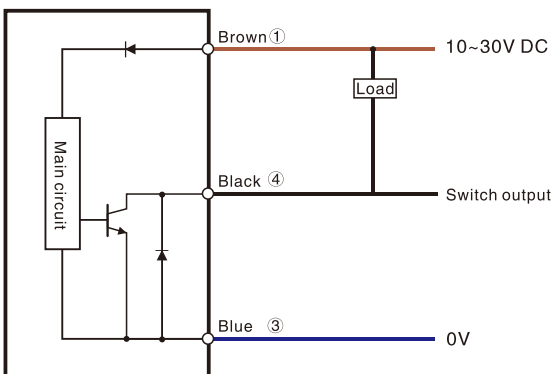
PTZ-R400 Reflector



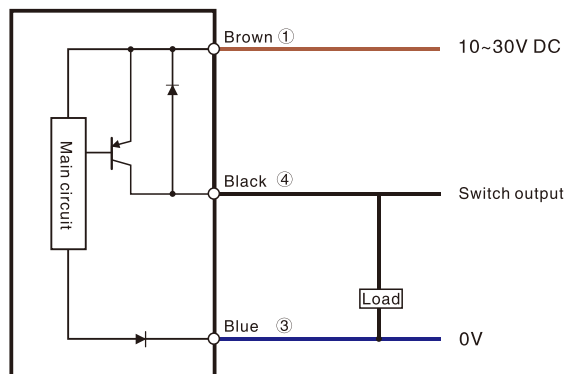
(Standard TD-11)

Circuit diagram

NPN Output



PNP Output





IO-Link
NEW!

Appearance

Sensing type	Diffuse reflection	Thru-beam reflection	Retro-reflection	
Sensing distance	0~1m(white paper200X200mm)	25m	0.01~4m(with reflector)	
Spot diameter	φ 75mm / 1m	φ 1800mm / 25m	φ 280mm / 4m	
Output type	NPN/PNP Open-collector, ≤100mA(30VDC)			
Switch type	L.on/D.on selectable			
Indicator	Input indicator: orange, Status indicator: green			
Response time	≤500us			
Sensitivity	Single turn adjuster			
Light source	Red light LED			
Operating voltage	10~30V DC ± 10%			
Current consumption	≤20mA	Emitter ≤ 14mA, Receiver ≤ 20mA	≤20mA	
Hysteresis	≤20%	-	-	
Function	IO-LINK			
Ambient light	Sunlight ≤ 50000Lux, Incandescent lamp ≤ 5000Lux			
Ambient temperature	-25°C~+55°C, no freezing			
Ambient humidity	35%~85% RH, No condensation			
Degree of protection	IP67			
Connection	3 wire 2m cable, 2 wire 2m cable for thru-beam models			
Material	ABS (housing) +PMMA (window)			
Accessories	-			
Model No.	NPN	PTZ-D70N-C	PTZ-TM25N-C	PTZ-R400N-C
	PNP	PTZ-D70P-C	PTZ-TM25P-C	PTZ-R400P-C

- Fiber Optic
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Guidance

Photoelectric

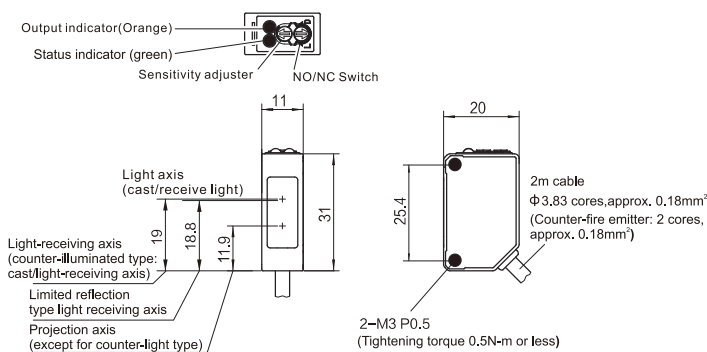
- Cylindrical
- Square**
- Flat type
- Thin type
- BGS
- Transparent detection
- Color/Mark Detection
- TOF reflective
- IP69K high protection type
- Anti-glare type

Reflectors

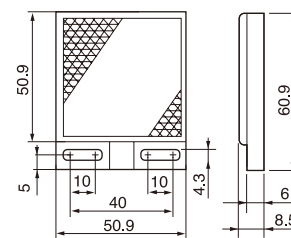
- Reflectors

尺寸规格

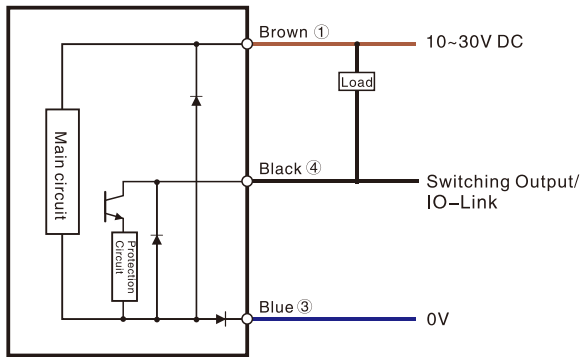
单位: mm



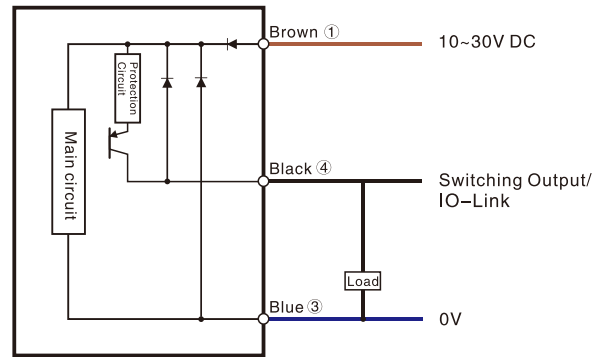
Reflector for PTZ-R400-C



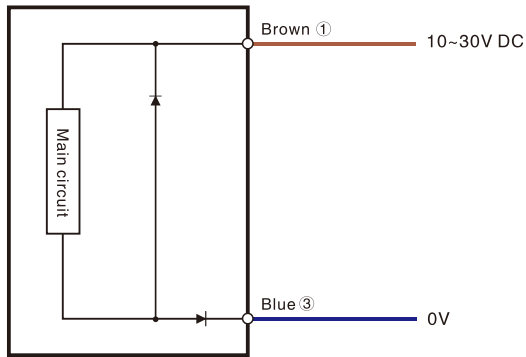
NPN Output



PNP Output



Opposed-fire Launcher



Guidance

Photoelectric

Cylindrical

Square

Flat type

Thin type

BGS

Transparent detection

Color/Mark Detection

TOF reflective

IP69K high protection type

Anti-glare type

Reflectors

Reflectors

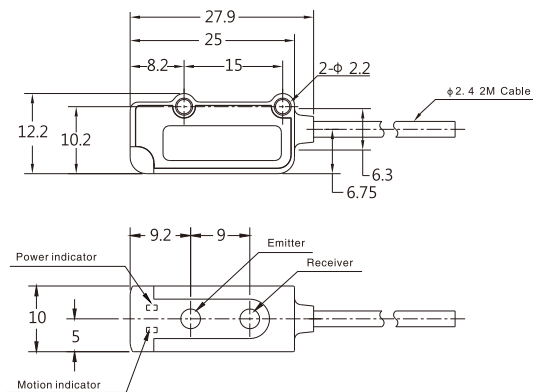


Appearance		
Sensing type	Diffuse reflection	Thru-beam
Sensing distance	5cm, White board 100*100mm(> 5cm)	50cm
Output type	NPN/PNP Open-collector	
Switch type	L.on	D.on
Response time	≤ 1 ms	
Light source	Infrared light LED (940nm)	
Operating voltage	12~24V DC ± 10%	
Current consumption	≤ 20mA	≤ 30mA
Load current	≤ 100mA (24V DC)	
Protective circuit	Reverse polarity, short circuit	
Ambient temperature	-10°C~ +45°C, No freezing	
Ambient humidity	35%~85% RH, No condensation	
Storage temperature	-10°C~ +55°C, No freezing	
Storage humidity	35%~95% RH, No condensation	
Voltage withstandability	1000 V/AC 50/60Hz 1min	
Insulation resistance	≥ 20MΩ/500V DC	
Degree of protection	IP64	
Material	ABS	
Connection method	φ 2.4*2M 3core cable	(Receiver) φ 2.4*2M 3core cable/ (Emitter) φ 2.4*2M 3core cable
Weight	≈ 20g	≈ 40g
Model No.	NPN PNP	PTN-D05N PTN-D05P
		PTN-T50N PTN-T50P

- Fiber Optic
- Slot Sensors
- Photoelectric**
- Laser
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- Vision
- Vibration
- Temperature
- Annexes

Dimensions

Unit: mm



Guidance

Photoelectric

Cylindrical

Square

Flat type

Thin type

BGS

Transparent detection

Color/Mark Detection

TOF reflective

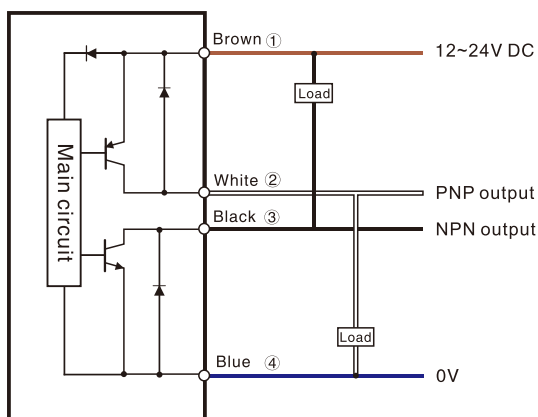
IP69K high protection type

Anti-glare type

Reflectors

Reflectors

Circuit diagram



PTJ-I Series

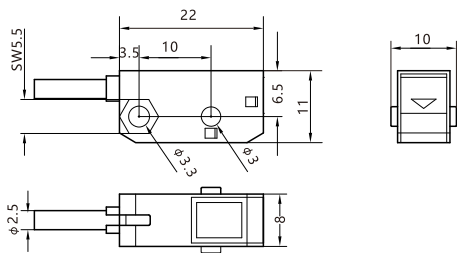


Appearance

Sensing type	Thru-beam		
Sensing distance	80cm (fixed)	150cm (fixed)	
Standard test object	Opaque objects above ϕ 6mm		
Output type	NPN/PNP Open-collector		
Switch type	Selectable L.on/D.on, Model optional		
Response frequency	150Hz		
Indicator	Transmitter: Power indicator: green; Receiver: Action indicator: yellow		
Light source	Infrared LED 850nm (Modulated)		
Operating voltage	12~24V DC		
Residual voltage	2V or less (when the current is 50mA)		
Current consumption	The transmitting end < 15mA, Receiving end < 15mA		
Load current	< 50mA		
Protective circuit	Reverse polarity, short circuit		
Ambient brightness	Sunlight \leq 10000Lux, Incandescent lamp \leq 3000Lux		
Ambient temperature	-20°C~+50°C, No freezing		
Voltage drop	35~90% RH, Storage: 35~90% RH		
Storage temperature	-30°C~+70°C, No freezing		
Voltage withstandability	\geq 20M Ω /500V DC		
Pressure strength	AC1000V(50/60Hz)1minute		
Shock resistance	10~55Hz reciprocating amplitude 1.5mm, X, Y, Z directions 2 hours		
Impact resistant	500m/s ² XYZ three directions		
Degree of protection	IP 64		
Housing Material	PC/ABS		
Connection method	2M 3core cable		
Model No.	NPN D.on	PTJ-T80NO-I	PTJ-T150NO-I
	NPN L.on	PTJ-T80NC-I	PTJ-T150NC-I
	PNP D.on	PTJ-T80PO-I	PTJ-T150PO-I
	PNP L.on	PTJ-T80PC-I	PTJ-T150PC-I

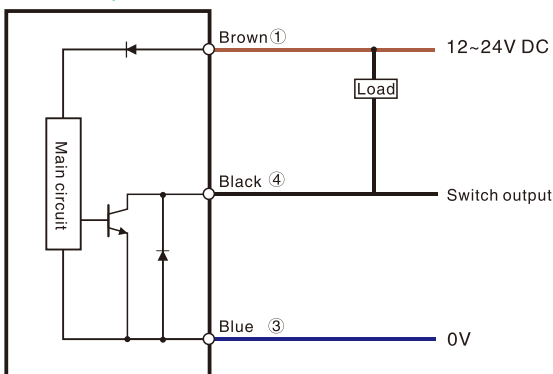
Dimensions

Unit: mm



Circuit diagram

NPN Output



PNP Output

