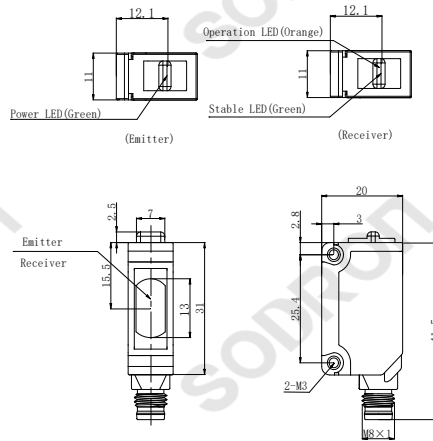




### Dimensions



### Model

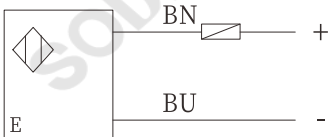
PF31-T10BNO(E)-E1  
PF31-T10BNC(E)-E1  
PF31-T10BPO(E)-E1  
PF31-T10BPC(E)-E1

### Product features

- Through beam, 850nm infrared light
- ASIC, Fast response, High frequency
- IEC IP67

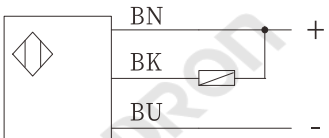
### Connection

#### Transmitter

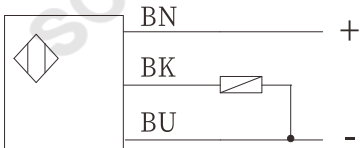


#### Receiver

##### NPN



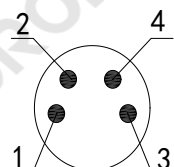
##### PNP



### Terminal Number and Function Table

### Technical parameters

Sensing method	Through beam		
Model	NPN	PF31-T10BNO(E)-E1	PF31-T10BNC(E)-E1
	PNP	PF31-T10BPO(E)-E1	PF31-T10BPC(E)-E1
Sensing distance	10m		
Standard target	> Φ15mm (Opaque object)		
Output mode	Dark ON		Light ON
Light source	850nm infrared light		
Supply power	DC 12~24V ±10% , impulse (P-P) <10%		
Directivity angle	3~15°		
Residual voltage	<2V (Load Current: ≤100mA)		
Current consumption	<15mA		
Load current	≤100mA		
Circuit protection	Power reverse indirection connection protection, short-circuit protection		
Response time	<0.5ms		
Indicator light	Output LED: Orange LED、 Power/stable: Green LED		
Connection	connector type (M8 4pin male)		
Ambient temperature	Work: -25 ~ +55°C; Store: -30 ~ +70°C (No dew condensation or icing allowed)		
Ambient humidity	Work: 35 ~ 85%RH, Store: 35 ~ 95%RH, (No dew condensation)		
Ambient illumination	Sunlight :10,000Lx, lamplight:3,000Lx		
Withstand Voltage	1000 VAC, 50/60 Hz, 1 min.		
Insulation resistance	> 20MΩ (DC500V megger) between current-carrying parts and case		
Anti-vibration	10~55Hz double-amplitude 1.5mmX,Y,Z 2h		
Impact resistance	500 m/s <sup>2</sup> in X, Y, Z directions for 3 times		
Protection degree	IEC IP67		
Material	Housing	PBT	
	Lens	PMMA	



Terminal No.	Technical parameters
1	+V
2	No connection
3	0V
4	output