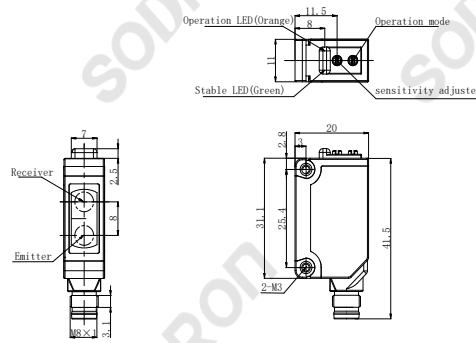




**Dimension**



**Model**

PF31V-P03BNSR-E1  
PF31V-P03BPSR-E1

**Technical parameters**

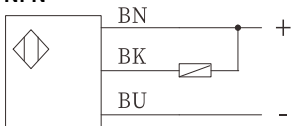
Detection method	Retro-reflective
Model	NPN PF31V-P03BNSR-E1 PNP PF31V-P03BPSR-E1
Sensing distance	3m (with a 40 x 60 mm reflector)
Output mode	Light ON/Dark ON (Adjustable)
Standard target	> Φ75mm (Opaque object)
Light source	620nm Red LED
Supply power	DC 12~24V ±10% , impulse (P-P) < 10%
Directivity Angle	2~10°
Residual Voltage	< 2V (Load Current : ≤100mA)
Current consumption	<12mA
Load Current	≤100mA
Circuit protection	Power reverse indirection connection protection, short-circuit protection
Response time	<1ms
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> (X, Y, Z directions, 3 times)
Protection degree	IEC IP67
Material	Housing PBT Lens PMMA

**Product Features**

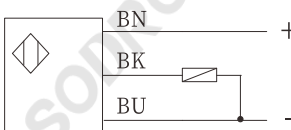
- Retro-reflective Sensor with M.S.R.
- ASIC, Fast Response, High Frequency
- IEC IP67

**Connection**

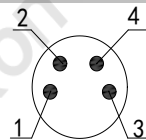
**NPN**



**PNP**



**Terminal Number and Function Table**



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

**Spot size**

