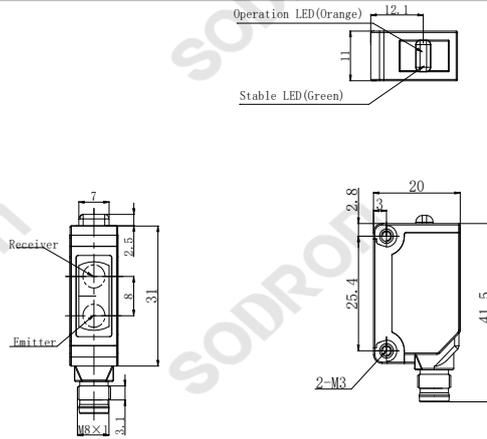




**Dimension**



CAD数据

**Model**

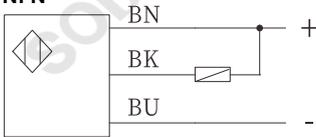
PF31-R04BNOR-E1  
PF31-R04BNCR-E1  
PF31-R04BPOR-E1  
PF31-R04BPCR-E1

**Technical parameters**

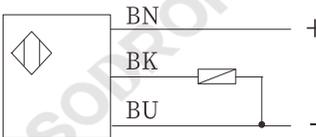
Sensing method	Retro-reflective		
Model	NPN	PF31-R04BNOR-E1	PF31-R04BNCR-E1
	PNP	PF31-R04BPOR-E1	PF31-R04BPCR-E1
Sensing distance	4 m (with a 40 x 60 mm reflector)		
Standard target	> Φ75mm (Opaque object)		
Output mode	Dark ON		Light ON
Light source	620nm Red LED		
Supply power	DC 12 ~ 24V ±10% , impulse (P-P) < 10%		
Directivity Angle	2~10°		
Residual Voltage	< 2V (Load Current: ≤100mA)		
Curent consumption	<15mA		
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 allowde)		
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-carring parts and case		
Anti-vibration	10~55HZ double-amplitude 1.5mmX,Y,Z 2H		
Anti-impact	500m/S² X, Y,Z , directions for 3 times		
Protection degree	IEC IP67		
Material	Housing	PBT	
	Lens	PMMA	

**Connection**

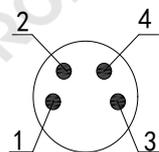
**NPN**



**PNP**



**Terminal Number and Function Table**



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

端子	定义	
1	BN	DC10~30V
2	BU	GND
3	BK	输出

