



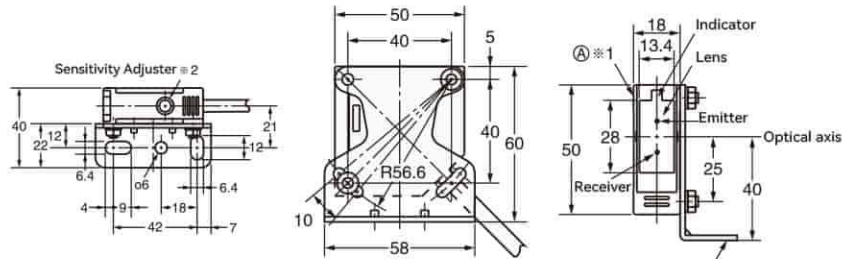
PC31	-	B	M01	R
Series		Sensing Method	Sensing Distance	Output Mode
PC31 Series		B: Diffuse Reflective T: Through beam D: Retro-reflective	500:500mm 1M5:1.5M M04:4M M15:15M	R: Relay output

- Features
- High precise sensitivity adjustor(Diffuse reflective)
 - Red LED light source
 - Relay contact output
 - Reverse polarity/Short circuit protection
 - Surge suppressor
 - Flexible cable/ Oil resistance

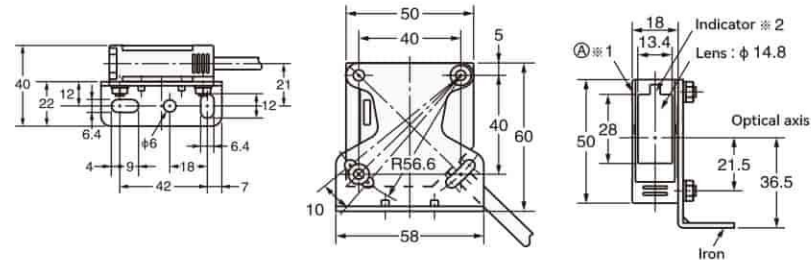
Model			
Relay	PC31-BM01R	PC31-DM07R-3	PC31-TM20R
Specification			
Sensing Method	Diffuse reflective	Retro-reflective	Through-beam
Light Source/Wavelength	Red LED (Visible)		
Sensing Distance	1M	7M	20M
Standard Sensing Object	Opaque object		
Differential Travel	20% Max. of sensing distance	—	—
Sensitivity Adjustment	Yes		
Response Time	1.0ms Max.		
Power Supply Voltage (Operating Voltage Range)	12-24VDC, Ripple (p-p) 10% Max. (10-30VDC)		
Current consumption	5mA Max. @NPN. 7mA Max. @PNP 100mA Max. @12VDC, 200mA Max.@24VDC		
Residual Voltage	1V Max.		
Ambient Illumination	Incandescent lamp 3000lx Max.		
Protection Circuit	Reverse Polarity/Overload/Short circuit protection/ Surge suppressor		
Ambient Temperature Range	Operating -25~+70°C / storage: -40~+80°C (with no icing or condensation)		
Ambient Humidity Range	Operating 45~85%/ storage: 35-95% (with no icing or condensation)		
Insulation Resistance	20MΩ Min. (at 500VDC) between current carrying parts and case		
Dielectric Strength	1000VAC 50/60Hz for 1 minute between current carrying parts and case		
Vibration Resistance	10-55Hz 1.5mm double amplitude for 2 hours each in X, Y, Z directions		
Shock Resistance	500 m/s² 10 times each in X, Y and Z directions		
Degree of Protection	IEC standards: IP50		
Materials of Case/Sensing Surface	Case: PBT/ Sensing Surface: Acrylate resin		
Connection Method	Pre-wired 2M		
Accessories	—	Reflector	—

Dimension Diagram

Unit: mm



PC31-BM01R/PC31-DM07R-3



PC31-TM20R

Wiring Diagram

