

B1-Sensor®

INDUCTIVE PROXIMITY SWITCH

MANUAL



Thanks for using B1-Sensor electrical, for your safety, please read the following before using.

Caution for your safety

Please keep these instructions and review them before using this unit.
Please observe the cautions that follow;
Warning : Serious injury may result if instructions are not followed.
Caution : Product may be damaged, or injury may result if instructions are not followed.
The following is an explanation of the symbols used in the operation manual.
Caution : Injury or danger may occur under special conditions

Warning

In case of using this unit with machinery (Ex: nuclear power control, medical equipment, ship, vehicle, train, airplane, combustion apparatus, safety device, crime/disaster prevention equipment, etc) which may cause damages to human life or property, it is required to install fail-safe device. It may cause a fire, human injury or damage to property.

Caution

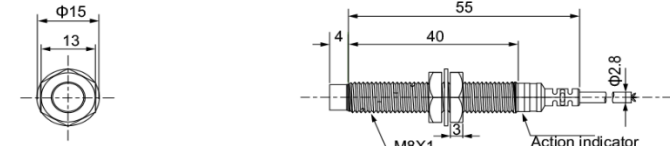
- Do not use this unit in place where there are flammable, explosive gas, chemical or strong alkalis, acids. It may cause a fire or explosion.
- Do not impact on this unit. It may result in malfunction or damage to the product.
- Do not apply AC power and observe the rated specification. It may result in serious damage to the product.

Specifications

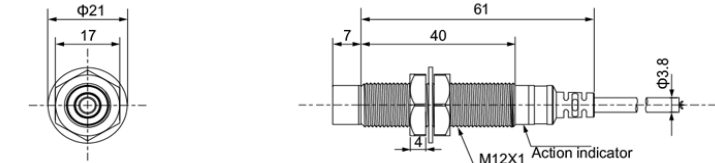
Model	BIR08	BIR12	BIR18	BIR30		
Sensing distance	1mm 2mm	2mm 4mm	5mm 8mm	10mm 15mm		
Hysteresis	Max. 10% of sensing distance					
Standard sensing target	8 * 8 * 1mm (Iron)	12 * 12 * 1mm (Iron)	18 18x11mm (Iron)	25 x 25x1mm (Iron)	30 x 30x1mm (Iron)	45*45* 1mm (Iron)
Setting distance	0-1.05mm 0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0-10.5mm
Power supply	12-24VDC (10-30VDC)					
Current consumption	10mA WT					
Response frequency	1.5kHz 1kHz	1.5kHz 500Hz 500Hz 350Hz 400Hz 200Hz				
Residual voltage	Max. 2VC	Max. 1.5V				
Affection by Temp.	Within ± 10C max of sensing distance at 20C in temperature range of -25 -7010 (CJY08 Series: Max.					
Control output	Max. 200mA					
Insulation resistance	Min. 50MO (500VDC megger)					
Dielectric Strength	1500VAC 50/60HZ for 1 minute					
Vibration	1mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 2 hours					
Shock	500m/s²(50G)X,Y,Z directions for 3 times					
Indicator	Operating indicator (Red LED)					
Enviroment	Ambient temperature	-25~+70°C, Storage: -30~+80°C				
	Ambient humicfty	35~95%RH, Storage: 35~95%RH				
Protection circuit	Surge protection, Reverse polarity protection, Overload & short circuit protection					
Protection	IP67(IEC Standards)					
Materials	Case/Nut: Nikel plated Brass, Washer: Nikel plated Iron, Sensing surface: Heat-resistant ABS, Standard cable(Black): Polyvinyl chloride(PVC), Oil resistant cable(Gray): Oil resistant Polyvinyl chloride(PVC)					
Approval	® ce					

Dimensions

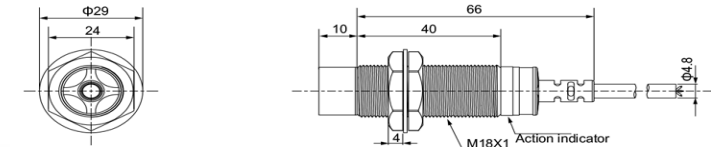
BIR08



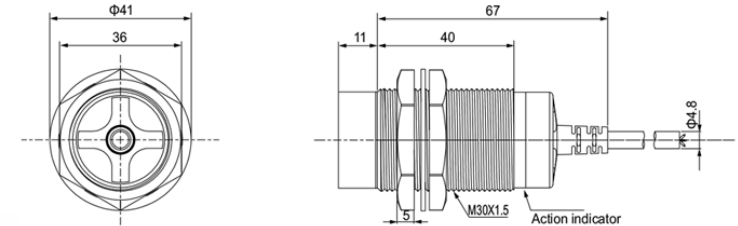
BIR12



BIR18



BIR30



Ordering Information

B I R 18 - 8 D NO

