



KCR/S Series

Capacitive Proximity Sensor

- Sensing of metal, plastic, liquid, wood etc.
- Easy to adjust sensing distance
- Various Sizes (M12, M18, M30)
- Long life cycle and high reliability



Specifications

Detected Objects	Metal, Plastic, Liquid, Granular Materials etc.
Hysteresis	Max. 4% ~ 20% of sensing distance
Operation Indicator	LED
Protection Circuit	Surge protection circuit, Reverse polarity protection circuit
Ambient Temperature	-25°C to 70°C
Ambient Humidity	35% ~ 95%
Affection by Temperature	Max. ±10% for sensing distance at ambient temperature 23°C
Affection by Voltage	Max. ±1% for sensing distance at rated voltage ±15%
Insulation Resistance	Over 50MΩ (at 500VDC megger)
Vibration	1.5mm amplitude at frequency of 10Hz ~ 55Hz in each of X, Y, Z direction for 2 hours
Shock	500m/S ² (approx. 50G) in each of X, Y, Z direction for 10 times
Material	KCR: Nickel copper plate KCS: Plastic
IP rate	IP67

Ordering Information

KCR **K5** **21** **3**
 ① ② ③

① Size/ Detecting Face	E4	M12	Size	Sensing Distance	Detecting Face
	G4		2mm	Flush	
	H5	M18	4mm	Non-Flush	
	K5		5mm	Flush	
	L6	M30	8mm	Non-Flush	
	P6		10mm	Flush	
			15mm	Non-Flush	
② Output/ Power Supply		Type	Output	Power Supply	
	11	DC 3-wire	NPN NO	10 ~ 30VDC	
	21		NPN NC		
	31		PNP NO		
	41		PNP NC		
	55*	AC 2-wire	NO	20 ~ 240VAC	
65*	NC				
③ Cable Type	no mark	2m cable			
	3	M12 Connector			

* For M18(H5, K5) only

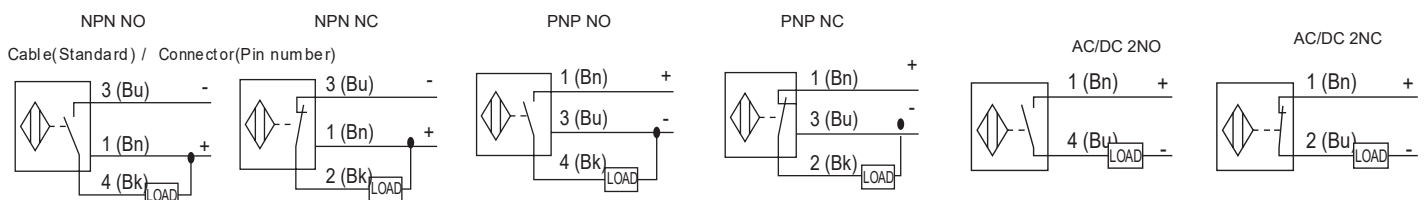
KCS Series

Model	Output	Wiring	Type/ Power	Sensing Distance	Body
KCS LG11	NPN NO	2m cable	DC 3-wire, 10~30 VDC	10mm	Rectangular Plastic body Non-flush
KCS LG21	NPN NC				
KCS LG31	PNP NO				
KCS LG41	PNP NC				

	KCR DC 3-wire	KCR AC 2-wire	KCS DC 3-wire
Power Supply	10 ~ 30VDC	20 ~ 240VAC	10 ~ 30VDC
Current Consumption	Max. 15mA	-	Max. 10mA
Leakage Current	-	Max. 2.2mA	-
Voltage Drop	Residual Voltage: Max. 2V Load Current: Max. 200mA	Load Current : 5 ~ 300mA	Residual Voltage: Max. 1.5V Load Cur- rent : Max. 200mA
Dielectric Strength	1,000VAC, 50/60Hz for 1 min	4,000VAC, 50/60Hz for 1 min	1,000VAC, 50/60Hz for 1 min
Max. Response Frequency	50Hz	15Hz	30Hz

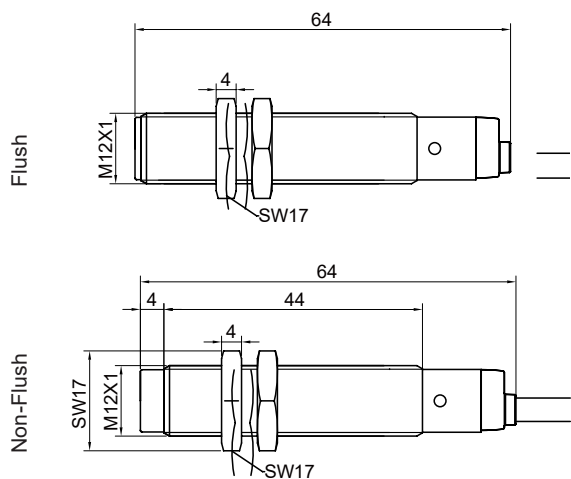
Wiring Diagram

Bu = Blue Bn = brown Bk = Black

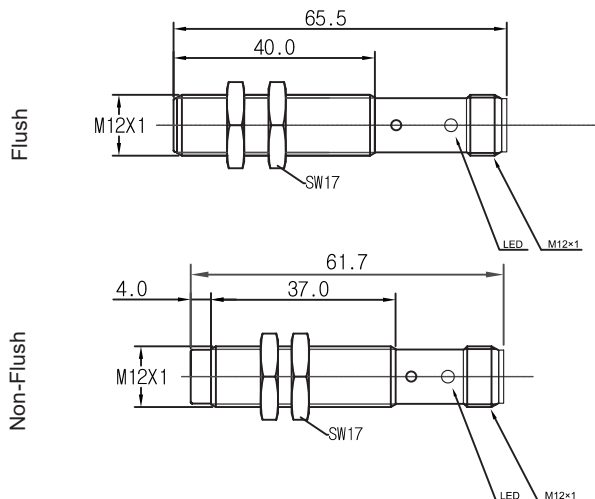


Dimensions (Unit: mm)

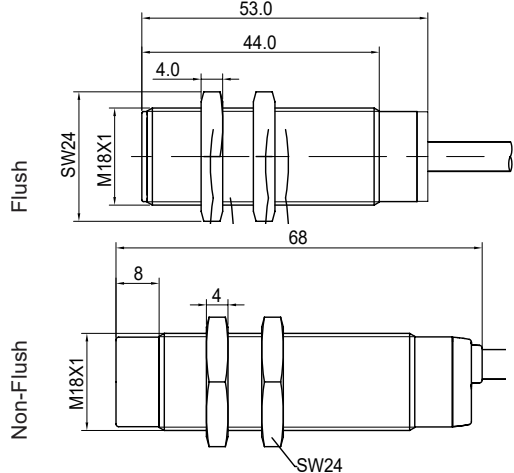
KCR M12



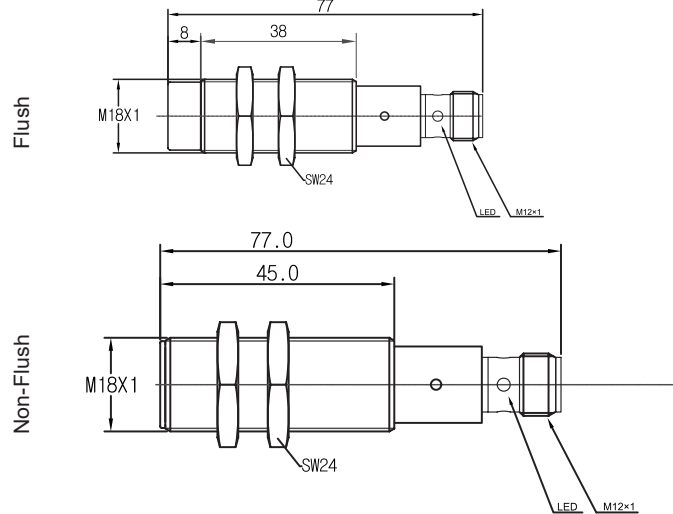
KCR M12 with M12 Connector



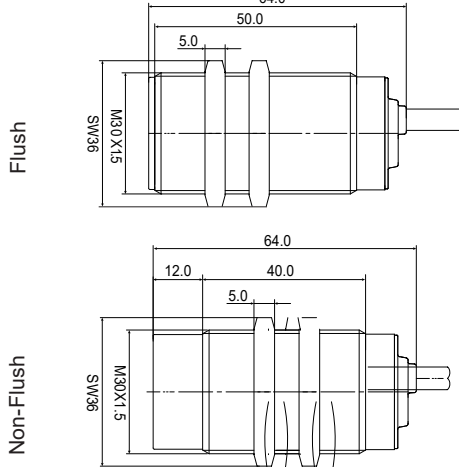
KCR M18



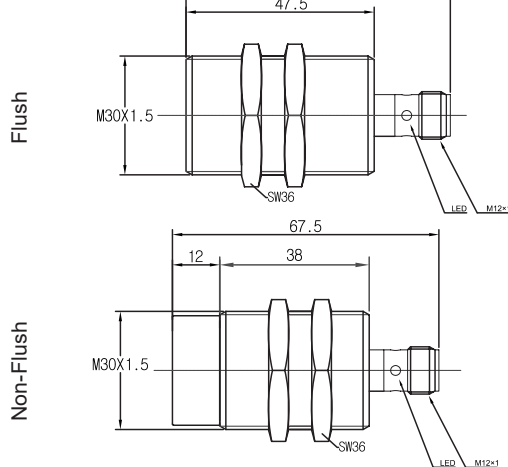
KCR M18 with M12 Connector



KCR M30



KCR M30 with M12 Connector



KCS-LG

