

KPR Series

Cylindrical Inductive Proximity Sensors

- Wear-resistant full stainless housing (M3, M5)
- Built-in protection circuits
- High intensity LED operation indicator
- Long life cycle and high reliability



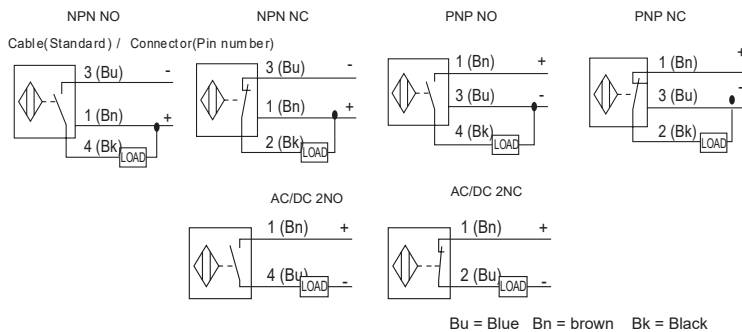
Ordering Information

KPR	A1	11	(3)
	①	②	③
① Size/ Detecting Face		Size	Sensing Distance
	A1	M3	1mm
	B2	M5	1mm
	CH3	M6.5	1.5mm
	EH3		2mm
	E3	M8	2mm
	F3		3mm
② Output/ Power Supply		Type	Output
	11	DC 3-wire	NPN NO
	21		NPN NC
	31		PNP NO
	41		PNP NC
	51	DC 2-wire	NO
	61		NC
③ Cable Type	no mark	2m cable	for size M3, M5, M6.5 only
	2	M8 Connector	for size M5, M8 only
	3	M12 Connector	for size M8 only

Specifications

Detected Objects	Iron, Aluminum, Copper, Stainless Steel, Brass (Reduced sensing distances for non-iron metals)
Hysteresis	Max. 15% of sensing distance
Operation Indicator	LED
Protection Circuit	load short circuit protection, Surge protection circuit, Reverse polarity protection circuit
Ambient/Storage Temperature	-25°C ~ 70°C (with no icing)
Ambient/Storage Humidity	35% ~ 95% (with no icing)
Affection by Temperature	-25°C ~ 70°C 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	1000m/s ² (approx. 50G) in each of X, Y, Z direction for 10 times
Material	Stainless Steel(M3, M5 only) / Nickel copper plated
IP rate	IP67

Wiring Diagram



			DC 3/4-wire	DC 2-wire
Power Supply			10 ~ 30VDC	
Current Consumption			Max. 10mA	Max. 0.8mA
Voltage Drop			Residual Voltage : Max. 2V Load Current: Max. 200mA	Residual Voltage : Max 4V Load Current : 3mA ~ 100mA
Dielectric Strength			1,000VAC, 50/60Hz for 1 min	
Mex. Response Frequency	M3	Flush	2500Hz	-
	M5	Flush	2500Hz	-
	M6.5	Flush/ Non-Flush	-	2500Hz
	M8	Flush	2000Hz	800Hz
		Non-Flush	1500Hz	500Hz

Dimensions (Unit: mm)

