



## Hall Effect Proximity Switches

A Hall Effect proximity switch is a non-contact electronic switch, which consist of a permanent magnet or ferromagnetic part as trigger intermediary and a Hall Effect sensor IC. The Hall sensor IC detects the change of the magnet field when the permanent magnet comes in the close proximity to it and generates an electric signal. This signal is amplified and rectified to control the output signal of the switch.



Compared with magneto-electric, optoelectronic and capacitive proximity switches, Hall proximity switches have the advantages of good output wave shape, high stability, low costs, unaffected by oil, dirt and vibration, and wide operating temperature etc. They are very suitable for integrating in PC systems and various kinds of industrial control equipments, and are optimal switches for position control, speed measurement, counting, direction detection and automatic protection etc.

### General Properties

Ambient temperature:	-25°C ~ +125°C	Ambient humidity:	35%~95%
Max. supply current:	≤ 25mA	Reverse supply voltage:	≤ -35V
Frequency range:	0~50KHz	Position repeatability:	0.02mm
Overcurrent indication:	Red LED	Sensing object:	Magnet S-pole
Max. output current:	20mA – 200mA	Power supply:	5 – 30V
Max. sensing distance:	8mm	Max. voltage drop:	0.4V – 1.0V
Isolation voltage:	AC 1500V, 50/60Hz,1min	Case material:	Brass, chrome plated

### Definition of Part number:

C	Y	K	N	8	—	20	B	L
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	

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Series name	Output type (1)	Output type (2)	Max. sensing distance	Max. output current	Power supply	Case style and number
CY	K: Open, single output B: Close, single output K/B: Open/Close double output Z: Magnetic Latching G/F: Counting/direction double output	N:NPN P:PNP	8: 8mm	02: 20mA 05: 50mA 20: 200mA	A: 5±0.25V B: 5 ~ 9V C: 4.5~24V D: 8 ~ 30V	L: Cylinder with screw B: block









