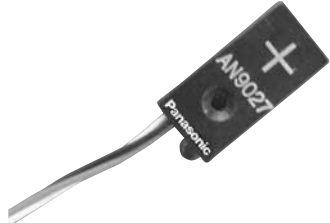


## A compact and lightweight position detection sensor



RoHS Directive compatibility information  
<http://www.nais-e.com/>

### FEATURES

#### 1. Compact and lightweight

Subminiature 10 × 20 × 5mm (.394 × .787 × .197inch) size, and ultra-lightweight at approximately only 10g .35oz even with the cable, means space-saving when it comes to machine attachments.

#### 2. Absolutely no effect from light or dust

Because the sensor is magnetically operated, ternal light and dust has no effect on the unit.

#### 3. With LED display

Operations can be easily checked with the LED display.

## SPECIFICATIONS

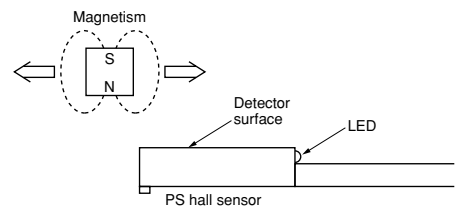
Power voltage Vcc	4.5 to 15V DC
Current consumption	Max. 17mA
Output current capacity	Max. 15mA
Rise and shutdown time	Max. 1 μsec. (When Vcc = 12V Load resistance 820Ω Output cord 1.2m)
Output saturation voltage	Max. 0.4 (when output current capacity is 15mA)
Response frequency	Min. 1KHz
Standard detection electromagnet	Rare earth magnet [(BH) max. = 20MGOe] 5 dia. × 2
Detection distance	2. 5mm .098inch
Settings distance	0 to 2mm 0 to .079inch
Movement differential	1. 5mm .059inch max. at set distance of 1mm .039inch.
Electromagnet polarity	Sensor detected at [N] pole. *No detection at [S] pole.
Ambient temperature	0°C to +55°C +32°F to +131°F
Storage temperature	-10°C to 70°C +14°F to +158°F
Insulation resistance	50MΩ (at DC 500V mega) (between lead wire and attachment board)
Voltage resistance	AC 500V 1 min. (between lead wire and attachment board)
Vibration resistance	10 to 55Hz amplitude 1.5mm .059inch 2 hours X, Y, Z each direction
Shock absorption	490m/s <sup>2</sup> {50G} X, Y, Z each axis three times each

\*These characteristics occur when there is no strong magnetic body (iron, etc.) near either the magnet or the sensor, and no external magnetic field either.

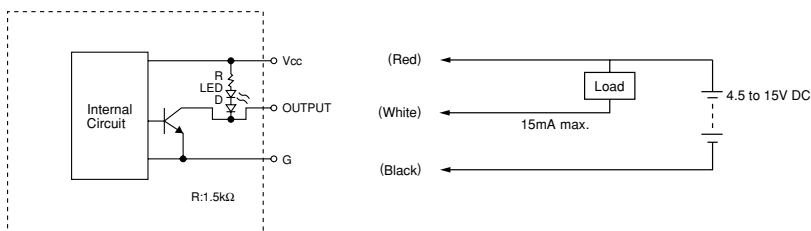
## OPERATION EXPLANATION

The PS hall sensor is a proximity switch that detects magnet. When magnet approaches the ON type while it is operating, the operating lamp (LED) illuminates.

The OFF type operates as an opposite detection way of the ON type.



## Output circuit diagram



## TYPICAL APPLICATIONS

Position fixing for assembly and processing equipment, and position detection of limit detection cylinders.

Open/close verification of PPC doors

## PRODUCT TYPE

	Specifications	Part No.
Sensor unit only	ON during operation type	AN9027
	OFF during operation type	AN9028

## DIMENSIONS

