

MAGNETIC SENSOR

**MP1021 Series**

**Digital Hall effect proximity sensor in plastic flange mount housing**



**Features**

- Three sensing orientations available in a convenient flange mount housing.
- Excellent output stability over operating temperature range.
- Compatible with unregulated power supply
- Reverse battery protection to -24VDC
- Meets IEC529 IP67 for dust and water protection
- Open collector (NPN) output can be used with bipolar switch or cmos logic circuits with suitable pull up resistor

**MP102101-03:** North pole activated unipolar switch.

- Output switches low (off) when the magnetic field at the sensor exceeds the operate point threshold
- Output switches high (on) when the magnetic field is reduced to below the release point threshold
- Interfaces with AS101002 magnet

**MP102104-06.** Bipolar latch

- Output latches high (on) in the presence of a north pole
- Output unlatches (low or off) in the presence of a south pole.

**Applications:**

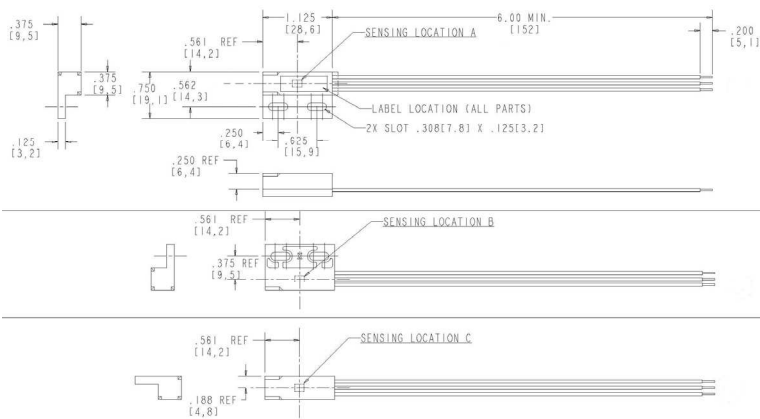
- Interrupt Switch
- Limit security
- Door position

**Specifications**

Part Number	Operating Voltage Range (VDC)	Supply Current (mA max)	Output	Output Saturation Voltage (mV max)	Output Current (mA max)	Operating Temperature Range (°C)	Function	Operate Point Gauss (max)	Release Point Gauss (min)	Sensing Location
MP102101	4.5 - 24	12	3-wire sink	500	20	-40 to 85	Switch	400 (north)	195 (north)	A
MP102102	4.5 - 24	12	3-wire sink	500	20	-40 to 85	Switch	400 (north)	195 (north)	B
MP102103	4.5 - 24	12	3-wire sink	500	20	-40 to 85	Switch	400 (north)	195 (north)	C
MP102104	4.5 - 24	12	3-wire sink	500	20	-40 to 85	Switch	60 (north)	60 (south)	A
MP102105	4.5 - 24	12	3-wire sink	500	20	-40 to 85	Switch	60 (north)	60 (south)	B
MP102105	4.5 - 24	12	3-wire sink	500	20	-40 to 85	Switch	60 (north)	60 (south)	C

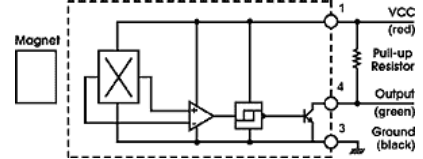
Notes: These sensors require the use of an external pull-up resistor, the value of which is dependent on the supply voltage  
Pull-up resistor should be connected between output (Green) and Vcc (Red).

**Dimensions inches (mm)**



Specifications subject to change without notice.

**Open Collector Sinking Block Diagram**



**Recommended pull-up resistor values:**

Volts DC:	5	9	12	15	24
Ohms:	1K	1.8K	2.4K	3K	3K

Last Updated 072612

