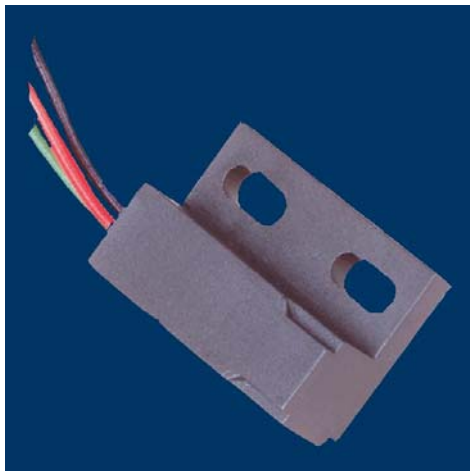


MAGNETIC SENSOR

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

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:

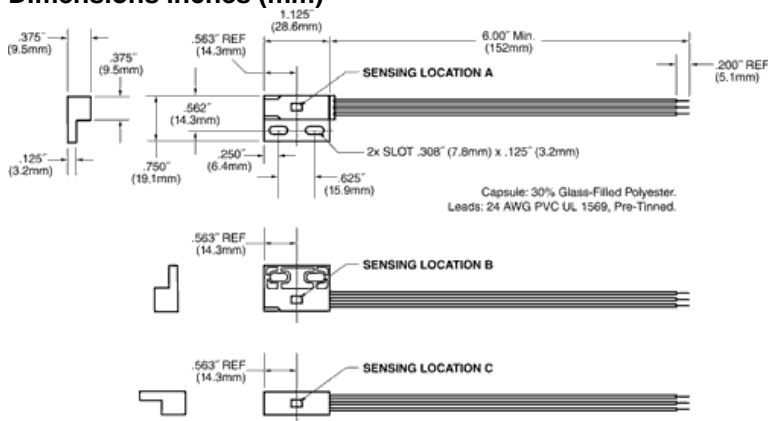
- Interrupt Switch
- Limit security
- Door position

Specifications

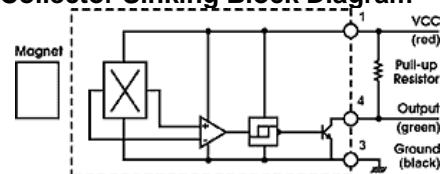
Part Number	Operating Voltage Range (VDC)	Supply Current (mA max.)	Output	Output Saturation Voltage (mV max.)	Output Current (mA max.)	Operating Temp Range (°C)	Function	Operate Point Gauss (max.)	Release Point Gauss (min.)	Sensing Location
MP102101	4.5 – 24	12	3-wire sink	500	25	-40 to 85	Switch	400 (north)	195 (north)	A
MP102102	4.5 – 24	12	3-wire sink	500	25	-40 to 85	Switch	400 (north)	195 (north)	B
MP102103	4.5 – 24	12	3-wire sink	500	25	-40 to 85	Switch	400 (north)	195 (north)	C
MP102104	4.5 – 24	12	3-wire sink	500	25	-40 to 85	Latch	60 (north)	60 (south)	A
MP102105	4.5 – 24	12	3-wire sink	500	25	-40 to 85	Latch	60 (north)	60 (south)	B
MP102106	4.5 – 24	12	3-wire sink	500	25	-40 to 85	Latch	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)



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

Specifications subject to change without notice.

Last Updated 0111