

## 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
- MP1012101-03 — north pole activated unipolar switch
  - 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 switch
- Door position

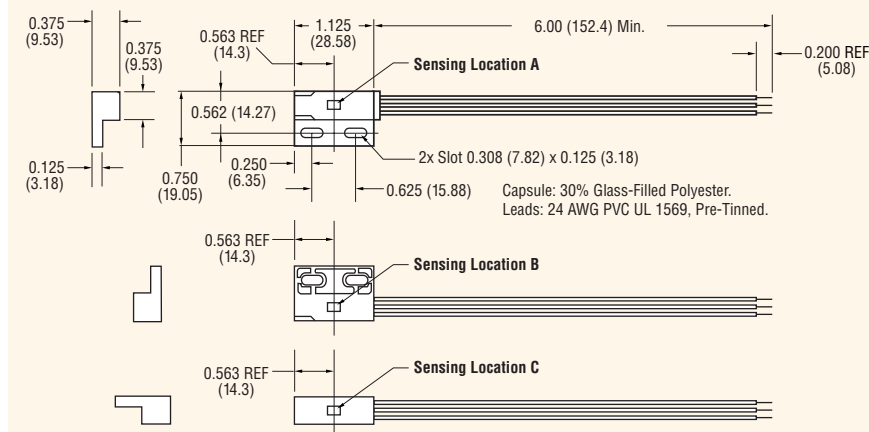
### Specifications

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. See page 18 for recommendations. Pull-up resistor should be connected between output (Green) and Vcc (Red).

### Dimensions inches (mm)

All tolerances  $\pm 0.005$  (0.13) unless otherwise noted.



### Open Collector Sinking Block Diagram

