

MAGNETIC SENSOR

# MP1001 Series



**Solid state, magnetic proximity sensors with electrical immunity protection.**

**Features**

- Stable output over operating temperature range
- Compatible with unregulated power supply
- Reverse battery protected to -24VDC
- Internal circuit protection to IEC529 1000
  - EMI resistant to 10V/m, 30MHz to 1GHz
  - ESD resistant to 4kV (contact discharge)
  - Fast transient resistant to 2kV
  - Conducted immunity resistant to 10VRMS @ 150kHz to 80MHz
  - EMC compatible 30A/m @ 50Hz
- Meets IEC529 IP67 for dust and water protection
- South pole activated
- Open collector (sinking or NPN) output can be used with bipolar or CMOS logic circuits with suitable pull up resistor
  - 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

**Applications**

- Safety door
- Power sliding door
- Flow sensing

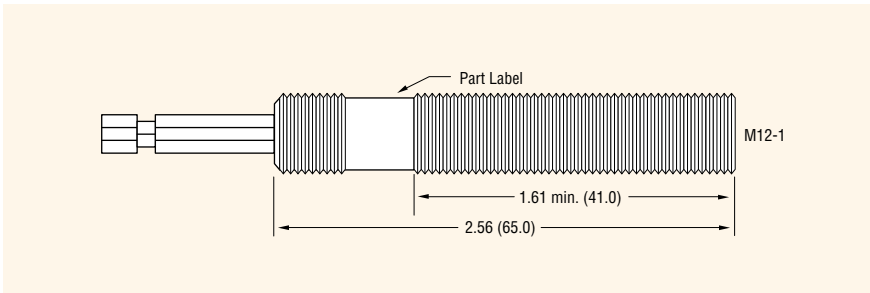
**Specifications**

Part Number	Operating Voltage Range (VDC)	Supply Current (mA max.)	Output	Output Saturation Voltage (mV max.)	Output Current (mA max.)	Operating Temp Range (°C)	Storage Temp Range (°C)	Operate Point Gauss (max.)	Release Point Gauss (min.)	Housing	Cable	Connector
MP100101	5 – 24	12	3-wire sink	700	25	-40 to 105	-40 to 105	300	60	SST	—	12mm circular
MP100102	5 – 24	12	3-wire sink	700	25	-40 to 125	-40 to 125	300	60	SST	22 AWG x 1m BBB	—

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 (Black) and Vcc (Brown).

**Dimensions inches (mm)**

All tolerances ±0.005 (0.13) unless otherwise noted.



**Open Collector Sinking Block Diagram**

