

MAGNETIC SENSOR

**MP1001 Series**

**Solid state magnetic proximity sensor 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 IEC 529 1000
- EMI resistance to 10V/m, 30MHz to 1GHz
- ESD resistance to 4KV (contact discharge)
- Fast transient resistance to 2kV
- Conducted immunity resistance to 10VRMS@150kHz to 80MHz
- EMC compatible to 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

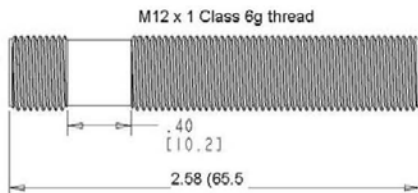
**Specifications**

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	—

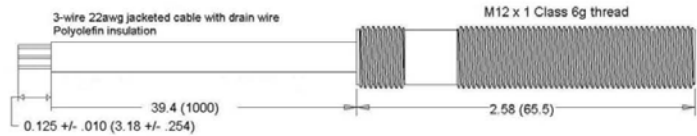
Notes: These sensors require the use of an external pull-up resistor, the value of which is dependent on the supply voltage. Pull-up resistor should be connected between output (Black) and Vcc (Brown).

**Dimensions inches (mm)**

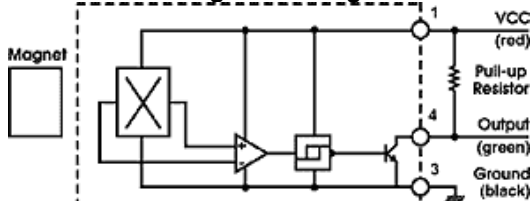
**MP100101**



**MP100102**



**Open Collector Sinking Block Diagram**



Specifications subject to change without notice.

**Recommended pull-up resistor values:**

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

Last Update 062911

