## **MP1013 Series**



#### Hall-effect proximity sensor with convenient snap-fit mounting.

#### **Features**

- · Solid State Reliability
- Excellent output stability over operating temperature range
- Regulated power supply not required
- 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

**MP101301 and MP101302** – south pole sensitive 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 AS101001 magnet

#### MP101303 - bipolar latch

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

## Applications:

Speed sensing

# ensing • Door interlock sensing

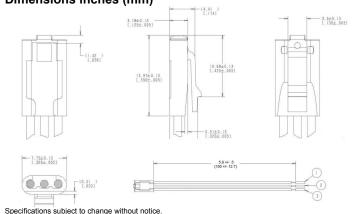
#### **Specifications**

Part Number	Operating Voltage Range (VDC)	Supply Current (mA max)	Output	Output Saturation Voltage (mV max)	Output Current (mA max)	Operating Temperature Range (°C)	Storage Temperature Range (°C)	Operate Point Gauss (max)	Release Point Gauss (min)	Leads	Reverse Battery Protection
										24 awg x	
MP101301	3.8 - 24	7.5	3-wire sink	400	25	-40 to 85	-40 to 85	245	60	150mm	-30VDC
										24 awg x	
MP101302	3.8 - 24	7.5	3-wire sink	400	25	-40 to 150	-40 to 150	245	60	150mm	-30VDC
MP101303	4.5 - 24	5	3-wire sink	500	20	-40 to 85	-40 to 85	60	-60 (latch)	24 awg x 150mm	None

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).

Recommended pull-up resistor values:													
Volts DC	5	9	12	15	24								
Ohms	1K	1.8K	2.4K	3K	3K								

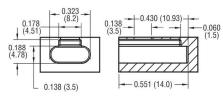
# Dimensions inches (mm)



Open Collector Sinking Block Diagram

Magnet

#### **Sensor Pocket**



Revised 101212