

# 1 **KOOLANCE** INS-FM18 Coolant Flow Meters v 1.4

Koolance INS-FM17N and INS-FM18 flow meters use a normally-open magnetic reed contact switch which responds to internal impeller rotation.

The flow meters should not be directly connected to high power outputs like 12VDC fan headers or similar controllers. If connected directly to a custom circuit, the intended current range is 10mA or less. A signal graph is provided to the right.

## Specifications

Flow Rate Range:

2.0 - 15 LPM (0.53 - 4 GPM)

Fluid Temperature Range:

0 - 70 °C (32 - 158 °F)

**IMPORTANT NOTES:** Be sure to install the flow meter in the correct liquid direction! This is indicated by the arrow on the flow meter's body. Residual air pockets in the flow meter will not result in an accurate reading.

## Frequency Adapter

An optional Koolance power adapter (ADT-FM03) can be used to multiply the flow meter impeller signal. This allows most fan detection software, including many computer BIOS programs, to see the flow meter tachometry as if it were a 12VDC fan RPM signal. The multiplied RPM signal can allow 3rd-party software to log or enable an alarm event for the flow meter impeller.

With ADT-FM03, flow meter "RPMs" represent approximate coolant flow rate in mL/min, and not actual revolutions. Be aware that 3rd-party software and BIOS programs must be configured properly if the flow meter will be used to initiate a safety procedure.

The connections and functions for ADT-FM03 are illustrated below.

