Specification sheet

BRD01
MAG Single Channel Loop Detector

Date: 28 August 2013

1.0 Introduction

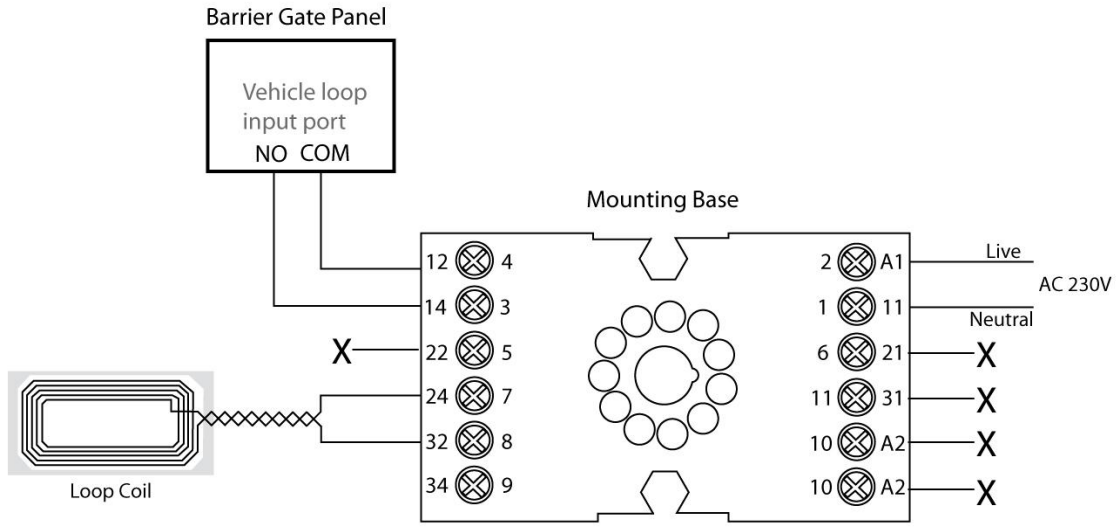
MAG BRD01 is a single channel loop detector. The principle is based on a change in the inductance with the loop which is caused by the metallic component of passing vehicles which are picked up & evaluated by a microprocessor.

BRD01 simplified design is well balance between affordability and performance stability, Ideal solution for site that requires standard function,

2.0 Technical Data

Supply voltage AC	220V
Sensitivity	Adjustable in 3 increments
Operating temperature	-20˚C to +65˚C
Reaction time	100ms
Frequency range	20 kHz to 170 kHz
Loop inductance	Ideal is 80µH to 300µH
Loop connection	< 5 m optimal
Loop connection wiring	Maximum length 200 meters, twisted at least 20 times per meter
Dimension	35 x 74 x 85 mm (W x H x L)
Net Weight	300g

3.0 Connection Diagram

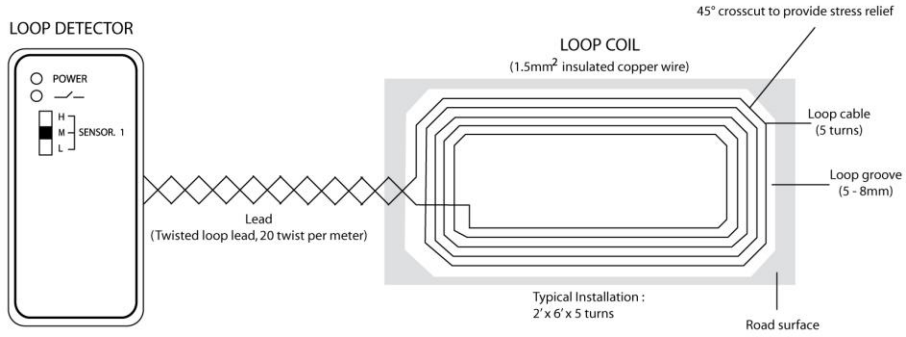


4.0 Installation Information

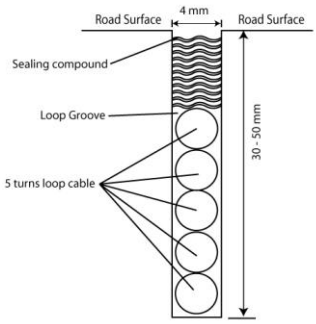
Loop and feeder specification

The loop must consist of multi-strand insulated copper wire with cross-sectional area equivalent to 0.75 mm2 and above. The insulator of the wire must be able to withstand high temperature and corrosion. Do not use single strand copper wire as it will easily break.

When long loop feeders are used, or feeders are routed together with other electrical wiring, the use of a screened cable is suggested for the feeder. The screen must be earthed at the detector end only.



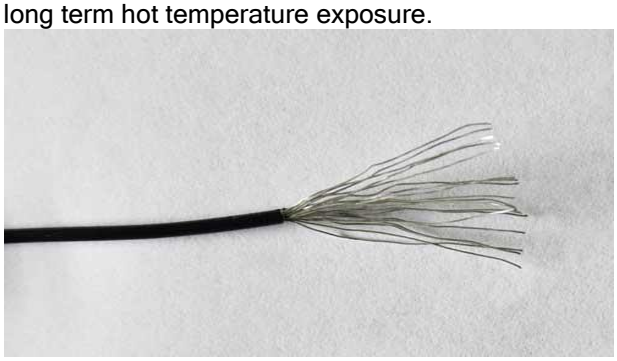
Top View



Side View

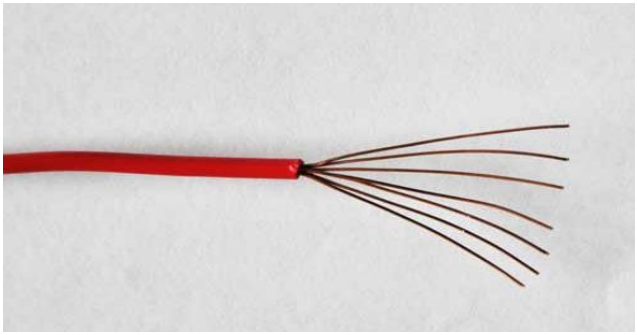
High temperature loop cable (RECOMENDED)

Loop cable 0.75 mm2 stranded wire with Teflon insulator. Recommended cable when hot asphalt is used to fill into loop groove. Great resistant against long term hot temperature exposure.

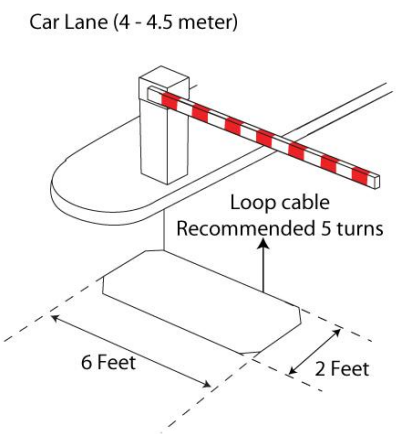


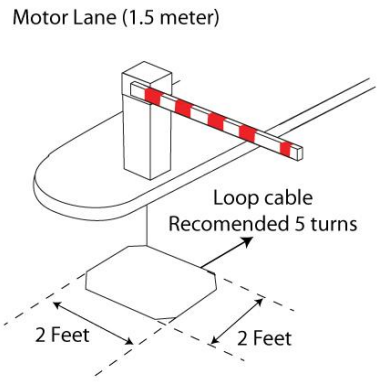
Standard loop cable

Loop Cable 1.5mm² or 16awg stranded wire. Can only use silicon glue to fill into loop groove to avoid melting the insulator



Typical installation diagram





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