BRD01

MAG Single Channel Loop Detector



Date: 11 October 2014

1.0 Introduction

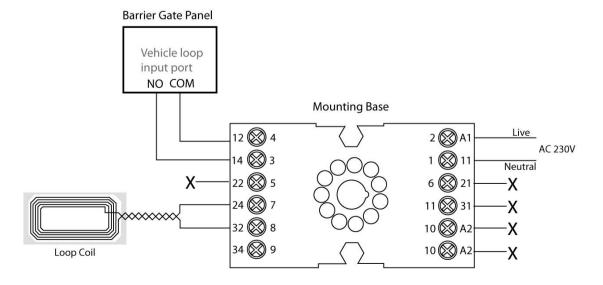
MAG BRD01 is a single channel loop detector. The principle is based on a change in the inductance with the loop which is caused by the metallic component of passing vehicles which are picked up & evaluated by a microprocessor.



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



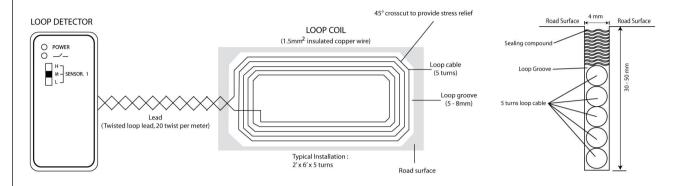
© 2016_SP_BRD01 1

4.0 Installation Information

Loop and feeder specification

The loop must consist of multi-strand insulated copper wire with cross-sectional area equivalent to 0.75mm2 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 used of a screened cable is suggested or the feeder. the screen must be earthed at the detector end only



Top View

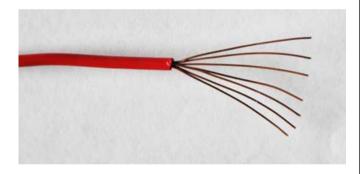
High temperature loop cable (RECOMMENDED) Loop cable 0.75 mm2 stranded wire with Teflon insulator. Recommended cable when hot asphalt is used to fill into loop groove. great resistant against long term hot temperature exposure.



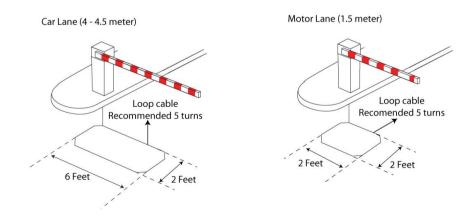
Standard loop cable

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

Side View



Typical installation diagram



Disclaimers

MAG reserves the right to make changes, without notice, in the products, including circuits, standard cells, and/or software, described or contained herein in order to improve design and/or performance. MAG assumes no responsibility or liability for the use of any of these products, conveys no license or title under any patent, copyright, or masks work right to these products, and makes no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified.

© MAG. All rights reserved. Date released: 11 OCTOBER 2014

© 2016_SP_BRD01 2