BRD01
MAG Single Channel Loop Detector

Date: 28 August 2013

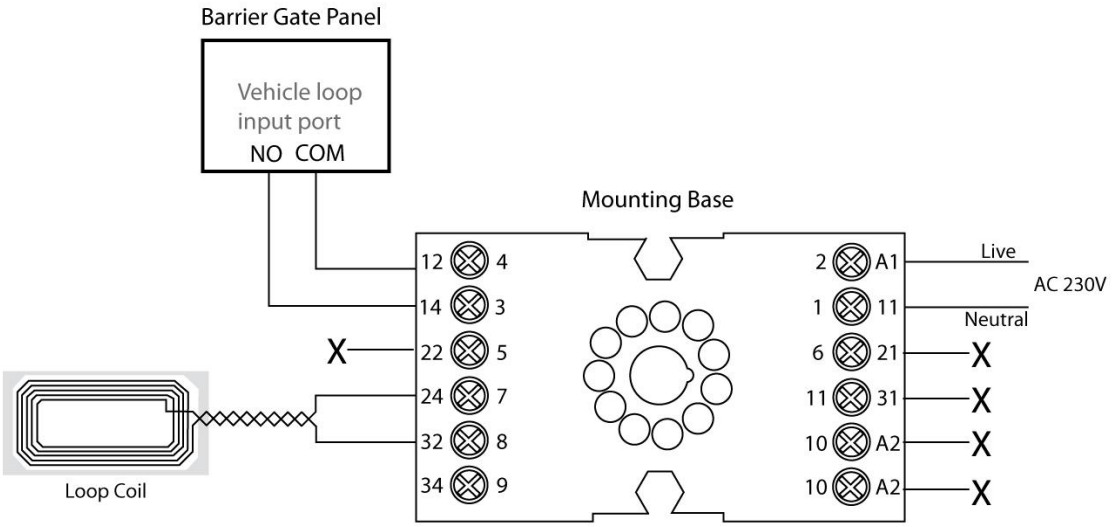
1.0 Introduction

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.

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

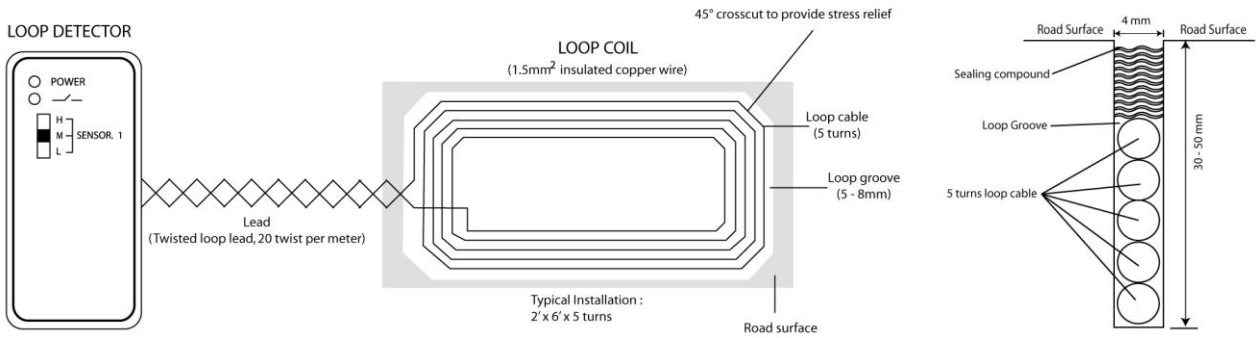
3.0 Connection Diagram



4.0 Installation Information

Loop and feeder specification

The loop must consist of insulated wire with a minimum copper cross-sectional area equivalent to 1.5 mm2. The feeder should be of the same material but twisted a minimum of 20 twists per meter. Joints in the loop or feeder are not recommended. Where this is not possible, joints are to be soldered and terminated in a waterproof joint bow. This is extremely important for reliable detector performance. 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.

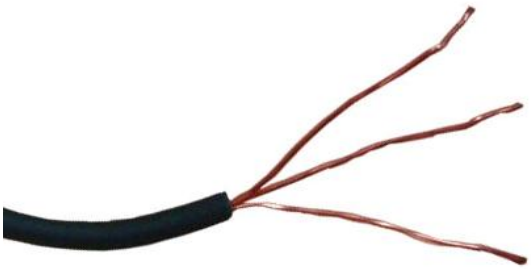


Top View

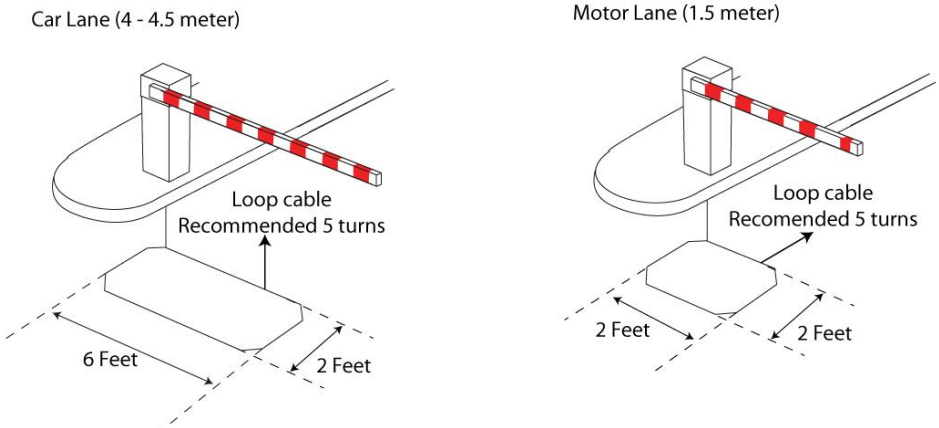
Side View

Loop cable specification

Loop Cable 1.5mm² or 16awg stranded wire (3 copper)



Typical installation diagram



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