

# **BRD05 Single channel Loop Detector**

WWW.MAG.COM.MY



### Description

MAG BRD05 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.

With EXTRA WIDE INDUCTANCE (EWI), BRD05 provides a wider inductance ideal for all loop coil installation.

### **Technical Parameters**

Input Voltage	230ACV±10%
Operating temperature	-25°C to +70°C
Reaction time	50ms
Frequency range	20KHz to 200KHz
Loop coil inductance	Max limit of 40µH to 1000µH (EWI), best performance is 80µH to 300µH
Loop coil connection	< 10 m optimal
Loop coil connection wiring	Maximum length 200 meter, twisted at least 20 times per meter
Dimension	36mm (W) x 78mm (H) x 85mm (L)
Net weight	250g

## **Connection Diagram**



### Installation information

#### Loop and feeder specification

The loop must consist of multi-strand insulated copper wire with cross-sectional area equivalent to 0.75mm<sup>2</sup> 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 break easily.

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





Side view

#### High temperature loop Cable (RECOMMENDED)

Loop cable 0.75 mm<sup>2</sup> 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 1.5mm<sup>2</sup> or 16awg stranded wire. can only use silicon glue to fill into loop groove to avoid melting the insulator.



Disclaimer: \*Please note the cable recommended is not included or supply by MAGNET

### Typical installation diagram



© COPYRIGHT 2021. This documentation served as a reference only. It is subject to change without further notice. All the diagrams and information in this documentation may not be duplicated or modified in any form without the written approval from the management.