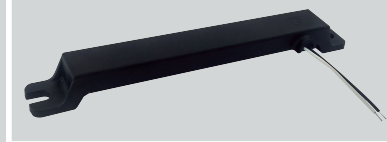


KGEA-MRHB

Middle Range Antenna LF for smart entry system.

EMITTER ANTENNAS & SWITCHES / MIDDLE RANGE



FEATURES

The Middle range antenna have been designed in order to reduce the number of antennas respect to the total number short antennas with equal or better performance reading distance and H-field around the whole vehicle

01 CHARACTERISTICS

Depending on the requirements and location of the antennas in the vehicle and taking into account its exposure to environmental conditions, grade IP waterproof, mechanical robustness, etc.. PREMO offers from LPM technology, to Polyurethane, mixed LPM-resin and HPM.

New Middle Range Antenna with Low Pressure Technology (LPM)

- › LPM is a well know technology in PREMO
- › Vert fast to produce (No Curing needed)
- › IP56 grade Waterproof

New Middle Range Antenna with PU-resin

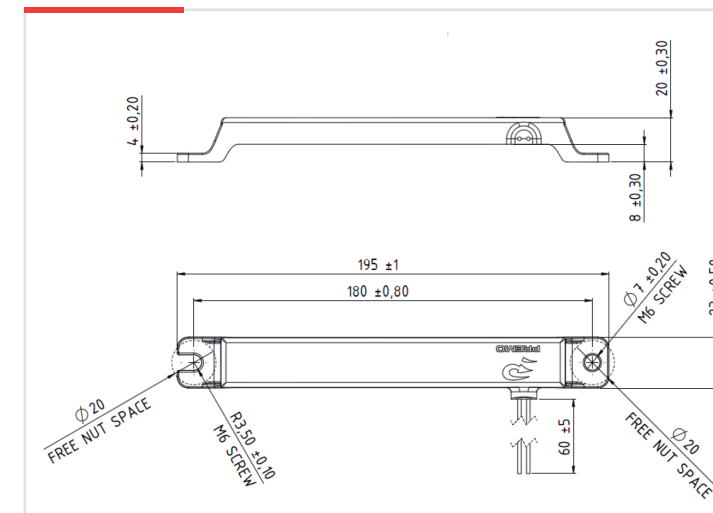
- › High mechanical robustness
- › IP68 grade Waterproof

THE MAIN TECHNICAL AND ECONOMIC ADVANTAGE

- › Middle antenna (length until 200mm).
- › External housing shape H-bridge (best performance electrical on metal surfaces). Material PBT-GF30% or PA66-GF30%
- › Strong anchor points which provide an easy assembly and will ensure mechanical robustness
- › Higher impact absorption and mechanical reduction preventive.
- › Connector located outside assembly housing plastic base.
- › High stability in temperature (-40°C up to +85°C).
- › Resonant frequency adjusting below +/- 2kHz.
- › Custom L-C value (F-Res: KGEA-MRHBC) under demand or only L (KGEA-MRHBL)
- › This antenna is designed based on AECQ-200

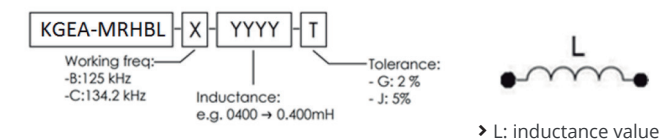
02 SPECIFICATIONS

DIMENSIONS (mm)



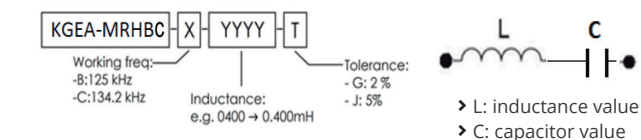
NOMENCLATURE DESCRIPTION AND SCHEMATIC DIAGRAM

› Only L:



NOMENCLATURE DESCRIPTION AND SCHEMATIC DIAGRAM

› L+C in series:



ELECTRICAL SPECIFICATIONS

Operating Frequency @125Khz @25°C @1Vac (Only L)

L(mH)	0.240
Cres (nF)	-
Q(L)	>100
Rdc (Ω)	<1,5
Arms	Max 1,43A
H-Field (dBμV/m) @2App@3m	145

ELECTRICAL SPECIFICATIONS

Operating Frequency @125Khz @25°C @1Vac (L+C in series)

L(mH)	0.240
Cres (nF)	6.8
Q(L+C)	>100
Rdc (Ω)	<2
Arms	Max 1,43A
H-Field (dBμV/m) @2App@3m	145

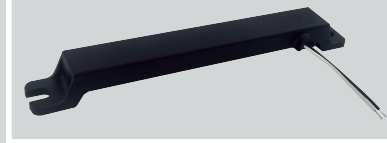
› Antenna is measured in resonant mode.

› The specification chart is a reference guide for the most common required values at working frequencies of 125 kHz, 20 kHz and 134.2 kHz. Any other inductance.

› value at LF or tighter tolerances can be provided. Please contact our sales department for any inquiry.

KGEA-MRHB

Middle Range Antenna LF for smart entry system
EMITTER ANTENNAS & SWITCHES / MIDDLE RANGE

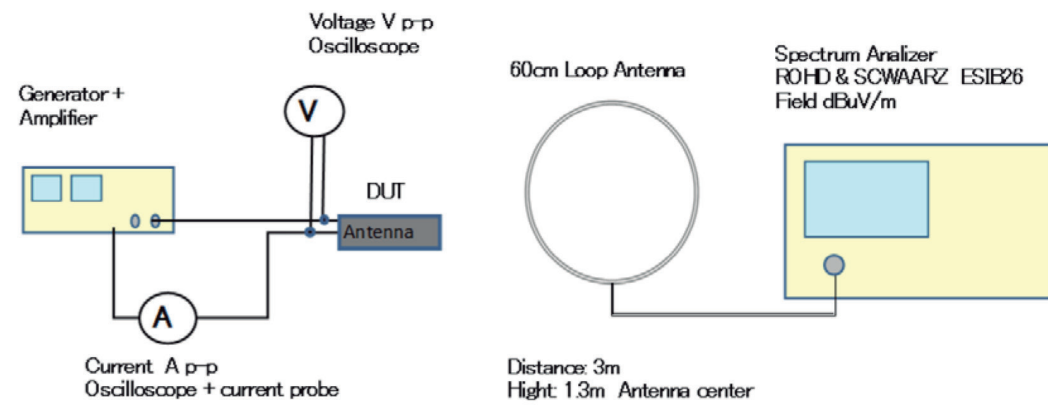


RADIATED H-field (Ipp)@distance:

PROCEDURE

- › Magnetic field probe measures in load $I_{pp}=2A_{pp}$ to 3meters @ $f_0=125KHz$
- › Receiving the signal from the probe field with the spectrum analyzer.

SETUP



› The sample (antenna under test), the current flowing through it and the EM-field at 3m measured with a loop antenna (60cm) are obtained at 125Khz frequency.

› Note: I_{pp} is the current peak to peak measured with the oscilloscope

KGEA-MRHBC-B0240J / H-FIELD@125KHz@2App@3m

