

MAGNETIC ELEMENT AND EDDY CURRENT SENSOR USING THE SAME

ABSTRACT

A magnetic element for strengthening a magnetic field formed in an object and an eddy current sensor using the magnetic field are provided. The eddy current sensor includes a bottom face portion which is a magnetic body, a magnetic core portion provided at the middle of the bottom face portion and a peripheral wall portion provided on the periphery of the bottom face portion. The eddy current sensor further includes an excitation coil disposed on an outer periphery of the magnetic core portion and capable of generating a magnetic field and an excitation coil disposed on an outer periphery of the peripheral wall portion and capable of generating a magnetic field.

Representative drawing: Fig. 18