

The proposed high-sensitivity magnetoresistor can be used in noncontact direct-current and alternating-current electric apparatuses, relay protection devices, and other devices designed for operation in highly explosive environment, specifically in mines and at gasoline filling stations. The magnetoresistor is shaped as a ring and made of manganese-zinc ferrite with high magnetic conductivity. The high sensitivity of the magnetoresistor is ensured by increased magnetic induction that is characteristic for rings made of manganese-zinc ferrite.