

The proposed measuring channel of an electronic compass, which is intended for measuring magnetic flux density, contains a Hall-effect transducer, a current regulator, an amplifier, a voltage-to-digital converter, and a display unit. The outputs of the current regulator are connected to the corresponding current terminals of the Hall-effect transducer. The inputs of the amplifier are connected to the measuring terminals of the Hall-effect transducer. The input of the voltage-to-digital converter is connected to the output of the amplifier. The proposed measuring channel is distinctive by that it contains additionally a resistor and a switch, which are connected in series to each other and connected across the current and measuring terminals of the Hall-effect transducer, two subtracting units, a divider, a memory unit, and a control unit. The first output of the memory unit is connected to the first input of the divider. The output of the voltage-to-digital converter is connected to the first and second inputs of the first subtracting unit and the first input of the second subtracting unit. The second input of the second subtracting unit is connected to the output of the first subtracting unit. The output of the second subtracting unit is connected to the first input of the display unit. The first output of the control unit is connected to the third input of the divider and the third inputs of the subtracting units. The second output of the control unit is connected to the start signal input of the voltage-to-digital converter. The third, fourth, fifth, sixth, seventh, eighth, and ninth outputs of the control unit are accordingly connected to the fourth, fifth, and sixth inputs of the first subtracting unit, the fourth input of the divider, the fourth input of the second subtracting unit, the second unit of the display unit, and the control input of the switch.