

Multi frequency inductive sensor

HG 195330A

Description

Robust sensor with analog voltage outputs ± 10 V and a detect signal. One out of eight frequencies can be selected.

The difference coil is mounted in horizontal orientation (similar to HG 193300A).

Casing

Polyester-body Rolec PT 082 IN (hexagon socket screw)

Presettings

Adjusted to: $I=100$ mA, $H=100$ mm

Frequencies

5.1 - 5.7 - 6.3 - 7.0 - 7.8 - 9.0 - 10.0 - 12.0 kHz, binary selectable by FS [1..3] inputs, see Table 1 and Table 2.

Cable clamps

Cable gland at long or short side of the antenna casing - user selectable

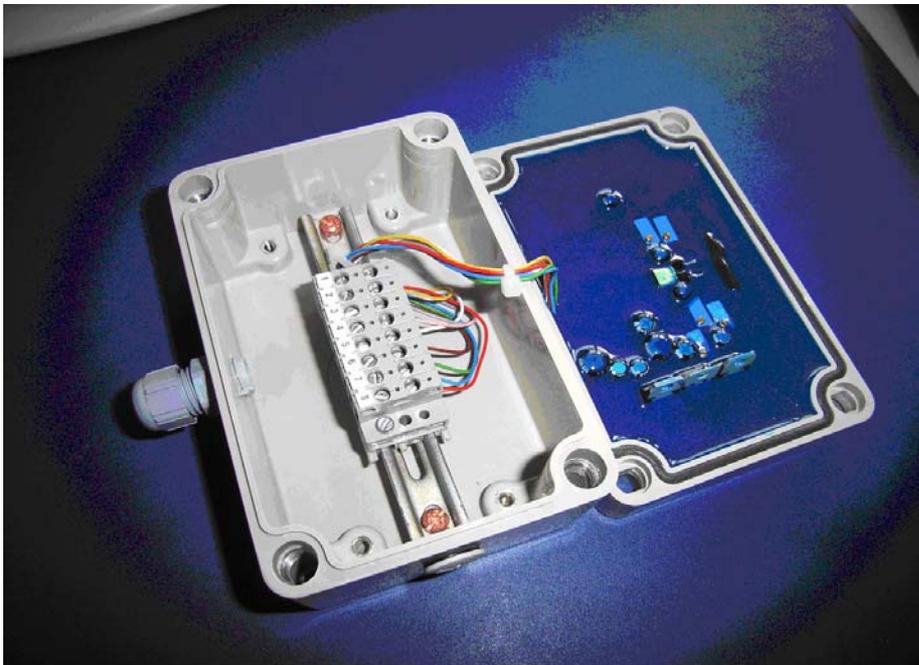


Figure 1
Photo of the sensor

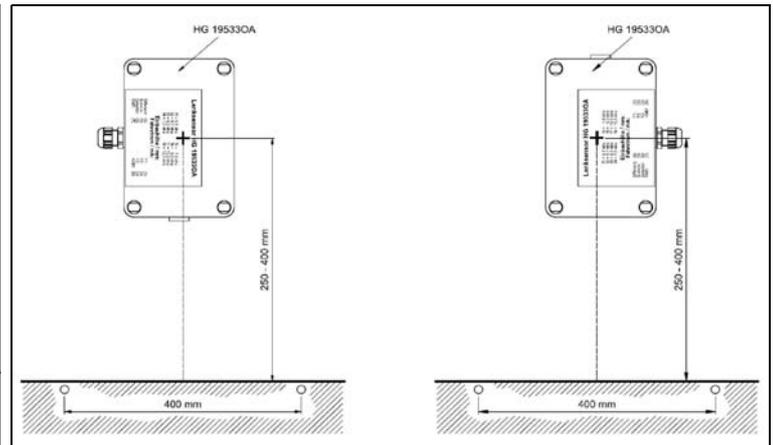
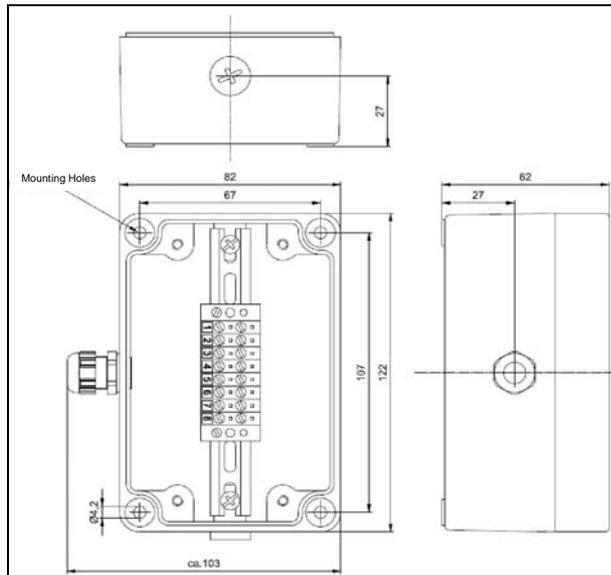
M16 Binder, angular plug 8 pole				09 0153 72 08	
Lapp Kabel UNITRONIC FD CY 10 x 0,14 shielded				0027416	
1	yellow	FS1	5	brown	Sum
2	grey	FS2	6	green	Detect
3	pink	FS3	7	blue	GND
4	white	Difference	8	red	+ 24 V

Table 1
Cable Type and
Pin Allocation
of Connector

	1	2	3	4	5	6	7	8
FS1	0	+	0	+	0	+	0	+
FS2	0	0	+	+	0	0	+	+
FS3	0	0	0	0	+	+	+	+

0 = connect to GND or leave open; + = connect to +24 V

Table 2
Frequency selection
via FS1-FS3



← Figure 2

↑ Figure 3

Sensor Installation

Dismount the cover of the sensor casing. The main body of the antenna can be mounted by using four screws M4. Mount the antenna in an upright position as shown in figure 3.

Cable Connection

Figure 3 shows the two different positions for mounting the sensor related to the inductive guide wires. The two positions are equivalent, but the user has the choice to feed the cable from any of the four directions. There are two holes to feed the cable into the sensor using a cable gland. The user can select the long or short side of the case.

Connect the cable according table 1 to the cable clamps shown in figure 2.

Important Information for Installation

The lateral mounting position of the sensor must be chosen accordingly that the cross is centered between the two wires above the guide wire system. The height of the sensor above the wires should be in the range of 250 to 400 mm.

Any rotation of the sensor will generate a positioning error.

Technical Data

- Dimensions	82 x 122 x 62 mm
- Connection	Cable clamps
- Pin Allocation	see Table 1
- Frequency	8 possible frequencies: 5.1 - 5.7 - 6.3 - 7.0 - 7.8 - 9.0 - 10.0 - 12.0 kHz Selection via FS1, FS2 and FS3 (see Table 2)
- Operating Voltage	+24 V, 100 mA
- Wire Current	100 mA
- Detection / Guidance Distance	100 mm
	} with single wire system
- Signal output	0 to 10 V (Sum), -10 to +10 V (Diff)
- Sum voltage detector	24 V, 20 mA, active high
- Environmental Temperature	-30 to 40° C