SWARCO

IG316 / IG326

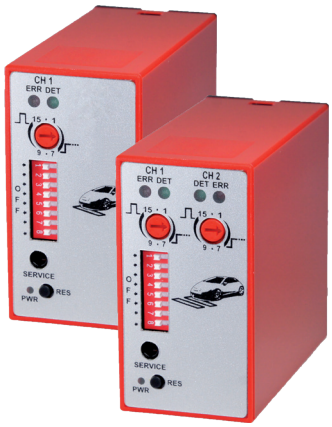
INDUCTION LOOP DETECTOR



RELIABLE DETECTION OF VEHICLES AT BARRIERS, GATES AND PARKING AREAS

AS WELL AS AUTOMATION APPLICATION

The IG-series detectors are used for vehicle access control at door and barrier controls, for occupancy monitoring and for vehicle counting in parking garages, for signal output with traffic light systems and traffic controllers, for direction-dependent vehicle detection and for safeguarding and monitoring of e.g. conveyor systems and car-washes.



IG316 UND IG326

The induktive loop detectors IG316 (single-channel) and IG326 (dual-channel) are optimized for the reliable detection of different vehicles such as bicycles, motorcycles, cars, heavy goods vehicles, cars with trailer, forklifts and others.

BENEFITS

- Reliable data acquisition independent of environmental influences
- Intuitive pre-configuration without supply voltage and easy initial operation
- Fast automatic tuning after switch-on
- Wide adjustable range of response sensitivity
- Sensitivity boost
- Selectable relay functions: Permanent or impulse mode, impulse signal when leaving the loop, switchable turn-on / turn-off delay, closed / open circuit principle
- No interference of loop frequencies due to „multiplex mode“ (only IG326)
- Direction signal (only IG326)
- Wide inductivity range: 20 µH - 2000 µH
- Simple simulation mode to test peripherie

IG316 / IG326 INDUCTION LOOP DETECTOR

FURTHER FEATURES

- Continuous adjustment of frequency drifts because of e.g. changing temperature and humidity
- High noise immunity due to frequency adjustment and oversampling
- Permanent loop control and display via LED blink code for immediate detection of inductive loop failures (loop short-circuits, loop disruptions, wrong frequency range, operational disturbances, alignment time)

ADDITIONAL FUNCTIONS IG316S AND IG326S

- Comfortable operation by means of "LoopMaster" program
- Customizing: Individual adjustment and configuration of switch functions

FUNCTIONAL DESCRIPTION

The induction loop detectors IG316 (single-channel) and IG326 (dual-channel) analyze the loops in the ground, working as inductivities of a high frequency oscillating circuit. The metal body of a vehicle passing the loop causes a characteristic change of circuit frequency. The loop detector analyzes it and sends a switching signal to the potential free relay output. This is also displayed at the front panel LEDs.

The loop signals are analyzed by a microprocessor. When the detector is switched-on an automatic alignment with the connected inductive loop is executed.

There is no interference of loop signals since the dual-channel version IG326 analyzes the loops in a defined order (multiplex mode) so that only one loop is active at one time. The single-channel version IG316 analyzes the loops continuously.

Changing loop inductances because of temperature or humidity are automatically compensated.

Via rotary and DIP switches on the front the detector can be comfortably set. For the versions IG316S and IG326S all current parameter and diagnosis values can also be set and readout via serial interface on the front of the device. This is done by means of the “LoopMaster“ PC operating program which is available free of charge and which additionally offers extensive loop and detector analysis functions. The trend-setting customizing allows an individual configuration and setting of operating elements and functions.

For heavy industrial use the protecting enclosure GHIG301 is available.

TECHNICAL SPECIFICATIONS

Supply voltage	230 V AC or 115V AC or 24 V AC/DC
Power consumption	230 V AC: < 4.5 VA; 115 V AC: < 4.5 VA; 24 V AC/DC: < 3.0 VA
Loop inductivity	permitted range: 20 µH bis 2000 µH; recommended range: 100 µH bis 300 µH
Sensitivity	adjustable in 7 stepts from 0.3 % - 0.007 % (frequency change f/f_0 in %)
Interfaces	service interface AJ-USB via optionally available service cable (only IG316S and IG326S)
Outputs	floating relay contacts per channel
Dimensions	plastic enclosure: length: 75 mm, width: 37 mm, height: 68 mm
Operating / Storage temperature	-25°C to +70°C / -40°C to +80°C
Protection class	class II (for 230 V and 115 V) / class III (bei 24 V)
Terminal strip	11-poliger Stecker (Typ 78-S 11)

DMSZ zertifiziert nach ISO 9001 QM 01178

For detailed information about the function, operation and pin assignment as well as further technical data see user manual.

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