

MAG-FLEX MAGNETIC SENSORS

Multiapplications sensors for trafic, access and active mobility



The complete Mag-Flex range provides solutions for multiple applications, whether to manage traffic flow, improve safety and facilitate mobilities of all users.

The soft mobility version takes into account the presence of cycles on dedicated lanes or on mixed lanes, ensuring their safe integration.

BENEFITS

- Detection of all types of vehicles
- Accounting for cycles in traffic flow
- Securing urban areas mixing vehicles and bicycles

APPLICATIONS

- Traffic regulation
- Priority at traffic light
- Green wave
- Counting
- Size and direction detection
- Access control
- Bollards and barriers, motorway tolls
- Cycle priority

Operating principle

Mag-Flex detectors operate on the principle of magnetic induction.

Associated with an induction loop placed in the ground, the vehicle detectors react to any magnetic presence or variation within its perimeter. They deliver permanent or calibrated control information over time.

The reliability and stability of the detection depend on the configuration of the detector and the care taken in making and installing the loop (recommendations for making standard loops or cycle dedicated ones on request).

The range of MAG-FLEX magnetic detectors includes 3 versions of detectors according to the targeted applications: **traffic (MFTx), access (MFAx) and cycle (MFCx).**

Designed with a specific detection algorithm, the cycle version has a sensitivity adapted to react precisely to the magnetic imprint of a bicycle, scooter, or any other personal transport device.

PRODUCT ADVANTAGES

- New, compact design for better integration into the environment
- Easy to install
- Simple configuration
- High detection reliability and accuracy
- Real-time display of product status
- Durable and robust

Technical characteristics

Technology	Magnetic detection by inductive loop
Sensitivity	Constant over the whole inductance range used
Loop inductance	Min = 50µh / max 1500µh
Response time	60ms except fast version 5ms
Power supply	230VAC or 12-24VAC/DC
Consumption	8W – 35mA @ 230VAC 500mW – 35mA @ 12VDC 900mW – 35mA @ 24VAC
Dimensions/weight	h82mm x l42mm x p47mm (without plug) 95g (version 230VAC) – 58g (version 12-24VACDC)
Outputs	2 configurables optocoupler outputs
Maximum load current	Max 80mA
AC blocking voltage	30Vac
DC blocking voltage	36Vdc
Connection	plug 11-pin circular header plug FINDER 90.83.3 advisable
IP	40
Temperature	-20°C à + 54°C -50°C à +70°C
• operation temperature	
• storage temperature	
Interfaces	Setting: Cap'Mobile application by bluetooth Display: Cap'Mobile application and LED on the front panel
Compliance	European Directive RED 2014/53/UE

Specifications

Simple and flexible configuration with the Cap'Mobile application:

Visualization of inductance, frequency and, in real-time, detections and sensitivity level

Parameters such as forget time, sensitivity and frequency offset are all easily adjustable in the app.

The 2 outputs are also configurable: type (technical fault, timed, pulsed,...), NO/NC, activation/deactivation...

Ease of installation and maintenance

Pairing with the Cap'Mobile mobile application requires a simple press on the product (button accessible on the front panel) at the first connection only.

The detector's standard 11-pin connector allows simple mounting on standard DIN rail and compatibility with the installed base (Capsteel products) for the majority of references.

Self test

On power-up, the entire installation is checked automatically and then gives way to permanent monitoring.

Range

Thanks to the flexibility of product configuration, the range is reduced while responding to many applications.

The detectors are available in single or dual channel version