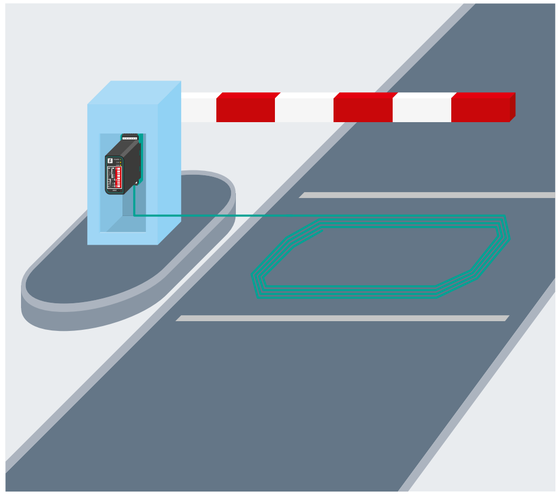
Added Freedom in Access Areas

Induction loops can be installed in the floor and guarantee durability and immunity from interference, whether used in a barrier, traffic light, or gate system. The wire loops form a high-frequency oscillating circuit whose frequency changes when a vehicle with metallic parts approaches or is within the wire loops. The LC20 loop detector from Pepperl+Fuchs evaluates this frequency change and generates a corresponding switching signal.
The induction loops come in a wide range of sizes and shapes, enabling customization of sensing ranges.



Efficient Control of Barrier Systems

The system can be quickly installed with the LC20 loop detector and diagnostic tool. The LC20 installed in the barrier system detects a wide range of vehicle types without any interference. This is made possible by the automatic sensitivity adjuster for high and long vehicles and for changing road conditions. In such cases, the LC20 adjusts the sensitivity to the highest level to compensate for weak signals.

In addition, automatic frequency selection reliably excludes occupied, identical, and similar transmission frequencies. This function prevents the loops from interfering with each other. It is ideal for classic parking scenarios, car counting at traffic lights and gates, and monitoring parking-lot capacity—direction recognition included.

Your automation, our passion.

Explosion Protection

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Enabling diagnostics. Detecting reliably. Visualizing data.

LC20 Loop Detector

Your automation, our passion.

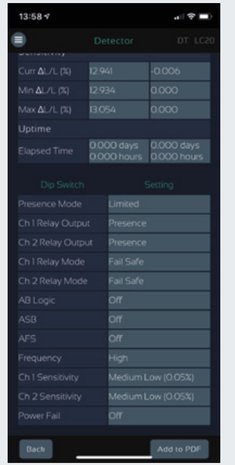
PEPPERL+FUCHS

Increased Reliability through Quick Detection and Diagnosis

Reliable detection of various vehicle combinations and quick real-time diagnostics—indispensable for modern barrier systems, traffic-light control systems, and gate systems.

Safe Vehicle Detection with Intelligent Features

In combination with the induction loops installed in the floor, the loop detectors form a universal sensor system for detecting vehicles. Commissioning the Pepperl+Fuchs LC20 loop detector is quick and easy. With the help of automatic frequency selection, it is even possible to install multilane access control systems. The area around the detector is automatically checked and the optimal operating frequency selected, minimizing setup times and operating costs. The LC20 is also ideal for applications where vehicles can be damaged. Power Fail Memory enables detection to continue seamlessly after a power failure using the stored parameters. In addition, the direction logic detects the direction of travel.



For more information, visit
www.pepperl-fuchs.com/pf-lc20

Excerpt of Technical Data	LC20-1	LC20-2
Number of channels	1	2
Self-tuning range	20 µH ... 1500 µH	
Operating voltage	12 ... 24 V AC/DC ±15 % 230 V AC ±15 %	
Connection	Plug socket 11-pin terminal connection	
Temperature range	–40° C ... +70° C	
Response time	200 ms ... 300 ms	

Highlights

- Rugged, durable loop detector for reliable detection of all vehicles
- Diagnostic tool and app: readout via smartphone simplifies commissioning and makes device easy to use
- Automatic frequency selection and automatic sensitivity boost simplify commissioning, even in unfavorable conditions
- Changes can be visualized for simple diagnostics and troubleshooting
- Reliable operation: fail-safe and memory backup features in the event of a power outage or loop error

Quick Commissioning through Intuitive Handling

The powerful little diagnostic tool and LC20 loop detector can be connected magnetically, making connection quick and easy. Communication between the diagnostic tool and the detector takes place without direct contact via an infrared interface. The associated app (iOS and Android) can be used to display activated functions and frequency changes caused by a vehicle. The diagnostic tool securely transmits data to the app via Bluetooth®. In addition to detailed fault diagnosis, the app can also visualize short-term changes and trends.

Data Visualization Facilitates Commissioning and Diagnostics

The diagnostic tool and diagnostic app complement the reliable LC20 loop detector perfectly. All parameters are displayed in the app during installation, including changes such as an automatic increase in sensitivity and automatic frequency selection.

Clear in-app navigation makes the app intuitive to use as a diagnostic tool, enabling immediate fault repair for all kinds of barrier systems, traffic lights, and gates. In addition, parameters such as frequency response and sensitivity can be saved as PDF files—ideal for final acceptance tests and annual safety checks. Users can also refer to changes and trends, which are visualized in the app.