

RES-1

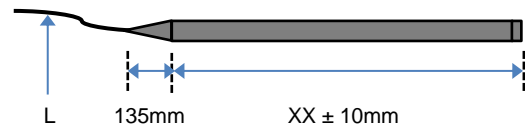
Trapezoidal resistive sensor



RES-1-XX/L

XX: Length of the part exposed on the lane (in dm).

L: Length of connecting cable (in m).



COMPLETELY CUSTOMIZED

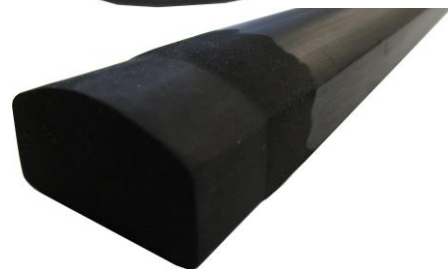
- Length customized to each site.
- Active and inactive sections in the same sensor.
- One or two sensitive elements in the same sensor.
- Connecting cable length from 1 to 100 meters.

CHARACTERISTICS

- Speed detection from 0 to 80 km/h,
- Detection : ≥ 80 kg,
- Insensitive to slab vibrations,
- MTBF higher than 3 million axles,
- MTTR of 10 minutes,
- Operating temperature: -20°C to $+75^{\circ}\text{C}$,
- Environment protection: IP 67.

INSTALLATION

- Stainless steel support, thickness 3 mm,
- Easy support installation (small overall dimensions),
- Easy sensor installation or replacement (10 min).
- Sensor glued in its support,
- Rail DIN box detector for 2 sensors,
- Multiple supports.



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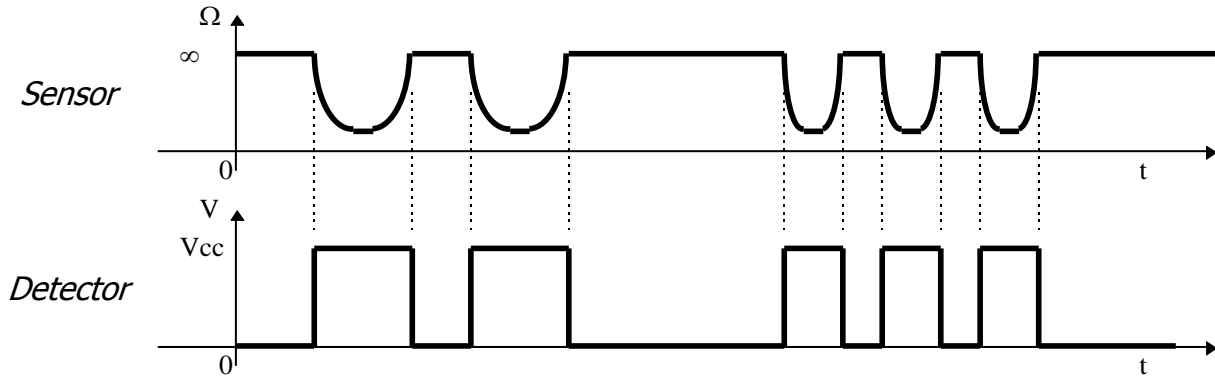


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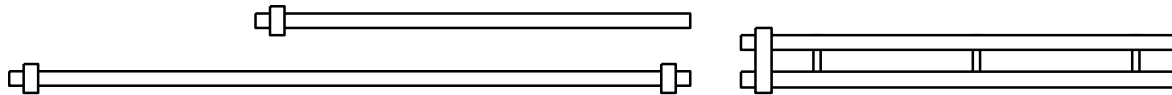
Principle : The « Sensor / Support / Detector » set is intended to detect the axles of vehicles with speeds from 0 to 80 km/h. The sensor is installed in the stainless steel support, embedded in the roadway. The pressure exercised by one or several wheels of the vehicle produces a variation in its electrical resistance.

The illustrations below shows the resistance variations of the sensor as well as the corresponding response of the detector during the passage of axles :



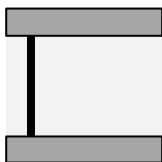
RES1 sensor : The cross-section is trapezoidal. Its length and the length of the connecting cable are adapted to suit the requirements of the customer. It is possible to have two sensitive elements in the same sensor or even sections active and others inactive. No metallic element moves or deforms inside the sensor. Its electrical resistance at rest is greater than **1 MΩ** and, when it is active, drops to below **200 KΩ**.

SUP1 support : The stainless steel support (3mm-thick) is folded and embedded in the roadway. An attach guarantees the maintaining of the sensor. Several types of supports are available: single supports for one or two sensors, double supports...

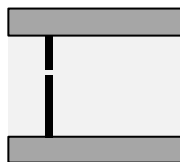


Capella CR2-T detector : It manages 2 sensors simultaneously. Two versions of power supply exist: 12V-DC or 24V-DC. The detector operation is automatic, no setting is necessary. The detector (CAPELLA CR2T module) is in rail DIN box.

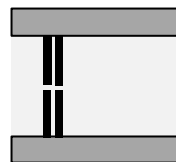
Sensor installation examples on toll lane :



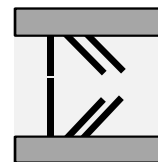
Detection of car and truck axles.



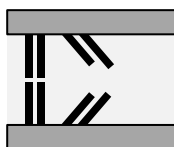
Detection of car, motor bike and truck axles.



Detection of car, motor bike and truck axles. Detection of vehicles driving backwards.



Detection of car, motor bike and truck axles + detection of dual wheel.



Detection of car, motor bike and truck axles.+ detection of dual wheel + Detection of vehicles driving backwards.

