

# Capacitive proximity sensors

These sensors detect without contact objects of all kinds (*liquids, pastes, powders, bulk solids*), whether they are conductive or not.

### Principle

Electrodes placed in the sensing face of the sensor form a capacitor whose capacity varies according to the dielectric properties of the objects entering the electric field formed between the electrodes.

A change in the capacity causes the RC oscillator to begin to oscillate. Consisting of a demodulator followed by a Schmitt trigger, a signal-shaping stage evaluates the signal delivered by the RC oscillator. Depending on the voltage attenuation measured, it triggers a change in the state of its output which controls the output stage of the sensor.

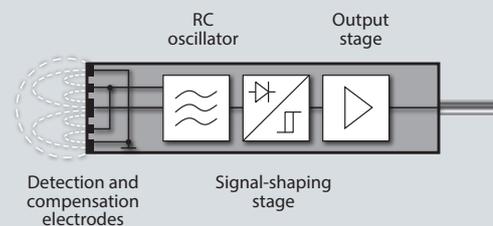
### Overview of the SENSTRONIC RANGE

| Body shape      |                    |
|-----------------|--------------------|
| Cylindrical     | from M18 to M30    |
| Rectangular     | Q26                |
| Main features   |                    |
| Connection type | 2-wire or 3-wire   |
| Voltage type    | DC or AC/DC        |
| Connection      | cables, connectors |

### Some examples:



### Schematic diagram:



### Special products

SENSTRONIC is at your disposal to discuss special applications or development requests. Do not hesitate to contact our sales department.