

# Safety Magnetic Sensors Introduction



As a partner for solutions in Safety, CARLO GAVAZZI offers you a complete line of safety devices, including safety magnetic sensors. SMS safety magnetic sensors are used to monitor the position status of hinged, sliding or removable guards.

The safety gate devices must be such that, at the opening or displacement of machine mobile protections, the machine or the dangerous motion is stopped or disconnected. In case of protection closing, the machine start should be possible only if dangerous situations do not exist.



SMS safety magnetic sensors find their application field over a variety of cases: from extremely harsh industrial environments where really dirty and damp conditions are the rule up to applications where demanding hygienic standards are required and are met by the simplicity in cleaning the sensors, all of them being IP67.

Moreover, where there is the necessity to have concealed mounting under non-magnetic materials as well as the impossibility to have a precise approach, safety magnetic sensors represent often the only solution. Besides, being non-contact, safety magnetic sensors can avoid the typical mounting problems of mechanical switches, making easier the assembling and maintenance operations of the machinery.



The SMS non-contact magnetic switches are coded and use redundancy techniques so that they can be used instead of the mechanical switches, according to the EN 1088 standard. The series includes rectangular and cylindrical housings, single or dual-channel versions as well as 1 NO, 1 NO + 1 NC, 2 NO safety output function models. The range includes also versions with auxiliary signalling output. As far as output connections are concerned, next to the standard cable, pig tail connections are in range.

Used along with the monitoring safety unit also in range, the SMS safety sensors are suitable for applications where the risk category can be up to 4 according the EN 954-1.