

## INFORMATION FOR INDUCTIVE, MAGNETIC AND CAPACITIVE SENSORS



THESE SENSORS ARE NOT SAFETY DEVICES, THEREFORE THEY CANNOT BE USED TO PREVENT INJURES TO PERSONS, DAMAGES, INDUSTRIAL DAMAGES, ACCIDENTS.

### CONNECTIONS:

- 1) Do not exceed the voltage limits. For DC sensors, use stable tension.
- 2) Do not connect the sensors power supply cables down-stream from other devices and make sure they are directly connected to the mains.
- 3) If the power supply source is a switching voltage regulator, connect the FG (Frame Ground) terminal to the ground.
- 4) Connect to the ground the FG (Frame Ground) terminal and all metallic parts of every industrial machinery or not if a sensor is used in it.
- 5) Do not use the sensors near electromagnetic or high frequency fields.
- 6) The cables of sensors must be separate from the power supply cables, from the engines cables, from the inverters cables, or from any other electromagnetic device because induction noise could cause malfunction or damage to the sensors. Separate the wires of the sensor from the above indicated lines and then insert the wires into an earthed metal conduit.
- 7) After making all operations mentioned in the above point 6, if inductive interference exists, an adequate transient suppression filter must be used on the power supply line in proximity to the sensor.
- 8) Do not extend the supplied sensor cable length. If a cable extension is made, the manufacturer will not be liable for the malfunction of the sensors.
- 9) The output signal of a sensor cannot be used during the start up delay (not more than 300 mS).
- 10) Several sensors should not be connected in series, whereas several sensors can be connected in parallel.

### ASSEMBLY:

- 1) For correct assembly and alignment, all the accessories supplied with the sensor must be used.
- 2) When available, to regulate the sensitivity adjustment trimmer use a suitable screw-driver without exerting excessive force.  
Only for capacitive sensors: The distance could change according to temperature variations. To increase the sensitivity twist the trimmer clock-wise, to decrease do it anti clock-wise.
- 3) Do not turn too much fixing screws or nuts to avoid electrical or mechanical damages.
- 4) Mounting sensors side by side, leave an appropriate place between them to avoid mutual interference.
- 5) Do not pull the connection cable of the sensor. When the conditions of use result to be too hard (in places not protected from shocks or subjected to movements) use a protective sheath.
- 6) Avoid continuous movements between the sensor and its cable.
- 7) Protect the sensitive surface of the sensor from shocks, mechanical pressures to avoid irreparable damages.
- 8) Install the sensor being careful that metallic (or of any other material) shavings shall not settle on the sensitive part of the sensor.
- 9) Do not use the sensors in presence of organic or liquid solvents or of any kind of acid.
- 10) Do not use the sensors outdoors without an adequate protection.
- 11) Do not exceed the indicated temperature limits.
- 12) Do not subject the appliance to strong vibrations or to shocks which can damage the sensor or can harm its impermeability.
- 13) Do not use the sensor to detect objects in water or in the rain.

The manufacturer is not liable for the improper use of the product. Any use and/or application which are not provided for by DATALOGIC documentation must be previously and directly authorized by the same manufacturer.



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