# ASA\_CB\* CAN BUS ANGLE SENSOR

This brand new device is based on the use of an internal static sensor, driven by a proper inside microprocessor.

Specifically designed for applications on mobile machines, its compact design and ease of installation, together with the lack of inside mobile components offers a unique rugged solution, resumed in its 500 g's and IP67 proof.

Suitable where 360° angle measuring range is required, its basic control function consists in generating an output signal representing its angle referred to gravity.

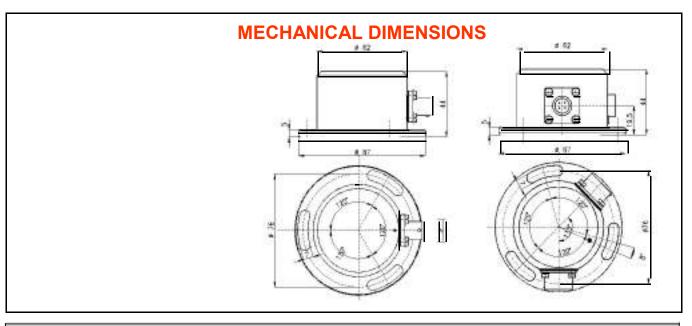
Inside processor enables the output to be directly linked to CAN BUS nets.

Typical applications are cranes, access platforms, fire ladders, excavators, concrete pumps, drilling rigs, etc., wherever environmental reliability and immunity is required.



omNo(\*) = ASA sensors exist in following configurations:

- S = Standard 360° range, IP67 4 poles connector
- **H** = Heavy Duty with increased mechanical resistance (3.5 mt hydraulic hose).
- L = Light version, for "internal" use only (cable reels, control units, cabinets); 1,5 meters cable out.
- **P** = Provided with a second 4 poles IP67 connector to allow another sensor signal passing through and a consequent single connecting cable over the machine (i.e. 2 or more boom sections).
- **O** = Horizontal version. For this version the measuring angle is just +/- 45° on each axis. IP67 4 poles connector.



#### TECHNICAL SPECIFICATIONS

## Electrical

Supply Voltage
Supply Current
9 – 32 VDC
80 mA

Output CAN BUS 2.0B; CAN OPEN protocol supported

• Connections: 4 Poles connector: A = + V, B = Gnd, C = CANL, D = CANH

• Programmability Baud Rate (50, 100, 125, 250, 500, 1000 Kbit/sec.)

• Identifier Range : Freely programmable 11-29 bit

• Transmission Rate: Freely programmable in 20 ms steps

•Measuring Range 0°: 360°

Zero Angle Reference
 Accuracy and Linearity
 Freely programmable
 +/- 0.2° on full range.

Thermal drift 0.01 deg/°C

#### Environmental

Compensated Temperature Range
 Storage Temperature Range
 20 ° C to + 70 ° C
 35 \* C to + 85 \* C

• Vibration: 5g from 20 to 400 HZ over 20 hours for each axis

• Accelerometer: 1000 g shock

Enclosure and Connector Protection: IP67

### **EMC Compliance**

The unit comply with following CE DIRECTIVES:

EN 61000-4-4
EN 61000-4-6
EN 61000-4-3
Burst-Fast Transient
Conducted RF Immunity
Radiated RF Immunity

• EN 61000-4-3 Radiated Pulsed RF Immunity

• EN 55011 Radiated Emission