ACQ: LENGTH & ANGLE TRANSDUCERS
UP TO 12 METERS

The cable reel is very important to measure boom lengths on telescopic cranes, basic information for any load limiter or over tipping control system.
ACQ is installed into a very robust case made of enforced resin, that maintains the whole weight very low. The cable in the drum can be steel made for just measurement applications, or multipolar cable for signals transfer.
In addition, ACQ installs internally an accelerometer sensor, used to measure boom length, another basic information for load moment calculation.
In order to be installed on aerial platforms, ACQ can have double length potentiometer and double angle sensor, to fulfil actual required standards.
This device is also available with CAN-BUS link which provides better sensitivity and accuracy, and reduces the wiring through direct connection of this unit into a global CAN network.

TECHNICAL DATA

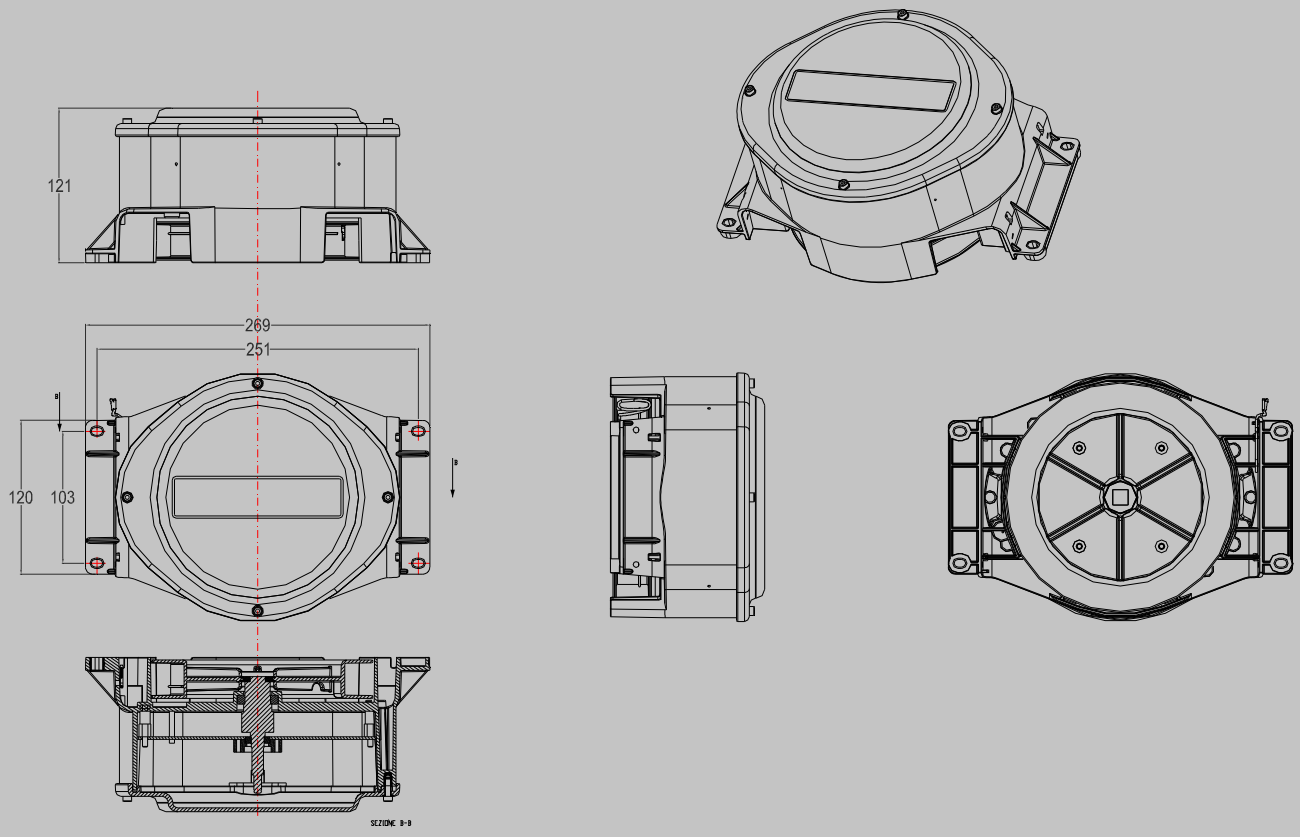
CONFIGURATIONS:
- Steel cable
- Electric cable
- 3 poles slip-ring
- Gold plated slip-ring collector 1A max

CERTIFICATIONS:
The ACQ unit (all models) conforms to the following directives and standards required by 89/336 CE, according to automotive standards:

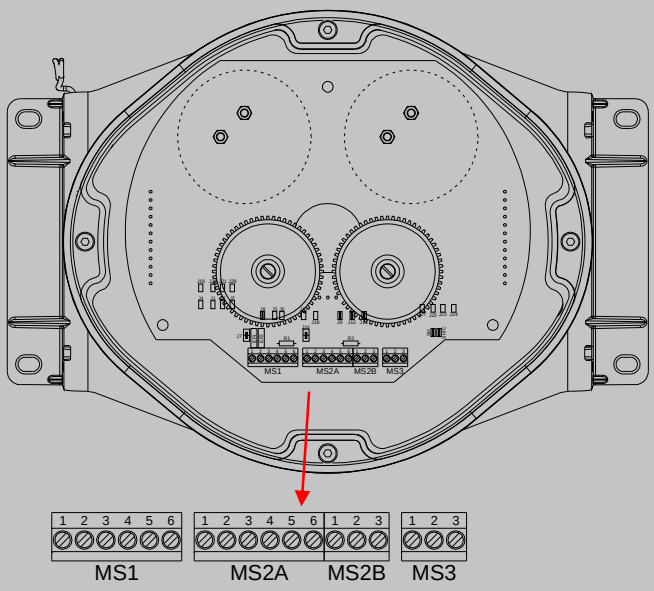
1) Shock and Vibration test :
   - Reference standard: EN 60068-2-6 (Vibrations)
     EN 60068-2-27 (Shock)
2) Salt Spray test:
   - Reference standard: UNI EN ISO 9227
3) EMC generic standards for emission, heavy industrial environment :
   - Reference standard: EN 61000-6-3
   - Base standard: EN 55022 (Radiated RF emissions)
4) Electromagnetic immunity in heavy industrial environment:
   - Reference standard: EN 61000-6-2
   - Base standard: EN 61000-4-4 (Fast transient “Burst”)
     EN 61000-4-6 (Conducted RF immunity)
     EN 61000-4-3 (Radiated RF immunity)

MECHANICAL CHARACTERISTICS AND RATINGS:
- Housing: nylon PA6 glass fiber filled 30%
- IP protection IP65
- Operating temperature Range: from -20°C to +70°C (from -4°F to +158°F)
- Storage temperature Range: from -30°C to +85°C (from -22°F to +185°F)
- Weight: 3 Kg
- Dimensions : 269 x 120 x 121 mm
- Breaking Strenght 9 N/m

MECHANICAL DIMENSIONS:



BOARD CONNECTION DETAILS: :



	Analog Version	CAN-BUS Version
MS1	+V	+VB
	-V	-VB
	A1	CAN1H
	S1	CAN1L
	/	R CAN
	/	R CAN
MS2A	+V	+VB
	-V	-VB
	A1	CAN1H
	A2	CAN2H
	S1	CAN1L
	S2	CAN2L
MS2B	/	R CAN
	/	R CAN

COLLECTOR		
MS3	Description	Wire Color
1	1° Track	Green
2	2° Track	Red
3	3° Track	Grey

NOTA: in order to enable the CAN BUS impedence adapter, it is necessary to bridge PIN 5 and 6 on MS1

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