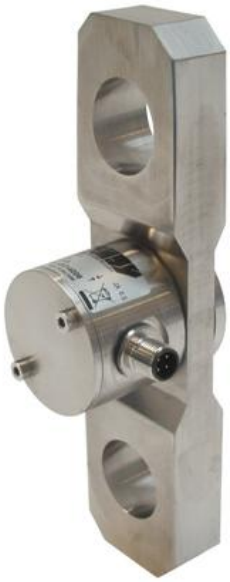
TENSION LOAD CELL FOR HOISTING

MODEL 5205-HOIS (alloy steel / nickel plated steel)
MODEL 5205-CRANE (alloy steel / nickel plated steel)
MODEL 5200-HOIS (stainless steel)

CE



APPENDIXES:

- Control + diagnostic data sheet
- Drawing

1. OPERATING CONDITIONS OF MODEL 5205-HOIS (5200-HOIS)

1.1. Mounting

1. The 5205-HOIS (5200-HOIS) has to be used in the defined conditions of its technical data and following the described conditions.

2. The applied load has to be on the axle in accordance with the preferential direction of ± 3° shown by the arrow.

3. The 5205-HOIS (5200-HOIS) should only work in tension. It should not normally be subject to parasitic constraints such as: torsion, flexion, radial forces. It is therefore necessary to uncouple efforts by an appropriate mounting (ex: use of cables, eye hooks, shackles, chains).

   Load cell's setting cannot be done using force or by giving violent shocks. Nevertheless, you can use a wooden mallet to ensure the adjustment.

4. Only the length of cable delivered with the load cell can be used; although this cable can be shortened. Otherwise, sensitivity may be different. Please contact us. It's commissioning technician job alone to connect the load cell to its electronic device according to the color codes defined on the form of the load cell and according to the specifications equivalent to the electronics used. The commissioning technician will ensure cable's integrity of the after mounting on site. All damage to this cable or one of the conductors will necessitate its replacement by SENSY.

5. A written agreement from the manufacturer is necessary for particular conditions of use.

1.2. Use

1. This 5205-HOIS/CRANE (5200-HOIS/CRANE) load cell is designed to take an occasional static overload, up to 2 x the Nominal Load (case of the test load of a travelling crane) without getting damaged. In no case, can a superior overload (static or dynamic) be accepted.

2. The handled load has to be free and adapted to the nominal load of the system :
   - no anchorage to the ground or to a support;
   - no collision with another load or structure;
   - no jamming;
   - no shock produced by another load falling on the handled load.

3. The load cell should not undergo shocks linked to the conditions of use: case of a balancing beam crashing against winch's frame in the swing of the pulley block.

1.3. Periodic inspections

1. Check output for zero load (Annually)
   max. allowed: ± 0.15 mV/V for models 5205-HOIS/CRANE (5200-HOIS/CRANE)
   ± 6 mA for models 5205-HOIS/CRANE (5200-HOIS/CRANE)-C,
   5205-HOIS/CRANE (5200-HOIS/CRANE) -J
   ± 0.8 V for models 5205-HOIS/CRANE (5200-HOIS/CRANE) -t

2. Make sure that the load cell has not been knocked (markings) or chemically attacked (some corrosive greases). If point 1 is not accounted for, just take preventive measures. (Annually)

3. In case of doubt, answer the diagnostic questionnaire provided with the individual form of the load cell, join and consult the constructor.

4. Check cable's integrity.

5. After any serious functioning incident, repeat operations 1 to 3.

1.4. Calibration

If it's not possible to hoist the nominal load for calibration, hoist at least 50% of the nominal load.

1.5. Use features

			option C	**option J**	**option t**
Type		Resistive	4-20 mA 2 wires	4-20 mA 3 wires	1-5 V
Compensated temperature range		from – 10° to + 45° C			
Operating temperature range		from – 30° to + 80° C			
Storage temperature range		from – 50° to + 85° C			
Power supply (VDC)		5 – 12	15 – 28 not regulated	10 - 30 not regulated	10 - 30 not regulated
Bridge impedance (Ω)		350 ±30	(5000)	(350)	(350)
Load impedance (Ω)		NA	0.1 – 1k	0.1…0.3k	> 10k
Nominal signal range	Min.	0-0.5 mV/V	9 mA	4 - 9 mA	1-5 V
	Max.	0-1.7 mV/V	22 mA	4 – 22 mA	0.2 – 5.6 V
Electrical saturation		> 2 mV/V	> 24 mA	> 24 mA	> 5.6 V
Normal drift (zero) %/°C		<0.01	<0.03	<0.03	<0.03
Normal drift (span) %/°C		<0.01	<0.025	<0.025	<0.02

1.6. Guarantee

The constructor's guarantee applies provided that the mounting recommendations and general use principles exposed above are respected.
For all particular utilization not described in these documents, preliminary written agreement from SENSY s.a. is mandatory to preserve the conformity.

2. DECLARATION OF CE CONFORMITY

SAFETY COMPONENTS PUT ON THE MARKET SEPARATELY

SENSY S.A. certifies that the load cells described hereafter and destined to load limitation are in accordance with the essential requirements defined in the European Directive 2006/42/EC (Machinery Directive) related to safety components and 2004/108/EC (Electromagnetic compatibility Directive).
Technical files regarding this conformity are at the disposal of the authorities during the whole legal delay.
This declaration is only valid for a usage strictly according to the specifications and instruction manual accompanying and characterizing each of our products.
These load cells are defined by their control and dimensional data sheet attached, which are to be read and kept cautiously. See the general conditions for use at the back of this certificate.

Concerned items:

- Models 5200 or 5205 -HOIS/CRANE (Resistive load cell)
  Electronics associated: CRANE BOY, BRIDGEBOY, INDI BOY

- Models 5200 or 5205 -HOIS/CRANE - C, 5200-HOIS/CRANE -J
(Integrated amplifier 4 – 20 mA
  Electronics associated: BRIDGE BOYP, CRANE BOY P, DISP BOY

These cells have been designed for hoisting devices and may be used with other electronic load limiters. In this case, to be in accordance with the CE requirements the customer has to verify the right compatibility between the electronic (in accordance with referred directives in industrial environment) and SENSY load cells.

Regulations: EN954-1 (category 1) and ISO 13849-1
Rule FEM 9761
NBN 52-010 / 52-011
EN50281-2 / EN50282-2

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