



Issued by NMI Certin B.V.
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The Netherlands

Notified Body Number 0122

In accordance with Paragraph 8.1 of the European Standard on Metrological aspects of non-automatic weighing instruments EN 45501:1992/AC:1993 and by application of the OIML International Recommendation R 60 (Edition 2000). The applied error fraction p_i , meant in the paragraph 3.5.4. of the standard is 0.7.

Applicant Laumas Elettronica S.r.l.
Via Primo Maggio 6
43030 Basilicanova (PR)
ITALY

In respect of **A tension, S-type load cell**, with strain gauges, tested as a part of a weighing instrument.
Manufacturer : Laumas Elettronica S.r.l.
Type : CTL A and CTL B

Characteristics

Maximum capacity (E_{max})	500 kg up to and including 12500 kg	
Accuracy class	C	
Maximum number of load cell verification intervals (n_{max})	2000	3000
Ratio of minimum LC verification interval $Y = E_{max} / V_{min}$	10 000	

In the description number TC6891 revision 1 further characteristics are described.



Test certificate

Number **TC6891** revision 1

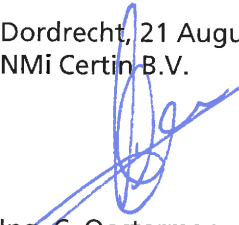
Project number 503960

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Description and documentation The load cell is described in the description number TC6891 revision 1 and documented in the documentation folder TC6891-2, appertaining to this test certificate.

Remarks Summary of the test involved: see Appendix number TC6891 revision 1.
This revision test certificate replaces the earlier version, including its documentation folder.

Dordrecht, 21 August 2006
NMI Certin B.V.



Ing. C. Oosterman
Manager Product Certification

1 General information about the load cell

All properties of the load cell, whether mentioned or not, may not be in conflict with the standard mentioned in the test certificate.

1.1 Essential parts

Description	Drawing number	Rev.	Remarks
Mechanical drawing CTL 500 – 1000 – 2000 - 2500	102	0	
CTL 5000 - 7500	110	0	
CTL 7500 – 10000	111	0	
CTL 10000 - 12500	112	0	
Bridge electrical drawing	103	0	

Cable:

- If the load cell is provided with a 4-wire system, the cable length has to correspond with the cable length mentioned on the descriptive plate of the load cell.
- The load cell is provided with a 6-wire system (=“Remote-sensing”).
The cable length is not limited.
- The cable should be a shielded cable, the shield is not connected to the load cell.

1.2 Essential characteristics

Minimum dead load	: 0 kg
Safe overload	: 150 % of E_{max}
Rated Output	: 2 mV/V \pm 0.1%
Input impedance	: 350 Ω \pm 5 Ω
Output impedance	: 350 Ω \pm 2 Ω
Recommended excitation	: 5 V DC/AC
Excitation maximum	: 15 V DC/AC
Transducer material	: Stainless Steel
Atmospheric protection	: Laser welded sealed

1.3 Essential shapes

The load cell is built according to the drawing:

- Mechanical drawing CTL 500 – 1000 – 2000 - 2500, drawing number 102;
- CTL 5000 – 7500, drawing number 110;
- CTL 7500 – 10000, drawing number 111;
- CTL 10000 - 12500, drawing number 112.

The data plate is secured against removal by sealing or will be destroyed when removed. The data plate mentions at least the information and markings as described in the OIML R60 document. In the countries where it is mandatory the load cell should bear this test certificate number: TC6891.

Securing:

The connecting cable of the load cell or the junction box is provided with possibility to seal.

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Tests performed for this test certificate:

Test	Institute	type, version, remarks
Temperature test and repeatability (20, 40, -10 and 20 °C)	NMi Certin B.V.	CTL 500 kg C3 and CTL 2500 kg C3
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V.	CTL 500 kg C3 and CTL 2500 kg C3
Creep (20, 40 and -10 °C)	NMi Certin B.V.	CTL 500 kg C3 and CTL 2500 kg C3
Minimum dead load output return (20, 40 and -10 °C)	NMi Certin B.V.	CTL 500 kg C3 and CTL 2500 kg C3
Barometric pressure effects at room temperature	NMi Certin B.V.	CTL 500 kg C3
Damp heat, cyclic: marked CH (or not marked)	NMi Certin B.V.	CTL 500 kg C3