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Project number 803197
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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 ASCELL SENSOR, S.L.
Jaume Llorens i Vidal, 46
08757 Corbera de Llobregat
Barcelona
Spain

In respect of The model of a **bending beam load cell**, with strain gauges, tested as a part of a weighing instrument.
Manufacturer : ASCELL SENSOR, S.L.
Type : BM

Characteristics

Maximum capacity (E_{max})	10 kg up to and including 1800 kg
Accuracy Class	C
Maximum number of load cell intervals (n)	3000
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	10 000

In the description TC6178 revision 3 further characteristics are described.



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Test certificate

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Description and documentation The load cell is described in the description number TC6178 revision 3 and documented in the documentation folder TC6178-3, appertaining to this test certificate.

Remarks Summary of the test involved: see Appendix number TC6178 revision 3
This revision test certificate replaces the earlier version(s), except for its documentation folder.

Dordrecht, 1 April 2008
NMI Certin B.V.



Ing. C. Oesterman
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
Dimensiones BM / Dimensions BM	LH-100	A	Mechanical BM
Dimensiones BM / Dimensions BM	LH-100	B	Mechanical BM
Dimensiones BM / Dimensions BM	LH-101	A	Mechanical BM1 and BM2
Dimensiones BM / Dimensions BM	LH-101	D	Mechanical BM1 and BM2
Dimensiones BM / Dimensions BM	LH-102	A	Mechanical BM3
Dimensiones BM / Dimensions BM	LH-102	B	Mechanical BM3
Electric diagram BM / Diagrama electrico BM	LH-103	A	Electrical

Cable:

- The load cell is provided with a 4-wire or 6-wire system.
- Because no "remote-sensing" (4-wire system) is used the cable length has to be approximately:
 - 0.5 meter for BM and BM-1;
 - 3 meters for the model BM-2 and BM-3.
 The cable length is not relevant for a 6-wire system.
- 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	: 120 % of E_{max}
Rated Output	: 2 mV/V \pm 10%
Input impedance	: 380 Ω \pm 10 %
Output impedance	: 350 Ω \pm 1 %
Recommended excitation	: 10 V DC
Excitation maximum	: 15 V DC/AC
Transducer material	: ASI 431
Atmospheric protection	: Potted



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1.3 Essential shapes

The load cell is built according to the drawings:

- Dimensiones BM /Dimensions BM, drawing number LH-100 revision A;
- Dimensiones BM /Dimensions BM, drawing number LH-100 revision B;
- Dimensiones BM /Dimensions BM, drawing number LH-101 revision A;
- Dimensiones BM /Dimensions BM, drawing number LH-101 revision D;
- Dimensiones BM /Dimensions BM, drawing number LH-102 revision A;
- Dimensiones BM /Dimensions BM, drawing number LH-102 revision B;
- Electric diagram BM / Diagrama electrico BM, drawing number LH-103.

The data plate is sealed against removal 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: TC6178.

Securing:

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

Tests carried out for this test certificate:

Test	Institute	type, version, remarks
Temperature test and repeatability (20, 40, -10 and 20 °C)	NMi Certin B.V.	BM 10 kg C3 BM-1 50 kg C3 BM-3 500 kg C3
Temperature effect on minimum dead load out-put (20, 40, -10 and 20 °C)	NMi Certin B.V.	BM 10 kg C3 BM-1 50 kg C3 BM-3 500 kg C3
Creep test (20, 40 and -10 °C)	NMi Certin B.V.	BM 10 kg C3 BM-1 50 kg C3 BM-3 500 kg C3
Minimum load output return (20, 40 and -10 °C)	NMi Certin B.V.	BM 10 kg C3 BM-1 50 kg C3 BM-3 500 kg C3
Barometric pressure test at room temperature	NMi Certin B.V.	BM 10 kg C3
Damp heat, cyclic test	NMi Certin B.V.	BM 10 kg C3