

Issued by	NMi Certin B.V.
In accordance with	WELMEC 8.8 Issue 2, Paragraph 8.1 of EN 45501:1992/AC:1993, OIML R60:2000, WELMEC 2.4 Issue 2.
Producer	Keli Sensing Technology (Ningbo) Co.,Ltd. No.199 of Changxing RD, Jiangbei district Ningbo P.R. China
Measuring instrument	A shear beam load cell , with strain gauges, tested as a part of a weighing instrument. Brand : Keli Sensing Technology (Ningbo) Co.,Ltd. Designation : SQB
Remarks	Further properties are described in the annexes: - Description TC6911 revision 2; - Documentation folder TC6911-3. An overview of performed tests is given in the annex: - Description TC6911 revision 2. This revision replaces the earlier versions, including its documentation folder.

Issuing Authority **NMi Certin B.V.**
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1 General information about the load cell

All properties of the load cell, whether mentioned or not, shall not be in conflict with the standards mentioned in this certificate.

This certificate is the positive result of the applied voluntary, modular approach, for a component of a measuring instrument, as described in WELMEC guide 8.8. The complete measuring system must be covered by an EC type-examination Certificate.

1.1 Essential parts

Number	Pages	Description	Remark
600697-1	1	SQB Load cell, 1 tf	Mechanical
600697-2	1	Electrical diagram of the SQB load cell	Electrical
6911/1-01	1	Outline drawing SQB	Mechanical/ Electrical
6911/2-01	1	SQB 7.5 – 20 t	Mechanical/ Electrical

Cable:

- The load cell is provided with a 4-wire system:
 - The cable length is mentioned in the accompanying load cell document / on the label;
 - The cable length shall not be modified.
- 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

Maximum capacity (E_{max})	150 kg up to and including 750 kg	1000 kg up to and including 5000 kg	7500 kg up to and including 20000 kg
Minimum dead load	0 kg		
Accuracy Class	C		
Rated Output	2,00 ± 0,002 mV/V	3,00 ± 0,003 mV/V	
Maximum number of load cell intervals (n)	3000		
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	10000		
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	3000		
Input impedance	400 Ω ± 20 Ω		
Temperature range	-10 °C / +40 °C		
Fraction p_{LC}	0,7		
Humidity Class	CH		
Safe overload	150% of E_{max}		
Output impedance	352 Ω ± 3 Ω		
Recommended excitation	10 - 12 V AC/DC		
Excitation maximum	15 V AC/DC		
Transducer material	Alloy steel		
Atmospheric protection	Hermetically welded		

The characteristics for n_{max} and Y can be reduced separately. Z is proportional or equal to n_{max} .

Each produced load cell is provided with an accompanying document with information about its characteristics.

1.3 Essential shapes

The load cell is built according to drawing:

- "SQB Load cell, 1 tf", drawing number 600697-1;
- "Outline drawing SQB", drawing number 6911/1-01;
- "SQB 7.5 – 20 t", drawing number 6911/2-01.

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 recommendation.

In the countries where it is mandatory the load cell should bear this test certificate number: TC6911.



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2 Seals

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

3 Conditions for conformity assessment

The compatibility of load cells and indicator is established by the manufacturer by means of the compatibility of modules form, contained in WELMEC 2 Issue 5 Section 11, at the time of EC verification or declaration of EC conformity of type.

Other parties may use this Parts Certificate without the written permission of the producer.

4 Test reports, evaluation reports and pattern evaluation reports

An overview of performed tests is given in the reports:

- No. R60/2000-NL1-06.03 dated 22 February 2006 that includes 40 pages;
- No. NMI-11200809-05 dated 10 April 2012 that includes 27 pages;
- No. NMI-13200048-04 dated 6 June 2013 that includes 27 pages.