

Issued	NMi Certin B.V.
In accordance with	WELMEC 8.8 Issue 2, Paragraph 8.1 of EN 45501:1992/AC:1993, WELMEC 2.4 Issue 2, OIML R 60 (2000)
Producer	Zhonghang Electronic Measuring Instrument Co., Ltd. (ZEMIC) Xinyuan Rd. North Zone of EDZ, Hanzhong 723000, Shaanxi China
Measuring instrument	A <b>single point load cell</b> , with strain gauges, tested as a part of a weighing instrument.
	Brand : ZEMIC Designation : L6E-xx-xx-xxx-XX – Series
	Further properties are described in the annexes: - Description TC7838 revision 1; - Documentation folder TC7838-1.
	An overview of performed tests is given in the annex: - Description TC7838 revision 1
Remarks	This revision replaces the earlier version, except for its documentation folder.

Issuing Authority

**NMi Certin B.V.**  
21 April 2015



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This document is issued under the provision that no liability is accepted and that the producer shall indemnify third-party liability.

Parties concerned can lodge objection against this decision, within six weeks after the date of submission, to the general manager of NMI (see "Regulation objection and appeal against decisions of NMI" www.nmi.nl)

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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 8.8. The complete measuring system must be covered by an EC type-approval Certificate.

### 1.1 Essential parts

Number	Pages	Description	Remark
12102010103 Rev 0	5	L6E Load cells Catalogue for using	Mechanical / Electrical

Cable:

- The load cell is provided with a 4-wire system:
  - The cable length is mentioned on the label (see chapter "Naming example" in the document mentioned above);
  - 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 shall be a shielded cable, the shield may be connected to the load cell.

### 1.2 Essential characteristics

Type	L6E-xx-xx-xxx-XX – Series					
Humidity class	CH					
Fraction $p_{ic}$	0,7					
Temperature range	-10 °C / +40 °C					
Rated Output	2 mV/V $\pm$ 0,2 mV/V					
Maximum capacity ( $E_{max}$ )	50 kg up to and including 100 kg			150 kg up to and including 500 kg		
Accuracy class	C3	C4	C5	C3	C4	C5
Maximum number of load cell intervals (n)	3000	4000	5000	3000	4000	5000
Ratio of minimum load cell verification interval $Y = E_{max} / v_{min}$	10000	15000	20000	10000	15000	20000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	4200	6000	7000	3300	4400	5500

Minimum dead load	0 kg
Safe overload	150% of $E_{max}$
Input impedance	$406 \Omega \pm 6 \Omega$
Output impedance	$350 \Omega \pm 3 \Omega$
Recommended excitation	5 - 12 V AC / DC
Excitation maximum	18 V AC / DC
Transducer material	Aluminium alloy
Atmospheric protection	Silicon rubber

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:

Number	Pages	Description	Remark
12102010103 Rev 0	5	L6E Load cells Catalogue for using	Mechanical / Electrical

The descriptive markings plate is secured against removal by sealing or will be destroyed when removed and contains at least the information and markings as described in OIML R 60 (2000) and:

- This certificate number TC7838 (in the countries where it is mandatory);
- Producers name or mark.

## 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 placing on the market.

Other parties may use this certificate without the written permission of the producer (WELMEC 8.8).

## 4 Reports

An overview of performed tests is given in the reports:

- No. R60/2000-NL1-10.22A dated 10 November 2010 that includes 64 pages;
- No. R60/2000-NL1-10.22B dated 10 November 2010 that includes 63 pages.

A report can be a test report, an evaluation report, a type evaluation report and/or a pattern evaluation report.