

Number **TC7808** revision 1  
 Project number 10200844  
 Page 1 of 4

Issued by NMI Certin B.V.  
 Hugo de Grootplein 1  
 3314 EG Dordrecht  
 The Netherlands

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).

Manufacturer Zhonghang Electronic Measuring Instrument Co., Ltd. (ZEMIC)  
 Xinyuan Rd. North Zone of EDZ, Hanzhong  
 723000, Shaanxi  
 China

In respect of A **single point load cell**, with strain gauges, tested as a part of a weighing instrument.  
 Manufacturer : Zhonghang Electronic Measuring Instrument Co., Ltd (ZEMIC)  
 Type : L6D-xx-xx-xx x -R1 Series

Characteristics  $E_{max}$  : 3 kg up to and including 50 kg  
 Accuracy class : C

In the description number TC7808 revision 1 further characteristics are described.

Description and documentation The load cell is described in the description number TC7808 revision 1 and documented in the documentation folder TC7808-2, appertaining to this test certificate.

Remarks Summary of the test involved: see Appendix number TC7808 revision 1  
 This revision test certificate replaces the earlier version, including its documentation folder.

Issuing Authority **NMI Certin B.V. Notified Body number 0122**  
 12 November 2010

  
 C. Oosterman  
 Head Certification Board

**NMI Certin B.V.**  
 Hugo de Grootplein 1  
 3314 EG Dordrecht  
 The Netherlands  
 T +31 78 6332332  
 certin@nmi.nl  
 www.nmi.nl

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

The designation of NMI Certin BV as Notified Body can be verified at <http://ec.europa.eu/enterprise/newapproach/nando/>

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](http://www.nmi.nl))

Reproduction of the complete document only is permitted



## 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
L6D-R1 Load cells Catalogue for using	24082010001	0	Mechanical / Electrical 4 Pages

Cable:

- The load cell is provided with a 4-wire system;
  - The cable length is mentioned on the load cell, see chapter "Naming example" in the L6D-R1 Load cells Catalogue for using;
  - 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 may be connected to the load cell;

### 1.2 Essential characteristics

Type	L6D-xx-xx-xx x -R1 Series		
Humidity classification	CH		
Fraction $p_{lc}$	0.7		
Temperature range	-10 °C / +40 °C		
Maximum capacity	$E_{max}$	3 kg up to and including 15 kg	20 kg up to and including 50 kg
Accuracy class	C		
Maximum number of load cell verification intervals	$n_{max}$	4000	
Ratio of minimum LC verification interval	$Y = E_{max} / v_{min}$	15000	
Ratio of minimum dead load output return	$Z = E_{max} / 2 * DR$	4000	5000

The characteristics for  $n_{max}$  and  $Y$  can be reduced separately.  $Z$  is proportional or equal to  $n_{max}$ . Each produced load cell is supplied with information about its characteristics.

Minimum dead load	: 0 kg
Safe overload	: 150 % of $E_{max}$
Rated Output	: 2 mV/V $\pm$ 0.2 mV/V
Input impedance	: 1065 $\Omega \pm$ 15 $\Omega$
Output impedance	: 1000 $\Omega \pm$ 10 $\Omega$
Recommended excitation	: 5 - 12 V AC/DC
Excitation maximum	: 18 V AC/DC
Transducer material	: Aluminum alloy
Atmospheric protection	: Silicon rubber

### 1.3 Essential shapes

The load cell is built according to drawing:

- L6D-R1 Load cells Catalogue for using, drawing number 24082010001.

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: TC7808.

Securing:

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

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.	L6D-C4-20 kg – 0.4 B - R1 L6D-C4-3 kg – 0.4 B - R1
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V.	L6D-C4-20 kg – 0.4 B - R1 L6D-C4-3 kg – 0.4 B - R1
Creep (20, 40 and -10 °C)	NMi Certin B.V.	L6D-C4-20 kg – 0.4 B - R1 L6D-C4-3 kg – 0.4 B - R1
Minimum dead load output return (20, 40 and -10 °C)	NMi Certin B.V.	L6D-C4-20 kg – 0.4 B - R1 L6D-C4-3 kg – 0.4 B - R1
Barometric pressure effects at room temperature	NMi Certin B.V.	L6D-C4-20 kg – 0.4 B - R1 L6D-C4-3 kg – 0.4 B - R1
Damp heat, cyclic: marked CH (or not marked)	NMi Certin B.V.	L6D-C4-20 kg – 0.4 B - R1 L6D-C4-3 kg – 0.4 B - R1