

Number **TC7866** revision 0

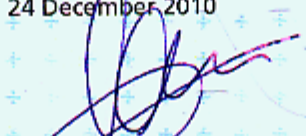
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Issued by	NMi Certin B.V. Hugo de Grootplein 1 3314 EG Dordrecht The Netherlands
In accordance with	Paragraph 8.1 of the European Standard on Metrological aspects of non-automatic weighing instruments EN 45501:1992/AC:1993 and by application of the 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 <b>tension or compression load cell</b> , with strain gauges, tested as a part of a weighing instrument. Manufacturer : Zhonghang Electronic Measuring Instrument Co., Ltd (ZEMIC) Type : H3G-xx-xxx-xx Series
Characteristics	$E_{max}$ : 50 kg up to and including 250 kg Accuracy class : C  In the description number TC7866 revision 0 further characteristics are described.
Description and documentation	The load cell is described in the description number TC7866 revision 0 and documented in the documentation folder TC7866-1, appertaining to this test certificate.
Remarks	Summary of the test involved: see Appendix number TC7866 revision 0

Issuing Authority

**NMi Certin B.V. Notified Body number 0122**  
24 December 2010

  
C. Oosterman  
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## 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
H3G Load cells Catalogue for using	7866/0-01	0	Mechanical / Electrical 5 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 H3G 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	H3G-xx-xxx-xx Series	
Humidity classification	CH	
Fraction $p_{lc}$	0,7	
Temperature range	-10 / +40 °C	
Maximum capacity	$E_{max}$	50 kg up to and including 250 kg
Accuracy class	C	
Maximum number of load cell verification intervals	$n_{max}$	3000
Ratio of minimum LC verification interval	$Y = E_{max} / V_{min}$	15000
Ratio of minimum dead load output return	$Z = E_{max} / 2 * DR$	3000

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	: 3,0 mV/V $\pm$ 0,008 mV/V
Input impedance	: 430 $\Omega$ $\pm$ 60 $\Omega$
Output impedance	: 351 $\Omega$ $\pm$ 2 $\Omega$
Recommended excitation	: 5 - 12 V DC/AC
Excitation maximum	: 18 V DC/AC
Transducer material	: Alloy steel
Atmospheric protection	: Silicon rubber

### 1.3 Essential shapes

The load cell is built according to drawing:

- "H3G Load cells Catalogue for using", drawing number 7866/0-01.

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 document. In the countries where it is mandatory the load cell should bear this test certificate number: TC7866.

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.	H3G-C3-50kg-6B
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V.	H3G-C3-50kg-6B
Creep (20, 40 and -10 °C)	NMi Certin B.V.	H3G-C3-50kg-6B
Minimum dead load output return (20, 40 and -10 °C)	NMi Certin B.V.	H3G-C3-50kg-6B
Barometric pressure effects at room temperature	NMi Certin B.V.	H3G-C3-50kg-6B
Damp heat, cyclic: marked CH (or not marked)	NMi Certin B.V.	H3G-C3-50kg-6B