

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	Hottinger Baldwin Messtechnik GmbH Im Tiefen See 45 D-64293 Darmstadt Germany
Measuring instrument	A <b>double bending beam load cell</b> , with strain gauges, tested as a part of a weighing instrument.  Brand : Hottinger Baldwin Messtechnik Designation : TLC, HLC and THC  Further properties are described in the annexes: - Description TC6524 revision 2; - Documentation folder TC6524-3.  An overview of performed tests is given in the annex: - Description TC6524 revision 2.
Remark	This revision replaces the earlier versions, including its documentation folder.

Issuing Authority

**NMi Certin B.V.**  
23 December 2013

  
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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 or an EC-type examination Certificate.

### 1.1 Essential parts

Number	Pages	Description	Remark
6524/2-01	2	Datenblatt TLC../ THC.. Wägezellen	-
6524/2-02	2	Datenblatt HLCF1.. Wägezellen	-
6524/2-03	2	Datenblatt HLC.. Wägezellen	-
6524/2-04	2	Datenblatt HLCB1../10t Wägezellen	-
6524/2-05	2	Data sheet HLCB2...	-
6524/2-06	1	Prinzipzeichnung HLC.... TLC.... THC...	Mechanical & Electrical
6524/2-07	1	Prinzipzeichnung TLC.... THC...	Mechanical & Electrical

#### Cable:

- The load cell is provided with a 4-wire system:
  - The cable length has to be approximately 3 meters;
  - 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 is connected to the load cell.

Nomenclature for load cell: TLC, HLC or THC dd e f / aaa

where: dd = Mechanical version load introduction  
 e = Accuracy class D or C  
 f = Division 1/1000  
 aaa = Capacity



# Description

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## 1.2 Essential characteristics

Maximum capacity ( $E_{max}$ )	110, 220, 500, 550, 1000, 1100, 1760, 2000, 2200, 4400 and 10000 kg	110, 220, 500, 550, 1000, 1100, 1760, 2000, 2200, 4400 and 10000 kg	220, 500, 550, 1000, 1100 kg			
Accuracy Class	D	C				
Maximum number of load cell intervals (n)	1000	1000	2000	3000	4000	6000
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	3509	7042	10000	10000 or 12000	10000 or 12000	
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	2000	7500				
Minimum dead load	0 kg					
Rated Output	2 mV/V or 1,94 mV/V					
Input impedance	350 $\Omega$ to 480 $\Omega$					
Temperature range	-10 $^{\circ}$ C / +40 $^{\circ}$ C					
Fraction $p_{LC}$	0,7					
Humidity Class	CH					
Safe overload	150% of $E_{max}$					
Output impedance	350 $\Omega$					
Recommended excitation	10 V DC/AC					
Excitation maximum	15 V DC/AC					
Transducer material	Stainless Steel					
Atmospheric protection	Viton PVC					

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:

- Datenblatt TLC.. / THC.. Wägezellen, drawing number 6524/2-01;
- Datenblatt HLCF1.. Wägezellen, drawing number 6524/2-02;
- Datenblatt HLC.. Wägezellen, drawing number 6524/2-03;
- Datenblatt HLCB1../10t Wägezellen, drawing number 6524/2-04;
- Data sheet HLCB2..., drawing number 6524/2-05.

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 OIML R60 .

In the countries where it is mandatory the load cell bears this certificate number: TC6524.

## 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 putting into use.

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

## 4 Test reports, evaluation reports and type (pattern) evaluation reports

An overview of performed tests is given in the reports:

- No. R60/2000-NL1-04.07A dated 08 June 2004 that includes 40 pages;
- No. R60/2000-NL1-04.07B dated 11 June 2004 that includes 37 pages;
- No. R60/2000-NL1-04.07C dated 07 October 2004 that includes 37 pages;
- No. NMI-13200520-01 dated 19 December 2013 that includes 51 pages.