

# Test Certificate Parts Certificate

Number **TC10982** revision 0  
Project number 16200809  
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Issued by NMI Certin B.V.

In accordance with WELMEC 8.8 Issue 2, WELMEC 2.4 Issue 2, OIML R 60 (2000), EN 45501:2015.

Producer Hottinger Baldwin Messtechnik GmbH  
Im Tiefen See 45  
D-64293 Darmstadt  
Germany

Measuring instrument A **single point load cell**, with strain gauges tested as a part of a weighing instrument.

Brand : Hottinger Baldwin Messtechnik GmbH  
Designation : PW22

Further properties are described in the annexes:

- Description TC10982 revision 0;
- Documentation folder TC10982-1.

An overview of performed tests is given in the annex:

- Description TC10982 revision 0.

Issuing Authority

**NMI Certin B.V.**  
2 February 2017



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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, an EC-type examination certificate or an EU-type examination certificate.

### 1.1 Essential parts

Number	Pages	Description	Remark
10982/0-01	1	Load cell outline	Mechanical
10982/0-02	1	Electrical drawing	Electrical

Cable:

- If 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 not connected to the load cell.

### 1.2 Essential characteristics

Maximum capacity ( $E_{max}$ )	6 kg up to and including 90 kg
Minimum dead load	0 kg
Accuracy Class	C
Rated Output	$1,9 \pm 0,1$ mV/V
Maximum number of load cell intervals (n)	3000
Ratio of minimum LC Verification interval $Y = E_{max} / v_{min}$	15000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	4000
Input impedance	$400 \Omega \pm 100 \Omega$
Temperature range	- 10 °C / + 40 °C
Fraction $p_{LC}$	0,7
Humidity Class	CH
Safe overload	150 % of $E_{max}$
Output impedance	$400 \Omega \pm 100 \Omega$
Recommended excitation	12 V AC / DC

Excitation maximum	15 V AC / DC
Transducer material	Aluminium
Atmospheric protection	Silicone rubber

The characteristics for  $n_{max}$  and Y can be reduced separately.

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

### 1.3 Essential shapes

Number	Pages	Description	Remark
10982/0-01	1	Load cell outline	Mechanical
10982/0-02	1	Electrical drawing	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 TC10982 (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, 2015 clause 10, at the time of putting into use.

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. NMI-16200809-01 dated 31 January 2017 that includes 51 pages;
- No. NMI-16200809-02 dated 31 January 2017 that includes 46 pages.

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