

Issued by NMI Certin B.V.

In accordance with WELMEC 8.8 2017, WELMEC 2.4 Issue 2, OIML R 60 (2017).

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.

Designation : PWSE

Further properties are described in the annexes:

- Description TC8022 revision 1;
- Documentation folder TC8022-2.

An overview of performed tests is given in the annex:

- Description TC8022 revision 1.

Remark This revision replaces the earlier version, including its documentation folder.

Issuing Authority

NMI Certin B.V.

16 August 2019


C. Oosterman
Head Certification Board

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
8022/0-01	1	PWSE Electrical drawing	-

Cable:

- If 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.
- If the load cell is provided with a 6-wire system (=“Remote-sensing”):
 - The cable length is not limited.

The cable is shielded; the shield is connected to the load cell.

1.2 Essential characteristics

Characterization of load cell capabilities	Analog-passive load cell	
Maximum capacity (E_{max})	100 kg up to and including 2500 kg	
Minimum dead load	0 kg	
Accuracy Class	C	
Rated Output	2 mV/V	
Maximum number of load cell intervals (n) ⁽¹⁾	6000	5000
Ratio of minimum LC Verification interval ⁽¹⁾ $Y = E_{max} / V_{min}$	15000	15000
Ratio of minimum dead load output return ⁽¹⁾ $Z = E_{max} / (2 * DR)$	7000	5000
Input impedance	390 $\Omega \pm 15 \Omega$	
Temperature range	-10 °C / +40 °C	
Fraction p_{LC}	0,7	
Humidity Class	CH	
Safe overload	150 % of E_{max}	
Output impedance	359 $\Omega \pm 10 \Omega$	
Recommended excitation	5 – 10 V AC or DC	
Excitation maximum	15 V AC or DC	
Transducer material	Stainless steel	
Atmospheric protection	IP67	

Remarks:

1. The characteristics for n_{max} , Y and Z can be reduced separately.

1.3 Essential shapes

Number	Pages	Description	Remark
8022/0-01	1	PWSE Electrical drawing	-
8022/1-01	1	PWSE Outline drawing	-

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 (2017) and:

- This certificate number TC8022 (in the countries where it is mandatory);
- Producers name or mark.



Description

Number **TC8022** revision 1
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2 Seals

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

3 Conditions for conformity assessment

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

The compatibility of load cells and indicator is established by the manufacturer by means of the compatibility of modules form, contained in EN45501:2015 clause F.4, 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-11200427-01 dated 21 February 2012 that includes 27 pages;
- No. NMI-11200427-02 dated 21 February 2012 that includes 24 pages.

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