Evaluation Certificate

Number **TC10862** revision 0
Project number SO16202870

Issued by	NMi Certin B.V.
In accordance with	WELMEC 8.8 Issue 2, WELMEC 2.1 Issue 4, EN 45501:2015, OIML R 76-1 (2006), WELMEC 7.2, 2015, OIML R51-1 (2006), OIML R61-1 (2004)
Producer	Hottinger Baldwin Messtechnik GmbH Im Tiefen See 45 D - 64293 Darmstadt GERMANY
Measuring instrument	An **Indicator**, tested as a part of a weighing instrument.

Brand : Hottinger Baldwin Messtechnik GmbH
Type : WTX120

Further properties are described in the annexes:
- Description TC10862 revision 0;
- Documentation folder TC10862-1.

An overview of performed tests is given in the annex:
- Description TC10862 revision 0.

Issuing Authority

NMi Certin B.V.
5 December 2016

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INSPECTION
RvA I 122

1 General information about the indicator

All properties of the indicator, whether mentioned or not, shall not be in conflict with the standard mentioned in the 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	Remarks
10862/0-01	1	Block diagram	-
10862/0-02	3	DPG-Series datasheet	Tilt sensor datasheet
10862/0-03	3	Lay-out of CPU board	Including partslist
10862/0-04	4	Lay-out of ADM (A/D) board	Including partslist

EMI protection measures:
- The indicator is built in a metal enclosure;
- The interface and power cables are shielded;
- The interface and power cables are grounded near the instrument.

1.2 Essential characteristics

Accuracy class	OIML R 76	III, IIII
	OIML R 51	XIII , Y(a), XIIII, Y(b)
	OIML R 61	Ref(0,2)
Weighing range(s)		Single interval Multi-interval Multiple range
Maximum number of verification scale intervals		10000
Maximum number of partial weighing ranges		3
Load cell excitation voltage		5 V square wave
Minimum input voltage per verification scale interval		0,33 µV
Minimum load cell resistance		43 Ω
Maximum load cell resistance		3321 Ω

Fraction of the maximum permissible error	0,5	
Load cell connection	6-wire (remote sensing) or 4-wire	
Maximum value of the cable length per cross wire section between the indicator and the junction box or load cells	6-wire:	519 m/mm^2
	4-wire:	load cells connected directly
Tare	T ≤ -Max	

Climatic environment	temperature range	-10 °C / +40 °C	
	humidity	Non-condensing	
	intended location	Closed	
Mechanical environment class		M3	
Electromagnetic environment class		E3	
Power supply voltage		12 –30 V DC, or 24 V DC road vehicle battery	
Software identification	non automatic weighing instrument	Checksums	15487782
	automatic catchweigher		f3c7675a or 34b95a82
	automatic gravimetric filling instrument		15487782

Rated minimum fill (Minfill) for automatic gravimetric filling instruments:

Average number of loads per fill:	1			
Accuracy class:	X(0,2)	X(0,5)	X(1)	X(2)
d [g]	Minfill[g]			
0,5	28	11	5,5	3
1	111	22	11	6
2	334	44	22	12
5	1665	335	110	30
10	3330	1330	330	110
20	6660	2660	1340	340
50	25000	6650	3350	1650
100	50000	20000	6700	3300
200	100000	40000	20000	6600
≥ 500	500d	200 d	100 d	50 d

Software:
- The identification number will be displayed after the sequence:
  - Stop all possible running processes (depending upon the running application);
  - Press the arrow-up button several times until the start-up message appears (depending upon the loaded application);
  - Press enter button to enter Supervisor Mode;
  - Press Info button several times until “4 Software ID” appears;
  - Press enter button:
    - The software ID will be displayed.
- The indicator has loadable software;
- Software specification (WELMEC 7.2):
  - Software type U;
  - Risk Class C;
  - Extension L/S/D.

List of legally relevant functions:
- Determination stability of equilibrium;
- Zero indicating;
- Semi-automatic zero-setting;
- Initial zero-setting;
- Zero-tracking;
- Semi-automatic subtractive tare balancing;
- Semi-automatic subtractive tare weighing;
- Preset tare;
- Gravity compensation;
- Adjustment / set-up mode via switch on the ADM (A/D) board;
- Acting upon significant faults;
- Set points;
- Indication of selected set point(s);
- Linearity compensation: the linearity can be compensated to maximum 6 points;
- Extended indicating, resolution 1/10 e for $\leq$ 5 seconds after manual command;
- Indications other than primary indications;
- Indication of additional information;
- Memory storage;
- Download of software recorded in audit trail.

Additional legally relevant function for tilt sensor:
- Tilt compensation $\leq$ 8°.

Additional legally relevant function for non-automatic weighing instrument:
- Additive tare, multiple range, maximum effect: $T = + (Max_2 - Max_1)$

Additional legally relevant functions for automatic gravimetric filling instrument:
- Automatic zero-setting, that operates as part of every automatic weighing cycle;
- Automatic tare-setting, that operates as part of every automatic weighing cycle;
- Automatic subtractive tare setting;
- Automatic additive tare setting, multiple range, maximum effect: $T = + (Max_2 - Max_1)$;

- Preset value;
- Final feed cut-off device;
- Correction device.

1.3 Essential shapes

Number	Pages	Description	Remarks
10862/0-05	1	Display	-
10862/0-06	1	Housing without display	-
10862/0-07	1	Housing with display	-

The descriptive markings plate is secured against removal by sealing or will be destroyed when removed and contains at least the following information:
- This certificate number TC10862;
- Producers name or mark.

Inside the cabinet is an adjustment lock, located on the ADM (A/D) board.

1.4 Conditional parts

The indicator may be equipped with one or more of the following protective interfaces that have not to be secured:
- RS232;
- RS422;
- RS485;
- Ethernet;
- USB host;
- Bluetooth;
- PROFI-bus;
- PROFINET;
- Digital I/O;
- Incremental Encoder Interface;
- Analog I/O;
- Modbus;
- Ethernet for remote display.

1.5 Non-essential parts

Display;
Keyboard;

2 Seals

To secure components that may not be dismantled or adjusted by the user, the indicator has to be secured in a suitable manner on the locations indicated in the drawings:

Number	Pages	Description	Remarks
10862/0-08	1	Sealing of instrument	-
10862/0-09	1	Sealing connection tilt sensor	Connected to serial port KL3

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 Evaluation Certificate only with the written permission of the producer.

4 Reports

An overview of performed tests is given in the reports:
- No. NMi-14200302-01 dated 20 July 2015 that includes 58 pages;
- No. NMi-14200302-02 dated 20 July 2015 that includes 16 pages.

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