Test Certificate
Parts Certificate

Number **TC11195** revision 0
Project number 1901501

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	Moorange Electronics Mfg (Shanghai) Co.,Ltd. No.335, Group2 Haishen, Haiqiao Rd, Huinan, Pudong District, Shanghai 201301 China
Measuring instrument	A **compression load cell**, with strain gauges, tested as a part of a weighing instrument.
Measuring instrument	Brand : Moorange
Measuring instrument	Designation : M36, M36i

Further properties are described in the annexes:
- Description TC11195 revision 0;
- Documentation folder TC11195-1.

An overview of performed tests is given in the annex:
- Description TC11195 revision 0.

Issuing Authority **NMi Certin B.V.**
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INSPECTION
RvA I 122

Description

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
11195/0-01	1	M36 Outline drawing	Mechanical
11195/0-02	1	M36i Outline drawing	Mechanical
11195/0-03	1	Circuit diagram	Electrical

Cable:
- When the load cell is provided with a 4-wire system:
  - The cable length is mentioned in the accompanying load cell document / on the label;
  - The cable length shall not be modified.
- When 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})	20000 kg up to and including 100000 kg
Minimum dead load	0 kg
Accuracy Class	C
Rated Output	2,0 mV/V
Maximum number of load cell intervals (n) (1)	3500
Ratio of minimum LC Verification interval (1) $Y = E_{max} / v_{min}$	16000
Ratio of minimum dead load output return (1) $Z = E_{max} / (2 * DR)$	3800
Input impedance	700 Ω ± 10 Ω
Temperature range	-10 °C / + 40 °C
Fraction p_{LC}	0,7
Humidity Class	CH

Safe overload	150 % of E_{max}
Output impedance	700 Ω ± 10 Ω
Recommended excitation	10 V AC / DC
Excitation maximum	15 V AC / DC
Transducer material	Steel
Atmospheric protection	Hermetically welded

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

1.3 Essential shapes

Number	Pages	Description	Remark
11195/0-01	1	M36 Outline drawing	Mechanical
11195/0-02	1	M36i Outline drawing	Mechanical

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 TC11195 (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

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 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 report(s):
- No. NMi-15200268-01 rev. 1 dated 29 September 2015 that includes 51 pages.

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