

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.
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Pudong District, Shanghai 201301
China

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

Measuring instrument Brand : Moorange

Measuring instrument Designation : M28i

Further properties are described in the annexes:

- Description TC11196 revision 0;
- Documentation folder TC11196-1.

An overview of performed tests is given in the annex:

- Description TC11196 revision 0.

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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
11196/0-01	1	Load cell assembly	Mechanical
11196/0-02	1	Schematic diagram for wiring	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})	500 kg up to and including 2500 kg
Minimum dead load	0 kg
Accuracy Class	C
Rated Output	2 mV/V \pm 0,2 mV/V
Maximum number of load cell intervals (n) ⁽¹⁾	3000
Ratio of minimum LC Verification interval ⁽¹⁾ $Y = E_{max} / V_{min}$	12000
Ratio of minimum dead load output return ⁽¹⁾ $Z = E_{max} / (2 * DR)$	3000
Input impedance	380 Ω \pm 10 Ω
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 Ω \pm 4 Ω
Recommended excitation	5 - 15 V AC / DC

Excitation maximum	15 V AC / DC
Transducer material	Stainless steel
Atmospheric protection	Laser welded seal

Remarks:

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

1.3 Essential shapes

Number	Pages	Description	Remark
11196/0-01	1	Load cell assembly	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 TC11196 (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 reports:

- No. NMI-1900827-01 dated 1 May 2017 that includes 51 pages.

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