



# OIML Certificate

**OIML Member State**  
The Netherlands

Number R60/2017-A-NL1-20.16  
Project number 1902523  
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Issuing authority

NMi Certin B.V.  
Person responsible: M. Boudewijns

Applicant and  
Manufacturer

NINGBO TIMY SCALE CO., LTD  
9-8-2 Huacheng Garden 31.35.37, No 611 Qingshuiqiao Rd, Hi-tech Zone  
Ningbo  
China

Identification of the  
certified type

A **shear beam load cell**, with strain gauges.  
Registered trade name : NINGBO TIMY SCALE / TIMY / TIMY SCALE  
Type : TM601  
TM602  
TM603  
TM604  
TM605  
TM605-Y

Characteristics

See next page

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified Type (represented by the sample(s) identified in the OIML Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

**OIML R 60** - Edition 2017 (E) for accuracy class C

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation above-identified. This Certificate does not bestow any form of legal international approval.

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Issuing Authority

**NMi Certin B.V., OIML Issuing Authority NL1**  
12 May 2020

Certification Board

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This document is issued under the provision that no liability is accepted and that the applicant shall indemnify third-party liability.

The notification of NMi Certin B.V. as Issuing Authority can be verified at [www.oiml.org](http://www.oiml.org)

This document is digitally signed and sealed. The digital signature can be verified in the blue ribbon at the top of the electronic version of this certificate.



The conformity was established by the results of tests and examinations provided in the associated OIML Type Evaluation Reports:

- No. NMI-1902523-01 dated 12 May 2020 that includes 51 pages;
- No. NMI-1902523-02 dated 12 May 2020 that includes 46 pages.

### Characteristics of the load cell:

Characterization of load cell capabilities	Analog-passive load cell
Maximum capacity ( $E_{max}$ )	300 kg up to and including 5000 kg
Minimum dead load	0 kg
Accuracy Class	C
Rated Output	2 mV/V up to 3 mV/V $\pm$ 0,1%
Maximum number of load cell intervals (n) <sup>(1)</sup>	3000
Ratio of minimum LC Verification interval <sup>(1)</sup> $Y = E_{max} / V_{min}$	10000
Ratio of minimum dead load output return <sup>(1)</sup> $Z = E_{max} / (2 * DR)$	3000
Input impedance	385 $\Omega$ $\pm$ 20 $\Omega$
Temperature range	-10 °C / + 40 °C
Fraction $p_{LC}$	0,7
Humidity Class	CH
Safe overload	150 % of $E_{max}$
Output impedance	350 $\Omega$ $\pm$ 3 $\Omega$
Recommended excitation	5-12 V AC / DC
Excitation maximum	15 V AC / DC
Transducer material	Alloy steel
Atmospheric protection	Silicon rubber

### Remarks:

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

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

The above identified Type (represented by the sample(s) identified in the OIML Test Report) have been found to comply with the additional national requirements established by the United States of America (NIST Handbook 44 and NCWM Publication 14), included in the Utilizer Declaration:

- R 60 OIML-CS rev.2 Additional requirements from the United States Accuracy class III L;
- R 60 OIML-CS rev.2 Additional requirements from the United States Marking requirements.