



# OIML Certificate

**OIML Member State**  
The Netherlands

Number R60/2000-A-NL1-18.26  
Project number 2251860  
Page 1 of 2

Issuing authority	NMi Certin B.V. Person responsible: C. Oosterman
Applicant and Manufacturer	Marques Electronic Technology (Ningbo) Co., Ltd. Room113, Building B, Xidan Industry Park No 123 Zhenning, West Road, Jiauchuan Street, Zhenhai 315200 Ningbo City China
Identification of the certified type	A <b>compression load cell</b> , with strain gauges, Type : MC-CT
Characteristics	See next page

This OIML Certificate is issued under scheme A.

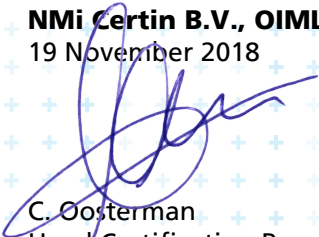
This Certificate attests the conformity of the above identified Type (represented by the sample(s) identified in the OIML Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

**OIML R 60** - Edition 2000 (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.

*Important note:* Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate was issued, partial quotation of the Certificate and of the associated OIML Test Report(s) is not permitted, although either may be reproduced in full.

Issuing Authority **NMi Certin B.V., OIML Issuing Authority NL1**  
19 November 2018

  
C. Oosterman  
Head 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)



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Page 2 of 2

The conformity was established by the results of tests and examinations provided in the associated OIML Test Report:

- No. NMI-15200268-01 rev. 1 dated 29 September 2015 that includes 51 pages.

**Characteristics of the load cell:**

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)	3500
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	16000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	3800
Input impedance	$700 \Omega \pm 10 \Omega$
Temperature range	-10 °C / + 40 °C
Fraction $p_{LC}$	0,7
Humidity Class	CH
Safe overload	150 % of $E_{max}$
Output impedance	$700 \Omega \pm 10 \Omega$
Recommended excitation	10 V AC / DC
Excitation maximum	15 V AC / DC
Transducer material	Steel
Atmospheric protection	Hermetically welded

The characteristics for  $n_{max}$  and Y can be reduced separately. Z is proportional or equal to  $n_{max}$ .

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.