



OIML Certificate

OIML Member State
The Netherlands

Number R60/2021-A-NL1-25.38 revision 0
Project number 4020720
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Issuing authority

NMi Certin B.V.
Person responsible: M.Ph.D. Schmidt

Applicant and
Manufacturer

Zhonghang Electronic Measuring Instruments (Xi'an) Co., Ltd.
No.166, WestAve, Hi-tech District
Xi'an, Shaanxi
China

Identification of the
certified type

A **double ended shear beam load cell**, with strain gauges
Registered trade name : ZEMIC
Type : HM9E

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 60-1:2021 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.

This certificate and supporting reports comply with the requirements of OIML-CS-PD-07 clause 6.2.

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Issuing Authority

NMi Certin B.V., OIML Issuing Authority NL1
30 December 2025

Certification Board

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The conformity was established by the results of tests and examinations provided in the associated report:

- No. R60/2000-NL1-10.15 dated 20 September 2010 that includes 64 pages.

Characteristics of the load cell:

Characterization of load cell capabilities	Analog-passive load cell
Maximum capacity ($E_{\max}$)	22 t up to and including 100 t
Minimum dead load	0 t
Accuracy Class	C
Rated Output	3 mV/V $\pm$ 0,003 mV/V
Maximum number of load cell intervals (n) ⁽¹⁾	3000
Ratio of minimum LC Verification interval ⁽¹⁾ $Y = E_{\max} / v_{\min}$	13000
Ratio of minimum dead load output return ⁽¹⁾ $Z = E_{\max} / (2 * DR)$	3000
Input impedance	700 $\Omega \pm 7 \Omega$
Temperature range	-10 °C / +40 °C
Fraction p_{LC}	0,7
Humidity Class	CH
Safe overload	150 % of $E_{\max}$
Output impedance	703 $\Omega \pm 4 \Omega$
Recommended excitation	5-12 V AC / DC
Excitation maximum	18 V AC / DC
Transducer material	Alloy Steel
Atmospheric protection	Hermetically welded

Remark:

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.

Revision History

Revision	Date	Change(s)
0	2025-12-30	Initial issue.