



OIML Certificate

OIML Member State
The Netherlands

Number R60/2021-A-NL1-24.14 revision 1
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 **shear beam load cell**, with strain gauges.
Registered trade name : ZEMIC
Type : BM8D-W16

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.

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Issuing Authority

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

Certification Board

NMi Certin B.V.
Thijssseweg 11
2629 JA Delft
The Netherlands
T +31 88 6362332
certin@nmi.nl
www.nmi.nl

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The notification of NMi Certin B.V. as Issuing Authority can be verified at www.oiml.org

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

- No. NMI-3765900-01 dated 9 July 2024 that includes 97 pages.

Characteristics of the load cell:

Characterization of load cell capabilities	Analog-passive load cell
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⁾	8000
Ratio of minimum LC Verification interval ⁽¹⁾ $Y = E_{\max} / v_{\min}$	20000
Ratio of minimum dead load output return ⁽¹⁾ $Z = E_{\max} / (2 * DR)$	8000
Input impedance	384 $\Omega \pm 10 \Omega$
Temperature range	-10 °C / +40 °C
Fraction p_{LC}	0,7
Humidity Class	CH
Safe overload	150 % of E_{\max}
Output impedance	350 $\Omega \pm 2\Omega$
Recommended excitation	5-12 V AC / DC
Excitation maximum	18 V AC / DC
Transducer material	Stainless 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.

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.



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Revision History

Revision	Date	Change(s)
0	2024-07-09	Initial issue.
1	2025-12-30	Change of address.