

OIML Member State
The Netherlands

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Project number 2641941
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Issuing authority

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

Applicant and
Manufacturer

Mettler-Toledo (Changzhou) Precision Instrument Ltd.
No. 22 Zhengqiang Road, Changzhou, Jiangsu, 213125, P.R.China
Changzhou
China

Identification of the
certified type

A **bending beam load cell**, with strain gauges.
Registered trade name : Mettler-Toledo
Type : MTB

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 60-1:2017 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
17 November 2022

Certification Board

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

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



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

- No. NMI-R60/2000-NL-02.10A dated 9 April 2002 that includes 40 pages;
- No. NMI-R60/2000-NL-02.10B dated 5 April 2002 that includes 37 pages;
- No. NMI-R60/2000-NL1-05.18A dated 4 November 2004 that includes 38 pages;
- No. NMI-R60/2000-NL1-05.18B dated 4 November 2004 that includes 37 pages;
- No. NMI-R60/2000-NL1-05.18C dated 10 October 2005 that includes 40 pages;
- No. LSfc2015-6001 dated 24 June 2015 that includes 24 pages;
- No. NMI-2641941-01 dated 17 November 2022 that includes 24 pages.

Characteristics of the load cell:

Characterization of load cell capabilities	Analog-passive load cell	
Maximum capacity (E_{max})	10 up to and including 20 kg	30 kg up to and including 500 kg
Minimum dead load	0 kg	
Accuracy Class	C	
Rated Output	2 mV/V	
Maximum number of load cell intervals (n) ⁽¹⁾	3000	6000
Ratio of minimum LC Verification interval ⁽¹⁾ $Y = E_{max} / V_{min}$	12000	25000
Ratio of minimum dead load output return ⁽¹⁾ $Z = E_{max} / (2 * DR)$	3000	6000
Input impedance	383 $\Omega \pm 4 \Omega$ or 387 $\Omega \pm 4 \Omega$	
Temperature range	-10 °C / +40 °C	
Fraction p_{LC}	0,7	
Humidity Class	CH	
Safe overload	150 % of E_{max}	
Output impedance	350 $\Omega \pm 1 \Omega$	
Recommended excitation	5-15 V AC / DC	
Excitation maximum	20 V AC / DC	
Transducer material	Stainless steel	
Atmospheric protection	Stainless metal laser welding sealing	

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.



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Revision History

Revision	Date	Change(s)
0	2022-11-17	Initial issue