

OIML Member State
The Netherlands

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Project number 3636136
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Issuing authority

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

Applicant and
Manufacturer

Hottinger Brüel & Kjaer GmbH
Im Tiefen See 45
D-64293 Darmstadt
Germany

Identification of the
certified type

A **single point load cell**, with strain gauges, equipped with electronics.

Registered trade name : HBM

Type : FIT5X

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.

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Issuing Authority

NMi Certin B.V., OIML Issuing Authority NL1
23 June 2023

Certification Board

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

- No. NMI-3636136-01 dated 22 June 2023 that includes 61 pages;
- No. NMI-3636136-02 dated 22 June 2023 that includes 15 pages.

Characteristics of the load cell:

Characterization of load cell capabilities	Digital load cell with data processing
Maximum capacity (E_{max})	5 kg up to and including 25 kg
Minimum dead load	0 kg
Accuracy Class	C
Maximum number of load cell intervals (n) ⁽¹⁾	4000
Ratio of minimum LC Verification interval ⁽¹⁾ $Y = E_{max} / V_{min}$	10000
Ratio of minimum dead load output return ⁽¹⁾ $Z = E_{max} / (2 * DR)$	4000
Fraction p_{LC}	0,8
Temperature range	-10 °C / + 40 °C
Humidity Class	CH
Safe overload	150 % of E_{max}
Recommended excitation	10-30 V DC
Excitation maximum	30 V DC
Transducer material	Stainless steel
Atmospheric protection	Hermetically welded
Electromagnetic environment class	E1
Number of counts for E_{max}	$\geq Y * 5 / p_{LC}$
Software identification	Version number: 81, Checksum: 244554

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	2023-06-23	Initial issue.