OIML Certificate

OIML Member State
The Netherlands

Number R60/2017-A-NL1-23.13 revision 0
Project number 3523792

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 **bending beam load cell**, with strain gauges. Registered trade name : HBM Type : Z6…
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.

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
26 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-3523792-01 dated 23 June 2023 that includes 51 pages;
- No. NMi-3523792-02 dated 23 June 2023 that includes 24 pages;
- No. NMi-3523792-03 dated 23 June 2023 that includes 46 pages;
- No. NMi-3523792-04 dated 23 June 2023 that includes 46 pages.

Characteristics of the load cell:

Characterization of load cell capabilities	Analog-passive load cell			
Maximum capacity (E_{max})	5 kg up to and including 1000 kg	10 kg up to 20 kg	20 kg up to 200 kg	200 kg up to and including 1000 kg
Minimum dead load	0 kg			
Accuracy Class	D	C		
Rated Output	2,0 mV/V			
Maximum number of load cell intervals (n) (1)	1000	4500	6000	6000
Ratio of minimum LC Verification interval (1) $Y = E_{max} / v_{min}$	3000	22500	22500	22500
Ratio of minimum dead load output return (1) $Z = E_{max} / (2 * DR)$	1800	11000	14000	20000
Input impedance	350 - 480 Ω			
Temperature range	-10 °C / + 40 °C			
Fraction p_{LC}	0,7			
Humidity Class	CH			
Safe overload	150 % of E_{max}			
Output impedance	356 Ω ± 0,2 Ω	356 Ω ± 0,12 Ω, or with plug 355 Ω ± 0,12 Ω		
Recommended excitation	0,5 - 12 V AC / DC			
Excitation maximum	18 V AC / DC			
Transducer material	Stainless steel			
Atmospheric protection	Hermetically sealed (welded)			

Remark:

1. The characteristics for n_{max}, Y and Z can be reduced separately.

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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.

Revision History

Revision	Date	Change(s)
0	2023-06-26	Initial issue.