

## OIML Certificate

**OIML Member State** 

The Netherlands

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Issuing authority NMi Certin B.V.

Person responsible: C. Oosterman

Applicant and Hottinger Baldwin Messtechnik GmbH

Manufacturer Im Tiefen See 45
D-64293 Darmstadt

Germany

Identification of the

certified type

A **bending beam load cell**, with strain gauges

Type : SP4M.

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 - Edition 2000 (E) 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 NL

11 September 2018

C. Oosterman

Head Certification Board

NMi Certin B.V. Hugo de Grootplein 1 3314 EG Dordrecht the Netherlands T +31 78 6332332 certin@nmi.nl www.nmi.nl This document is issued under the provision that no liability is accepted and that the applicant shall indemnify third-party liability.

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

- No. NMi-16200621-01 dated 24 November 2016 that includes 51 pages;
- No. NMi-16200621-02 dated 24 November 2016 that includes 46 pages.

## Characteristics of the load cell:

Maximum capacity (E <sub>max</sub> )	7 kg up to and including 200 kg
Minimum dead load	0 kg
Accuracy Class	+ + + + + + + + + + + + + + + + + + +
Rated Output + + + + + + + + + + + +	+ + + + + + 2,1 ± 0,2 mV/V
Maximum number of load cell intervals (n) (1)	6000
Ratio of minimum LC Verification interval $^{(1)}$ Y = $E_{max}$ / $v_{min}$	25000
Ratio of minimum dead load output return $^{(1)}$ Z = $E_{max}$ / (2 * DR)	+ + + + + + + + + + + + + + + + + + + +
Input impedance + + + + + + + + + +	+ + + + + + 400 Ω ± 100 Ω+ + + + + +
Temperature range	-10 °C / + 40 °C
Fraction p <sub>LC</sub>	0,7
Humidity Class + + + + + + + + + +	+ + + + + + + CH+ + + + + + + +
Safe overload + + + + + + + + + + +	+ + + + + + 150 % of E <sub>max</sub> + + + + + +
Output impedance	400 Ω ± 100 Ω
Recommended excitation	5 V AC / DC
Excitation maximum	12 V AC / DC
Transducer material	Aluminium
Atmospheric protection	Silicone rubber

## 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.2Additional requirements from the United StatesAccuracy class III L;
- R 60 OIML-CS rev.2 Additional requirements from the United States Marking requirements.