



# OIML Certificate of Conformity

**OIML Member State**  
The Netherlands

Number R60/2000-NL1-17.19  
Project number 1900650  
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Issuing authority	NMi Certin B.V. Person responsible: C. Oosterman
Applicant and Manufacturer	MinebeaMitsumi Inc. 1-1-1, Katase Fujisawa-shi, Kanagawa-ken 251-8531 Fujisawa Japan
Identification of the certified type	A <b>single point load cell</b> , with strain gauges. Type : CB004-xxx-NS CB004-xxx
Characteristics	See next page

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 R60** - 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.

*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**  
17 March 2017



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This document is issued under the provision that no liability is accepted and that the applicant shall indemnify third-party liability.

The notification of NMi Certin B.V. as Issuing Authority can be verified at [www.oiml.org](http://www.oiml.org)



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The conformity was established by the results of tests and examinations provided in the associated OIML Test Report(s):

- N° R60/1991-NL-98.15A dated 24 September 1998 that includes 41 pages (CB004-100K-NS C3);
- N° R60/1991-NL-98.15B dated 24 September 1998 that includes 38 pages (CB004-10K-NS C3);
- N° R60/2000-NL1-04.18A dated 6 December 2004 that includes 37 pages (CB004-60K C6);
- N° R60/2000-NL1-04.18B dated 6 December 2004 that includes 18 pages (CB004-10K C6);
- N° R60/2000-NL1-07.11 dated 13 September 2007 that includes 37 pages (CB004-10K C6).

**Characteristics of the load cell:**

Maximum capacity ( $E_{max}$ )	10 kg up to and including 100 kg	10 kg up to and including 45 kg	60 kg up to and including 100 kg
Minimum dead load	0 kg		
Accuracy Class	C		
Rated Output	2 mV/V		
Maximum number of load cell intervals (n)	3000 for CB004-xxx-NS	4000 for CB004-xxx	6000 for CB004-xxx
Ratio of minimum LC Verification interval $Y = E_{max} / v_{min}$	10000		
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	3000 for CB004-xxx-NS	4000 for CB004-xxx	6000 for CB004-xxx
Input impedance	425 $\Omega \pm 25 \Omega$		
Temperature range	-10 °C / + 40 °C		
Fraction $p_{LC}$	0,7		
Humidity Class	CH		
Safe overload	150 % of $E_{max}$		
Output impedance	350 $\Omega \pm 5 \Omega$		
Recommended excitation	12 V AC / DC		
Excitation maximum	20 V AC / DC		
Transducer material	Alloy Aluminum		
Atmospheric protection	Butyl rubber		

The characteristics for  $n_{max}$  and Y can be reduced separately.

Each produced load cell is provided with an accompanying document with information about its characteristics.