



OIML Certificate of Conformity

OIML Member State
The Netherlands

Number R60/2000-NL1-17.55
Project number 1900957
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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
Japan

Identification of the certified type A **bending beam load cell**, with strain gauges.
Type : M110 or PR79
M110T or PR79T

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.

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Issuing Authority **NMI Certin B.V., OIML Issuing Authority NL1**
4 September 2017



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

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

- No. NMI-1900957-01 dated 18 August 2017 that includes 97 pages;
- No. NMI-1900957-02 dated 18 August 2017 that includes 90 pages;
- No. NMI-1900957-03 dated 18 August 2017 that includes 90 pages.

Characteristics of the load cell:

Maximum capacity (E_{max})	91 kg up to 227 kg	227 kg up to 1134 kg	1134 kg up to and including 5099 kg
Minimum dead load	0 kg		
Accuracy Class	C		
Rated Output	2,0 mV/V		
Maximum number of load cell intervals (n) ⁽¹⁾	3000		
Ratio of minimum LC Verification interval ⁽¹⁾ $Y = E_{max} / v_{min}$	20000	18000	20000
Ratio of minimum dead load output return ⁽¹⁾ $Z = E_{max} / (2 * DR)$	3000		
Input impedance	1100 $\Omega \pm 10 \Omega$		
Temperature range	-10 °C / + 40 °C		
Fraction p_{LC}	0,7		
Humidity Class	CH		
Safe overload	150 % of E_{max}		
Output impedance	1000 $\Omega \pm 1 \Omega$		
Recommended excitation	10 V AC / DC		
Excitation maximum	15 V AC / DC		
Transducer material	Stainless steel		
Atmospheric protection	Hermetically welded		

Remark:

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

Each produced load cell 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 MAA Declaration of Mutual Confidence:

- R 60 DoMC-01 rev.0, Additional requirements from the United States;
- R 60 DoMC-02 rev.0, Additional requirements from the United States.