

OIML Member State
The Netherlands

Number R60/2017-A-NL1-19.19 revision 1
Project number 2393178
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Issuing authority NMI Certin B.V.
Person responsible: C. Oosterman

Applicant and Manufacturer Minebea Intec GmbH
Meiendorfer Strasse 205 A
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Germany

Identification of the certified type **A tension load cell**, with strain gauges.
Registered trade name : Minebea Intec
Type : PR 76

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 2017 (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 Type Evaluation Reports is not permitted, although either may be reproduced in full.

Issuing Authority **NMI Certin B.V., OIML Issuing Authority NL1**
14 August 2019


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

- No. NMI-2393178-01 revision 1 dated 14 August 2019 that includes 74 pages;
- No. NMI-2393178-02 revision 1 dated 14 August 2019 that includes 68 pages;
- No. NMI-2393178-03 revision 1 dated 14 August 2019 that includes 68 pages.

Characteristics of the load cell:

Characterization of load cell capabilities	Analog-passive load cell
Maximum capacity (E_{max})	60 kg up to and including 5000 kg
Minimum dead load	0 kg
Accuracy Class	C
Rated Output	2 mV/V
Maximum number of load cell intervals (n) ⁽¹⁾	3000
Ratio of minimum LC Verification interval ⁽¹⁾ $Y = E_{max} / V_{min}$	10000
Ratio of minimum dead load output return ⁽¹⁾ $Z = E_{max} / (2 * DR)$	3000
Input impedance	400 $\Omega \pm 50 \Omega$
Temperature range	-10 °C / + 40 °C
Fraction p_{LC}	0,7
Humidity Class	CH
Safe overload	150 % of E_{max}
Output impedance	352 $\Omega \pm 2 \Omega$
Recommended excitation	10 V AC / DC
Excitation maximum	15 V AC / DC
Transducer material	Stainless steel
Atmospheric protection	Hermetically sealed

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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Certificate history:

This revision replaces the previous versions.

Revision	Date	Description of the modification
Initial	12 August 2019	-
1	14 August 2019	Minor correction of type evaluation reports.