OIML Certificate

OIML Member State
The Netherlands

Number R60/2017-A-NL1-23.01 revision 0
Project number 3458015

Issuing authority	NMi Certin B.V. Person responsible: M.Ph.D. Schmidt
Applicant and Manufacturer	Minebea Intec GmbH Meiendorfer Strasse 205 A D-22145 Hamburg Germany
Identification of the certified type	A **compression load cell**, with strain gauges, equipped with electronics. Registered trade name : Minebea Intec GmbH Type : PR 6204B
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 or D

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
22 May 2023

Certification Board

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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-3458015-01 dated 19 May 2023 that includes 17 pages;
- No. NMi-3458015-02 dated 19 May 2023 that includes 48 pages;
- No. NMi-3458015-03 dated 19 May 2023 that includes 61 pages;
- No. NMi-3458015-04 dated 19 May 2023 that includes 48 pages;
- No. NMi-3458015-05 dated 19 May 2023 that includes 48 pages.

Characteristics of the load cell:

Characterization of load cell capabilities	Digital load cell with data processing							
Maximum capacity (E_{max})	500 kg up to 1000 kg	1000 kg up to 2000 kg	2000 kg up to 3000 kg		3000 kg up to 20000 kg		20000 kg up to and including 75000 kg	
Minimum dead load	0 kg							
Accuracy Class	D		C	D	C	D	C	D
Maximum number of load cell intervals (n) (1)	1000		3000	1000	3000	1000	6000	1000
Ratio of minimum LC Verification interval (1) $Y = E_{max} / v_{min}$	2500	5000	10000		14000		20000	
Ratio of minimum dead load output return (1) $Z = E_{max} / (2 * DR)$	1000		3000		3000		8000	
Temperature range	Class C: -10 °C / + 40 °C Class D: -25 °C / + 55 °C							
Fraction p_{LC}	0,7							
Humidity Class	CH							
Safe overload	0,5 t: 600% of E_{max} 1 t: 300% of E_{max}		2 t: 150% of E_{max}		3 t: 150% E_{max} 5 t: 150% E_{max} 10 t: 150% E_{max}		20 t: 187% of E_{max} 25 t: 150% of E_{max} 30 t: 250% of E_{max} 50 t: 150% of E_{max} 60 t: 125% of E_{max} 75 t: 100% of E_{max}	
Recommended excitation	12-28V DC supplied by 100-240V AC power supply							
Transducer material	Stainless steel							
Number of counts for E_{max}	$\geq Y * 5 / p_{LC}$							
Atmospheric protection	Hermetically welded							

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Electromagnetic environment class	E2
Software identification	Version number: 01.01.01

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.

Revision History

Revision	Date	Change(s)
0	22 May 2023	Initial issue.