

OIML Member State
The Netherlands

Number R60/2000-NL1-15.02
Project number 13200572
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Issuing authority	NMi Certin B.V. Person responsible: C. Oosterman
Applicant and Manufacturer	Ravas Europe B.V. Toepadweg 7 5201 KA Zaltbommel The Netherlands
Identification of the certified type	A shear beam load cell , with strain gauges. Type : LC-RA-x000Lx, LC-RA-x000Sx
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**
30 January 2015



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.

The notification of NMi Certin B.V. as Issuing Authority can be verified at www.oiml.org

Parties concerned can lodge objection against this decision, within six weeks after the date of submission, to the general manager of NMI (see www.nmi.nl).



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

- No. NMI-13200572-01 dated 28 January 2015 that includes 51 pages;
- No. NMI-13200572-02 dated 28 January 2015 that includes 46 pages.

Characteristics of the load cell:

Designation	LC-RA-x000Lx	LC-RA-x000Sx
Maximum capacity (E_{max})	1000 kg up to and including 5000 kg	
Minimum dead load	5 kg	
Accuracy Class	C	
Rated Output	2 mV/V	3 mV/V
Maximum number of load cell intervals (n)	2000	1500
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	12500	30000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	2300	5500
Input impedance	380 $\Omega \pm 30 \Omega$	
Temperature range	-10 °C / + 40 °C	
Fraction p_{LC}	0,7	
Humidity Class	CH	
Safe overload	150 % of E_{max}	
Output impedance	350 $\Omega \pm 3 \Omega$	
Recommended excitation	5 V AC / DC	
Excitation maximum	15 V AC / DC	
Transducer material	Alloy steel	
Atmospheric protection	Potting with cover plate	

The characteristics for n_{max} and Y can be reduced separately. Z is proportional or equal to n_{max} .

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.