



# OIML Certificate of Conformity

**OIML Member State**  
The Netherlands

Number R60/2000-NL1-17.42  
Project number 1901017  
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Issuing authority	NMi Certin B.V. Person responsible: C. Oosterman
Applicant and Manufacturer	Cardinal Scale Manufacturing Company 203 East Daugherty Street Webb City, MO 64870 United States of America
Identification of the certified type	A <b>single point load cell</b> , with strain gauges Type : SPZ
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 June 2017

  
C. Oosterman  
Head Certification Board

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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)



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

- No. R60/2000-NL1-10.20 dated 10 November 2010 that includes 64 pages;
- No. NMI-10200947-06 dated 24 December 2010 that includes 59 pages.

**Characteristics of the load cell:**

Maximum capacity ( $E_{max}$ )	50 kg up to and including 250 kg	300 kg up to and including 500 kg
Minimum dead load	0 kg	
Accuracy Class	C	
Rated Output	2,0 mV/V $\pm$ 0,2 mV/V	
Maximum number of load cell intervals (n)	4000	5000
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	20000	
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	7500	
Input impedance	406 $\Omega \pm 6 \Omega$	
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 - 12 V AC / DC	
Excitation maximum	18 V AC / DC	
Transducer material	Aluminium alloy	
Atmospheric protection	Silicon 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.