



# OIML Certificate of Conformity

**OIML Member State**  
The Netherlands

Number R60/2000-NL1-17.42  
Rev. 1  
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 **single point load cell**, 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.

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Issuing Authority **NMI Certin B.V., OIML Issuing Authority NL1**  
7 July 2017

  
C. Oosterman  
Head Certification Board

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The notification of NMI Certin B.V. as Issuing Authority can be verified at [www.oiml.org](http://www.oiml.org)





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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	120 % 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.



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## Revision History

This revision replaces the previous version.

Revision	Date	Change(s)
Initial	30 June 2017	-
Rev. 1	7 July 2017	Changed safe overload to 120 % of $E_{\max}$ .