

## OIML Certifica

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Number R60/2017-A-NL1-19.23 Project number 2309247

### **OIML Member State** The Netherlands



Issuing authority NMi Certin B.V.

Person responsible: C. Oosterman

Técnicas de Electrónica y Automatismos, S.A. Applicant and

Manufacturer C/Espronceda 180 08018 Barcelona

Spain

Identification of the

certified type

A bending beam load cell, with strain gauges.

Registered trade name UTILCELL

300 Type

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 Report(s) is not permitted, although either may be reproduced in full.

Issuing Authority NMi Certin B.V., OIML Issuing Authority NL1

5 September 2019

∕osterman

Head Certification Board

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







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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-2309247-01 dated 4 September 2019 that includes 52 pages;
- No. NMi-2309247-02 dated 4 September 2019 that includes 24 pages;
- No. NMi-2309247-03 dated 4 September 2019 that includes 24 pages.

### **Characteristics of the load cell:**

Characterization of load cell capabilities	Analog passive load cell		
Maximum capacity (E <sub>max</sub> )	5 kg up to 30 kg	30 kg up to 100 kg	100 kg up to and including 500 kg
Minimum dead load	0 kg		
Accuracy Class	С		
Rated Output	2 mV/V ± 0,1 mV/V		
Maximum number of load cell intervals (n) (1)	4000	3000	4000
Ratio of minimum LC Verification interval $^{(1)}$ Y = $E_{max}$ / $v_{min}$	20000		
Ratio of minimum dead load output return (1) $Z = E_{max} / (2 * DR)$	4000		
Input impedance	400 $\Omega$ ± 20 $\Omega$		
Temperature range	-10 °C / + 40 °C		
Fraction p <sub>LC</sub>	0,7		
Humidity Class	СН		
Safe overload	200 % of E <sub>max</sub>		
Output impedance	350 Ω ± 3 Ω		
Recommended excitation	10 V AC / DC		
Excitation maximum	15 V AC / DC		
Transducer material	Stainless steel		
Atmospheric protection	Hermetically sealed/welded		
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### 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

- 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.

