

**OIML Member State**  
The Netherlands

Number R60/2017-A-NL1-23.25 revision 0  
Project number 3576052  
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Issuing authority

NMi Certin B.V.  
Person responsible: M.Ph.D. Schmidt

Applicant and  
Manufacturer

Changzhou Runningtech Sensing Co., Ltd.  
No.20, Wangxian Road  
Xinbei District, Changzhou, Jiangsu province 213133  
China

Identification of the  
certified type

A **shear beam load cell**, with strain gauges.

Registered trade name : Changzhou Runningtech

Type : Bxxxx series

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

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**  
17 August 2023

Certification Board

NMi Certin B.V.  
Thijsseweg 11  
2629 JA Delft  
The Netherlands  
T +31 88 6362332  
certin@nmi.nl  
www.nmi.nl

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This document is digitally signed and sealed. The digital signature can be verified in the blue ribbon on top of the electronic version of this certificate.



The conformity was established by the results of tests and examinations provided in the associated reports:

- No. NMI-3576052-01 dated 14 August 2023 that includes 51 pages;
- No. NMI-3576052-02 dated 14 August 2023 that includes 46 pages.

### Characteristics of the load cell:

Characterization of load cell capabilities	Analog-passive load cell					
Designation <sup>(2)</sup>	B535A, B535S B735A, B735S B550A, B550S B750A, B750S	B320A B520A, B520S B720A, B720S	B530A, B530S B730A, B730S	B540A, B540S B740A, B740S	B310A B510A, B510S B710A, B710S	B315A B515A, B515S B715A, B715S
Maximum capacity ( $E_{max}$ )	0,55 t - 4,4 t	0,5 t - 2,5 t	0,5 t - 5 t	0,5 t - 10 t	0,5 t - 10 t	0,5 t - 5 t
Minimum dead load	0 kg					
Accuracy Class	C					
Rated Output	1,94 mV/V $\pm 0,1\%$	2 mV/V $\pm 0,1\%$		3 mV/V $\pm 0,1\%$		
Maximum number of load cell intervals (n) <sup>(1)</sup>	4000					
Ratio of minimum LC Verification interval <sup>(1)</sup> $Y = E_{max} / V_{min}$	25000 for $E_{max}$ 0,5 t - 2,5 t 30000 for $E_{max}$ 3 t - 10 t					
Ratio of minimum dead load output return <sup>(1)</sup> $Z = E_{max} / (2 * DR)$	6000 for $E_{max}$ 0,5 t - 2,5 t 4000 for $E_{max}$ 3 t - 10 t					
Input impedance	384 $\Omega \pm 5 \Omega$					
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	10 V AC / DC					
Excitation maximum	15 V AC / DC					
Transducer material <sup>(2)</sup>	Alloy steel or Stainless steel					
Atmospheric protection	Hermetically welded					

### Remarks:

1. The characteristics for  $n_{max}$ , Y and Z can be reduced separately;
2. In the type designation A means Alloy steel and S means Stainless steel.



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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	2023-08-17	Initial issue.