Test Certificate
Parts Certificate

Number **TC12591** revision 0
Project number 3536114

Issued by	NMi Certin B.V.
In accordance with	WELMEC 8.8 2017, WELMEC 2.4 2021, OIML R 60 (2021), EN 45501:2015.
Producer	Zhonghang Electronic Measuring Instruments Co. Ltd. Xinyuan Road, north part of EDZ Hanzhong 723000 Shaanxi China
Measuring instrument	A **compression load cell**, with strain gauges. Registered trade name : ZEMIC Designation : BM6G-W3 Further properties are described in the annexes: - Description TC12591 revision 0; - Documentation folder TC12591-1. An overview of performed tests is given in the annex: - Description TC12591 revision 0.
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Issuing Authority

NMi Certin B.V.
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Certification Board

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RvA PRODUCTS C 681

Description

1 General information about the load cell

All properties of the load cell, whether mentioned or not, shall not be in conflict with the standards mentioned in this certificate.

This certificate is the positive result of the applied voluntary, modular approach, for a component of a measuring instrument, as described in WELMEC 8.8. The complete measuring system must be covered by an EC type-approval certificate, an EC-type examination certificate, an EU-type examination certificate.

1.1 Essential parts

Number	Pages	Description	Remark
12591/0-01	7	BM6G-W3 Load Cells Catalogue for using	Mechanical/Electrical

Cable:
- If the load cell is provided with a 4-wire system:
  - The cable length is mentioned in the accompanying load cell document / on the label;
  - The cable length shall not be modified.
- If the load cell is provided with a 6-wire system (="Remote-sensing"):
  - The cable length is not limited.

The cable is shielded; the shield is not connected to the load cell.

1.2 Essential characteristics

Characterization of load cell capabilities	Analog-passive load cell
Maximum capacity (E_{max})	10 kg up to and including 250 kg
Minimum dead load	0 kg
Accuracy Class	C
Rated Output	2 mV/V ± 0,2 mV/V
Maximum number of load cell intervals (n) (1)	6000
Ratio of minimum LC Verification interval (1) $Y = E_{max} / v_{min}$	45000
Ratio of minimum dead load output return (1) $Z = E_{max} / (2 * DR)$	7500
Input impedance	380 Ω ± 15 Ω
Temperature range	-10 °C / +40 °C
Fraction p_{LC}	0,7
Humidity Class	CH
Safe overload	150 % of E_{max}

Output impedance	351 Ω ± 3.5 Ω
Recommended excitation	5 ~ 12 VDC
Excitation maximum	18 VDC
Transducer material	Stainless Steel
Atmospheric protection	Hermetically welded

Remarks:
1. The characteristics for n_{max}, Y and Z can be reduced separately.

1.3 Essential shapes

Number	Pages	Description	Remark
12591/00-01	7	BM6G-W3 Load Cells Catalogue for using	-

The descriptive markings plate is secured against removal by sealing or will be destroyed when removed and contains at least the information and markings as described in OIML R 60 (2017) and:
- This certificate number TC12591 (in the countries where it is mandatory);
- Producers name or mark.

2 Seals

The connecting cable of the load cell or the junction box is provided with possibility to seal.

3 Conditions for conformity assessment

Each load cell produced is provided with an accompanying document with information about its characteristics.

The compatibility of load cells and indicator is established by the manufacturer by means of the compatibility of modules form, contained in EN45501:2015 clause F.4, at the time of putting into use.

Other parties may use this certificate without the written permission of the producer.

4 Reports

An overview of performed tests is given in the evaluation report ER12591 revision 0.