

Number **TC6827** revision 1
Project number 507729
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Issued by NMI Certin B.V.
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Notified Body Number 0122

In accordance with Paragraph 8.1 of the European Standard on Metrological aspects of non-automatic weighing instruments EN 45501:1992/AC:1993 and by application of the OIML International Recommendation R 60 (Edition 2000). The applied error fraction p_i , meant in the paragraph 3.5.4. of the standard is 0.7.

Applicant Keli Electric Manufacturing (Ningbo) Co., Ltd.
199 Changxing Road, Jiangbei District,
Ningbo City,
P.R. China

In respect of A **compression load cell**, with strain gauges, tested as a part of a weighing instrument.
Manufacturer : Keli Electric Manufacturing (Ningbo) Co., Ltd.
Type : ZSF-A-..... and ZSFY-A-.....

Characteristics

Maximum capacity (E_{max})	10 000 kg up to and including 50 000 kg
Accuracy class	C
Maximum number of load cell verification intervals (n_{max})	3000
Ratio of minimum LC verification interval $Y = E_{max} / V_{min}$	10 000


In the description number TC6827 revision 1 further characteristics are described.

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Description and documentation The load cell is described in the description number TC6827 revision 1 and documented in the documentation folder TC6827-1, appertaining to this test certificate.

Remarks Summary of the test involved: see Appendix number TC6827 revision 1.
 This revision test certificate replaces the earlier version, except for its documentation folder.

Dordrecht, 1 November 2005
 NMi Certin B.V.



Jpg. C. Oosterman
 Manager Product Certification

1 General information about the load cell

All properties of the load cell, whether mentioned or not, may not be in conflict with the standard mentioned in the test certificate.

1.1 Essential parts

Description	Drawing number	Rev.	Remarks
ZSF(Y)-A Load cell, 10tf	507729 001	--	Mechanical
Electrical diagram of the ZSF(Y)-A load cell	507729 002	--	Electrical

Cable:

- The load cell is provided with a 4-wire system.
The cable length has to be approximately 15 meters.
The cable length shall not be modified.
- The cable should be a shielded cable, the shield is not connected to the load cell.

1.2 Essential characteristics

Minimum dead load	: 0 kg
Safe overload	: 150 % of E_{max}
Rated Output	: 2 mV/V \pm 0.002 mV/V
Output impedance	: 352 $\Omega \pm 2 \Omega$ for the Model ZSF-A-..... 700 $\Omega \pm 10 \Omega$ for the Model ZSFY-A-.....
Recommended excitation	: 10 / 12 V DC
Excitation maximum	: 15 V DC
Transducer material	: Alloy steel
Atmospheric protection	: Welded steel cover

1.3 Essential shapes

The load cell is built according to the drawing:

- ZSF(Y)-A Load cell, 10tf, drawing number 507729 001.

The data plate is secured against removal by sealing or will be destroyed when removed. The data plate mentions at least the information and markings as described in the OIML R60 document. In the countries where it is mandatory the load cell should bear this test certificate number: TC6827.

Securing:

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

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Tests performed for this test certificate:

Test	Institute	type, version, remarks
Temperature test and repeatability (20, 40, -10 and 20 °C)	NMi Certin B.V.	ZSFY-A10t C3 and ZSF-A10t C3
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V.	ZSFY-A10t C3 and ZSF-A10t C3
Creep (20, 40 and -10 °C)	NMi Certin B.V.	ZSFY-A10t C3 and ZSF-A10t C3
Minimum dead load output return (20, 40 and -10 °C)	NMi Certin B.V.	ZSFY-A10t C3 and ZSF-A10t C3
Barometric pressure effects at room temperature	NMi Certin B.V.	ZSFY-A10t C3
Damp heat, cyclic: marked CH (or not marked)	NMi Certin B.V.	ZSFY-A10t C3