Test Certificate
Parts Certificate

Number **TC8626** revision 0
Project number 14219005

Issued	NMi Certin B.V.
In accordance with	WELMEC 8.8 Issue 2, Paragraph 8.1 of EN 45501:1992/AC:1993, WELMEC 2.4 Issue 2, OIML R 60 (2000).
Producer	TÜM ELEKTRONİK MÜHENDİSLİK SAN. TİC. LTD. ŞTİ İstanbul Deri Organize Sanayi Bölgesi 1.Yol H7 Parsel Orhanlı 34956 TUZLA / İSTANBUL TURKEY
Measuring instrument	A **single point load cell**, with strain gauges, tested as a part of a weighing instrument.

Brand : TEM
Designation : TM1241, TM1243 and TM1245

Further properties are described in the annexes:
- Description TC8626 revision 0
- Documentation folder TC8626-1

An overview of performed tests is given in the annex:
- Description TC8626 revision 0

Issuing Authority

NMi Certin B.V.
4 September 2014

C. Oosterman
Head Certification Board

NMi Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht
The Netherlands
T +31 78 6332332
certin@nmi.nl
www.nmi.nl

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 or an EC-type examination Certificate.

1.1 Essential parts

Number	Pages	Description	Remark
8626/0-01	1	TM1241 specifications	Mechanical & electrical
8626/0-02	1	TM1243 specifications	Mechanical & electrical
8626/0-03	1	TM 1245 specifications	Mechanical & electrical

Cable:
- 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.
- The load cell is provided with a 6-wire system (="Remote-sensing"):
  - The cable length is not limited.

The cable shall be a shielded cable, the shield is not connected to the load cell.

1.2 Essential characteristics

Maximum capacity (E_{max})	60 kg up to and including 300 kg
Minimum dead load	0 kg
Accuracy Class	C
Rated Output	2,2 mV/V
Maximum number of load cell intervals (n)	6000
Ratio of minimum LC Verification interval $Y = E_{max} / v_{min}$	15000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	6000
Input impedance	400 Ω ± 10 Ω
Temperature range	-10 °C / +40 °C
Fraction p_{LC}	0,7
Humidity Class	CH
Safe overload	150 % of E_{max}
Output impedance	350 Ω ± 3 Ω
Recommended excitation	10 V AC / DC
Excitation maximum	15 V AC / DC
Transducer material	Aluminium
Atmospheric protection	IP65

The characteristics for n_{max} and Y can be reduced separately. Z is proportional or equal to n_{max}.

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

1.3 Essential shapes

The load cell is built according to drawings:

Number	Pages	Description	Remark
8626/0-01	1	TM1241 specifications	Mechanical & electrical
8626/0-02	1	TM1243 specifications	Mechanical & electrical
8626/0-03	1	TM 1245 specifications	Mechanical & electrical

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 (2000) and:
- This certificate number TC8626 (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

The compatibility of load cells and indicator is established by the manufacturer by means of the compatibility of modules form, contained in WELMEC 2 Issue 5 Section 11, at the time of placing on the market.

Other parties may use this certificate without the written permission of the producer (WELMEC 8.8).

4 Reports

An overview of performed tests is given in the reports:
- No. NMi-13200571-01 dated 27 May 2014 that includes 51 pages.

A report can be a test report, an evaluation report, a type evaluation report and/or a pattern evaluation report.