Test certificate

Nederlands Meetinstituut

Number **TC6263** revision 0
Project number 305358

Issued by

NMi Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht
The Netherlands

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

Vishay Tedea-Huntleigh Ltd.
5a Hatzoran St.,
Netanya, 42506
Israel

In respect of

A **Single point bending beam load cell**, with strain gauges, tested as a part of a weighing instrument.
Manufacturer : Tedea-Huntleigh
Type : 1142

Characteristics

Maximum capacity (E_{max})	20 kg up to and including 100 kg		
Accuracy class	C		
Maximum number of load cell verification intervals (n_{max})	1000	2000	3000
Ratio of minimum LC verification interval $Y = E_{max} / V_{min}$	2000	4000	15000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	6000		

In the description number TC6263 revision 0 further characteristics are described.

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Subsidiary companies:
NMi Van Swinden Laboratorium B.V. (27228703)
NMi Certin B.V. (27.233.418)
Verispect B.V. (27.228.700)

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Description and documentation	The load cell is described in the description number TC6263 revision 0 and documented in the documentation folder TC6263-1, appertaining to this test certificate.
Remarks	Summary of the test involved: see Appendix number TC6263 revision 0

Delft, 10 June 2003
NMi Certin B.V.

P.P.M. van Enckevort
Manager Certification Delft

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
Model 1142 Load Cell	174.000.00-4	A	Mechanical
Model 1142 Load Cell	174.200.00-2	A	Electrical

Cable:
- The load cell is provided with a 4 or 6-wire system.
  Because no "remote-sensing" is used by the 4-wire system that cable length has to correspond with the cable length mentioned on the descriptive plate of the load cell.
- 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± 0.2 mV/V
Input impedance	:	385 Ω ± 10 Ω
Output impedance	:	351 Ω ± 5 Ω
Recommended excitation	:	10 V DC/AC
Excitation maximum	:	15 V DC/AC
Transducer material	:	Stainless Steel
Atmospheric protection	:	Adhesive Silicone Rubber

1.3 Essential shapes

The load cell is built according to drawing:
- Model 1142 Load Cell, drawing number 174.000.00-4.

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: TC6263.

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

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	1142 C3 20 kg
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V	1142 C3 20 kg
Creep (20, 40 and –10 °C)	NMi Certin B.V	1142 C3 20 kg
Minimum dead load output return (20, 40 and –10 °C)	NMi Certin B.V	1142 C3 20 kg
Barometric pressure effects at room temperature	NMi Certin B.V	1142 C3 20 kg
Damp heat, cyclic: marked CH (or not marked)	NMi Certin B.V.	1142 C3 20 kg