Test certificate

Nederlands Meetinstituut

Number **TC5303** revision 3
Project number 10125713

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 1991 and 2000). The applied error fraction p_i, meant in the paragraph 3.5.4. or 2.4.2. of the standard is 0.7.

Applicant
Master-K
38 Avenue des Frères Montgolfier BP 186
69686 Chaussieu Cedex
France

In respect of
The model of a **bending beam load cell** , with strain gauges, tested as a part of a weighing instrument.
Manufacturer : Master-K
Type : FFX ....

Characteristics

Maximum capacity (E_{max})	300, 600 and 1500 kg		1500, 3000 and 5000 kg
Accuracy Class	C		
Maximum number of load cell intervals (n)	6000	3000	3000
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	10100		
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	8000		6000

In the description TC5303 revision 3 further characteristics are described.

Description and documentation
The load cell is described in the description number TC5303 revision 3 and documented in the documentation folder number TC5303-2, appertaining to this test certificate.

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NMi International B.V. (27239176)

Remarks

Summary of the test involved: see Appendix number TC5303 revision 3
This revision test certificate replaces the earlier versions, excluding its documentation folder.

Delft, 28 November 2000
NMi Certin B.V.
i.a.

W.A.C.M. van Leeuwen
Manager 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
FFX1500 Outline drawing & Dimensions	103174/6K	0	--
FFX3000/5000 Outline drawing & dimensions	103178/6K	0	--
FFX300, 600, 1500: outline drawing & dimensions	103174/6K	1	--

Cable:
The load cell is provided with a 4-wire system.
Because no "remote-sensing" is used the cable length has to be approximately 3 meters.
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
Input impedance	:	420 Ω ± 50 Ω
Output impedance	:	352 Ω ± 2 Ω
Recommended excitation	:	10 V DC/AC
Excitation maximum	:	12 V DC/AC
Transducer material	:	Stainless Steel
Atmospheric protection	:	hermetically sealed

1.3 Essential shapes

The load cell is built according to drawings: 103174/6K, 103178/6K and 103174/6K

The data plate is sealed against removal 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: TC5303.

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

Tests carried out for this test certificate:

Test	Institute	type, version, remarks
Temperature test and repeatability (20, 40, -10 and 20 °C)	NMi Certin B.V	FXX1500, C3 FXX300, C3 and C6
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V	FXX1500, C3 FXX300, C3 and C6
Creep test (20, 40 and –10 °C)	NMi Certin B.V	FXX1500, C3 FXX300, C3 and C6
Minimum load output return (20, 40 and –10 °C)	NMi Certin B.V	FXX1500, C3 FXX300, C3 and C6
Barometric pressure test at room temperature	NMi Certin B.V	FXX1500, C3 FXX300, C6
Humidity test	NMi Certin B.V.	FXX1500, C3 FXX300, C6