

Issued by NMI Certin B.V.

In accordance with WELMEC 8.8 2017, WELMEC 2.4 Issue 2, OIML R 60 (2017), EN 45501:2015.

Producer Sauter GmbH
Ziegelei 1
72336 Balingen
Germany

Measuring instrument A **bending beam** or **shear beam load cell**, with strain gauges, tested as a part of a weighing instrument.

Designation : CT xxxxx-xP1 or CT xxxxx-xP2 or CB xxxxx-xP1

Further properties are described in the annexes:

- Description TC11695 revision 0;
- Documentation folder TC11695-1.

An overview of performed tests is given in the annex:

- Description TC11695 revision 0.

Issuing Authority

NMI Certin B.V.
9 September 2019


C. Oosterman
Head Certification Board

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 or an EU-type examination certificate.

1.1 Essential parts

Number	Pages	Description	Remark
11695/0-01	2	CT P1 / CT P2	Mechanical / electrical
11695/0-02	1	CB P1	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		
	Bending beam	Shear beam	
Load cell construction			
Maximum capacity (E_{max})	100 kg up to and including 250 kg	500 kg up to and including 2500 kg	3000 kg up to and including 15000 kg
Minimum dead load	0 kg		
Accuracy Class	C		
Rated Output	2,0 mV/V \pm 0,002 mV/V 3,0 mV/V \pm 0,003 mV/V		
Maximum number of load cell intervals (n) ⁽¹⁾	5000		
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$ ⁽¹⁾	20000	20000	18000
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$ ⁽¹⁾	5000		

Input impedance	$350 \Omega \pm 3,5 \Omega$
Temperature range	-10 °C / +40 °C
Fraction p_{LC}	0,7
Humidity Class	CH
Safe overload	150 % of E_{max}
Output impedance	$350 \Omega \pm 3,5 \Omega$
Recommended excitation	5-12 V AC / DC
Excitation maximum	18 V AC / DC
Transducer material	Alloy steel
Atmospheric protection	Silicon rubber

Remark:

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

1.3 Essential shapes

Number	Pages	Description	Remark
11695/0-01	2	CT P1 / CT P2	Mechanical / electrical
11695/0-02	1	CB P1	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 (2017) and:

- This certificate number TC11695 (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 (WELMEC 8.8).



Description

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Project number 2373221
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4 Reports

An overview of performed tests is given in the reports:

- No. NMI-11200684-06 dated 24 October 2011 that includes 65 pages;
- No. NMI-11200684-07 dated 24 October 2011 that includes 61 pages;
- No. NMI-11200684-08 dated 24 October 2011 that includes 61 pages;
- No. NMI-12200100-02 dated 25 April 2012 that includes 52 pages.

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