

RAPPORT

issued by Notified body No 0402



Test Certificate No. 0402-MVm002, Revision 1

Load cell type UB1

Issued to

Flintec GMBh, Bemannsbruch 9, DE-74909 Meckeesheim, Germany

In respect of

A tension load cell with strain gauges.

Type UB 1
Manufacturer Flintec

Characteristics

Load cell to be used as a part of a non-automatic weighing instrument with the following characteristics:

- Class C1, C3
- Maximum number of LC verification scale intervals (n_{LC}) is 3000
- Ratio of minimum LC verification interval (Y) is 5700
- Temperature range: -10 °C to +40 °C
- In the annex belonging to this certificate further essential characteristics are described

Description and documentation

The load cell is described in the annex to this certificate and documented in the documentation folder held by SP, both appertaining to this test certificate.

Issued by

Sveriges Provnings- och Forskningsinstitut, Box 857, S-501 15 Borås, Sweden.

In accordance with

Paragraph 8.1 and 3.5.4 of the European Standard on metrological aspects of non-automatic weighing instruments EN 45501:1992 and by application of the OIML International Recommendation R 60 Edition 1991. The applied error fraction p_i meant in paragraph 3.5.4 of the standard is 0,7.

Borås, 07 may, 2004

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General

All properties of the load cell, whether mentioned or not, may not be in conflict with the legislation and standard mentioned in the document.

Technical data

Type		UB1
Accuracy class		C1, C3
Maximum number of intervals, n_{max}		3000
Max capacity, E_{max}		10, 20, 50 kN
Safe overload, E_{lim}/E_{max}		200 % (of E_{max})
Min capacity, E_{min}		0 % of E_{max}
Ratio to minimum LC verification interval, $Y = E_{max}/V_{min}$		5700
Rated output, C		2 mV / V
Input Impedance, R_{LC}		1000 Ω
Excitation		15 V AC/DC maximum

Essential shapes

Description	Drawing no.	Rev	Remarks
Drawing	3-20619		
Description	Drawing no.	Rev	Remarks

Description of load cell

Function of the load cell

The load cell are of the type tension load cell with strain gauges.

Construction of the load cell

The load cell is built of stainless steel 17-4PH.

Characteristics of load cell cable

The load cell is provided with a 4-wire system, length 3 m, cross section 4 x 0,2 mm².

Markings

Type designation and serial number are marked on a plate on the load cell.

Sealing

The connection cable is fixed inside the load cell and can be sealed at the connection box.

Documentation

Application and technical documentation dated 16 march 1994.

Validity of this Test Certificate

Manufacturing process, material and sealings of the produced load cells have to be in accordance with that of the tested pattern; essential changes are only allowed with the permission of the Notified Body.



Tests carried out

The load cell is tested in accordance with SPs test procedure MVm 7.5 and OIML R60 / EN45501. The results are documented in the test report 01-C94495 dated 1994-06-21.

Tests performed with load cell UB1

Test	Test performed by	Approved (yes/no)
Temperature test and repeatability (20, 40, -10 and +20 °C)	SP, MMh	Yes
Temperature effect on minimum dead load output (20, 40, -10 and +20 °C)	SP, MMh	Yes
Creep test (20, 40, -10 and +20 °C)	SP, MMh	Yes
Minimum dead load output return (20, 40, -10 and +20 °C)	SP, MMh	Yes
Humidity test	SP, MMh	Yes
Barometric pressure effects	SP, MMh	Yes