

OIML Member State The Netherlands

OIML Certificate



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Issuing authority	NMi Certin B.V. Person responsible: M. Bo	oudewijns	
Applicant and Manufacturer	Balanças Marques de José Pimenta Marques, Lda Parque Industrial de Celeirós (2° Fase), Apart. 2376 4701-905 Braga Portugal		
Identification of the	A Non-automatic weig	hing instrument	
certified type	Туре :		M-WS, PVS, PVS-U, PVM, PVM-U, VS, H, TLV, HW, LCM
Characteristics	See next page		

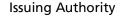
This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified Type (represented by the sample(s) identified in the OIML Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R 76 - Edition 2006 for accuracy class (III) or (III)

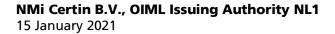
This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation above-identified. This Certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate was issued, partial quotation of the Certificate and of the associated OIML Test Report(s) is not permitted, although either may be reproduced in full.



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Certification Board

This document is issued under the provision that no liability is accepted and that the applicant shall indemnify third-party liability.

The notification of NMi Certin B.V. as Issuing Authority can be verified at www.oiml.org This document is digitally signed and sealed. The digital signature can be verified in the blue ribbon at the top of the electronic version of this certificate.







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The conformity was established by the results of tests and examinations provided in the associated OIML Reports:

Indicator BM1000 series or BM1000P series:

- No. NMi-2283727-01 dated 15 April 2019 that includes 43 pages;
- No. NMi-2283727-02 dated 15 April 2019 that includes 22 pages;
- No. NMi-2283727-03 dated 15 April 2019 that includes 11 pages;
- No. NMi-2370113-01 dated 5 September 2019 that includes 10 pages;
- No. NMi-2370113-02 dated 5 September 2019 that includes 14 pages;
- No. NMi-2370113-03 dated 5 September 2019 that includes 17 pages.

Indicator BM400 or BM500:

- No. NMi-2332688-01 dated 15 January 2021 that includes 52 pages;
- No. NMi-2332688-02 dated 15 January 2021 that includes 14 pages;
- No. NMi-2332688-03 dated 15 January 2021 that includes 18 pages;
- No. NMi-2332688-04 dated 15 January 2021 that includes 15 pages.

Load cell BM:

- No. R60/2000-NL1-03.03A dated 21 January 2003 that includes 40 pages;
- No. R60/2000-NL1-03.03B dated 21 January 2003 that includes 38 pages;
- No. R60/2000-NL1-03.03A dated 21 January 2003 that includes 37 pages.

Load cell ILE-SS:

- No. NMi-11200809-02 dated 10 April 2012 that includes 27 pages.

Load cell ILEC-SS:

- No. PTB 1.12-4041659-1 dated 12 August 2009 that includes 22 pages.

Load cell MCT:

- No. NMi-15200268-01 rev.1 dated 29 September 2015 that includes 51 pages.

Load cell MLC 1A / MLC 1A MG:

- No. NMi-11200434-01 dated 26 November 2010 that includes 25 pages;
- No. NMi-11200434-02 dated 26 November 2010 that includes 27 pages.

Load cell SB:

- No. LXff2003-6002 dated 2 April 2003 that includes 18 pages.

Load cell UDA:

- No.1.12-4040888-1 dated 23 June 2009 that includes 22 pages.

Characteristics of the non-automatic weighing instrument:

Accuracy class		
Maximum capacity	Depending on the load cell(s) used	
Verification scale interval	Depending on the load cell(s) used	
Temperature range	0 °C / +40 °C	

The compatibility of load cells and indicator is established by the manufacturer by means of the compatibility of modules form, contained in OIML R 76 (2006) Annex F clause F.4, at the time of putting into use.





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Characteristics of the indicator BM1000 series or BM1000P series:

		(+)	
Accuracy class			
Weighing range(s)		Single interval Multi-interval	
Maximum number of scale intervals (one weighing range)		n ≤ 6000	
Maximum number of scale intervals (multi-interval)		n ≤ 3000 (per partial weighing range)	
Maximum number of partial weighing ranges		2	
Load cell excitation voltage		5 V DC	
Minimum signal input voltage		U _{min} = 0 mV	
Minimum input voltage per verification scale interval		0,3 μV	
Minimum load cell resistance		44 Ω	
Maximum load cell resistance		1050 Ω	
Fraction of the maximum permissible error		0,5	
Load cell connection		6-wire (remote sensing)	
Maximum value of the cable length per cross wire section between the indicator and the junction box or load cells		1463,7 m/mm²	
Maximum number of load platforms		2	
	temperature range	0 °C / +40 °C	
Climatic environment	humidity	non-condensing	
	intended location	Closed	
Electromagnetic environment class		E2	
Power supply volta	age	230 V AC 50/60 Hz or 12 V DC by AC/DC adapter	
Software identification	Version number:	V-1.xx (xx is a number between 00 and 99)	
	Checksum:	0bAdA3dC	





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Characteristics of the indicator BM400 or BM500:

Configuration		Analog load cells	Digital load cells or weighing module
Accuracy class	OIML R 76	III or III	III or III
	OIML R 107	0,2 or 0,5 or 1 or 2	0,2 or 0,5 or 1 or 2
Weighing range(s)		Single interval Multi-interval	Single interval Multi-interval
Maximum number of scale intervals (one weighing range)		n ≤ 6000	-
Maximum number of scale intervals (multi-interval)		n ≤ 3000 (per partial weighing range)	-
Maximum number of partial weighing ranges		2	-
Load cell excitation voltage		5 V DC	-
Load cell power supply voltage		-	5 V DC
Minimum signal input voltage		U _{min} = 0,05 mV	-
Minimum input voltage per verification scale interval		0,3 µV	-
Minimum load cell resistance		43 Ω	-
Maximum load cell resistance		1149 Ω	-
Fraction of the maxim	um permissible error	0,5	0
Load cell connection		6-wire (remote sensing)	-
Maximum value of the cable length per cross wire section between the indicator and the junction box or load cells		No special cable length	-
Maximum number of	load platforms	2	8
	temperature range	0 °C / +40 °C	
Climatic environment	humidity	Non-condensing	
	intended location	Closed	
Electromagnetic environment class		E2	
Power supply voltage		24 V DC supplied by 230 V 50/60 Hz AC/DC plug in power supply	
Software	Version number	ETMETRO v1.0	
identification	Checksum	0xD619	



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Characteristics of the load cells:

See OIML certificates:

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- BM: R60/2000-NL1-03.03, dated 21 January 2003 that includes 2 pages;
- ILE-SS: R60/2000-NL1-12.04, dated 10 April 2012 that includes 2 pages;
- ILEC-SS: R60/2000-DE1-09.10, dated 13 August 2009 that includes 2 pages;
- MC-CT: R60/2000-A-NL1-18.26, dated 19 November 2018 that includes 2 pages;
- MLC 1A / MLC 1A MG: R60/2000-NL1-15.04, dated 19 March 2015 that includes 2 pages;
- SB: R60/2000-CN-03.03, dated 14 May 2003 that includes 3 pages;
- UDA: R60/2000-DE1-09.17, dated 23 July 2009 that includes 2 pages.

Revision History

This revision replaces the previous versions.

Revision	Date	Change(s)
Initial	2020-07-13	Initial issue
1	2021-01-15	Update to add additional indicator to the certificate.



