



OIML Member State
Denmark

OIML Certificate No.
R76/2006-A-DK2-2024.08

OIML CERTIFICATE ISSUED UNDER SCHEME A

OIML Issuing Authority

Name: **FORCE Certification A/S**
Address: Park Allé 345, 2605 Brøndby, Denmark
Person responsible: Per Rafn Crety

Applicant

Name: **BEL Engineering s.r.l.**
Address: Via Carlo Carrà 5
20900 Monza (MB)
ITALY

Manufacturer: BEL Engineering s.r.l.

Identification of the certified type (*the detailed characteristics will be defined in the additional pages*)

Mnn4Ai-M / MGnn4Ai-M / M5-Mnn4Ai-M / M5-Mnn4Ai-PT-M / Mnnn2(D)i-M / MGnnn2(D)i-M / M5-Mnnn2(D)i-M / Mnnn3(D)i-M / MGnnn3(D)i-M / M5-Mnnn3(D)i-M / M5-Mnnn3(D)i-PT-M / MWnnn3(D)i-M / MGWnnn3(D)i-M / M5-MWnnn3(D)i-M / M5-MWnnn3(D)i-PT-M / (S)HPB-nnn5(D)i-M / (S)HPB-nnn5(D)i-ION-M / (S)HPBG-nnn5(D)i-M / (S)HPBG-nnn5(D)i-ION-M / M5-(S)HPB-nnn5(D)i-M / M5-(S)HPB-nnn5(D)i-ION-M / M5-HPB-nnn5i-M / M5-HPB-nnn5i-PT-M
(where 'n' stands for a number '0' - '9' or nothing and **D** and **S** may be present or not)

Designation of the module (*if applicable*)

Non-automatic weighing instrument

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

OIML R 76-1, Edition (year): 2006

For accuracy class (if applicable): **I and II**

This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

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

Type examination report: No. 122-29315.10, dated 14 February 2024, that includes 51 pages

Type evaluation report: No. 122-29315.90.20, dated 04 June 2024, that includes 27 pages.

The technical documentation relating to the identified type is contained in documentation file:
122-29315

OIML Certificate History

Revision No.	Date	Description of the modification
Initial version	17 June 2024	-

Identification, signature and stamp

The OIML Issuing Authority

FORCE Certification A/S

Date: 17 June 2024

Jens Hovgård Jensen

Certification Manager

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

Descriptive annex

Characteristics

- Accuracy class I or II
- Single interval, multiinterval(dual)
- Maximum number of verification scale intervals: $\leq 250\ 000$
- Maximum capacity from 42 g to 6200 g
- Scale interval $e = 0.001\text{ g}$ or $e = 0.01\text{ g}$ or $e = 0.1\text{ g}$
- Display scale interval: $d = 0.1e$ or $d = 0.01e$ for $e=0,001\text{g}$
- Minimum capacity 100d for class I
50d for $e = 0.1\text{g}$ and
20d for $e = 0.01\text{ g}$ for class II
- Maximum tare effect: $\leq -\text{Max}$
- Temperature range. $15\text{ }^\circ\text{C}$ to $+30\text{ }^\circ\text{C}$
- Power supply: 100-240 VAC, 50/60 Hz using external adapter with 24 V output.

Software

The software revision level is displayed during the power-up sequence of the instrument.
 The approved software version is r 6.02 for M... and MW... models with LCD display
 The approved software version is r 1.02 for MG... and MGW... models with graphic display
 The approved software version is r 7.05 for SHPB... and HPB... models with LCD display
 The approved software version is r 8.02 for SHPBG... and HPBG ... models with graphic display
 The approved software version is r c13.01 for all models with touch screen display

Models

Model name	Class	Max	Min	e	d	n
M254Ai-M MG254Ai-M M5-M254Ai-M	I	250g 1250ct	0.01g 0.1ct	0.001g 0.01ct	0.0001g 0.001ct	250.000 125.000
M214Ai-M MG214Ai-M M5-M214Ai-M M5-M214Ai-PT-M	I	220g 1100ct	0.01g 0.1ct	0.001g 0.01ct	0.0001g 0.001ct	20.000 110.000

M124Ai-M MG124Ai-M M5-M124Ai-M	I	120g 600ct	0.01g 0.1ct	0.001g 0.01ct	0.0001g 0.001ct	120.000 60.000
SHPB-225i-M SHPB-225i-ION-M SHPBG-225i-M SHPBG-225i-ION-M M5-SHPB-225i-M M5-SHPB-225i-ION-M	I	220g 1100ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g 0.0001ct	220.000 110.000
SHPB-165i-M SHPB-165i-ION-M SHPBG-165i-M SHPBG-165i-ION-M M5-SHPB-165i-M M5-SHPB-165i-ION-M	I	160g 800ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g 0.0001ct	160.000 80.000
SHPB-125i-M SHPB-125i-ION-M SHPBG-125i-M SHPBG-125i-ION-M M5-SHPB-125i-M M5-SHPB-125i-ION-M	I	120g 600ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g 0.0001ct	120.000 60.000
HPB-105i-M HPBG-105i-M M5-HPB-105i-M M5-HPB-105i-PT-M HPB-105i-ION-M HPBG-105i-ION-M M5-HPB-105i-ION-M	I	102g 510ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g 0.0001ct	102.000 51.000

HPB-625i-M HPBG-625i-M M5-HPB-625i-M HPB-625i-ION-M HPBG-625i-ION-M M5-HPB-625i-ION-M	I	62g 310ct	0.001g 0.001ct	0.001g 0.01ct	0.00001g 0.0001ct	62.000 31.000
HPB-425i-M HPBG-425i-M M5-HPB-425i-M HPB-425i-ION-M HPBG-425i-ION-M M5-HPB-425i-ION-M	I	42g 210ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g 0.0001ct	42.000 21.000
HPB-22105Di-M HPBG-22105Di-M M5-HPB-22105Di-M HPB-22105Di-ION-M HPBG-22105Di-ION-M M M5-HPB-22105Di-ION-M	I	102g/220g 510ct/1100ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g/0.0001g 0.0001ct/0.001ct	102.000/220.000 51.000/110.000
HPB-2285Di-M HPBG-2285Di-M M5-HPB-2285Di-M HPB-2285Di-ION-M HPBG-2285Di-ION-M M5-HPB-2285Di-ION-M	I	82g/220g 410ct/1100ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g/0.0001g 0.0001ct/0.001ct	82.000/220.000 41.000/110.000
HPB-2265Di-M HPBG-2265Di-M M5-HPB-2265Di-M HPB-2265Di-ION-M HPBG-2265Di-ION-M M5-HPB-2265Di-ION-M	I	62g/220g 310ct/1100ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g/0.0001g 0.0001ct/0.001ct	62.000/220.000 31.000/110.000

HPB-2245Di-M HPBG-2245Di-M M5-HPB-2245Di-M HPB-2245Di-ION-M HPBG-2245Di-ION-M M5-HPB-2245Di-ION-M	I	42g/220g 210ct/1100ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g/0.0001g 0.0001ct/0.001ct	42.000/220.000 21.000/110.000
HPB-1265Di-M HPBG-1265Di-M M5-HPB-1265Di-M HPB-1265Di-ION-M HPBG-1265Di-ION-M M5-HPB-1265Di-ION-M	I	62g/120g 310ct/600ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g/0.0001g 0.0001ct/0.001ct	62.000/120.000 31.000/60.000
HPB-1245Di-M HPBG-1245Di-M M5-HPB-1245Di-M HPB-1245Di-ION-M HPBG-1245Di-ION-M M5-HPB-1245Di-ION-M	I	42g/120g 210ct/600ct	0.001g 0.01ct	0.001g 0.01ct	0.00001g/0.0001g 0.0001ct/0.001ct	42.000/120.000 21.000/60.000
M223i-M MG223i-M M5-M223i-M	II	220g 1100ct	0.02g 0.2ct	0.01g 0.1ct	0.001g 0.01ct	22.000 11.000
M333i-M MG333i-M M5-M333i-M	II	330g 1650ct	0.02g 0.2ct	0.01g 0.1ct	0.001g 0.01ct	33.000 16.500
M523i-M MG523i-M M5-M523i-M MW523i-M MGW523i-M M5-MW523i-M	II	520g 2600ct	0.02g 0.2ct	0.01g 0.1ct	0.001g 0.01ct	52.000 26.000

M723i-M MG723i-M M5-M723i-M M5-M723i-PT-M MW723i-M MGW723i-M M5-MW723i-M M5-MW723i-PT-M	II	720g 3600ct	0.02g 0.2ct	0.01g 0.1ct	0.001g 0.01ct	72.000 36.000
M1003i-M MG1003i-M M5-M1003i-M MW1003i-M MGW1003i-M M5-MW1003i-M	I	1000g 5000ct	0.1g 1ct	0.01g 0.1ct	0.001g 0.01ct	100.000 50.000
M1203i-M MG1203i-M M5-M1203i-M MW1203i-M MGW1203i-M M5-MW1203i-M	I	1200g 6000ct	0.1g 1ct	0.01g 0.1ct	0.001g 0.01ct	120.000 60.000
M1003Di-M MG1003Di-M M5-M1003Di-M MW1003Di-M MGW1003Di-M M5-MW1003Di-M	II	500g /1000g 2500ct/5000ct	0.02g 0.2ct	0.01g 0.1ct	0.001 g / 0.01 g 0.01 ct / 0.1 ct	50.000/10.000 25.000/5000
M1203Di-M MG1203Di-M M5-M1203Di-M MW1203Di-M MGW1203Di-M M5-MW1203Di-M	II	720g /1200g 3600ct/6000ct	0.02g 0.2ct	0.01g 0.1ct	0.001 g / 0.01 g 0.01 ct / 0.1 ct	72.000/12.000 36.000/6000
MW2103i-M MGW2103i-M M5-MW2103i-M	I	2100g 10500ct	0.1g 1ct	0.01g 0.1ct	0.001g 0.01ct	210.000 105.000

M2202i-M MG2202i-M M5-M2202i-M	II	2200g 11000ct	0.5g 5ct	0.1g 1ct	0.01g 0.1ct	22.000 11.000
M3102i-M MG3102i-M M5-M3102i-M	II	3100g 15500ct	0.5g 5ct	0.1g 1ct	0.01g 0.1ct	31.000 15.500
M4202i-M MG4202i-M M5-M4202i-M	II	4200g 21000ct	0.5g 5ct	0.1g 1ct	0.01g 0.1ct	42.000 21.000
M5202i-M MG5202i-M M5-M5202i-M	II	5200g 26000ct	0.5g 5ct	0.1g 1ct	0.01g 0.1ct	52.000 26.000
M6202i-M MG6202i-M M5-M6202i-M	II	6200g 31000ct	0.5g 5ct	0.1g 1ct	0.01g 0.1ct	62.000 31.000
M5202Di-M MG5202Di-M M5-M5202Di-M	II	3000 g / 5200 g 15000ct/26000ct	0.5g 5ct	0.1g 1ct	0.01 g / 0.1 g 0.1 ct / 1 ct	30.000/5.200 15.000/2.600
M5502Di-M MG5502Di-M M5-M5502Di-M	II	800 g / 5500 g 4000ct/27500ct	0.5g 5ct	0.1g 1ct	0.01 g / 0.1 g 0.1 ct / 1 ct	8.000/5.500 4.000/2.750
M6202Di-M MG6202Di-M M5-M6202Di-M	II	4000 g / 6200 g 2000ct/31000ct	0.5g 5ct	0.1g 1ct	0.01 g / 0.1 g 0.1 ct / 1 ct	40.000/6.200 20.000/3.100

Devices

- Initial zero setting device ($\leq 20\%$ of Max)
- Semi-automatic zero setting device ($\leq 1.75\%$ of Max)
- Zero tracking device ($\leq 1.75\%$ of Max)
- Combined semi-automatic zero-setting and tare
M..., SHPB/HPB..., MW... , MG..., SHPBG/HPBG... and MGW... models:
Pressing the “0/T” key, when the indication is stable, will enter the currently weight value either as a new zero – if within the zero-setting range – or as a tare weight value. While doing so the display will show “0 – t”.
- As it is a combined zero-setting and tare function the balance has no NET annunciator.
- Models starting with M5 have separate zero and tare keys so these models have a NET annunciator
- Unit, gram (g) and metric carat (ct)
- .Checkweighing
- Unstable samples weighing
- Totalization
- Printing
- Counting
- Percentage weighing
- Density determination
- Maximum load determination
- Internal calibration device
- The M5- models has possibility for Statistics, Recipes, Textile identification and Pipette check

Interfaces

- RS-232C

The interface does not have to be secured.

