



OIML Member State
Japan

OIML Certificate No.
R60/2000-A-JP1-23.03

OIML CERTIFICATE ISSUED UNDER SCHEME A

OIML Issuing Authority

Name: National Metrology Institute of Japan /National Institute of Advanced Industrial Science and Technology (NMIJ/AIST)
Address: AIST Tsukuba Central 3, 1-1-1 Umezono Tsukuba Ibaraki 305-8563, Japan

Person responsible: ISHIMURA Kazuhiko, President of AIST

Applicant

Name: Yamato Scale Co., Ltd.
Address: 5-22 Saenba-cho, Akashi, 673-8688, Japan

Manufacturer

Name: Yamato Scale Co., Ltd.
Address: 5-22 Saenba-cho, Akashi, 673-8688, Japan

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

Beam (bending) load cell, with strain gauges
Models: UB2-100, UB2-200, UB2-300, QUB2-100, QUB2-200, QUB2-300, QUB21-100, QUB21-200, QUB21-300

Designation of the module (if applicable)

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 60 Edition: 2000 (E) for accuracy class C

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 type evaluation report:

No. 2023-005, dated 2 October 2023, that includes 5 pages

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

No. 2023-005-D, dated 2 October 2023

OIML Certificate History

Revision No.	Date	Description of the modification
Revision 0	4 October 2023	OIML Certificate first issued
-	-	-
-	-	-
-	-	-

This revision replaces previous versions of the certificate.

Identification, signature and stamp

The Issuing Authority
NMIJ/AIST

The OIML Member

ISHIMURA Kazuhiko
President of AIST
4 October 2023




TAKATSUJI Toshiyuki
4 October 2023

The accreditation body:

NMIJ/AIST has achieved accreditation under the ASNITE-Product (OIML) scheme of IAJapan, which applies ISO/IEC 17065:2012 and regulations relevant to OIML-CS as the accreditation criteria. The accreditation identification for this accreditation is ASNITE 0001 Product and the details of the accreditation information could be referred from the IAJapan website (<https://www.nite.go.jp/en/iajapan/asnite/lab/index.html>).

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 of the Load cell:

Model designation		UB2-100 QUB2-100 QUB21-100	UB2-200 QUB2-200 QUB21-200	UB2-300 QUB2-300 QUB21-300	Units
Classification		C			
Maximum capacity	E_{max}	100	200	300	kg
Minimum dead load	E_{min}	0			kg
Maximum number of verification scale intervals	n_{LC}	5 000 4 000 3 000			
Relative V_{min} (ratio to minimum load cell verification interval)	Y	10 000			
Relative DR (ratio to minimum dead load output return)	Z	5 000 4 000 3 000			
Rated Output		2.0			mV/V
Maximum excitation voltage		15			V DC
Input impedance	R_{LC}	350 ± 10			Ω
Temperature range	T	-10 / +40			°C
Safe load limit	$\% \cdot E_{max}$	150			%
Fraction	ρ_{LC}	0.7			
Humidity Class		CH			
Transducer material		Aluminum alloy			
Atmospheric protection		IP67			

Characteristics of load cell cable:

The cable has 6-wire plus shield. The ground is open at the load cell end. Electrical connectors: 6-wire with shield, Specification as follows:

Excitation +	White
Excitation -	Green
Signal +	Red
Signal -	Black
Sense +	Brown
Sense -	Yellow
Shield	Dark Green
Cable length (Maximum)	5 m