



Office for Product  
Safety & Standards



**OIML Member State**

United Kingdom of Great Britain  
and Northern Ireland

**OIML Certificate No.**  
**R76/2006-A-GB1-22.01**

**OIML CERTIFICATE ISSUED UNDER SCHEME A**

OIML Issuing Authority **Office for Product Safety and Standards**  
**Stanton Avenue**  
**Teddington**  
**TW11 0JZ**  
**United Kingdom**

Person responsible: **Mannie Panesar**

Applicant **LAUMAS Elettronica S.R.L.**  
**VIA Primo Maggio 6**  
**43022 Montechiarugolo (PR)**  
**Italy**

Manufacturer **The applicant**

Identification of the certified type **W series**  
*(the detailed characteristics are defined in the Descriptive Annex)*

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: 2006**

For accuracy class: III and IIII

Issue date: 10 May 2022

**The OIML Issuing Authority**

**Marek Bokota**

**Technical Manager**

*For and on behalf of the Office for Product Safety and Standards*

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. P02980 dated 10 May 2022 that includes 16 pages

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

No. P02980-D dated 10 May 2022

#### **OIML Certificate History**

<b>Revision No.</b>	<b>Date</b>	<b>Description of the modification</b>
0	10 May 2022	Certificate first issued.
-	-	-

No revisions have been issued.

*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 instrument:

This family of indicating devices comprises the W100 / W200 / W200IP64 / W200IP67 / WDOS / WDESK / WDESKLIGHT / WINOX / WTAB / W200BOX / W200BOXEC / ADPEW200 / WLIGHT models. The indicators are self-indicating, mains, DC or battery-powered, and are designed to be used as part of Class III or IIII, single or multi-interval, or multi-range, non-automatic weighing instruments.

The above designations may have the prefix "JOLLY" and may be followed by alphanumeric characters (e.g. JOLLY WINOXL).

The WDOS (special version), WDESK, WINOX and WTAB indicators with LCD display may be used for direct sales to the public.

### Main features:

- Metal or plastic enclosure
- LCD or LED display
- Operator's keypad with 4 to 62 keys
- Optional secondary display
- Optional level indicator based on a digital input
- Connection through shunt-diode safety barrier (EEx version)

### Devices:

- Initial zero setting device (< 20% of Max)
- Semi-automatic zero setting device (< 4% of Max)
- Zero tracking device (< 4% of Max)
- Semi-automatic tare weighing or balancing
- Preset tare (not for direct sales for public)
- Display check at power-up
- Alibi memory
- Gravity compensation
- Extended indication (not available to the user)
- Printing
- Price computing
- Stable weight indicator
- Weighing unstable samples (optional)
- Real time clock
- Operator information messages

### Price computing models:

The WDOS (special version), WDESK, WINOX and WTAB models can operate as a price computing instruments with a price look-up table. Selection of product and price are performed via a digital input or serial interface.

Technical data:

	W series not including EEx	EEx version
Type:	W100 / W200 / W200IP64 / W200IP67 / WDOS / WDESK / WDESKLIGHT / WINOX / WTAB / W200BOX / W200BOXEC / ADPEW200 / WLIGHT	W100 / W200 / W200IP64 / W200IP67 / WDOS / WDESK / WDESK-LIGHT / WINOX / WTAB / W200BOX / W200BOXEC / ADPEW200 / WLIGHT
Accuracy class:	III or IIII	III or IIII
Weighing range:	Single-interval, multi-range or multi-interval (2 or 3)	Single-interval, dual-range or dual-interval
Maximum number of verification scale intervals (n):	10000 for Class III 1000 for Class IIII	7500 for Class III 1000 for Class IIII
Minimum input voltage per VSI:	0.2 $\mu$ V	0.52 $\mu$ V
Maximum capacity of interval or range (Max <sub>i</sub> ):	$n_i \times e_i$	$n_i \times e_i$
Verification scale interval,	$e_i = \text{Max}_i/n_i$	$e_i = \text{Max}_i/n_i$
Initial zero-setting range:	$\pm 10\%$ of Max	$\pm 10\%$ of Max
Maximum tare effect:	100 % of Max	100 % of Max
Fractional factor ( $\pi$ ):	0.5	0.5
Excitation voltage:	5 VDC	5 VDC
Minimum input impedance:	43 ohm	43 ohm
Maximum input impedance:	1200 ohm	1200 ohm
Connecting cable to load cell(s):	4-wire or 6-wire system	4-wire or 6-wire system
Supply voltage:	12 - 24 VDC, or 230 VAC	12 - 24 VDC, or 230 VAC
Operating temperature range	-10 °C to +40 °C	-10 °C to +40 °C
Shunt-diode safety barrier	N/A	MTL7761ac, MTL7766Pac, or similar

Load cell:

Any compatible load cell(s) may be used providing the following conditions are met:

- There is a respective OIML Certificate of Conformity (R60) issued for the load cell.
- The certificate contains the load cell types and the necessary load cell data required for the manufacturer's declaration of compatibility of modules (R76-1 (2006), Annex F), and any particular installation requirements. A load cell marked NH is allowed only if humidity testing to R76 has been conducted on this load cell.
- The compatibility of the load cells and indicator is established by the manufacturer by means of the compatibility of modules calculation at the time of verification.
- The load cell transmission must conform to one of the examples shown in OIML R60: 2017 – Annex E.

The instruments may be connected to the following digital load cells:

Manufacturer	Load cell designation	OIML Certificate number
Laumas Electronica S.r.L	COKD..., COD...	R60/2000-A-NL1-21.44
Keli Sensing Technology (Ningbo) Co. Ltd.	ZSF-D, ZSF-DSS, ZSW-D, ZSW-DSS	R60/2000-NL1-13.25

### Interfaces:

The instruments may have any of the following protected interface type:

- Load cell 4-wire or 6-wire shielded connection
- RS232C
- RS485
- USB
- Modbus RTU, Profibus, DeviceNet and CANopen Ethernet TCP/IP, Ethernet/IP, Modbus/TCP, Profinet IO, EtherCAT, POWERLINK, SERCOSIII, CC-link, CC-link IE and IO-link
- Digital output / Digital input
- Analogue input / Analogue output
- Wireless

### Software:

The software version number is displayed at power up.

The version format is xx.yy.zz, where xx is the legally relevant version number, with yy and zz the major and minor version numbers reflecting non-legally relevant changes.

The software version for standard indicators is 01.yy.zz, where yy.zz shall be 00.46 or higher. The software version for price computing indicators is 01.yy.zz, where yy.zz shall be 03.04 or higher.

### Sealing:

The calibration and legally relevant parameters are protected via physical or software means.

The indicators have an event counter, which increments each time the legally relevant parameters (calibration and configuration) are changed. The value of the event counter can be displayed in the 'Menu' under 'Info', and must be written on the data plate.

For the WLIGHT indicator the legally relevant parameters (calibration and configuration) can be accessed by pressing a button on the rear of the indicator. This button is protected by tamper evident seals.

Access to the electronics, jumper, load cell connections, junction box, and peripheral interfaces is prevented via tamper evident labels or by the use of wire and seals.

Alternatively, the electronics may be secured via a tamper evident label on the cover protecting the analogue circuits, swapping of the electronics is then prevented via a common indicator serial number (affixed on on the data plate and displayed from the the non-erasable memory).

Alternatively, the indicator and load receptor with load cell made be secured via common serial numbers (indicator serial number on platform or load cell serial number on indicator).

This is not necessary for the W200IP64, W200IP67, WDESK, WDESKLIGHT, WINOX, W200BOX, W200BOXEC and ADPEW200 models with hardwired load cell connection, provided the indicator enclosure is sealed.