

# EU Type Examination Certificate

**No. 0200-NAWI-09304**

**4800MLF / 4800XLF Series**

**NON-AUTOMATIC WEIGHING INSTRUMENT**

**Issued by**        **FORCE Certification**  
EU - Notified Body No. 0200

In accordance with the requirements in Directive 2014/31/EU of the European Parliament and Council.

**Issued to**        **SR Instruments Inc.**  
600 Young Street  
Tonawanda, New York 14150  
USA

**In respect of**   Non-automatic weighing instrument designated 4800MLF / 4800XLF Series having the following characteristics:  
Accuracy class: III  
Maximum capacity: 350 to 400 kg  
Minimum capacity: 10 kg  
Verification scale interval:  $e = 0.1 \text{ kg}$  or  $0.2 \text{ kg}$

The conformity with the essential requirements in annex 1 of the Directive is met by the application of the European Standard EN 45501:2015 and OIML R76:2006.

The principal characteristics and conditions for certification are set out in the descriptive annex to this certificate.

The annex comprises 6 pages.

**Issued on**        **2020-11-24**

**Valid until**     **2030-11-24**

**Jens Hovgård Jensen**  
2020-11-24

Digitally signed by Jens Hovgård Jensen  
jhje@force.dk  
Certification Manager

FORCE Certification references:

Task no.: 120-33448.90.10 and ID no.: 0200-NAWI-09304

**Signatory: Jens Hovgård Jensen**

## Descriptive annex

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## 1. Name and type of instrument

The SR Instruments 4800MLF series and 4800XLF series (figure 1) are battery powered, self-indicating, single-interval, non-automatic weighing instruments, designed for medical use to weigh patients.

## 2. Description

### 2.1 Construction

#### 2.1.1 Main features

- Three-piece plastic housing
- Load hanging joints above and below for attachment, which allow the load cell to pivot freely.

#### 2.1.2 Devices

- Initial zero-setting device (+10% of Max)
- Zero indicator
- Stable weight indicator
- Gravity compensation
- Automatic shutoff after pre-designated time

#### 2.1.3 Load cell

The instrument is fitted with a single tension load cell per table 3.2, where the end mounting joint is configured to meet individual customer requirements. All end configurations will allow load cell to pivot freely.

## 2.2 Operation

### 2.2.1 Switch-on

Power is turned on by pressing the ON / RESET button. At switch-on, a display test is performed to ensure that the display has no defect. In normal operating conditions the scale turns off after a pre-designated time. The display can be restored by pressing the WEIGHT button.

### 2.2.2 Initial zero-setting device (+10% of Max)

The ON / RESET button functions as an initial zero-setting device provided that the instrument is within range of not more than +10% of its capacity.

### 2.2.3 Over-range and under-range

If the load is less than gross zero, then the display shows a "-" sign before the value. The instrument cannot display a value below -20 d. At lower loads the display shows "vvvv".

The instrument may be set to display weight up to nine divisions above Max. At greater loads the display shows "^^^".

### 3. Technical data

#### 3.1 Power supply

The instrument operates on a 9 V DC battery power supply. The battery symbol appears, when the voltage drops beneath 7 V. The indicator becomes inactive when the battery voltage drops below 6 V.

#### 3.2 Metrological characteristics

Model Series	4800XLF	4800MLF	4800MLF
Max	350 kg	350 kg	400 kg
Min	10 kg	10 kg	10 kg
e =	0.1 kg	0.2 kg	0.2 kg
Load Cell	SE4800MLF		
Software	SW160425 v5.13		SW1601020 v5.12

The temperature range for the instruments is 5 °C / +35 °C.

#### 3.3 Software

The designation of the software is shown in the above table.

The software version number is displayed during the shutdown sequence.

Download of software is prevented by hardware sealing. The program is fully embedded on the PCB and downloads aren't possible without opening the casing.

Access to the legally relevant parameters is only possible by accessing the calibration button which is recessed in an access hole and sealed (Section 7.1).

#### 3.4 Documents

The documents filed at FORCE (reference No.120-33448) are valid for the weighing instruments described here.

### 4. Interfaces and peripheral equipment

The instrument has no approved interfaces.

### 5. Conditions for certification

#### 5.1 Measurement functions other than non-automatic functions

Measurement functions that will enable the use of the instrument as an automatic weighing instrument are not covered by this type examination.

### 6. Special conditions for verification

None.

## **7. Securing and location of seals and verification marks**

### **7.1 Securing and sealing**

Seals shall bear the mark of the manufacturer and/or manufacturer's representative, or alternative verification mark of a notified body according to ANNEX II, section 2 or 4 of the Directive 2014/31/EU.

The inscription plate shall be secured, either by sealing or by being of a form such that it is destroyed, when removed.

Access to the electronics and load cell is prevented by a tamper-evident seal covering a case screw. Access to the calibration switch is prevented by a tamper-evident seal covering the access hole. Both sealing measures are shown in Figure 3.

Verification marks, and the CE-marking, are located on, or adjacent to, the data plate situated at the back of the display.

## **8. Location of CE mark of conformity and inscriptions**

### **8.1 Indicator**

#### **8.1.1 CE mark**

CE mark, supplementary metrological marking and identification number of notified body shall be applied to the weighing instrument according to article 16 and 17 of Directive 2014/31/EU.

#### **8.1.2 Inscriptions**

The instrument shall bear the following inscriptions on or near the display:

- Max, Min, e =

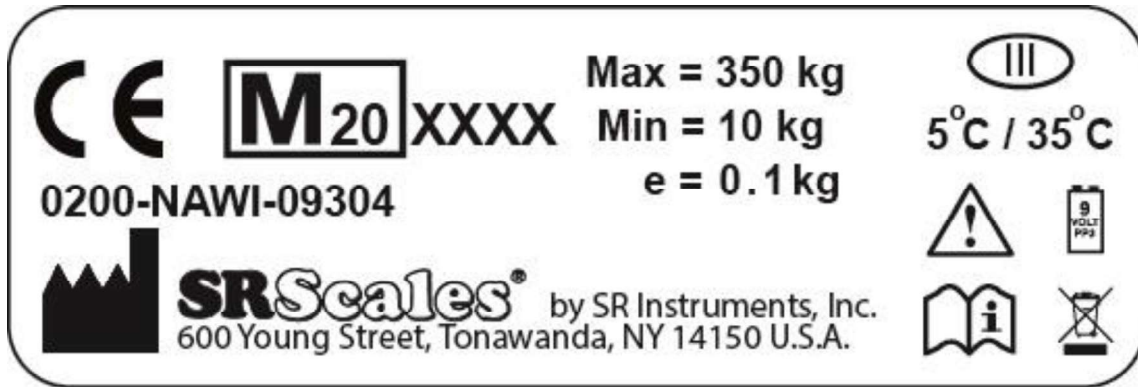
On the inscription plate:

- Manufacturer's name and/or logo
- Postal address of manufacturer
- Type, batch or serial number
- Type examination certificate no.
- Accuracy class
- Temperature range

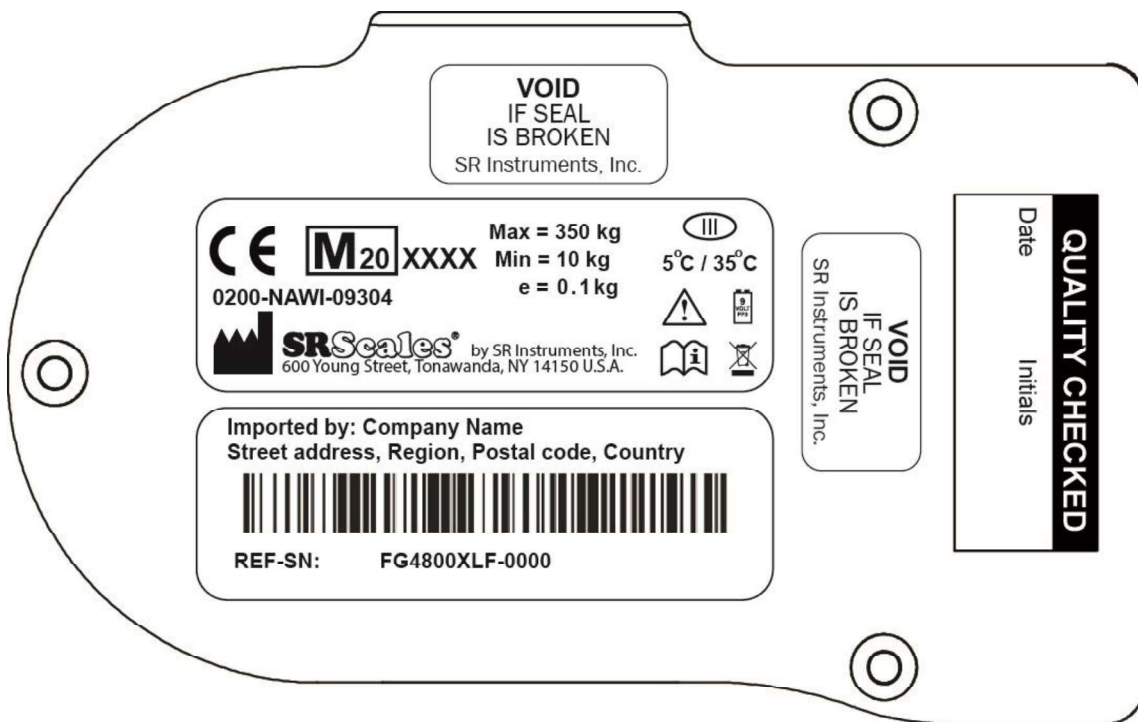
## 9. Pictures



**Figure 1** 4800MLF / 4800XLF.



**Figure 2** Example of inscription plate (4800XLF)



**Figure 3** Sealing measures