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User manual

ITKU-134-04-10-23-EN

Multifunctional scales CY10

OCTOBER 2023

SAFETY MEASURES AND PRECAUTIONS

Before you start installing, using or maintaining the device, you are obligated to get familiar with this operating manual and follow its guidelines.

	Before use, please read this Operating Manual carefully and use the device as per its intended use.
	Put loads in the central part of the weighing pan.
	Load the weighing pan with goods whose gross mass is lower than the maximum loading capacity of the scale.
	Do not leave large loads on the weighing pan for a long time.
	Secure the device against excessive temperature fluctuations, solar radiation and UV radiation, substances that cause chemical reactions.
	The device must not be used in explosive atmospheres (gas or dust).
	Do not use sharp tools (e.g. knife, screwdriver, etc.) to use the touch panel.
	In case of failures, unplug the device immediately.
	The device that is to be withdrawn from service must be disposed of in accordance with applicable rules of law.
	If the device is to operate in the bothersome electrostatic environment (e.g. printing house, packhouse, etc.), an earthing cable must be connected. To do so, use a functional earthing terminal in the device, marked as ⏚.
	Wi-Fi® is a registered trademark owned by Wi-Fi Alliance. This trademark has been used is this document for reference only and is not intended to mark compliance of any products with products certified by Wi-Fi Alliance.

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1. INTENDED USE

Scales are the response to growing expectations of the market regarding simple use and maximum automation of the weighing process. The scales are intended to quickly and precisely specify mass in laboratory and industrial conditions. The scale is equipped with an ABS and aluminum housing as well as a 10” high-resolution color display.

In the standard variant, the scale is supplied with 2 USB type-A connectors, a USB type-C connector, Ethernet, wireless connection, Hotspot, 2 proximity sensors, RFID sensor, HDMI port, loudspeakers, camera and microphone. The device cooperates with receipt and label printers, barcode scanners and PC equipment (mouse, keyboard, USB flash memory).

2. GUARANTEE TERMS

A. RADWAG undertakes to repair or replace the elements that prove defective in terms of manufacture or structure.
B. It is allowed to specify defects of unclear origin and establish methods of eliminating them only in cooperation with representatives of the manufacturer and user.
C. RADWAG shall not be held responsible for defects or losses deriving from unauthorized or improper production or servicing.
D. The guarantee does not cover the following:
   - mechanical damage arising from wrong use of the scale, and thermal, chemical damage, or damage caused by atmospheric discharge, overvoltage in the power system or other random event,
   - maintenance works (cleaning).
E. The guarantee cover becomes invalid when:
   - the repair is conducted out of the authorized service center,
   - the service technician detects unauthorized intervention in the mechanical or electronic structure of the scale,
   - other version of the operating system is installed,
   - the scale does not hold any company protective marks.
F. The rights on accounts of the guarantee for storage batteries supplied with devices cover a period of 12 months.
G. Detailed terms of the guarantee can be found in the service log.
H. The contact phone number for the authorized service center: +48 (48) 386 63 30.

3. CLEANING

To clean the device safely, unplug it in the first place. Next disassemble the weighing pan and other moving elements of the scale.

	***If you clean the weighing pan while it is installed, you can damage the scale.***

3.1. Cleaning ABS Elements

Dry surfaces are cleaned with clean cellulose or cotton cloths that do not leave streaks or colors. It is also allowed to use water solution and cleaning agent (soap, dishwashing liquid, window cleaner). While cleaning surfaces, it is necessary to regularly press the cloth against the surface. The surface must be wiped and then dried. Cleaning can be repeated if necessary.

In case of stubborn dirt, such as glue, gum, tar, polyurethane foam, etc., you can use special cleaning agents based on aliphatic hydrocarbons. Before using the cleaning agent, it is advisable to conduct usability tests for all surfaces. Do not use abrasive agents.

3.2. Cleaning Stainless Steel Elements

While cleaning stainless steel, it is essential that you avoid cleaning agents based on caustic chemicals, e.g. bleaches (chlorine-rich products). It is forbidden to use abrasive preparations. Always remove dirt with a microfiber cloth so that protective coatings of the elements cannot be damaged.

In case of daily care and stain removal, follow the steps below:
1. Remove dirt with a cloth immersed in warm water.
2. For the best results, you can add a drop of dishwashing liquid.

3.3. Cleaning Powder-coated Elements

The first step is to pre-clean elements under running water or with a large-pore sponge and large amount of water in order to eliminate loose or stubborn dirt. It is forbidden to use abrasive agents. Next, using a suitable cloth and water solution and cleaning agent (soap, dishwashing liquid), apply a regular pressure of the cloth against the surface while cleaning. Never dry-clean with a very detergent as it may damage the coating. It is advisable to use a large amount of water or water solution with a cleaning agent.

3.4. Cleaning Aluminum Elements

For cleaning aluminum, use products based on natural acids. The following products will be perfect: synthetic vinegar, lemon. It is forbidden to use abrasive agents. Do not use coarse brushes that can easily scratch aluminum. A soft microfiber cloth will be the best choice.
To clean polished surfaces, make circular movements. After removing all dirt, polish the surface with a dry cloth to dry the surfcae and make it glow.

4. SERVICE AND REPAIRS

	***If you can notice any damage, unplug the device immediately. Damaged element must be immediately replaced or repaired by RADWAG service technicians.***

If the scale malfunctions, contact the manufacturer's local service center.

In case of any defect, the operator must supply the defective device to the manufacturer's service center or, if impossible, report the defect to the service center to arrange the scope and method of repair.

	***The operator is not allowed to repair the product in any way. Any unauthorized manipulations (modifications, repairs, etc.) shall invalidate certificates, declarations and guarantees of the manufacturer.***

5. DISPOSAL

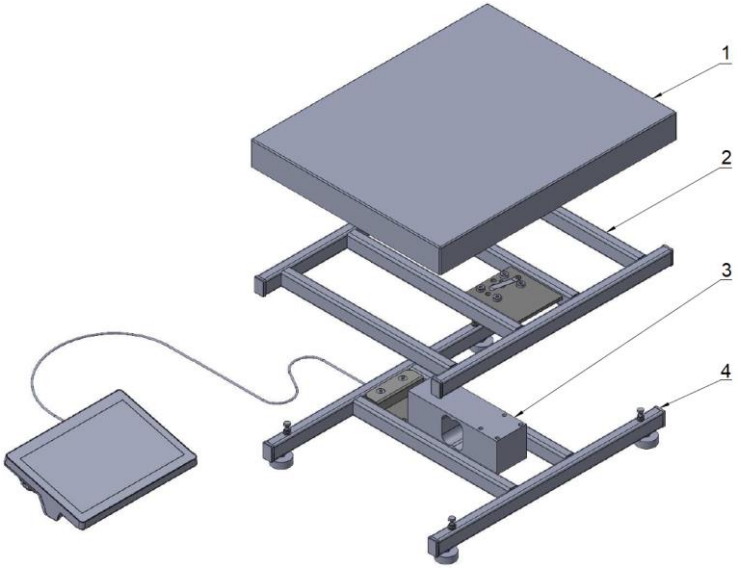
Scales must be recycled and are not considered as household waste. The product must be disposed of when its life ends in accordance with applicable law.



6. STRUCTURE

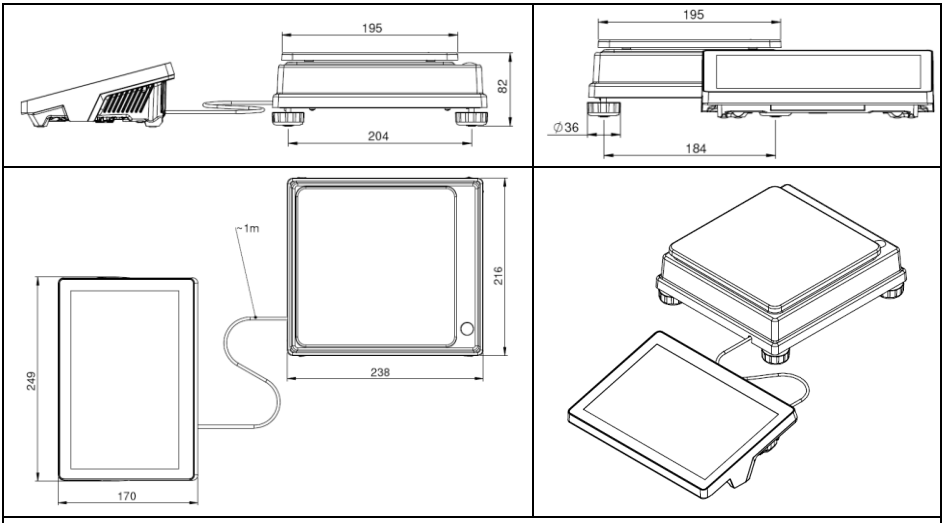
CY10 are single-sensor scales intended to quickly and precisely measure masses up to 300 kg. In single-sensor scales, mass is measured by one mass sensor located in the structure of the platform.
Platforms are equipped with a stainless steel weighing pan and, depending on the scale type, star-piece structure and foundation that is made of stainless steel or painted.

Single-sensor scale components – general view:

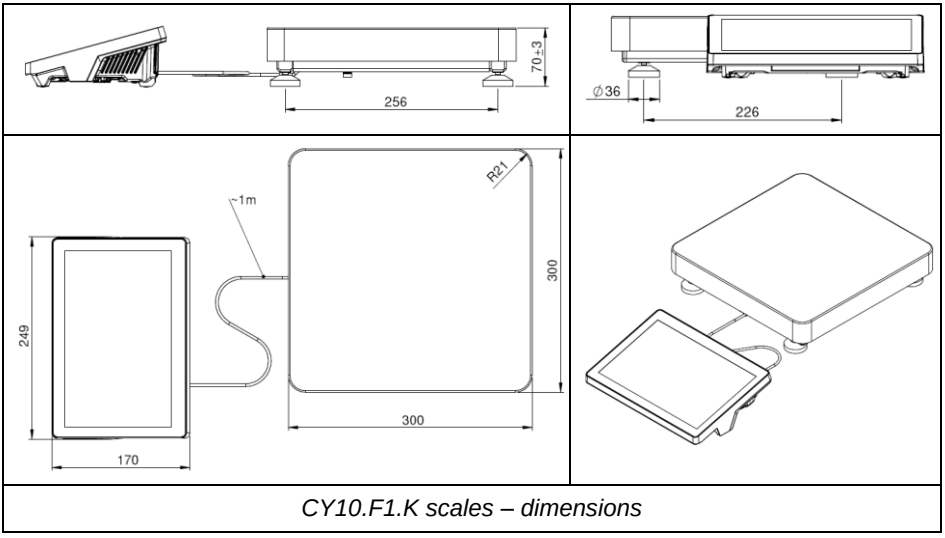


Single-sensor scale components – general view:
1 - Weighing pan, 2 - Star-piece, 3 – Mass sensor, 4 – Foundation.

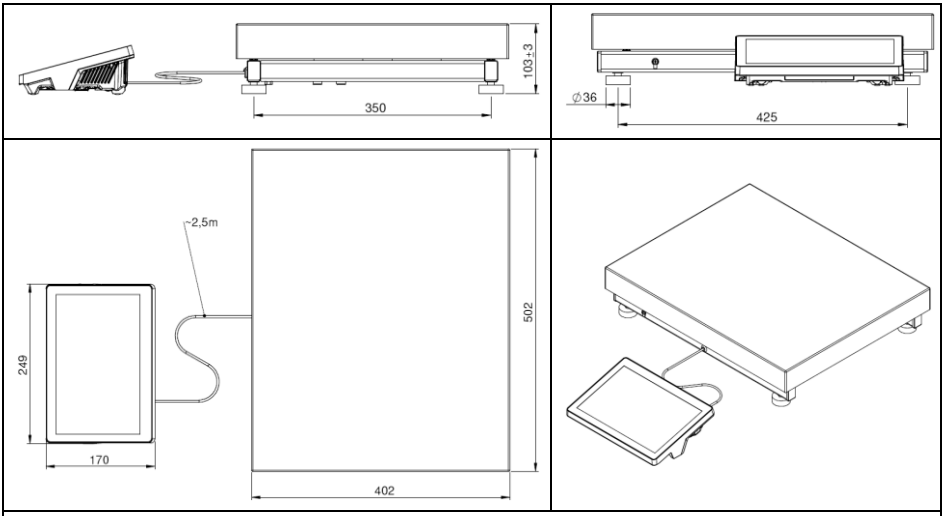
6.1. Dimensions



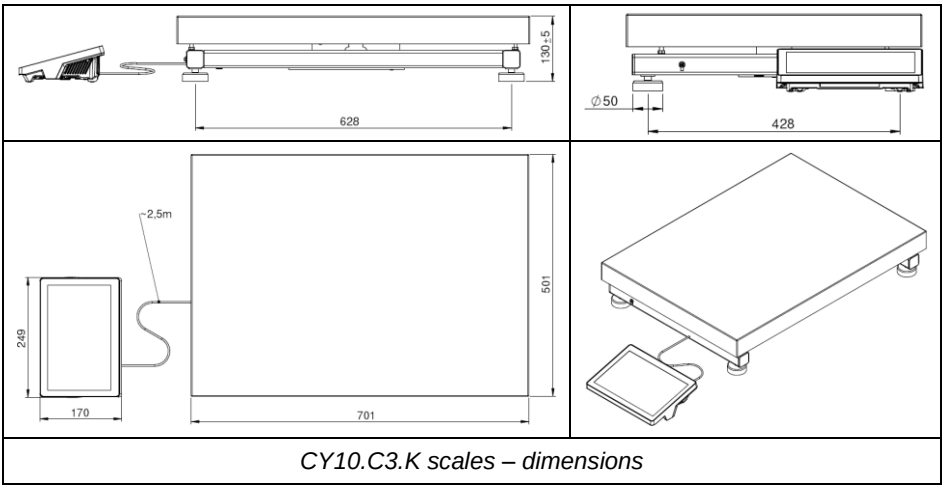
CY10.D2 scales – dimensions



CY10.F1.K scales – dimensions

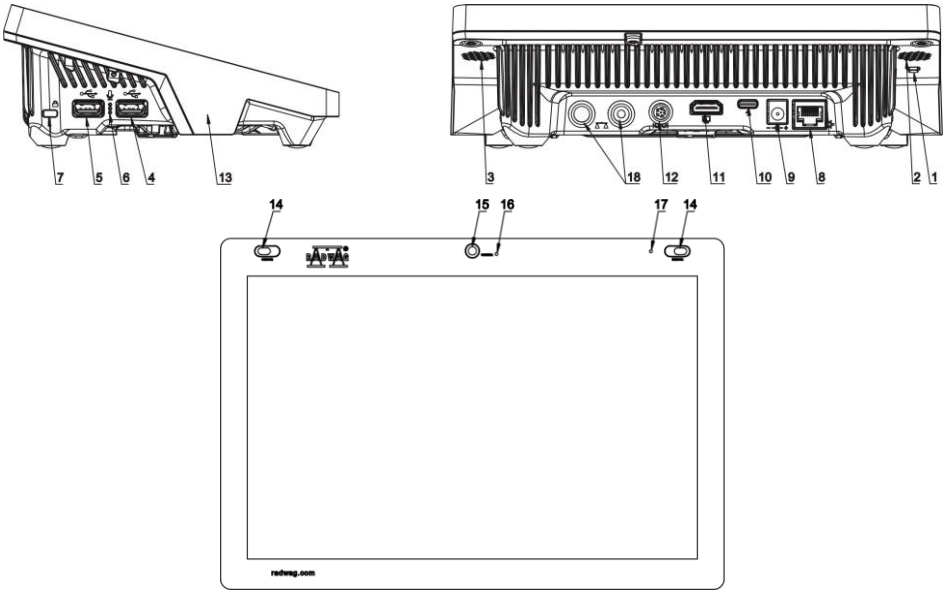


CY10.C2.K scales – dimensions



CY10.C3.K scales – dimensions

6.2. Description of Connectors



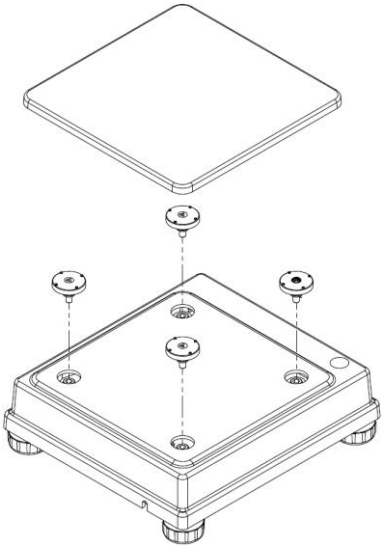
1	Reboot or on/off button
2	Left loudspeaker
3	Right loudspeaker
4	USB type-A port
5	USB type-A port
6	Microphone
7	Kensington Lock
8	Ethernet port.
9	Power supply power
10	Power supply port – USB type-C
11	HDMI port
12	Media box port
13	RFID sensor
14	Reflective sensors
15	Camera
16	Camera LED light
17	Signal LED light
18	Weighing platform cable glands

7. INSTALLATION

7.1. Unpacking and Assembly

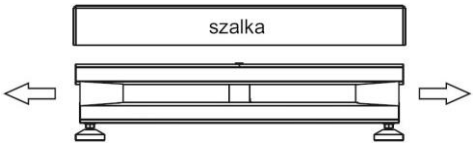
7.1.1. CY10.D2 Series Scales

A. Remove the scale from the factory box.
B. Place the device in the place of use, on the even and hard flooring, away from sources of heat.
C. Install the weighing pan as showed in the figure below:



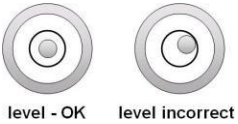
7.1.2. CY10.xx.K Series Scales

A. Remove the scale from the factory box.
B. Place the device in the place of use, on the even and hard flooring, away from sources of heat.
C. Pull transportation protection out and put the weighing pan on:



7.2. Scale Leveling

Turn adjustment feet to level the scale. Leveling is correct if the air bubble is in the center of the level that has been placed on the foundation:

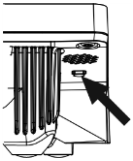


7.3. Connection to Network

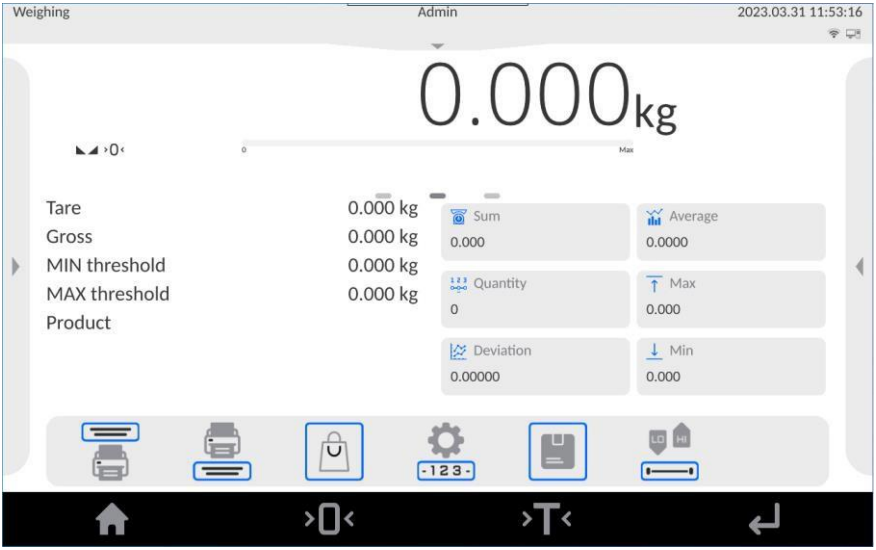
The device can be plugged in only with the use of the original feeder cable supplied. The rated voltage of the feeder cable (given in dedicated rating plate) should correspond to the mains rated voltage.

Procedure:

- Plug the feeder cable into the mains socket and put the feeder cable plug into the port at the back of the weighing indicator housing.
- The operating system and RADWAG software loading procedure will initiate in a moment. While the program is being launched, a signal LED light and LED lights at the lower frontal part of the indicator will flash.
- Once the start-up procedure has ended, the home page will be displayed.
- The weighing indicator starts with the operator being unlogged (no user). To start working, log in (logging procedure has been described below).

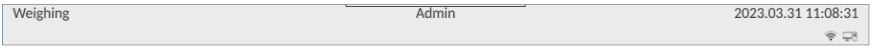
	***Switch the scale on without any load – with the empty weighing pan. As per EN 45501 standard, in verified scales the mass value of less than -20e must not be displayed. Therefore when the result drops below this value, the home page will display <Lo mass>. This being the case, zero the scale by pressing***  ***.***
	***If the program crashes during operation, reboot it. To do so, press and hold the button in the scale head for about 5 seconds. The program will restart and device will reload.***

8. HOME PAGE



The home page can be divided into 5 fields:

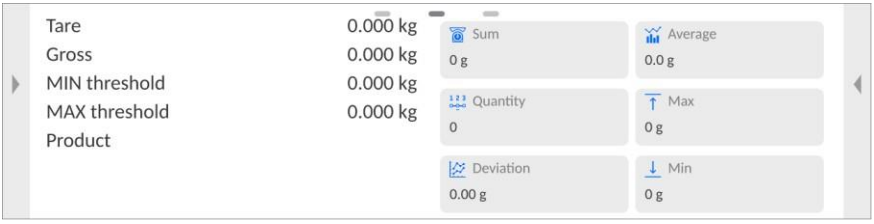
- The upper part of the screen shows information on current working mode, logged user, date, time, active connection to PC.



- The weighing result and scale leveling box is displayed below.



- The field provides additional information related to ongoing actions.



	Information in this field can be freely programmed. Defining method can be found in 'PUE CY10 indicator software manual'.

- The on-screen functional buttons are showed below:



	The scale operator can define on-screen functional buttons. Defining method can be found in 'PUE CY10 indicator software manual'.

- At the bottom of the screen you can see permanent functional buttons:



9. NAVIGATION IN THE MENU

Navigation in the menu is intuitive and user-friendly. Thanks to the touch screen display, it is very easy to use the program. Press the screen button or field in the screen to activate the assigned operate or function.

9.1. Scale Keyboard

	Enter main menu
	Confirm changes
	Return to previous window and do not change values
	Add item in database
	Search item in database by date
	Search item in database by name
	Search item in database by code
	Print item from database

	Select variables for printout template
	Return to previous menu level

9.2. Return to Weighing Function

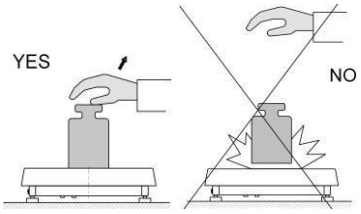
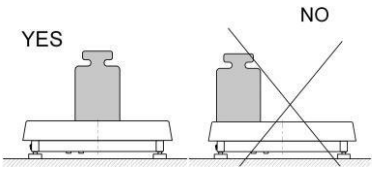
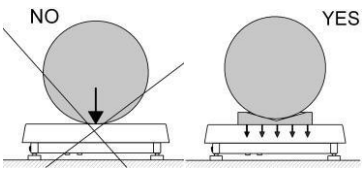
Any changes made in the scale memory are automatically recorded in the menu after going back to the home screen.

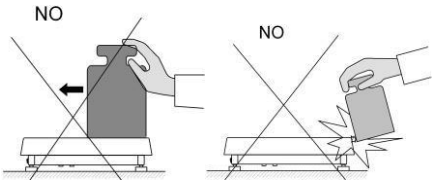
Procedure:

- Press ← button a couple of times to make the scale return to home screen.
- Press ⌂ in the lower bar to return to home page immediately.

10. WEIGHING

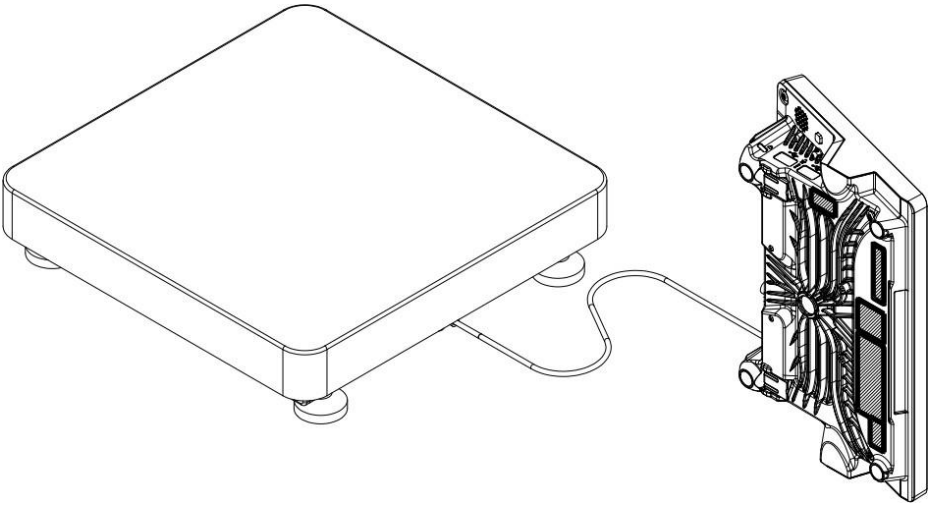
Load the weighing pan. When marker ◣◢ is displayed, read the value. To assure long-term life of the scale and proper measurements, please do as follows:

Load the weighing pan in a gentle manner.	
Place loads in the center of the weighing pan (non-centric errors are defined in PN-EN 45501 point 3.6.2).	
Do not use concentrated force to load the weighing pan.	

Avoid side loads of the scale, particularly side strokes.	

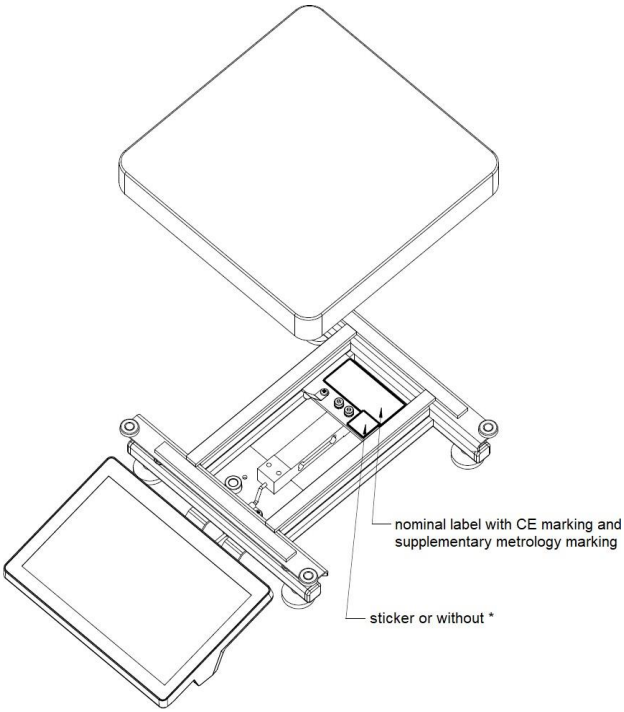
11. SCALE MARKING

The verification features, including the rating plate and CE conformity signage, are marked on the underside of the terminal. They can be seen when the terminal is lifted or rotated, as illustrated in the picture below.



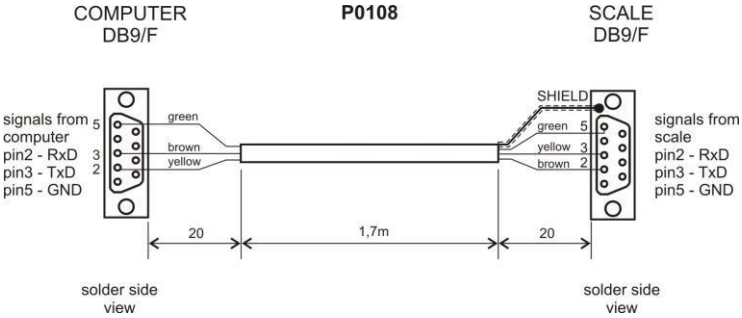
The signage is in accordance with the Terminal's Type Examination Certificate.

In some cases imposed by the construction of the weighing scale, the nominal label and CE marking are placed under the weighing pan on the main structure of the weighing scale. The data plate and the CE marking are visible in the weighing pan photo, see the below figure:

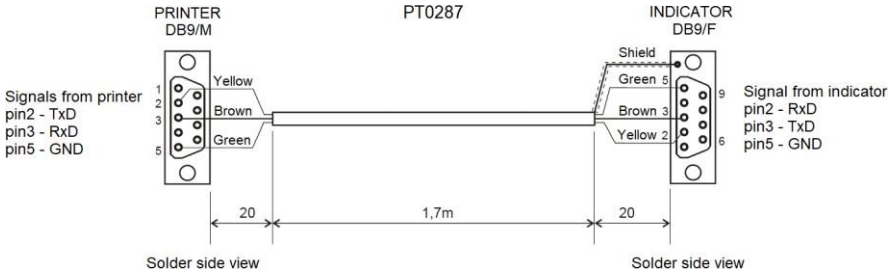


***)** - for nominal label made of sealing foil.*

12. CONNECTION WIRE DIAGRAMS



Scale – computer wire (RS232)



Scale – printer wire (RADWAG, ZEBRA)

	To assure correct cooperation with peripherals with the use of RS232 ports, use a USB-RS232 converter.
	'Scale – Ethernet' wire is a standard network cable that ends on both sides with RJ45 tip.

13. TECHNICAL PARAMETERS

Technical parameters of particular scales are available on the following website: www.radwag.com.

14. ERROR MESSAGES

Max weighing threshold exceeded Unload the weighing pan	Tarring out of range Press zeroing button or restart the balance
Min weighing threshold exceeded Install weighing pan	Start mass out of range Install weighing pan
Zeroing out of range Press tarring button or restart the balance	Zeroing/tarring time out of range Weighing indication unstable
Display capacity out of range Unload the weighing pan	