

Ballorex® Balancing Computer BC2

8.1 Introduction



**Ballorex
Balancing
Computer
BC2**

Ballorex Balancing Computer BC2 description

The Ballorex Balancing Computer BC2 is a compact, handheld instrument for effective system commissioning. The balancing computer is easily connected to a system through measuring points on a balancing valve by use of the included hoses and measuring needles.

The built-in pressure sensors measure the differential pressure which in combination with the Kv (Kvm)-value of the valve is directly converted into a flow reading.

If anti-freeze media is used in the system, the flowmeter offers density correction to display the actual flow.

Ballorex Balancing Computer BC2 benefits

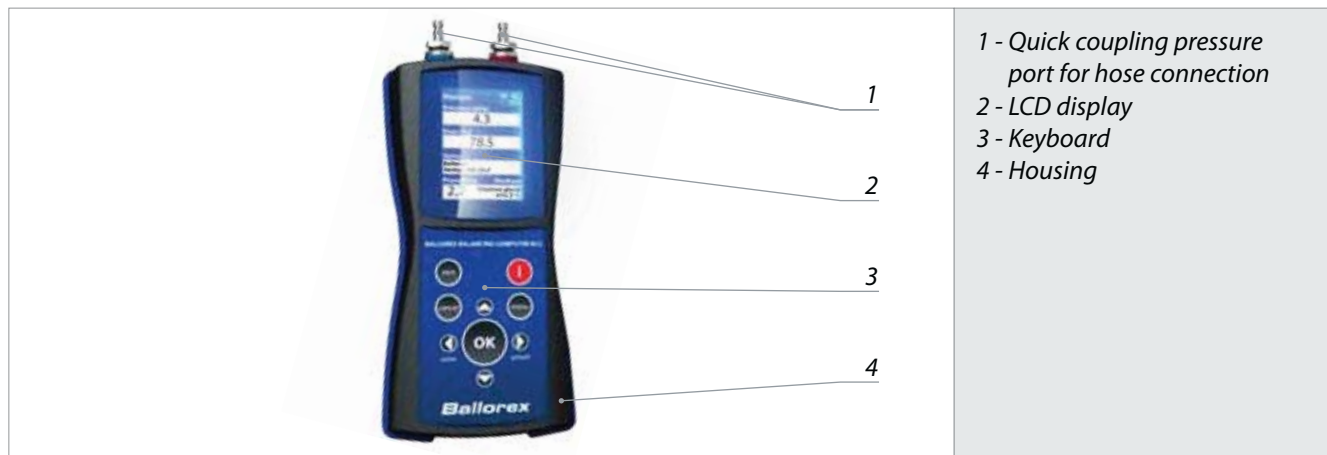
- » Smart menu for easy handling
- » Valve images for fast identification
- » Quick coupling pressure ports
- » λ -value calculated and displayed directly
- » Data logging function up to 20000 records
- » Up to 1200 pre-programmed balancing valves
- » Project commissioning with the possibility of printing balancing reports
- » Anti-freeze media density correction
- » Real time measurement recording
- » Valve pre-setting calculation

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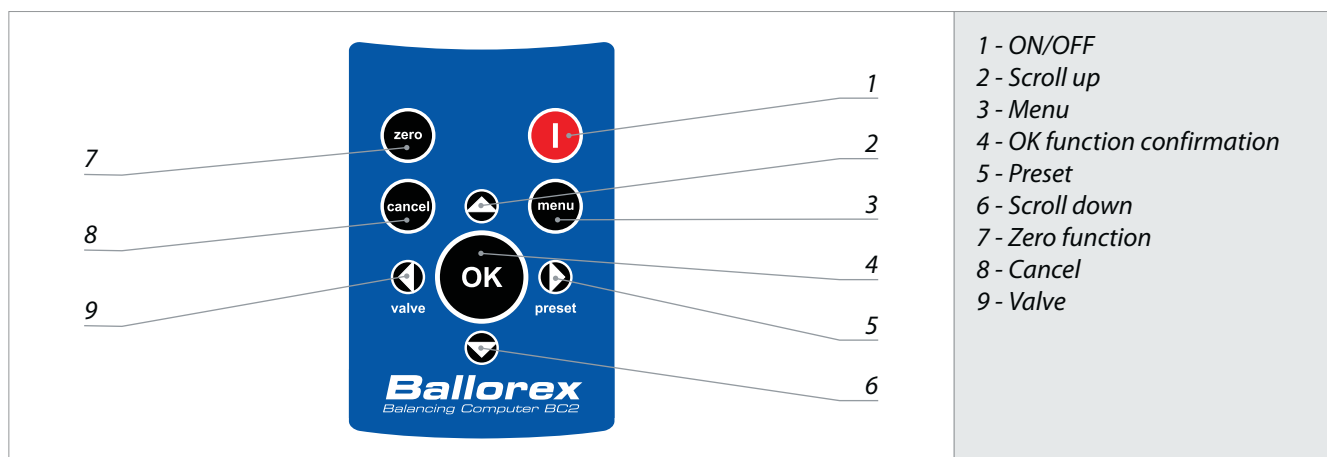
Ballorex Balancing Computer BC2 design

The Ballorex Balancing Computer BC2 is equipped with an illuminated QVGA colour display, pressure sensors and a 9-key keyboard.



- 1 - Quick coupling pressure port for hose connection
- 2 - LCD display
- 3 - Keyboard
- 4 - Housing

The keys enable menu navigation and entry of the required flow, Kv-value or setting of the balanced valve.



- 1 - ON/OFF
- 2 - Scroll up
- 3 - Menu
- 4 - OK function confirmation
- 5 - Preset
- 6 - Scroll down
- 7 - Zero function
- 8 - Cancel
- 9 - Valve

The display presents all the data required during commissioning.

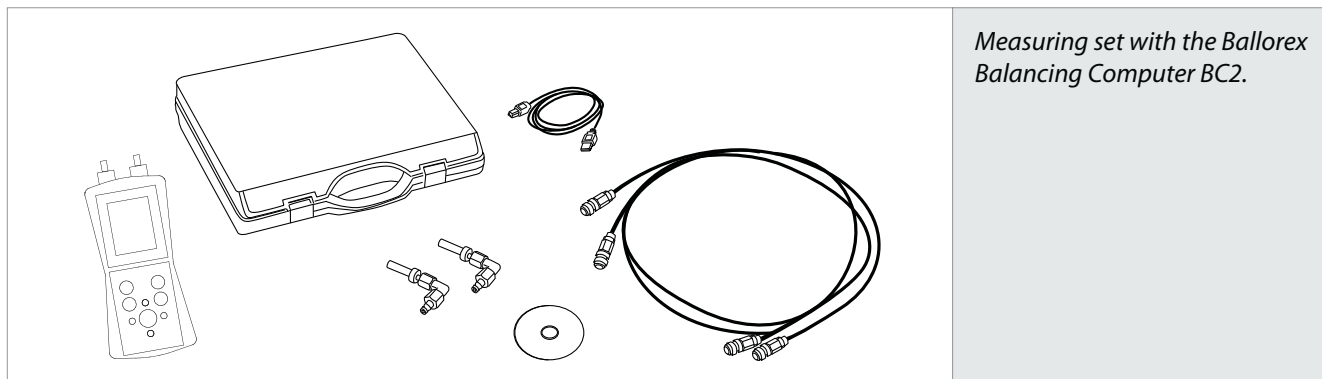


- 1 - Window name
- 2 - Flow unit
- 3 - Pressure unit
- 4 - Used record capacity (virtual SD card icon)
- 5 - Time
- 6 - Battery capacity
- 7 - Measured pressure
- 8 - Measured flow
- 9 - Selected valve
- 10 - Selected medium
- 11 - Valve pre-setting
- 12 - Medium concentration
- 13 - Medium temperature

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The Ballorex Balancing Computer BC 2 is delivered as a complete set including suitcase, balancing computer with carry belt, USB cable, charger, pair of hoses with quick connectors, measuring needles, one cap 3/4" with measuring point and a CD with software.



Measuring set with the Ballorex Balancing Computer BC2.

The Ballorex Balancing Computer BC2 is provided with a library of pre-programmed Ballorex balancing valves characteristics and images for fast and easy identification.



Example of a Ballorex valve LCD displayed image.

The most well-known balancing valves from other suppliers are also included in the library to enable use of the Ballorex Balancing Computer BC2 when commissioning systems equipped with different valves is required.

The large memory of the Ballorex Balancing Computer BC2 enables storing recorded pressure and flow data as well as direct viewing of earlier recorded values in the display.

Communication and charging of BC2 are done via a mini USB connector.

The Ballorex Balancing Computer BC2 enables:

- Differential pressure measurement
- Flow measurement
- Language selection
- Time and data setting
- Measured media selection
- Pressure unit selection
- Flow unit selection
- Temperature unit selection
- Flow measurement with Lambda value
- Direct Kv value input
- Single valve measuring
- Working with projects
- Valve pre-setting calculation
- Real time measurement recording

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Ballorex Balancing Computer BC2 operation

The Ballorex Balancing Computer BC2 measures differential pressure to calculate the flow for all Ballorex balancing valves.

The flowmeter is used with the standard Ballorex measuring points, requiring needles.

It is also applicable with high temperature measuring points. This requires removing the needles and connecting hoses with quick couplings directly to the valve measuring points, which need then to be rotated.

The direct flow reading of Ballorex Dynamic, Ballorex Venturi and Ballorex Basic valves makes system commissioning fast, easy and precise.



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When measuring flow on a Ballorex Vario the setting is typed into the flowmeter. Every time the setting is changed, it must be re-entered in order to achieve the correct flow reading.



When measuring flow on a Ballorex Basic the correct type and size of the valve is first chosen from the display list. The pre-programmed Kvm-value is then used to convert the differential pressure measurement into a direct flow reading. The valve can be used for measuring only in a fully open position and with measuring points provided as accessories.

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8.1 Product data sheet



Ballorex Balancing Computer BC2

Dimensions	Specifications
	<p> Pressure nominal range 1000 kPa Max. overpressure 120% of nominal range Linearity and hysteresis error 0.15% of nominal range Temperature error 0.25% of nominal range Media temperature -5 to 90°C Operating temperature -5 to 90°C Storage temperature -5 to 90°C Power Internal 900 mAh rechargeable Li-Ion battery Power consumption 80 mA with active display Standby consumption 50 µA Number of records 20000 max. Number of valve producers 20 Number of valves in the library 1200 max. Charging/Communication Mini USB 5 V/200 mA Display 320 × 240 pixels, 65 K colours Keypad 9 keys Cover IP65 Calibration validity 12 months Mass 420 g </p>

Item	Article
	5901500

Accessories	Article	Dimension	Description
	41550042-000003	3/4"	Cap with test point installed on the drain of the Ballorex Delta, Ballorex Venturi, Ballorex Vario or Ballorex Basic for measuring the differential pressure during commissioning
	5901510	2 × 1.5 M	Pair of hoses (blue and red) with quick couplings
	5901520	-	Pair of needles