



CALVOLVER

Technical Data Sheet

20221003/v4/cho



Technical Information:

Cabinet Size:	The size of the cabinet is:	
	Width	150 cm
	Depth	120 cm
	Height	200 cm
Weight:	Cabinet:	approx.150 kgs
	Robot Arm, Control Box, Teach Pendant:	25 kgs
	Other content and components:	max. 10 kgs
Power supply:	230 V AC, Grounded. <10 Amps	
Noise level:	< 70 dB Normally lower noise level than lab ventilation systems	
Transport:	Calvolver will be delivered to you in 2 halves of H200 x W150 x D60 cm. So, it generally passes through normal doorways.	
Room requirements:	Ordinary lab environment: <ul style="list-style-type: none"> • Solid foundation/floor → our balances are very precise and sensitive, so any movement of the floor can cause non-acceptable measurement results • Minimum space requirements are 1,5 x 2,5 meters (recommendation 2,2 x 3 m), and 2,5 m from floor to ceiling. • We recommend a room temperature between 15–30° C and an air humidity at minimum 50%. <p>More specific requirements may be enforced depending on individual customer calibration process specifications.</p>	

Pipette calibration & data handling:

Pipette handling:	<p>The robot arm → E.g.: Universal Robots UR3e. The UR3e is a collaborative robot, also called a “Cobot”, that is made specifically to work safely with and around humans. <i><u>For more details read the UR3e Product Fact Sheet</u></i></p> <p>Balances → 5 & 6 digit, e.g.: Sartorius</p>
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Sensors → Water thermometer, e.g.: Testo

Vision system / camera, e.g.: Festo

1. For reading the pipette display when adjusting volume
2. For reading a data matrix to identify the pipettes

Pipette tip change system

Rack for interfaces/tools

A tool for each pipette model/family

Rack for pipettes – Capacity depends on customer need

e.g., 4, 8, 12 or more spaces in the rack

Data handling:

Pipette calibration specifications are automatically imported from the integrated LIMS and matched with the individual pipette.

Once the calibration is completed, the pipette status digitally updates in the LIMS or other system.

Safety & Instructions for use

CE certification:

Calvolver complies with relevant requirements in the following standards:

ISO 9001-2015	Quality Management
ISO 8655-2002	Pipettes with piston
ISO 17025-2017	Calibration laboratories
ISO 10218-2012	Robotic systems
ISO 20607-2019	User instructions

Instruction for use:

To ensure safe and correct operation of Calvolver the following will be provided by Techvolver in English and local language:

- Obligatory training and certification of customer employees
- User Instruction
- User Manual

Contact information:

If you have questions or in case of any event, please contact us:

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