



CELLROLL and CELLSPIN Cell cultivation system that grows with your needs

CELLROLL and CELLSPIN



The modular system for laboratory-scale cell cultivation

The CELLROLL and CELLSPIN systems are based on a modular assembly concept that allows you to configure and combine the two instruments according to your needs. Using only one control unit it is possible to operate two CELLROLL drive units or two CELLSPIN stirring platforms or a combination of one instrument each. The control unit automatically recognises the type of instrument connected and allows you to independently store ten different cell cultivation programs for each unit.

Designed for a “lifelong” use in CO₂-incubators

The control unit contains all sensitive electronic parts and connects via cable to the drive unit, therefore it can be kept outside of the incubator and the electronics are not damaged by the incubator’s humidity. The materials used for the CELLROLL drive unit and the CELLSPIN stirring platform are non-corroding and the motor housings are sealed tightly – all this makes sure that a reliable and long-lived system will keep your cells always “on the move”!



For quality conscious cell culture laboratories

Because quality assurance is an integral part of a cell-based manufacturing process, the CELLROLL and CELLSPIN systems offer the means to efficiently monitor and document cell cultivation. Both instruments can be connected to a printer or a PC to log cultivation parameters at specified time intervals and to record all saved culture protocols. Also an interruption of the cultivation process – either due to a power failure or to an accidental disconnection of the control unit – doesn’t go unnoticed: the control unit triggers a beeping-alarm and generates an error message.

CELLSPIN



Adaptable to your specific needs

On each CELLSPIN stirring platform up to four spinner flasks can be employed independently of their size. The CELLSPIN spinner flasks are available in four different sizes – 100 ml, 250 ml, 500 ml and 1000 ml – to match individual needs of cultivation scale. Using the conversion kit for impeller-type flasks, the individual stirring positions of the stirring unit can easily be adapted for use with other spinner flasks.

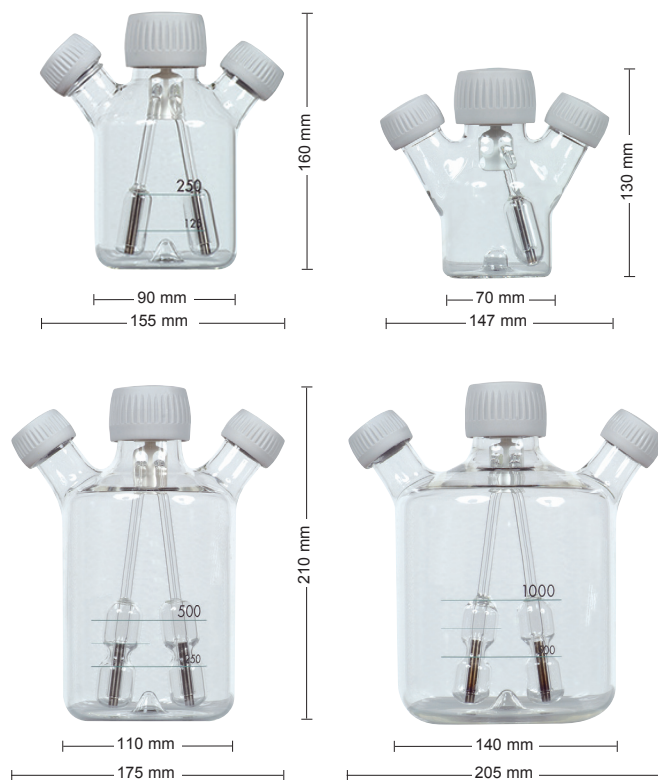
Optimised for cell cultivation

An optimised culture protocol is a key factor for successful cultivation of cells. CELLSPIN allows you to precisely set parameters such as stirring speed, pause intervals and pendular angles for inversion of the rotation direction. The speed ranges from 5 to 75 rpm and can be adjusted in steps of 2.5 rpm (5-40 rpm) or in steps of 5 rpm (40-75 rpm).

The CELLSPIN spinner flasks are designed to provide a high surface to volume ratio ensuring improved oxygenation over standard designs. The unique stirring mechanism of the CELLSPIN spinner flasks relies on two glass pendula which guarantee low shear forces while maintaining optimum mixing. As most cells are very sensitive to overheating, the stirring platform design prevents any release and transfer of heat to the cell suspension. Owing to these specific measures aimed at gentle cell cultivation, high yield expression from even the most sensitive cell lines is possible.

Technical Data

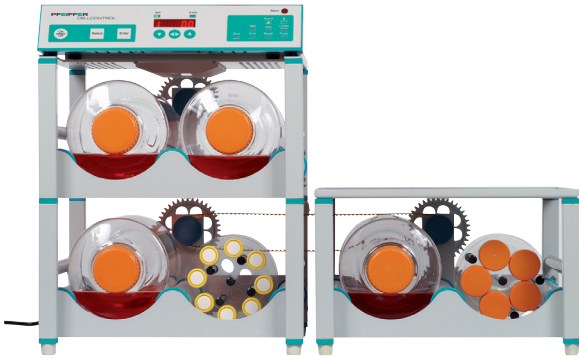
Dimensions (H x W x D)	75 x 295 x 380 mm
Weight	3.4 kg
Input voltage	100 – 240 VAC 50 – 60 Hz
Flasks volumes	100, 250, 500, 1000 ml



Ordering information

	Description	Part No.
CELLSPIN	Includes a stirring platform (with 4 stirring positions), a control unit, a power supply and a control cable	183 001
Components	Control unit incl. power supply	183 013
	Stirring platform (with 4 stirring positions) incl. control cable	183 015
Accessories	Control cable (length 2 m) for second output	186 050
	Power supply	186 238
	Interface cable (for connection to printer or PC)	186 041
	Conversion kit for impeller-type flasks	183 260
Spinner flasks	Spinner flask with 1 pendulum, 100 ml	182 023
	Spinner flask with 2 pendula, 250 ml	182 026
	Spinner flask with 2 pendula, 500 ml	182 051
	Spinner flask with 2 pendula, 1000 ml	182 101
	Middle cap for spinner flask (100-1000 ml)	182 217
	Side cap for spinner flask (100-1000 ml)	182 781
	Glass pendulum for 100 ml	182 701
	Glass pendulum for 250 ml	182 703
Glass pendulum for 500 and 1000 ml	182 706	

CELLROLL



Adaptable to specific needs

The modular design of the CELLROLL allows scale-up of bottle capacity from 4 to 16 roller bottles. By using two drive units up to 32 roller bottles can be operated using one control unit only. The customised configuration of CELLROLL increases flexibility and efficiency of the lab.

Technical Data

Dimensions (H x W x D)	400 x 295 x 360 mm (2 decks)
Weight	1.85 kg
Weight of one deck	1.7 kg
Input voltage	100 – 240 VAC 50 – 60 Hz

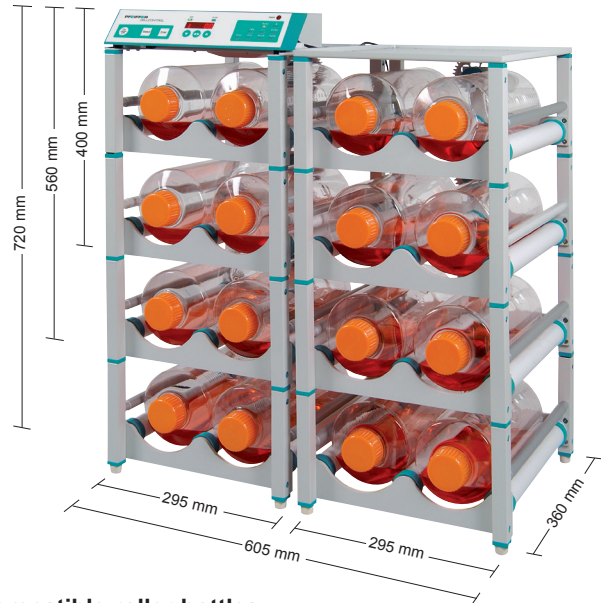
Ordering information

	Description	Part No.
CELLROLL	Includes a drive unit (0.1 - 2 rpm), two decks (for 4 roller bottles), a control unit, a power supply and a control cable	186 001
CELLROLL fast	Includes a drive unit (2 - 6 rpm), two decks (for 4 roller bottles), a control unit fast, a power supply and a control cable	186 005
Components	Control unit incl. power supply	183 013
	Drive unit (0.1 - 2 rpm) for maximally 8 decks incl. control cable	186 015
	Drive unit fast (2 - 6 rpm) for maximally 8 decks incl. control cable	186 020
	Deck (for 2 roller bottles)	186 026
Accessories	Storage deck (necessary for horizontal extension)	186 030
	Control cable (length 2 m) for second output	186 050
	Power supply	186 238
	Interface cable (for connection to printer or PC)	186 041

Optimised for cell cultivation

Successful growth of cells in roller bottles often relies on optimal rolling speed and therefore the CELLROLL allows fine-tuning of the rotation speed. The standard drive unit operates in a speed range from 0.1 to 2 rpm and is adjustable in steps of 0.1 rpm. The faster drive unit rotates the roller bottles with 2 to 6 rpm (adjustable in steps of 0.5 rpm).

To avoid unnecessary shear stress, all the rolls of the instrument are turning on high-quality ball-bearings free of vibrations and are driven by a stepper motor which guarantees a completely smooth rolling start and stop.



Compatible roller bottles:

Up to 29 cm in length (incl. 3 cm lid), 10 - 12 cm of diameter



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