

Your Partner in Laboratory Centrifuges

MSE



BLUE FORCE 12LR & 12LR+

Floor-standing centrifuge, high capacity



4 700 rpm



7 630 xg



6 x 2000 ml



-20°C à +40°C

Floor-standing centrifuge range



Mastering centrifugation
for over 85 years

YOU TALKED,
WE LISTENED

MSE

Introducing the MSE Blue Force 12LR / LR+ – a high-performance refrigerated centrifuge engineered for reliability, energy efficiency, and process safety.

With over 85 years of engineering expertise, MSE delivers a robust and durable built from high-grade steel and aluminium, rigorously tested to guarantee long-term performance.

OPTIMAL CAPACITY

The BlueForce 12LR can accommodate up to **6 x 2000 ml** bags or **18 x 500 ml bags**. Each configuration benefits from controlled dynamic balancing, perfect stability, and excellent reproducibility of results.

RELIABLE AND PRECISE REFRIGERATION

Efficient and ultra-fast Precool function: reach **4 °C in 10mn max!** Begin your centrifugation sooner while the Cold Chamber mode keeps your samples perfectly preserved and ready when you are at the end of the cycle.

COLOR TOUCHSCREEN INTERFACE

Pleasant, intuitive, and **customizable**, it is easy to use— with or without surgical gloves.

LOW OPERATING COST

Built to last, the BlueForce 12LR & 12LR+ combine high performance with energy efficiency. Less maintenance, lower consumption, and consistent effectiveness with every cycle.

HIGH PERFORMANCE

With **4,700 RPM** and a force of **7,630 × g**, the BlueForce 12LR offers controlled and consistent centrifugation, meeting the requirements of even the most demanding applications.

Whether you're working with single or six-fold bags, you can always count on optimal performance and unmatched reproducibility: every cycle delivers the same results, regardless of the load.

EVOLVING TECHNOLOGY

The newest PLC technology eliminates the need to worry about obsolete spare parts

Updates and upgrades to your centrifuge are now made effortlessly through a simple software update.

ERGONOMIC DESIGN

With the control panel located at the front of the instrument, the user can effortlessly operate the centrifuge and minimise musculoskeletal strain.

STABLE BASE, EASY TO MOVE

Equipped with large, nylon casters, the BlueForce 12 moves easily—even on rough surfaces. Its smart design also allows the use of a pallet jack without no extra handling required.

BLUEFORCE 12LR

LESS EXPENSES, MORE PERFORMANCE !



The Blue Force 12L R has been designed for demanding labs. Reduced operating costs and lower heat emissions, resulting in decreased reliance on air conditioning. Choose performance without compromise!

RELIABILITY

Built to last, backed by 85+ years of centrifuge expertise.



Every Blue Force 12L R is put through 50+ hours of rigorous testing to ensure exceptional reliability.

Our full warranty provides complete coverage for every component of the centrifuge

SAFETY

High-quality steel and aluminum frame with a reinforced drum and safety guard ring.



Automatic locking and imbalance detection for safe operation.

Motor overheat and overspeed protection, plus an integrated electrical safety filter.

EASY MAINTENANCE

Self-diagnosis and brushless motor



All electronics easily accessible from the front.

Lightweight buckets make it easier to handle and clean.

COST EFFICIENCY

35% lower energy use = real savings.



Affordable spare parts.

Low heat production reduces the cooling requirements of your laboratory.

PEACE OF MIND

Fully compliant with European regulation 2017/746

Adaptors perfectly designed to support your blood bags during centrifugation and minimise spoiled samples.

Your samples are preserved in optimal conditions through consistent temperature control of the Blue Force.

THE LATEST TECHNOLOGY AT YOUR FINGERTIPS

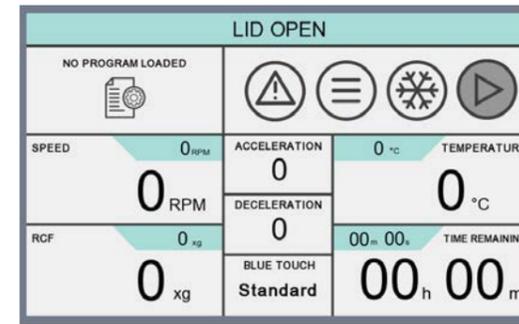


EASY-TO-USE INTERFACE

The interface is **customizable (color, language)** and user-friendly.

Detailed individual programs can be set up by the laboratory manager and locked to avoid other users tampering with the parameters.

Programs can be password protected and named with alphanumeric characters.

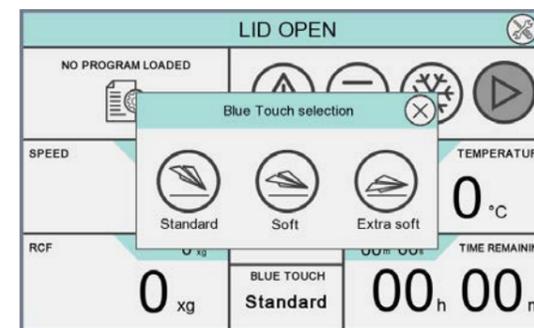


BLUE TOUCH FUNCTION

Three additional end-of-braking modes to protect your precious samples from the deceleration impact.

From standard mode to extra soft mode to end the cycle in a controlled freewheel mode.

Helping you achieve both quality and productivity.

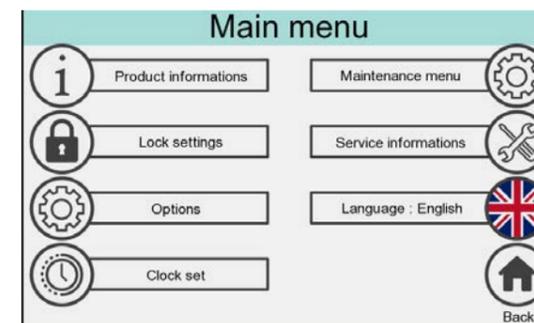


AUTO-DIAGNOSTIC MENU

The service engineer can quickly access a wide range of diagnostics via the intuitive touchscreen interface.

They can safely perform targeted tests on individual centrifuge components – all without opening the unit, saving valuable time.

The alarm log gives technicians instant insight into the centrifuge's usage and history, ensuring smarter, faster maintenance.



SCALABLE AND ADAPTIVE TECHNOLOGY

Developed in collaboration with Omron Industrial Automation, the Blue Force 12L R centrifuge combines advanced **PLC control** with intuitive resistive touchscreen interface, delivering both precision and ease of use.



OMRON

The use of programmable logic controllers (PLCs) **eliminates the dependence on obsolete electronic components.** System updates, bug fixes, and feature enhancements can now be performed via software updates, without the need to replace hardware.

This technology also means we are able offer tailored customization options to meet your specific needs:

LANGUAGE: The interface can be adapted to your preferred language ensuring ease of use and accessibility for your team.

PROGRAMS: Control programs and automation sequences can be developed to suit your unique process requirements.

INTERFACE: Select your color scheme to improve user experience.



Customization on request



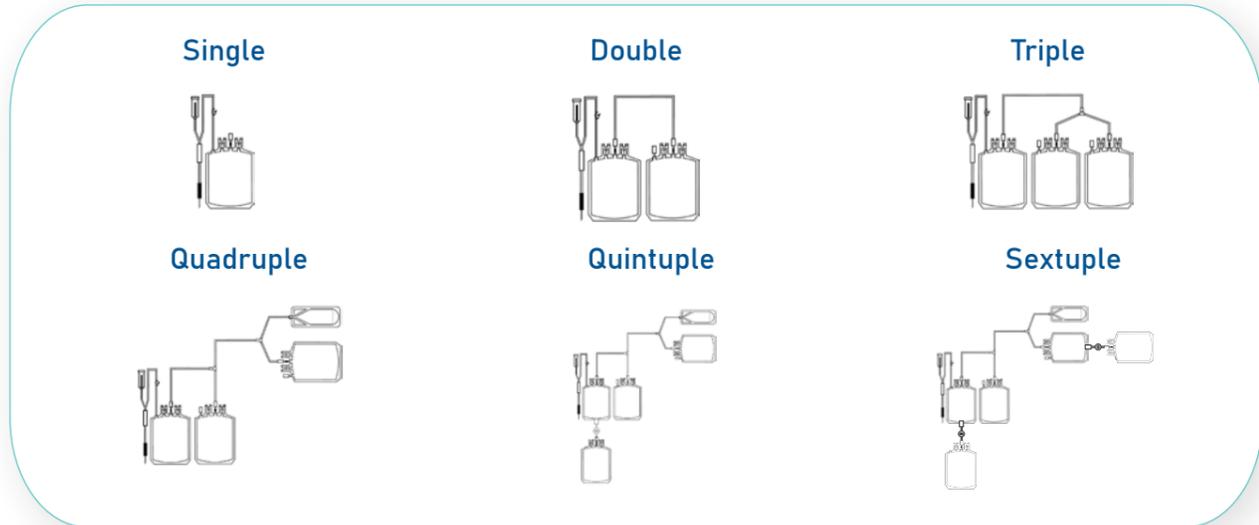
BLOOD BAG ADAPTORS



NEW



Max. possible type	Single	Single	Double	Triple	Quadruple	Quintuple	Sextuple
Max. quantity	18	12	12	12	12	12	12
Max. speed (RPM)	4700	4 700	4 700	4 700	4 700	4 700	4 700
Colour	Black	Yellow	Red	Red	Blue	Blue	Blue
Adaptor PN	43255-006	43255-0026	43255-0016	43255-0016	43255-0006	43255-0006	43255-0006

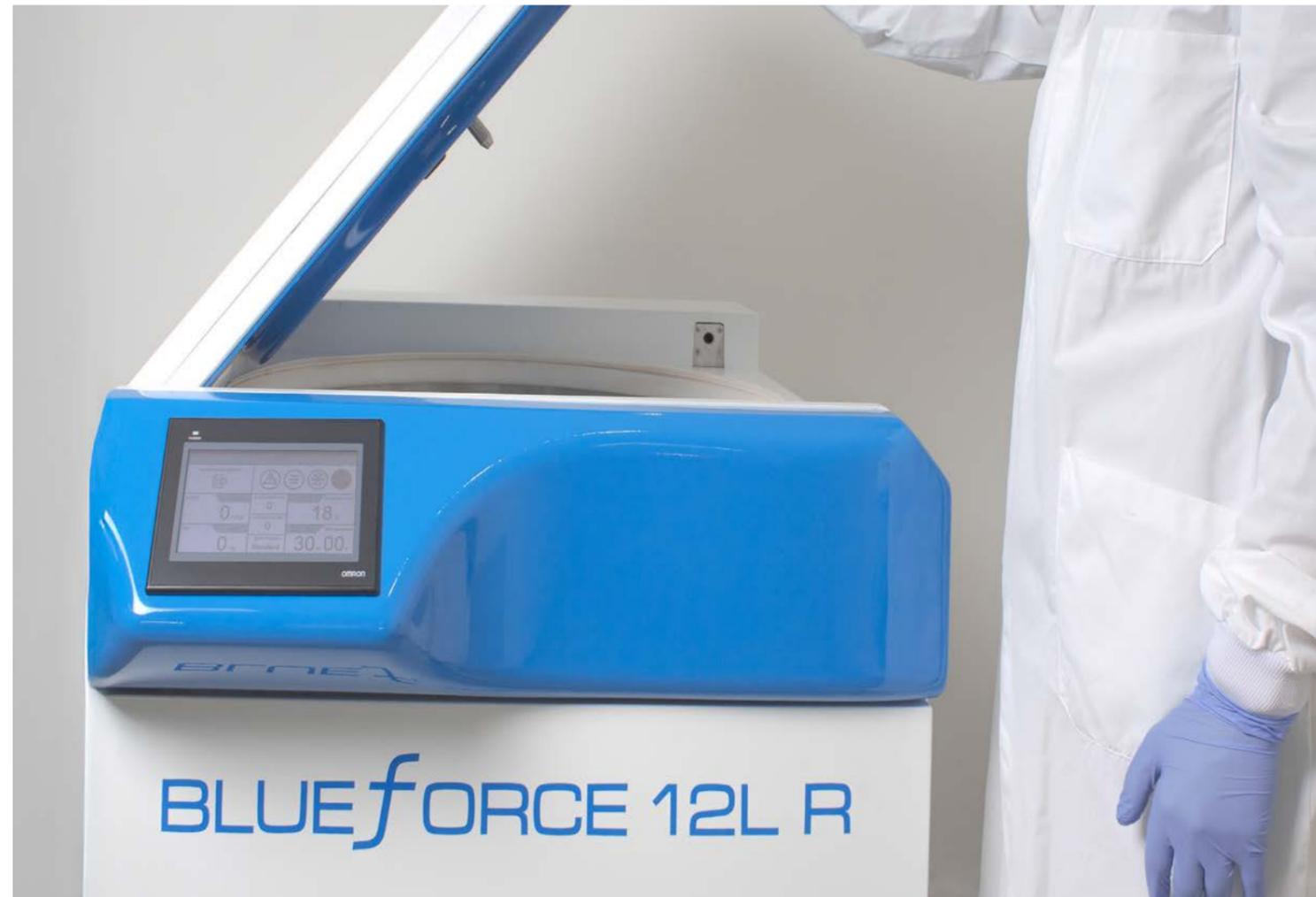


Cat. No.	Description	Max capacity Type of blood bag /container	RPM	RCF
43551-2006	SET OF 6 Buckets for Blue Force 12 LR and LR+	6 x 2000 ml	4 700	7 630
43255-0006	SET OF 6 Adaptors for 2 x blood bag 750 - 1000 ml (BLUE)	12 X 750/1000 ml	4 700	7384
43255-0016	SET OF 6 Adaptors for 2 x blood bag 500-750 ml (RED)	12 x 500/750ml	4 700	6 990
43255-0026	SET OF 6 Adaptors for 2 x blood bag <500 ml (YELLOW)	12 x 250/500 ml	4 700	7 384
43255-006	"SET OF 6 Adaptors for 3 x 500 ml blood bag !! NEW !!"	18 x 250/500	4 700	7 000
43255-xxx	Customized adaptors and accessories	354 blood tubes	4 700	7 000

Available : optional front USB port for data download

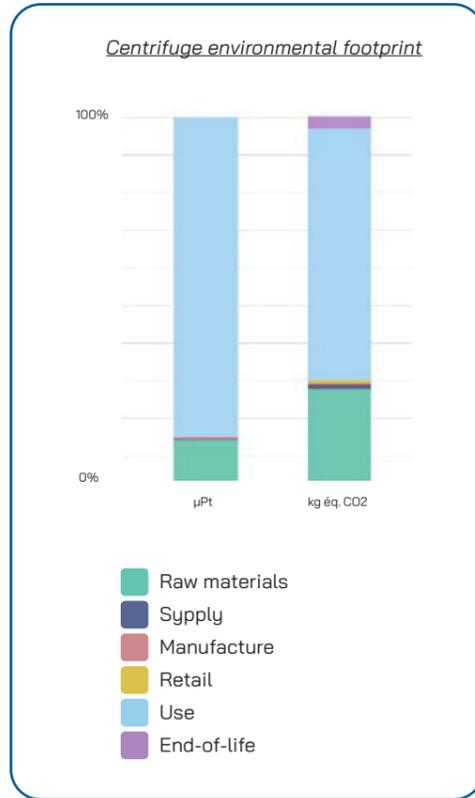
BOTTLES, VIALS & TUBES

Cat. No.	Description	Max capacity Type of blood bag /container	RPM	RCF
43551-2006	SET OF 6 Buckets for Blue Force 12 LR and LR+	6 x 2000 ml	4 700	7 630
43255-003	SET OF 6 BF12 Adaptors for 1000 mL bottle (WHITE)	6 X 1000 ml	4 700	7384
43255-004	SET OF 6 BF12 Adaptors for 2 x 500 mL bottle (WHITE)	12 x 500 ml	4 700	6 990
43255-005	SET OF 6 Adaptors for 1.2L bottle (WHITE)	6 X 1200 ml	4 700	7 384
43255-101	SET OF 6 Adaptors for 59 blood tubes 7-11 ml	354 blood tubes	4 700	7 000
43255-102	SET OF 6 Adaptors for 59 blood tubes 4,8-7 ml	354 blood tubes	4 700	7 000
43255-103	SET OF 6 Adaptors for 59 blood tubes 1,6-4 ml	354 blood tubes	4 700	7 000
43551-210	SET OF 6 Bucket for 2L Bottle	6 x 2000 ml	4 700	7 600
43155-XXX	CUSTOMED ADAPTOR and ACCESSORY			



Our mission is to be at the forefront of centrifuge innovation, but this goes hand in hand with our commitment to better production! We design and improve our centrifuges to have as little impact as possible on the environment and offer solutions to reduce our carbon footprint.

To minimize the carbon impact of manufacturing we work mainly with local suppliers.



FOCUS ON OUR ECODESIGN APPROACH

The studies we ran with an independent office specialized in **Eco-design** shows that the most impacting phase of the life cycle is the use of the centrifuge.

Our R&D engineers have adopted an eco-design approach to provide our customers:

- ✓ REDUCE ENERGY CONSUMPTION
- ✓ FACILITATE REPAIRS AND MAINTENANCE,
- ✓ EXPAND SERVICE LIFE
- ✓ MINIMIZE THE QUANTITY OF MATERIALS USED
- ✓ INCORPORATE FLEXIBILITY TO ADAPT TO TECHNOLOGICAL CHANGE

Interview with MSE's Director and MSE's R&D manager on the actions taken to limit the energy consumption of our centrifuges and their carbon impact.



- **WARRANTY** : 24 months of warranty + possible extended warranty
- **CUSTOMER ORIENTED** : Immediate assistance to any inquires and claims
- **QUALITY** : Our ISO 9001 and ISO 13485 certifications are testament to the quality of our products and our commitment to continually improve them
- **CE marked and EMC tested**



	BLUE FORCE 12LR	BLUE FORCE 12LR+
Height (mm)	1 250 mm	
Weight (mm)	810 mm	
Depth (mm)	980 mm	
Weight (kg)	390 kg	
Maximum capacity	6 x 2 000 ml	
Maximum speed	4 200 rpm / 1 rpm step	4 700 rpm / 1 rpm step
Maximum RCF	6 094 xg / 1 xg step	7 630 xg / 1 xg step
Timer	1 second to 99 hours , 59 minutes or continuous	
Noise output	62 dB	
Power supply	360V-415V, 32 Amp, 3 phase + N, 50/60Hz	
Qty Acceleration/brake rates	10 / 10 x 3 (Blue touch function)	
Number of programs	100 x 10 steps	
Display	180mm wide resistive HMI	
Motor	Brushless induction drive	
Control	Programmable Logic Controller	
Safety features	Reinforced guard ring and lid lock, Motor overheat, Over speed protection, Inverter-controlled brushless motor, Out-of-balance detection, Inbuilt fault log storage. Automatic alert when the service is due, Embedded diagnostics for easy servicing, Easy-to-use keypad with anti-tamper lock, Electrical protection filter, Optional: chimney back panel	
Selectable temperature range	-20°C to +40°C (1°C step)	
Catalogue number	MSF120.CR2.KG	MSF120.CR2.KG+

All MSE centrifuges comply with the latest European safety and environmental standards. Our centrifuges also comply with the RoHS directive.



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