

Your Partner in Laboratory Centrifuges

MSE



BLUE FORCE 12LR & 12LR+

Stand Floor centrifuge high capacity, new version



4 700 rpm



7 630 xg



6 x 2000 ml



-20°C à +40°C

Stand floor centrifuge range



Mastering centrifugation
for over 85 years

QUALITY SEPARATION. EVERY TIME

Spin single, double, triple, quadruple, quintuple and sextuple bags and get optimum results, every time.

TOUCH SCREEN TECHNOLOGY

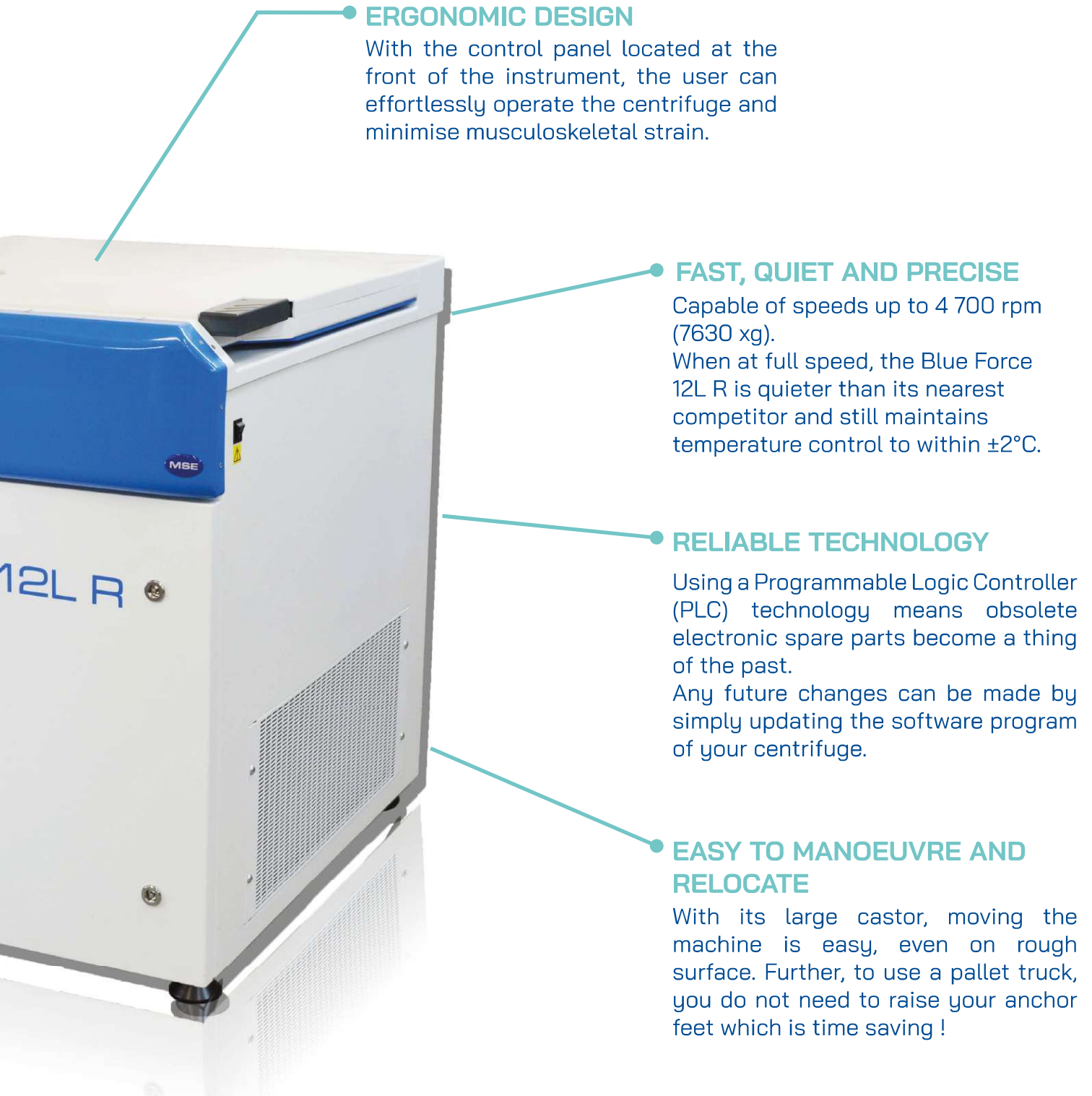
Our full colour, easy-to-use touch screen interface can be used with or without surgical gloves.

**LARGE STABLE FEET
AND NYLON CASTORS**

Standard castors do not grip a glossy lab floor very well and they usually get caught on little ridges and joins in the flooring. That's why the Blue Force 12L R uses two large multi-directional, nylon castors, making it easier to move when relocating.

The feet have a wide range of height adjustment to compensate for all unevenness in the floor.





ERGONOMIC DESIGN

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

FAST, QUIET AND PRECISE

Capable of speeds up to 4 700 rpm (7630 xg).
When at full speed, the Blue Force 12L R is quieter than its nearest competitor and still maintains temperature control to within $\pm 2^{\circ}\text{C}$.

RELIABLE TECHNOLOGY

Using a Programmable Logic Controller (PLC) technology means obsolete electronic spare parts become a thing of the past.
Any future changes can be made by simply updating the software program of your centrifuge.

EASY TO MANOEUVRE AND RELOCATE

With its large castor, moving the machine is easy, even on rough surface. Further, to use a pallet truck, you do not need to raise your anchor feet which is time saving !

PRESERVE ENVIRONMENT, SAVE MONEY !



Whilst performance and quality are important when choosing a centrifuge, running costs are also a significant factor.

The MSE Blue Force 12L R uses, on average, approximately **35% less power** than its nearest competitor.

This is good news for the environment and good news for your energy bills too.

THE MAIN BENEFITS, FOR YOU

RELIABILITY

Quality design from a brand you can trust. Over 85 years of experience in manufacturing centrifuges.

Rugged and built to last. Everything you'd expect from an MSE centrifuge.

Every Blue Force 12L R centrifuge undergoes rigorous inspection procedures and performance testing before leaving our factory.

SAFETY

Out of balance cut out, automatic rotor recognition and over speed protection.

Multi-point lid lock, reinforced guard ring. Motor and chamber over temperature cut outs.

Frame and lid made of high grade steel and aluminium.

Disruption tested to ensure safety.

COST SAVINGS

Power consumption is 35% less than most leading blood bank centrifuge competitors.

Affordable spare parts and accessories.

Each Blue Force 12L R produces significantly less heat than its nearest competitor, meaning you can spend less on air conditioning.

EASY MAINTENANCE

Automatic alert in case of failure. Maintenance free, brushless induction drive.

Inbuilt diagnostics makes fault finding easy.

All electronic parts located on a single, easily accessible chassis plate inside the front panel.

Software based electronics eliminates the possibility of spare parts becoming obsolete.

Buckets are more than 600g lighter than our nearest competitor. This makes periodic cleaning less of a strain when removing pods.

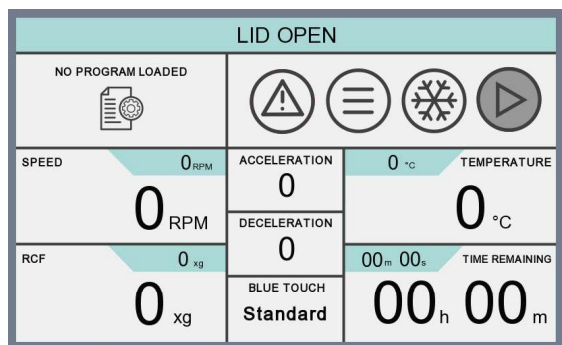
PEACE OF MIND

Fully compliant with European regulation 2017/746

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

Maintaining a stable temperature reduces the risk of damaging your precious samples.

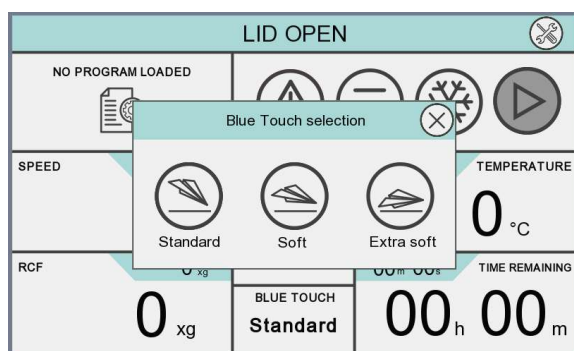




FRIENDLY and easy-to-use interface

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.

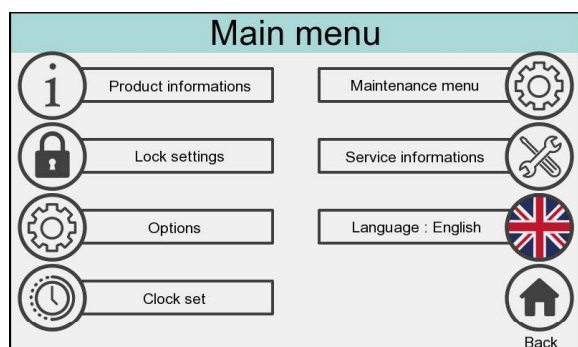


BLUE TOUCH : a unique optimization of the centrifugation results

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

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

Allowing you combining quality and productivity



AUTO DIAGNOSTIC MENU

A service engineer can access a vast range of diagnostics within the touch screen interface and perform specific tests on individual parts of the centrifuge; all of which can be carried out without even having to open up the unit.

Comprehensive log of all alarms automatically stored

A perfect knowledge of the centrifuge use and history to help the service engineer.

BLOOD BAG ADAPTORS

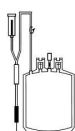


NEW

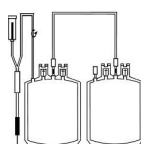


Max. possible type	Single	Single	Double	Triple	Quadruple	Quintuple	Sextuple
Max. quantity	18	12	12	12	12	12	12
Max. speed (RPM)	4700	4 700	4 700	4 700	4 700	4 700	4 700
Colour	Black	Yellow	Red	Red	Blue	Blue	Blue
Adaptor PN	43255-006	43255-0026	43255-0016	43255-0016	43255-0006	43255-0006	43255-0006

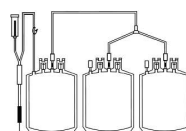
Single



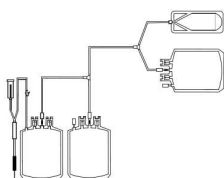
Double



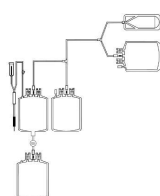
Triple



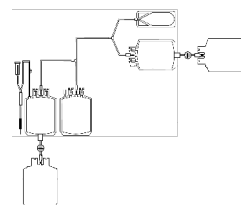
Quadruple



Quintuple



Sextuple



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

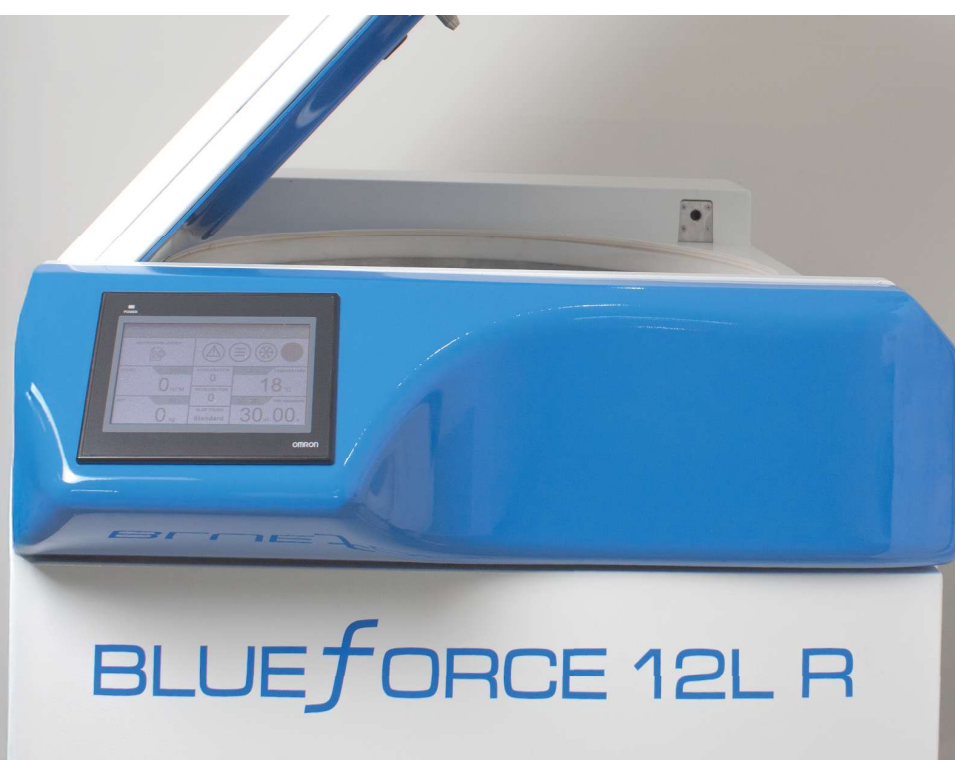
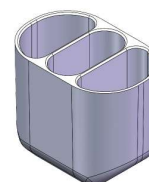
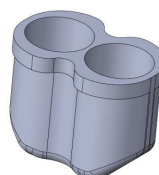
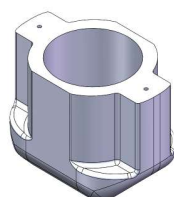
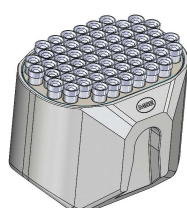
Accessories available on request: liners, removable dividers, adaptors for custom sizes of blood bags or containers.



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			







OMRON

The Blue Force 12L R centrifuge has been developed in partnership with Omron Industrial Automation, a worldwide leader in the manufacture of technologically advanced industrial automation products and resistive touch screen technology

Programmable Logic Controller (PLC): Scalable and adaptive technology

Evolutionary Multilingual Interface
FR, EN, ES, IT, PT, DE, RU, SE, CZ, PL

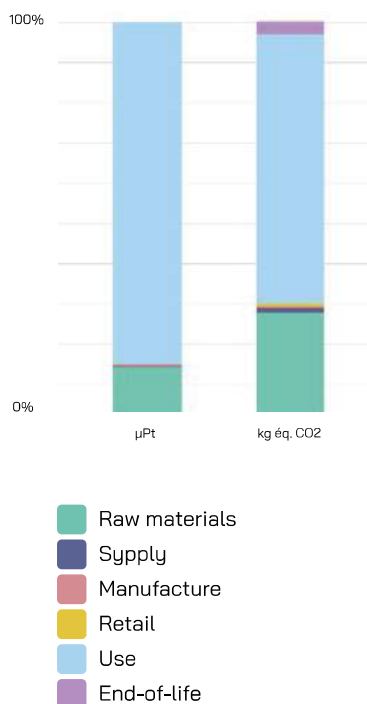


Customization on demand
Language, Interface or Programs

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.

Centrifuge environmental footprint



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
- ✓ INCORPORATING FLEXIBILITY TO COUNTER 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 + 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	
Weight (mm)	810	
Depth (mm)	980	
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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