L-BLOCK

RANGE OF SELF-CONTAINED PROTECTIVE SCREENS FOR RADIOPHARMACEUTICAL PREPARATIONS

ASSOCIATED PRODUCTS

- PHE vial shields
- Medi handling tongs
- Mediclic syringe shields HE
- Safety Storage range of shielded cabinets

HIGH **ENERGY**

PET

DIAMOND GLASS

L-Block Simple

L-Block Cave Simple

The "L-Block" range of shielded screens with a radiation protection viewing window is designed in **bactericidal composite materials** by Lemer Pax and is available in **5 products of different configurations** to meet **all applications in open systems** during the handling of **high-energy radiopharmaceuticals in nuclear medicine PET activity. Preparations, measurements and fractionating** are possible in **manual or automatic** mode depending on the L-Block model selected. The **radiation protection** of this **wide range** of shielded screens, provided to **reduce the full-body exposure of users**, consists in **60 mm lead shields and 104 mm thick Diamond Glass scratch and chemical resistant laminated lead glass**. In order to offer the same level of ergonomics for any configuration, all models feature a shielded window that can be tilted from 20 to 50°.

L-Block Telemetry

L-Block Cave with dose calibrator

L-Block Cave Automatic

L-BLOCK **SIMPLE**

HIGH **ENERGY**

PET

DIAMOND GLASS

ASSOCIATED PRODUCTS

- PHE vial shields
- Medi handling tongs
- Mediclic syringe shields HE
- Safety Storage range of shielded cabinets

CHARACTERISTICS

General

External dimensions*: L 400 x D 542 x H 635 mm

Weight: 220 kg

Materials: composite

Exterior finish: RAL 9016 bactericidal

Shielding thickness: 60 mm lead shielding over all sides.

Radiation protection

Maximum radioactivity that can be handled to obtain a dose rate less than 25 µSv/h at 5 cm from the walls**

Radionuclides	Maximum radioactivity that can be handled
^{18}F	98 GBq
^{131}I	71 GBq
^{68}Ga	10 GBq
^{177}Lu	185 GBq

Calculation conditions: sources positioned in a 30 mm lead pot located behind the L-Block front panel

Work surface

Dim.: L 311 x D 312 mm

Work surface height: 82 mm

Work surface finish: RAL 9016 bactericidal

Lead glass viewing window

Total dimensions: L 337 x D 310 x Th. 128 mm

Angle: adjustable from 20° to 50°

Adjustment system: handwheel

Shielding: 55 mm lead eq.

Dimensions of the viewing window: L 268 x W 165 x Th. 104 mm

Diamond Glass lead glass density: 4.36

Options

Compatible with the Safety Storage range: contact us

Non-shielded L-Block unit made to measure: contact us

Installation requirements

Floor load: 1,058 kg/m^2

Door passage width: 500 mm

Package

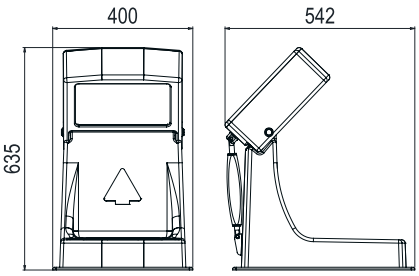
Package dimensions: L 400 x D 520 x H 800 mm

Package weight (product without options): 300 kg

Ref.: 00004958

As an entry-level model, the **L-Block Simple** is the shielded screen for **quick and easy handling**. With its **small footprint**, it is the ideal screen **for benchtop installation**.

EFFECTIVE DIMENSIONS (mm)



* The dimensions must be confirmed by a layout drawing

**Regulations in ASNR Guide No.32 "In vivo nuclear medicine facilities: minimum technical rules for design, operation and maintenance"

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L-BLOCK **CAVE SIMPLE**

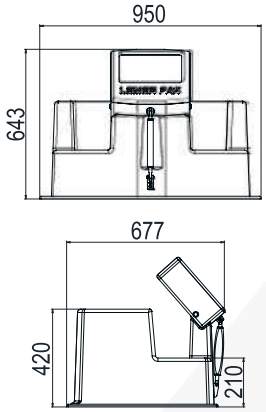
HIGH **ENERGY**

PET

DIAMOND GLASS

The **L-Block Cave Simple** offers **additional radiation protection** through its shielded side walls and thus forms a **closed and secure handling environment** that eliminates any risk of contamination. It comes with a sturdy stainless steel load-distribution plate for easy installation.

EFFECTIVE DIMENSIONS (mm)



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ASSOCIATED PRODUCTS

- PHE vial shields
- Medi handling tongs
- Mediclic syringe shields HE
- Safety Storage range of shielded cabinets

CHARACTERISTICS

General

External dimensions*: L 950 x D 677 x H 643 mm

Weight: 810 kg

Materials: composite

Exterior finish: RAL 9016 bactericidal

Shielding thickness: 60 mm lead shielding over all sides.

Radiation protection

Maximum radioactivity that can be handled to obtain a dose rate less than 25 µSv/h at 5 cm from the walls**

Radionuclides	Maximum radioactivity that can be handled
^{18}F	98 GBq
^{131}I	71 GBq
^{68}Ga	10 GBq
^{177}Lu	185 GBq

Calculation conditions: sources positioned in a 30 mm lead pot located behind the L-Block front panel

Work surface

Dim.: L 620 x D 336 mm

Work surface height: 80 mm

Work surface finish: RAL 9016 bactericidal

Lead glass viewing window

Total dimensions: L 337 x D 310 x Th. 128 mm

Angle: adjustable from 20° to 50°

Adjustment system: handwheel

Shielding: 55 mm lead eq.

Dimensions of the viewing window: L 268 x D 165 x Th. 104 mm

Diamond Glass lead glass density: 4.36

Options

Compatible with the Safety Storage range: contact us

Non-shielded L-Block unit made to measure: contact us

Installation requirements

Floor load: 1,254 kg/m^2

Door passage width: 70 cm

304L stainless steel dispensing plate (supplied): L 950 x D 650 x Th. 12 mm

Package

Package dimensions: L 1,000 x D 750 x H 940 mm

Package weight (product without options): 900 kg

Ref.: 00017462

L-BLOCK **CAVE WITH DOSE CALIBRATOR**

HIGH **ENERGY**

PET

DIAMOND GLASS

ASSOCIATED PRODUCTS

- PHE vial shields
- Medi handling tongs
- Mediclic syringe shields HE
- Safety Storage range of shielded cabinets

CHARACTERISTICS

General

External dimensions*: L 989 x D 702 x H 793 mm

Weight: 860 kg

Materials: composite

Exterior finish: RAL 9016 bactericidal

Standard equipment: Accurion-226® dose calibrator chamber 2/3 (Class Im medical device) with 25 mm lead peripheral shielding

Shielding thickness: 60 mm lead shielding over all sides.

Radiation protection

Maximum radioactivity that can be handled to obtain a dose rate less than 25 µSv/h at 5 cm from the walls**

Radionuclides	Maximum radioactivity that can be handled
^{18}F	98 GBq
^{131}I	71 GBq
^{68}Ga	10 GBq
^{177}Lu	185 GBq

Calculation conditions: sources positioned in a 30 mm lead pot located behind the L-Block front panel

Work surface

Dim.: L 630 x D 346 mm

Work surface height: 80 mm

Work surface finish: RAL 9016 bactericidal

Lead glass viewing window

Total dimensions: L 337 x D 310 x Th. 128 mm

Angle: adjustable from 20° to 50°

Adjustment system: handwheel

Shielding: 55 mm lead eq.

Dimensions of the viewing window: L 268 x D 165 x Th. 104 mm

Diamond Glass lead glass density: 4.36

Options

Posilift: pneumatic dose calibrator dipper raising and lowering system with foot control

Compatible with the Safety Storage range: contact us

Non-shielded L-Block cabinet: contact us

Installation requirements

Floor load: 1,286 kg/m^2

Dispensing plate: 304L stainless steel L 950 x D 650 x Th. 12 mm

Door passage width: 80 cm

Package

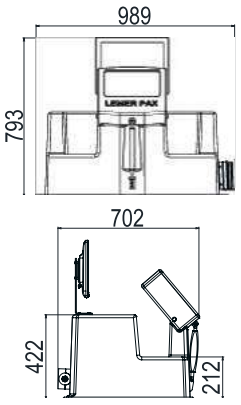
Package dimensions: L 1,000 x D 750 x H 940 mm

Package weight (product without options): 1,000 kg

Ref.: 00007292

The **L-Block Cave with dose calibrator** benefits from the **closed and secure environment** of the L-Block Cave with additional essential equipment to **perform radioactive source measurements: Accurion-226® dose calibrator (class Im medical device)**. It is supplied with a **measurement readout screen** and **sample dipper**, Lemer Pax offers the **option of a Posilift source lift**, providing users with considerable reduction in hand and finger exposure with this pneumatic foot-operated dose calibrator dipper raising system.

EFFECTIVE DIMENSIONS (mm)



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L-BLOCK **CAVE AUTOMATIC**

HIGH **ENERGY**

PET

PATENTED

DIAMOND GLASS

ASSOCIATED PRODUCTS

- PHE vial shields
- Medi handling tongs
- Mediclic syringe shields HE
- Safety Storage range of shielded cabinets

The **L-Block Cave Automatic** is the **"all inclusive" model** of the range since it also features, in addition to the advantages of the other configurations, an **automatic patient dose collection system. The multidose radiopharmaceutical vial** is positioned with its transport pot in the centre of the L-Block, behind the shielded lead glass window. **After the specially designed Lemer Pax sampling kit** has been inserted, the vial is fractionated by **remote control. Dose measurement** is **directly** performed. **A filling detection system secures the samples** and alerts the operator in case of malfunction. With this system, the dose is packaged in a specific cartridge equipped with a tungsten shield and is ready for administration to the patient with one of the Manujet or Manujet Shield injection units.

CHARACTERISTICS

General

External dimensions*: L 1,059 x D 672 x H 791 mm

Weight: 901 kg

Exterior finish: bead blasted 304L stainless steel

Standard equipment:
- Accurion-226® dose calibrator (Class Im medical device)
- Posiflash sampling system with peristaltic pump
- Remote control
- Touchscreen
- 1 syringe cartridge
- 1 shielded syringe shield - 9 mm tungsten
- 1 electrical cabinet

Shielding thickness: 60 mm lead shielding over all sides.

Radiation protection

Maximum radioactivity that can be handled to obtain a dose rate less than 25 µSv/h at 5 cm from the walls**

Radionuclides	Maximum radioactivity that can be handled
^{18}F	98 GBq
^{131}I	71 GBq
^{68}Ga	10 GBq
^{177}Lu	185 GBq

Calculation conditions: sources positioned in a 30 mm lead pot located behind the L-Block front panel

Work surface

Dim.: L 644 x D 365 mm

Work surface height: 80 mm

Work surface finish: 304L bead blasted stainless steel

Lead glass viewing window

Total dimensions: L 337 x D 310 x Th. 128 mm

Angle: adjustable from 20° to 50°

Adjustment system: handwheel

Shielding: 55 mm lead eq.

Dimensions of the viewing window: L 268 x D 165 x Th. 104 mm

Diamond Glass lead glass density: 4.36

Associated consumables

Vial sampler kit Ref.: 00007030

Syringe kit Ref.: 00008218

Options

Additional shielded cartridge Ref.: 00008480

Additional shielded syringe shield Ref.: 00021627

Compatible with the Safety Storage range: contact us

Non-shielded L-Block cabinet: contact us

Installation requirements

Floor load: 1,504 kg/m^2

Dispensing plate: 304L stainless steel Dim.: L 950 x D 650 x Th. 12 mm

Door passage width: 80 cm

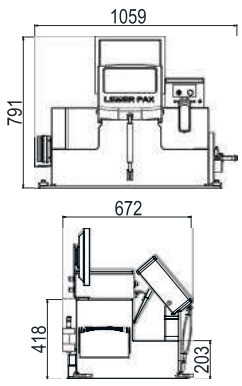
Package

Package dimensions: L 1,000 x D 750 x H 940 mm

Package weight (product without options): 940 kg

Ref.: 00024802

EFFECTIVE DIMENSIONS (mm)



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L-BLOCK
TELEMETRY

HIGH **ENERGY**

PET

DIAMOND GLASS

The **L-Block Telemetry** is the latest possible configuration in the L-Block range. **It is modular** and available **with or without side walls** and is equipped with a **remote control ball joint** positioned on the right or left (as required). The Lemer Pax design engineering team will be able to study the required configuration, depending on the intended use.

ASSOCIATED PRODUCTS

- PHE vial shields
- Medi handling tongs
- Mediclic syringe shields HE
- Safety Storage range of shielded cabinets

All models in the **L-Block range are compatible** with the **Safety Storage range of radiation protection cabinets.** The combination of these two product ranges offers users **secure working and storage environments** with considerable **space optimisation**, while ensuring appropriate **radiation protection** for the radioactive sources handled.
The high level of modularity of these two families of products makes it possible to create **customised sets** as required, **adapted to the specific uses of each service.**

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