

Bh3

Small and medium-sized freestanding display cases, opened by lifting the glass box with short-travel electromechanical or hydraulic actuators.

Lifting with hydraulic actuators

This system consists of two, four, or more pump-operated hydraulic actuators. The small cylinders are generally placed in the corners of the display cases, while the pump is fitted to the base. High-pressure pipes sealed with gaskets guaranteed not to leak any oil connect the pump and cylinders hydraulically. The distance lifted depends on the height of the case's base. The mechanism can be manually operated or motorized, on request. Goppion has developed a transmission system that offers a manual override of the electric motor so that the display case can be opened in the event of a power failure or other emergency.

Lifting with electromechanical actuators

This lifting system employs two or more electromechanical actuators fitted to the base of the case and operated from an electric control unit with a push-button panel. It uses actuators with two or three telescopic stages to lift the glass box to a reasonable height, thus ensuring access to all sides of the display deck. The mechanism has to be connected to the electricity grid and is extremely easy to operate. The display case can be fitted with back-up batteries that enable the case to be opened in the event of a power failure or other emergency.

Advantages and limitations

These affordable lifting systems employ commercially available components housed in the display case's base. Since they are not specifically engineered for use in a museum context, but rather adapted to it, they have a few limitations as well as considerable advantages.

The advantages include:

- small size;
- moderate price;
- user-friendliness.

The limitations include:

- low load-bearing capability;
- limited travel;
- some models cannot be manually operated.

These systems are most suitable for small and medium-sized display cases.

The table shows the height lifted in relation to the base of the display case, with hydraulic actuators and electromechanical actuators.

Height of base	Height lifted (in mm)	
	Hydraulic actuators	Electromechanical actuators
600	300	660
700	400	660
800	500	660

Museo Nazionale del Bargello,
Florence, (IT), 2021



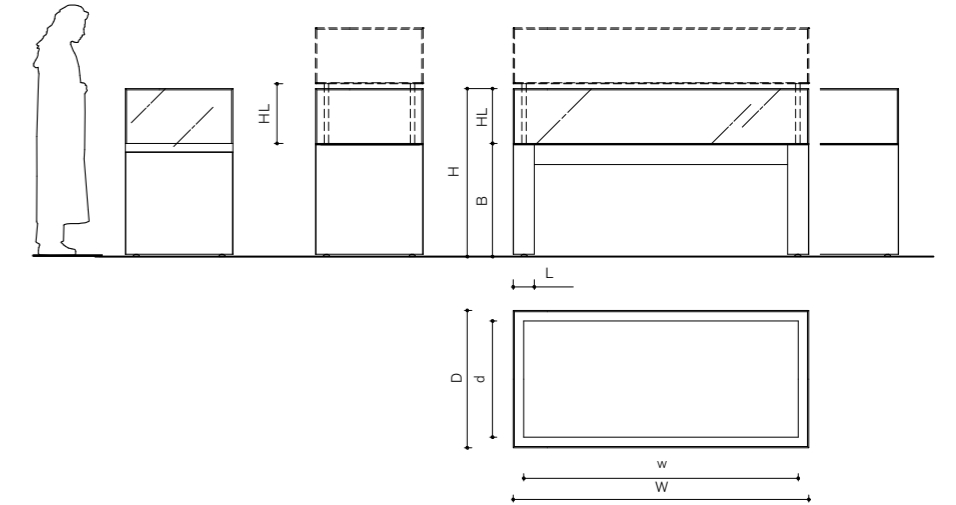
Bh3

Dimensions

- W = up to 2,000
- D = up to 1,000
- H = 900
- G = 100-200-300
- B = 800-700-600
- HL = 300 to 600
- L = 100
- w = W - 150
- d = D - 150

Goppion patented devices that can be fitted (see p. 381)

- 1, 2, 4, 5, 17, 18, 20, 22, 23



Airtightness measured with tracing gas decay methodology

Bh3	MJ	AER	D-Days
		gasket	gasket
		round	round
	3	0.052	19.40
	5	0.055	18.25
	6	0.056	17.71

- MJ** = Moving joints, meters of gasket
- AER** = ac/d (air changes per day)
- D-Days** = number of days

