

# Pneumatic Vibration Isolation System

**1VIS22**



- Vertical resonance frequency: 1.5 Hz (average load)
- Horizontal resonance frequency: 1.7 Hz (average load)
- Air source pressure: up to 600 KPa (6 bar) (87 PSI)

**Pneumatic Vibration Isolation System 1VIS22** is an ideal foundation for equipment which is sensitive to vibration, e.g. microscopes, scales, interferometers, and similar devices.

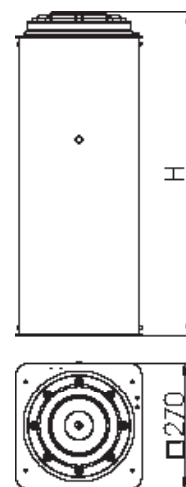
Work surface of the table is separated from the floor by means of a highly effective system of pneumatic supports, i.e. pneumatic springs with hydraulic (oil) dampers.

The system features solid and light supports that come in various dimensions to support a wide range of table top sizes. This enables quick creation of vibration isolation systems for a variety of tasks.

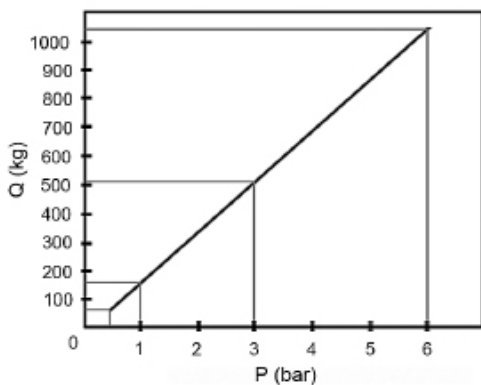
Maximum load capacity of each support leg is **1000 kg**.

## SPECIFICATIONS

Height of the vibration isolation system	H= 400, 500, 600, 700 mm
Vertical movement range	14mm
Precision of automatic level control	±0.3 mm
Vertical resonance frequency	1.5 Hz (average load)
Vertical isolation at 5 Hz	85–93%
Vertical isolation at 10 Hz	90–98%
Horizontal resonance frequency	1.7 Hz (average load)
Horizontal isolation at 5 Hz	85–93%
Horizontal isolation at 10 Hz	90–97%
Pressure from source of air	600 KPa (6 bar) (87 PSI)
Air supply socket opening	Ø 6 mm
Operating humidity (max)	90%
Operating temperature range	10–50 °C
Minimum load capacity	90 kg per isolator
Load-bearing capacity (at 6 bar)	1,000 kg per isolator

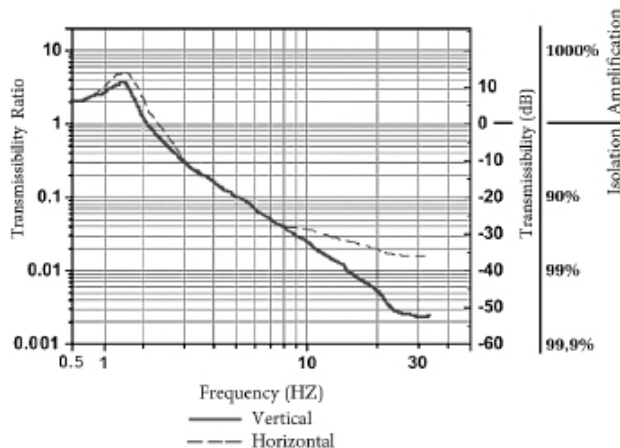


Working pressure of the system is 0.5–6 atm (bar). Required minimum system pressure required to support a certain load in kg is shown in the load/pressure diagram.



P - required minimal pressure in atm (bar).  
Q - load on one support leg (kg).

Load/Pressure diagram



Vibration / Isolation performance

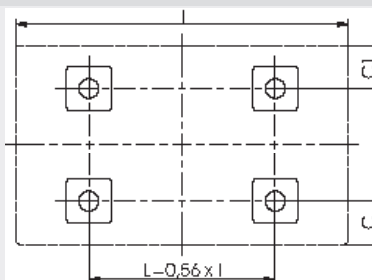
## ORDERING EXAMPLE

**1VIS22-70-4**

70 – height of isolator 700 mm.  
4 – number of isolators - 4 pc.

Standard heights of 1VIS22-XX-X

- 400 mm (code 40),
- 500 mm (code 50),
- 600 mm (code 60),
- 700 mm (code 70),



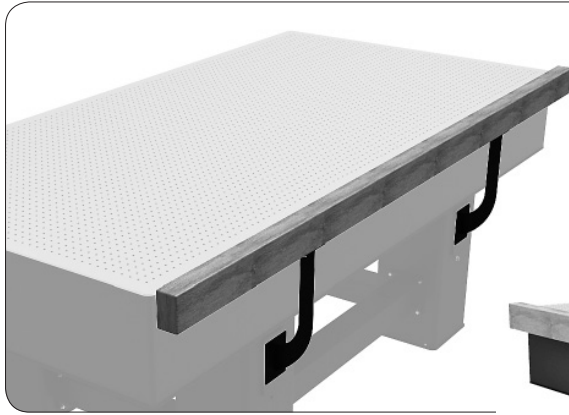
We offer optimal Vibration Isolation Systems for the optical table of your choice.

Figure shows the correct layout of pneumatic supports for tables with standard dimensions.

**C=C1=160...200 mm**

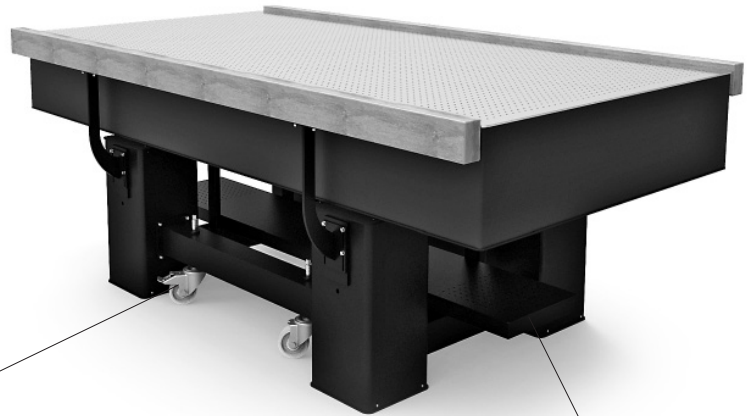
## Modifications and Ordering

1VIS22



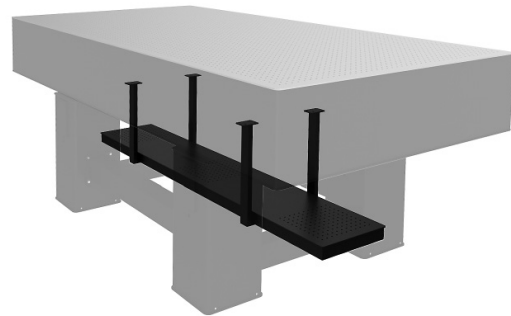
**Armrest guards** isolates the honeycomb table from impacts of your body. This allows you to work at the table like at a conventional table, using a microscope or other equipment.

Optionally you may order workstation with two **Armrests** on opposite sides.



**Castors** - made of high-quality nylon, high abrasion resistant, smooth running performance on even floors, shock and impact-resistant, corrosion-resistant.

**Laser shelves** are optional breadboards. They save space when installing lasers and other equipment beneath honeycomb table tops. The shelf stays mechanically coupled to the table top.



Laser shelf sizes can be found on page 1-23.

Below are the formulas for calculating optimal dimensions of 1VIS22 with casters.

$$B=0.56 \times b; L=0.56 \times l; H=900 - h$$

**Standard dimensions of 1VIS22 are presented below.** Select the closest greater values matching your calculations.

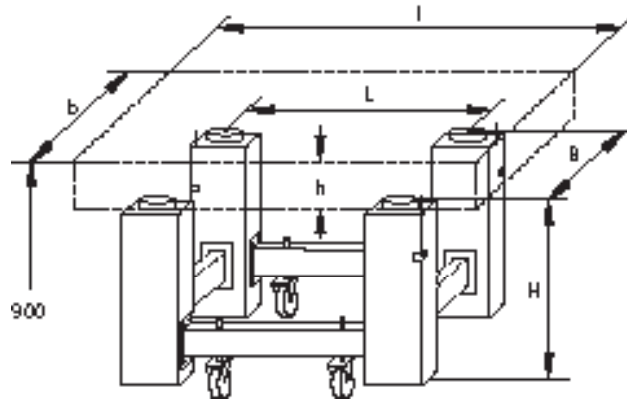
**1VIS22-B-L-H-CA:**

B: **500 mm** (code 05), **650 mm** (code 065), **800 mm** (code 08);

L: **800 mm** (code 08), **1300 mm** (code 13), **1900 mm** (code 19);

H: **400 mm** (code 40), **500 mm** (code 50), **600 mm** (code 60), **700 mm** (code 70).

CA: casters



**Low noise air compressors** have been developed for those users where low noise and relatively small flow of air is required. With **sound levels from just 40 dB(A)** and almost no vibration when running, the compressors can be located in the work area without causing any noise intrusion. The compressors have a **8 bar** maximum working pressure. Designed to require minimal maintenance and to ensure years of trouble free use, our comprehensive range meets the needs of many applications including; air-brushing, exhibition stands, glue dispensing, pneumatic controls, stapling – anywhere where compressed air is needed silently!



**Air compressor is required for operation**

**1VIS-BB15V**

**Car Pumps and Air Compressors** are available upon request. **Product details** are available on our web page [www.standa.it](http://www.standa.it).



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12