

Pressure losses in plumbing elements



Experimental capabilities

- Understanding pressure measures
- Study of regular and singular load losses
- Pipework of different diameters
- TA balancing valve load loss study
- Pressure reducer load loss study
- A sieve filter load loss study
- Load loss study with right stitching
- Load loss study with faulty right stitching
- Study of the influence of flow speed

Operating principle

The BCD 050 bench is used to study the load losses of different shutdown valves. The piping elements used are similar to those found commercially for thermal engineering or health engineering. The table on which the elements are clearly arranged is fixed on a stable and moving frame.

The test bench consists of seven sections of pipe in which different stop valves are mounted. The pipe sections can be selected individually using spherical-rotating faucets.

The flow is adjusted to a valve at the start and read on a precision rotameter.

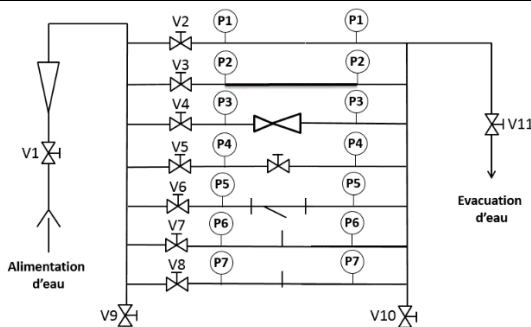
The robust design of this device makes it suitable for use in schools.

The equipment is set up on an Anodized aluminium frame on casters wheels. This gives it great strength and a flexibility of integration into your premises.

The manufacture of this equipment complies with the European standard for machinery manufacturing.

This equipment can be used alone or with other compatible equipment from our range (see last section of this document).

Illustrations



Technical details

Copper piping

Equipped with a circuit with seven starts
Operculum flow control valve
Circuit pressure valve

Vertical face with different piping

A line with the diameter of the piping – 15mm
A Line with the diameter of the piping – 22mm
A line with pressure reducer
A line with TA balancing valve
A line with sieve filter
A line with straight stitching
A line with faulty straight stitching

A flow meter

Scale of 250 - 2500 L/h

Two electronic pressure sensors

Both pressure sensors are mounted with fast, self-sealing fittings
Quick connection upstream and downstream of the test line
Readings made on local digital display

Services required

- Water supply : 15 L/min - 3 bars or by utility module UTL 050 (not provided) or BCP 202 (not provided)
- Dimensions: (LxWxH mm): 1650 x 700 x 1850
- weight (Kg): 902

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine

Documentation

- User's manual
- Pedagogical manual
- Technical documentation of the components
- Lab exercises
- Certificate of conformity CE

Recommended equipment

- Utility module
- Water pump trainer
- Ref : UTL 050
- Ref : BCP 202