BCD100



LOSSES IN PIPING SYSTEMS



Experimental capabilities

- Measurements of pressure
- Study of regular pressure losses
- Piping of various diameters (DN14, DN26)
- Smooth or rough piping of the same diameter (DN14)
- Study of singular pressure losses
- Five elbows from different elbows
- Mitre bend 90°
- Short radius bend : 50mmMedium radius bend : 100mm
- Large radius bend: 150mm
- Two different types of valves (gate, globe)
- Sudden enlargement (DN14 DN26)
- Sudden contraction (DN26 DN14)

BCD100



Operating principle

The BCD 100 bench allows the study of pressure losses of different piping components (bends, valves and pipes).

The bench is directly connected to the local water network and sends it in a hydraulic circuit including all the components.

It is equipped with several pressure measurements taken with quick couplings connected on different water column manometer with scale.

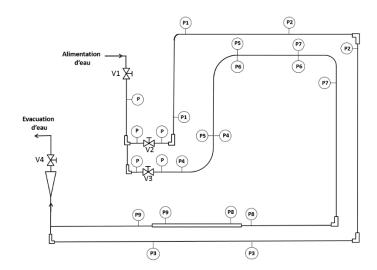
The bench is equipped with a precision flow meter that allows to study the relation between the flow rate and pressure loss across each element.

The robust design of this equipment makes it perfectly suited for use in schools.

Its anodized aluminum structure on wheels makes it extremely robust as well as great flexibility of integration into your premises. The manufacturing of this equipment meets the European machine directive.

Illustrations

Technical details



Copper piping

Flow rate control valve Valve for pressurizing the circuit

Vertical work surface

Pipes of different diameters DN26 and DN14 Smooth and rough piping of the same diameter DN14 Five types of bends from different angles Two types of valves (gate, globe) enlargement and contraction (DN26 to DN14)

Flowmeter

A flowmeter of 250 - 2500 L/h

A manometer diameter 63mm at the circuit output 0-4 bars

Four Bourdon manometers of diameter 63 mm

2 inline manometers of the gate valve 0 to 4 bars 2 inline nanometers of the globe valve 0 to 4 bars

Set of piezometer tubes

Scale up to 1200 mm

Air pump

Services required

- Water supply: 15 L/min 3 bar or by the utility module UTL 050 (not supplied)
- Dimensions: (LxWxH mm): 2600 x 600 x 1800
- weight (Kg): 80

Note: As part of an equipment installation by our services, all connections to networks must be at least 2m from the machine

Documentation

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

Recommended equipment

Hydraulic bench
Ref : UTL 050