

STUDY OF LIQUID AND GAS CONDUCTIVITY



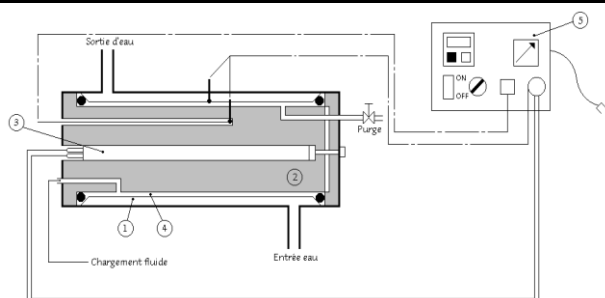
Experimental capabilities

- **Measuring of the conductivity of liquid and gas after calibration of the unit with the air**

Operating principle

The PCT 020 bench allows the study of thermal conductivity of liquids and gases after calibration of the unit with air. The system consists of a heated inner cylinder and a concentric outer tube cooled by water circulation. The objective of this bench is to define through experience the conductivity of a fluid that occupies a small radial clearance between the cylinder and the tube. The instrumentation allows to know the heating power and the temperatures of hot and cold sources and to deduce therefrom, after calibration, the conductivity of the fluid. The robust design of this equipment makes it perfectly suited for school use. Its anodized aluminum structure gives it great strength as well as a great flexibility of integration into your premises. The manufacture of this equipment meets the European machine directive

Illustrations



Technical details

1 Cold source of cooling

Supply by water circulation type
« WATER JACKET »

2 Cylindrical hot source

Internal cylinder equipped with a heating cartridge

3 Heating cartridge (100 W)

4 Annular space containing the fluid to be studied

Disposition of the liquids or the gas

5 Control box including:

The power regulator and its indicator

A temperature indicator with channel selector

6 A voltmeter / ammeter

Services required

- Power supply: 230 V mono - 50Hz - 20A
- Water supply: 3 to 5 L/min – 3 bars
- Dimensions: (LxWxH mm): 300 x 310 x 450
- weight (Kg): 10

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