



## FLUID STATICS AND PRESSURE MEASUREMENT



**DL DKL291**

The equipment is designed for the study of static fluid and the measurement of pressures with different types of piezometric tubes and level measurement elements as graduated scales and level meter.

The equipment includes a transparent tank from where it is possible to pour water through valves and pipes and deliver it in the columns installed in the system. One of these water columns has a tilting system, so that students can clearly see the effect of the different possible inclinations.

The tank and the in water columns have graduated scale for immediate and clear display of the water level that can be measured also by the water level supplied with this system.

### PERFORMBLE EXPERIMENTS

- Study and checking the hydrostatic paradox
- Comparison between absolute and relative pressure gauges
- Utilization of the piezometer tube
- Measurement of pressure with the following types of gauges:
  - U type
  - Inverted U type
  - Inclined type
  - Differential type
- Using level meter for measuring the water level
- Using graduated scales for determining the level of water
- Study of the influence of air inside the pressure gauges
- Study of pressure losses



# FLUID MECHANICS



## TECHNICAL DATA

Water tank:

- Storage capacity: 4 liters
- Max. height: 560mm
- Inner diameter: 94mm

Manometer:

- U type manometer: scale 460mm
- Piezometric tubes: scale 460mm
- Two parallel types
- Two with variable section
- Inclined manometer: scale 460mm with four positions
  - 5°
  - 30°
  - 60°
  - 90°

Other elements:

- Level meter with 150 mm maximum reading capacity
- Check valve