

HF 235 FLOW MEASUREMENT TEST SET

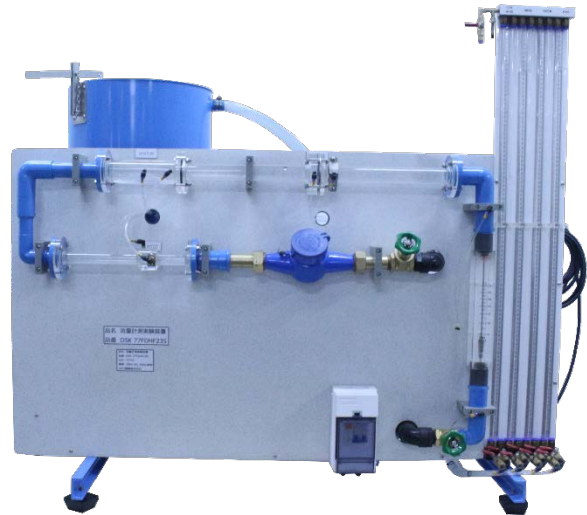
GENERAL DESCRIPTION:

This is a bench top self contained water circulating unit for studying the various flow measuring instruments including primary flow measuring devices.

The flow measuring instruments are connected in series and all except the measuring tank are arranged on a water proof panel.

Measurement of flow by a primary flow measuring devices is by coefficient of discharge which is determined from a pressure drop across the device and a flow rate. Flow rate is obtained from a water meter reading and a stop watch. The pressure drop is measured by differential pressure using manometers. Pressure tapping is by small ball valves with quick connection. Water tanks are behind the panel. Flow rate is varied by a flow control valve.

Instruction manual is also included.



EXPERIMENT CAPABILITIES:

- Comparison of differential pressure at various flow rates for Venturi meter, orifice meter, Pitot tube, and variable area flow meter.
- Determination of coefficients of discharge for Venturi meter, orifice meter and Pitot tube and compare the flow rates with those from water meter, variable area flow meter and measuring tank.

TECHNICAL DATA:

- Primary flow measuring devices made of clear acrylic:
 - Venturi tube
 - Orifice plate
 - Pitot tube
- Other flow measuring devices:
 - Water meter and a stop watch.
 - Rotameter
 - Measuring tank
- Differential pressure measurement : Water manometer, 8 tubes.
- Software for data display and analysis by computer (separately supplied).
- Power supply : 220 V, 1 Ph, 50 Hz.
Other power supply is available on request.



OPTIONAL EQUIPMENT:

- HF 013 ISA nozzle.
- HF 031 Differential pressure digital display.
- HF 235-050 Computer Interface
Sensors with computer interface unit for key data acquisition instead of analog data measuring instruments. This includes computer interface unit with flow and differential pressure sensors (low range).
- HP 010 Flow digital display.
- HF 034A Portable differential pressure meter.
- Other flow measuring devices can be supplied on request. eg vortex, paddle wheel, electromagnetic, ultrasonic etc.
- Other optional equipment, please contact manufacturer (essom@essom.com)

Net (unpacked) shipping dimensions WxLxH
Net weight

: 60 x 130 x 105 cm
: Approx. 70 kg