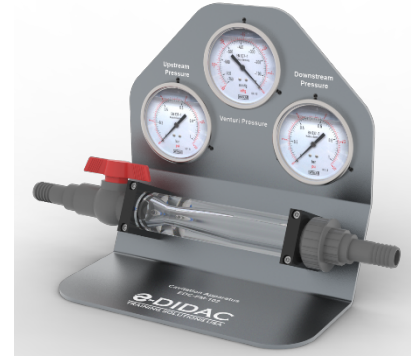


## Cavitation Demonstration Apparatus (EDC-FM-102)

### EXPERIMENTAL DATA:

- Observation of phenomenon of Cavitation
- Comparison of theoretical and experimental cavitation pressure
- Demonstration of effect of static pressure on cavitation pressure
- Verification of Bernoulli's equation



### DESCRIPTION:

This attachment consists of a circular Venturi-shaped section manufactured from clear acrylic to enable visualisation inside the section. As the flow of water increases the pressure at the throat falls in accordance with the Bernoulli equation until a limit is reached corresponding to the vapour pressure of the liquid. At this low pressure small bubbles of vapour form then collapse violently as the pressure rises again downstream – a process called cavitation. Bourdon gauges indicate the pressure upstream of the contraction, inside the throat and downstream of the expansion in the test section. Flow control valves upstream and downstream of the test section enable the flow and pressure to be adjusted, enabling cavitation to be clearly demonstrated.

### TECHNICAL DATA:

- Bourdon Gauges for Upstream, Cavitation and Downstream Pressure
- Acrylic tube to facilitate visualization
- Ball Valve to control the flow

#### Upstream pressure gauge

- Diameter: 63mm
- Range: 0 to 1 bar

#### Throat vacuum gauge

- Diameter: 100mm
- Range: -1 to 0 bar

#### Downstream pressure gauge

- Diameter: 63mm
- Range: 0 to 1 bar

### RELATED LAWS:

- Fluid Mechanics
- Venturi
- Bernoulli's Theorem

### SCOPE OF DELIVERY:

- 1 x EDC-FM-102
- 1 x Instructional Manual

### DIMENSIONS AND WEIGHT:

L x W x H (mm): 350 x 250 x 400

Weight: 12kg