SCIENTICO INDIA
Manufacturer & Exporter · Ambala, Haryana, India

PRODUCT DATA SHEET
Catalogue reference for product evaluation

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Cavitations Apparatus | FluidoSurge-X 184

Category: Fluid Mechanics · **Country of Origin:** India

Product Overview

The Cavitations Apparatus is designed to demonstrate the formation and effects of cavitation in flowing liquids. It enables clear visualization of vapor bubble formation and collapse within a Venturi section. Made by Scientico India, ISO 9001:2015 certified, and supplied with a calibration certificate and operation manual.

View this product online: https://scienticoindia.com/product/cavitations-apparatus-fluidosurge-x-184/



Request a model-specific quotation
Include quantity and delivery country.

Technical Specifications

Parameter	Specification
Model	FluidoSurge-X 184
Type	Cavitations Apparatus
Application	Cavitation Demonstration
Test Section	Venturi shaped, transparent acrylic
Upstream Pressure Gauge Range	0 to 4 bar
Throat Vacuum Gauge Range	-1 to 1 bar
Downstream Pressure Gauge Range	0 to 4 bar
Flow Control	Upstream control valve
Mounting	Plate with feet for hydraulic bench
Operation Requirement	Hydraulic bench or laboratory water supply

Key Features

Key Features-

- Clear acrylic Venturi section for full visualization of cavitation
- Demonstration of vapor bubble formation and collapse
- Measurement of static pressure at upstream, throat, and downstream locations

- Independent flow regulation for controlled cavitation onset
- Bourdon gauges for real time pressure indication
- Designed for safe operation with restricted downstream valve closure

Applications-

- Observation of cavitation phenomenon in liquids
- Comparison of theoretical and actual pressure at cavitation conditions
- Study of air release from dissolved gases at low pressure
- Demonstration of cavitation reduction by increasing static pressure
- Fluid mechanics and hydraulic machinery laboratory experiments

Construction & Design Details-

The apparatus uses a circular Venturi shaped test section manufactured from clear acrylic for unobstructed observation. Pressure tapping points are located upstream of the contraction, at the throat, and downstream of the expansion. Each tapping is connected to a dedicated Bourdon pressure or vacuum gauge of suitable range. The assembly is mounted on a rigid plate with support feet to locate securely on the hydraulic bench.

Export & Supply Capability-

SCIENTICO manufactures the Cavitations Apparatus FluidoSurge-X 184 for domestic and international supply. The equipment is suitable for export to engineering colleges, universities, and technical training laboratories. Standard packing, flexible connections, and documentation are provided with each unit.

Ordering & Delivery

- Send the product name, quantity, delivery country and destination with your enquiry.
- Production schedule, freight, payment terms and export documents are confirmed in the written quotation.

Frequently Asked Questions

Q1. What phenomenon is demonstrated using this apparatus?
It demonstrates the formation and collapse of vapor bubbles in a liquid, known as cavitation.

Q2. How is cavitation initiated in the experiment?
Cavitation is initiated by increasing the flow rate until pressure at the Venturi throat reaches the vapor pressure of the liquid.

Q3. Can pressure be measured at different locations in the test section?
Yes, pressure is measured upstream, at the throat, and downstream using Bourdon gauges.

Q4. Is the apparatus safe to operate during cavitation?
Yes, flow control and valve restrictions are provided to protect instrumentation during experiments.

Q5. What water supply is required for operation?
The apparatus operates using a hydraulic bench with closed water circuit or a laboratory water connection.

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