SCIENTICO INDIA
Manufacturer & Exporter · Ambala, Haryana, India

PRODUCT DATA SHEET
Catalogue reference for product evaluation

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Gravimetric Hydraulic Bench | FluidoSurgeX 103

Category: Fluid Mechanics · **Order Code:** FLUIDOSURGEX 103 · **Country of Origin:** India

Product Overview

A CE-certified self-contained hydraulic bench providing a measured water supply for a range of fluid mechanics experiments, manufactured by Scientico India to ISO 9001:2015 standards. Supplied with calibration certificate, operation manual, and complete export documentation. Designed for Fluid Mechanics laboratories in engineering colleges and technical institutions.

View this product online: https://scienticoindia.com/product/gravimetric-hydraulic-bench-for-fluid-mechanics-laboratory-fluidosurgex-103-by-scientico/



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

Technical Specifications

Parameter	Specification
Model	FluidoSurgeX 103
Type	Gravimetric Hydraulic Bench
Application	Fluid Mechanics Experiments
Water Circuit	Closed-loop system
Construction	Mobile welded frame
Pump Type	Centrifugal pump
Pump Power Consumption	500 to 746 W
Maximum Flow Rate	Up to 100 L/min
Maximum Head	21.5 m
Supply Tank Capacity	160 L
Measuring Tank Capacity (Large Flow)	40 L
Measuring Tank Capacity (Small Flow)	7 L
Flow Measurement Method	Gravimetric
Load Cell Measuring Range	0 to 350 N
Flow Channel Size (L x W x H)	Approx. 510 x 165 x 170 mm

Parameter	Specification
Graduated Beaker Capacity	5 L
Stopwatch Range	0 to 9 h 59 min 59 sec
Material	Reinforced fiberglass and PVC piping

Key Features

Key Features -

- Gravimetric hydraulic bench for accurate flow rate determination
- Closed water circulation system independent of external water supply
- Lever based weight measurement with optional digital load cell system
- Integrated flow channel for weir and open channel experiments
- Stepped work surface edge for secure mounting of experimental modules
- Reinforced fiberglass tanks and workspace for corrosion resistance
- Mobile construction with welded frame for laboratory flexibility

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Applications -

- Gravimetric flow measurement experiments
- Fluid mechanics laboratory studies
- Weir and open channel flow experiments
- Engineering and technical education laboratories
- Research and training institutes

Construction & Design Details -

The FluidoSurgeX 103 is constructed using reinforced fiberglass for the supply tank, measuring tank, and work space to ensure durability and resistance to corrosion.
PVC piping is used throughout the system for reliable water circulation.
The integrated flow channel forms part of the work surface, allowing direct placement of weir experiment modules.
The stepped edge on the work surface enhances safety and stability during experimental setup.

Export & Supply Capability -

SCIENTICO manufactures the FluidoSurgeX 103 Gravimetric Hydraulic Bench for supply to domestic and international markets.
The unit is suitable for export to engineering colleges, universities, and research laboratories.
Standard packing, documentation, and instruction manuals are provided for international shipments.

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 is the main difference between a gravimetric hydraulic bench and a volumetric bench?
A gravimetric hydraulic bench measures flow rate based on weight measurement, whereas a volumetric bench measures flow using volume over time.

Q2. How is flow measured in the FluidoSurgeX 103?
Flow is measured using a lever based weight mechanism with calibrated weights or optionally using digital load cells with direct display.

Q3. Does the bench require an external water supply?
No, the bench operates on a closed water circuit with an integrated supply tank and pump.

Q4. Can digital measurement be added to this system?

Yes, digital load cells with direct display at the switch box are available as an optional configuration.

Q5. What experiments can be performed using the integrated flow channel?

The flow channel is used for experiments involving weirs and open channel flow studies.

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