SCIENTICO INDIA
Manufacturer & Exporter · Ambala, Haryana, India

PRODUCT DATA SHEET
Catalogue reference for product evaluation

Phone: +91 7015865225 **Email:** info@scienticoindia.com **Web:** scienticoindia.com **Address:** #71, Industrial Area, Ambala Cantt, Haryana, India

Hydraulic Bench with Series and Parallel Pumps | FluidoSurgeX 104

Category: Fluid Mechanics · **Order Code:** FLUIDOSURGEX 104 · **Country of Origin:** India

Product Overview

A CE-certified hydraulic test bench for studying series and parallel pump configurations, combined H-Q characteristics, 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/hydraulic-bench-with-series-and-parallel-pumps-for-fluid-mechanics-laboratory-fluidosurgex-104-by-scientico/



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

Technical Specifications

Parameter	Specification
Model	FluidoSurgeX 104
Type	Hydraulic Bench with Series and Parallel Pumps
Application	Fluid Mechanics and Pump Performance Experiments
Water Circuit	Closed-loop system
Pump Type	Centrifugal
Number of Pumps	2
Motor Rating	0.37 kW
Pump Speed	Up to 2900 rpm
Maximum Head	9 to 21 m
Flow Rate Range	More than 10 to 100 LPM
Storage Tank Material	GRP/SS
Measuring Tank Capacity (Large Flow)	40 L
Measuring Tank Capacity (Small Flow)	7 L
Rotameter Range	18 to 118 LPM
Pressure Gauges	−1 to 1 bar, 0 to 4 bar, 0 to 6 bar

Parameter	Specification
Flow Measurement Method	Volumetric using stopwatch
Measuring Cylinder Capacity	5 L
Flume Size (L x W x H)	510 x 165 x 170 mm
Piping Material	Industrial PVC
Valves	Nonferrous
Structure	Rust resistant painted steel frame

Key Features

Key Features -

- Two centrifugal pumps configurable in single, series, or parallel operation
- Closed water circulation system for continuous laboratory use
- Stepped measuring tank for small and large volumetric flow measurements
- Rotameter for discharge flow indication before the test section
- Multiple pressure gauges for suction and discharge monitoring
- Integrated flume for weir and open channel flow experiments
- GRP tanks and work surface for corrosion resistance and durability

Applications -

- Study of centrifugal pump characteristics
- Series and parallel pump performance comparison
- Determination of head, discharge, and pump efficiency
- Plotting characteristic curves such as head versus discharge
- Fluid mechanics and hydraulic machinery laboratory experiments

Construction & Design Details -

The FluidoSurgeX 104 is built on a rigid painted steel structure that supports pumps, valves, and interconnecting pipework. The storage tank, measuring tank, and work surface are manufactured from GRP to ensure resistance to water exposure. Industrial grade PVC piping and nonferrous valves are used to minimize corrosion. The integrated flow channel on the work surface allows direct execution of weir experiments without additional fixtures.

Export & Supply Capability -

SCIENTICO manufactures the FluidoSurgeX 104 Hydraulic Bench for supply to engineering colleges, universities, and technical training laboratories. The apparatus is suitable for domestic supply and international export. Standard packing, instruction manuals, and basic accessories 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 pump configurations are possible on this hydraulic bench?
The pumps can be operated individually, in series, or in parallel using the integrated selection system.

Q2. How is flow rate measured during experiments?
Flow rate is measured volumetrically using the stepped measuring tank and stopwatch, with additional indication from a rotameter.

Q3. What pressure measurements are available?
Pressure gauges are provided to measure suction and discharge pressures across the pumps.

Q4. Can this bench be used for weir experiments?

Yes, the work surface includes an integrated flume specifically for weir flow experiments.

Q5. Is data acquisition software included with the system?

Data acquisition software based on LABVIEW environment is available as an optional accessory and requires electronic sensors.

SCIENTICO INDIA

Manufacturer & Exporter · Ambala, Haryana, India

#71, Industrial Area, Ambala Cantt, Haryana, India

+91 7015865225 · info@scienticoindia.com

scienticoindia.com