

**HM 150**

***Base Module for Experiments in Fluid Mechanics***



- \* **Water supply for experimental units for fluid mechanics**
- \* **Volumetric flow rate measurement for large and small flow rates**
- \* **Comprehensive range of accessories allows a complete course in the fundamentals of fluid mechanics**

**Technical Description**

The HM 150 series of devices permits a varied experimental cross-section in the fundamentals of fluid mechanics. The base module HM 150 provides the basic equipment for individual experiments: the supply of water in the closed circuit; the determination of volumetric flow rate and the positioning of the experimental unit on the working surface of the base module and the collection of dripping water.

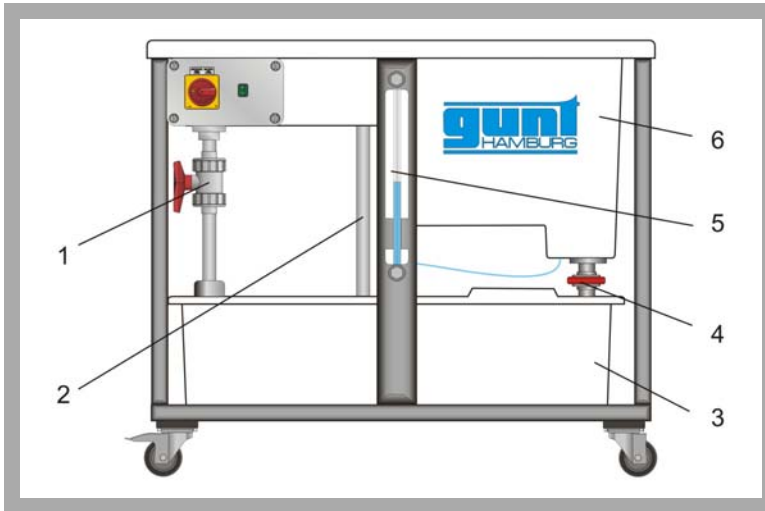
The closed water circuit consists of the underlying storage tank with a powerful immersion pump and the measuring tank arranged above, in which the returning water is collected.

The measuring tank is stepped, for larger and smaller volumetric flow rates. A measuring beaker is used for very small volumetric flow rates. The volumetric flow rates are measured using a stopwatch.

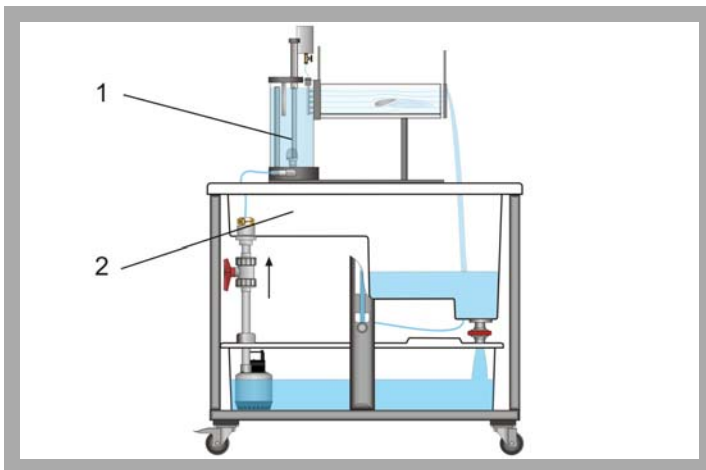
The top work surface enables the various experimental units to be easily and safely positioned. A small flume is integrated in the work surface, in which experiments with weirs are conducted.

## HM 150

## Base Module for Experiments in Fluid Mechanics



1 flow control valve, 2 overflow, 3 storage tank with immersion pump, 4 gate valve, 5 measuring tank level indicator, 6 measuring tank



HM 150.21 placed on the HM 150 base module



Base module for experiments in fluid mechanics with HM 150.03 plate weir

### Specification

- [1] base module for supplying experimental units in fluid mechanics
- [2] closed water circuit with storage tank, immersion pump and measuring tank
- [3] measuring tank divided in two for volumetric flow rate measurements
- [4] measuring beaker with scale for very small volumetric flow rates
- [5] measurement of volumetric flow rates by using a stopwatch
- [6] work surface with integrated flume for experiments with weirs
- [7] work surface with inside edge for safe placement of the accessory and for collecting the dripping water
- [8] storage tank, measuring tank and work surface made of GRP

### Technical Data

#### Pump

- power consumption: 550W
- max. flow rate: 230L/min
- max. head: 11m

Storage tank, contents: 180L

#### Measuring tank

- at large volumetric flow rates: 40L
- at small volumetric flow rates: 10L

#### Flume

- LxWxH: 530x150x180mm

Measuring beaker with scale for very small volumetric flow rates

- content: 2L

#### Stopwatch

- measuring range: 0...9h 59min 59sec

### Dimensions and Weight

LxWxH: 1.230x765x1.065mm

Weight: approx. 82kg

### Connections

230V, 50/60Hz, 1 phase or 120V, 60Hz/CSA, 1 phase

### Scope of Delivery

- 1 base module
- 1 stopwatch
- 1 measuring beaker
- 1 hose
- 1 manual

### Order Details

070.15000 HM 150 Base Module for Experiments in Fluid Mechanics

## HM 150

## Base Module for Experiments in Fluid Mechanics

Available Accessories:

### Product no. Order details

070.15001	HM 150.01	Pipe Friction Apparatus
070.15002	HM 150.02	Dead-Weight Piston Gauge
070.15003	HM 150.03	Flow Over Weirs Accessory
070.15004	HM 150.04	Variable Speed Centrifugal Pump
070.15005	HM 150.05	Hydrostatic Pressure Apparatus
070.15006	HM 150.06	Stability of a Floating Body
070.15007	HM 150.07	Bernoulli's Principle Demonstrator
070.15008	HM 150.08	Impact of Jet Apparatus
070.15009	HM 150.09	Orifice and Jet Velocity Apparatus
070.15010	HM 150.10	Flow Visualisation Apparatus
070.15011	HM 150.11	Fluid Friction Apparatus
070.15012	HM 150.12	Orifice Discharge Apparatus
070.15013	HM 150.13	Methods of Flow Measurement
070.15014	HM 150.14	Impeller Vortex Apparatus
070.15015	HM 150.15	Hydraulic Ram Pump
070.15016	HM 150.16	Twin Centrifugal Pump Configurations
070.15017	HM 150.17	Learning Software for Basic Fluid Mechanics
070.15018	HM 150.18	Osborne Reynolds Demonstrator
070.15019	HM 150.19	Demonstration Pelton Turbine
070.15020	HM 150.20	Demonstration Francis Turbine
070.15021	HM 150.21	Flow Channel
070.15029	HM 150.29	Losses in Bends and Fittings