

## HYDRAULICS BENCH HB100/115



### 1 study

#### Features

- Hydraulics Bench for supply of water to a wide and expanding series of HB Modules from P.A.Hilton
- Self-contained floor standing bench fitted with lockable castor wheels
- Closed system for re-use of water
- Bench dimensions allow storage underneath suitable laboratory benches
- High duty pump with location for second optional pump for specialised modules and expansion

#### Description

The HB100 Hydraulics Bench is the main source of water supply/flow for all the additional modules within the HB series from P.A.Hilton Ltd.

The hydraulics bench is mounted on lockable castor wheels and is constructed around a sturdy framework

onto which all elements of the hydraulics bench are mounted. The main water storage tank from which the electrically operated external pump takes its water is situated on the framework. An on/off control on the front of the frame, together with a safety cut out controls the pump.

The storage tank is also used as the main drain of water from the relevant detachable modules of the HB series. The water is pumped into the modules and then allowed to flow/drain back into the main tank via hoses and pipework. The storage tank has a secured lid to keep dust and debris out. The pipe work connecting the storage tank and the modules ensure a closed system, which minimises the local water requirement but allows large flow rates and pressure ranges to be accommodated.

Due to its size the unit may be stored under a suitably

sized laboratory bench to save space.

A standard variable area flow meter is supplied as an option on the HB100, with additional optional flow metering packages available to suit the wide range of flow rates required on the HB series. Control valves allow variation in flow rate available from the HB100 Hydraulics Bench.

An overflow system and drain are fitted to ensure maintenance of sensible water levels. Space is provided for the inclusion of a second pump to boost the water flow rate and allow series/parallel pump experiments together with other optional items.

#### Related laws

- Engineering
- Science
- Physics
- Technology

#### Learning capabilities

- For detailed descriptions and experimental capabilities refer to individual data sheets for each optional unit.

#### Technical Specification

- Storage tank capacity: 75 litres
- Centrifugal pump: 0.365kw
- Single phase, 115V AC pump supplied as standard
- (Single Pump): approximately 30 L/min
- Safety cut out
- On/off switch
- Lockable castor wheels
- Twin 115V waterproof electrical output
- Optional series/parallel pump available as HB100L
- Includes 21 channel data logger

#### Essential Ancillaries

- HB100A
- HB100B
- HB100C
- HB100D
- HB100E

- HB100F
- HB100G
- HB100J
- HB100K
- HB100L
- HB100M

#### What's in the Box?

- Hydraulics Bench with -
- Water Tank
- Single Pump
- Fitted Pipework to Optional Modules
- Fitted 3m Electrical Cable and RCCB
- Water Purification Tablets
- 3/4OD X 1/2ID Hose. Length 2.5m
- Drain Extension Tube
- Return Pipe

#### Weights & Dimensions

- Weight: 61 kg
- Length: 1180mm
- Width: 640mm
- Height: 810mm

#### Essential Services

- Single phase earthed electrical supply, 110/120Vac, 60Hz
- Cold water supply and drainage

#### Ordering information

To order this product, please call PA Hilton quoting the following code:  
HB100/115

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