



# **E** AXIAL ROTODYNAMIC PUMP

VDAS<sup>®</sup> H85D

Axial Rotodynamic Pump for use with the multi-pump test set (H85V)



#### **KEY FEATURES**

- Rotodynamic pump
- One of a set of optional pumps for use with TecQuipment's H85V Multi-pump Test Set
- Mounted on a base plate that slots into the base unit
- Simple and safe to use, its foolproof fittings allow students to change and connect the pump quickly and easily without
- Corrosion-resistant materials for use with clean de-ionised water at safe temperatures



BW/zb 0923 Page 1 of 2

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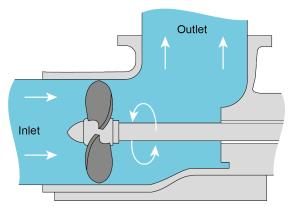
#### DESCRIPTION

Axial flow pumps have a motor-driven rotor that directs flow along a path parallel to the axis of the pump. The fluid thus travels in a relatively straight direction, from the inlet pipe through the pump to the outlet pipe. Axial flow pumps are most often used as compressors in turbo-jet engines. Centrifugal pumps are also used for this purpose, but axial flow pumps are more efficient.

Axial flow pumps require higher speeds than centrifugal pumps. TecQuipment's axial flow pump is geared 2.5:1 to achieve the higher pump speeds required.

The axial flow pump, or AFP, is a common type of pump that essentially consists of a propeller (an axial impeller) in a pipe. The propeller can be riven directly by a sealed motor in the pipe or by electric motor or petrol/diesel engines mounted to the pipe from the outside or by a right-angle drive shaft that pierces the pipe.

One of the most common applications of AFPs would be in handling sewage from commercial, municipal and industrial sources.



## STANDARD FEATURES

- Five-year warranty
- Made in accordance with the latest European Union directives
- ISO9001 certified manufacturer

### **ESSENTIAL BASE UNIT**

Multi Pump Test Set (H85V)

#### LEARNING OUTCOMES

- Understanding pump performance
- Creating characteristic curves from experimental data
- Investigating, analysing and comparing the characteristics of different pump types (if more than one pump is purchased)

#### DETAILED SPECIFICATIONS

TecQuipment is committed to a programme of continuous improvement; hence we reserve the right to alter the design and product specification without prior notice.

#### NETT DIMENSIONS:

380 mm (length), 400 mm (height), 200 mm (width)

8 kg (weight)

#### **OPERATING CONDITIONS**

#### OPERATING ENVIRONMENT:

Laboratory

#### STORAGE TEMPERATURE RANGE:

-25°C to +55°C (when packed for transport)

#### **OPERATING TEMPERATURE RANGE:**

+5°C to +40°C

#### **OPERATING RELATIVE HUMIDITY RANGE:**

80% at temperatures < 31°C decreasing linearly to 50% at 40°C

## **PUMP TECHNICAL DETAILS**

CC / Rev: -

Nominal Maximum RPM: 9000 (geared 2:5:1)

Rotation Direction: Clockwise

Nominal Maximum Pressure (bar): 0.55



