



## Fluid Mechanics

# MFP101a

## Turbine Dynamometer

**Dynamometer for the turbines of the Centrifugal Pump Module (MFP101)**

Works with  
**VDAS**<sup>®</sup>



- Dynamometer that fits on the Centrifugal Pump Module to test the optional turbines
- Electrically powered from outlets on the Universal Dynamometer motor drive
- Measures and displays torque, speed and shaft power
- Can connect to TecEquipment's Versatile Data Acquisition System (VDAS<sup>®</sup>)

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- An ISO 9001 certified company

# MFP101a

## Turbine Dynamometer

### Description

You need the Turbine Dynamometer for tests on the optional turbines. It fits on the Centrifugal Pump Module, near the outlet end of the centrifugal pump. You fit any of the three optional turbines to the Turbine Dynamometer. Each turbine has a brake drum that fits inside the dynamometer.

You connect the outlet of the centrifugal pump to your turbine. As the pump forces water through the turbine, you use a control on the Turbine Dynamometer to adjust a band brake. This loads the turbine. The Turbine Dynamometer and its instrumentation then measures and displays the speed, torque and shaft power available at the dynamometer. The Turbine Dynamometer instrumentation fits above the dynamometer, in the instrument frame of the Centrifugal Pump Module. It has a socket for connection to TecQuipment's optional VDAS®.

### Standard Features

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

### Ancillary For:

- Pelton Wheel (MFP101b)
- Propeller Turbine (MFP101c)
- Francis Turbine (MFP101d)

**Note:** You need only one Turbine Dynamometer to test all three turbines.

### 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

### Specifications

*Nett dimensions and weights:*

- Dynamometer: 550 mm x 255 mm x 110 mm and 8 kg
- Torque and speed display: 450 mm x 190 mm x 170 mm and 4 kg

*Instrumentation:*

- Measures and displays turbine power, speed and torque.
- Electrically powered from outlets on the Universal Dynamometer motor drive.

*tradition.*

*innovation.*

*integration.*

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