PIPE FLOW AND NOZZLE KIT

VDAS® MFP106A

Optional pipe flow and nozzle kit for use with the Centrifugal Fan Module (MFP106).

KEY FEATURES

- A kit of additional parts to fit to TecQuipment's Centrifugal Fan Module (MFP106)
- Includes a multi-way pressure display with additional instrument frame
- Multiple pressure tappings along lengths of straight pipe to find pressure losses
- Includes different pipe fittings to compare losses in bends and elbows
- Axial probe and additional nozzle to find pressures along a nozzle
- Pitot traverse to find pressure profile and calculate theoretical flow
- Orifice plate to calculate theoretical flow and compare with the pitot and standard nozzle measurement

TECQUIPMENT LTD, BONSALL STREET, LONG EATON, NOTTINGHAM NG10 2AN, UK
TECQUIPMENT.COM +44 115 972 2611 SALES@TECQUIPMENT.COM

TECQUIPMENT

PIPE FLOW AND NOZZLE KIT

VDAS® MFP106A

DESCRIPTION

An optional Pipe Flow and Nozzle Kit for the Centrifugal Fan Module (MFP106). This kit includes two long lengths of smooth-walled pipe with multiple pressure tappings and a Pitot traverse. The pipes connect to the inlet of the MFP106 (you move the standard inlet nozzle), so it becomes a suction fan for tests on the pipes. The pipe tappings connect to a multiway pressure display (supplied with the kit).

The multiple pressure tappings along the long pipes allow you to measure the pressure drop and therefore losses along them.

The kit includes three different fittings: two elbows and a bend, that each fit between the long pipes to test the pressure drop and therefore loss caused by the fitting.

A probe mounts in an assembly so that it moves axially through an additional nozzle to measure its axial pressure profile.

A Pitot traverse fits at the end of one long pipe to allow you to measure the velocity profile across a pipe and calculate the theoretical flow. This allows a comparison with the flow found from the standard MFP106 nozzle and the orifice plate included with the kit.

STANDARD FEATURES

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

LEARNING OUTCOMES

- Axial pressure profile along a nozzle
- Velocity profile across a pipe
- Losses in straight pipes
- Losses in bends and elbows (fittings)
- Flow through an orifice

ANCILLARY FOR

- Centrifugal Fan Module (MFP106)

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

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

ASSEMBLED WITH MFP106 FOR STRAIGHT PIPE TESTS:

8000 mm x 3000 mm x 2000 mm (height)

ASSEMBLED WITH MFP106 FOR LOSSES IN FITTINGS TESTS:

5000 mm x 4000 mm x 2000 mm (height)

NETT WEIGHT (ALL ITEMS):

101 kg

MAIN PARTS:

- 2 off smooth-walled pipes, 3050 mm long and 15 kg each
- 2 off pipe stands, 16 kg each
- 1 bend, 1 cascaded elbow and 1 standard elbow, 1 kg each
- 1 off smooth-walled pipe, 310 mm long and 2 kg
- 1 Pitot traverse, 3 kg
- 1 nozzle probe and additional 50 mm nozzle
- 1 multiway pressure display and instrument frame, 30 kg
- Orifice plate
- Connecting pipes and cables

PACKED WEIGHT AND DIMENSIONS:

4.17 m^3, 426 kg

TECQUIPMENT LTD, BONSALL STREET, LONG EATON, NOTTINGHAM NG10 2AN, UK
TECQUIPMENT.COM +44 115 972 2611 SALES@TECQUIPMENT.COM

TECQUIPMENT