

MLT3813H Heated Pneumotach (800L)

Transducer Series

Description

The MLT3813H Heated Pneumotach (800L) with heater controller is designed for use as part of a respiratory flow measurement system. Used in association with the FE141 Spirometer or ML311 Spirometer Pod, it is suitable for human use in continuous exercise studies to minimize distorting effects of condensation on the flow head. The Pneumotach and Heater Controller are supplied together.



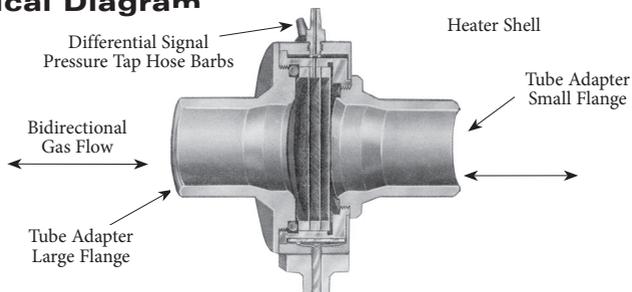
Operation

To operate, plug the Pneumotach Cable into the 5-pin connector on the rear of the Heater Controller unit. Turn on the Heater Controller by pressing the On/Off Switch. Set the Pneumotach Model Selection Switch to Model 3830/3813. Set the screen temperature using the knob on the front panel. Normally a setting between 37 °C and 43 °C is adequate to prevent condensation. The Heating Pilot Light illuminates when the Heater Shell is at a temperature lower than that set by the Screen Temperature Knob. As the Heater Shell rises in temperature, this light fades and eventually goes out when the set temperature is reached. During normal operation the pilot light should cycle on and off. Once the desired temperature is reached, connect the Pneumotach to the Spirometer Front-end or Pod by gently pushing one end of each length of tubing over the whole length of the tap hose barbs on the Pneumotach. Similarly, connect the other end of the tubing to the hose barbs on the Spirometer Front-end or Pod.

Application

The MLT3813H is suitable for measurements of human continuous exercise studies.

Technical Diagram



Schematic diagram of the MLT3813 Heated Flow Head.

Caution

Read "Statement of Intended Use" on our website or in "Getting Started with PowerLab" before use.

- Do not allow the external surface of the flow head to contact the subject. It is hot, up to 45 °C depending on the heater control setting .
- Do not use the flow head for long term continuous flow monitoring in a humidified flow circuit. Moisture can occlude the screen causing the unit to malfunction.
- Keep the flow head clean by using particle filters and washing it regularly in warm soapy water. Rinse and dry thoroughly. Do not submerge the heater shell and cables in any liquid. Before cleaning, remove the heater shell and cable assembly by gently pulling it from the housing. Flow head and tubing may be cold sterilized only..

Specifications

Pneumotach

Calibrated flow range:	0 - 800 L/min
Dead space volume:	88 mL
Back pressure:	0.3 cmH ₂ O at 80 L/min 2.8 cmH ₂ O at 400 L/min 8.2 cmH ₂ O at 800 L/min
Overall length:	102 mm (4")
Body diameter:	76 mm (3")
Weight:	167 g
Port flanges:	35 mm OD (1.4"), 29 mm ID (1.1")

Heater Controller

Operating voltage:	115 V AC 60 Hz or 230 V AC 50 Hz
Operating temp:	18 to 45 °C
Warm-up period:	15 min

All specifications were tested at the time of printing and are subject to change.

Ordering Information:

MLT3813H-V Heated Pneumotach 800L with Heater Controller*

For use with:

FE141 Spirometer

ML311 Spirometer Pod

MLA140 Spirometer Kit

*Please specify voltage required when ordering (115 or 220 V)