



Mouse Ventilator

Cat. No. 28025

General

This new Respirator, which completes the well known Ugo Basile line of Ventilators, features:-

- The **tidal volume**, in the range 0.1-1 ml (or 0.05-0.5 with the smaller piston installed), can be selected via its knob either while the pump is running or at a standstill. The stroke volume scale is ample, provided with precise engraved marks.
- The **rate**, selected by a knob, is indicated by a 3-digit solid state display, in the range 60-300 strokes per minute.
- Suitable channels and ports provide the witching of the air flow, with practically **no dead space**.
- A unique **variable stroke linkage** mechanism operates the piston.

The reciprocating motion is adjusted and transmitted to the piston by rods and articulated joints only, which leads to minimal wear, no backlash, silent operation and exact stroke reproducibility.



Unique Design

Reliable

Compact

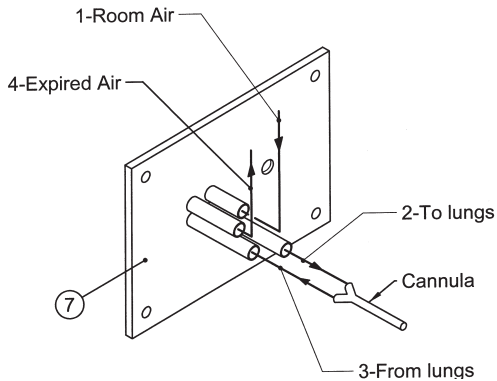
Silent

Main Features

- Ideal for use with mice, small birds and perinatal rats
- Optional 0.5 ml cylinder/piston assembly
- Purely mechanical, with impeccable finishing: lifetime lasting
- Quiet operation and negligible electrical noise

The instrument is compact and light, cm 20x13x18.5 and 2.5 Kg, and it is self-contained: in other words, it embodies its power supply which feeds the geared motor, its feedback controller and the rate display.

The Connection Square



As illustrated in the drawing above, and pictured below, a connection square of four ports include:-

1. intake of air or other non-explosive gas mixture
2. delivery of air to the animal lungs
3. return air from animal
4. exhaust, for sampling, partial recycling, testing positive expiration pressure, etc.

so closely packed, that the connection tubes are cut in different lengths, to ease the insertion of the tubing.



Start / Stop Model

A Mouse Ventilator version is available, Cat. **28125**, which embodies a controlled pause feature.

The synchronised START/STOP function gives the operator a means to stop and restart the respirator at "full lungs" point, via an external trigger pulse, when it is beneficial if not essential to minimize any extraneous movement of the anesthetized animal during electrophysiological recording, X-ray and imaging, etc.

Specifications

Rate	60 to 300 strokes for minute
Rate Read-out	on digital display
Stroke Volume	0.1 to 1ml (with standard 1 ml piston) 0.05 to 0.5ml (optional 0.5ml piston) Reproducibility $\pm 2\%$
Volume Scale	precision engraved, 0.05ml divisions
Start-Stop	by synchronised command (model 28125 only)
Power Requirements :	115 or 230V, 50/60Hz, 10W max.

Physical

Dimensions	20x13x18.5cm
Net weight	2.2Kg
Shipping Weight	4.6Kg approx.
Packing	40x39x30cm

Ordering Information

28025	MOUSE VENTILATOR , complete with following standard accessories :-
28025-010	1ml Cylinder/piston assembly
28025-302	Instruction Manual (on CD)
28025-321	Perspex Vertical Lid
28025-323	Cannula/Y-connection assembly (0.7mm & 1mm ID), tube, etc., in a plastic case
E-WP008	Mains Cord
Options	
28025-5	Mouse Ventilator , with 0.5ml cylinder/piston assy. & standard accessories
28025-005	0.5ml Cylinder/piston assembly
28125	Mouse Ventilator , with synchronised START/STOP feature, with 1ml cylinder/piston assy. & standard accessories
28125-5	Mouse Ventilator , with synchronised START/STOP feature, with 0.5ml cylinder/piston assy. & standard accessories

Bibliography

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- M.K. Sadegh et alia: "**Impaired contractility and detrusor hypertrophy in cavin-1-deficient mice**", 2016
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- K. Swård et alia: "**Elevated pulmonary arterial pressure and altered expression of Ddah1 and Arg1 in mice lacking cavin - 1/PTRF**" *Physiological Reports* Vol.1 (e00008), 2013
- M.S.Karbalaei et alia: "**Impaired contractility and detrusor hypertrophy in cavin-1-deficient mice**" *Eur.J.Pharmacol*, 689 (1-3): 179-185, 2012