## **Ventilators**

## **How to Select Your Ventilator**

Harvard Apparatus has manufactured animal ventilators for more than 75 years. These ventilators are based on the designs of Dr. William T. Porter, a Professor of Physiology at Harvard Medical School, a strong proponent of physiology education and training through The American Physiological Society and the founder of Harvard Apparatus. A range of animal ventilators is available for species from mice to large dogs (15 g to 50 kg).

We now offer the most advanced animal ventilator on the market, the new Inspira, Advanced Safety Ventilator. Inspira offers microprocessor control, easy-setup and operation, alphanumeric display, airway pressure monitoring, assist mode, sigh breath, variable Inspiratory: Expiratory (I:E) ratios, digital rate and digital volume. The Inspira ventilators also feature SafeRange $^{\sim}$ , a rapid setup system which uses the animals weight to calculate 'average' ventilation parameters such as rate and tidal volume.

In addition to our line of animal ventilators we also offer virtually all of the other accessories necessary to make your animal ventilation safe and reliable. Anesthesia machines are available in several different styles and form factors suitable for a wide range of animal sizes. The multi-station ventilator, and the Coax rebreathing system, offer

The multi-station ventilator, and the Coax rebreathing system, offer larger research groups the opportunity to anesthetize multiple animals using a single anesthesia setup.

Our vaporizer line has been expanded to include the three most popular styles of anesthetic vaporizers, Tech 3, Tech 4 and Ohio 100 with a choice of Isoflurane, Halothane and now Sevoflurane. Intubation tubes and cannulae have been expanded to include sizes suitable for mice, rats and guinea pigs.

BS4 55-0000	BS4 55-0798, BS4 55-0806	BS4 55-0715	BS4 55-7059		
Small Animal 683	Intermediate Animal 665	Large Animal 613	Inspira	Multi-Channel Ventilator	KTR-4
V	OLUME VENTILATORS		PRESSURE VENTILATORS		
rats, guinea pigs, rabbits, cats	rabbits, cats, dog	rats, guinea pigs, cats, dogs	mice, rats, guinea pigs, rabbits, cats	rats, guinea pigs	rats, guinea pigs, rabbits
250 g to 10 kg (22 lbs)	1 kg (2.2 lbs) to 30 kg (66 lbs)	1.5 kg (3.3 lbs) to 50 kg (110 lbs)	15 g to 10 kg	150 g to 1 kg	150 g to 5.5 kg
0.5 to 5 ml 3 to 30 ml	4 to 100 ml	30 to 750 ml	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
18 to 150	10 to 200	7 to 50	5 to 200	30 to 100	1 to 199
CE	CE, EMC	CE	CE	CE	CE
1:1	35% to 65% of a single stroke cycle	25% to 50% of a single stroke cycle	1:4 to 4:1	10% to 80% of a single stroke cycle	1 to 99%
NO	NO	NO	NO	Up to eight simultaneously with individual volumes	NO
NO	NO	NO	NO	yes 4 (58 lbs) to 8 bar (116)	NO
NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	0 to 50 cmH <sub>2</sub> O	NOT AVAILABLE	
NO	NO	NO	5 to 12 V peak pulse	NO	NO
NO	NO	NO	0 to 50 cmH <sub>2</sub> O	NO	NO
NO	NO	NO	auto or manual	NO	NO
NO	NO	NO	YES	NO	NO
NO	NO	NO	YES	NO	NO
-	-	-	YES	NO	NO
NO	NO	NO	YES	100 cmH <sub>2</sub> O	NO
NO	NO	NO	YES	2 to 100 cmH <sub>2</sub> O	NO
yes (attach column of water)	yes (attach column of water)	yes (attach column of water)	built in	yes (attach column of water)	yes (attach column of water)
NO	NO	NO	YES	NO	NO
OD 5 mm (3/16 in), ID 3.5 mm (1/8 in)	OD 7.9 mm, ID 6.4 mm	OD 15.9 mm, ID 12.7 mm			
25 x 32.5 x 15 cm (10 x 13 x 6 in)	35 x 20 x 45 cm (14 x 8 x 18 in)	30 x 50 x 22.5 cm (12 x 20 x9 in)	17.8 x 25.4 x 40.6 cm (8 x 10 x 17.25 in)		36 x 15 x 34 cm (14.2 x 5.9 x 13.4 in)
F7	F12	F13	F4	F9	F10
				Depends on configuration	