Инструменты для респираторных исследований

Описание

По вопросам продаж и поддержки обращайтесь:

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Aerosol Nebulizer

The Aerosol Nebulizer is a jet nebulizer ideal for nebulizing drugs sensitive to ultrasonic cavitation and higher temperatures.

- Low particle sizes (100% of the nebulized particles are below 10 µm on fluids with a viscosity like a saline solution)
- No solution warming required
- Aerosol is automatically transported by compressed air
- Connecting block required to attach Nebulizer to HSE-HA single/double chamber plethysmograph or mouse plethysmograph
- Multigas Inlet Adapter (73-2919) required for use with MicroVent, MiniVent or MidiVent
- Available with Multi-Gas Adapter Kit for Chamber/Box use

Item No.	Description
73-1963	Aerosol Nebulizer
73-3433	Aerosol Nebulizer with Multi-Gas Adapter Kit and stand to use with Chamber/Box Use
73-2919	Multi-Gas Inlet Adapter and stand to connect Aerosol Nebulizer and MicroVent, MiniVent or MidiVent
73-3300	Aerosol Nebulizer Connection Kit for Pressure Regulator (1.5 to 2 bar, 22 to 30 PSI). Includes quick connector (shut off) and 2m pressure tube (ID 2mm, OD 3mm)

DETAILS

The Aerosol Nebulizer is a jet nebulizer ideal for nebulizing drugs sensitive to ultrasonic cavitation and higher temperatures.

- Low particle sizes (100% of the nebulized particles are below 10 µm on fluids with a viscosity like a saline solution)
- No solution warming required
- Aerosol is automatically transported by compressed air
- Connecting block required to attach Nebulizer to HSE-HA single/double chamber plethysmograph or mouse plethysmograph
- Multigas Inlet Adapter (73-2919) required for use with MicroVent, MiniVent, or MidiVent
- Available with Multi-Gas Adapter Kit for Chamber/Box use

This aerosol jet nebulizer requires an operating pressure of approximately 1.5 bar (22 psi) from a compressed air source. All of the particles generated by the jet nebulizer are 10 µm or less in size with 60% of the particles being 2.5 µm or less. A special connecting block is used to attach the nebulizer to the HSE-HA single and double chamber plethysmographs and are configured in a number of respiratory mechanics applications.

SPECIFICATIONS

Particle Size, µm	% Nebulized		Particle Size Range in Band, µm	% of Total Particles in Band
10.5	100		13.6 to 10.5	0
8.19	99.7		10.5 to 8.19	0.2
6.37	98.0		8.19 to 6.37	1.7
4.97	92.2		6.37 to 4.97	5.8
3.88	80.9		4.97 to 3.88	11.3
3.04	68.3		3.88 to 3.04	12.6
2.40	61.5		3.04 to 2.40	6.8
1.90	57.7		2.40 to 1.90	3.8
1.52	54.5		1.90 to 1.52	3.2
1.22	52.0		1.52 to 1.22	2.5

Intubation Cannulae with Luer Adapter

The intubation cannula is used in chronic studies where the animal will be intubated. The outside diameter of the cannula must ensure a tight fit to the animal's trachea.

- Luer-adapter for use with any Luer style connections
- Available in several sizes for various species

Related Items

Item No.	Description
73-3112	Intubation Cannula with Luer Adapter for Rat/Guinea Pig, OD 3.5 mm, L 56 mm
73-2856	Intubation Cannula with Luer Adapter for Rat/Guinea Pig, OD 3.0 mm, L 53 mm
73-2855	Intubation Cannula with Luer Adapter for Rat/Guinea Pig, OD 2.5 mm, L 45 mm
73-2854	Intubation Cannula with Luer Adapter for Rat/Guinea Pig, OD 2.3 mm, L 45 mm
73-2853	Intubation Cannula with Luer Adapter for Small Rat, OD 2.0 mm, L 45 mm
73-2852	Intubation Cannula with Luer Adapter for Small Rat, OD 1.8 mm, L 35 mm
73-2851	Intubation Cannula with Luer Adapter for Small Rat, OD 1.5 mm, L 32 mm
73-2850	Intubation Cannula with Luer Adapter for Mouse, OD 1.2 mm, L 27 mm

Item No.	Description
73-2849	Intubation Cannula with Luer Adapter for Mouse, OD 1.1 mm, L 26 mm
73-2848	Intubation Cannula with Luer Adapter for Mouse, OD 1.0 mm, L 26 mm

DETAILS

The intubation cannula is used in chronic studies where the animal will be intubated. The outside diameter of the cannula must ensure a tight fit to the animal's trachea.

- Luer adapter for use with any Luer style connections
- Available in several sizes for various species

Note: The Luer adapter reduces the length of the cannula by approximately 4 mm.

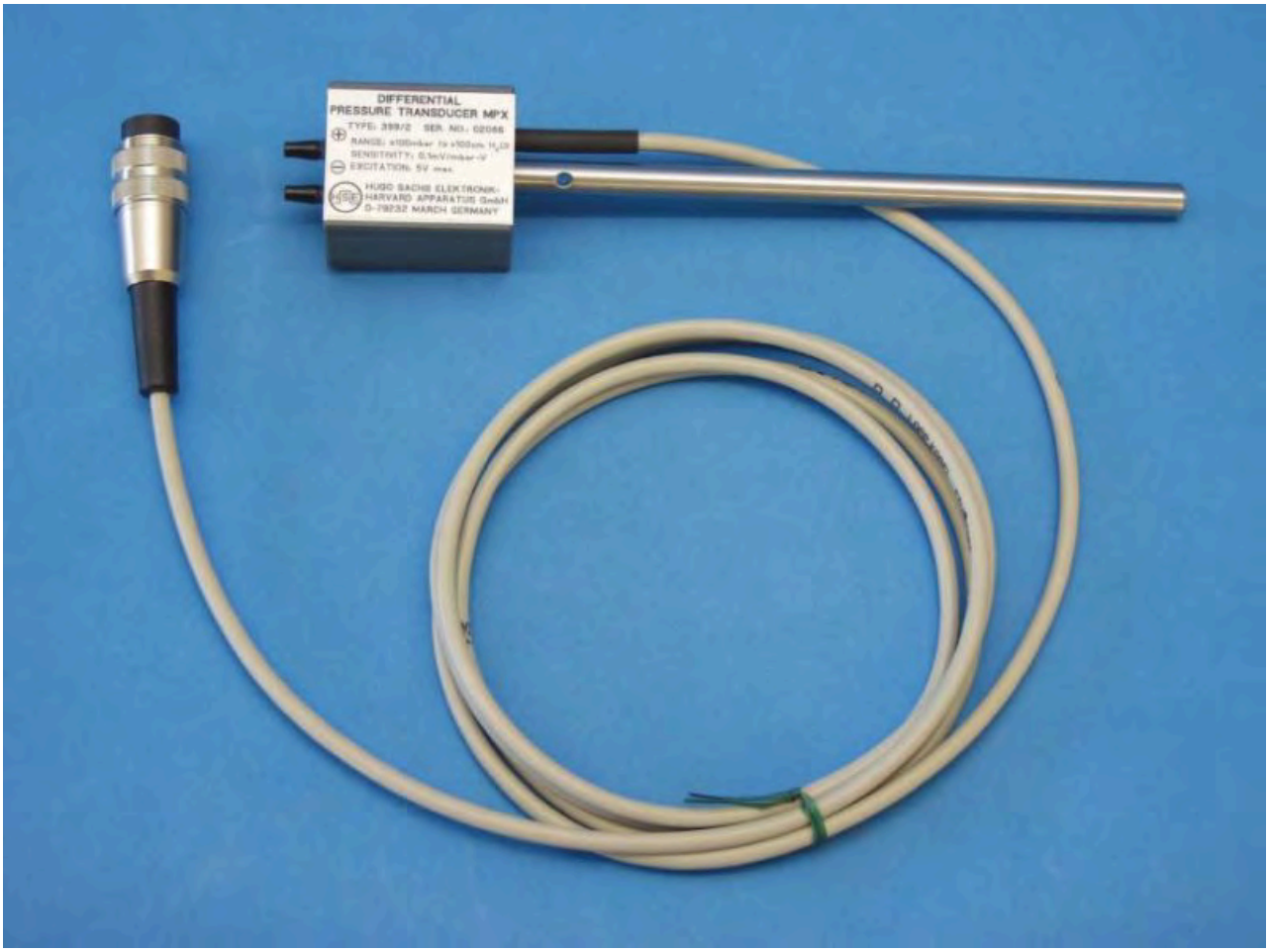
SPECIFICATIONS

Item #	Species	Length with Luer Adapter (mm)	OD (mm)
73-3112	Rat/Guinea Pig	56	3.5
73-2856	Rat/Guinea Pig	53	3.0
73-2855	Rat/Guinea Pig	45	2.5
73-2854	Rat/Guinea Pig	45	2.3
73-2753	Small Rat	45	2.0
73-2852	Small Rat	35	1.8
73-2851	Small Rat	32	1.5
73-2850	Mouse	27	1.2
73-2849	Mouse	26	1.1
73-2848	Mouse	26	1.0

Differential Pressure Transducers MPX

Ideal for measuring tracheal, esophageal or transdiaphragmatic pressures with air-filled catheter.

Item No.	Description
73-0064	Differential Pressure Transducer MPX, Range +- 100 cmH2O, HSE Connector
73-3744	Differential Pressure Transducer MPX, Range +- 100 cmH2O, for ADI Amplifier ML110 or ML112 or Newer Versions



DETAILS

These MPX Differential Pressure Transducers can be used with most research animals to measure tracheal, esophageal or transdiaphragmatic pressures with air-filled catheter. It is ideal for use with mouse, hamster, rat, guinea pig, rabbit, ferret, cat and dog.

SPECIFICATIONS

Pressure Range	±100 cmH_2O (±100 mbar)
Sensitivity	0.3 to 0.8 mV/mbar, excitation of 5 V
Linearity	±1.5%
Thermal Zero Shift	5 mbar (0° to 85°C)
Input Resistance	400 to 550 â„¦
Output Resistance	600 to 1000 â„¦
Offset Voltage	1 mV maximum
Excitation Voltage	0 to 5 VDC or VAC
Overpressure	±1000 mbar (750 mmHg)
Inlet/Outlet Nozzle (ID x OD x L)	2.0 x 4.7 x 9.0 mm
Housing Size, H x W x D	24 x 42 x 36 mm (0.9 x 1.7 x 1.4 in)
Weight	190 g (6.7 oz)
Application	Only for dry air

Intubation Cannulae with Y-Adapter

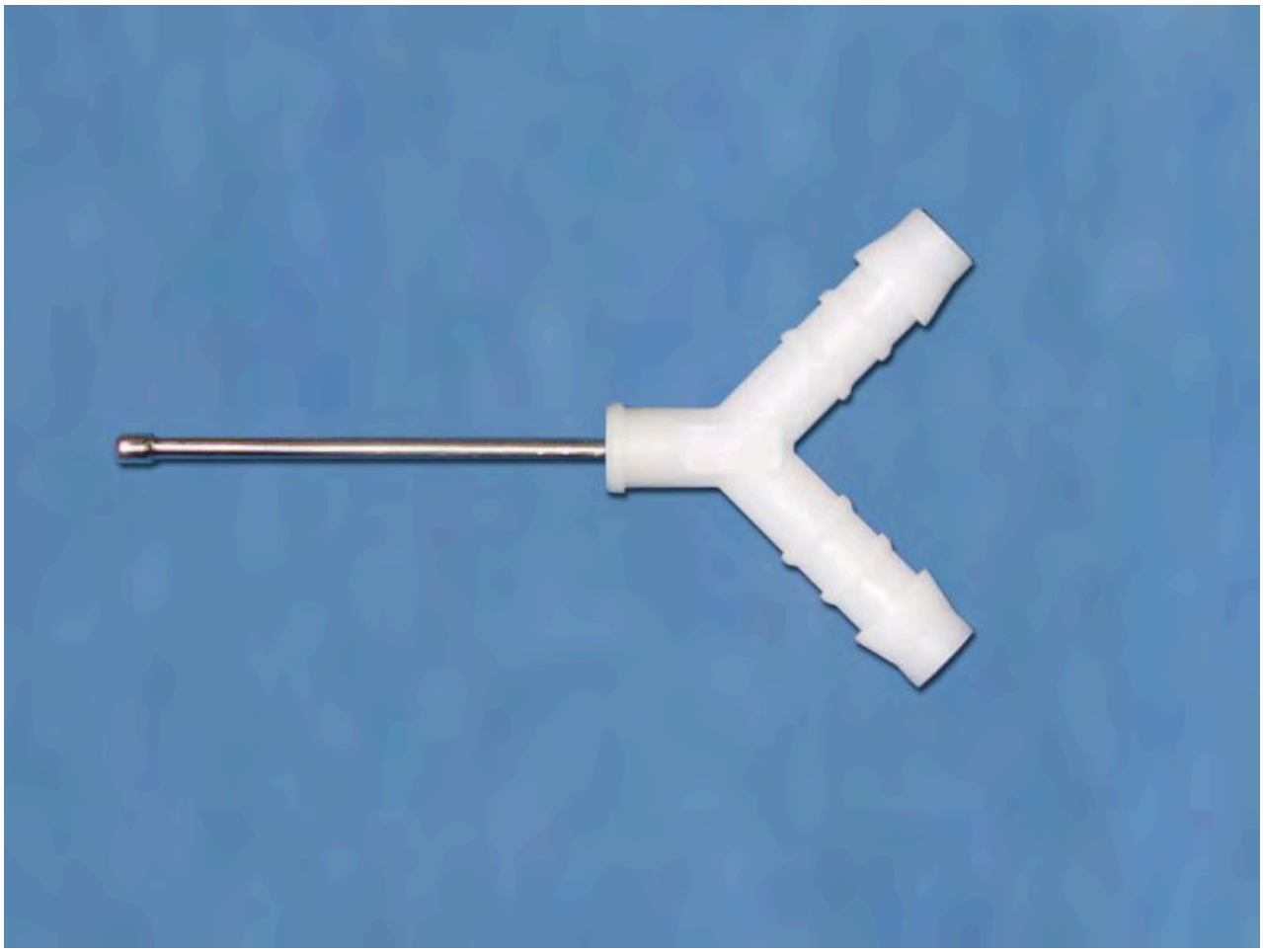
The intubation cannula is used in chronic studies where the animal will be intubated. The outside diameter of the cannula must ensure a tight fit to the animal's trachea.

- Includes Y-adapter for connecting to a ventilator; the outside diameter of the Y-adapter matches to most of the ports diameters of the ventilators
- Available in several sizes for various species

Related Items

Item No.	Description
73-2737	Intubation Cannula with Y-adapter for Mouse, OD 1.0 mm, L 24 mm
73-2843	Intubation Cannula with Y-adapter for Mouse, OD 1.1 mm, L 24 mm
73-2844	Intubation Cannula with Y-adapter for Mouse, OD 1.2 mm, L 27 mm
73-4115	Intubation Cannula with Y-adapter for Small Rat, OD 1.5 mm, L 32 mm
73-4116	Intubation Cannula with Y-adapter for Small Rat, OD 1.8 mm, L 35 mm
73-4117	Intubation Cannula for with Y-adapter for Rat, OD 2.0 mm, L 45 mm
73-2847	Intubation Cannula with Y-adapter for Rat/Guinea Pig, OD 2.3 mm, L 45 mm
73-2739	Intubation Cannula with Y-adapter for Rat/Guinea Pig, OD 2.5 mm, L 45 mm

Item No.	Description
73-2740	Intubation Cannula with Y-adapter for Rat/Guinea Pig, OD 3.0 mm, L 53 mm
73-2741	Intubation Cannula with Y-adapter for Rat/Guinea Pig, OD 3.5 mm, L 56 mm
73-2742	Intubation Cannula with Y-adapter for Rabbit/Small Cat, OD 4.5 mm, L 62 mm



DETAILS

The intubation cannula is used in chronic studies where the animal will be intubated. The outside diameter of the cannula must ensure a tight fit to the animal's trachea.

- Includes Y-adapter for connecting to a ventilator; the outside diameter of the Y-adapter matches to most of the ports diameters of the ventilators
- Available in several sizes for various species

Note: The Y-adapter reduces the length of the cannula by approximately 4 to 6 mm.

SPECIFICATIONS

Item #	Species	Length with Y-Adapter (mm)	OD (mm)	Y-Adapter Size for Connection to Ventilator (mm)
73-2737	Mouse	24	1.0	1.6
73-2843	Mouse	24	1.1	1.6
73-2844	Mouse	27	1.2	1.6
73-4115	Small Rat	35	1.5	3.0
73-4116	Small Rat	35	1.8	3.0
73-4117	Rat	45	2.0	3.0
73-2847	Rat	45	2.3	7.5
73-2739	Rat/Guinea Pig	45	2.5	7.5
73-2740	Rat/Guinea Pig	53	3.0	7.5
73-2741	Rat/Guinea Pig	56	3.5	7.5
73-2742	Rabbit/Small Cat	62	4.5	10

Tracheal Cannulae with Y-Adapter

The tracheal cannula is used in a tracheotomy for general ventilation or respiratory mechanics studies. The outside diameter of the cannula must ensure a tight fit to the inside diameter of the animal's trachea.

- With Y-adapter for connecting to a ventilator, the outside diameter of the Y-adapter matches to most of the ports diameter of the ventilators
- Available in various sizes for several species

Related Items

Item No.	Description
73-2891	Tracheal Cannula for Rabbit/Small Cat, OD 6.0 mm, L 30 mm, with Large Y-Adapter (OD 10 mm)
73-2736	Tracheal Cannula for Rabbit/Small Cat, OD 5.0 mm, L 30 mm, with Large Y-Adapter (OD 10 mm)
73-2735	Tracheal Cannula for Rabbit/Small Cat, OD 4.0 mm, L 25 mm with Large Y-Adapter (OD 10 mm)
73-2734	Tracheal Cannula for Rat/Guinea Pig, OD 3.5 mm, L 25 mm, with Medium Y-adapter (OD 7.5 mm)
73-2733	Tracheal Cannula for Rat/Guinea Pig, OD 3.0 mm, L 20 mm, with Medium Y-adapter (OD 7.5 mm)
73-2732	Tracheal Cannula for Rat/Guinea Pig, OD 2.5 mm, L 20 mm, with Medium Y-adapter (OD 7.5 mm)
73-2834	Tracheal Cannula for Rat/Guinea Pig, OD 2.3 mm, L 20 mm, with Medium Y-Adapter (OD 7.5 mm)
73-4114	Tracheal Cannula for Small Rat, OD 2.0-mm, L 20 mm, with Small Y-Adapter (ID 3 mm OD 5 mm)

Item No.	Description
73-4113	Tracheal Cannula for Small Rat, OD 1.8-mm, L 15 mm, with Small Y-Adapter (ID 3 mm OD 5 mm)
73-4112	Tracheal Cannula for Small Rat, OD 1.5 mm, L 15 mm, with Small Y-Adapter (ID 3 mm OD 5 mm)
73-2730	Tracheal Cannula for Mouse, OD 1.3 mm, L 13 mm, with Y-adapter for Minivent
73-2830	Tracheal Cannula for Mouse, OD 1.2 mm, L 13 mm, with Y-adapter for Minivent (OD 3 mm)
73-2731	Tracheal Cannula for Mouse, OD 1.0 mm, L 13 mm, with Y-adapter for Minivent

DETAILS

The tracheal cannula is used in a tracheotomy for general ventilation or respiratory mechanics studies. The outside diameter of the cannula must ensure a tight fit to the inside diameter of the animal's trachea.

- With Y-adapter for connecting to a ventilator, the outside diameter of the Y-adapter matches to most of the ports diameter of the ventilators
- Available in various sizes for several species

Note: The Y-adapter reduces the length of the catheter by approximately 4 to 6 mm.

Recommended Cannulae:

- 73-2731, 73-2830, 73-2730: Micro Y-adapter for Minivent and MicroVent, for tubing ID 1.5 to 2.2 mm
- 73-4112, 73-4113, 73-4114: Miniature Y-adapter, for tubing ID 2.5 to 3.4 mm
- 73-2834, 73-2732, 73-2733, 73-2734: Medium Y-adapter, for tubing ID 6 to 7.4 mm
- 72-2736, 73-2819: Large Y-adapter, for tubing ID 7 to 10 mm

SPECIFICATIONS

Item #	Species	Length with Y-Adapter (mm)	OD (mm)	Y-Adapter Size for Connection to Ventilator (mm)
73-2891	Rabbit/Small Cat	30	6.0	10
73-2736	Rabbit/Small Cat	30	5.0	10
73-2735	Rabbit/Small Cat	25	4.0	10
73-2734	Rat/Guinea Pig	25	3.5	7.5
73-2733	Rat/Guinea Pig	20	3.0	7.5
73-2732	Rat/Guinea Pig	20	2.5	7.5
73-2834	Rat/Guinea Pig	20	2.3	7.5
73-4114	Small Rat	20	2.0	5
73-4113	Small Rat	15	1.8	5

73-4112	Small Rat	15	1.5	5
73-2730	Mouse	13	1.3	3
73-2830	Mouse	13	1.2	3
73-2731	Mouse	13	1.0	3

Intubation Cannulae (Cannula Only)

The intubation cannula is used in chronic studies where the animal will be intubated. The outside diameter of the cannula must ensure a tight fit to the animal's trachea.

- Cannula only, for your own assembly
- Available in several sizes for various species

Related Items

Item No.	Description
73-2840	Intubation Cannula for Small Rat, OD 1.5 mm, L 37 mm
73-2839	Intubation Cannula for Mouse, OD 1.2 mm, L 30 mm
73-2838	Intubation Cannula for Mouse, OD 1.1 mm, L 28 mm
73-0030	Intubation Cannula for Mouse, OD 1.0 mm, L 18 mm

DETAILS

The intubation cannula is used in chronic studies where the animal will be intubated. The outside diameter of the cannula must ensure a tight fit to the animal's trachea.

- Cannula only, for your own assembly
- Available in several sizes for various species

SPECIFICATIONS

Item #	Species	Total Length (mm)	OD (mm)
73-0042	Rabbit/Small Cat	74	4.5
73-0041	Rat/Guinea Pig	63	3.5
73-0040	Rat/Guinea Pig	60	3.0
73-0039	Rat/Guinea Pig	50	2.5

73-2842	Rat/Guinea Pig	50	2.3
73-0038	Small Rat	50	2.0
73-2841	Small Rat	40	1.8
73-2840	Small Rat	37	1.5
73-2839	Mouse	30	1.2
73-2838	Mouse	28	1.1
73-0030	Mouse	28	1.0

Tracheal Cannulae with Luer Adapter

The tracheal cannula is used in a tracheotomy for general ventilation or respiratory mechanics studies. The outside diameter of the cannula must ensure a tight fit to the inside diameter of the animal's trachea.

- Luer-adapter for use with any Luer style connections, such as the Y-Luer Adapters
- Available in several sizes for various species

Related Items

Item No.	Description
73-2723	Tracheal Cannula for Rat/Guinea Pig with Luer Adapter OD 3.5 mm, L 24 mm
73-2724	Tracheal Cannula for Rat/Guinea Pig with Luer Adapter OD 3.0 mm, L 20 mm
73-2725	Tracheal Cannula for Rat/Guinea Pig with Luer Adapter OD 2.5 mm, L 17 mm
73-2726	Tracheal Cannula for Rat/Guinea Pig with Luer Adapter OD 2.3 mm L 14 mm
73-2727	Tracheal Cannula for Small Rat with Luer Adapter OD 2.0 mm, L 13 mm
73-2728	Tracheal Cannula for Small Rat with Luer Adapter OD 1.5 mm, L 10 mm
73-2729	Tracheal Cannula with Luer Adapter OD 1.5 mm, L 10 mm

Item No.	Description
73-2837	Tracheal Cannula for Mouse with Luer Adapter 1.3 mm, L 9 mm
73-2836	Tracheal Cannula for Mouse with Luer Adapter 1.2 mm, L 8 mm
73-2835	Tracheal Cannula for Mouse with Luer Adapter 1.0 mm, L 8 mm

DETAILS

The tracheal cannula is used in a tracheotomy for general ventilation or respiratory mechanics studies. The outside diameter of the cannula must ensure a tight fit to the inside diameter of the animal's trachea.

- Luer adapter for use with any Luer style connections, such as the Y-Luer Adapters
- Available in several sizes for various species

Note: The Luer adapter reduces the length of the cannula by approximately 4 mm.

SPECIFICATIONS

Item #	Species	Length with Luer Adapter (mm)	OD (mm)
73-2723	Rat/Guinea Pig	24	3.5
73-2724	Rat/Guinea Pig	20	3.0
73-2725	Rat/Guinea Pig	17	2.5
73-2726	Rat/Guinea Pig	14	2.3
73-2727	Small Rat	13	2.0
73-2728	Small Rat	13	1.8
73-2729	Small Rat	10	1.5
73-2837	Mouse	9	1.3
73-2836	Mouse	8	1.2
73-2835	Mouse	8	1.0

Tracheal Cannulae (Cannula Only)

The tracheal cannula is used in a tracheotomy for general ventilation or respiratory mechanics studies. The outside diameter of the cannula must ensure a tight fit to the inside diameter of the animal's trachea.

- Cannula only, for your own assembly
- Available in several sizes for various species

Related Items

Item No.	Description
73-3319	Tracheal Cannula for Rabbit/Cat, OD 6.0 mm, L 40 mm
73-0036	Tracheal Cannula for Rat/Guinea Pig/Rabbit, OD 4.0 mm, L 32 mm
73-0034	Tracheal Cannula for Rat/Guinea Pig, OD 3.0 mm, L 25 mm
73-0033	Tracheal Cannula for Rat/Guinea Pig, OD 2.5 mm, L 25 mm
73-2829	Tracheal Cannula for Rat/Guinea Pig, OD 2.3 mm, L 25 mm
73-2828	Tracheal Cannula for Small Rat, OD 2.0 mm, L 25 mm
73-2827	Tracheal Cannula for Small Rat, OD 1.8 mm, L 20 mm
73-2826	Tracheal Cannula for Small Rat, OD 1.5 mm, L 20 mm

Item No.	Description
73-0028	Tracheal Cannula for Mouse, OD 1.3 mm, L 15 mm
73-2825	Tracheal Cannula for Mouse, OD 1.2 mm, L 15 mm
73-0029	Tracheal Cannula for Mouse, OD 1.0 mm, L 15 mm

DETAILS

The tracheal cannula is used in a tracheotomy for general ventilation or respiratory mechanics studies. The outside diameter of the cannula must ensure a tight fit to the inside diameter of the animal's trachea.

- Cannula only, for your own assembly
- Available in several sizes for various species

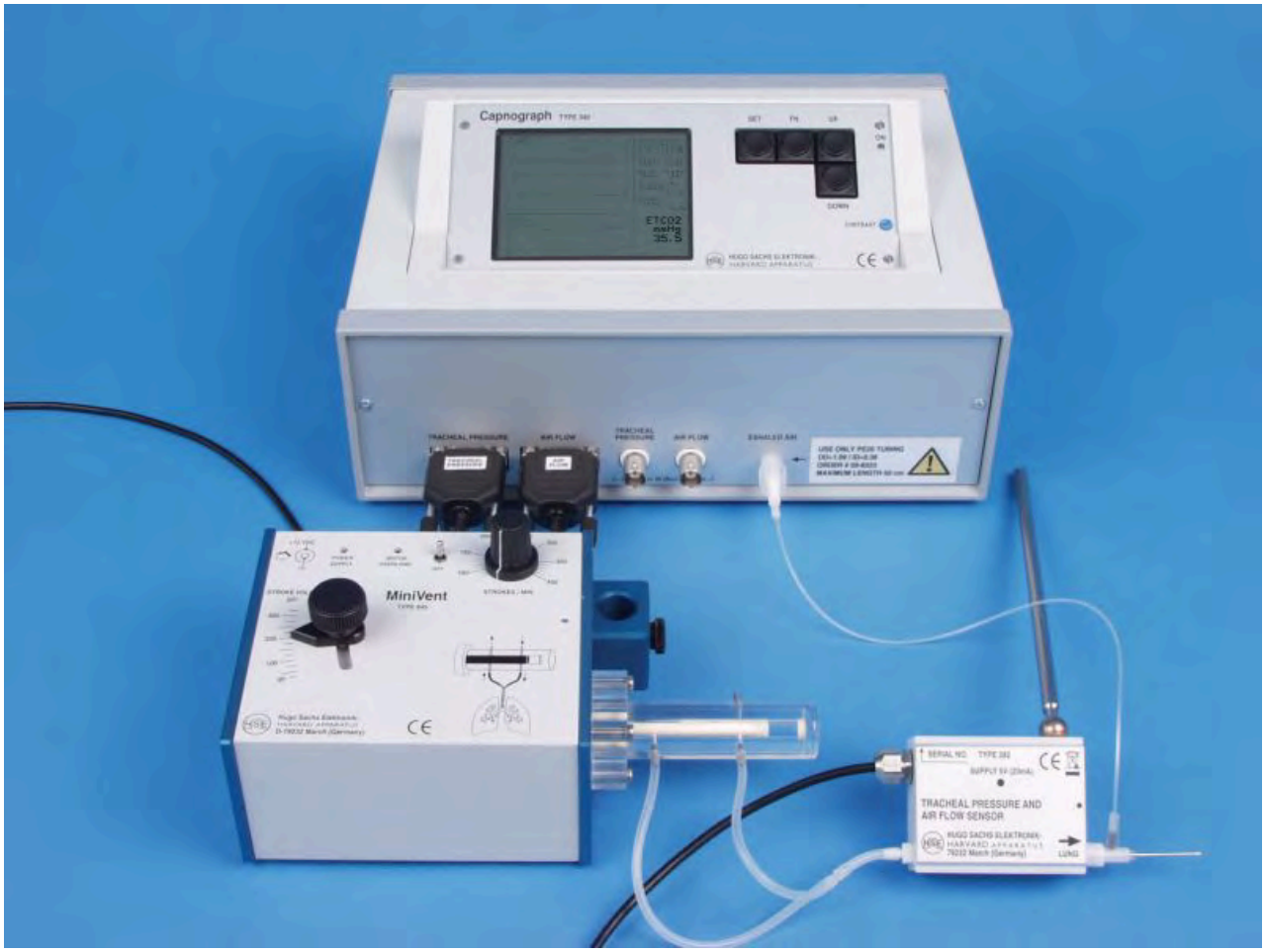
SPECIFICATIONS

Item #	Species	Length (mm)	OD (mm)
73-3319	Rabbit/Cat	40	6.0
73-0037	Rabbt	35	5.0
73-0036	Rat/Guinea Pig/Rabbit	32	4.0
73-0035	Rat/Guinea Pig	30	3.5
73-0034	Rat/Guinea Pig	25	3.0
73-0033	Rat/Guinea Pig	25	2.5
73-2829	Rat Guinea Pig	25	2.3
73-2828	Small Rat	25	2.0
73-2827	Small Rat	20	1.8
73-2826	Small Rat	20	1.5
73-0028	Mouse	15	1.3
73-2825	Mouse	15	1.2
73-0029	Mouse	15	1.0

Capnograph for Small Rodents (Type 340)

The Type 340 capnograph for rats and mice is equipped with a built-in highly sensitive infrared spectroscopy CO_2 sensor. The sensor is pressure and temperature compensated. The very low volume of the sensor, the optimized system volume and the application of a micro-pump allow very accurate monitoring of respiratory CO_2 concentration on small animals. The Capnograph also includes electronic compensation for interference introduced to signals during NO_2 anesthesia administration.

Item No.	Description
73-3809	Capnograph Type 340, 110-230 VAC, 50/60 Hz
73-3816	Flow Pressure Sensor for Mouse to Capnograph Type 340
73-3817	Flow Pressure Sensor for Rat to Capnograph Type 340
73-0500	Lab Stand with Triangular Base Plate, 30 cm Rod Length (one block clamp included)
73-4166	Mouse Cannulating Kit - to Capnograph with Adapter for Ventilator
73-4165	Rat Cannulating Kit- to Capnograph with Adapter for Ventilator



DETAILS

The Type 340 capnograph for rats and mice is equipped with a built-in highly sensitive infrared spectroscopy CO_2 sensor. The sensor is pressure and temperature compensated. The very low volume of the sensor, the optimized system volume and the application of a micro-pump allow very accurate monitoring of respiratory CO_2 concentration on small animals. The Capnograph also includes electronic compensation for interference introduced to signals during NO_2 anesthesia administration.

A CO_2 inlet tube (73-4553) and low volume filter (73-4554) are included and do not need to be ordered separately. Available as replacement parts.

Features

- Built-in highly sensitive temperature and pressure compensated infraredspectroscopy CO_2 sensor
- Very low system compliance
- Basic evaluated parameters:
  - CO_2
  - Respiration rate

- Extend function with optional flow heads to create a complete respiratory survey and monitoring system:
  - Peak Inspiratory Flow
  - Peak Expiratory Flow
  - Peak Inspiratory Pressure
  - Positive End-Expiratory Pressure
  - Tidal Volume
  - Respiratory Rate
- Analog output of CO_2 waveform and end tidal CO_2 for data collection on all versions
- Analog output of CO_2 waveform, end-tidal CO_2, respiratory flow, tracheal pressure, respiratory rate and tidal volume in extended version

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Applications

The main function of this unit is capnography. With the extension using additional sensors, it can become a complete respiratory survey and monitoring system for:
• Capnography
• Anesthesia survey
• Respiratory monitoring

Extended Functions (optional)

The Capnograph can be equipped with two additional sensors, a pressure sensor for measuring tracheal pressure and a pneumotach with differential pressure transducer for measuring respiratory airflow. These sensors are mounted directly on the tracheal or intubation cannula and connected to the control unit, this serves to minimize the dead space. The tracheal pressure and the respiratory flow are important signals to monitor during mechanical ventilation. When monitoring these parameters the investigator can verify that ventilation is performed within normal physiologic limits and helps to avoid barotraumatic ventilation conditions.

Settings

All the settings are done using the display and keypad on the front panel. The settings can also be downloaded by software via a RS232 (optionally USB) port on the back panel.

Output

The following signals are available as analog signals on the rear of the unit:
• CO_2 Waveform
• End expiratory CO_2 ($EtCO_2$)

SPECIFICATIONS

Tracheal Pressure Range	–10 to +80 cmH_2O
CO_2 Range	0 – 10%
Airflow Range Mouse	±3.00 ml/sec
Airflow Range Rat	±30.00 ml/sec
Tidal Volume Range Mouse	1.0 ml
Tidal Volume Range Rat	5.0 ml
Respiratory Rate Range	0 to 300 BPM
Output Signal Range	±4 Volt
Sampling Rate Mouse	~10 ml/min
Sampling Rate Rat	~15 ml/min
Base Plate Dimensions (H x W x L)	5.1 x 5.1 x 5.1 in (13 x 13 x 13 cm)
Base Plate Weight	15 ml/min

Linear Pneumotachometer, Heated

These Linear Pneumotachometers have a special screen design which assures a linear signal over a range of flow rates and have minimum dead space.

- For use with Differential Pressure Transducers
- Available heated or non-heated

For Non-Heated Pneumotachometers please see:

Item No.	Description
72-6310	Heated Linear Pneumotachometer with Luer side port for airway pressure, 0 to 160 L/min flow rate, dead space 13.87 ml. Port OD = 22 mm, ID = 15 mm. Opposite port: OD 15 mm, ID = 13.2 mm. Requires heater controller.

DETAILS

A pneumotachometer converts the flow of gases through it into a proportional signal of pressure difference on either side of a central screen. These Linear Pneumotachometers have a special screen design which assures a linear signal over a range of flow rates and have minimum dead space.

- For use with Differential Pressure Transducers
- Available heated or non-heated

The Heated Pneumotachometers require a Heater Controller and are recommended when condensation of water vapor occurs. The heater shell is removable if heating is not required. Two Heater Controllers are available to heat one or two Pneumotachometers. The cable from the Pneumotachometer heater shell connects to the rear panel of the Controller.

Both the Heated and Unheated Pneumotachometers are linear and bidirectional (produce signals for gas flow in either direction). They are available in seven flow ranges.

All Pneumotachometers are supplied with calibration curves. Adapter diameters measuring 7.5, 10.5, 15 or 22 mm are standard medical tapers. All other connectors are straight. When selecting a Pneumotachometer it is important to select the appropriate adapter size and style to match existing equipment.

For Non-Heated Pneumotachometers please see:

SPECIFICATIONS

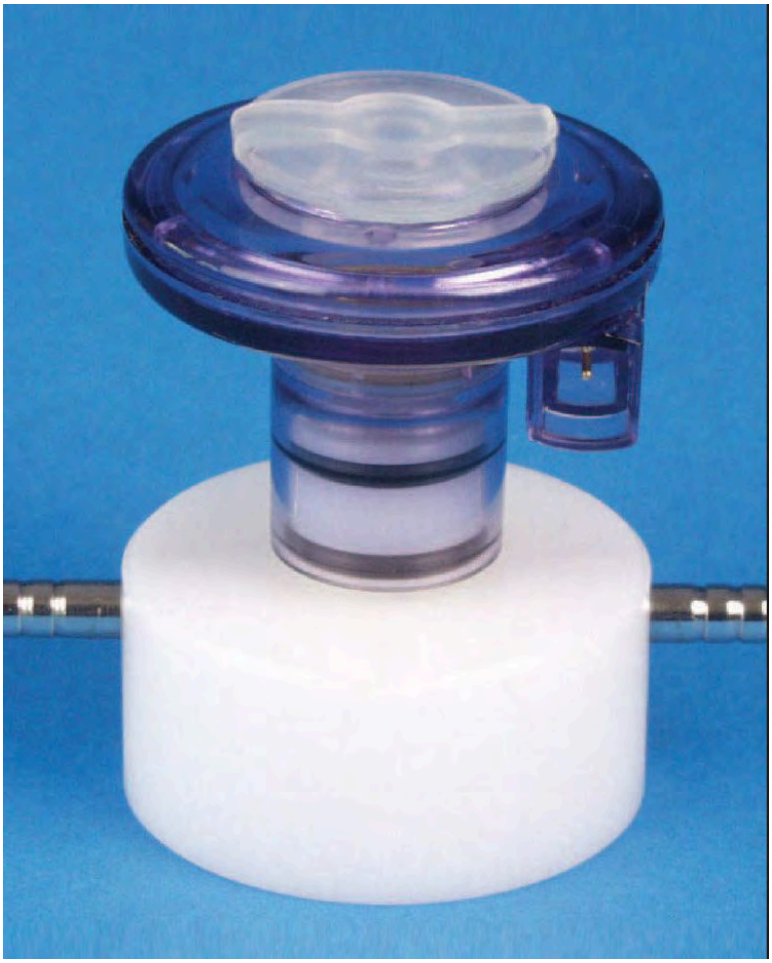
Item	DP input to transducer signal pressure(mm/H2O)	Dead space volume (ml)	Flow range (L/min)	Recommended differential pressure transducer	Species
59-9325	10	0.30	0 to 3	600349 or 600350	Mouse
59-9322	10	0.39	0 to 3	600349 or 600350	Mouse
59-9331	8	0.59	0 to 5	600348 or 600349	Mouse / Rat
59-9328	8	0.71	0 to 5	600348 or 600349	Guinea Pig
59-9337	10	1.06	0 to 10	600349 or 600350	Cat
59-9334	10	1.30	0 to 10	600349 or 600350	Cat
59-9340	7	1.66	0 to 10	600348 or 600349	Rabbit
59-9346	7	2.65	0 to 10	600348 or 600349	Rabbit
59-9349	7	3.28	0 to 10	600348 or 600349	Rabbit
59-9343	7	5.06	0 to 10	600348 or 600349	Rabbit
59-9352	7	6.81	0 to 35	600348 or 600349	Small Dog
59-9355	7	8.74	0 to 35	600348 or 600349	Small Dog
59-9358	7	11.45	0 to 35	600348 or 600349	Small Dog
59-9361	10	18.15	0 to 100	600348 or 600349	Medium Dog
59-9367	16	13.87	0 to 160	600350	Large Dog
59-9364	16	14.18	0 to 160	600350	Large Dog

Ultrasonic Aerosol Nebulizer System

This nebulizer does not alter the formulation’s molecular integrity. The system includes Nebulizer, filler cap, control and timing unit with power supply, and low dead volume adapter.

- High quality aerosol, precise particle size 2.5 to 4 µm
- Low flow rate approximately 0.1 ml/min
- Low residual volume <0.2 ml
- Nebulized substance does not contaminate the inspiration path of the ventilator
- Suitable for rats, guinea pigs or rabbits
- Low dead volume adapter keeps system compliance to 1.5 ml
- System does not exceed 30ËšC after 15 min of use

Item No.	Description
73-3948	Ultrasonic Aeroxol Nebulizer System
73-3732	Ultrasonic Nebulizer with Filler Cap
73-3733	Ultrasonic Nebulizer Control Unit with Power Supply and Timer
73-3734	Low Dead Volume Adapter for Ultrasonic Aerosol Nebulizer



DETAILS

This nebulizer does not alter the formulation's molecular integrity. The system includes Nebulizer, filler cap, control and timing unit with power supply, and low dead volume adapter.

- High quality aerosol, precise particle size 2.5 to 4 µm
- Low flow rate approximately 0.1 ml/min
- Low residual volume <0.2 ml
- Nebulized substance does not contaminate the inspiration path of the ventilator
- Suitable for rats, guinea pigs or rabbits
- Low dead volume adapter keeps system compliance to 1.5 ml
- System does not exceed 30ËšC after 15 min of use

Included Items

Ultrasonic Aerosol Nebulizer System
Includes 73-3732 Ultrasonic Aerosol Nebulizer Unit, 73-3733 Ultrasonic Nebulizer Control Unit with Power Supply and Timing Unit, 73-3734 Low Dead Volume Adapter for Nebulizer

Ultrasonic Nebulizer with Filler Cap
High quality aerosol (precise particle size VMD between 2.5 and 4 µm, low-velocity aerosol, flow rate 0.1ml/min), low residual volume < 0.2ml, does not alter formulation´s molecular integrity, aerosolizes a broad range of formulations in liquid without increasing concentration

Low Dead Volume Adapter
Effective dead volume 1.5ml, connection ports 6mm OD, 5mm ID

Heater Controller for Pneumotachometer

Two Heater Controllers are available to heat one or two Pneumotachometers. The cable from the Pneumotachometer heater shell connects to the rear panel of the Controller.

Item No.	Description
59-9703	Heater Controller for Single Pneumotachometer 230 VAC, 50 Hz

DETAILS

Two Heater Controllers are available to heat one or two Pneumotachometers. The cable from the Pneumotachometer heater shell connects to the rear panel of the Controller.

Differential Low Pressure Transducers DLP2.5

For very low differential pressure measurements, usable for all types of pneumotachometers in respiration studies

Item No.	Description
73-3882	Differential Low Pressure Transducer DLP2.5, range +- 2.5 cmH2O, HSE Connector
73-3999	Differential Low Pressure Transducer DLP2.5, range +- 2.5 cmH2O, ADI ML110, ML112 or News Versions Connector
73-0500	Lab Stand with Triangular Base Plate, 30 cm Rod Length (one block clamp included)

DETAILS

These Differential Pressure Transducers are designed for very low differential pressure measurements. They are especially suitable for airflow measurement in respiration studies using pneumotachs. They are used in combination with plethysmographic boxes, isolated lung systems and all types of pneumotachs.

The Transducer element is temperature compensated over a large temperature range. It has small internal volume and a very low volumetric displacement to achieve good frequency response.

This Transducer can be connected to a standard strain gauge amplifier like a PLUGSYS Module type .

По вопросам продаж и поддержки обращайтесь:

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