



Model 700

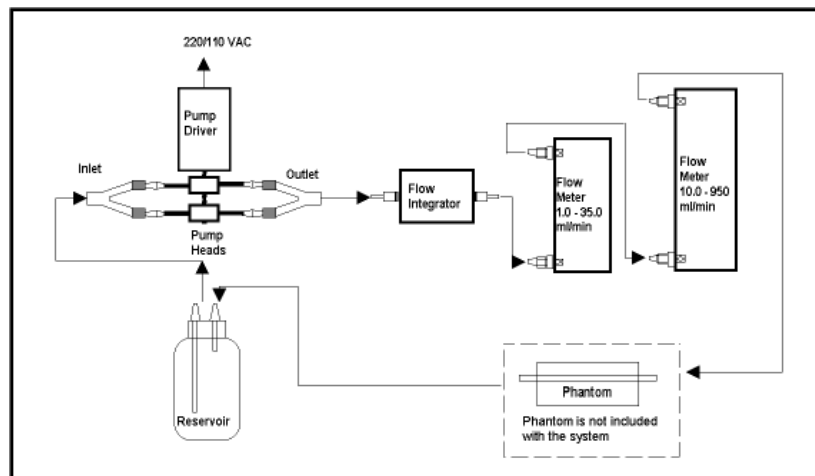
Doppler Flow Controller and Pumping Systems



Product Description

The Model 700 Doppler Flow Controller and Pumping System, when combined with an appropriate phantom provides an easy and accurate means of evaluating an ultrasound Doppler imaging system's ability to detect sensitivity at varying depths, maximum penetration, flow velocity, location and directional discrimination. Model 700 consists of a variable speed positive displacement pump, flow integrator, in-line flowmeters, and a test fluid reservoir. The Model 700 is used with an appropriate phantom such as the ATS Doppler Flow Phantoms Models **523**, **523A**, **524**, **525** and **527** (these products are available as a separate purchase) and Model 707 Doppler Test Fluid. The System provides steady-state flow ranging from 20 to 950 ml/minute. Higher flow rates are available upon request. The speed of the pump is controlled by one knob. Two In-line flowmeters continuously monitor the flow rate of the blood mimicking test fluid through the phantom during the test procedure. The large capacity test fluid reservoir insures the fluid pumped through the phantom will be free of air bubbles even after hours of continuous use. Warranty: Three months.

Set-up Diagram



Specifications

Pump and Controller

RPM Range	6-600
Pump Heads	2
Control/Power Switch	Forward/Off/Reverse
Speed Control Knob	1-Turn Potentiometer
Fluid Contact	Tubing Only
Self-Priming	Up to 2.0 m (6.5-Ft.)
Run Dry	Yes, continuously
Non-siphoning	Yes
Flow Rate	20 - 950 ml/min
Domestic Voltage	90-130 VAC 50/60 Hz
International Voltage	200-260 VAC 50/60 Hz
Pump Head Tubing	Silicon, 3.1 mm (1/8") I.D.
System Tubing	PVC 6.4 mm (1/4") I.D. PVC 10 mm (13/32") I.D.

Flowmeters

Number	2
Flow Range	2.0-974 ml/min.
Accuracy	2% of reading
Repeatability	1%

Fluid Reservoir

Type	Heavy-duty bottle
Cap	Inlet/outlet
Capacity	2 Liter (.5 gallon)

Weight/Dimensions*

Size	69 x 40x 25 cm (27-1/2 x 16 x 10 in)
Weight	14 Kg (30 lb.)

*Includes carrying case without Doppler test fluid

Doppler Test Fluid

Model 707

Type	Blood-Mimicking
Density	1.04 +/- 0.01g/cc
Viscosity	1.66 +/- 0.1 centistokes
Particulate size	30 micron +/- 3 micron mean diameter
Particulate concentration	1.7 +/- 0.1x10 ⁴ particles per cc

WARNING THIS PRODUCT IS NOT DESIGNED NOR INTENDED FOR MEDICAL USE IN TREATMENT OF PATIENTS AND, ACCORDINGLY, HAS NOT RECEIVED FDA APPROVAL AS A DEVICE FOR MEDICAL USES.

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