Research Grade Blood Pressure Transducer

Shown: Research Grade Blood Pressure Transducer

This physiological blood pressure transducer uses a semi-disposable dome of medical grade Silastic® with an integral silicone rubber diaphragm. Blood only contacts the diaphragm. Domes are supplied sterile and can be re-sterilized and reused without affecting calibration. Replacement domes are available as accessories.

This new transducer converts picofarad changes of capacitance into high-level DC voltages using a new electronic circuit (U.S. Patent #4,142,144). This circuit is extremely sensitive and stable, producing up to 2 VDC for direct connection to recorders, oscillographs and computers. The transducer consists of a small transducer element, hard wired to a small amplifier box that is hard wired to a wall-type transformer. The transformer reduces line voltage to 12 VDC and is both UL and CSA listed. For 230 VAC, 50 Hz operation the transformer is VDE listed. The pressure in the dome is transmitted through the silicone membrane to a plastic button whose motion is translated to a voltage. The small 0.3 ml internal volume of the dome and its dual female Luer lock fitting make this transducer ideal for use with small animals.

The transducer amplifier has a 3-digit back lit LCD display that reads directly in mmHg up to 999. Standard banana plugs are located at the rear of the amplifier. Amplifiers can be stacked for multiple use. It is possible on special order to have as many as 4 amplifiers operated by one transformer.

Note that replacement domes listed on this page are for Harvard Apparatus' newer model transducer ONLY. The newer model is distinguished by a black threaded ring at the base of the dome. Our older models have a white ring at the base of the dome. We do not offer replacement domes for these older units any longer. For a small fee, these older units may be sent back to us and retrofitted with the newer style dome/ring/head component.

This research grade blood pressure transducer is for use with:

- Data Acquisition System for the IBM-PC with Windows and Data Acquisition System for the Macintosh
- PONEMAH Physiology Platform P3
- Harvard TR2 Chart Recorder
- Flatbed Recorder
- Modular Universal Oscillograph
- Student Oscillograph
- Other recorders/data acquisition systems

Specifications

Output Voltage	Factory set at 1.0 V/100 mmHg
Linearity	±1.5% of full scale
Compliance	14 µl displacement /100 mmHg, including 305 mm (12 in) of standard 3 mm (1/8 in) ID vinyl tubing
Dome Volume	300 µl
Pressure Range	-50 to +300 mmHg
Overload Pressure	3000 mmHg
Zero Offset Control	-50 to +100 mmHg
Natural Frequency	> 500 Hz, dry
Electrical Isolation	> 1 kV
Carrier Frequency	2 MHz
Output Impedance	2 kΩ
Input Liquid Connectors	Dual transparent female Luer lock
Drift	Negligible after 5 min. warm-up
Sterilization of Transducer	Chemical: Alcide, Cidex, etc.
Dimensions:	
Transducer, H x W x D	43 x 30 x 55 mm (1-1/2 x 1-1/8 x 2-1/4 in)
Handle, OD x L	6.4 x 76.2 mm (1/4 x 3 in)
Amplifier, H x W x D	51 x 95 x 86 mm (2 x 3-3/4 x 3-3/8 in)
Display	LCD, 7.6 mm (0.3 in) high numbers
Weight	908 g (2 lb)

Catalog No.	Product
Descontinuado CGS 8000.72	Research Grade Blood Pressure Transducer, 115 VAC, 60 Hz
Descontinuado CGS 8001.72	Research Grade Blood Pressure Transducer, 230 VAC, 50 Hz
CGS 8002.72	Replacement Dome, pkg. of 10 (older units require retrofit)
CGS 8003.72	Double Banana-to-Double Banana Cable, 4 mm, pkg. of 2
CGS 8004.72	BNC to 4 mm Double Banana Cable, pkg. of 2; For Use with Modular Universal Oscillographs and Student Oscillograph
CGS 8005.72	BNC to Phone Jack Cables, pkg. of 2
CGS 8006.72	Double Banana Plug to Female BNC Adapter, pkg. of 2
CGS 8007.72	Input Connector for Gould Electronic 6600 Series Amplifiers; Mating 14-pin DIN Male Connector; Allows Research Grade Blood Pressure Transducer to be Used with Standard Signal Conditioners; Requires Wiring