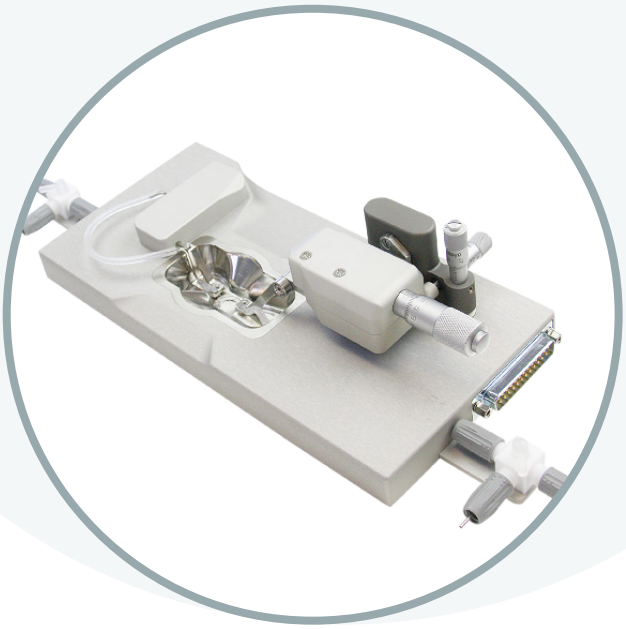
PRESSURE MYOGRAPH SYSTEM - 114P



- **Study the structure and function of small vessels >40 µm under near-physiological pressure**
- **Ergonomic design to facilitate easy and quick mounting of arteries. Simplified precise cannula alignment**
- **Longitudinal force measurement**
- **Combine the system with fluorescence imaging to study intracellular Ca2+ or pH**

The Pressure or Perfusion Myograph System - 114P is a system used to study the structure and function of isolated sections of small vessels (diameter >40 µm) under near physiological conditions. Vessel diameters can be measured in response to pharmacological and physiological stimuli.

A built-in heating system maintains the chamber temperature, eliminating the need for continuous and often costly super fusion. The chamber cover includes ports for super fusion, for rapid draining and filling, for cumulative addition of drugs and for oxygenation. To facilitate cleaning, the chamber is made of acid resistant stainless steel.

Measurements are continuously recorded by a computer with dimension analysis software - MyoVIEW. As an option, the FlowMeter - 162FM can be added to the system to measure flows between 15 - 4000 µl/min. In studies requiring rapid freezing or fixation of the vessel segment, the Pressure Myograph for rapid freezing - 115FP can replace the standard 114P chamber.

Because of the nature of the technique, physiological responses such as the myogenic response and flow- mediated dilation can be examined.

The state of the art Pressure Myograph software MyoVIEW will collect data such as vessel wall thickness, changes in vessel and lumen diameter, intravascular pressure, and a host of other calculated parameters, such as shear stress and vascular resistance, can be collected, setting pressure or perfusion myography apart from standard organ bath techniques.

The Acquisition & Analysis Package
The DMT Inverted Microscope, inverted Zeiss, Nikon or similar microscopes (contact DMT for further specifications) with USB camera, computer and Data Acquisition Software - MyoVIEW.

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CHAMBER:	
Chamber volume (min)	3.1 ml
Chamber(s)	1
Chamber material	Acid resistant stainless steel
Vessel size	>40 µm
Vessel alignment	X, Y, Z
Micrometer resolution	0.01 mm
Mounting type	Cannulas
TEMPERATURE:	
Range	15.0 to 50.0 °C
Resolution	0.1 °C
Stability	±0.2 °C
Heating	Yes
TRANSDUCER FORCE:	
Output reading	mN
Range	±200 mN
Resolution	0.01 mN
Force calibration	Yes
TRANSDUCER PRESSURE:	
Output reading	mmHg
Range	0 - 250 mmHg
Pressure stability	±0.5 mmHg
Resolution	0.1 mmHg
Force calibration	Yes
RESERVOIR:	
Heated	Yes
Capacity	250 ml
Pressure circuit	Closed
Air inlet	1 bar (max)
OUTPUT:	
Data communication	USB 2.0
Analogue output channels	4
Analogue output range	±2.5 V

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