

Pressure Myograph System - 110P XL

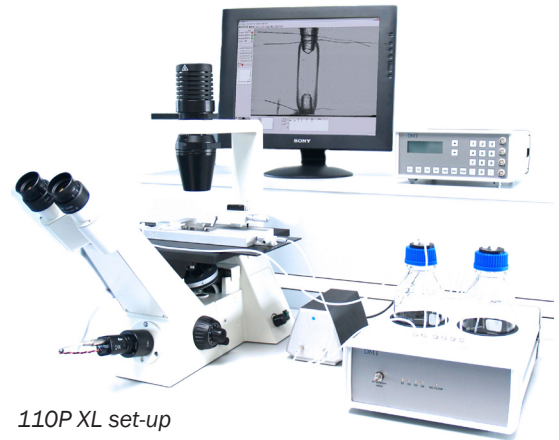
The 110PXL is a custom designed version of the pressure myograph chamber 110P for use with larger arteries and veins. It comes with a set of adapters to accommodate arteries with diameter from 2.5mm up to 6mm. Together with the precise control of the 110P system's user interface and low power objectives, the XL chamber can be used for the study of large artery reactivity and compliance by measuring diameter under physiological pressurized conditions.

The 110PXL has almost the same features as with the 110P but can be used for any large tubular tissue.

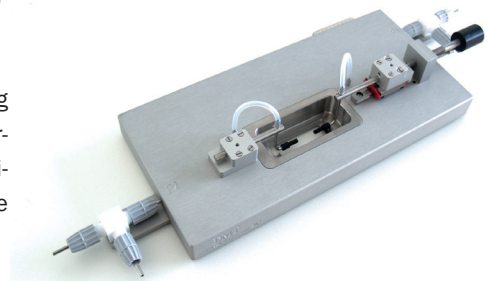
Continuous video measurements of external and internal diameters are done through a window in the base of the myograph. Continuous display of the acquired vessel image can be combined with measurement of vessel dimensions, intravascular pressure, longitudinal force, temperature, luminal flow (optional) and wall calcium concentration (optional). Intravascular pressure or a pressure gradient (user defined to induce flow) over the vessel can be controlled precisely.

A heating system with electronic feedback maintains the chamber temperature eliminating the need for continuous (and costly) superfusion. The chamber cover includes ports for superfusion, for rapid draining and filling, cumulative addition of drugs and for oxygenation. To facilitate cleaning, the chamber is made of stainless steel and is acid-resistant. Measurements are continuously recorded by a computer and can be output to a chart recorder.

As an option the FlowMeter - 161FM can be connected in order to measure flow between 15µl and 1500µl.



110P XL set-up



110P XL Myograph

The Myograph- and Pressure Package

Myograph chamber, interface unit, chamber cover, calibration kit and vacuum valve. Pressure regulator, calibration kit, internal and external tubing, set of polished cannulas.

The Acquisition & Analysis Package

Upright Zeiss or Nikon microscope (contact DMT for further specifications) with CCD camera, frame grabber, PC & acquisition/analysis Myoview software.

Technical Specifications

Vessel size:	>2,5mm - 6mm
Vessel alignment:	Manually / X, Y & Z
Mounting supports:	Plastic tube
Chamber:	Single
Chamber volumes:	Max. 10ml (3ml typical)
Chamber material:	Acid-resistant stainless steel
Chamber cover:	With pipes for suction/gassing/superfusion
Pressure range:	0 - 250mmHg
Pressure resolution:	0.1mmHg
Heating:	Built-in
Temp. range:	Ambient - 50°C
Temp. resolution:	0.1°C
Temp. probe:	Included
Analogue output:	0-1.0V full scale (12 bit)
Digital output:	Serial interface - RS232/RS485
Voltage:	100 to 240 VAC (auto) 50/60Hz
Ambient temperature:	15-30°C
Pressure regulator	
Pressure range:	0 - 250mmHg (requires external pressure source. app.1AT0.)
Pressure calibration:	Manual
Fluid capacity:	250ml
Gas/superfusion ports:	Built-in
Heating:	Built-in
Valves:	Safety and reduction
Voltage:	100 to 240 VAC (auto) 50/60Hz
Optional accessories	
FlowMeter	
- range	
Enable pH meter on the interface:	
- range	pH 0 - 14
- temp. correction	0° C - 50° C
Peristaltic pump	2.5 - 50 rpm (for superfusion of the chamber)

Set-up example

