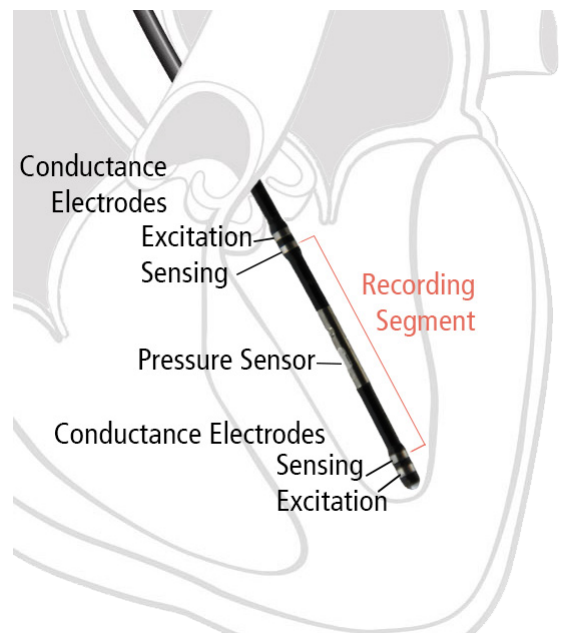


Scisense Pressure-Volume Catheters

Solid-State Pressure-Volume Catheters and Variable Segment Length (VSL) Catheters for use with ADV500 PV System

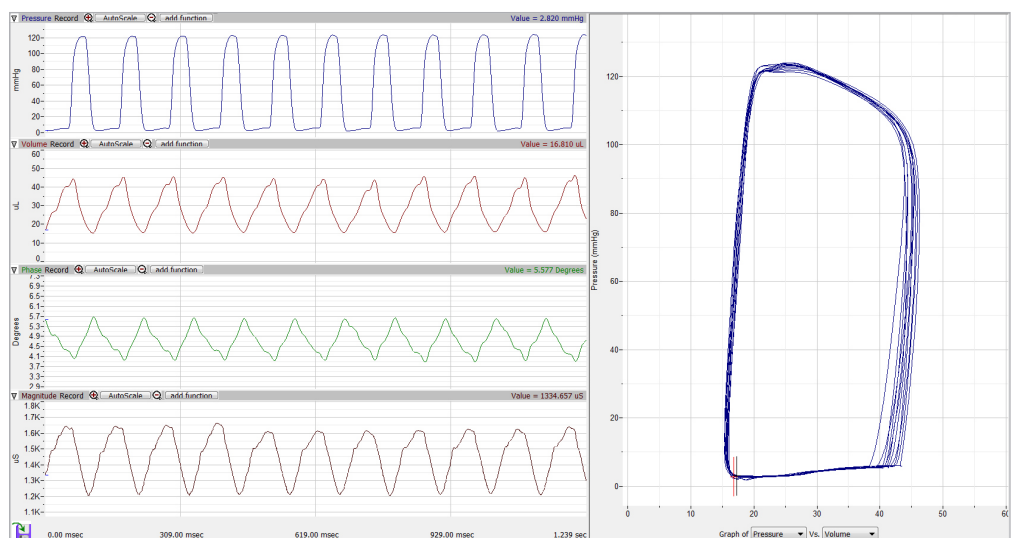
- Excellent response at high frequencies such as rodent heart rates.
- VSL Catheters provide adjustable segment lengths to fit a variety of heart sizes.
- Sizes for all animal models from 1.2F for mice to 7.0F for large animals.
- Smooth, flexible tubing allows easy insertion and navigation.
- Easy to use and maintain without measurement artifacts.
- Customizable options (including electrode spacing) to meet application requirements.



Outer excitation electrodes create the electrical field which is detected by the inner sensing electrodes.



Rat 1.9F PV Catheter (left) and Mouse 1.2F PV Catheter (right).

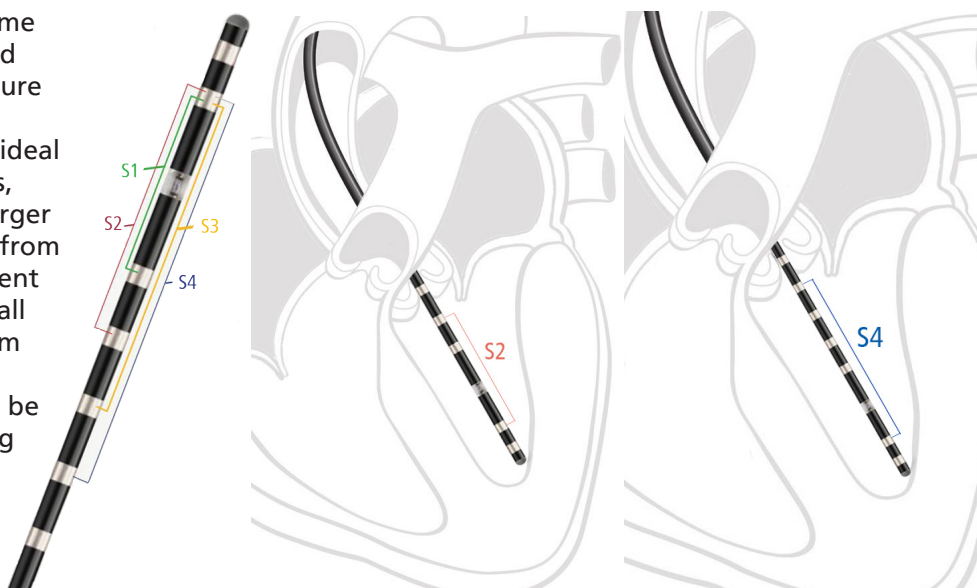


Mouse PV Loops with Pressure, Volume, Phase and Magnitude Traces

Scisense Variable Segment Length (VSL) Catheters

VSL Catheters have 4 volume electrode options designed to offer flexibility and ensure proper fit. Catheters are available in 1.2F and 1.9F, ideal for rodent dilation models, and are standard for all larger animal Catheters ranging from 3.5F - 7.0F. Standard segment spacings are available for all Catheter sizes while custom designs can be made to order. Active segment can be changed at anytime during data collection.

Four different segment lengths (S1-S4) provide versatility and flexibility.



A smaller heart would use the first or second segment (left) while a larger heart would need the third or fourth (right).

PRESSURE-VOLUME CATHETER RECOMMENDATIONS ¹			
ANIMAL	CATHETER	ELECTRODE SPACING	LONG AXIS LENGTH ²
Mouse	1.2F	3.5 mm	5.25 - 5.57 mm
	1.2F	4.0 mm	5.57 - 6.25 mm
	1.2F	4.5 mm	6.25 - 6.75 mm
Rat	1.9F	6 mm	7.75 - 8.25 mm
	1.9F	8 mm	9.75 - 10.75 mm
	1.9F VSL	6, 8, 10 & 12 mm	10.75 - 15.25 mm
	1.9F VSL	8, 10, 12 & 14 mm	12.75 - 17.25 mm
	1.9F VSL	8, 11, 14 & 17 mm	14.75 - 21.25 mm
Rabbit	3.5F VSL	5, 8, 11 & 14 mm	13.0 - 22.0 mm
	3.5F VSL	8, 11, 14 & 17 mm	16.0 - 25.0 mm
	3.5F VSL	11, 14, 17 & 20 mm	19.0 - 28.0 mm
Large Animals ³ (Dog, Pig, Sheep)	5.0F VSL Straight	20, 30, 40 & 50 mm	30.0 - 70.0 mm
	5.0F VSL Pigtail	20, 30, 40 & 50 mm	47.0 - 77.0 mm
	7.0F VSL Straight ⁴	30, 40, 50 & 60 mm	50.0 - 80.0 mm
	7.0F VSL Pigtail ⁴	30, 40, 50 & 60 mm	57.0 - 87.0 mm

- Catheter size is based on animal weight and heart size.
- Long axis length refers to the internal length of the ventricle (valve to apex).
- All large animal Catheters (5.0F & 7.0F) are available with a second pressure sensor for simultaneous aortic pressure measurement. All dual pressure Catheters must be specified for either carotid (aortic) or apical approach.
- All 7.0F Catheters are available with or without a lumen, there is no change to electrode spacing or long axis length.



Pigtail tip large animal VSL Catheter