

# Sonosite PX

Volume Flow Calculation  
Educational Quick Guide

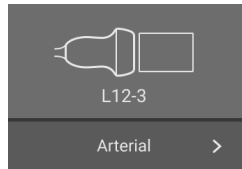
Any patient. Anywhere. Anytime.

Information contained in this document is meant for quick reference and a supplement to formal ultrasound experience, education and training.



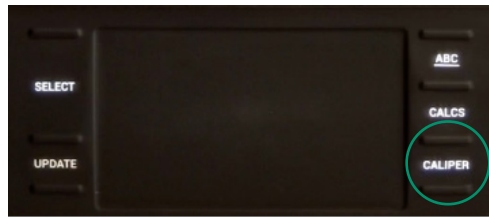
# How to Perform a Volume Flow Calculation

The **volume flow measurement** requires you to perform a basic measurement in 2D and a basic measurement on a Doppler trace. See 'Technique Tips' on Page 3 of this guide while following step-by-step instructions below.

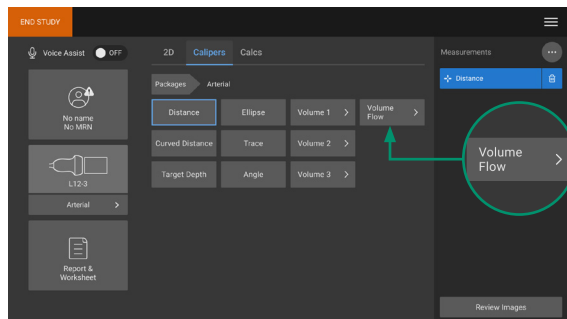


Before beginning the calculation, select a **linear transducer** and **Arterial** exam type.

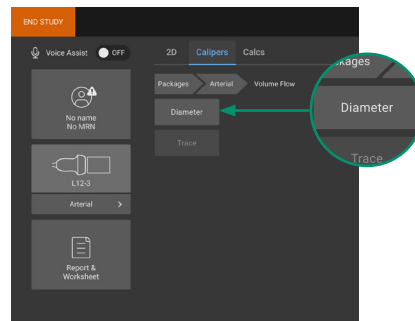
1. On a frozen 2D image or Doppler trace, press the **CALIPER/** button.



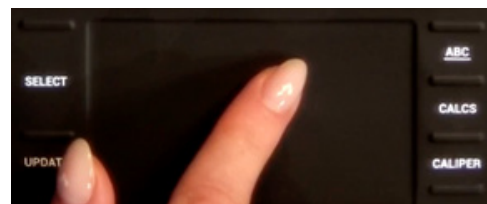
2. Tap **Volume Flow** on the caliper page. **Step 3** and **Step 4** can be done in either order.



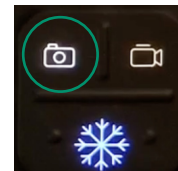
3. Measure blood vessel diameter:
  - a. On a frozen 2D image, tap **Diameter** from the Volume Flow page.



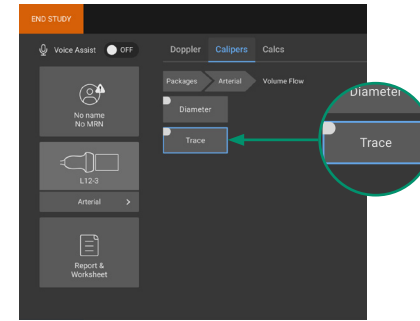
- b. Use the touchpad to position the first caliper.
- c. Press **SELECT/** and use the touchpad to position the second caliper.



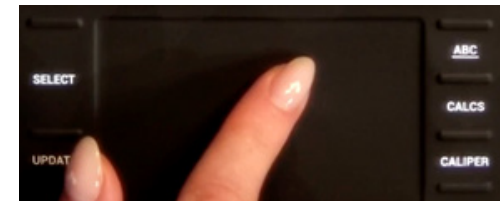
- d. Press **Save Image** to save an image with the measurement.



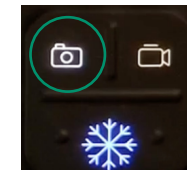
4. Calculate the blood velocity:
  - a. On a frozen Doppler trace, tap **Trace** from the Volume Flow page.



- b. Press **SELECT/** and use the touchpad to position each vertical caliper.



- c. Press **Save Image** to save an image with the measurement.



- d. Volume flow calculation is now complete and appears in the upper left corner of the clinical display.

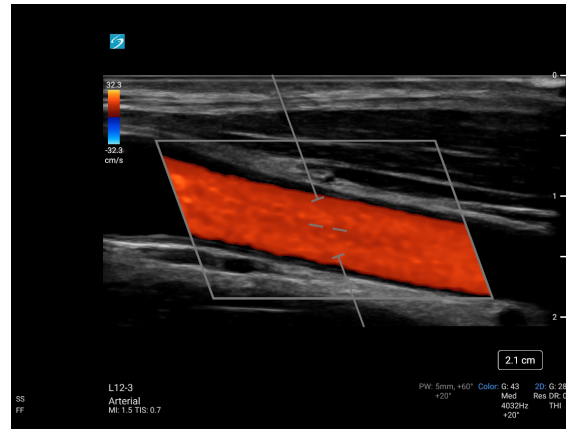
5. View the complete calculation by selecting **Report & Worksheets** from the home screen.

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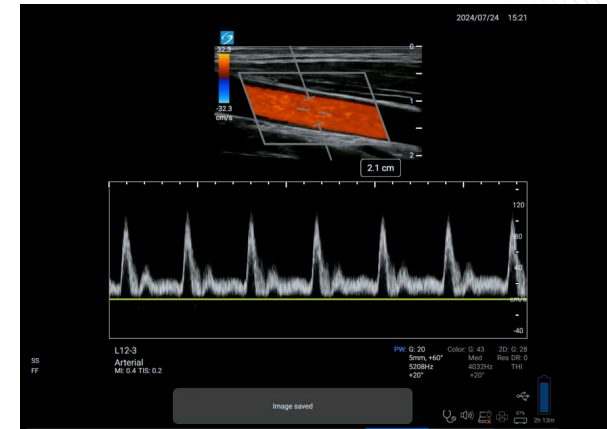
## Technique Tips



In long axis, measure and save the diameter of the vessel from inner-to-inner wall.



Position the Doppler Sample gate (at the diameter measurement) to enclose the vessel but not to include vessel walls. Adjust the color scale to reduce aliasing artifact.



For Volume Flow accuracy, ensure the PWD angle is  $\leq 60^\circ$  and the Angle Correction (AC) bar is in the center of the vessel, parallel to the vessel walls. Trace one single heartbeat on the PWD trace.

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