Doppler 403™ & Mini-Doppler 1430™ Flow Phantoms

Ensure years of consistent QC measurements and high quality diagnostic imaging.

- Collaboratively designed to better serve your needs
- Go from storage to use in less than 10 seconds
- Precision pulsatile flow mode allows you to reliably test system velocities
- HE (High Equivalency) Gel™ is patented and proven
  - Helps ensure all transducers and system settings are fully tested across the entire frequency range from 2 to 18 MHz
  - Response of attenuation-to-frequencies over 8 MHz supports accurate axial resolution and penetration depth representative of human tissue¹,²

Gammex collaborated with clinical and academic thought leaders to develop our patented HE (High Equivalency) Gel™ and the first portable Doppler Flow Phantoms in the world.

The Doppler 403 and Mini-Doppler 1430 Flow Phantoms are second generation devices based on the proven, original designs, and developed with ongoing customer input.

Scanning the angled vessel displays the color flow sensitivity depth.

From routine QA to education and complex research

**Doppler 403 Flow Phantom**
- The reference standard in Doppler Ultrasound QA
- Laminar and parabolic flows are available (velocity dependent)
- Includes the Sono Transducer Holder
- New blood mimicking fluid formulation
- No need to ever purchase or store blood mimicking fluid
- Increased viscosity and decreased Reynolds number

**Mini-Doppler 1430 Flow Phantom**
- Ideal for cardiology and musculoskeletal (MSK) applications
- Portable and lightweight (<10 lbs / 4.6 kg)

**Common Highlights**
- Patented multi-frequency HE Gel™
- Constant and pulsatile flow modes
- Rugged, self-contained, battery-operated

**Sono Transducer Holder**
The Sono Transducer Holder Accessory fits any Gammex phantom including the Sono Family and Doppler Flow phantoms.
- Place a transducer in a precise location in the holder for reproducible tests over time
- Support the transducer cable with the cable hook

*“The tissue-like properties in Gammex ultrasound phantoms make them ideal for testing the performance of scanners.”*

James A. Zagzebski, Ph.D., FAAPM
Professor Emeritus, Retired Chair
Department of Medical Physics,
Wisconsin Institutes for Medical Research

Volume flow settings on the phantom support reliable system velocity testing.
Precision pulsatile flow mode supports reliable system velocity testing

The Doppler 403 Flow Phantom is used to test the Doppler color flow velocity measurement. Cross section image showing the highest velocity at the center of the tubing. This represents a measurement of laminar, parabolic flow.

Rejuvenation Will Protect Your Investment

Our Doppler Flow and Sono (B-Mode) phantoms are the only ultrasound phantoms on the market that can be rejuvenated and re-validated. Implementing a rejuvenation program can extend the life of the phantom to 10+ years.

Specifications

| HE Gel™: Gammex’s multi-frequency tissue mimicking material: | ✔ | ✔ |
| Patented Composite Film Scanning Surface: | ✔ | ✔ |
| Vessels (2) | 5 mm inner diameter; 1 horizontal at 2 cm depth, 1 diagonal at 40° from 2 to 16 cm deep | 4 mm inner diameter; 1 horizontal at 2 cm depth, 1 diagonal at 35° from 2 to 9 cm deep |
| Flow rates | Customizable, constant and pulsatile | Customizable, constant and pulsatile |
| Blood Mimicking Fluid | Speed of Sound 1550 +/- 10 m/s | Speed of Sound 1550 +/- 10 m/s |
| Targets | Strings, cysts, grey scale, resolution groups | Strings, cysts, grey scale, resolution groups |
| Dimensions (Case) | 28 H x 30.5 W x 22 cm D (11 x 12 x 8.65 in.) | 20 H x 23 W x 15.2 cm D (7.87 x 9.06 x 5.94 in.) |
| Weight | 8.34 kg (18 lbs. 4 oz.) | 4.6 kg (9 lbs. 15 oz.) |