Doppler Flow Directional Discrimination Phantom

Model ATS 527

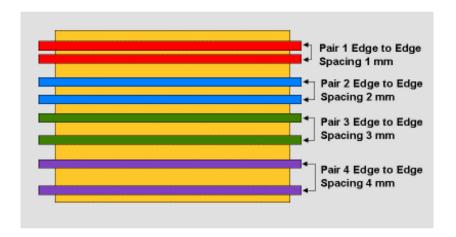


The Model 527 rubber-based tissue mimicking phantom is designed to test the ability of color Doppler flow imaging systems to discriminate the direction of flow in small, closely spaced vessels at varying depths.

Our phantom contains four pairs of 2 mm flow-channels. The edge-to-edge spacing between each pair of flow-channels progressively increases from 1 mm to 4 mm. If greater distances are desired, a combination of two flow-channel pairs can be used. Two fixed-angle scan surfaces of 18° and 56° maintain the sound beam and the Doppler Test Fluid flowing through the phantom. These angles permit continuous scanning at depths ranging from 3 to 17 cm. All ATS urethane phantoms are guaranteed for the useful life of the phantom, defined as 10 years.

Key Tests with Model ATS 527

- Directional Discrimination
- Flow Velocity
- Flow Location
- Sensitivity at varying depths
- Maximum Penetration



SPECIFICATIONS

DIMENSIONS	32 x 14 x 8.5 cm (13" x 6" x 3")
PHANTOM WEIGHT	14 lbs. (6.4 kg)
HOUSING MATERIALS	PVC
SCAN SURFACES	2
MAXIMUM FLUID PRESSURE	8 psi
SCAN SURFACE DIMENSIONS	25.5 x 11.5 cm @18° 9.5 x 11.5 cm @56°
CONNECTORS	Luer-lock
TISSUE-MIMICKING MATERIAL	Urethane Rubber

MODEL ATS 527 INCLUDES

QTY	COMPONENT DESCRIPTION
1	Doppler Flow Directional Discrimination Phantom
-	10-Year Warranty
-	User Guide

URETHANE PROPERTIES

Freezing point: < -40°C

Melting point: Above 100° C

Speed of Sound: 1450 m/s at 23°

Attenuation Coefficient: 0.5 dB/cm/MHz (measured at 3.5 MHz)

FLOW CHANNELS

Type: Circular
Number of Channels: 8
Number of Pairs: 4
Diameters: 2 mm

Diameters: 2 mm
Scan Surface Depths: 3 - 11 cm @18°
Scan Surface Depths: 4 - 17 cm @56°