SUN NUCLEAR
A MIRION MEDICAL COMPANY

CIRS Model ATS523A

Cardiac Doppler Flow Phantom

Perform image quality tests with CIRS Model 769, Doppler Flow Pump:

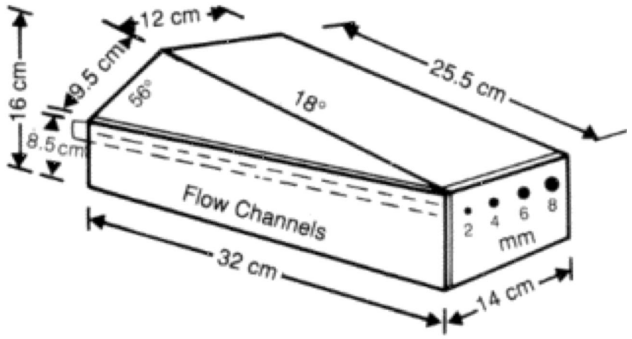
- Sensitivity
- Flow Velocity
- Flow Location
- Maximum Penetration
- Uniformity

Designed to simulate cardiac & abdominal vessels

The Model ATS 523A, Cardiac Doppler Flow Phantom, is a rubber-based tissue mimicking phantom designed for simulating deep vasculature of cardiac and abdominal vessels.The phantom contains four flow channels with constant diameter channels of 2, 4, 6 and 8 mm.

Two fixed-angled scan surfaces maintain a constant angle between the sound beam and the Doppler Fluid flowing through the phantom. The phantoms scan surfaces are angled at 18° and 56°, permitting continuous scanning at depths ranging from 3 to 17 cm.

Phantom Diagram



Phantom In Use

Specifications

Dimensions	32 cm x 14 x 8.5 cm (13” x 6” x 3”)
Weight	15.2 lbs (6.9 kg)
Housing Material	PVC
Scan Surface Dimensions	25.5x12.0 cm @ 18° & 9.5x12.0 cm @ 56
Maximum Fluid Pressure	15 psi (1.05 Kg/cm)
Connectors*	Quick Disconnect
Tissue-Mimicking Materal	Urethane Rubber
Freezing point	< -40° C
Melting point	Above 100° C
Speed of Sound	1450 m/s ±1.0% at 23°
Attenuation	0.5 dB/cm/MHz ± 10%
Flow Channels	Circular (4 total), Diameters: 2, 4, 6, & 8 mm Scan Surface Depths: 3.0-11.0 cm @ 18° & 4.0-17.0 cm @ 56°

**Mating quick disconnect fittings are provided with the 769 Doppler Flow Pump. If using the phantom with a different pump system, the mating connectors may be ordered separately.*

Items Included with CIRS Model ATS523A

Quanity	Description
1	Cardiac Doppler Flow Phantom
1	User Guide
-	Certificate of Compliance

Must purchase CIRS Model 769, Doppler Flow Pump, separately.