

Elasticity QA Phantoms

Models 049 & 049A



ZERDINE® Inside
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DEVELOPED TO PROVIDE USERS WITH ACOUSTIC TARGETS OF DISCRETE KNOWN STIFFNESS

The Model 049 and 049A Elasticity QA Phantoms are tools developed for sonoelastography systems. These are the only phantoms commercially available for sonoelastography quality assurance. The phantoms contain targets of known stiffness relative to the background material and range in stiffness, diameter and depth.

The Elasticity QA Phantoms are suitable for determining the dynamic range of the system, checking system performance over time, demonstrating system features and training personnel and customers on this rapidly growing field. The phantoms can also be used by researchers developing and verifying new techniques.

The Model 049 is a basic QA phantom as it contains two sizes of spheres positioned at two different depths. At each depth there are two spheres that are softer than the background and two that are harder than the background.

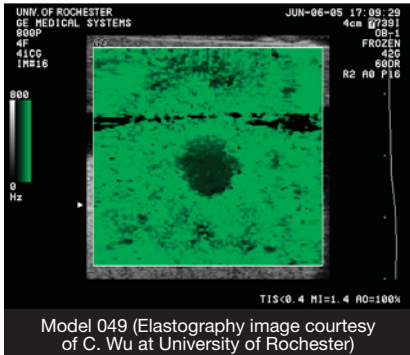
For a broader range of target sizes, the Model 049A phantom has stepped mass targets instead of spheres. Each stepped

mass consists of six diameters so that you can evaluate the ability to visualize targets that are located at the same depth and have the same relative stiffness but vary in diameter. The Model 049A is housed in the same size container as the original Model 049.

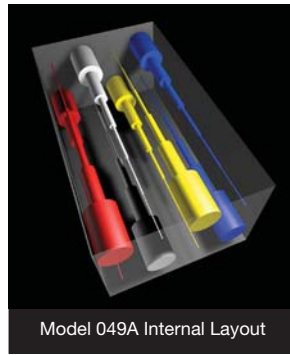
Both phantoms come standard with a four-year warranty and a carry case.

Features

- Four types of lesions with discrete elastic moduli
- Targets appear almost isoechoic on standard B-mode imaging
- Phantom includes carry case
- Four-Year Warranty



Model 049 (Elastography image courtesy of C. Wu at University of Rochester)



Model 049A Internal Layout

SPECIFICATIONS

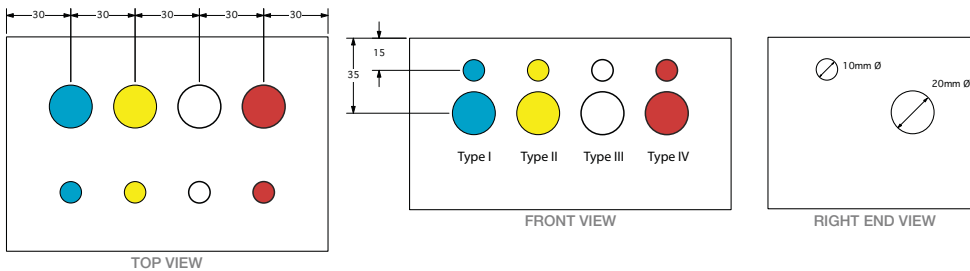
DIMENSIONS:	8.5 cm x 6 cm x 4 cm (3.3" x 2.4" x 1.6")
PHANTOM WEIGHT:	Model 049 - 6 lb Model 049A - 7 lb
MATERIALS:	<p>Background Material: Zerdine® Speed of Sound: 1540 m/s Attenuation: 0.50 dB/cm-MHz</p> <p>Lesions Material: Zerdine Attenuation: 0.50 dB/cm-MHz</p> <p>Elasticity¹ Background: 25 kPa Lesion Type I: 8 kPa Lesion Type II: 14 kPa Lesion Type III: 45 kPa Lesion Type IV: 80 kPa</p>

¹ Elasticity values will vary depending on the measurement system used. Batch sample measurements, made using a quasi-static load frame, are provided with a certification sheet on all phantoms.

MODEL 049 & 049A INCLUDE

QTY	COMPONENT DESCRIPTION
1	Elasticity QA Phantom (Spherical or Stepped Cylinder)
1	User Guide
-	48 Month Warranty

MODEL 049 ELASTICITY QA PHANTOM - SPHERICAL



MODEL 049A ELASTICITY QA PHANTOM - STEPPED CYLINDER

