## Elasticity QA Phantom

## Models 049 & 049A



# Developed to Provide Users with Acoustic Targets of Discrete Known Stiffness

- Four types of lesions with discrete elastic moduli (Contact CIRS for custom moduli)
- Compatible with both shear wave and compression elastography
- Customized versions available for magnetic resonance elastography
- Ensure over ten years of reliable use through reinspection and repair services

#### Includes best in industry four-year warranty

The Model 049 and 049A Elasticity QA Phantoms are tools developed for both shear wave and compression elastography. 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 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

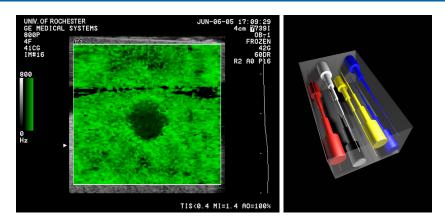
vary in diameter. The Model 049A is housed in the same size container as the original Model 049.

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

### Models 049 & 049A are Suitable for:

- Determining dynamic range
- Checking system performance over time
- Training and demonstrating of system features
- Research and development

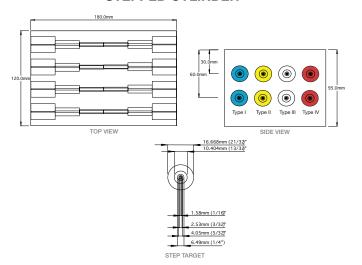




## **SPECIFICATIONS**

DIMENSIONS	20 cm x 15 cm x 10 cm (8.5 in x 6 in x 4 in)	
PHANTOM WEIGHT	6.5 lbs. (3 kg)	
HOUSING MATERIAL	ABS Plastic	
MEMBRANE	Saran laminate	
SCANABLE SURFACE AREA	17 x 10 cm	
TISSUE MIMICKING MATERIAL	Zerdine® solid elasti Freezing point: Melting point: Speed of Sound: Other:	c hydrogel  0° C  Above 100° C  1540-1570 m/s  Compatible with harmonic imaging
YOUNG'S MODULUS <sup>1,2</sup>	Background: Lesion Type I: Lesion Type II: Lesion Type III: Lesion Type IV:	25 kPa 8 kPa 14 kPa 45 kPa 80 kPa

#### **MODEL 049A ELASTICITY QA PHANTOM -**STEPPED CYLINDER

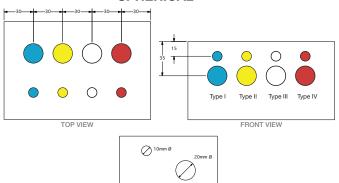


### **MODELS 049 AND 049A INCLUDE**

QTY	COMPONENT DESCRIPTION	
1	Elasticity QA Phantom (Spherical or Stepped Cylinder)	
1	Carry Case	
-	48 Month Warranty	
-	User Guide	
-	Certificate of Compliance	

#### 1. Contact CIRS for custom elasticities. Stiffness can be changed from 3 kPa to 150 kPa.

#### **MODEL 049 ELASTICITY QA PHANTOM -SPHERICAL**



RIGHT END VIEW



<sup>&</sup>lt;sup>2</sup> 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.