

# Elasticity QA Phantom

## Models 049 & 049A



**ZERDINE® Inside**  
A registered trademark of CIRS

### 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.

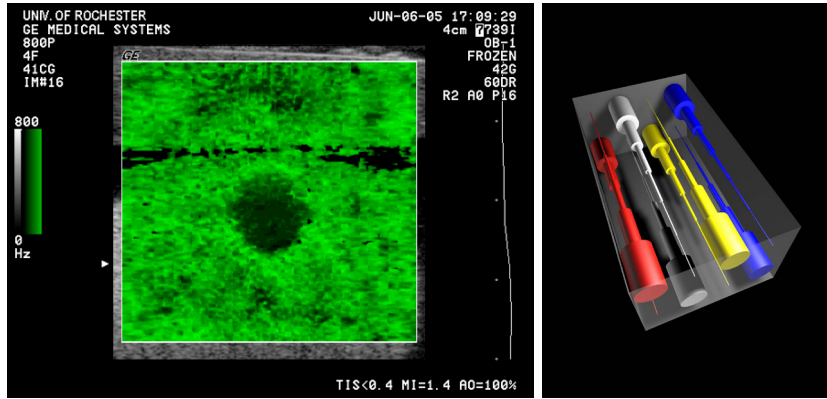
Both phantoms come standard with a four-year warranty and carry case.

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

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

# CIRS

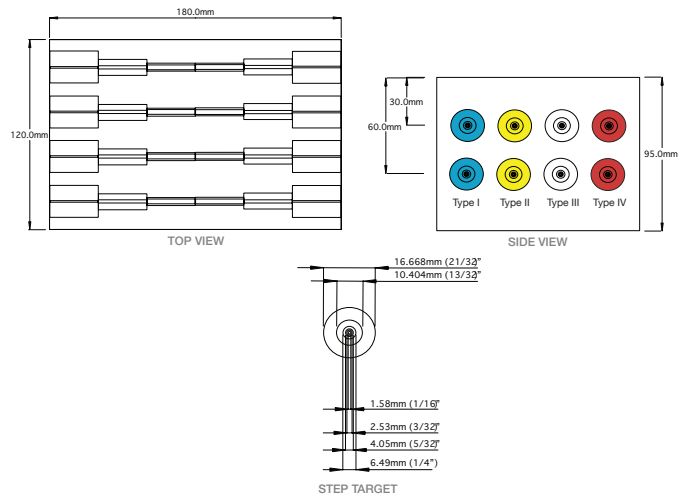
900 Asbury Ave • Norfolk, Virginia 23513 • USA • Tel: 757-855-2765 • [WWW.CIRSINC.COM](http://WWW.CIRSINC.COM)



SPECIFICATIONS

<b>DIMENSIONS</b>	20 cm x 15 cm x 10 cm (8.5 in x 6 in x 4 in)
<b>PHANTOM WEIGHT</b>	6.5 lbs. (3 kg)
<b>HOUSING MATERIAL</b>	ABS Plastic
<b>MEMBRANE</b>	Saran laminate
<b>SCANABLE SURFACE AREA</b>	17 x 10 cm
<b>TISSUE MIMICKING MATERIAL</b>	Zerdine® solid elastic hydrogel Freezing point: 0° C Melting point: Above 100° C Speed of Sound: 1540-1570 m/s Other: Compatible with harmonic imaging
<b>YOUNG'S MODULUS<sup>1,2</sup></b>	Background: 18 kPa Lesion Type I: 6 kPa Lesion Type II: 9 kPa Lesion Type III: 36 kPa Lesion Type IV: 70 kPa

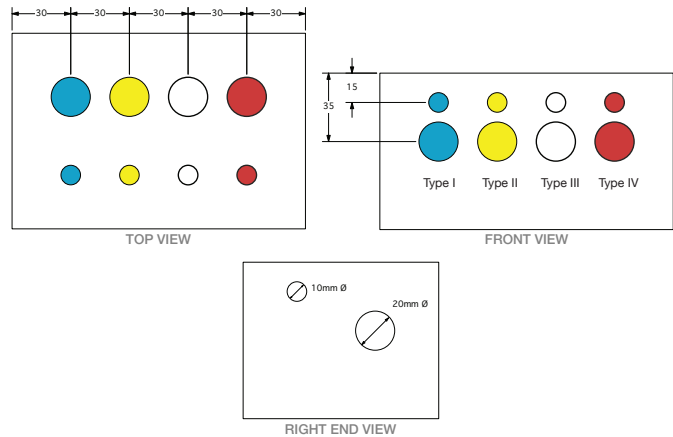
MODEL 049A ELASTICITY QA PHANTOM - STEPPED CYLINDER



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

MODEL 049 ELASTICITY QA PHANTOM - SPHERICAL



<sup>1</sup> Contact CIRS for custom elasticities. Stiffness can be changed from 3 kPa to 150 kPa.

<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.

