

# MicroMouse™ & Water-Filled Mouse Phantoms

Models 090 & 091



## *PROVIDES STANDARD OF REFERENCE FOR MICRO-CT SCANNERS*

Micro-CT systems promise to deliver precise and accurate high-resolution measurements. The field of view of these systems requires appropriately scaled QA phantoms. The CIRS Model 090 MicroMouse™ and Model 091 Water-Filled Mouse Phantoms provide tools for quantifying calcium and bone density with respect to X-ray attenuation and absorption properties. Hydroxyapatite (HA), the principal constituent of teeth and bones within mammals, is the most appropriate reference for mineral density evaluations. CIRS blends HA in a soft-tissue equivalent, polymer background to provide references which can range in HA loading between 0 mg/cc and 750 mg/cc. Hydroxyapatite grain size and homogeneity of the rods are optimized for use in Micro-CT.

Both the MicroMouse Phantom and the Water-Filled Mouse phantom contain 11 rods of varying mineral loading and dimension. They can be used to evaluate Micro-CT scanners as you would standard whole body scanners. The targets are suitable for determining contrast detectability and estimating low-contrast resolution.

In the MicroMouse Phantom the rods are embedded in soft tissue equivalent material that is of the size and shape of a small rodent.

The Water-Filled Mouse Phantom contains the 11 rods in a water-tight, polycarbonate housing which is very durable and resistant to many chemicals. The Model 091 housing can easily be filled with a variety of liquids to vary the contrast between the rods and the surrounding liquid.

### *Features*

- 25 mg/cc - 750 mg/cc HA targets
- Lung, Muscle and Adipose
- Optimal for Micro-CT
- Solid or Liquid Filled

This product is available through:

**JRT** Associates

800-221-0111

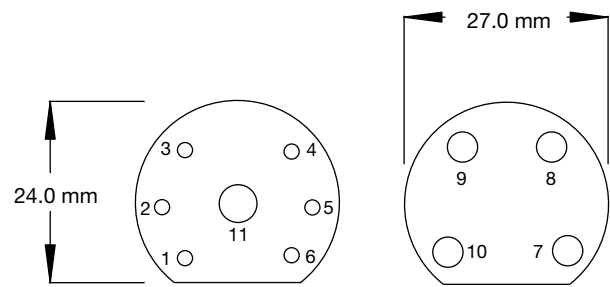
**CIRS**

Tissue Simulation & Phantom Technology

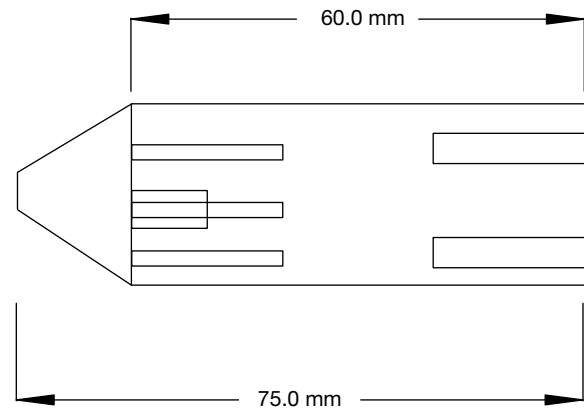
## SPECIFICATIONS

Model 090

<b>OVERALL DIMENSIONS:</b>	20 mm Ø x 60 mm
<b>ROD DIMENSIONS:</b>	
<b>RODS 1- 6</b>	2 mm Ø x 20 mm
<b>RODS 7-10</b>	4 mm Ø x 20 mm
<b>ROD 11</b>	5 mm Ø x 10 mm
<b>MATERIAL:</b>	Tissue Equivalent Epoxy



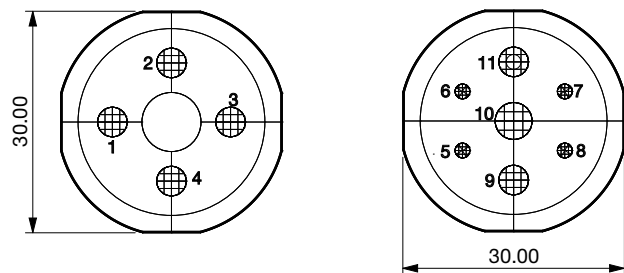
COMPONENT:	COMPOSITION:
Body	Muscle
Rod 1	0 mg/cc
Rod 2	50 mg/cc
Rod 3	100 mg/cc
Rod 4	250 mg/cc
Rod 5	500 mg/cc
Rod 6	750 mg/cc
Rod 7	0 mg/cc
Rod 8	50 mg/cc
Rod 9	250 mg/cc
Rod 10	750 mg/cc
Rod 11	Lung (Low density, inhale)



## SPECIFICATIONS

Model 091

<b>OVERALL DIMENSIONS:</b>	30 mm Ø x 82 mm
<b>ROD DIMENSIONS:</b>	
<b>RODS 1-4, 9, 11</b>	4 mm Ø x 30 mm
<b>RODS 5-8</b>	2 mm Ø x 30 mm
<b>ROD 10</b>	5 mm Ø x 30 mm
<b>MATERIAL:</b>	
<b>HOUSING:</b>	Polycarbonate
<b>RODS:</b>	Tissue Equivalent Epoxy



COMPONENT:	COMPOSITION:
Body	Muscle
Rod 1 & 5	0 mg/cc
Rod 2 & 6	50 mg/cc
Rod 3 & 7	250 mg/cc
Rod 4 & 8	750 mg/cc
Rod 9	Adipose
Rod 10	Lung
Rod 11	Muscle

