

PET CT Phantom™

Model PET/CT/P

Main Features

- The PET-CT Phantom™ includes internal structures (three rods and five spheres) which when imaged with both modalities can demonstrate how accurately the two image sets are aligned.
- In addition, a single sample of radioactive water is attenuated by water, bone, and CT contrast material (as well as air only) to determine how accurately the CT-based PET attenuation correction works.
- Spheres are fillable from outside the closed cylinder

Main Applications

- Acceptance testing of PET/CT and SPECT/CT systems
- Routine quality evaluation of PET/CT and SPECT/CT Systems
- Evaluation of new image fusion software
- Evaluation of new attenuation correction algorithms
- Aluminum tubes are for registration
- The outer 2" OD micro cylinder is for comparing attenuation region to non-attenuation region
- The 6" ring is for contrast solution
- Research

Specifications

Main Cylinder

All clear material: PMMA
Exterior length: ~ 217 mm
Interior length: ~ 193 mm
Interior anteroposterior: ~ 221 mm
Interior lateral: ~ 290 mm
Wall thickness: ~ 3.2 mm
Volume of empty cylinder: ~ 9.7 l
Fillable Spheres (5) inner diameter: 10 mm, 13 mm, 17 mm, 22 mm, and 28 mm
Distance from sphere center to mounting surface: ~ 70 mm

Main Fillable Insert Specifications

All clear material: PMMA
Fillable Insert outside height: ~ 203 mm
Fillable Insert inside height: ~ 185 mm
Fillable Insert outside diameter: ~ 51 mm
Volume of Fillable Insert: ~0.26 liters

Cylinder Specifications

Cylinder outside diameter: ~ 51 mm
Cylinder inside diameter: ~ 45 mm
Cylinder inside height: ~ 82 mm
Cylinder outside height: ~ 115 mm
Volume of cylinder: ~ 408 mL

Three Aluminum Tubes Specifications

One 105 mm-long: ~ 1.7 mL
Two 200 mm (each): ~ 2.5 mL
ID of aluminum tubes: 3.8 mm

Stepped Bone Ring Specifications

Call for detailed Bone Ring dimensions
Pre-filled with liquid bone composition, not to be opened
The volumes for the bone ring are:
Outer volume: ~ 256 mL
Inner volume: ~ 110 mL

Contrast Ring, Fillable Specifications

Outside height: ~ 27.15 mm
Outside diameter: ~ 149.86 mm
Outer volume: ~ 890 mL
Inner volume: ~ 562 mL

Shipping

Carton: 14" x 14" x 14"
Weight: 12lbs.



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NEMA IEC Body / CT Lid
with Hollow Spheres