

Multi-Purpose Multi-Tissue Ultrasound Phantom



The new standard for ultrasound quality assurance

The CIRS Model 040GSE Multi-Purpose Multi-Tissue Ultrasound Phantom not only contains all the features of the original CIRS Model 040, but also includes gray scale targets, anechoic stepped masses and elasticity targets. The phantom is designed to meet the ultrasound QA challenges of today and tomorrow.

The unique dual attenuation of the background gel allows for evaluation of transducers that range from 2 MHz - 15 MHz. A removable water well and endocavity cover extends the use of the phantom by allowing evaluation of all transducer configurations: linear, curvilinear and intercavity.

CIRS ultrasound QA phantoms all come standard with a robust housing, rugged carry case, 4-year warranty, user guide and data sheet.

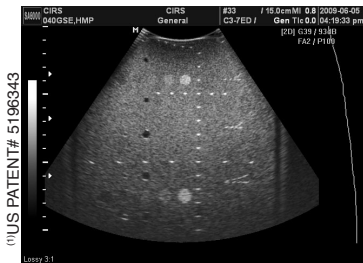


Model 040GSE

Exceeds ACR Accreditation Requirements

Performance Measurements

- Dead Zone
- Horizontal Distance
- Vertical Distance
- Depth of Penetration
- Image Uniformity
- Axial Resolution
- Lateral Resolution
- Anechoic Mass Resolution
- Gray Scale Contrast Resolution
- Elasticity Image Evaluation



Overall Ultrasound image of Model 040GSE

This product is available through:

JRT Associates 800-221-0111

Model 040GSE Specifications:

MATERIAL: Zerdine^{®(1)}, solid elastic water-based polymer
 Freezing point: 0° C
 Melting point: Above 100° C

ATTENUATION COEFFICIENT:
 0.5 dB/cm-MHz
 0.7 dB/cm-MHz

SPEED OF SOUND:
 1540 m/s ± 10 m/s

SCANNING WELL:
 1 cm deep

SCANNING MEMBRANE:
 Saran-based laminate

NEAR FIELD GROUP:
 Material: Nylon monofilament
 Number of targets: 5
 Depth range: 1 to 5 mm
 Distance between Targets: 1 mm

HORIZONTAL AND VERTICAL GROUPS:
 Material: Nylon monofilament
 Wire diameter: 100 microns

VERTICAL GROUP:
 Number of targets: 15
 Wire diameter: 100 microns
 Depth range: 1 to 16 cm
 Spacing: 10 mm

HORIZONTAL GROUP
 Number of groups: 2
 Wire diameter: 100 microns
 Depth range: 4 and 9 cm
 Number of targets: 4 & 7 respectively
 Spacing: 10 & 20 mm respectively

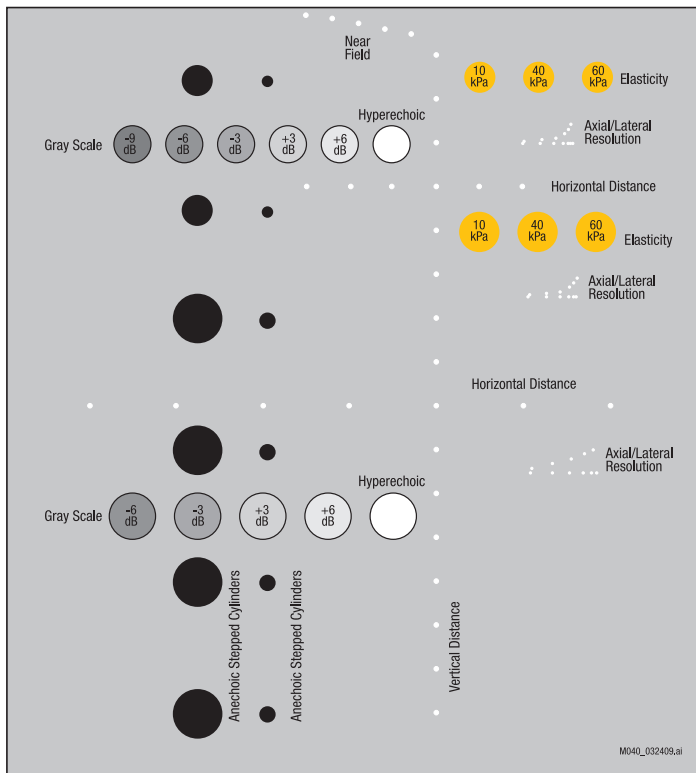
COMBINED AXIAL-LATERAL RESOLUTION GROUPS:
 Number of groups: 2
 Wire diameter: 80 microns
 Depth range: 3, & 6.5 cm
 Axial Intervals: 4, 3, 2, 1, 0.5 & 0.25 mm

Number of groups: 1
 Wire diameter: 80 microns
 Depth range: 10.5 cm
 Lateral Intervals: 4, 3, 2, 1, & 0.5 mm

CYSTIC MASSES:
 Number of targets: 12
 Diameter of targets: 1.33, 2.00, 2.99, 4.47, 6.69 & 10.00 mm
 Depth of Targets: 1.5, 4.5, 7.0, 10.0, 13.0, 16.0 cm
 Attenuation: 0.5 dB/cm-MHz ± 0.1
 Speed: 1540 m/s ± 10 m/s
 Contrast: Anechoic, Cyst-like

GRAY SCALE TARGETS:
 Number of targets: 6
 Diameter of targets: 8 & 10 mm
 Depth of targets: 3 & 11.5 cm
 Attenuation: 0.5 dB/cm-MHz ± 0.1
 Contrast: -9, -6, -3, +3, +6 & <15 dB

ELASTICITY TARGETS:
 Number of targets: 3
 Diameter of targets: 6 & 8 mm
 Depth of targets: 1.5 & 5 cm
 Attenuation: 0.5 dB/cm-MHz
 Elasticity: 10, 40 & 60 kPa



Phantom comes with detachable scanning wells to accommodate large sector probes and small endocavity probes. It is packaged in a foam lined carrying case.