# Cool-40 Rat Coil

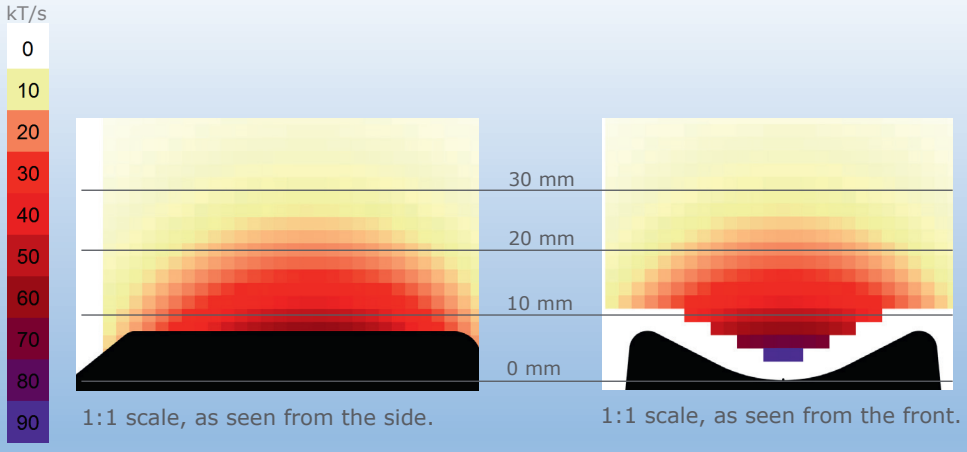
## The ultimate tool to study effects and action mechanisms of Transcranial Magnetic Stimulation (TMS) in small rodents


- Perform rTMS and determine motor threshold
- Study the effects of TMS within e.g. behavioral, metabolic, (epi) genetics, molecular and biochemical pathways
- May be used inside a PET or SPECT imaging scanner with a minimum ø120mm bore
- Allows a high number of stimuli before overheating
- Developed in close collaboration with researchers within the field


Not for human use, animal studies only.

MagVenture
Versatility in Magnetic Stimulation

# Magnetic Field Strength




| Mechanical Properties | |
|---|---|
| Weight | 0.5 kg |
| Cable length | 1.4 m |
| Dimensions of transducer head (WxLxH) | 52 x 54 x 42mm |

| Environmental Data | |
|---|---|
| Operating temperature | 10-30°C (50-86°F) |
| Storage temperature | 0-50°C (32-122°F) |
| Operating humidity | 30-75% RH |
| Storage humidity | 10-90% RH |

| Magnetic and Electrical Properties | |
|---|---|
| Max initial dB/dt: | 80 kT/s (5 mm from coil surface) |
| Active Pulse width | 280µs (biphasic) |

| Coil Winding Data | |
|---|---|
| Type and dimension | Circular ø40mm with a slight bend |

| Ordering Number |
|---|
| Cool-40 Rat Coil: 9016E0241<br>High-Performance Cooling System: 9016B0411 |

| Performance* | |
|---|---|
| Motor Threshold level for anesthetized rats (propofol) | Typically 30% mean output |
| Maximum protocol settings for continuous running without over-heating | 10 pps: 60 pulses/train @ ITI 54s @ 50% mean output<br>5 pps: 60 pulses/train @ ITI 48 s @ 53% mean output<br>1 pps: 70% mean output |

* The Cool-40 Rat Coil requires the High-Performance Cooling System.

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Universiteit Antwerpen

Developed in close collaboration with the Molecular Imaging Center Antwerp

**MagVenture A/S**
Lucernemarken 15
DK-3520 Farum
Denmark
Phone: +45 4499 8444
info@magventure.com
www.magventure.com