### Table 1. Characteristics of MRI-compatible PET insert

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of modules</td>
<td>16</td>
</tr>
<tr>
<td>Detector ring diameter</td>
<td>60 mm</td>
</tr>
<tr>
<td>No. of detector rings</td>
<td>8</td>
</tr>
<tr>
<td>No. of crystals/ring</td>
<td>128</td>
</tr>
<tr>
<td>Total no. of crystals</td>
<td>1,024</td>
</tr>
<tr>
<td>Axial FOV</td>
<td>12 mm</td>
</tr>
<tr>
<td>Transaxial FOV</td>
<td>35 mm</td>
</tr>
<tr>
<td>Insert length</td>
<td>55 cm</td>
</tr>
<tr>
<td>Insert outer diameter</td>
<td>11.8 cm</td>
</tr>
</tbody>
</table>

### Table 2. Energy resolution (%) for four scintillator crystals (A) in one of the detector modules acquired while running various MR sequences with the specified parameters (B) and with no sequence running. (Similar results were obtained for all crystals. RARE, rapid acquisition with relaxation enhancement; FLASH, fast low-angle shot.)

**A**

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Crystal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#8</td>
</tr>
<tr>
<td>None</td>
<td>21.84</td>
</tr>
<tr>
<td>RARE</td>
<td>20.92</td>
</tr>
<tr>
<td>FLASH</td>
<td>21.43</td>
</tr>
<tr>
<td>SE</td>
<td>21.72</td>
</tr>
</tbody>
</table>

**B**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sequence</th>
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<tbody>
<tr>
<td></td>
<td>RARE</td>
</tr>
<tr>
<td>Echo time, ms</td>
<td>13.3</td>
</tr>
<tr>
<td>Repetition time, ms</td>
<td>3,000</td>
</tr>
<tr>
<td>RARE factor</td>
<td>8</td>
</tr>
<tr>
<td>Flip angle</td>
<td>-</td>
</tr>
</tbody>
</table>

Similar results were obtained for all crystals. RARE, rapid acquisition with relaxation enhancement; FLASH, fast low-angle shot.