

# The Flexibility of the 4-Channel Flex Coil

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4-channel Flex coils come in two sizes (Fig. 1). Both are very flexible, with superior signal-to-noise ratio, and can be used almost universally. Furthermore, syngo BLADE motion correction functions extremely well with Flex coils, producing optimum results.

The smaller version of the coil can be used for small to medium-sized shoulders (e.g. of children), the elbow (Fig. 2), the wrist (Fig. 3), and for smaller feet or the forefoot (also refer to the use of Flex coils in pediatric imaging as shown in the case studies by Michael Kean on page 57 ff).

The larger coil is suitable for use on the hips, knee (Fig. 4), or ankle. If a Body Matrix coil is positioned on the liver and the large Flex coil on the pelvis, the entire abdomen can be covered. Here is an example for displaying the entire foot – from the tip of the toes to the ankle – using a fast protocol. The patient is positioned on his side. The Spine coil is used from below, and the large Flex coil is positioned on top of the foot. The foot is then immobilized with sandbags (Fig. 5). If the foot is positioned properly, parallel imaging can

be used in heel – toe direction and in Spine coil – Flex coil direction, that is, axial/transverse and sagittal.



→ Visit [www.siemens.com/magnetom-world](http://www.siemens.com/magnetom-world) to download this protocol as Phoenix image.



1 CP Flex coil large and small.



2 Small Flex coil for elbow imaging.



3 Small Flex coil for wrist imaging.



**4** Large Flex coil for knee imaging.



**5** Patient positioning for fast whole foot imaging.



**6A** 3T MAGNETOM Verio, PD Turbo Spin Echo (TSE) using spine and large Flex coil. TR 3000, TE 47, TA 42 sec, SL 3 mm, slices 19, FOV 330 x 330 mm, matrix 205 x 256, GRAPPA 2.



**6B** 3T MAGNETOM Verio, PD Turbo Spin Echo (TSE) using the Foot Ankle Coil. TR 3000, TE 47, TA 42 sec, SL 3 mm, slices 19, FOV 330 x 330 mm, matrix 205 x 256, GRAPPA 2.

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