

Step Width

The correct step width is fundamental not only for HKAFO/RGOs, but also decisive for the effectiveness of AFOs, KAFOs, and walking podiums. An appropriate step width significantly influences stability, balance, and the ergonomics of movement. Furthermore, the correct step width is important for the device's optimal function, contributing to enhanced wearing comfort and user mobility.



Narrow step **increases step length** but reduces lateral stability



Wide stance **improves stability** but reduces step length

HKAFO / RGO Stride

For the bipedal human, pelvic rotation plays a central role in minimizing energy expenditure during walking. The alternating movement of the pelvis, combined with the counter-rotation of the upper body, keeps the body's center of gravity more stable and centered. This is supported by our RGO hip joints with 2D movement, as well as our 2D and 3D HKAFO hip joints. Hip joints that only permit movement in flexion and extension (1D) are utilized, for example, in patients with rotational deficiencies, during the postoperative phase, or in an orthosis treating only one hip (due to design considerations).

