

KX06

KX06 uses a hydraulic SNS cylinder with a polycentric, four-bar knee mechanism. The polycentric mechanism provides geometric stability during stance phase and in combination with a hydraulic stance and swing cylinder allows customisation of the swing characteristics and the ability to yield when the situation requires.

The concept of polycentric prosthetic knees, using “four-bar” mechanisms have existed since the late 1960s. The advantages and benefits of this mechanism, including enhanced weight bearing stability due to knee pivot location and reduced effective limb length in swing phase (thereby reducing the risk of trips), are well reported in O&P literature. The multiple pivot points allow the adaptation of the ‘instantaneous centre of rotation’ (ICR) of the device. During stance phase, the ICR rises, improving stability. At the end of stance phase, the increased moment arm allows easier flexion initiation, compared to monocentric knees. During swing phase, the lowered ICR increases toe clearance.

The latest version of KX06 has been reengineered since the original device, to be more robust and hard-wearing.

Improvements in Clinical Outcomes using four-bar, polycentric knees compared to monoaxial knees

Improvement in **SAFETY**

- Increased mean prosthetic minimum toe clearance^{2,4}, reducing the likelihood of tripping.
- Fully satisfies stance phase stability³

Improvement in **USER SATISFACTION**

- Acceptable cosmetics for knee disarticulation amputees and trans-femoral amputees with long residua¹
- Meets all the design requirements for paediatric patients³

References

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4. Gard SA, Childress DS, Uellendahl JE. The influence of four-bar linkage knees on prosthetic swing-phase floor clearance. *JPO J Prosthet Orthot* 1996; 8: 34–40.