3R90/3R92
Modular Knee Joints with Friction Brake

Quality for life

Information for Practitioners
The new generation of modular friction brake knee joints 3R90 and 3R92 features a completely revised design. They offer unique convincing technology with an innovative, load-dependant brake mechanism.

The brake mechanism engages when the heel is loaded. It stabilizes the prosthesis and achieves a high degree of safety during the entire stance phase. The braking mechanism releases automatically when the forefoot is loaded, and the swing phase can be initiated easily and harmoniously. Unphysiological movements, such as hip hike are minimized with this solution and this helps to create a secure, harmonious gait.

The 3R90 is equipped with an integrated mechanical extension assist, the 3R92 with a progressive dual-chamber pneumatic for swing phase control.
**3R90 & 3R92**

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**Improved Technology and Fresh Design**
Friction and wear are minimized through state-of-the-art bearing technology. The brake mechanism was further optimized. The result is a high degree of functional reliability and extended life. A fresh visual appearance underlines the technical innovations.

1 **3R90 with mechanical extension assist**
The effect of the integrated extension assist can be regulated very easily by adjusting the tension of the spring combination. The setting unit can be engaged individually in 5 settings and increases or, as the case may be, decreases the spring effect.

2 **3R92 with dual-chamber pneumatic system**
The pneumatic swing phase control allows a significantly more harmonic gait for the prosthesis wearer. The flexion and extension damping is individually and continuously adjustable to match individual requirements. In particular, users with Mobility Grades 2 and 3 will appreciate the smooth and energy-efficient functionality of the progressive pneumatic swing phase control.

3 **Further advantages of the 3R90 and 3R92**
A blue ring on the upper section of the joints makes prosthetic alignment easier. The plumb line is simply placed at the outer ring of the disk, thereby allowing the recommended 15 mm posterior placement to be realized without measuring. In this way the functional advantages of the joints, in particular the initiation of the swing phase under load, can be put to optimal use. This prevents premature wear of the components. The newly designed plastic elements cover the mechanical components of the knee joint and protect the cosmetic foam.

**Field of application according to MOBIS:**
- 3R90, recommended for Mobility Grades 1 and 2,
- 3R92, recommended for Mobility Grades 2 and 3,
- approved for patient weights up to: 125 kg/275 lbs

These knee joints are contraindicated for those patients who cannot control the brake during walking.

**Recommended prosthetic feet**
For optimal fitting results we recommend the combinations: 3R90 with Dynamic Motion (1D35) as well as 3R92 with Trias (1C30). Alternately the following combination possibilities are available:

- 3R90: Adjust (1M10), SACH Foot (1S...), Dynamic Foot (1D10/1D11), Greissinger Plus (1A30) or Trias (1C30)

- 3R92: Adjust (1M10), Dynamic Motion (1D35), Greissinger Plus (1A30), C-Walk (1C40) or Advantage DP2 (1E50/1E51).  

**Recommended accessories**
- 3S107 cosmetic foam cover
- 2R45=34 length adjustable tube adapter for test fittings
- 2R77 tube adapter for interim and definitive fittings