

3R78 Polycentric knee joint with pneumatic swing phase control



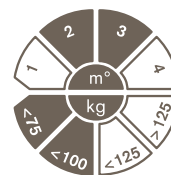
Quality for life

The development of the 3R78 was focused on a robust, dust-resistant design that is resistant against environmental impacts. This new polycentric prosthetic knee joint with pneumatic swing phase control offers reliable stance phase security for users with moderate activity levels. Get to know the 3R78 and see the advantages for yourself.



Area of application according to MOBIS:

Recommended for transfemoral amputees with mobility grade 2 to 3 (restricted and unrestricted outdoor walkers) according to MOBIS, the Otto Bock mobility system. Approved for a patient weight of up to 100 kg/220 lbs.



3R78

Polycentric knee joint with pneumatic swing phase control

Single-chamber pneumatics control the swing phase

In swing phase, the smooth yet powerful single-chamber pneumatics - one chamber each for flexion and extension damping (Fig. 1) - do not run out of air, even at various walking speeds. Harmonious flexion and extension movements, and therefore an approximation of the physiological gait pattern, are made possible. Here the joint geometry effectively shortens the prosthesis during swing, resulting in more ground clearance.

Four-axis polycentric structure ensures stance phase stability

In extension, the instantaneous centre of rotation (Fig. 1) is located above the joint and behind the load line, resulting in high stability in stance phase. The integrated extension assist spring ensures that the lower leg of the prosthesis is always extended at heel strike and weight can be safely supported on the prosthesis side. This is especially advantageous when the user takes small compensating steps, turns in a circle or walks in confined areas.

The 3R78 offers numerous advantages, not only whilst walking. When sitting or kneeling, the large maximum flexion angle of 150° (Fig. 2) and the low system height when flexed make it both comfortable and practical.

Easy to fit

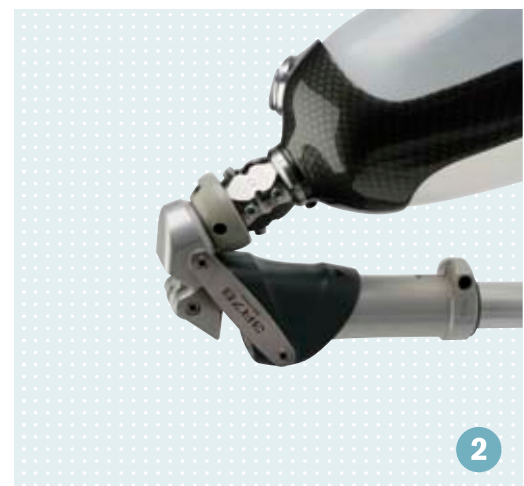
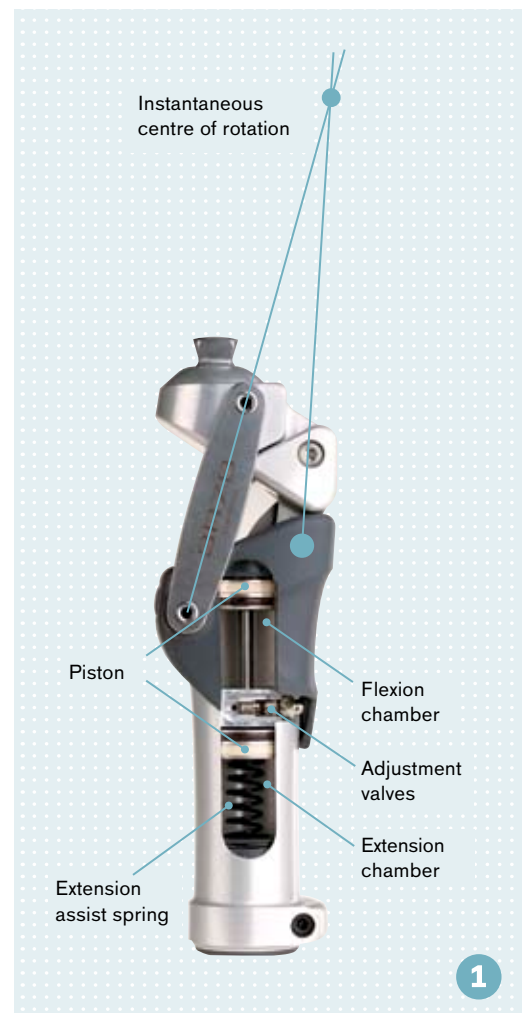
Flexion and extension dampening can be separately and individually customised to the needs of the user (Fig. 3). A quick start guide included with the delivery facilitates the alignment process and helps establish the prosthesis settings. This effectively reduces the working time of the prosthetist and leads to rapid fitting success.

Additional product characteristics

- Main material: aluminium
- Low weight: approx. 750 g
- Connectors: proximal - pyramid adapter, distal - tube clamp Ø 30 mm
- Plastic cover protects the pneumatics against dirt
- Rounded contours protect the cosmetic cover

Recommended system components

- Prosthetic feet: 1D35 Dynamic Motion or 1C30 Trias
- Tube adapter: 2R3 (stainless steel), 2R38 (titanium) or 2R49 (aluminium)
- Cosmetic cover: 3S107 foam cover



Otto Bock HealthCare GmbH
Max-Näder-Straße 15 · 37115 Duderstadt/Germany
T +49 5527 848-0 · F +49 5527-848 1524
export@ottobock.de · www.ottobock.com