# Mechanical Knees.
## Choice without Compromise.

Ottobock’s complete range of mechanical knees means choice without compromise for you and your patients. From products designed with lower mobility users in mind, to those built to be pushed to the limit, you are empowered to create the ideal outcome for your patients. When you choose a knee from Ottobock’s extensive mechanical knee portfolio, you can be confident that quality and safety won’t be compromised due to payers, lifestyles, or anything in between. Here, we’ve highlighted a few of our most popular models for various user profiles.

<table>
<thead>
<tr>
<th>3R31 Prosedo</th>
<th>3R62 Pheon</th>
<th>3R60 EBS</th>
<th>3R80</th>
<th>3R85 Dynion</th>
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<tbody>
<tr>
<td><strong>K1/MG1</strong></td>
<td><strong>K2 / MG2</strong></td>
<td><strong>K3 / MG3</strong></td>
<td><strong>K3/K4, MG3/MG4</strong></td>
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<td>Up to 165 lbs / 75 kg or 275 lbs / 125 kg (depends on model)</td>
<td>Up to 275 lbs / 125 kg</td>
<td>Up to 330 lbs / 150 kg (34mm pylon)</td>
<td>Up to 220 lbs / 100 kg</td>
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### Category:
- Single Axis Hydraulic (manual lock)
- Polycentric - Friction
- Polycentric - Hydraulic
- Single Axis Hydraulic stance and swing (default swing)
- Single Axis Hydraulic stance and swing (default stance)

### Design
- **Monocentric knee axis**
- **Proximal pyramid or threaded top**
- **Distal 30mm pylon**
- **Polycentric knee axis**
- **Multiple proximal connections**
- **Distal 30mm pylon**
- **Polycentric knee axis**
- **Multiple proximal connections**
- **Distal pyramid**
- **Monocentric knee axis**
- **Proximal pyramid or threaded top**
- **Distal 34mm pylon**
- **Monocentric knee axis**
- **Proximal pyramid**
- **Distal 30mm pylon**

### Control Mechanism:

#### Stance:
- **Manual lock** (stance active when unlocked. Swing not possible)

#### Swing:
- **Flexion is friction control**
- **Extension is controlled by adjustable extension assist**

#### Stance:
- **Geometric stance stability**
- **Adjustable stance flexion bumper**
- **Hydraulic stance extension**

#### Swing:
- **Independent hydraulic adjustments for swing phase flexion and extension**
- **Extension assist spring**

#### Stance:
- **Adjustable hydraulic stance flexion resistance**
- **Stance resistance is active during swing phase extension**

#### Swing:
- **Independent hydraulic adjustments for swing phase flexion and extension**
- **Extension assist spring**

### Other:
- **Adjustable hydraulic stance flexion resistance for sitting down**
- **Optional manual lock**
- **Stance flexion bumper**
- **Hydraulic stance extension support**
- **PDAC Verified**
- **3R60 Pro option (for users up to 165 lbs)**
- **Optional manual lock**
- **Waterproof: fresh, chlorinated and salt**
- **PDAC Verified**
- **Optional manual lock**
- **Bicycle Mode**
- **Waterproof: fresh, chlorinated and salt**
3R31 Prosedo

A hydraulic locking knee with flexion resistance

The 3R31 Prosedo knee features hydraulic stance flexion resistance sitting assist. The hydraulic can be adjusted based on the user’s weight and needs.

After disengaging the lock, progressive flexion resistance will support the user while lowering into a seated position. This can help improve balance and reduce strain on the their sound side.

Key Features:

Manual lock
Manual lock knee with unique release function. Disengagement of the lock when partially loaded is possible.

Optional lock release
Optional disengagement of the lock via the lock release button, located underneath the blue front cap.

Adjustable hydraulics
High progressive flexion resistance helps improve balance when patients are moving into a seated position.

Proximal connection
Prosedo is available with two proximal connection variants: a pyramid adapter or a threaded connector for fittings of longer residual limbs.

High maximum body weight
Lightweight design (600 g) with a high weight limit (275 lbs / 125 kg).

Tube clamp Ø 30 mm
Pylon is included in scope of delivery.

Technical Data

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<td>Category</td>
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<td>Distal connection</td>
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The 3R62 Pheon polycentric prosthetic knee joint with mechanical swing phase control is especially well suited for users with low mobility, as it provides both swing phase and stance phase control. The 3R62 also supports the therapy goal of restoring the ability to stand with a high degree of stability and moderate ability to walk indoors and outdoors.

The integrated optional lock, which can be activated or deactivated by the prosthetist, provides targeted support for post-amputation therapy – from initial standing and walking exercises with the interim prosthesis through to the final fitting.

**Key Features:**

**Axis geometry**
The Five-axis geometry allows stance flexion during loading and a smooth transition to swing.

**Ergonomically balanced stride (EBS)**
The unique mechanical EBS unit with spring dampening element is adjustable up to a max. of 10° stance phase flexion.

**Mechanical swing phase control**
Equipped with an assist spring to control extension movement and provide a smooth extension stop.

**Optional manual lock**
An integrated manual lock provides targeted support depending on the patient's needs.

**Needle roller bearing technology**
Durable, robust and smooth.

**High weight limit (275 lbs / 125 kg)**
Plus, various proximal fitting adapters for a wide range of fitting options.

**Up to 10° stance flexion for more natural gait**

2R49 aluminum tube adapter included in scope of delivery.
3R60 EBS

A polycentric, hydraulic knee with Ergonomically Balanced Stride

The 3R60 provides controlled knee flexion at heel-strike and efficient hydraulic swing phase control. Comfort, stability and a more natural gait are ensured by the characteristics of the elastic EBS (Ergonomically Balanced Stride) flexion unit.

EBS offers advanced function and security—especially on uneven terrain, inclines and declines—by acting as a shock absorber and flexing as much as 15 degrees during loading. This stance flexion feature can be individually adjusted to the user’s weight and activity level.

Key Features:

**Progressive stance phase damping**
For harmonious, natural movements under load and adaptation to various everyday situations.

**Comfortable walking and a high level of safety**
Even on uneven terrain or declines up to 10°.

**Easy initiation of swing phase**
Progressive swing resistance for a wide range of walking speeds with comfortable terminal impact.

**Light weight and a large flexion angle of 175°**
For more freedom of movement, e.g. when kneeling down.

**Four proximal connection versions**
For fitting various amputation levels of the lower extremities.

EBS (Ergonomically Balanced Stride)

**Recommended:** 2R58 34mm tube adapter (must be ordered separately)

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### Technical Data

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A hydraulic, single-axis waterproof knee joint for higher activity users (default swing)

The rotary hydraulics of the 3R80 respond to ground reaction forces in the stance phase at every step. Hydraulic resistance is built up, preventing involuntary flexion of the joint; an important feature on uneven surfaces, slopes and when walking down stairs step-over-step.

The level of flexion resistance in the stance phase can be easily adapted to the requirements of the user.

The 3R80 easily adapts to changes in walking speed while assisting natural movement patterns.

**Key Features:**

**Default swing**
Activation of stance requires a hip extension moment during loading.

**Individual adaptation of stance and swing phase**
Two settings for stance and two settings for swing phase with easy and independent adjustment for flexion and extension resistance.

**Waterproof design**
Protected against fresh, salt and chlorinated water.

**Integrated manual lock**
Improved safety in wet areas and comfort when standing for long periods.

**High maximum flexion angle of 150°**
Allows extensive freedom of movement, for example when getting into a car.

**Robust, durable construction**
With high-performance rotary hydraulics for active users.

**High weight limit of 330 lbs.**
Durable, robust knee with high weight limit.

**Multiple options for a variety of users**
A new threaded top connection version enables long residual limb fittings.

**2R57 titanium tube adapter included in scope of delivery**

### Technical Data

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A sophisticated, adjustable stance release unit and stance control mechanisms ensure that high flexion resistance is there to provide support when needed. The default stance feature, in combination with a unique design, provide stable and direct hydraulic yielding support.

**Key Features:**

- **Default stance**
  Dynion is default stance with active stance resistance during swing phase extension.

- **A Powerful, rotary hydraulic**
  Provides dynamic, dependable control throughout the gait cycle (both stance and swing phase).

- **Consistent, adjustable, stance flexion resistance**
  Provides support when going down stairs (step-over-step), ramps and other descents.

- **Supported ascent:**
  Hyper-extension at the control axis during terminal stance emulates dorsi flexion at the foot.

- **Knee extension assist**
  The knee extension assist spring promotes variable cadence and a more secure loading condition.

- **Stance and Swing Extension Dampening**
  In the last 35° of extension (both stance and swing), the adjustable extension channel narrows (via an individual valve), increasing resistance to provide a dampening effect and a more natural gait.

- **Waterproof**
  Protected against fresh, salt and chlorinated water.

- **Manual lock**
  Optional manual lock supports effortless standing via an easy access button.

- **Bicycle mode**
  Enables free swing mode for bicycling via an easy access button.

- **Anterior adjustment panel**
  Convenient access to settings. Two settings for stance and two settings for swing phase with easy and independent adjustment for flexion and extension resistance.

- **2R37 waterproof tube adapter included in scope of delivery**

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**Technical Data**

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<tr>
<th>Article Number</th>
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