

# Levitation™

Levitation™ is the world's first compact and powerful bionic knee brace. It is designed to augment strength and enhance mobility. Levitation™ stores kinetic energy generated during knee flexion and restores that energy upon extension. The result is a revolutionary knee brace that not only stabilizes the joint, but also enhances strength and endurance while helping reduce impact in the most commonly injured joint in the body.

## INDICATIONS:

- Knee osteoarthritis
- ACL/MCL injury
- Meniscal injury

## KEY BENEFITS:

- Augments quadriceps function
- Provides functional stabilization
- Helps rebuild natural strength
- Helps reduce pain
- Helps prevent injury

## KEY FEATURES:

- Spring-loaded hinge
- Instant spring disengage
- Adjustable force-output
- Quick-release strapping
- Custom force-response
- No slip suspension system
- Under 1 kg (2.2 lbs) in weight



# Levitation™

The World's First Compact and Powerful Bionic Knee Brace

Levitation™ augments the strength and endurance of your knee joint and leg muscles, giving you the confidence to work harder, play longer, and do more of what you love.

## ENHANCED STRENGTH

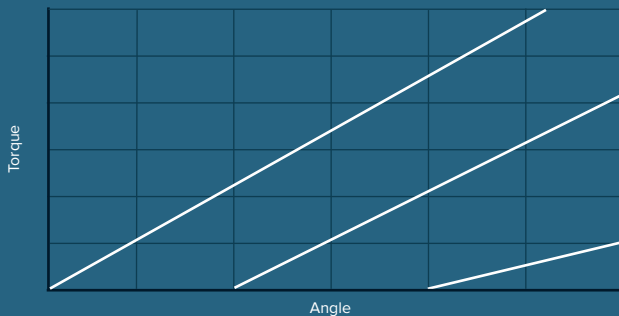
Levitation™ stores energy in a compact spring-loaded hinge mechanism as the knee is bent. The stored energy is released as the leg is straightened, thereby augmenting the output of the quadriceps muscles and assisting knee extension. The maximum force-output and range of motion assisted can be adjusted by the user or clinician as rehabilitation progresses, helping the user to get back to their activities sooner.

## REDUCED JOINT COMPRESSION

Tibiofemoral and patellofemoral joint stress increases with greater levels of knee flexion. Although weight-bearing exercise is essential for strength training and injury rehabilitation, limiting joint compression is equally important for the early regeneration and healing of connective tissues. Levitation™ is designed to function as a shock-absorption system in order to reduce joint compression while weight-bearing.

## ADJUSTABLE EXTENSION ASSIST

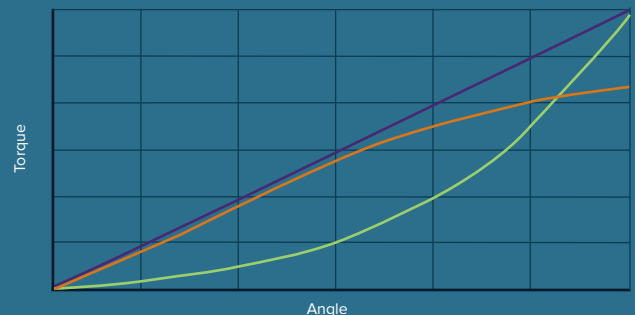
The graph below depicts three potential force output and range of motion assistance options.



For example, a user may choose to reduce the force output and unassisted range of motion as their confidence and natural strength rebuild through the rehabilitation process.

## CUSTOM FORCE RESPONSE

The shape of the force-response curve is tailored to optimize our brace for a user's primary activities. Example curves:



- Full power lift assist
- Lowered maximum power
- Reduced early flexion power

ORDERS AND INQUIRIES:



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