

BIO-FLEX

Trans Tibial Socket

The BIO-FLEX Prosthetic Socket is a custom molded design that consists of a flexible inner socket, rigid Pre-Preg carbon external frame. The Pre-Preg external frame is also a dynamic socket design that allows for the primary vertical suspension pressures to extend under the weight of the patient to a fixed flexion point. This dynamic socket provides a natural unobstructed fluid flow of the patient's limb in rotation, vertical shock and allows for flexing of the gastroc without impediment.

The BIO-FLEX socket allows for user adjustability to increase and decrease the pre-loaded pressure points of the frame using an incremental adjustable strap system. This attribute also allows for the user to incrementally increase and decrease the primary suspension forces of the socket to adapt for volume fluctuation throughout the day thus reducing or eliminating the need to add fitting socks or stopping activity to apply socks.

The BIO-FLEX Socket must be casted using a uniform silicone or gel locking or suction liner. The socket can be built to accommodate a standard 65mm Bulldog Tools, P.D.I. or K.I.S.S system molding block or the ALPS VIP Vacuum or Locking molding block.

The 3-Point Socket Has an anterior tibial opening with only the posterior portion of the socket that can be adjusted to apply posterior suspension forces.

The 5-Point Socket has 3 pressure points that can be adjusted to apply increased or decreased suspension force anteriorly and posteriorly.





**ORTHOTIC
ENERGY STORING
SYSTEMS**

**3 Point
Bio-Flex TT Socket**



Practitioner: _____
 Facility: _____
 Address: _____
 City/ State/ Zip: _____
 Phone: _____
 Email: _____

Patient Name:

Left Right Bilateral

Locking Socket Using Bulldog or PDI
Standard Size Locking Mechanism

Vacuum Or Locking Socket Using ALPs
VIP

Cast Over 3mm Liner → Fit with 6mm Liner

Cast Over 6mm Liner → Fit with 9mm Liner

Special Instructions



**ORTHOTIC
ENERGY STORING
SYSTEMS**



**5 Point
Bio-Flex TT Socket**

Practitioner: _____
 Facility: _____
 Address: _____
 City/ State/ Zip: _____
 Phone: _____
 Email: _____

Patient Name:

Left Right Bilateral

Locking Socket Using Bulldog or PDI
Standard Size Locking Mechanism

Vacuum Or Locking Socket Using ALPs
VIP

Cast Over 3mm Liner → Fit with 6mm Liner

Cast Over 6mm Liner → Fit with 9mm Liner

Special Instructions

BIO-FLEX Prosthetic Socket

Casting Procedure

- 1) Select liner size that the patient will be fit with. If you intend to fit the patient with a 6mm liner, you will need to cast over a 3mm liner of similar design. If you intend to fit the patient with a 9mm liner, you will need to cast over a 6mm liner.
- 2) Don the liner and wrap tightly with shrink wrap to compress the soft tissue.
- 3) Apply a thin vacuum forming hosiery over the limb and with a black marker, mark the bula head, center of the patella tendon bar, distal end of the tibia, and distal end of the Fibula with an X. If there are specific areas of concern, you can circle the outline of the areas with the marker.
- 4) Apply a trim strip along the medial midline of the limb running from the proximal to distal end.
- 5) Wrap the limb tightly with the moistened casting tape so that it is as tight as it can be applied while still preventing roping in the casting tape.
- 6) With gloved hands, place the base of the palms of both hands rmly on either side of the tibia and press both thumbs into the medial and lateral distal termination point of the patella to identify the patella tendon bar.



- 7) Wrap the fingers of both hands around the posterior side of the limb with the limb slightly -flexed and place the index fingers of both hands into the medial pockets of the medial and lateral hamstrings. Squeeze with the other fingers into the posterior calf.
- 8) Allow the cast to harden completely and then if possible, remove the cast from the limb without trimming along the trim strip.