Constrained liner options to meet the most demanding needs



Freedom® Standard Face Constrained Liner



Freedom® 10 Degree Constrained Liner



Freedom® +5mm Standard Face Constrained Liner



Freedom® +5mm Standard Face Low-profile Constrained Liner



Freedom® All-poly Constrained Liner

References

- Berend, K. et. al. A Constrained Device with Increased Range of Motion Prevents Early Dislocation. Clinical Orthopedics & Related Research. 447:70–75, 2006
- Fehring, T.K. et al. Motion at the Modular Acetabular Interface: A Competitive Study. Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons. 62nd Annual Meeting. Atlanta, GA. 1996.
- Rosner, B.I. et al. Cup Liner Conformity of Modular Acetabular Designs. Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons. 61st Annual Meeting. Orlando, FL. 1995.
- Rosner, B.I. et al. Cup/Liner Incongruity of Two Piece Acetabular Designs: Implications in the Generation of Polyethylene Debris. Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons. 60th Annual Meeting. New Orleans, LA. 1994.
- Trodonsky, S. et al. Performance Characteristics of Two-piece Acetabular Cups. Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons. 59th Annual Meeting. San Francisco, CA. 1992.
- Trodonsky, S. et al. Performance Characteristics of Two-Piece Acetabular Cups Series II. Scientific Exhibit presented at the American Academy of Orthopaedic Surgeons. 62nd Annual Meeting. Atlanta, GA. 1996.

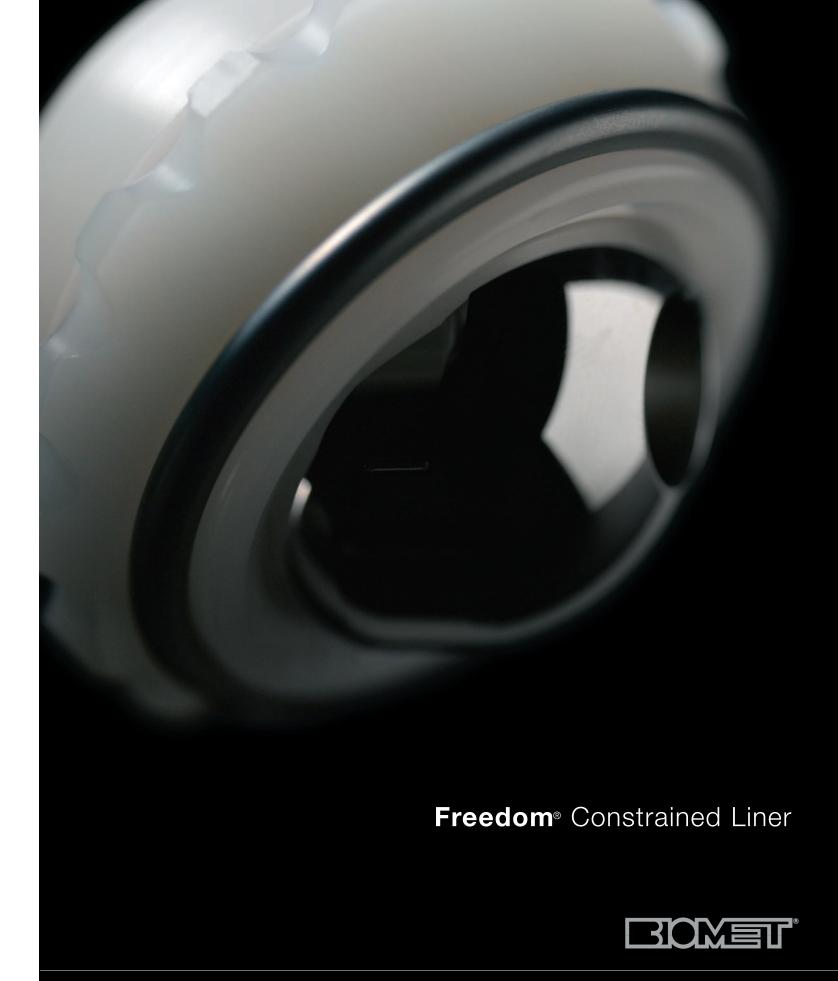
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Knees • Hips • Extremities • Cement and Accessories • PMI • Technology

Freedom® Constrained Liner

Maximum resistance to dislocation

The use of constrained liners in patients of joint instability has historically been a trade off of constraint to range of motion. The Freedom® Constrained Liner offers a high level of constraint while maintaining optimal range of motion. The Freedom® system has performed well resisting dislocation in the early term when patients are most prone.1

of the head



Average Lever-out Force:

198 in. lbs.



Maximum Range of Motion:

114 Degrees



15 Degree Circumferential Flat

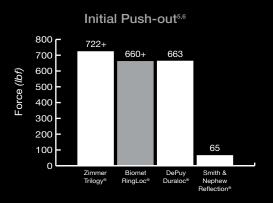
Designed to allow the surgeon to easily reduce the head while providing additional dislocation resistance

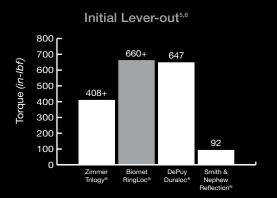
* Any time the liner is removed, it is recommended that the locking ring be removed and replaced with a new one. If the liner is damaged in any way, a new liner should be utilized.

RingLoc® liner technology: Proven after 15 years of clinical use

Various forces including toggling, levering and rotation are present during normal acetabular kinematics. To extend acetabular component life and help reduce potential debris generation, the shell-to-liner locking mechanism must be sound. Independent labs have consistently rated Biomet's RingLoc® cups among the best.^{2, 4-6}

- Proven to be a superior locking mechanism for polyethylene liners²⁻⁵
- High strength of the locking mechanism helps prevent liner disassociation from the shell
- Fully supported liner for even stress distribution
- Lowest micromotion of all tested systems to help eliminate debris generation²
- Combine with Biomet's Freedom® Constrained Liner for patients at high dislocation risk





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