Comprehensive® Reverse
Shoulder System

Technical Design Features
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1. Humeral Stem
   • 45/135 degree anatomic neck angle
   • PPS® coating proximally to enhance biologic fixation
   • Reverse Morse taper allows for easier glenoid accessibility

2. Humeral Joint Space Options
   • Available joint space options ranging from 5 to 18mm, depending on humeral tray and bearing selections

3. Humeral Tray
   • RingLoc® technology: an expanding ring that locks around the humeral bearing providing for optimal mechanical strength and ease of bearing exchange
   • Morse taper connection between humeral tray and stem for easy conversion of a well-fixed humeral stem to a reverse

4. E1® and ArComXL® Polyethylene Humeral Bearing Options
   • Minimum 3mm thickness between the articulating surface radius and the bottom of the bearing
   • Bearing constraint height of up to 12.6mm
   • Retentive options capture 2–3mm more of the glenosphere surface without increasing deltoid tension

5. Versa-Dial® Glenosphere
   • Center of rotation for neutral option is medialized, lying approximately 1mm below the face of the baseplate
   • Dual taper design underwent extensive fatigue testing for 10,000,000 cycles without failure
   • Variable offset technology allows flexibility in positioning the baseplate to take advantage of ideal glenoid bonestock
   • Inferior positioning of the glenosphere with respect to the glenoid potentially increases ROM and decreases impingement thereby minimizing scapular notching
**Modular 6.5mm Central Screw**
- 10 times more compression than baseplates with a central peg alone
- 2.3 times more shear strength than baseplates with a central peg alone

**Peripheral Locking Screws**
- Tested favorably against accepted standard for micromotion and biologic fixation (150 µm)
- Increases glenoid baseplate stability

**Central Boss Geometry**
- Provides additional shear resistance during deltoid functions
- Allows for modular 6.5mm central compression screw

**Glenoid Baseplate**
- HA over PPS® porous coating on back and sides for a total interference fit of approximately 1mm providing for increased biologic fixation
- May be partially recessed to potentially increase shear stability
- 5 degree diverging angulation in peripheral screw holes
- Instrumentation provides for 10 degree inferior tilt of glenoid baseplate to maximize implant stability
- Mini (25 mm) and standard (28 mm) diameters
References


3. Data on file at Biomet.