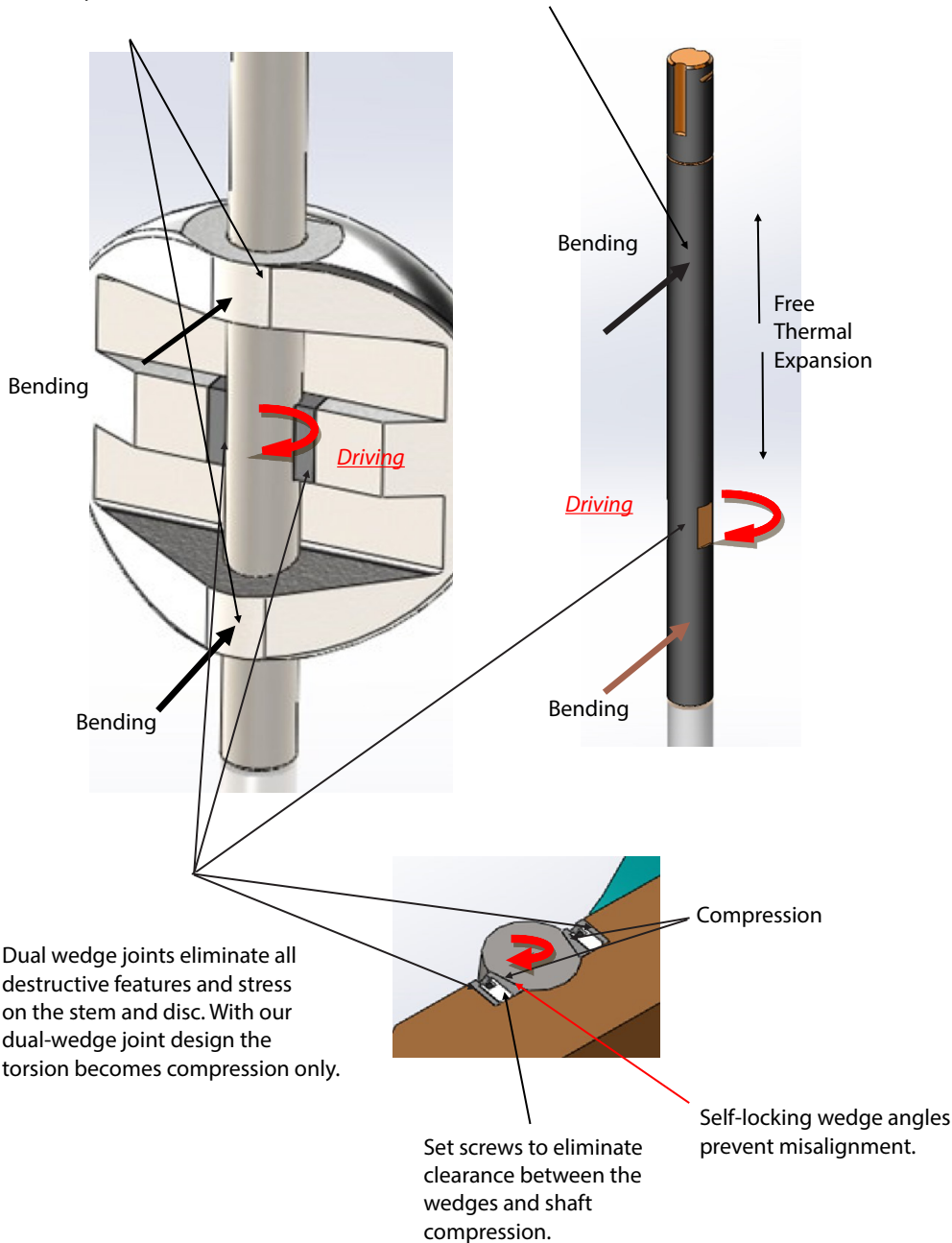


DESIGN FEATURES 1-3

Patent Dual Wedge Joint

The hub areas account for 90% of all failures during full closing or opening and under water hammer conditions.

Shaft - No stress concentration features, such as holes and keyways.



- **Dual Wedge Technology**® – Designed for high speed and thermal cycling applications. The **Dual Wedge Joint**® is a standard feature that eliminates concentrated stress forces on the rotary stem. By separating the bending force from driving force and equally distributing the driving force with the **Dual Wedge Joint**®, the bending stress and hub size are greatly reduced, improving the fluid flow rate. The center of the disc has the strongest cross-section. With our double-sided wedge joint, we transfer the driving force from the shaft to the disc. Not only does this force secure the joint without weakening the shaft, but it also allows for the decrease of the overall cross-sectional area of the disc and hub of the valve.

- **Streamlined Disc** - By reducing the overall cross-sectional area and hub size of Series 67, we reduce our pressure drop by 15% or more and contour our disc to produce a more laminar flow.

- **Freedom of Thermal Expansion** - Restricting a shaft from axial expansion causes extensive seat leakage under thermal change between 60°F to 1200°F. If the shaft is secured by pins, it eliminates axial freedom. With the Series 67 Dual Wedge Joint, the shaft will freely expand axially without damage to the seat or seal ring.

- **Wedge Retainment** - Since the wedges are the same material as the disc, they will not lose engagement with the disc even under high vibration or thermal expansion.