

IS 9471 (Part 4): 2024 Modular Lower Limb Orthotic Components — Specification Part 4 Joint Unit, Ankle

IS 9471 (Part 4): 2024 is the first revision of IS 9471 (Part 4): 1980. The joint unit ankle is a critical mechanical component in modular lower limb orthoses that facilitates natural ankle movement and support.

This standard covers requirements for four types of ankle joint units:

1. Type I (Free motion): Allows natural ankle movement
2. Type II (Limited motion): Controls range of movement
3. Type III (Foot drop): Prevents foot drag during walking
4. Type IV (Double action): Provides dual-axis movement

Key quality parameters covered:

- **Material Specifications:** Requirements for robust, corrosion-resistant materials
- **Size Standardization:** Three sizes (1, 2, and 3) ensuring proper fit across patient needs
- **Construction Requirements:** Detailed specifications for manufacturing quality
- **Workmanship and finish:** Guidelines for smooth operation and appearance

Target Stakeholders:

- Orthotists and rehabilitation specialists
- Medical device manufacturers
- Healthcare providers
- Quality control professionals

This standard serves as the definitive guide for ensuring consistent quality in ankle joint units for orthotic devices, addressing key consumer needs for durability, precise movement control, and customizable sizing options.