

# Single Pass Rotary Joint

(Designed for Dependable Operation in Custom-Engineered Systems)

## TYPE : RJ-1210

### Face Materials :

- Carbon / Silicon Carbide / Tungsten Carbide

### Secondary Seals :

- Nitrile (NBR) / Viton (FKM) / EPDM / Aflas / PTFE / Kalrez (FFKM)

### Hardware :

- CS / SS 304 / SS 316 / SS 316L / Hastelloy-B & C

### Operating Limits :

**Size:** 12.0 mm to 300.0 mm (0.500" to 12.000")

**Speed:** 300 RPM

**Pressure:** 20 bars (290 PSI)

**Temperature:** -20 °C to +220 °C (-4 °F +428 °F)

### Application :

- Steel Plants
- Textile Industry
- Plastic Industry
- Pulp & Paper Industry
- Pharmaceutical Industry Etc.



# Single Dry Mechanical Seal

## (Designed for Dependable Operation in Custom-Engineered Systems)

### Key Features :

- **Low starting and running torque** reduce energy consumption and mechanical wear, critical in high-speed applications.
- **Compact and lightweight body** enables easy installation in confined areas and rotating equipment with space constraints.
- **Dry-run capability** allows short-term operation without fluid, protecting equipment during startup or shutdown scenarios.
- **Uniform seal face loading** minimizes wear and maintains consistent sealing performance across variable speeds and pressures.
- **High-precision bearing alignment** supports vibration-free operation, especially important in high-RPM or continuous duty cycles
- **Customizable designs** available to accommodate special media, rotation speeds, port arrangements, and mounting requirements.
- **Externally mounted springs** remain outside the fluid path, reducing contamination and thermal degradation in high-temperature services.
- **Fully captured O-ring seal system** ensures robust sealing and eliminates leakage, even under high-pressure or high-temperature conditions.
- **Isolated seal-loading springs** prevent direct contact with process fluids, resisting fouling or corrosion common in steam and thermal oil systems.
- **Advanced seal materials** (e.g., carbon, silicon carbide) ensure exceptional wear resistance and service life under abrasive or high-temperature conditions.
- **Low-maintenance architecture** lowers service intervals and downtime, which is critical in continuous process industries like paper, textile, and plastics.
- **Balanced mechanical seal system** handles pressure fluctuations in steam and thermal oil systems, preserving sealing integrity over long operating cycles.
- **Seal replacement on-machine** capability enables fast, hassle-free maintenance without full disassembly –ideal for reducing maintenance time in production lines.
- **Material selection tailored for media compatibility**, including stainless steel, bronze, and specialized elastomers suited for steam, water, air, and thermal oils.
- **Optimized internal flow geometry** reduces pressure drop, ensuring efficient fluid transfer in high-flow or high-viscosity media like thermal oil or steam condensate.
- **Multi-spring configuration** delivers consistent seal face pressure and compensates for thermal expansion, ensuring reliable sealing under varying operating temperatures.
- **End connection options available in flanged and threaded types**, providing flexibility for integration with various piping systems and industry standards (ANSI, DIN, BSP, NPT, etc.).
- **High load capacity bearings**, including deep-groove ball or optional tapered roller bearings, support elevated thrust loads in rotary unions used on drying cylinders and roll applications.

➤ **DIMENSIONS FOR HIGHER SIZES AVAILABLE ON REQUEST**