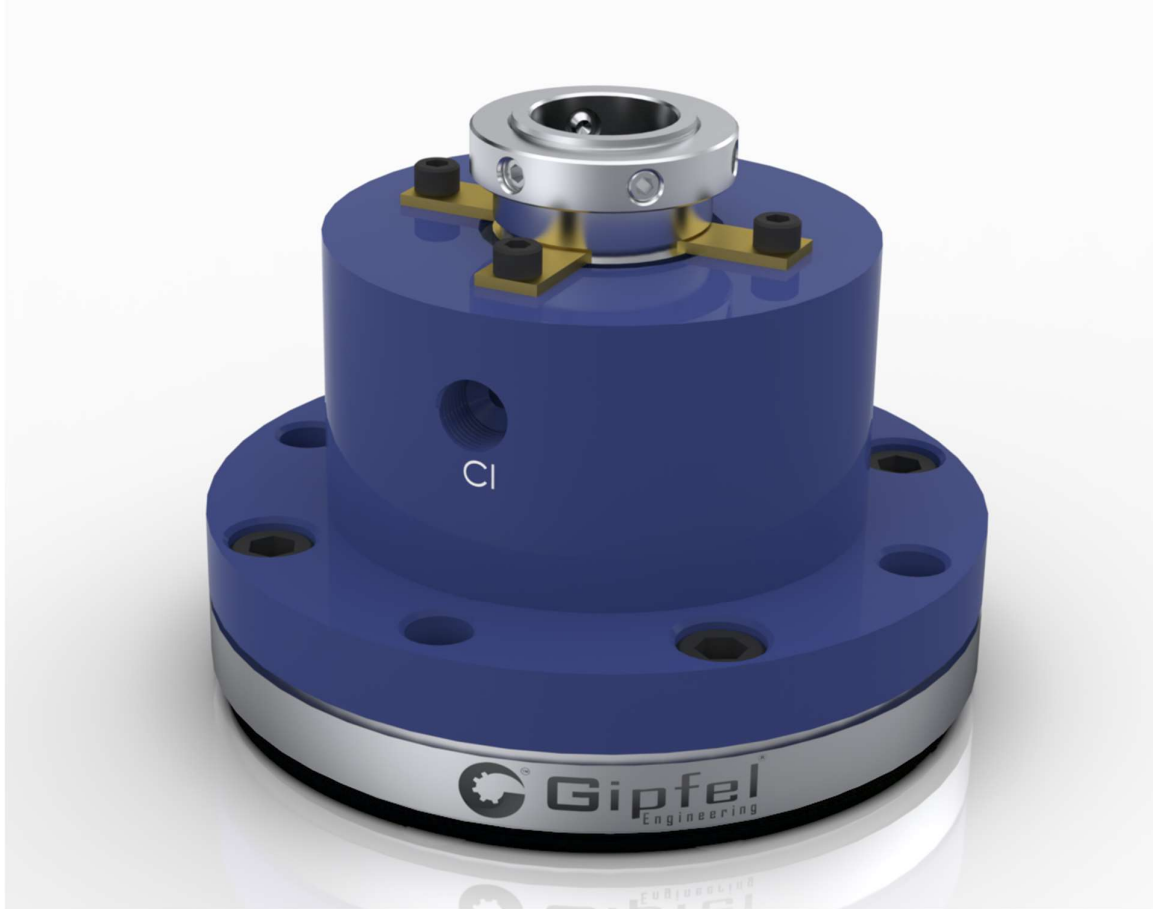


# Single Balanced & Unbalanced Mechanical Seal

(ES915 - ES920) Without Bearing Assembly for Top and Side Entry Rotating Equipment

SEO line: Single-pressurised mechanical seal for agitators, mixers, and top-entry rotating equipment applications.



**(ES915 - ES920)**

## **Key Features;**

- **Bi-Directional Operation** – Functions independently of shaft rotation direction.
- **Multiple Spring Design** – Uniform face loading and consistent sealing performance.
- **Factory Assembled and Tested** – Quality assurance and reduced on-site commissioning.
- **Single Seal Configuration** – Reliable sealing for moderate to demanding process conditions.
- **Custom Engineering Available** – Non-standard dimensions and exotic materials upon request.
- **No Bearing Assembly Required** – Simplified mechanical design reduces maintenance requirements.
- **Cartridge Construction** – Pre-assembled unit minimizes installation errors and commissioning time.
- **Zero Leakage Performance** – Engineered for environmental containment and regulatory compliance.
- **Balanced and Unbalanced Options** – Accommodates varying pressure ranges and media characteristics.
- **Externally Mounted Design** – Enhanced accessibility for installation, inspection, and maintenance operations.
- **Wide Material Selection** – Available in multiple face and elastomer combinations to suit a broad range of industrial media.
- **Non-Metallic Wetted Parts (Optional)** – Prevents corrosion and product contamination in aggressive or hygienic environments.
- **Top and Side Entry Installation** – Engineered specifically for equipment with top or side shaft entry (not suitable for bottom entry).
- **Liquid-Lubricated with Optional Cooling System** – Maintains optimal seal face conditions and extends seal life under demanding operations.

**Specification;**

<b>Application</b>	General process industry; plastics and chemicals; paints and coatings; pharmaceuticals and bulk drug manufacturing; petrochemical and refinery units; pulp and paper plants; polymerization and resin processing; electronic encapsulation and epoxy systems; food and beverage processing; water and wastewater treatment; and agitators, reactors, mixers, vessels, and all types of top and side-entry rotating equipment.	
	<b>Materials</b>	
	Faces	Carbon / Ceramic / Silicon Carbide / Tungsten Carbide
	Elastomers	NBR (Nitrile) / FKM (Viton) / EPDM / Aflas / PTFE / TTV / Kalrez (FFKM)
	Hardware	SS 304 / SS 316 / SS 316L / Duplex / Hastelloy C / Alloy 20
<b>Operating Limits</b>	Size	20.0 mm to 300.0 mm (0.750" to 12.000")
	Pressure	Vacuum ... to 10 bars (145 psi) Unbalanced & 16 bars (232 psi) Balanced
	Temperature	-40°C to +200°C (-40°F to +392°F)
	Speed	150 RPM

**Operational Notes;**

- **Not recommended for bottom-entry applications** due to gravity-induced leakage and lubrication challenges.
- **Operating limits** (pressure, temperature, speed) may vary based on selected materials and process conditions.
- **Monitoring systems** (e.g., temperature or pressure sensors) may be necessary for critical or regulated services.