

Oil seals Special GTR K5

DESCRIPTION

Special GTR K5 Rotary Shaft Seal

The Special GTR K5 rotary shaft seals are premium dynamic gaskets engineered to guarantee perfect retention of synthetic and aggressive lubricating fluids within high-performance or high-speed mechanical systems. Featuring a co-molded internal metal reinforcement shell and a precision-cut dynamic lip preloaded with a stainless steel garter spring, they ensure an uncompromised hydrodynamic barrier. The advanced K5 design effectively prevents the ingress of external contaminants, fine dust, and moisture even under the most severe operating conditions.

PROFILES AND GEOMETRIES

Type GTR/K5 Standard Single dynamic sealing lip profile equipped with an internal garter spring and a high-precision, fully smooth elastomer outer diameter.	Type GTR/K5 DL (Duplex) Variant equipped with an additional secondary front dust lip without a spring, specifically designed for highly dusty environments or constant debris exposure.
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MATERIALS & OPERATING CONDITIONS

MATERIAL / COMPOUND	PERIPHERAL SPEED	TEMPERATURE	MAX PRESSURE
Premium FKM K5 High-stability Fluoroelastomer	Up to 35.0 m/s	-20°C / +200°C	0.05 MPa Standard atmospheric
Hi-Tech NBR 75 ShA Special Nitrile Rubber	Up to 12.0 m/s (0.5 m/s at low regimes)	-30°C / +100°C	0.05 MPa Standard atmospheric

SPRING TENSION COMPONENT	
Component	High-responsiveness garter spring
Standard Material	AISI 302 / AISI 316 Stainless Steel (chemical resistance & marine environments)
Compatible Fluids	Synthetic oils, traditional mineral oils, industrial greases, water, and glycol solutions

KEY FEATURES

Constant Radial Load The embedded spring exerts a calibrated, continuous radial pressure on the shaft, compensating for elastomer aging, micro-run-out, and structural wear.	Rubberized Coating The outer shell ensures optimal static sealing within the housing, compensating for differential thermal expansion and metal bore micro-roughness.	K5 Lip Precision Cut The primary sealing lip is finished with a sharp geometric precision cut. The angle creates a hydrodynamic wedge utilizing the oil film's surface tension.
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COMPLIANCE AND INTERCHANGEABILITY

Standards

Manufactured in strict compliance with ISO 6194/1 and DIN 3760 specifications.

Interchangeability

Simmerring BA / AS FKM • Parker OSHA / SC • Dichtomatik WA FKM • SKF HMS5