

Our sealing solutions for:
AUTOMOTIVE



Don't buy our seals

No sleepless nights.

Zero last-minute damage, zero 7am emergency call. **Easy-peasy lemon squeezy.**

No surprises.

Every project is studied, validated and stress-tested. **Draft a beer and enjoy the process.**

No walks alone.

From first conversation to post-sale. And maybe **we will show up at your kid's birthday.**

No short menus.

From Ø1mm to 1500 mm and wide selection of materials. **Like a Deliveroo-Seals version.**

No fear.

Long-term supply security. We will stay here **for the next 100 years.**



Shared Expertise

A full range of sealing solutions designed to meet the diverse requirements of automotive systems, from standard geometries to fully customised components.

Rings



O-Rings



D-Rings



X-Rings



V-Rings



R-Rings



Trapezoidal Rings



Hexagonal Rings



Back-up Rings



Oval Rings

Engineered Solutions



DWG Parts



Frames



Grommets



Caps



Discs

Material Specifications

BMW: GS 93010 55 // GS 93010 56 // GS 93010 59 // GS 93010-3 // GS 93010-3:2008-06 54 25 // 93010 46-10

BOSCH: GW1380-92-63-67-500 // GW1380-93-65-67-000 // N28 GW 1370-92-61-67-500 // N28 GW 1380-92-63-67-50 // N28 GW32-015 GW3270-69-53-81-100

DAF: DAF 20000/29897 26235 Ed. 09-2017 // DAF 20000/29897 26235 Ed. 09-2017

DAIMLER: DBL 6038.40 // DBL 6015-32 / 33 // DBL 6038.26 // DBL 6038.41 // DBL 6038.42 // DBL 6038.46 // DBL 5587.65

FORD: WSE-M2 D401-A3 // WSD-M2 D401-A // WSA-M2 D401-A8

MAN Truck and Bus: MAN 308 FFKM Ed. 01-2017 // MAN 308 FPM-1 - FPM-2 - FPM-3

PORSCHE: PORSCHE PN 707-2

PS: PSA B 630200 // PSA B 636100 // PSA B63 0300

SCANIA: STD4494 type 1 - 2 - 3 / 4 // STD4497 // STD4495 // STD4498 Type 1-2-3

VOLKSWAGEN: VW 2.8.1 A+T // VW 2.8.1 A/C // TL 52708 // TL 52264 // VW 2.8.1 A/C/T // VW 2.8.1 C/T // VW 2.8.11 H // VW TL 52708

VOLVO: STD 412-0002 // VCS 1225,909- 92590-7 // STD 1225,91- 92590-7

Missing yours?

Ask the full list and, if it is still missing, ask our Engineers. We will build up the compound for you.

Fuel Systems

☰ List of Usable Materials

- **FKM Grades:**
 - Type A (Peroxidic - Glycol Resistant)
 - Type B (Enhanced Coolant Resistance)
 - PLT/GLT (Low Temperature)
- **Alternative Materials:** EPDM, VMQ/FVMQ, HNBR

🔄 Main Sealing Challenges

- Compatibility with petrol, diesel, biofuels and high-ethanol blends (E85)
- Strict fuel permeation control (EPA/CARB compliance)
- Volume swelling and dimensional stability
- Sealing reliability during extreme hot/cold cycles
- Resistance to aggressive "sour gas" and additives

🔑 Key Required Properties

- Low fuel permeation
- Superior compression set resistance
- Thermal ageing stability
- Low-temperature flexibility (Cold Start reliability)
- Volume swell control

📦 Typical Products

- Fuel injectors
- Fuel pumps
- Fuel pressure regulators
- Common rail systems
- Fuel lines & connectors
- Fuel tank modules
- Fuel sender units
- Fuel control valves

Engine Lubrication

☰ List of Usable Materials

- **FKM Grades:**
 - Type A (Standard Oil Resistant)
 - Type B (Enhanced Chemical Resistance)
 - PLT/GLT (Low Temperature for cold climates)
- **Alternative Materials:** NBR, HNBR, ACM, AEM

🔄 Main Sealing Challenges

- Continuous exposure to high-temperature engine oils
- Aggressive detergent and anti-wear oil additives
- Corrosive blow-by gases
- Wear in dynamic sealing (crankshaft/camshaft)
- Maintaining elasticity over extended service intervals (Long-Life)

🔑 Key Required Properties

- Excellent oil & additive resistance
- High-temperature stability
- Low compression set
- Ozone & ageing resistance
- High abrasion resistance for dynamic seals

📦 Typical Products

- Crankshaft & Camshaft assemblies
- Oil pans
- Valve covers
- Oil filter
- Oil pumps
- Oil passages
- Pushrod tubes
- Oil cooler

Air Intake, Turbo & Emissions

☰ List of Usable Materials

- **FKM Grades:**
 - Type A/B (Standard)
 - Type F (Acid Resistance)
 - PLT/GLT (Low Temperature)
- **Alternative Materials:** AEM, VMQ/FVMQ, HNBR

🔄 Main Sealing Challenges

- Thermal peaks & shocks
- Exposure to oil vapours, ozone & aggressive condensates
- Ageing
- Severe duty cycles in turbocharged engines
- Low temperature elasticity loss, sealing under boost pressure

🔑 Key Required Properties

- Hot air & oil mist resistance
- Thermal shock stability
- Resistance to acidic condensates
- Low-temperature sealing
- High elasticity retention

📦 Typical Products

- Intake manifolds
- Turbocharger
- Compressed air ducts
- Intercoolers
- EGR systems
- Throttle bodies
- Air pressure sensors
- Crankcase ventilation systems (PCV)

Transmission & Driveline

List of Usable Materials

- **FKM Grades:**
 - Type A
 - Type B (Additive Resistant)
 - PLT/GLT (Low Temperature for Mechatronics)
- **Alternative Materials:** NBR, HNBR, ACM, AEM

Main Sealing Challenges

- Compatibility with ATF and gear oils
- High-operating temperatures
- Long service intervals; Wear on rotating components
- Compression set; Dimensional stability
- Cold temperature operation where required

Key Required Properties

- Fluid resistance
- Thermal ageing resistance
- Compression set resistance
- Wear resistance
- Dimensional stability
- Low temperature flexibility where required
- Sealing force retention

Typical Products

- Gearboxes
- Differentials
- Automatic transmission valve bodies
- Transmission pumps
- Torque converters
- Gearbox housings
- Transmission oil lines
- Mechatronic units

Cooling Systems

List of Usable Materials

- **FKM Grades:**
 - Type A (Peroxidic - Glycol Resistant)
 - Type B (Enhanced Coolant Resistance)
 - PLT/GLT (Low Temperature)
- **Alternative Materials:** EPDM, VMQ/FVMQ, HNBR

Main Sealing Challenges

- Compatibility with modern coolants
- Resistance to OAT, NOAT and hybrid coolants
- Combined exposure to coolant and oil
- Thermal cycling
- Ageing in hot coolant
- Sealing at low temperature
- Long-term sealing force retention

Key Required Properties

- Coolant resistance
- Resistance to combined coolant and oil exposure
- Compression set resistance
- Low temperature sealing
- Thermal ageing resistance
- Chemical & dimensional stability

Typical Products

- Thermostats
- Water pumps
- Thermostat housings
- Coolant lines
- Heat exchangers
- Oil cooler modules
- Water inlets/outlets

High-Pressure Diesel

List of Usable Materials

- **FKM Grades:**
 - Type F/GFLT (Maximum Chemical Shield)
 - Type B
 - PLT/GLT
- **Alternative Materials:** HNBR (limited to lower pressures)

Main Sealing Challenges

- Very high pressure levels
- Pressure pulsations
- Compatibility with diesel fuel and additives
- Severe thermal cycles
- Loss of elasticity at low temperature
- Seal stability under load
- Reduced sealing margin in extreme conditions

Key Required Properties

- Fuel resistance
- Compression set resistance
- Low temperature flexibility
- Seal stability under pressure
- Extrusion resistance
- Resilience retention
- Dimensional stability
- Thermal ageing resistance

Typical Products

- Common rail systems
- High-pressure diesel pumps
- Diesel injectors
- Rail connectors
- Pressure control systems
- Fuel pressure sensors
- High-pressure fuel lines

Certified Quality



ISO 9001

Quality management, trusted by global OEMs.



IATF 16949

Quality management, trusted by global OEMs.



ISO 14001

Environmental responsibility in production.

Contact Us



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Trusted by the best

