



FKM XploR™ V9T82

**EXPLOSIVE DECOMPRESSION RESISTANT MATERIALS
OUTSTANDING EXTREME LOW TEMPERATURE PERFORMANCE**



Explosive decompression is a major concern to the oil and gas industry. It occurs when applied system pressure is released, causing absorbed gas to expand, potentially damaging elastomer seals.

Trelleborg Sealing Solutions has focused on this issue and presents the XploR™ range, an entire family of advanced elastomers especially developed for oil and gas applications. The portfolio includes compounds in HNBR, FKM, Aflas® and Isolast® Perfluoroelastomer, each of which demonstrates best-in-class Explosive Decompression (ED) resistance for its material type.

XploR™ V9T82 combines excellent chemical and thermal properties, with outstanding low temperature capability. It exhibits superior high pressure sealing performance in ED situations, which is supported by independent institute approval to standard test protocols.

When the composition of the well or conditions of the application are known, FKM XploR™ V9T82 may prove the optimum and most cost-effective material for your application, especially when operating temperatures are extremely low.

For further information on selecting the right compound and advice on seal specification for your individual application, consult your local Trelleborg Sealing Solutions marketing company. **Find contact details at www.tss.trelleborg.com.**

Features and benefits

- Unrivalled ED resistance within its material type
- Operating temperatures from -48°C to +200°C/-54°F to +392°F with short excursions to 210°C/+410°F
- Outstanding performance at extremely low temperatures
- Exceptional mechanical performance
- Low long-term compression set
- Very good chemical compatibility
- Extended life in aggressive media, including the hydrocarbon and aqueous media common within oil & gas applications
- High modulus and high strength

Applications

- Separation equipment
- Connector systems
- Valves
- Wellhead control equipment
- Tubing hangers
- Swivel stacks on Floating Production Storage and Offloading (FPSO) vessels
- Blowout Preventers (BOPs)
- Downhole Tools

XploR™ is available in all standard international O-Ring sizes and cross-sections along with custom-engineered solutions and specially designed seal profiles.

FKM XPLOR™ V9T82 COMPOUND DATA

	Standard	V9T82
Elastomer base		EXT LT-FKM
Hardness	DIN 53505	90+/-5 Shore A
Color		Black
Specific Gravity	DIN EN ISO 1183-1	1.8+/-0.03
Tensile Strength	DIN 53 504	17.3 MPa/2,510 psi
Elongation at Break	DIN 53 504	163%
Modulus at 100%	DIN 53 504	16.1 MPa/2,340 psi
Compression Set 24 hrs/150°C/302°F	DIN ISO 815 Type B	14%
Air Aging 70 hrs @ 150°C/302°F	DIN 53508	+2 Shore A
Hardness Change		-15%
Tensile Strength Change		-10%
Fluid Immersion Testing: Oil ASTM No. 1: 903 70 hrs @ 150°C/302°F	DIN ISO 1817	-1 Shore A
Change in Hardness		+1.4%
Change in Volume		
Fluid Immersion Testing: Oil IRM 903 70 hrs @ 150°C/302°F	DIN ISO 1817	-2 Shore A
Change in Hardness		+1.1%
Change in Volume		
Fluid Immersion Testing: Water 70 hrs @ 100°C/212°F	DIN ISO 1817	-1 Shore A
Change in Hardness		+1.0%
Change in Volume		
TR 10 Point	TBS 00036	-41°C/-42°F
Service Temperature		-48°C to +200°C/ -54°F to +392°F
Excursion Temperature		To +210°C/410°F

Material properties are average values resulting from tests, as specified, on standard test samples. The values are for guidance only. It is the responsibility of the user to test material for suitability within a specific application. Information is correct at time of publication.

