

XLT Materials

EXTENDING THE LIMITS OF LOW TEMPERATURE FKM SEALING

XLT – The new, tougher FKM series

Higher performance demands from automotive, oil and gas and chemical processing industries require even better sealing materials: materials capable of withstanding extremely low temperatures, high pressures and chemically aggressive environments.

The XLT range offers a solution to these challenges. The XLT family of compounds is the latest innovative series of low temperature peroxide-cured fluoroelastomer grades from Trelleborg Sealing Solutions. Originally designed to meet the challenging demands of automotive applications, these compounds are now also the preferred choice for chemical and processing industries due to their outstanding chemical resistance and sealing performance.

There are currently six main variants in the XLT family, but newer versions are constantly being developed to meet customer specific end-use and processing needs.

Testing of the new generation XLT compounds in bio-fuel applications have proven that this family of compounds outperforms and extends the temperature performance capability of traditional fluorocarbon elastomers, with comparably low volume swell and good retention of physical properties. They also demonstrate excellent chemical resistance against most chemicals including the more aggressive ethanol/fuel and methanol/fuel mixtures.

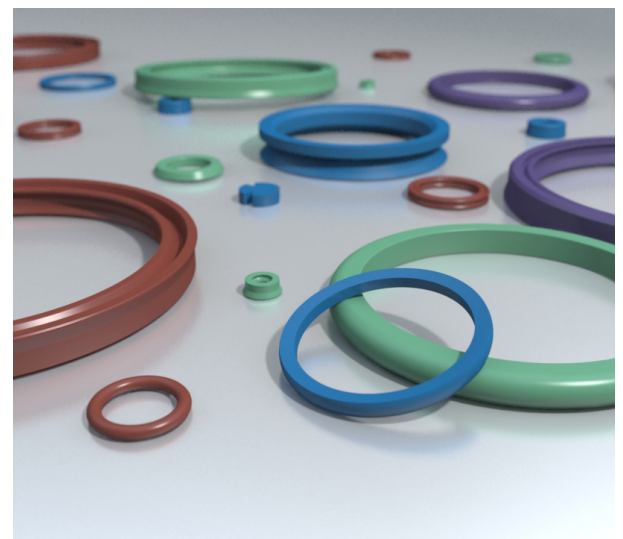
XLT has significant advantages compared to other elastomer sealing materials.

Features and Benefits

- Extended Low Temperature flexibility with low temperature retraction (TR10) values ranging from -30°C to -45°C
- Increased fuel and chemical resistance
- Increased sealing capability in aggressive environments
- Mechanical properties retention

Typical Applications

- Automotive – High pressure direct injection
- Military – Piston accumulators and rod seal systems
- Mining – hydraulic systems on diggers
- Forestry– spring loaded cylinders on vehicles
- Wind Power – gear boxes

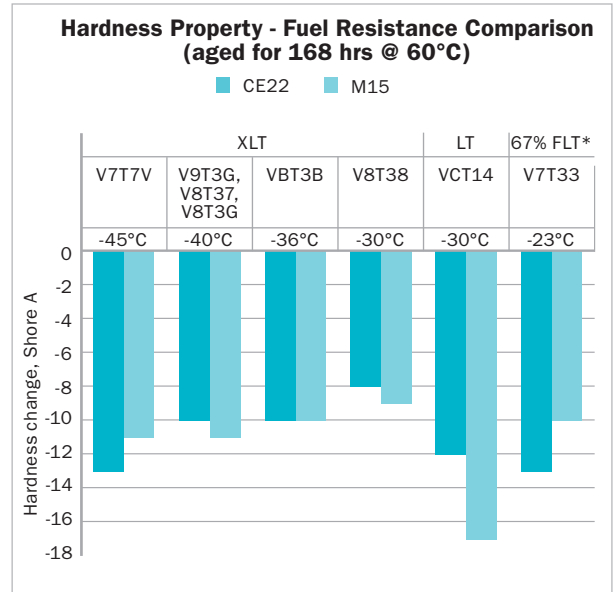
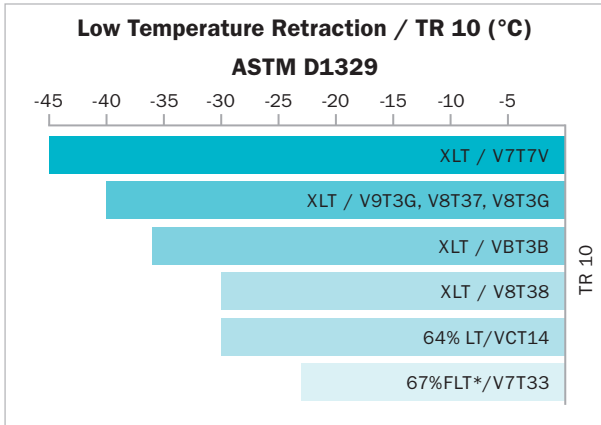


Engineered Seals designed to customers' needs

Optimised Low Temperature behaviour

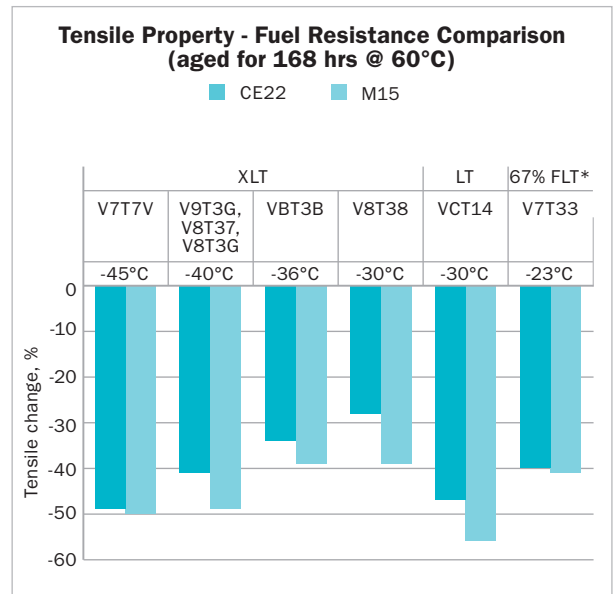
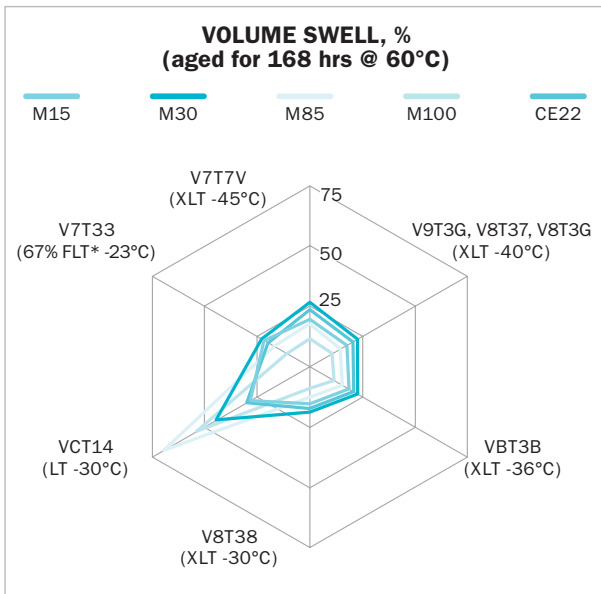
With TR10 values reaching -45°C, excellent sealing capability is achieved, outperforming other fluorocarbon elastomers.

Good retention of mechanical properties is also observed for the XLT family of compounds.



Superior Chemical and Fuel resistance

Typical results demonstrating the excellent fluid resistance of the XLT range in automotive reference fuels are shown.



The XLT family exhibits excellent chemical and swell resistance equivalent to a high fluorine terpolymer (70%F*), but with exceptional low temperature performance, down to -45°C TR10.

*indicates fluorine content

