V75SC

A high fluorine fluoroelastomer with enhanced thermal & chemical resistance

Description

V75SC is a white colored fluoroelastomer (FKM) developed as a 'clean' high performance material for use in demanding applications within the semiconductor and flat panel display industries.

The extremely high fluorine content of the material provides exceptional thermal resistance and outstanding chemical resistance to steam (up to 180°C) and acids. V75SC incorporates an inert reinforcing filler system that reduces particulation in critical sealing applications and a proprietary 'addition-type' curing system which further enhances chemical resistance.

V75SC provides excellent sealing performance due to its low compression set and ideal modulus, which ensures maximum long-term sealing efficiency.

The superior purity, chemical resistance and plasma resistance provided by V75SC exceeds the best performing FKMs (which are usually black) whilst delivering cost advantages over FFKMs.

Key Attributes

- ▶ High purity 'clean' material reduces particulation
- Excellent thermal resistance (including steam up to 180°C)
- Outstanding chemical resistance to a wide range of media
- Low compression set & high sealing efficiency
- Cost effective high performance fluoroelastomer

Typical Applications

O-rings
Slit Valve seals
Static & Dynamic seals
Lip Seals
Check Valves
Pumps & Valves



Typical Material Properties

Property	ASTM	ISO	Value
Material Type	FKM	FPM	Tetrapolymer
Colour			Cream
Hardness: (°IRHD) (Shore A)	D1415 D2240	ISO48 ISO7619	74 75
Tensile Strength (MPa)	D412	ISO37	13.1
Elongation at break (%)	D412	ISO37	260
100% Modulus (MPa)	D412	ISO37	5.8
Compression Set (%): 70 hrs @ 200°C (392°F)	D395	ISO815	16.7
Minimum Operating Temperature			-15°C (+5°F)
Maximum Operating Temperature			+250°C (+482°F)

SPECIAL NOTE: This information is to the best of our knowledge accurate and reliable. However, Perlast Ltd makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use, especially in applications where their failure may result in injury and/or demage. It should also be noted that all elastomeric parts have a finite life, therefore a regular program of inspection and replacement is strongly recommended. In non-black grades of elastomer, it is possible to observe slight variations in colour. This is normal and is inherent in the part, it is not indictive of foreign matter. These colour variations are not expected to adversely effect the performance of the part.

The material properties above should not to be used for specification purposes.



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