

# V75J

Steam resistant, lead-free, fluoroelastomer



## Description

V75J is a peroxide-cured terpolymer formulated for high performance sealing applications in today's aggressive industrial environments.

V75J has been developed to provide outstanding resistance to hot water and steam (above 150°C/302°F) *without* the use of litharge (lead oxide) curatives.

V75J also offers superior resistance to acids, oils, coolants and hydraulic fluids, making it ideal for use in chemical processing equipment and certain critical diesel engine locations.

## Key Attributes

- ▶ Excellent resistance to hot water and steam
- ▶ Excellent resistance to oils, fuels and hydraulic fluids
- ▶ High temperature performance
- ▶ Superior long-term sealing performance

## Typical Applications

- ▶ Marine diesel engines (valve seats & liner rings)
- ▶ Heat exchangers
- ▶ Paper/pulp processing equipment
- ▶ Hot water/steam systems

## Other steam resistant elastomers

A75H (FEPM) Aflas® material

E70K (EPDM) peroxide-cured material

Perlast® G80A (FFKM) perfluoroelastomer

Aflas® is a registered trademark of Asahi Glass.

Perlast® is a registered trademark of Precision Polymer Engineering Ltd.

## Comparative data

Critical Material Properties	Litharge-cured FKM	Typical Aflas®	V75J
<i>Test conditions: water, 150°C, pressure vessels, 168 hours</i>			
Tensile Strength (% change)	+57.0	16.2	3.3
Ultimate Elongation (% change)	-15	13.6	-0.9
<i>Test conditions: air, 200°C, 24 hours</i>			
Compression Set (%)	19.0	45.0	11.6



## Typical Material Properties

Property	ASTM	ISO	Value
Material Type	FKM	FPM	Terpolymer
Colour			Black
Hardness: (°IRHD)	D1415	ISO48	75
Tensile Strength (MPa)	D412	ISO37	17.4
Elongation at break (%)	D412	ISO37	300
Compression Set: 24 hrs @ 200°C (392°F)	D395	ISO815	11.6%
Minimum Operating Temperature			-20°C (-4°F)
Maximum Operating Temperature			+200°C (+392°F)
Water Resistance: 168 hrs @150°C (302°F)			
Hardness change (points)	D471	ISO000	3 IRHD
Tensile strength change	D1415	ISO48	+3%
Elongation at break change	D412	ISO37	-1%
Volume change	D412	ISO37	10%

**SPECIAL NOTE:** This information is to the best of our knowledge accurate and reliable. However, Precision Polymer Engineering 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 damage. It should also be noted that all elastomeric parts have a finite life. Therefore a regular programme of inspection and replacement is strongly recommended.  
The material properties above should not be used for specification purposes.