

Carburettor O Rings for FZS1000

Use Nitrile (Buna-N) or Viton® (FKM) O-Rings (FKM being more expensive) Fluoroelastomer Seal type FKM 75

Sizes

Float needle valve: 7.5mm ID x 1.5mm cross section x 10.5mm OD

Main Jet : 5.5mm ID x 1.5mm cross section x 8.5mm OD

Idle air screw: 3.0mm ID x 1.0mm cross section x 5.0mm OD

Under Diaphragm cap 2.5mm ID x 1.5mm cross section x 5.5mm OD

Idle air screw O-ring is a proprietary size of 2.70 I.D. x 1.13mm

Nitrile O-rings

Also called NBR or Buna-N, nitrile o rings are probably the most economical and widely used elastomer out there. This material has a desirable set of properties including low compression set, high resistance to abrasion and good tensile strength.

Temperature range: Effective from -40°C to 120°C

Suitability: General purpose, particularly in areas where the seal will be exposed to hydrocarbons, oils, petrol, water and hydraulic fluids

Benefits: Excellent abrasion and tear resistance, cost effective

Limitations: Nitrile is not good at resisting degradation by ozone or weather

Nitrile O rings used in many applications, including where oil resistance is needed or where low temperature functionality is required. These include automotive, aircraft fuel systems, marine applications and more.

Viton™ O rings

The name Viton is a trademark, a bit like Hoover or Sellotape, and refers to fluorocarbon o rings, or FKM/FPM for short. This material has an excellent tolerance for high temperatures, resistance to oils, fuels and hydraulic fluids as well as aromatics and solvents.

Various types of FKM/FPM/Viton™ o rings are available, with varying amounts of fluorine additions which increase performance in specific situations.

Temperature range: From -40°C up to 250°C

Suitability: Good for use in high temperature situations or where chemicals are being used. As well as resisting oils, petrol and hydrocarbons, Viton™ is resistant to mineral acids, halogenated hydrocarbons and more.

Benefits: Resistant to the majority of chemicals, as well as to degradation by UV, weather, ozone and mould.

Limitations: Less tolerant of low temperatures

You'll find FKM/FPM O rings in a huge variety of applications from aircraft engines to vehicle components, particularly where resistance to corrosive liquids and fuels is required. This material has low compression set characteristics, making it ideal for use in high temperature environments, as well as resistance to all sorts of chemicals.

Viton™ vs nitrile O rings – which is the right choice?

Viewing these two O ring materials at a glance, it's easy to see some occasions where the decision of Viton™ vs nitrile O rings will be clear to see. For example, if you know your assembly works at more than 100°C, nitrile will not be suitable. If your assembly is likely to be exposed to the weather, to UV or to ozone, nitrile will likely degrade and risk failure.

Viton™ /FKM/FPM is superior to Nitrile in almost all situations, excluding operation at subzero temperatures.