

Progressing Cavity Pump Elastomers

PCP Elastomer Options

A range of stator elastomers is available allowing the correct pump to be selected for many downhole fluid conditions.

OA-102: Medium Nitrile (~33% ACN) – This compound is a medium acrylonitrile rubber with good oil and solvent resistance. OA-102 has good physical properties having above average tensile and tear strength characteristics. Resistant to heat, ozone attack and very high resistance to gas permeation. Typically used in abrasive and high water cut applications with low aromatic content.

Maximum temperature: - 200°F (95°C) | **Hardness:** ~69 IRHD

OB-138: High Nitrile (~45% ACN) – This compound is a high acrylonitrile rubber. The higher acrylonitrile content improves the oil and solvent resistance of the compound, making it suitable for handling crude oils with medium-to-high aromatic content. OB-138 has high tensile and tear strength characteristics. Resistant to heat, ozone attack and explosive decompression.

Maximum temperature: - 212°F (100°C) | **Hardness:** ~73 IRHD

OF-103: “Soft” Medium Nitrile (~33% ACN) – This compound is a medium acrylonitrile rubber with good oil and solvent resistance. OF-103 has excellent mechanical properties and offers the highest level of abrasion resistance. OF-103 has a lower durometer than OA and is typically used in highly abrasive applications with low aromatic content.

Maximum temperature: - 175°F (80°C) | **Hardness:** ~53 IRHD

OH-175: Hydrogenated Nitrile (~36% ACN) – This compound is a medium-to-high acrylonitrile rubber. The properties of this compound are very similar to those of the OB-138 elastomer with improved resistance to hydrogen sulphide (H₂S) and the ability to operate at higher temperatures. The temperature resistance is further increased when combined with a High-Temperature-Lock (HTL) stator.

Maximum temperature: - 275°F (135°C) | **Hardness:** ~71 IRHD

Maximum temperature: with HTL - 300°F (150°C)

