Rubber Material Selection Guide
FVMQ or Fluorosilicone Rubber

- Abbreviation: FVMQ
- ASTM D-2000 Classification: FK
- Chemical Definition: Fluorovinyl Methyl Siloxane
- RRP Compound Number Category: 17-0000 Series

Physical & Mechanical Properties

- Durometer or Hardness Range: 35 – 80 Shore A
- Tensile Strength Range: 200 – 1,500 PSI
- Elongation (Range %): 100 % – 480 %
- Abrasion Resistance: Poor
- Adhesion to Metal: Good
- Adhesion to Rigid Materials: Fair to Good
- Compression Set: Fair to Good
- Flex Cracking Resistance: Poor to Good
- Impact Resistance: Poor to Good
- Resilience / Rebound: Poor to Fair
- Tear Resistance: Poor to Good
- Vibration Dampening: Good

Chemical Resistance

- Acids, Dilute: Excellent
- Acids, Concentrated: Good
- Acids, Organic (Dilute): Good
- Acids, Organic (Concentrated): Fair
- Acids, Inorganic: Fair
- Alcohol’s: Fair to Excellent
## Chemical Resistance

- **Aldehydes**: Poor
- **Alkalies, Dilute**: Excellent
- **Alkalies, Concentrated**: Good
- **Amines**: Poor
- **Animal & Vegetable Oils**: Excellent
- **Brake Fluids, Non-Petroleum Based**: Poor
- **Diester Oils**: Good to Excellent
- **Esters, Alkyl Phosphate**: Poor to Fair
- **Esters, Aryl Phosphate**: Good to Excellent
- **Ethers**: Fair
- **Fuel, Aliphatic Hydrocarbon**: Excellent
- **Fuel, Aromatic Hydrocarbon**: Good to Excellent
- **Fuel, Extended (Oxygenated)**: Excellent
- **Halogenated Solvents**: Good to Excellent
- **Hydrocarbon, Halogenated**: Good to Very Good
- **Ketones**: Poor
- **Lacquer Solvents**: Poor
- **LP Gases & Fuel Oils**: Excellent
- **Mineral Oils**: Good to Excellent
- **Oil Resistance**: Good
- **Petroleum Aromatic**: Good
- **Petroleum Non-Aromatic**: Good
- **Refrigerant Ammonia**: Excellent
- **Refrigerant Halofluorocarbons**: R-11, R-12
- **Refrigerant Halofluorocarbons w/ Oil**: R-11, R-12
- **Silicone Oil**: Excellent
- **Solvent Resistance**: Excellent
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♦ Thermal Properties
  ▪ Low Temperature Range - 85º F to - 70º F
  ▪ Minimum for Continuous Use (Static) - 80º F
  ▪ Brittle Point - 85º F
  ▪ High Temperature Range + 400º F to + 450º F
  ▪ Maximum for Continuous Use (Static) + 450º F

♦ Environmental Performance
  ▪ Colorability Good to Excellent
  ▪ Flame Resistance Excellent
  ▪ Gas Permeability Poor to Good
  ▪ Odor Good
  ▪ Ozone Resistance Excellent
  ▪ Oxidation Resistance Excellent
  ▪ Radiation Resistance Fair to Excellent
  ▪ Steam Resistance Fair
  ▪ Sunlight Resistance Excellent
  ▪ Taste Retention Good
  ▪ Weather Resistance Excellent
  ▪ Water Resistance Excellent

For assistance in identifying the appropriate polymer or material, or to develop and formulate a fluorosilicone rubber compound to meet your specific application and performance requirements, please contact Robinson Rubber Products at e-mail: sales@robinsonrubber.com or phone: +1-763-535-6737.

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