

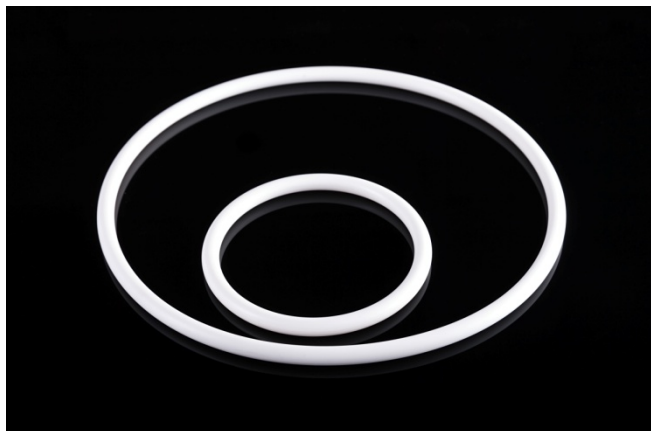
# VALQUA Semiconductor Industry Products

## SPOQ ARMOR®

High Performance Elastomer FKM O-Ring

### ❖ Product & Benefits

SPOQ ARMOR® is a high performance FKM material recommended for static/dynamic locations. Its plasma resistance properties make the SPOQ ARMOR® suited for CVD, Etch and Ashing applications.



### ❖ Featured Benefits

- Plasma Resistance
- Low Adhesion
- Low Metallic Impurities
- Low Outgassing

### ❖ Applications

- Dry Etch Equipment
- Plasma Enhanced CVD Equipment
- Plasma Ashing Equipment

### ❖ Contact Us

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### ❖ Typical Properties

Color	White
Hardness (Shore A)	71
Tensile Strength (MPa)	14
Elongation (%)	240
Modulus 100% Elongation (MPa)	3.0
Maximum Temperature (°C)	200
Compression Set (%)	18

*Compression Set: 25% compression at 200°C for 72 hours  
Values above are actual measurements, not standards*

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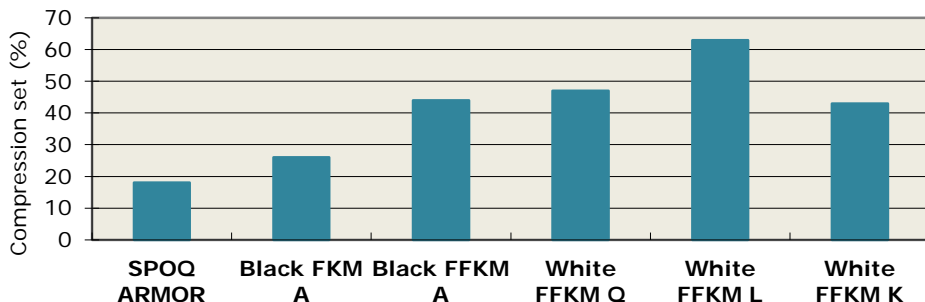
# Additional information

# SPOQ ARMOR®



## ❖ Mechanical Properties

### Compression Set Comparison

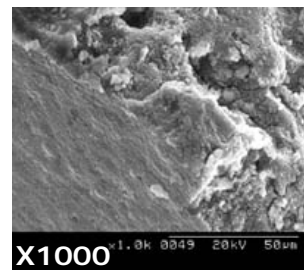
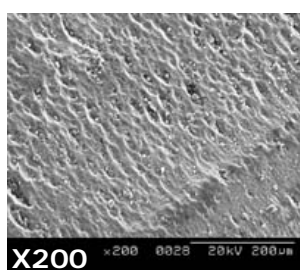
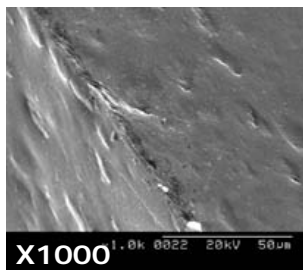
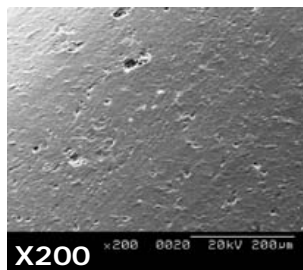
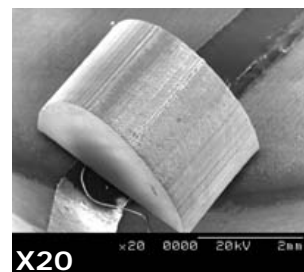
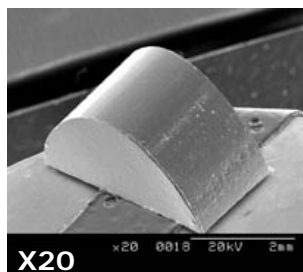


**Sample shape:** CS50 x 50mm  
**Temperature:** 200°C  
**Test period:** 72 hours  
**Squeeze ratio:** 25%

### Actual Equipment Evaluation Example

Scanning electron micrograph of elastomer surface after plasma exposure

**Equipment:** CVD  
**Location:** Slit valve (AS568A-254)  
**Gas:** TEOS+O<sub>2</sub>+C<sub>2</sub>F<sub>6</sub>+TMP  
**Plasma Power:** RF450W  
**Temperature:** 70~80°C  
**Wafer Count:** SPOQ ARMOR 17,727  
 General FKM 1,700



SPOQ ARMOR

General Fluoro Elastomer

