



O-Rings and Seals

Kratos™ F22 O-rings are designed for hazardous and contamination-sensitive environments, but are also environmentally-friendly.

This Ultra High Performance Elastomer (UHE) compound not only reduces cost of ownership over time, but also:

- Incorporates fluorinated backbone and nano-fill architecture
- Uses an Interstitial Reinforcement System (IRS)
- Allows for maximum service temperatures surpassing 285°C (545°F)
- Contains no metals, refractory metals or metal oxides
- Eliminates contamination
- Is a cost-efficient drop-in replacement for existing hardware
- Bridges the gap between FKM (Viton®) and FFKM (Perfluoroelastomer) applications
- Reduces installed cost
- Improves PM cycle frequency
- Performs similar to FFKM with permeation properties similar to FKM

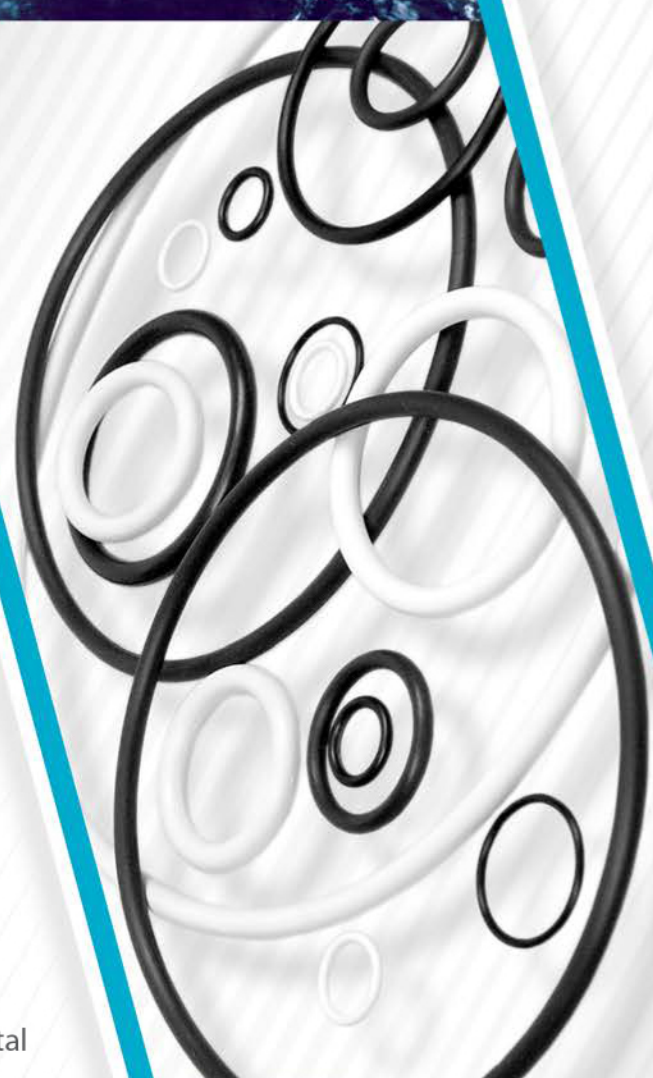
Available Kratos™ F22 O-rings and Seals:

- Kratos™ F22R - Contains no metals, refractory metals or metal oxides and is ideal for contamination sensitive processes
- Kratos™ F22W - Developed for aggressive oxidizers where UV emissions may also be present
- Kratos™ F22B - Specially formulated for aggressive chemical and hydrocarbon processing

"Multiple attempts have been made to close the gap between FKM and FFKM, but a majority lack universality of use...Kratos F22 is the only known gap compound that delivers universality of application."

~ Fred Pourmirzaie, Director of FloDynamix, LLC.

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Permeation and Etch Resistance of Kratos™ F22 O-rings

PVD and ALD processes are extremely sensitive to permeation of N_2 , O_2 and He among others. Conventional Perfluoroelastomer (FFKM) O-rings with inherent porosity are not the ideal material of choice for these processes. Deposition of exotic films are pushing process temperatures to much higher levels and this puts the incumbent FKM at the limit of its performance. Kratos™ F22 series O-rings with very low permeation properties are ideal sealing choices for these applications.

