

FF504-80

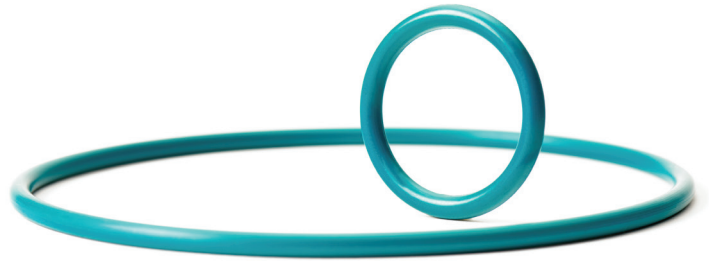
Extreme Chemical Resistant ULTRA™ O-Rings

In sectors and applications where resilience to chemicals is of utmost importance, the Parker compound FF504-80 stands out. This green, 80 durometer, perfluorinated elastomer is specifically designed for utilization in the most severe operating environments, where superior thermal stability (up to 275°C) and extreme chemical resistance are prerequisites.

FF504-80 exhibits exceptional compatibility for usage in bases, amines, steam, ethylene oxide, acids, and various other aggressive chemicals. As a result, it is optimally suited for the Chemical Process Industry (CPI), Exploration and Production of Oil and Gas (EOG), paint spray applications, and the broader industrial market.

Product Features

- 80 Shore A durometer
- Green in color
- Maximum operating temperature 275°C (527°F)
- Excellent compatibility with aggressive media
- Best in class base resistance
- Best in class steam resistance
- Outstanding compression set resistance
- Outstanding mechanical properties
- Available in O-rings, molded shapes, gask-o-seals, and rubber bonded seals



FF504 is an ULTRA fkm perfluoroelastomer material designed for use in the most harsh environments.



FF504-80

Material Test Report

| Original Physical Properties | Test Method | Test Results |
|---|--------------------|--------------|
| Hardness, Shore A, pts | ASTM D2240 | 80 |
| Tensile Strength, psi | ASTM D1414 | 2033 |
| Ultimate Elongations, % | ASTM D1414 | 226 |
| Modulus at 50% Elongation, psi | ASTM D1414 | 444 |
| Modulus at 100% Elongation, psi | ASTM D1414 | 849 |
| Specific Gravity | ASTM D1414 | 2.02 |
| Color | ASTM D297 | Green |
| Dry Heat Resistance 70 hrs. @ 250°C (482°F) | | |
| Hardness Change, Shore A, pts. | ASTM D573 | -1 |
| Tensile Strength Change, psi | | 13 |
| Ultimate Elongation Change, % | | -3 |
| Compression Set 22 hrs. @ 200°C (392°F) | | |
| Percent of Original Deflection, max | ASTM D395 Method B | 11 |
| Compression Set 70 hrs. @ 200°C (392°F) | | |
| Percent of Original Deflection, max | ASTM D395 Method B | 23 |
| Fluid Immersion Vinyl Chloride Monomer, 70 hrs. @RT | | |
| Hardness Change, Shore A, pts. | ASTM D471 | 0 |
| Tensile Strength Change, psi | | -4 |
| Ultimate Elongation Change, % | | -2 |
| Volume Change, % | | 0 |
| Fluid Immersion IRM903 Oil, 70 hrs. @150°C (302°F) | | |
| Volume Change, % | ASTM D471 | +2 |



Parker Hannifin Corporation
O-Ring & Engineered Seals Division
2360 Palumbo Drive
Lexington, KY 40509
phone 859 269 2351
www.parker.com/oes

OES 7015 03/26/2024

© 2024 Parker Hannifin Corporation

