



DuPont™ Kalrez® Perfluoroelastomer Parts

DuPont™ Kalrez® Spectrum™ 7390 perfluoroelastomer parts as an alternative to DuPont™ Kalrez® 3018 perfluoroelastomer parts for the Chemical Processing and Oil & Gas Industries

Technical Information - August 2021

Product Description

Kalrez® 3018 parts are used in applications involving aggressive chemicals such as amines, strong bases, and/or steam, and requiring high-hardness, and have an upper service temperature of 288 °C. However, production of this legacy product is being discontinued.

Kalrez® 7390 parts are black products that offer excellent amine-resistance and steam-resistance, and superior overall chemical resistance. It has an upper service temperature of 300°C as well as excellent compression set resistance. Kalrez® 7390 parts may be a suitable replacement for Kalrez® 3018 parts, and physical property comparisons between these products are shown in the table below.

For additional information on Kalrez® Spectrum™ 7390 performance in specific industrial environments, please contact a Kalrez® Technical Service & Development Engineer who can review and evaluate your specific application and needs in more detail.

Typical Physical Properties ¹	Kalrez® 3018	Kalrez® Spectrum™ 7390
Color	Black	Black
Hardness, Durometer Shore A ²	91	89
100% Modulus ³ , MPa (psi)	16.9 (2450)	21.3 (3090)
Tensile Strength at Break ³ , MPa (psi)	21.7 (3150)	22.1 (3210)
Elongation at Break ³ , %	125	101
Compression Set ⁴ , %70 hrs.at 204 °C (400 °F)	22	-
Compression Set ⁵ , %70 hrs.at 204 °C (400 °F)	-	14
Maximum Service Temperature ⁶ , °C (°F)	288 (550)	300 (572)
Lowest Service Temperature ⁶ , °C (°F)	-8 (18)	-26 (-15)

¹ Not to be used for specifications

² ASTM D2240 (Pellet test specimens)

³ ASTM D412 (Dumbbell test specimens)

⁴ ASTM D395B, (Pellet test specimens)

⁵ ASTM D395B & D1414, (AS568 K214 O-ring test specimens)

⁶ DuPont proprietary test method; performance will vary with seal design and application specifics

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