

Material Test Report

Compound V90101

FKM, Black, General Purpose

GENERAL		
Material:	FLUOROCARBON RUBBER	
Durometer:	90	
Color:	Black	
ASTM* D2000 Callout:	M3HK914 A1-10 B37 B38 EF31 EO78	
ORIGINAL PROPERTIES	ASTM D2000 REQUIREMENT	TYPICAL RESULTS
Hardness, Shore A, pts, ASTM D2240-15	90±5	89
Tensile Strength, psi, min, ASTM D412-16	2031 (min)	2368
Elongation, min, %, ASTM D412-16	100 (min)	135
Modulus @ 100%, psi, ASTM D412-16		1828
Density, Mg/m ³ , CNS 5341-96, Method A		1.84
HEAT AGE, A1-A10 (70 hrs. @ 250°C)	ASTM D2000 REQUIREMENT	TYPICAL RESULTS
Hardness Change, pts, Shore A, ASTM D573-04	+10(max)	+3
Tensile Strength Change, %, ASTM D573-04	-25(max)	-8
Elongation Change, %, ASTM D573-04	-25(max)	-13
Weight Change, %		-2.5
COMPRESSION SET, B37 (22 hrs. @ 175°C)	ASTM D2000 REQUIREMENT	TYPICAL RESULTS
ASTM D395-18, Method B	30% (plied) (max)	14.5
COMPRESSION SET, B38 (22 hrs. @ 200°C)	ASTM D2000 REQUIREMENT	TYPICAL RESULTS
ASTM D395-18, Method B	50% (plied) (max)	16.9
FUEL C RESISTANCE, EF31 (70 hrs. @ 23°C)	ASTM D2000 REQUIREMENT	TYPICAL RESULTS
Hardness Change, pts, Shore A, ASTM D471-16a	±5	-3
Tensile Strength Change, %, ASTM D471-16a	-25(max)	-12
Elongation Change, %, ASTM D471-16a	-20(max)	-8
Volume Change, %, ASTM D471-16a	0~+10	+2.8
NO. 101 OIL, EO78 (70 hrs. @ 200°C)	ASTM D2000 REQUIREMENT	TYPICAL RESULTS
Hardness Change, pts, Shore A, ASTM D471-16a	-15~+5	-8
Tensile Strength Change, %, ASTM D471-16a	-40 (max)	-11
Elongation Change, %, ASTM D471-16a	-20 (max)	+2
Volume Change, %, ASTM D471-16a	0~+15	+7.6

*American Society for Testing and Materials

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