

Data Sheet: V590 (FKM90)

MATERIAL: FLUOROCARBON 90 SHORE BISPHENOL CURED

COLOUR: BLACK

GENERAL SERVICE TEMPERATURE RANGE: -20°C to +205°C

SPECIFICATION: ASTM D2000 M3HK910 A1-10 B38 EF31 EO78

PHYSICAL PROPERTIES	TEST METHOD	REQUIREMENT	TEST RESULT
HARDNESS, SHOREA	ASTM D2240-05	90±5	89
TENSILE STRENGTH, PSI (MPa)	ASTM D412-06A	1450 (MIN)	2005 (13.82)
ELONGATION, %	ASTM D412-06A	100 (MIN)	167
MODULUS AT 100%, PSI (MPa)	ASTM D412-06A		1344 (9.26)
SPECIFIC GRAVITY, g/cm ³			1.82
HEAT AGEING, 70 hrs @ 250°C			
HARDNESS CHANGE, PTS	ASTM D573-04	+10 (MAX)	+5
TENSILE STRENGTH CHANGE, %	ASTM D573-04	-25 (MAX)	-2
ELONGATION CHANGE, %	ASTM D573-04	-25 (MAX)	-12
WEIGHT CHANGE, %	ASTM D573-04		-2.3
B38 COMPRESSION SET			
22 hrs @ 200°C, METHOD B	ASTM D395-14	50% (PLIED) (MAX)	19.3
EF31 ASTM FUEL C RESISTANCE, 70 hrs @ 23°C			
HARDNESS CHANGE, PTS	ASTM D471-12A	±5	-3
TENSILE STRENGTH CHANGE, %	ASTM D471-12A	-25 (MAX)	-14
ELONGATION CHANGE, %	ASTM D471-12A	-20 (MAX)	-14
VOLUME CHANGE, %	ASTM D471-12A	0~+10	+3.6
EO78 ASTM No. 101 OIL, 70 hrs @ 200°C			
HARDNESS CHANGE, PTS.	ASTM D471-12A	-15~+5	-11
TENSILE STRENGTH CHANGE, %	ASTM D471-12A	-40 (MAX)	-16
ELONGATION CHANGE, %	ASTM D471-12A	-20(MAX)	-13
VOLUME CHANGE, %	ASTM D471-12A	0~+15	+9.8

The above test results are based on test slabs / buttons. The results from the actual parts may be different.

Issue Date: 18.05.2023