



MR O-RING

QUALITY YOU TRUST, SERVICE YOU RELY ON

Material Datasheet

Compound #: V90

Genuine Viton®, General Purpose

Material Summary		
Material Type:	FKM	
Durometer:	90	
Color:	Black	
Recommended Temperature Range (Static):	-25°C to 250°C	
Cure System:	Bisphenol	
Specification:	ASTM D2000 M2HK910 A1-10 B38 EF31 EO78 EO88 Z1	
Original Properties	Requirements	Typical Results
Hardness, (Shore A) (ASTM D2240-05)	95±5	90.5
Tensile Strength, psi(MPa) (ASTM D412-06a)	1450(10)(min)	2117(14.6)
Elongation, (%) (ASTM D412-06a)	100(min)	131
Modulus at 100%, psi(MPa) (ASTM D412-06a)		1770(12.21)
Specific Gravity, g/cm ³		1.84
(A1-10) Heat age, 70 Hrs @ 250 °C (ASTM D573-04)		
Hardness Change, pts.	+10(max)	+3
Tensile Strength Change, %	-25(max)	+1
Elongation Change, %	-25(max)	-7
Weight Change, %		-1.6
(B38) Compression Set, 22 Hrs @ 200°C (ASTM D395-03B)		
-	50%(plied)(max)	17.7
(EF31) ASTM Fuel C Resistance, 70 Hrs @ 23 °C (ASTM D471-12a)		
Hardness Change, pts.	±5	-2
Tensile Strength Change, %	-25(max)	-5
Elongation Change, %	-20(max)	+2
Volume Change, %	0~+10	+2.5
(EO78) ASTM No. 101 Oil, 70 Hrs @ 200 °C (ASTM D471-12a)		
Hardness Change, pts.	-15~+5	-7
Tensile Strength Change, %	-40(max)	-5
Elongation Change, %	-20(max)	+14
Volume Change, %	0~+15	+8.7



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(EO88) HATCO 7700 Oil, 70 Hrs @ 200 °C (ASTM D471-12a)

Hardness Change, pts.	-15~+5	-10
Tensile Strength Change, %	-40(max)	-10
Elongation Change, %	-20(max)	-2
Volume Change, %	+25(max)	+12.7

(EO78) ASTM No. 101 Oil, 70 Hrs @ 200 °C (ASTM D471-16a)

Testing Elongation 50%, The Equipment of measure temperature: thermocouple, Length of Sample: 51 mm, Rate of Temperature Increasing: 1°C/min, Test Temperature: 26°C, Collant: Methanol	-17.2
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*American Society for Testing and Materials

Report Date: 3/7/2016

Information within this report is believed to be accurate and reliable. However, Mr. O-Ring makes no warranty, expressed or implied, that parts supplied in this material will perform satisfactorily in specific applications. It's the customer's responsibility to evaluate prior to use.