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Marco Compound # V1158 70 Durometer, Black, Dupont Grade FKM Type B Technical Datasheet

Common Names:

FKM, Fluoropolymer, Viton®,

General Description:

FKM compounds are widely used in chemical, automotive, aerospace and industrial applications. These compounds offer excellent chemical and temperature resistance. There are many additional specialty compounds based on A, B, F, GLT, GFLT, LTFE and ETP polymer types. Please contact engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

Features:

- FKM Type B (68% fluorine terpolymer).
- Better resistance than Type A in sulfur dioxide and acids.
- High temperature resistance.
- Excellent resistance to acids, fuels, mineral oils, greases, aliphatic, aromatic and chlorinated hydrocarbons, non-flammable hydraulic fluids (HFD) and many organic solvents and chemicals.
- Excellent resistance to aging and ozone.
- Low gas permeability, low compression set.

Limitations:

• Steam, hot water, amines, polar solvents, low molecular weight organic solvents and glycol-based brake fluids.

Cure System:

Bisphenol

Service Temperature:

-15 to 450°F (-26 to 230C°)

Specification:

ASTM D2000 M2HK710 A1-10 B38 EF31 EO78= B Type

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A, ASTM D2240 (Z1=75+/-5)	70 +/- 5	73
Color	Black	Black
Tensile Strength, MPa, (psi), ASTM D412	10 (1,440)	13.30 (1,923)
Ultimate Elongation, %, ASTM D412	175 Min.	266
Specific Gravity		1.99

HEAT RESISTANCE - A1-10, ASTM D 573 (70 hrs. @ 250°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	+10 (max)	-1
Tensile Strength Change, %, ASTM D412	-25 (max)	-1
Ultimate Elongation Change, %, ASTM D412	-25 (max)	+3
Volume change		-2.1

COMPRESSION SET – B37, ASTM D 395 Method B (22 hrs. @ 175°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	50 (max)	15

COMPRESSION SET – B38, ASTM D 395 Method B (22 hrs. @ 200°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	50 (max)	18

FLUID RESISTANCE - ASTM Fuel C - EF31, ASTM D 471(70 hrs. @ 23°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	+/- 5	-4
Tensile Strength Change, %, ASTM D412	-25 (max)	-10
Ultimate Elongation Change, %, ASTM D412	-20 (max)	-3
Volume Change, %, ASTM D471	0 to + 10	+3.5

FLUID RESISTANCE - ASTM #101 OIL - E078, ASTM D 471 (70 hrs. @ 200°C)	ASTM D2000	Typical Test
	Requirements	Results
Hardness Change, Shore A, ASTM D2240	+/- 5	-4
Tensile Strength Change, %, ASTM D412	-25 (max)	-10
Ultimate Elongation Change, %, ASTM D412	-20 (max)	-3
Volume Change, %, ASTM D471	0 to + 10	+3.5

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