

Compound ID: M-COR7228-75 KV**Description:** M-COR7228-75 KV is a black fluoroelastomer polymer designed to meet or exceed AMS, Military and ASTM/SAE specifications for extruded profiles used in the manufacture of high performance o-rings, gaskets and various sealing components.**Specifications:** AMS 3216F, ASTM D2000, AMS 7280, AMS 7276, Mil-R-83248, 3HK715, A1-10, B31, B38, EF31, EO78, EO88, F15, Z-1, Z-2; Z-1= 75+/- Durometer Shore "A", Z-2= 150% minimum elongation.

* AMS 3216 certified test results performed by an independent accredited ISO approved laboratory.

Cure:

Press: 10 minutes @177C (350F)

Oven: 12 hours @232C (450F)

Type of Test:	Test Method	AMS 3216F Specifications:	AMS D-2000 SAE J-200 Specifications	AMS 7280 Specifications	AMS 7276 Specifications	MILR 83248 Specifications	Certified Test Result*
Original Physical Properties							
Hardness, Durometer Shore "A", Pts	ASTM D-2240	70 to 80	70 to 80	70 to 80	70 to 80	70 to 80	77
Tensile Strength, PSI, (MPa)	ASTM D-412	1600 min	1500 (10.3) min	1600 (11.0) min	1400 (9.7) min	1600	2224
Elongation at Break, %	ASTM D-412	125 min	150 min.	125 min	125 min	125 min	211
100% Modulus, PSI (MPa)	ASTM D-412						1000 (6.9)
Specific Gravity, g/cc	ASTM D-297	+/- 0.02 orig.	1.84+/- .02			As determined	1.84
Compression Set: B31, 22 hours at 23C (73F) set of deflection %, max	ASTM D-395	15 max	15 max	15 max		15 max	9
Compression Set: B38, 22 hours at 200C (392F) set of deflection %, max	ASTM D-395	15	15 max	30 max	20 max	5 max	10.5
Long Term Compression Set: 336 hours at 200C (392F) Set of deflection %, max	ASTM D-395	45 max		55 max	40 max	45 max	33.8
Heat Resistance: A1-10, 70 Hours at 250C (482F) Hardness Change Points Shore A	ASTM D-573		+10 max	0 to +10	0 to +5		+1
Tensile strength change %			-25 max	-20 max	-20 max		+3
Elongation change %			-25 max	-20 max	-20 max		0
Heat Resistance: A1-11, 70 hours at 275C (527F) Hardness Change Points Shore A	ASTM D-573	-5 to +10	-5 to +10		0 to +10	-5 to +10	-2
Tensile strength change %		-35	-40 max		-35 max	-35 max	-18.9
Elongation change %		-15	-20 max		-15 max	-15 max	-4.3
Weight change %		-10					-3.6
Fluid Resistance: EF31, 70 hours at 23C (73F), Reference Fuel C	ASTM D-471		-5 to +5	-5 to +5	-5 to +5		-1
Hardness change Points Shore A			-25 max	-15 max	-15 max		-5
Tensile strength change %			-20 max	-15 max	-15 max		+5
Elongation change %			0 to +10	0 to +10	0 to +5		+3
Volume change %							
Fluid Resistance: EO78, 70 hours at 200C (392F), Fluid # 101, ARM 200 for 83248	ASTM D-471		-15 to +5	-15 to +5	-15 to 0	-15 to 0	-10
Hardness change Points Shore A			-40 max	-40 max	-30 max	35 max	-18
Tensile strength change %			-20 max	-20 max	-20 max	20 max	+8
Elongation change %			0 to +15	0 to +25	0 to +20	+1 to +25	+12
Volume change %							
Fluid Resistance: EO88, 70 hours at 200C (392F), Stauffer 7700/SAE Fluid #2	ASTM D-471		-15 to +5				-10
Hardness change Points Shore A			-40 max				-20
Tensile strength change %			-20 max				-10
Elongation change %			+25 max				+19
Volume change %							
Fluid Resistance: 70 hours at 23C (73F), ASTM Ref. Fuel B	ASTM D-471			-5 to +5	-5 to +5	-5 to +5	-3
Hardness change Points Shore A				-15 max	-15 max	-20	-3.6
Tensile strength change %				-15 max	-15 max	-20	+1
Elongation change %				0 to +10	0 to +5	0 to +5	+1.4
Volume change %							
Fluid Resistance: 70 hours at 200C (392F) Synthetic Lubricant AMS 3023	ASTM D-471		-15 to 0				-11.0
Hardness change Points Shore A			-35				-17.4
Tensile strength change %			-20				-5.9
Elongation change %			+1 to +25				+18.9
Volume change %			20				+16.2
Synthetic Lubricant Resistance 70 hours at 200C (392F) compression set set of deflection %	ASTM D-395						
Low Temp. Resistance: TR 10 point, degree C Max	ASTM D-1329	-15C		-15C	-15C	-15C	-22.0C

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