



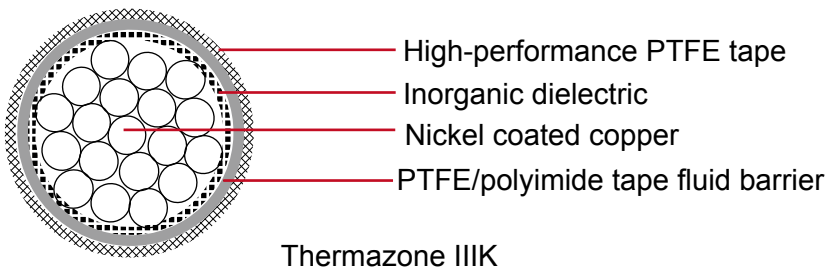
Caledonian Military Cables

MIL-W-25038/3

Application and Description:

These PTFE insulated single-core MIL-W-25038/3 cables are used in such aerospace applications as engine compartments, fire detection circuits, flight-critical circuits, and fly-by-wire systems. MIL-W-25038/3 (Thermazone IIIK) wires are designed for critical circuit applications where wires must operate in extremely harsh environments, under vibration, and with direct flame exposure. MIL-W-25038/3(Thermazone IIIG) wires also meet or exceed the requirements of MIL-W-25083/3, but provide this performance at a lower cost through the use of an innovative insulation system.

Construction:



Conductor: 12-18 AWG: Stranded 27% Nickel coated copper conductor

20-22 AWG: Stranded 27% Nickel coated high-strength copper alloy conductor

Insulation:

Thermazone IIIK:

Outer: PTFE/polyimide tape fluid barrier.

Inner: Inorganic dielectric

Thermazone IIIG:

Outer: PTFE-coated fiberglass fluid barrier.

Inner: Inorganic dielectric

Jacket: Fused High-Performance Polytetrafluoroethylene (PTFE) Tape Jacket

Identification: Surface printed per MIL-W-25038

Characteristics:

Temperature Range: -55°C +260°C

Voltage Rating: 600 volts

Color coded: MIL-STD-104



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Dimensions and Weight:

M25038/3 Thermazone IIIK									
AWG Size	Conductor Stranding	Conductor Diam.		Max. O.D.		Min. O.D.		Max. Resistance @ 20°C OHMS/MFT	Approx LBS/MFT
		in	mm	in	mm	in	mm		
22	19/34	0.031	0.787	0.054	1.372	0.040	1.016	23.700	4.2
20	19/32	0.040	1.016	0.083	2.108	0.048	1.219	15.300	9.00
18	19/30	0.050	1.270	0.097	2.464	0.065	1.651	8.500	10.5
16	19/29	0.056	1.422	0.103	2.616	0.068	1.727	6.660	13.5
14	19/27	0.072	1.829	0.123	3.124	0.097	2.464	4.320	19.5
12	19/25	0.090	2.286	0.142	3.607	0.100	2.540	2.780	28.0
M25038/3 Thermazone IIIG									
AWG Size	Conductor Stranding	Conductor Diam.		Max. O.D.		Min. O.D.		Max. Resistance @ 20°C OHMS/MFT	Approx LBS/MFT
		in	mm	in	mm	in	mm		
22	19/34	0.031	0.787	0.075	1.905	0.055	1.397	23.700	4.2
20	19/32	0.040	1.016	0.083	2.108	0.048	1.219	15.300	9.0
18	19/30	0.050	1.270	0.097	2.464	0.065	1.651	8.500	10.5
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