

FluoroFlex Wire & Cable

Fluoroflex Hookup and Multiconductor Cables

FEATURES:

- Low coefficient of friction
- Wide operating temperature usage range -150°C to 200°C
- Electrically stable
- High flexural fatigue life
- Flame resistant
- Will not outgas

GENERAL DESCRIPTION

Calmont's precision extrusion techniques combine the superior properties of FEP Teflon® with the durability of a highly stranded conductor to produce an unequalled product — FluoroFlex. It is small and lightweight, yet will withstand the severe and repeated flexing that usually destroys other fluorocarbon insulated wires.

APPLICATIONS

FluoroFlex is highly versatile and suitable for broad usage in aerospace, computer and medical electronics. Being chemically inert, FluoroFlex can be used for medical implantation. It has the smallest finished diameter of any of the Calmont's high flex products. This is of great importance in aerospace applications. FluoroFlex's excellent dielectric properties also make it ideal for data and audio applications.

MULTICONDUCTOR JACKET OPTIONS

- FEP • SILICONE • TPE • POLYURETHANE • PU • PVC

General Specifications

ELECTRICAL PROPERTIES		D.C. Volume Resistivity (ohm – CM)	2 x 10 ¹⁸
		Dielectric Strength (VPM on .125 slab)	600
		Dielectric Constant:	
		at 60 Hz	2.1
		at 10 ³ Hz	2.1
		at 10 ⁶ Hz	2.1
		Dissipation Factor:	
		at 60 Hz	.0003
		at 10 ³ Hz	.0003
		at 10 ⁶ Hz	.0007
PHYSICAL PROPERTIES		Specific Gravity	2.13 – 2.20
		Specific Volume (cubic inches/pound)	13.2 – 12.6
		Elongation (%)	250 – 330
		Burning Rate	0
THERMAL PROPERTIES		Temperature Rating (severe and repeated flexing)	-150 to 200 °C
		Temperature Rating (limited flexing)	From -268°C

Calmont FluoroFlex Hookup Wire

Part Number	Bare Copper Conductor						Finished Wire			
	AWG SIZE	(No. of Strands Strand Size)	Strand Diameter (inches)	Conductor Diameter (Nominal)	Conductor Area (CM) (Nominal)	Conductor Resistance (OHMS/1000' NOM)	Current Carrying Capacity @ 80°C (Approximate)	Outside Diameter (± .003)	Weight (lbs./1000') (approximate)	Stiffness Comparison (pounds)
3006-024-20-1-C-U-CCC	20	105/40	.0031	.039	1038.30	10.00	4.00	.054	4.82	.1800
3006-024-22-1-C-U-CCC	22	65/40	.0031	.031	642.70	16.10	2.50	.040	2.80	.1500
3006-024-24-1-C-U-CCC	24	41/40	.0031	.023	405.40	25.60	1.60	.031	1.77	.1100
3006-024-26-1-C-U-CCC	26	66/44	.0020	.019	258.10	40.20	1.00	.024	10.90	.0500
3006-024-28-1-C-U-CCC	28	41/44	.0020	.015	160.40	64.70	.60	.020	.72	.0240
3006-024-29-1-C-U-CCC	29	51/46	.0016	.014	125.50	82.70	.50	.019	.58	.0120
3006-024-30-1-C-U-CCC	30	41/46	.0016	.012	100.90	102.80	.40	.017	.48	.0072
3006-024-32-1-C-U-CCC	32	27/46	.0016	.009	66.41	156.20	.25	.015	.35	.0051
3006-024-34-1-C-U-CCC	34	40/50	.0010	.008	38.92	366.50	.16	.014	.25	.0038
3006-024-36-1-C-U-CCC	36	25/50	.0010	.006	24.32	426.40	.10	.012	.17	.0030
3006-024-38-1-C-U-CCC	38	16/50	.0010	.005	15.57	666.20	.06	.011	.13	.0024
3006-024-40-1-C-U-CCC	40	12/50	.0010	.003	11.67	888.30	.04	.010	.11	.0022

¹Contact Calmont for additional conductor options