CALMONT

WIRE AND CABLE

SuperFlex

FluoroFlex

SiliFlex

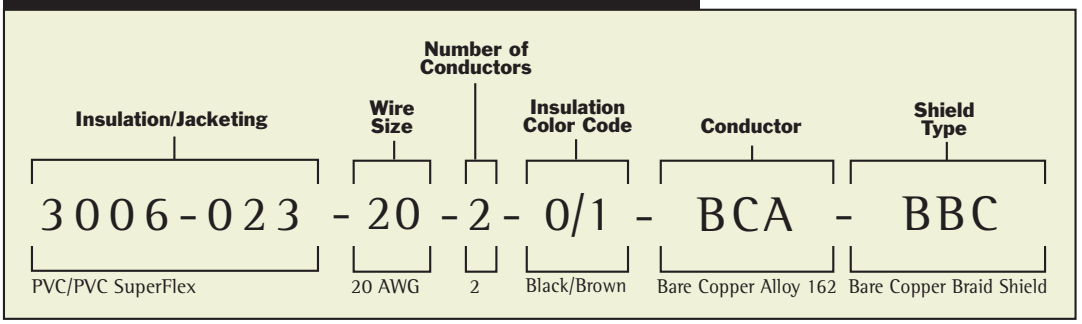
SiliFlex Ribbon Cable

Flat Braid

Calmont WIRE AND CABLE, INC.

How To Order Calmont High Flex Products

SAMPLE ORDERING NUMBER



CALMONT HIGH FLEX CABLE OPTIONS

Part #	Insulation/Jacketing	-A WIRE SIZE AWG	-N NUMBER OF CONDUCTORS	-C PRIMARY INSULATION COLORS	-CCC CONDUCTOR TYPE ABBREVIATION	DESCRIPTION	-S SHELD STYLE
3006-023	PVC/PVC	20 AWG through 40 AWG	Customer to specify.	Per MIL-STD-6 0 = Black 1 = Brown 2 = Red 3 = Orange 4 = Yellow 5 = Green 6 = Blue 7 = Violet 8 = Grey 9 = White	BC	Bare Copper	U = No Shield
3006-031	PVC/TPE				BCA	Bare Copper Alloy 162	BC
3006-051	PVC/PU				BCW	Bare CopperWeld	BCA
3006-024	FEP/FEP				BPB	Bare Phosphor Bronze	Bronze
3006-029	FEP/SILICONE				CON	Constantan	BCW
3006-032	FEP/TPE				HIP	High Permeable Iron	HIP
3006-052	FEP/PU				KN	Alumel	LOP
3006-028	SILICONE/SILICONE				KP	Chromel	NIC
3006-026	SILICONE/FEP				LOP	Low Permeable Iron	NPA
3006-034	SILICONE/TPE				NIC	Nickel	NPC
					NPA	Nickel plated Alloy 135	SCW
					NPC	Nickel plated Copper	SPA
					SCW	Silver plated CopperWeld	SPC
					SPA	Silver plated alloy 135	SPCS95
					SPC	Silver plated Copper	SS
					SPCS95	Silver plated Alloy CS-95	TC
					SS	Stainless Steel	TCA
					TC	Tin plated Copper	TCW
					TCA	Tin plated Alloy 162	
					TCW	Tin plated CopperWeld	

(B) Braid Shield
(S) Spiral Shield

SuperFlex Wire & Cable

SuperFlex Hookup and Multiconductor Cables

FEATURES:

- High dielectric strength
- High flexural fatigue life
- Low cost
- Bondable
- Resists deformation
- Resists abrasion
- Resists moisture

GENERAL DESCRIPTION

SuperFlex was pioneered and developed by Calmont for the exacting commercial and military markets. Specially compounded and plasticized polyvinyl chloride insulation applied over ultra fine stranded wire yields a finished wire with a longer flex life and a higher flexure index level than that attainable with ordinary PVC insulated wire.

APPLICATIONS

SuperFlex is an ideal choice for a variety of low temperature, high flex applications. SuperFlex is commonly used for disposable medical devices, robotics, sensors and assorted cost sensitive commercial applications.

MULTICONDUCTOR JACKET OPTIONS

• PVC • TPE • PU

General Specifications

ELECTRICAL PROPERTIES	D.C. Volume Resistivity (ohm – CM)	1×10^{12}
	Dielectric Strength (VPM on .075 slab)	400
	Insulation Resistance at 15.6° C (MΩ 1000 FT)	1000
	Dielectric Constant:	
	at 60 Hz	5.0 - 6.0
	at 10^3 Hz	4.5 - 5.8
	at 10^6 Hz	3.5 - 4.5
	Dissipation Factor:	
	at 60 Hz	.05 - .15
	at 10^3 Hz	.06 - .16
	at 10^6 Hz	.07 - .17
PHYSICAL PROPERTIES	Tensile Strength (PSI)	1500 -2500
	Elongation (%)	150 - 375
	Specific Gravity	1.2 - 1.5
	Shore Hardness (A Scale)	55 - 95
THERMAL PROPERTIES	Flammability	Self Extinguishing
	Operating Temperature (Useful life estimate: 20 yrs at 80° C). (Optional Insulation available with operating temperature -40° to 105° C).	-20° to 105° C

Calmont SuperFlex Hookup Wire

Part Number	Bare Copper Conductor[1]						Finished Wire			
	AWG SIZE	STRANDS[1] (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)
3006-023-20-1-C-CCC-S	20	105/40	.0031	.039	1038.30	10.00	4.00	.065	5.00	.2580
3006-023-22-1-C-CCC-S	22	65/40	.0031	.031	642.70	16.10	2.50	.054	3.30	.1900
3006-023-24-1-C-CCC-S	24	41/40	.0031	.023	405.40	25.60	1.60	.047	2.30	.0780
3006-023-26-1-C-CCC-S	26	66/44	.0020	.019	258.10	40.20	1.00	.042	1.60	.1360
3006-023-28-1-C-CCC-S	28	41/44	.0020	.015	160.30	64.70	.60	.038	1.20	.0224
3006-023-29-1-C-CCC-S	29	51/46	.0016	.014	125.50	82.70	.50	.030	.80	.0120
3006-023-30-1-C-CCC-S	30	41/46	.0016	.012	100.90	102.80	.40	.028	.67	.0084
3006-023-32-1-C-CCC-S	32	27/46	.0016	.009	66.41	156.20	.25	.026	.52	.0063
3006-023-34-1-C-CCC-S	34	40/50	.0010	.008	38.92	266.50	.16	.022	.35	.0051
3006-023-36-1-C-CCC-S	36	25/50	.0010	.006	24.32	426.40	.10	.020	.27	.0044
3006-023-38-1-C-CCC-S	38	16/50	.0010	.005	15.57	666.20	.06	.019	.22	.0039
3006-023-40-1-C-CCC-S	40	12/50	.0010	.003	11.67	888.30	.04	.018	.19	.0035

[1]Contact Calmont for additional conductor options

PVC INSULATED, SHIELDED AND TPE JACKETED CABLES

PART NUMBER See How to Order Page for Information	AWG Size	Strands No./Size	Uninsulated Conductor Diameter	Insulated Conductor Diameter	Diameter Over Shield (Nominal)	Overall Diameter (Nominal)	Weight (lbs./M Ft.)
ONE CONDUCTOR							
3006-031-20-1-C-CCC-S	20	105/40	.039	.065	.079	.102	9.1
3006-031-22-1-C-CCC-S	22	65/40	.031	.054	.068	.094	7.0
3006-031-24-1-C-CCC-S	24	41/40	.023	.047	.061	.085	5.5
3006-031-26-1-C-CCC-S	26	66/44	.019	.042	.056	.076	4.4
3006-031-28-1-C-CCC-S	28	41/44	.015	.038	.052	.072	3.7
3006-031-29-1-C-CCC-S	29	51/46	.014	.030	.044	.064	2.9
3006-031-30-1-C-CCC-S	30	41/46	.012	.028	.042	.062	2.7
TWO CONDUCTOR							
3006-031-20-2-C-CCC-S	20	105/40	.039	.065	.137	.165	18.5
3006-031-22-2-C-CCC-S	22	65/40	.031	.054	.116	.150	13.6
3006-031-24-2-C-CCC-S	24	41/40	.023	.047	.103	.133	10.8
3006-031-26-2-C-CCC-S	26	66/44	.019	.042	.093	.123	8.8
3006-031-28-2-C-CCC-S	28	41/44	.015	.038	.086	.116	7.5
3006-031-29-2-C-CCC-S	29	51/46	.014	.030	.071	.099	5.6
3006-031-30-2-C-CCC-S	30	41/46	.012	.028	.067	.095	5.2
THREE CONDUCTOR							
3006-031-20-3-C-CCC-S	20	105/40	.039	.065	.154	.182	24.0
3006-031-22-3-C-CCC-S	22	65/40	.031	.054	.130	.165	17.8
3006-031-24-3-C-CCC-S	24	41/40	.023	.047	.115	.145	13.6
3006-031-26-3-C-CCC-S	26	66/44	.019	.042	.104	.134	11.2
3006-031-28-3-C-CCC-S	28	41/44	.015	.038	.096	.126	9.2
3006-031-29-3-C-CCC-S	29	51/46	.014	.030	.078	.108	7.0
3006-031-30-3-C-CCC-S	30	41/46	.012	.028	.074	.104	6.4
FOUR CONDUCTOR							
3006-031-20-4-C-CCC-S	20	105/40	.039	.065	.169	.209	31.5
3006-031-22-4-C-CCC-S	22	65/40	.031	.054	.149	.179	22.6
3006-031-24-4-C-CCC-S	24	41/40	.023	.047	.127	.157	16.8
3006-031-26-4-C-CCC-S	26	66/44	.019	.042	.115	.145	13.5
3006-031-28-4-C-CCC-S	28	41/44	.015	.038	.106	.136	11.2
3006-031-29-4-C-CCC-S	29	51/46	.014	.030	.086	.116	8.5
3006-031-30-4-C-CCC-S	30	41/46	.012	.028	.081	.111	7.7
FIVE CONDUCTOR							
3006-031-20-5-C-CCC-S	20	105/40	.039	.065	.186	.226	37.7
3006-031-22-5-C-CCC-S	22	65/40	.031	.054	.165	.195	26.9
3006-031-24-5-C-CCC-S	24	41/40	.023	.047	.141	.171	19.9
3006-031-26-5-C-CCC-S	26	66/44	.019	.042	.127	.157	15.9
3006-031-28-5-C-CCC-S	28	41/44	.015	.038	.116	.146	13.0
3006-031-29-5-C-CCC-S	29	51/46	.014	.030	.095	.125	9.8
3006-031-30-5-C-CCC-S	30	41/46	.012	.028	.089	.119	8.9
SIX CONDUCTOR							
3006-031-20-6-C-CCC-S	20	105/40	.039	.065	.206	.246	44.0
3006-031-22-6-C-CCC-S	22	65/40	.031	.054	.182	.222	32.8
3006-031-24-6-C-CCC-S	24	41/40	.023	.047	.155	.185	23.1
3006-031-26-6-C-CCC-S	26	66/44	.019	.042	.140	.170	18.3
3006-031-28-6-C-CCC-S	28	41/44	.015	.038	.128	.158	14.9
3006-031-29-6-C-CCC-S	29	51/46	.014	.030	.104	.134	11.2
3006-031-30-6-C-CCC-S	30	41/46	.012	.028	.098	.128	10.1

NOTE 1:
Data based on 85% braid shield coverage. Other shield coverages and types are available.

NOTE 2:
Additional AWG sizes and conductor counts available.

NOTE 3:
See **How to Order** on the inside of the section tab for further information.

PVC INSULATED, SHIELDED AND PU JACKETED CABLES

PART NUMBER See How to Order Page for Information	AWG Size	Strands No./Size	Uninsulated Conductor Diameter	Insulated Conductor Diameter	Diameter Over Shield (Nominal)	Overall Diameter (Nominal)	Weight (lbs./M Ft.)
ONE CONDUCTOR							
3006-051-20-1-C-CCC-S	20	105/40	.039	.065	.079	.102	9.3
3006-051-22-1-C-CCC-S	22	65/40	.031	.054	.068	.094	7.2
3006-051-24-1-C-CCC-S	24	41/40	.023	.047	.061	.085	5.7
3006-051-26-1-C-CCC-S	26	66/44	.019	.042	.056	.076	4.5
3006-051-28-1-C-CCC-S	28	41/44	.015	.038	.052	.072	3.8
3006-051-29-1-C-CCC-S	29	51/46	.014	.030	.044	.064	3.0
3006-051-30-1-C-CCC-S	30	41/46	.012	.028	.042	.062	2.8
TWO CONDUCTOR							
3006-051-20-2-C-CCC-S	20	105/40	.039	.065	.137	.165	18.9
3006-051-22-2-C-CCC-S	22	65/40	.031	.054	.116	.150	14.0
3006-051-24-2-C-CCC-S	24	41/40	.023	.047	.103	.133	11.1
3006-051-26-2-C-CCC-S	26	66/44	.019	.042	.093	.123	9.1
3006-051-28-2-C-CCC-S	28	41/44	.015	.038	.086	.116	7.8
3006-051-29-2-C-CCC-S	29	51/46	.014	.030	.071	.099	5.8
3006-051-30-2-C-CCC-S	30	41/46	.012	.028	.067	.095	5.4
THREE CONDUCTOR							
3006-051-20-3-C-CCC-S	20	105/40	.039	.065	.154	.182	24.5
3006-051-22-3-C-CCC-S	22	65/40	.031	.054	.130	.165	18.3
3006-051-24-3-C-CCC-S	24	41/40	.023	.047	.115	.145	13.9
3006-051-26-3-C-CCC-S	26	66/44	.019	.042	.104	.134	11.5
3006-051-28-3-C-CCC-S	28	41/44	.015	.038	.096	.126	9.5
3006-051-29-3-C-CCC-S	29	51/46	.014	.030	.078	.108	7.2
3006-051-30-3-C-CCC-S	30	41/46	.012	.028	.074	.104	6.7
FOUR CONDUCTOR							
3006-051-20-4-C-CCC-S	20	105/40	.039	.065	.169	.209	32.2
3006-051-22-4-C-CCC-S	22	65/40	.031	.054	.149	.179	23.1
3006-051-24-4-C-CCC-S	24	41/40	.023	.047	.127	.157	17.3
3006-051-26-4-C-CCC-S	26	66/44	.019	.042	.115	.145	13.9
3006-051-28-4-C-CCC-S	28	41/44	.015	.038	.106	.136	11.5
3006-051-29-4-C-CCC-S	29	51/46	.014	.030	.086	.116	8.7
3006-051-30-4-C-CCC-S	30	41/46	.012	.028	.081	.111	8.0
FIVE CONDUCTOR							
3006-051-20-5-C-CCC-S	20	105/40	.039	.065	.186	.226	38.5
3006-051-22-5-C-CCC-S	22	65/40	.031	.054	.165	.195	27.5
3006-051-24-5-C-CCC-S	24	41/40	.023	.047	.141	.171	20.4
3006-051-26-5-C-CCC-S	26	66/44	.019	.042	.127	.157	16.3
3006-051-28-5-C-CCC-S	28	41/44	.015	.038	.116	.146	13.4
3006-051-29-5-C-CCC-S	29	51/46	.014	.030	.095	.125	10.1
3006-051-30-5-C-CCC-S	30	41/46	.012	.028	.089	.119	9.2
SIX CONDUCTOR							
3006-051-20-6-C-CCC-S	20	105/40	.039	.065	.206	.246	44.9
3006-051-22-6-C-CCC-S	22	65/40	.031	.054	.182	.222	33.6
3006-051-24-6-C-CCC-S	24	41/40	.023	.047	.155	.185	23.6
3006-051-26-6-C-CCC-S	26	66/44	.019	.042	.140	.170	18.8
3006-051-28-6-C-CCC-S	28	41/44	.015	.038	.128	.158	15.4
3006-051-29-6-C-CCC-S	29	51/46	.014	.030	.104	.134	11.5
3006-051-30-6-C-CCC-S	30	41/46	.012	.028	.098	.128	10.4

NOTE 1:
Data based on 85% braid shield coverage. Other shield coverages and types are available.

NOTE 2:
Additional AWG sizes and conductor counts available.

NOTE 3:
See **How to Order** on the inside of the section tab for further information.

PVC INSULATED, SHIELDED AND PVC JACKETED CABLES

PART NUMBER See How to Order Page for Information	AWG Size	Strands No./Size	Uninsulated Conductor Diameter	Insulated Conductor Diameter	Diameter Over Shield (Nominal)	Overall Diameter (Nominal)	Weight (lbs./M Ft.)
ONE CONDUCTOR							
3006-023-20-1-C-CCC-S	20	105/40	.039	.065	.079	.102	9.7
3006-023-22-1-C-CCC-S	22	65/40	.031	.054	.068	.091	7.5
3006-023-24-1-C-CCC-S	24	41/40	.023	.047	.061	.084	5.9
3006-023-26-1-C-CCC-S	26	66/44	.019	.042	.056	.075	4.7
3006-023-28-1-C-CCC-S	28	41/44	.015	.038	.052	.071	4.0
3006-023-29-1-C-CCC-S	29	51/46	.014	.030	.044	.063	3.2
3006-023-30-1-C-CCC-S	30	41/46	.012	.028	.042	.061	3.0
TWO CONDUCTOR							
3006-023-20-2-C-CCC-S	20	105/40	.039	.065	.137	.163	19.6
3006-023-22-2-C-CCC-S	22	65/40	.031	.054	.116	.142	14.7
3006-023-24-2-C-CCC-S	24	41/40	.023	.047	.103	.126	11.7
3006-023-26-2-C-CCC-S	26	66/44	.019	.042	.093	.117	9.6
3006-023-28-2-C-CCC-S	28	41/44	.015	.038	.086	.109	8.3
3006-023-29-2-C-CCC-S	29	51/46	.014	.030	.071	.092	6.2
3006-023-30-2-C-CCC-S	30	41/46	.012	.028	.067	.088	5.8
THREE CONDUCTOR							
3006-023-20-3-C-CCC-S	20	105/40	.039	.065	.154	.179	25.3
3006-023-22-3-C-CCC-S	22	65/40	.031	.054	.130	.156	19.0
3006-023-24-3-C-CCC-S	24	41/40	.023	.047	.115	.141	14.6
3006-023-26-3-C-CCC-S	26	66/44	.019	.042	.104	.128	12.1
3006-023-28-3-C-CCC-S	28	41/44	.015	.038	.096	.119	10.0
3006-023-29-3-C-CCC-S	29	51/46	.014	.030	.078	.100	7.7
3006-023-30-3-C-CCC-S	30	41/46	.012	.028	.074	.095	7.1
FOUR CONDUCTOR							
3006-023-20-4-C-CCC-S	20	105/40	.039	.065	.169	.209	33.4
3006-023-22-4-C-CCC-S	22	65/40	.031	.054	.149	.179	23.8
3006-023-24-4-C-CCC-S	24	41/40	.023	.047	.127	.157	17.9
3006-023-26-4-C-CCC-S	26	66/44	.019	.042	.115	.145	14.5
3006-023-28-4-C-CCC-S	28	41/44	.015	.038	.106	.136	12.1
3006-023-29-4-C-CCC-S	29	51/46	.014	.030	.086	.116	9.2
3006-023-30-4-C-CCC-S	30	41/46	.012	.028	.081	.111	8.5
FIVE CONDUCTOR							
3006-023-20-5-C-CCC-S	20	105/40	.039	.065	.186	.226	39.8
3006-023-22-5-C-CCC-S	22	65/40	.031	.054	.165	.195	28.3
3006-023-24-5-C-CCC-S	24	41/40	.023	.047	.141	.171	21.1
3006-023-26-5-C-CCC-S	26	66/44	.019	.042	.127	.157	16.9
3006-023-28-5-C-CCC-S	28	41/44	.015	.038	.116	.146	14.0
3006-023-29-5-C-CCC-S	29	51/46	.014	.030	.095	.125	10.7
3006-023-30-5-C-CCC-S	30	41/46	.012	.028	.089	.119	9.79
SIX CONDUCTOR							
3006-023-20-6-C-CCC-S	20	105/40	.039	.065	.206	.246	46.2
3006-023-22-6-C-CCC-S	22	65/40	.031	.054	.182	.222	34.8
3006-023-24-6-C-CCC-S	24	41/40	.023	.047	.155	.185	24.3
3006-023-26-6-C-CCC-S	26	66/44	.019	.042	.140	.170	19.5
3006-023-28-6-C-CCC-S	28	41/44	.015	.038	.128	.158	16.0
3006-023-29-6-C-CCC-S	29	51/46	.014	.030	.104	.134	12.1
3006-023-30-6-C-CCC-S	30	41/46	.012	.028	.098	.128	10.9

NOTE 1:
Data based on 85% braid shield coverage. Other shield coverages and types are available.

NOTE 2:
Additional AWG sizes and conductor counts available.

NOTE 3:
See **How to Order** on the inside of the section tab for further information.