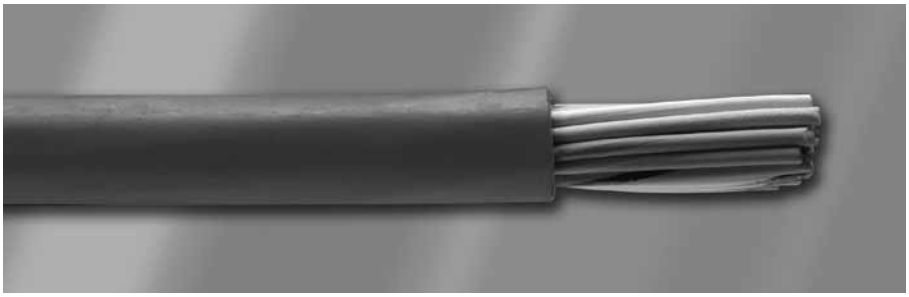
Industrial Series Cable

From the Factory Floor to Process Control



Alpha Wire's industrial series cables are well suited to the widest range of industrial applications. We offer a range of cables for general needs such as control wiring in both stationary and moving components. We also offer application-specific configurations for use with drives, servo systems, and factory protocols.

Typical applications for industrial cable include:

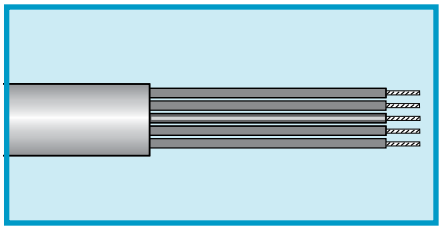
- Automated handling systems
- Automated pick-and-place systems
- Automotive assembly equipment
- Control panels
- Control/monitoring of speed and position in servo systems
- Conveyor systems
- Factory equipment interconnects
- High-flexibility applications
- Machine tools
- PLC controlled equipment
- Robotics
- Solar farms
- Transfer shuttles

Industrial Series Cable		
Applications	**Alpha Wire Product**	**Features**
High-flex cable track	Series F continuous flex control cable	Up to 20 million continuous rolling flex cycles 18 – 8 AWG 3 – 65 conductors PVC/nylon insulation, TPE jacket UL TC-ER (600 V) UL PLTC (300 V) (18 – 12 AWG only) UL Sunlight Resistant and Oil Res. I/II
Stationary Cable trays Light to moderate flex	Series M control cable	18 – 8 AWG 3 – 65 conductors PVC/nylon insulation, PVC jacket UL TC-ER (600 V) UL MTW (600 V) UL WTTC (1000 V) UL PLTC (300 V) (18 – 12 AWG only) UL Direct Burial UL Sunlight Resistant and Oil Res. I
Cable trays Light to moderate flex Enhanced flexibility and routability	Series P enhanced control cable	Improved oil and chemical resistance 18 – 8 AWG 3 – 65 conductors PVC/nylon insulation, TPE jacket UL TC-ER (600 V) UL PLTC (300 V) (18 – 12 AWG only) UL Sunlight Resistant and Oil Res. I/II
Servomotors Servodrives	Series S and SF servo power and control cables	**Power cable** 4-conductor power cable, with or without brake pair 18 – 8 AWG PVC insulation, TPE jacket SF Series offers increased flexibility UL TC-ER (600 V) UL WTTC (1000 V) UL Sunlight Resistant and Oil Res I/II **Control cable** 3 to 6 pairs for resolver applications 9 conductors for encoder applications 20 AWG Polyolefin insulation, TPE jacket
Variable-frequency drives	Series V VFD cable	3 or 4-conductor cable 16 to 4/0 AWG 14 AWG brake pair Cross-linked polyethylene insulation, PVC jacket Small diameter Low capacitance for improved signal transmission UL TC-ER (600 V) CSA I/II A/B 1000 V FT4 UL Direct Burial UL Sunlight Resistant
Solar power	Solar cable	18 - 12 AWG 3 – 9 conductors PVC/nylon insulation, PVC jacket UL TC-ER (600 V) UL MTW (600 V) UL WTTC (1000 V) UL Direct Burial UL Sunlight Resistant and Oil Res. I
Motor supply	Flexible motor supply cables	4-conductor cable 16 – 6 AWG PVC/nylon insulation, PVC jacket UL TC-ER (600 V) UL MTW (600 V) UL WTTC (1000 V) CSA AWM I/II A/B FT4
Industrial automation	Industrial automation cables	ControlNet™ 75-ohm coax cable DeviceNet™ cable for thick and thin trunks Fieldbus 100-ohm Types A and B cable High-Speed Fieldbus cable PROFIBUS™ cable RS-485 cable Industrial Twinax cable Series L Twinax + control cable

Series F Continuous Flex Control Cables

High-Flex Cable Track Applications

600 V Unshielded, Multiconductor



UL TC-ER, PLTC
UL TFFN (18 – 16 AWG)
UL THHN (14 – 8 AWG)
CSA AWM I/II A/B FT4
CE LVD 73/23/EEC Amend. 93/68/EEC

Operating Temperature

- -25°C to +90°C (static)
- -5°C to +90°C (dynamic)

Conductor Color Coding

- Red, blue, or black insulation*, numbered
  1 green/yellow green conductor
  1 white-striped neutral
  (12 conductors or greater)

Materials

- Stranded bare copper conductors
- PVC/nylon insulation
- Black oil-resistant thermoplastic elastomer jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I/II
- 10x bend radius
- Over 20 million rolling flex cycles
- Tic-tock and twist test per MIL-C-13777G
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-600: Highly flexible, cross-linked elastomer
- FIT-650: Chemical- and temperature-resistant fluoroelastomer

*Red insulation: AC circuits operating at less than line voltage
Blue insulation: DC circuits operating at less than line voltage
Black insulation: AC circuits operating at less than line voltage

18 AWG (0.83 mm²)

Stranding: 41/34 (41 x 0.16 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.10 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
F18003KW	F18003LW	F18003RW	3	0.308	7.82	0.050	1.27
F18004KW	F18004LW	F18004RW	4	0.333	8.46	0.050	1.27
F18005KW	F18005LW	F18005RW	5	0.360	9.14	0.050	1.27
F18007KW	F18007LW	F18007RW	7	0.418	10.62	0.050	1.27
F18012KW	F18012LW	F18012RW	12	0.515	13.08	0.065	1.65
F18017KW	F18017LW	F18017RW	17	0.597	15.16	0.065	1.65
F18022KW	F18022LW	F18022RW	22	0.656	16.66	0.065	1.65
F18025KW	F18025LW	F18025RW	25	0.717	18.21	0.065	1.65
F18034KW	F18034LW	F18034RW	34	0.775	19.69	0.065	1.65
F18042KW	F18042LW	F18042RW	42	0.874	22.20	0.085	2.16
F18049KW	F18049LW	F18049RW	49	0.965	24.51	0.085	2.16
F18065KW	F18065LW	F18065RW	65	1.052	26.72	0.085	2.16

16 AWG (1.31 mm²)

Stranding: 65/34 (65 x 0.16 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.10 mm) nylon

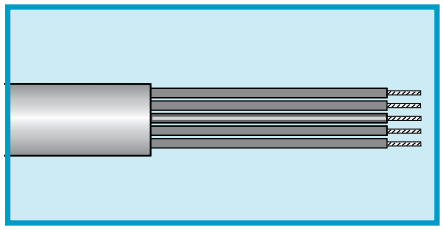
Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
F16003KW	F16003LW	F16003RW	3	0.334	8.48	0.050	1.27
F16004KW	F16004LW	F16004RW	4	0.362	9.19	0.050	1.27
F16005KW	F16005LW	F16005RW	5	0.393	9.98	0.050	1.27
F16007KW	F16007LW	F16007RW	7	0.489	12.42	0.065	1.65
F16012KW	F16012LW	F16012RW	12	0.565	14.35	0.065	1.65
F16017KW	F16017LW	F16017RW	17	0.657	16.69	0.065	1.65
F16019KW	F16019LW	F16019RW	19	0.691	17.55	0.065	1.65
F16022KW	F16022LW	F16022RW	22	0.724	18.39	0.065	1.65
F16025KW	F16025LW	F16025RW	25	0.793	20.14	0.065	1.65
F16033KW	F16033LW	F16033RW	33	0.899	22.83	0.085	2.16
F16042KW	F16042LW	F16042RW	42	0.966	24.54	0.085	2.16
F16049KW	F16049LW	F16049RW	49	1.069	27.15	0.085	2.16
F16065KW	F16065LW	F16065RW	65	1.168	29.67	0.085	2.16

UL LISTED CSA CE RoHS Compliant

Series F Continuous Flex Control Cables

High-Flex Cable Track Applications

600 V Unshielded, Multiconductor



UL TC-ER, PLTC
UL TFFN (18 – 16 AWG)
UL THHN (14 – 8 AWG)
CSA AWM I/II A/B FT4
CE LVD 73/23/EEC Amend. 93/68/EEC

Operating Temperature

- -25°C to +90°C (static)
- -5°C to +90°C (dynamic)

Conductor Color Coding

- Red, blue, or black insulation*, numbered
  1 green/yellow green conductor
  1 white-striped neutral
  (12 conductors or greater, except 14 AWG)

Materials

- Stranded bare copper conductors
- PVC/nylon insulation
- Black oil-resistant thermoplastic elastomer jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I/II
- 10x bend radius
- Over 20 million rolling flex cycles
- Tic-tock and twist test per MIL-C-13777G
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-600: Highly flexible, cross-linked elastomer
- FIT-650: Chemical- and temperature-resistant fluoroelastomer

14 AWG (2.11 mm²)

Stranding: 105/34 (105 x 0.16 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.10 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
F14004KW	F14004LW	F14004RW	4	0.398	10.11	0.050	1.27
F14005KW	F14005LW	F14005RW	5	0.434	11.02	0.050	1.27
F14007KW	F14007LW	F14007RW	7	0.539	13.69	0.065	1.65
F14012KW	F14012LW	F14012RW	12	0.628	15.95	0.065	1.65

12 AWG (3.38 mm²)

Stranding: 168/34 (168 x 0.16 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.10 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
F12004KW	F12004LW	F12004RW	4	0.501	12.73	0.065	1.65
F12005KW	F12005LW	F12005RW	5	0.545	13.84	0.065	1.65
F12007KW	F12007LW	F12007RW	7	0.640	16.26	0.065	1.65

10 AWG (5.32 mm²)

Stranding: 105/30 (105 x 0.25 mm)
Insulation thickness: 0.022 (0.56 mm) PVC/0.005 (0.10 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
F10004KW	F10004LW	F10004RW	4	0.565	14.35	0.065	1.65
F10005KW	F10005LW	F10005RW	5	0.618	15.70	0.065	1.65
F10007KW	F10007LW	F10007RW	7	0.729	18.52	0.065	1.65

8 AWG (8.51 mm²)

Stranding: 168/30 (168 x 0.25 mm)
Insulation thickness: 0.032 (0.81 mm) PVC/0.006 (0.15 mm) nylon

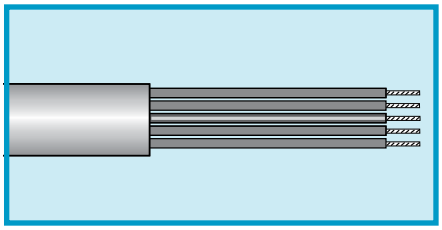
Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
F08004KW	F08004LW	F08004RW	4	0.740	18.80	0.065	1.65

*Red insulation: AC circuits operating at less than line voltage
Blue insulation: DC circuits operating at less than line voltage
Black insulation: AC circuits operating at less than line voltage

Series M Control Cable

Stationary or Minimal Flex Applications

600 V Unshielded, Multiconductor



UL TC-ER
UL MTW
UL WTTC (1000 V)
UL PLTC (300 V)
CSA AWM I/II A/B FT4
CE LVD 73/23/EEC Amend. 93/68/EEC

Operating Temperature

- -25°C to +90°C (static)
- -5°C to +90°C (dynamic)

Conductor Color Coding

- Red, blue, or black insulation*, numbered
  1 green/yellow green conductor
  1 white-striped neutral
  (12 conductors or greater)

Materials

- Finely stranded bare copper conductors
- PVC/nylon insulation
- Slate PVC jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I
- UL Direct Burial
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code
- 90°C Dry/75°C Wet

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-221: General-purpose cross-linked polyolefin
- FIT-321: Medium-wall, adhesive-lined cross-linked polyolefin

18 AWG (0.96 mm²)

Stranding: 19/30 (19 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.10 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
M18103KW	M18103LW	M18103RW	3	0.301	7.65	0.050	1.27
M18104KW	M18104LW	M18104RW	4	0.326	8.28	0.050	1.27
M18105KW	M18105LW	M18105RW	5	0.353	8.97	0.050	1.27
M18107KW	M18107LW	M18107RW	7	0.381	9.68	0.050	1.27
M18112KW	M18112LW	M18112RW	12	0.515	13.08	0.065	1.65
M18117KW	M18117LW	M18117RW	17	0.594	15.09	0.065	1.65
M18122KW	M18122LW	M18122RW	22	0.651	16.54	0.065	1.65
M18125KW	M18125LW	M18125RW	25	0.699	17.75	0.065	1.65
M18134KW	M18134LW	M18134RW	34	0.777	19.74	0.065	1.65
M18142KW	M18142LW	M18142RW	42	0.874	22.20	0.085	2.15
M18149KW	M18149LW	M18149RW	49	0.923	23.44	0.085	2.15
M18165KW	M18165LW	M18165RW	65	1.029	26.14	0.085	2.15

16 AWG (1.32 mm²)

Stranding: 26/30 (26 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.10 mm) nylon

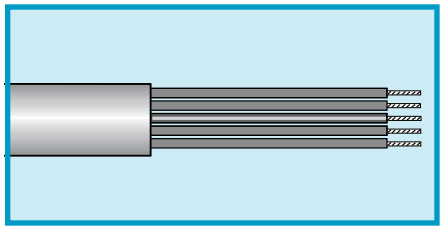
Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
M16103KW	M16103LW	M16103RW	3	0.323	8.20	0.050	1.27
M16104KW	M16104LW	M16104RW	4	0.350	8.89	0.050	1.27
M16105KW	M16105LW	M16105RW	5	0.380	9.65	0.050	1.27
M16107KW	M16107LW	M16107RW	7	0.421	10.69	0.055	1.39
M16112KW	M16112LW	M16112RW	12	0.557	14.14	0.065	1.65
M16117KW	M16117LW	M16117RW	17	0.644	16.35	0.065	1.65
M16119KW	M16119LW	M16119RW	19	0.644	16.35	0.065	1.65
M16122KW	M16122LW	M16122RW	22	0.707	17.95	0.065	1.65
M16125KW	M16125LW	M16125RW	25	0.761	19.32	0.065	1.65
M16133KW	M16133LW	M16133RW	33	0.857	21.76	0.085	2.15
M16142KW	M16142LW	M16142RW	42	0.950	24.13	0.085	2.15
M16149KW	M16149LW	M16149RW	49	1.005	25.52	0.085	2.15
M16165KW	M16165LW	M16165RW	65	1.122	28.49	0.085	2.15

*Red insulation: AC circuits operating at less than line voltage
Blue insulation: DC circuits operating at less than line voltage
Black insulation: AC circuits operating at less than line voltage

Series M Control Cable

Stationary or Minimal Flex Applications

600 V Unshielded, Multiconductor



UL TC-ER
UL MTW
UL WTTC (1000 V)
UL PLTC (300 V)
CSA AWM I/II A/B FT4
CE LVD 73/23/EEC Amend. 93/68/EEC

Operating Temperature

- -25°C to +90°C (static)
- -5°C to +90°C (dynamic)

Conductor Color Coding

- Red, blue, or black insulation*, numbered
  1 green/yellow green conductor
  1 white-striped neutral
  (12 conductors or greater, except 14 AWG)

Materials

- Finely stranded bare copper conductors
- PVC/nylon insulation
- Slate PVC jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I
- UL Direct Burial
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code
- 90°C Dry/75°C Wet

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-221: General-purpose cross-linked polyolefin
- FIT-321: Medium-wall, adhesive-lined cross-linked polyolefin

14 AWG (2.09 mm²)

Stranding: 41/30 (41 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.10 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
M14104KW	M14104LW	M14104RW	4	0.384	9.75	0.050	1.27
M14105KW	M14105KW	M14105RW	5	0.428	10.87	0.055	1.39
M14107KW	M14107LW	M14107RW	7	0.483	12.26	0.065	1.65
M14112KW	M14112LW	M14112RW	12	0.615	15.62	0.065	1.65
M14125KW	M14125LW	M14125RW	25	0.887	22.52	0.085	2.15

12 AWG (3.31 mm²)

Stranding: 65/30 (65 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.10 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
M12104KW	M12104LW	M12104RW	4	0.44	11.17	0.055	1.39
M12105KW	M12105LW	M12105RW	5	0.499	12.67	0.065	1.65
M12107KW	M12107LW	M12107RW	7	0.540	13.71	0.065	1.65

10 AWG (5.32 mm²)

Stranding: 105/30 (105 x 0.25 mm)
Insulation thickness: 0.022 (0.56 mm) PVC/0.005 (0.10 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
M10104KW	M10104LW	M10104RW	4	0.549	13.94	0.065	1.65
M10105KW	M10105LW	M10105RW	5	0.600	15.24	0.065	1.65
M10107KW	M10107LW	M10107RW	7	0.652	16.56	0.065	1.65

8 AWG (8.52 mm²)

Stranding: 168/30 (168 x 0.25 mm)
Insulation thickness: 0.032 (0.81 mm) PVC/0.006 (0.15 mm) nylon

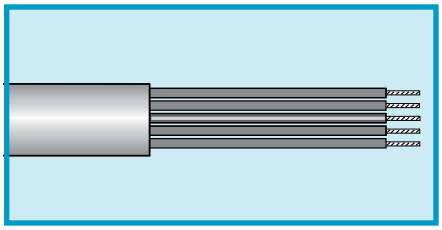
Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
M08104KW	M08104LW	M08104RW	4	0.724	18.38	0.065	1.65
M08105KW	M08105LW	M08105RW	5	0.795	20.19	0.065	1.65

*Red insulation: AC circuits operating at less than line voltage
Blue insulation: DC circuits operating at less than line voltage
Black insulation: AC circuits operating at less than line voltage

Series P Enhanced Stationary Control Cable

Stationary or Minimal Flex Applications

600 V Unshielded, Multiconductor



UL TC-ER, PLTC
UL TFFN (18 – 16 AWG)
UL THHN (14 – 8 AWG)
CSA AWM I/II A/B FT4
CE LVD 73/23/EEC Amend. 93/68/EEC

Operating Temperature

- -25°C to +90°C

Voltage Rating

- 600 V (TC-ER)
- 300 V (PLTC)

Conductor Color Coding

- Red, blue, or black insulation*, numbered
  1 green/yellow green conductor
  1 white-striped neutral
  (12 conductors or greater)

Materials

- Stranded bare copper conductors
- PVC/nylon insulation
- Oil-resistant thermoplastic elastomer jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I/II
- 10x bend radius, static and dynamic
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-600: Highly flexible cross-linked elastomer
- FIT-650: Chemical/temperature-resistant cross-linked fluoroelastomer

*Red insulation: AC circuits operating at less than line voltage
Blue insulation: DC circuits operating at less than line voltage
Black insulation: AC circuits operating at less than line voltage

18 AWG (0.96 mm²)

Stranding: 19/30 (19 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.010 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
MP18103KW	MP18103LW	MP18103RW	3	0.313	7.95	0.050	1.27
MP18104KW	MP18104LW	MP18104LW	4	0.338	8.58	0.050	1.27
MP18105KW	MP18105LW	MP18105RW	5	0.365	9.27	0.050	1.27
MP18107KW	MP18107LW	MP18107RW	7	0.393	9.98	0.050	1.27
MP18112KW	MP18112LW	MP18112RW	12	0.527	13.39	0.065	1.65
MP18117KW	MP18117LW	MP18117RW	17	0.606	15.39	0.065	1.65
MP18122KW	MP18122LW	MP18122RW	22	0.663	16.84	0.065	1.65
MP18125KW	MP18125LW	MP18125RW	25	0.711	18.06	0.065	1.65
MP18134KW	MP18134LW	MP18134RW	34	0.789	20.04	0.065	1.65
MP18142KW	MP18142LW	MP18142RW	42	0.886	22.50	0.085	2.16
MP18149KW	MP18149LW	MP18149RW	49	0.935	23.75	0.085	2.16
MP18165KW	MP18165LW	MP18165RW	65	1.041	26.44	0.085	2.16

16 AWG (1.32 mm²)

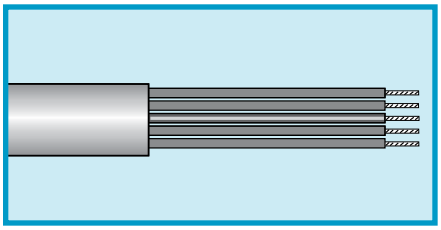
Stranding: 26/30 (26 x 0.25 mm)
Insulation thickness: 0.016 (0.41mm) PVC/0.005 (0.010 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
MP16103KW	MP16103LW	MP16103RW	3	0.335	8.51	0.050	1.27
MP16104KW	MP16104LW	MP16104RW	4	0.362	9.19	0.050	1.27
MP16105KW	MP16105LW	MP16105RW	5	0.392	9.96	0.050	1.27
MP16107KW	MP16107LW	MP16107RW	7	0.423	10.74	0.050	1.27
MP16112KW	MP16112LW	MP16112RW	12	0.569	14.45	0.065	1.65
MP16117KW	MP16117LW	MP16117RW	17	0.656	16.66	0.065	1.65
MP16122KW	MP16122LW	MP16122RW	22	0.719	18.26	0.065	1.65
MP16125KW	MP16125LW	MP16125RW	25	0.773	19.63	0.065	1.65
MP16133KW	MP16133LW	MP16133RW	33	0.869	22.07	0.085	2.16
MP16142KW	MP16142LW	MP16142RW	42	0.962	24.43	0.085	2.16
MP16149KW	MP16149LW	MP16149RW	49	1.017	25.83	0.085	2.16
MP16165KW	MP16165LW	MP16165RW	65	1.134	28.80	0.085	2.16

Series P Enhanced Stationary Control Cable

Stationary or Minimal Flex Applications

600 V Unshielded, Multiconductor



UL TC-ER, PLTC
UL TFFN (18 – 16 AWG)
UL THHN (14 – 8 AWG)
CSA AWM I/II A/B FT4
CE LVD 73/23/EEC Amend. 93/68/EEC

Operating Temperature

- -25°C to +90°C

Voltage Rating

- 600 V (TC-ER)
- 300 V (PLTC)

Conductor Color Coding

- Red, blue, or black insulation*, numbered
  1 green/yellow green conductor
  1 white-striped neutral
  (12 conductors or greater)

Materials

- Stranded bare copper conductors
- PVC/nylon insulation
- Oil-resistant thermoplastic elastomer jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I/II
- 10x bend radius, static and dynamic
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-600: Highly flexible cross-linked elastomer
- FIT-650: Chemical/temperature-resistant cross-linked fluoroelastomer

*Red insulation: AC circuits operating at less than line voltage
Blue insulation: DC circuits operating at less than line voltage
Black insulation: AC circuits operating at less than line voltage

14 AWG (2.08 mm²)

Stranding: 41/30 (41 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.010 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
MP14104KW	MP14104LW	MP14104RW	4	0.396	10.06	0.050	1.27
MP14105KW	MP14105LW	MP14105RW	5	0.430	10.92	0.050	1.27
MP14107KW	MP14107LW	MP14107RW	7	0.495	12.57	0.065	1.65
MP14112KW	MP14112LW	MP14112RW	12	0.627	15.93	0.065	1.65
MP14125KW	MP14125LW	MP14125RW	25	0.899	22.83	0.085	2.16

12 AWG (3.31 mm²)

Stranding: 65/30 (65 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.010 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
MP12104KW	MP12104LW	MP12104RW	4	0.472	11.99	0.065	1.65
MP12105KW	MP12105LW	MP12105RW	5	0.511	12.98	0.065	1.65
MP12107KW	MP12107LW	MP12107RW	7	0.552	14.02	0.065	1.65

10 AWG (5.32 mm²)

Stranding: 105/30 (105 x 0.25 mm)
Insulation thickness: 0.022 (0.56 mm) PVC/0.005 (0.010 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
MP10104KW	MP10104LW	MP10104RW	4	0.561	14.25	0.065	1.65
MP10105KW	MP10105LW	MP10105RW	5	0.612	15.54	0.065	1.65
MP10107KW	MP10107LW	MP10107RW	7	0.664	16.87	0.065	1.65

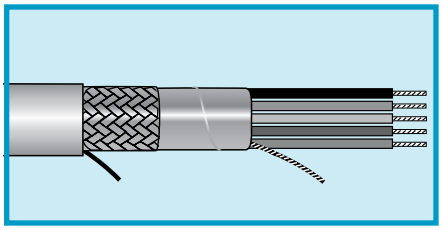
8 AWG (8.52 mm²)

Stranding: 168/30 (105 x 0.25 mm)
Insulation thickness: 0.032 (0.81 mm) PVC/0.005 (0.010 mm) nylon

Part No.			Conductors	Nominal Diameter		Jacket Thickness	
Black Insul.	Blue Insul.	Red Insul.		Inch	mm	Inch	mm
MP08104KW	MP08104LW	MP08104RW	4	0.736	18.69	0.065	1.65
MP08105KW	MP08105LW	MP08105RW	5	0.807	20.50	0.065	1.65

Series S Servo Cable

600 V Multiconductor Power, PVC, TPE
300 V Multipair Encoder/Resolver, PVC, PO



Series S cables are designed specifically for connecting power between the supply and servo motors, drives, and controllers.

UL AWM 20626
CSA AWM I/II A/B FT1
CE LVD 73/68/EEC
Amendment 93/68/EEC

Operating Temperature

Power and composite cable
- -10°C to +90°C (static)
- +5°C to +90°C (dynamic)

Resolver and encoder cable
- -30°C to +80°C (static)
- -10°C to +80°C (dynamic)

Conductor Color Coding

- Chart KX (page 522) for multiconductor power cables
- Chart A (page 516) for multipair resolver cables
- See table for multiconductor encoder cable

Materials

Power and composite cable
- Bare copper conductors
- PVC insulation
- Foil + braid shielding Aluminum/polyester foil Tinned copper braid, 85% coverage
- Orange thermoplastic elastomer jacket

Resolver and encoder cable
- Bare copper conductors
- Polyolefin insulation
- Overall tinned copper braid shield, 85% coverage
- Black thermoplastic elastomer jacket

Features

- 10x bend radius
- Three configurations
  1. Power cable
  2. Composite cable for power and control
  3. Control cable for resolver and encoder applications

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-600: Highly flexible cross-linked elastomer
- FIT-650: Chemical/temperature-resistant cross-linked fluoroelastomer

Power Servo Cable

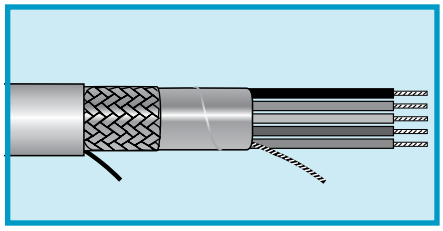
4 conductors for power/ground

Part No.	Conductors	Wire Size		Stranding		Nominal Diameter		Jacket Thickness	
		AWG	mm²	AWG	mm	Inch	mm	Inch	mm
S61124CY	4	24	0.23	7/32	7 x 0.20	0.351	8.92	0.048	1.22
S61122CY	4	22	0.35	7/30	7 x 0.25	0.366	9.30	0.048	1.22
S61120CY	4	20	0.51	10/30	10 x 0.25	0.383	9.73	0.048	1.22
S61118CY	4	18	0.96	19/30	19 x 0.25	0.431	10.95	0.053	1.35
S61116CY	4	16	1.32	26/30	26 x 0.25	0.455	11.56	0.053	1.35
S61114CY	4	14	2.09	41/30	41 x 0.25	0.489	12.42	0.053	1.35
S61112CY	4	12	3.31	65/30	65 x 0.25	0.555	14.10	0.060	1.52
S61110CY	4	10	5.37	105/30	105 x 0.25	0.626	15.90	0.065	1.65
S61108CY	4	8	8.53	133/29	133 x 0.29	0.863	21.92	0.075	1.91

RoHS Compliant

Series S Servo Cable

600 V Multiconductor Power, PVC, TPE
300 V Multipair Encoder/Resolver, PVC, PO



Series S cables are designed specifically for connecting power between the supply and servo motors, drives, and controllers.

UL AWM 20626
CSA AWM I/II A/B FT1
CE LVD 73/68/EEC
Amendment 93/68/EEC

Operating Temperature

Power and composite cable
- -10°C to +90°C (static)
- +5°C to +90°C (dynamic)

Resolver and encoder cable
- -30°C to +80°C (static)
- -10°C to +80°C (dynamic)

Conductor Color Coding

- Chart KX (page 522) for multiconductor power cables
- Chart A (page 516) for multipair resolver cables
- See table below for multiconductor encoder cable

Materials

Power and composite cable
- Bare copper conductors
- PVC insulation
- Foil + braid shielding Aluminum/polyester foil Tinned copper braid, 85% coverage
- Orange thermoplastic elastomer jacket

Resolver and encoder cable
- Bare copper conductors
- Polyolefin insulation
- Overall tinned copper braid shield, 85% coverage
- Black thermoplastic elastomer jacket

Features

- 10x bend radius
- Three configurations
  1. Power cable
  2. Composite cable for power and control
  3. Control cable for resolver and encoder applications

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-600: Highly flexible cross-linked elastomer
- FIT-650: Chemical/temperature-resistant cross-linked fluoroelastomer

Composite Servo Cable

4 conductors for power/ground + 1 individually shielded pair for brake or temperature control

Part No.	Conductors	Wire Size		Stranding		Nominal Diameter		Jacket Thickness	
		AWG	mm²	AWG	mm	Inch	mm	Inch	mm
S61220CY	4 + 1 pair	16 pwr 18 pr	1.32 0.83	26/30 41/34	26 x 0.25 41 x 0.16	0.620	15.75	0.053	1.35
S61221CY	4 + 1 pair	14 pwr 18 pr	2.09 0.83	41/30 41/34	41 x 0.25 41 x 0.16	0.640	16.26	0.053	1.35
S61222CY	4 + 1 pair	12 pwr 16 pr	3.31 1.31	65/30 65/34	65 x 0.25 65 x 0.16	0.720	18.29	0.060	1.52
S61223CY	4 + 1 pair	10 pwr 16 pr	5.37 1.31	105/30 65/34	105 x 0.25 65 x 0.16	0.770	19.56	0.065	1.65
S61224CY	4 + 1 pair	8 pwr 16 pr	8.53 1.31	133/29 65/34	133 x 0.29 65 x 0.16	0.955	24.26	0.075	1.91

Servo Resolver and Encoder Cable

300 V

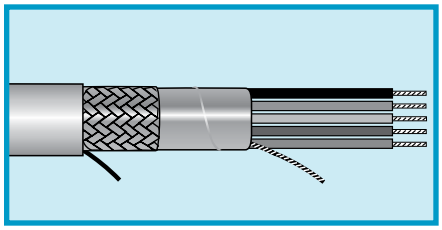
Part No.	Conductors	Wire Size		Stranding		Nominal Diameter		Jacket Thickness	
		AWG	mm²	AWG	mm	Inch	mm	Inch	mm
S61300CY*	9	20	0.91	26/34	26 x 0.16	0.381	9.68	0.033	0.84
S61403CY	3 pairs	20	0.91	41/36	41 x 0.12	0.515	13.08	0.050	1.27
S61404CY	4 pairs	20	0.91	41/36	41 x 0.12	0.562	14.27	0.050	1.27
S61406CY	6 pairs	20	0.91	41/36	41 x 0.12	0.670	17.02	0.050	1.27

**Conductor color codes: brown, black, slate, blue, white, red, pink, green, yellow.*

RoHS Compliant

Series SF Flexible Servo Cable

600/1000 V, PVC/Nylon, TPE



Series SF flexible servo cables give the same high performance as Series S cables, but offer enhanced flexibility in flexing applications that require continuous movement.

UL TC-ER (600 V)
UL WTTC (1000 V)
CSA AWM I/II A/B FT4

Operating Temperature

- -25°C to +90°C (static)
- -5°C to +90°C (dynamic)

Conductor Color Coding

- Chart KX (page 522) for multiconductor
- Chart A (page 516) for pairs

Materials

- Tinned copper conductors
- PVC/nylon insulation
- Foil + braid shielding
  Aluminum/polyester foil
  Tinned copper braid,
  85% coverage
- Orange thermoplastic elastomer jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I/II
- 10x bend radius
- Two configurations
  1. Power cable
  2. Composite cable for power and control
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-600: Highly flexible cross-linked elastomer
- FIT-650: Chemical/temperature-resistant cross-linked fluoroelastomer

Flexible Power Servo Cable

4 conductors for power/ground

Part No.	Conductors	Wire Size		Stranding		Nominal Diameter		Jacket Thickness	
		AWG	mm²	AWG	mm	Inch	mm	Inch	mm
SF61118CY	4	18	0.96	19/30	19 x 0.25	0.382	9.70	0.055	1.40
SF61116CY	4	16	1.32	26/30	26 x 0.25	0.406	10.31	0.055	1.40
SF61114CY	4	14	2.09	41/30	41 x 0.25	0.440	11.18	0.055	1.40
SF61112CY	4	12	3.31	65/30	65 x 0.25	0.506	12.85	0.065	1.65
SF61110CY	4	10	5.32	105/30	105 x 0.25	0.603	15.32	0.065	1.65
SF61108CY	4	8	8.50	168/30	168 x 0.25	0.785	19.94	0.065	1.65

Flexible Composite Servo Cable

4 conductors for power/ground +2 individually shielded pairs for brake or temperature control

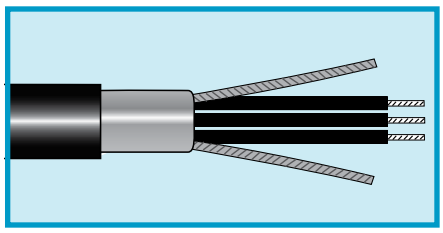
Part No.	Conductors	Wire Size		Stranding		Nominal Diameter		Jacket Thickness	
		AWG	mm²	AWG	mm	Inch	mm	Inch	mm
SF61220CY	4 +2 pairs	16 pwr 18 pr	1.32 0.96	26/30 19/30	26 x 0.25 19 x 0.25	0.590	14.99	0.065	1.65
SF61221CY	4 +2 pairs	14 pwr 18 pr	2.09 0.96	41/30 19/30	41 x 0.25 19 x 0.25	0.618	15.70	0.065	1.65
SF61222CY	4 +2 pairs	12 pwr 16 pr	3.31 1.32	65/30 26/30	65 x 0.25 26 x 0.25	0.674	17.12	0.065	1.65
SF61223CY	4 +2 pairs	10 pwr 16 pr	5.37 1.32	105/30 26/30	105 x 0.25 26 x 0.25	0.757	19.23	0.065	1.65
SF61224CY	4 +2 pairs	8 pwr 16 pr	8.50 1.32	168/30 26/30	168 x 0.25 26 x 0.25	0.943	23.95	0.085	2.16

RoHS Compliant

Series V VFD Control Cables

Enhanced Design for Superior Performance in Variable-Frequency Drives

600/1000 V Shielded



Series V cables for variable-frequency drives (VFD) set the standard in high-performance and reliable connectivity. Their specially formulated cross-linked polyethylene insulation provides superior corona resistance, low capacitance for longer runs, and excellent low-temperature properties.

A symmetrical design places the ground wires in the interstices of the conductors for uniform conductor-to-ground capacitance and impedance.

Smaller gauge cable feature a combination foil/braid shield to offer exceptional EMI/RFI protection in noisy environments. On larger gauge cable, a double copper tape is used to provide the same noise-free operation.

This uniformity reduces the probability of motor damage from common-mode current.

Alpha Series V VFD cables are compatible with drives from all major manufacturers.

UL RHW-2 (16 – 2 AWG)
UL XHHW-2
UL TC-ER
UL 1000V Flexible Motor Supply Cable
CSA AWM I/II A/B FT4
CE LVD 73/23/EEC Amendment 93/68/EEC
Pennsylvania MHSA

Operating Temperature

- -40°C to +90°C

Conductor Color Coding

- Black, numbered

Materials

- Stranded tinned copper conductors
- Stranded tinned copper ground wires
- Cross-linked polyethylene insulation
- Shielding
  16 – 4 AWG:
  Aluminum/polyester/aluminum foil and tinned copper braid with 85% coverage
  2 – 4/0 AWG:
  Double-layer copper tape
- Black premium PVC jacket

Voltage

- 600 V (UL TC-ER)
- 1000 V (UL Motor Supply)

Features

- UL Direct Burial
- UL Sunlight Resistant
- 10x bend radius
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, made to order

FIT® Tubing Recommendations

- FIT-221: General-purpose cross-linked polyolefin
- FIT-321V: Low-shrink-temperature, flame-retardant cross-linked polyolefin

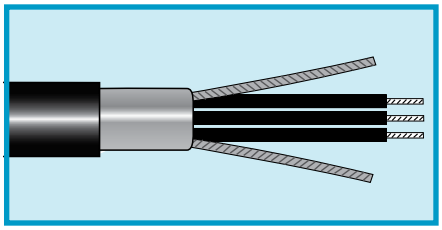
Three-Conductor VFD Cables

Part No.	Wire Size		Stranding		Shielding	Insulation Thickness		Jacket Thickness		Nominal Diameter	
	AWG	mm²	AWG	mm		Inch	mm	Inch	mm	Inch	mm
V16316	16	1.32	26/30	26 x 0.25	Foil/Braid	0.046	1.17	0.050	1.27	0.468	11.89
V16314	14	2.09	41/30	41 x 0.25	Foil/Braid	0.046	1.17	0.065	1.65	0.538	13.67
V16312	12	3.31	65/30	65 x 0.25	Foil/Braid	0.046	1.17	0.065	1.65	0.578	14.68
V16310	10	5.37	105/30	105 x 0.25	Foil/Braid	0.047	1.19	0.065	1.65	0.642	16.31
V16308	8	8.53	133/29	133 x 0.28	Foil/Braid	0.061	1.55	0.065	1.65	0.798	20.27
V16306	6	13.57	133/27	133 x 0.36	Foil/Braid	0.061	1.55	0.085	2.15	0.924	23.47
V16304	4	21.58	133/25	133 x 0.45	Foil/Braid	0.061	1.55	0.085	2.15	1.050	26.67
V16302	2	34.32	133/23	133 x 0.57	Tape	0.061	1.55	0.085	2.15	1.157	29.39
V16001	1	43.28	133/22	133 x 0.64	Tape	0.056	1.42	0.085	2.15	1.197	30.48
V16000	1/0	54.58	133/21	133 x 0.72	Tape	0.056	1.42	0.085	2.15	1.294	32.77
V16020	2/0	68.85	133/20	133 x 0.81	Tape	0.056	1.42	0.085	2.15	1.399	35.56
V16030	3/0	86.9	133/19	133 x 0.91	Tape	0.056	1.42	0.085	2.15	1.517	38.53
V16040	4/0	109	133/18	133 x 1.02	Tape	0.056	1.42	0.085	2.15	1.653	41.98

Series V VFD Control Cables

Enhanced Design for Superior Performance in Variable-Frequency Drives

600/1000 V Shielded



Series V cables for variable-frequency drives (VFD) set the standard in high-performance and reliable connectivity. Their specially formulated cross-linked polyethylene insulation provides superior corona resistance, low capacitance for longer runs, and excellent low-temperature properties.

A symmetrical design places the ground wires in the interstices of the conductors for uniform conductor-to-ground capacitance and impedance.

Smaller gauge cable feature a combination foil/braid shield to offer exceptional EMI/RFI protection in noisy environments. On larger gauge cable, a double copper tape is used to provide the same noise-free operation.

This uniformity reduces the probability of motor damage from common-mode current.

Alpha Series V VFD cables are compatible with drives from all major manufacturers.

UL RHW-2 (16 – 2 AWG)
UL XHHW-2
UL TC-ER
UL 1000V Flexible Motor Supply Cable
CSA AWM I/II A/B FT4
CE LVD 73/23/EEC Amendment 93/68/EEC
Pennsylvania MHSA

Operating Temperature

- -40°C to +90°C

Conductor Color Coding

- Black, numbered

Materials

- Stranded tinned copper conductors
- Stranded tinned copper ground wires
- Cross-linked polyethylene insulation
- Shielding
  16 – 4 AWG:
  Aluminum/polyester/aluminum foil and tinned copper braid with 85% coverage
  2 – 4/0 AWG:
  Double-layer copper tape
- Black premium PVC jacket

Voltage

- 600 V (UL TC-ER)
- 1000 V (UL Motor Supply)

Features

- UL Direct Burial
- UL Sunlight Resistant
- 10x bend radius
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, made to order

FIT® Tubing Recommendations

- FIT-221: General-purpose cross-linked polyolefin
- FIT-321V: Low-shrink-temperature, flame-retardant cross-linked polyolefin

Four-Conductor VFD Cable

Part No.	Wire Size		Stranding		Shielding	Insulation Thickness		Jacket Thickness		Nominal Diameter	
	AWG	mm²	AWG	mm		Inch	mm	Inch	mm	Inch	mm
V16016	16	1.32	26/30	26 x 0.25	Foil/Braid	0.047	1.19	0.065	1.65	0.547	13.89
V16014	14	2.09	41/30	41 x 0.25	Foil/Braid	0.047	1.19	0.065	1.65	0.584	14.83
V16012	12	3.31	65/30	65 x 0.25	Foil/Braid	0.047	1.19	0.065	1.65	0.633	16.08
V16010	10	5.37	105/30	105 x 0.25	Foil/Braid	0.047	1.19	0.085	2.15	0.746	18.95
V16008	8	8.53	133/29	133 x 0.28	Foil/Braid	0.061	1.55	0.086	2.15	0.920	23.37
V16006	6	13.57	133/27	133 x 0.36	Foil/Braid	0.061	1.55	0.086	2.15	1.017	25.83
V16004	4	21.58	133/25	133 x 0.45	Foil/Braid	0.061	1.55	0.086	2.15	1.157	29.39
V16002	2	34.32	133/23	133 x 0.57	Foil/Braid	0.061	1.55	0.088	2.15	1.308	33.22

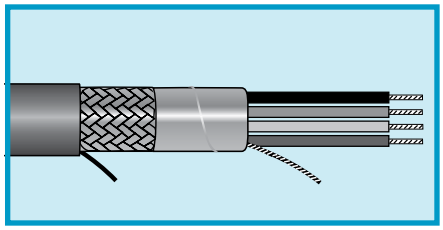
Four-Conductor VFD Cable with 14 AWG (2.09) Brake Pair

Part No.	Wire Size		Stranding		Shielding	Insulation Thickness		Jacket Thickness		Nominal Diameter	
	AWG	mm²	AWG	mm		Inch	mm	Inch	mm	Inch	mm
V16116	16	1.32	26/30	26 x 0.25	Foil/Braid	0.047	1.19	0.065	1.65	0.717	18.21
V16114	14	2.09	41/30	41 x 0.25	Foil/Braid	0.047	1.19	0.065	1.65	0.743	18.87
V16112	12	3.31	65/30	65 x 0.25	Foil/Braid	0.047	1.19	0.065	1.65	0.785	19.94
V16110	10	5.37	105/30	105 x 0.25	Foil/Braid	0.047	1.19	0.085	2.15	0.875	22.23
V16108	8	8.53	133/29	133 x 0.28	Foil/Braid	0.061	1.55	0.085	2.15	1.032	26.21

Flexible Motor Supply Cable

Light Duty Flexing

600 V Foil/Braid, Four Conductor



UL TC-ER
UL MTW
UL WTTC
CSA AWM I/II A/B FT4
CE

Operating Temperature

- -5°C to +90°C (flexing)
- -20°C to +90°C (stationary)

Conductor Color Coding

- One yellow/green and three numbered black

Materials

- Finely stranded bare copper conductors
- PVC/nylon insulation
- Foil + braid shield
  Aluminum/polyester/aluminum foil shield, with 25% overlap and four tinned copper drain wires
  Tinned copper braid with 70% coverage
- Black PVC jacket

Voltage

- 600 V (UL TC-ER, MTW)
- 1000 V (UL WTTC)

Availability

Bulk, cut to length

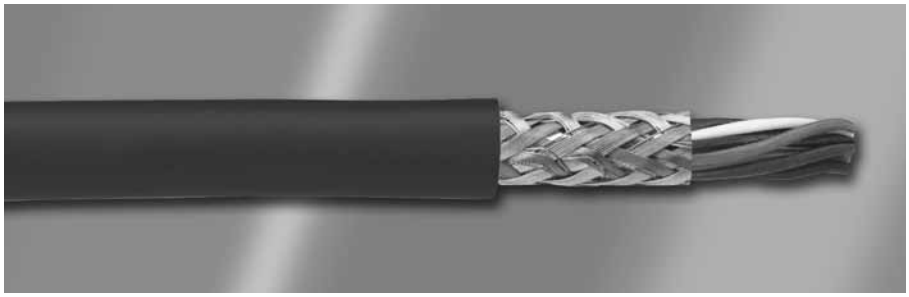
FIT® Tubing Recommendations

- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin
- FIT-600: Highly flexible, cross-linked elastomer

16 to 6 AWG (1.49 to 5.33 mm²)											
Part No.	Conductors	Wire Size		Stranding		Nominal Diameter		Jacket Thickness		Insulation Thickness	
		AWG	mm²	AWG	mm	Inch	mm	Inch	mm	Inch	mm
5660	4	16	1.32	26/30	26 x 0.25	0.381	9.67	0.050	1.27	0.016	0.40
5661	4	14	2.08	41/30	41 x 0.25	0.418	10.61	0.050	1.27	0.016	0.40
5662	4	12	3.30	65/30	65 x 0.25	0.464	11.78	0.050	1.27	0.016	0.40
5663	4	10	5.32	105/30	105 x 0.25	0.579	14.70	0.063	1.60	0.022	0.55
5664	4	8	8.52	168/30	168 x 0.25	0.760	19.30	0.063	1.60	0.032	0.81
5665	4	6	13.49	266/30	266 x 0.25	0.901	22.88	0.083	2.10	0.032	0.81

RoHS Compliant

Solar Cable



From residential rooftops to solar farms harvesting energy, our solar cables and photovoltaic wire are designed for the harsh environments of solar energy applications—the hot and cold of climate extremes, ozone and UV radiation, moisture, oil, and direct burial. Our specially formulated PVC jackets provide years of reliable service by withstanding the potential environments without failing or degrading.

A full range for power and control

No matter what your need in connecting solar power to the grid, we have wire and cable in a range of gauges and conductor counts to satisfy it.

Our cables meet regulatory and industry requirements for photovoltaic applications.

Applications

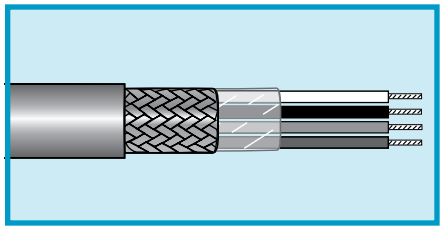
- **Panel monitoring and control**
- **Panel to junction box**
- **Panel to collector**
- **Collector to inverter**
- **Grounding**
- **Motor supply**

Photovoltaic Wire

For single-conductor needs, see page 00 for our line of photovoltaic wires.

Solar Cable

600 V Braid Shield, Multiconductor, PVC/Nylon, PVC



UL TC-ER
UL WTTC (1000 V)
UL MTW
CSA AWM I/II A/B FT1

Operating Temperature

- -40°C to +90°C (static)
- -30°C to +90°C (dynamic)
- +105°C (CSA)

Conductor Color Coding

- Chart F (page 520)

Materials

- Stranded bare copper conductors
- PVC/nylon insulation
- Clear polyester wrap
- Tinned copper braid shield, 85% coverage
- Green PVC jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I
- UL Direct Burial
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-260: Cross-linked polyolefin for ground identification
- FIT-300: Dual-wall polyolefin with meltable inner wall
- FIT-750: Bonding adhesive-lined cross-linked polyolefin

18 AWG (0.96 mm²)

Stranding: 19/30 (19 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1803CY	3	0.329	8.36	0.050	1.27
SPM1804CY	4	0.354	8.99	0.050	1.27
SPM1805CY	5	0.381	9.68	0.050	1.27
SPM1807CY	7	0.409	10.39	0.050	1.27
SPM1809CY	9	0.466	11.84	0.050	1.27

16 AWG (1.32 mm²)

Stranding: 26/30 (26 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1603CY	3	0.351	8.92	0.050	1.27
SPM1604CY	4	0.378	9.60	0.050	1.27
SPM1605CY	5	0.408	10.36	0.050	1.27
SPM1607CY	7	0.439	11.15	0.050	1.27
SPM1609CY	9	0.509	12.93	0.050	1.27

14 AWG (2.08 mm²)

Stranding: 41/30 (41 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1403CY	3	0.381	9.68	0.050	1.27
SPM1404CY	4	0.412	10.46	0.050	1.27
SPM1405CY	5	0.446	11.33	0.050	1.27
SPM1407CY	7	0.481	12.22	0.050	1.27
SPM1409CY	9	0.590	14.99	0.065	1.65

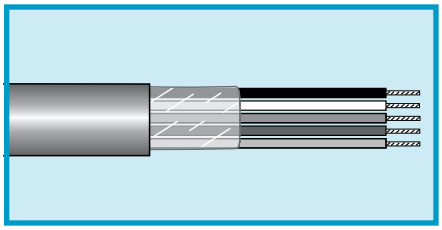
12 AWG (3.29 mm²)

Stranding: 65/30 (65 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1203CY	3	0.422	10.72	0.050	1.27
SPM1204CY	4	0.458	11.63	0.050	1.27
SPM1205CY	5	0.497	12.62	0.050	1.27
SPM1207CY	7	0.574	14.58	0.065	1.65
SPM1209CY	9	0.659	16.74	0.065	1.65

Solar Cable

1000 V Unshielded, Multiconductor, PVC/Nylon, PVC



UL TC-ER
UL WTTC (1000 V)
UL MTW
CSA AWM I/II A/B FT1

Operating Temperature

- -40°C to +90°C (static)
- -30°C to +90°C (dynamic)
- +105°C (CSA)

Conductor Color Coding

- Chart F (page 520)

Materials

- Stranded bare copper conductors
- PVC/nylon insulation
- Clear polyester wrap
- Green PVC jacket

Features

- UL Sunlight Resistant
- UL Oil Res. I
- UL Direct Burial
- Suitable for use in Class I, Division 2 locations per Article 501 of the National Electric Code

Availability

Bulk, cut to length

FIT® Tubing Recommendations

- FIT-260: Cross-linked polyolefin for ground identification
- FIT-300: Dual-wall polyolefin with meltable inner wall
- FIT-750: Bonding adhesive-lined cross-linked polyolefin

18 AWG (0.96 mm²)

Stranding: 19/30 (19 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1803	3	0.301	7.65	0.050	1.27
SPM1804	4	0.326	8.28	0.050	1.27
SPM1805	5	0.353	8.97	0.050	1.27
SPM1807	7	0.381	9.68	0.050	1.27
SPM1809	9	0.438	11.13	0.050	1.27

16 AWG (1.32 mm²)

Stranding: 26/30 (26 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1603	3	0.323	8.20	0.050	1.27
SPM1604	4	0.350	8.89	0.050	1.27
SPM1605	5	0.380	9.65	0.050	1.27
SPM1607	7	0.411	10.44	0.050	1.27
SPM1609	9	0.475	12.07	0.050	1.27

14 AWG (2.08 mm²)

Stranding: 41/30 (41 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1403	3	0.353	8.97	0.050	1.27
SPM1404	4	0.384	9.75	0.050	1.27
SPM1405	5	0.418	10.62	0.050	1.27
SPM1407	7	0.453	11.51	0.050	1.27
SPM1409	9	0.556	14.12	0.065	1.65

12 AWG (3.29 mm²)

Stranding: 65/30 (65 x 0.25 mm)
Insulation thickness: 0.016 (0.41 mm) PVC/0.005 (0.12 mm) nylon

Part No.	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
SPM1203	3	0.394	10.01	0.050	1.27
SPM1204	4	0.430	10.92	0.050	1.27
SPM1205	5	0.469	11.91	0.050	1.27
SPM1207	7	0.510	12.95	0.050	1.27
SPM1209	9	0.625	15.88	0.065	1.65

RoHS Compliant