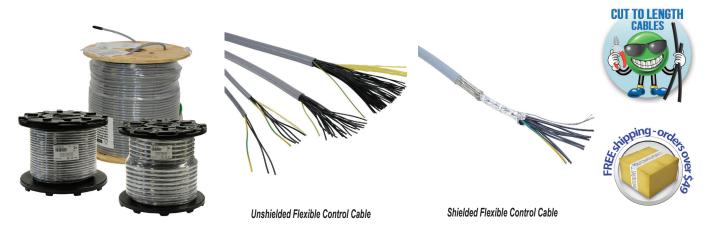
1-800-633-0405 **Multi-Conductor Flexible Control Cable**



Multi-conductor flexible control cable from Southwire is available in sizes from Features 20AWG to 10AWG with 3 to 41 unshielded and shielded conductors. Individual conductors are bare copper and stranded for flexibility, with black PVC/Nylon insulation and marked with numbers for easy identification. A convenient ground conductor is included in the conductor count of each cable and has insulation that is green with a yellow stripe. Shielded versions include both an overall aluminum mylar foil tape with drain wire and tinned copper braid for maximum effectiveness against external electrical noise interference. The cable's outer jacket is a flexible, premium grade Thermoplastic Elastomer (TPE) that is resistant to sunlight, oil, and moisture penetration, making these cables suitable for wet and dry locations as well as outdoors. Although not suitable for continuous flexing applications, these cables are ideal for both stationary and flexible applications with limited mechanical stress and free movement without any tensile stress, loads or forced movements.

With multiple ratings and approvals, Southwire flexible multi-conductor control cable has the versatility to meet a wide range of industrial applications. Given its Tray Cable Exposed Run rating, UL Type TC-ER or Power Limited Tray Cable Tray Cable, UL Type PLTC-ER, our cable can be installed between a cable tray and the utilization equipment or device without the need for metal conduit and/ or armor resulting in installation and maintenance savings. With the Machine Tool Wire rating, UL Type MTW, these cables meet NFPA 79, Electrical Standard for Industrial Machinery. Other ratings and approvals include Wind Turbine Tray Cable UL Type WTTC, Class 1 Division 2 Hazardous Locations, Direct Burial, and have been tested by UL for compliance with ECOLAB's resistance to cleaning chemicals per PM-40-1.

When combined with AutomationDirect ZIPport multi-wire connectors, our flexible multi-conductor cables provide an economical way to organize and simplify control wiring in facilities and during assembly of machinery. Cut to length in 1 foot increments with a 20 foot minimum length

Cable Use Examples*:

- 20AWG to 10AWG, 3 to 41 conductors including a equal size ground
- Unshielded and shielded constructions
- Individual conductors have black PVC/Nylon insulation and are marked with identification numbers
- Rugged Thermoplastic Elastomer (TPE) outer jacket
- Equal size green/yellow ground wire included
- Multiple ratings and approvals include Type TC-ER or PLTC-ER (eliminates need for conduit/armor), Type MTW (meets NFPA 79), WTTC, Class 1 Division 2, Direct Burial, Wet and Dry Location, Oil Resistant, Sunlight Resistant
- Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862
- Flexibility for easy installation
- Cut to length in 1 foot increments
- · Low 20 foot minimum length
- · Made in the USA
- Ideal for use with ZIPport multi-wire connectors (as shown below)





* Cables shown using AutomationDirects's ZIPport multi-wire connectors. See Terminal Blocks & Wiring Solutions section for further information.

20 Gauge Multi-Conductor Flexible Control Cable (Unshielded)

20 Gai	uge Multi-Conductor Flexi	ble Control Cab	le Specifications (Unshielded)			
Conductor Gauge & Stranding	20AWG 10/30 bare copper, Class K					
Voltage Rating	300V Power Limited Tray Cable - Exposed Run (PLTC-ER) 300V Instrumentation Tray Cable - Exposed Run (ITC-ER) 600V MTW Flexing / AWM 2587	Applicable Standards	ASTM B3 Soft or Annealed Copper Wire ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 758 AWM Style 2587 Standard for Appliance Wiring Material UL 1063 Machine Tool Wiring (MTW)			
Capacitance Resistance	26 pF/ft Nom. Conductor to Conductor		UL 2250 Instrumentation Tray Cable CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 -			
	10.15 Ω/kft*		8AWG) Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure,			
Impedance	61.0 Ω		UL Verified V747862			
Operating Temperature	-40°C to 90°C (-40°F to 194°F)					
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant	Approvals**	UL (E57497), CSA (90458)			
Conductor Insulation	0.011 Inch, PVC + 0.005 Inch, NYLON					
Conductor Markings	#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4					
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry		Southwire EXXXXX (UL) Type PLTC-ER XXAWG (XXmm ²)			
Cold Impact	-40°C (-40°F) per UL 1277	Sample Print Legend	XX/C PVC/Nylon 90C Sun Res Oil Res I/II -40C or ITC-ER or MTW Flexing 600V or AWM 2587 or LLXXXXXX CSA			
Min. Bend Radius	4x diameter		AWM I/II A/B 105C 600V -40C FT4 CE RoHS -2 Made in USA Sequential Footage			
Elamo Pating	FT4, IEEE 1202/383, ICEA T-29-520		in USA Sequential FUOLaye			
lame Rating	UL1685, UL MTW NFPA 79 2007					
Oil Resistance	Oil Res I & II					

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

	20 Gauge Multi-Conductor Flexible Control Cable (Unshielded)											
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (Ib/ft)	Price per foot		
					There 3	y Four 24 Two 2 Four 4						
<u>V30156-1</u>	3					0.26	1.12	20	0.04	\$0.63		
<u>V30158-1</u>	4				47	0.28	1.24	20	0.04	\$0.76		
<u>V30160-1</u>	5					0.30	1.32	20	0.05	\$0.86		
<u>V30162-1</u>	7			10		0.33	1.44	20	0.06	\$1.05		
<u>V30164-1</u>	9	20	10	16		0.41	1.64	20	0.09	\$1.49		
<u>V30186-1</u>	12				62	0.45	1.84	20	0.11	\$1.85		
<u>V30188-1</u>	18					0.52	2.20	20	0.15	\$2.54		
<u>V30190-1</u>	25					0.60	2.56	20	0.20	\$3.48		

* Installed bend radius \geq 4x diameter

** See web store for maximum cut lengths





Please Note: Our prices on flexible control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

1-800-633-0405

18 Gauge Multi-Conductor Flexible Control Cable (Unshielded)

18 Gauge Multi-Conductor Flexible Control Cable Specifications (Unshielded)

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Conductor Gauge & Stranding	18AWG 16/30 bare copper, Class K		ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having
	600V (Type TC-ER)		Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper
Voltage Rating	1000V (Type WTTC)	-	UL 13 Power-Limited Circuit Cables UL 66 Fixture Wire Type TFFN (for sizes 18 and 16 AWG)
	1000V (UL/CSAAWM)		UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW)
Capacitance	28.2 pF/ft Nom. Conductor to Conductor		UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1)
Resistance	6.53 Ω/kft*	Applicable	UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC CSA C22.2 No.230 Tray Cables - Rated TC
Impedance	55.0 Ω	Standards	CSA C22.2 No.230 Tray Cables - Nated TC CSA C22.2 No. 239 Control and instrumentation cables ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		Distribution of Electrical Energy IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862
Conductor Insulation	0.015 Inch, PVC + 0.005 Inch, NYLON	-	CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to the material restrictions identified in the RoHS-2 (2011/65/EU) Directive
Conductor Markings	#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4		NFPA 79 Electrical Standard for Industrial Machinery Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry		America requirements per 49 C.F.R. part 661
Cold Impact	-40°C (-40°F) per UL 1277	Approvals**	UL (E75755), CSA (90458)
Min. Bend Radius	4x diameter		
Flower Deting	FT4, IEEE 1202/383, ICEA T-29-520	Sample Print	Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C Dry 75°C Wet Sun Res Oil Res I/II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR
Flame Rating	UL1685, UL MTW NFPA 79 2007	Legend	WTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA AWM I/ILA/B 105°C 1000V -40°C FT4 CE
Oil Resistance	Oil Res I & II		

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

	18 Gauge Multi-Conductor Flexible Control Cable (Unshielded)											
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (Ib/ft)	Price per foot		
				-	Eleven 11							
<u>V40166-1</u>	3					0.28	1.12	20	0.05	\$0.72		
<u>V40168-1</u>	4					0.31	1.24	20	0.06	\$0.88		
<u>V40170-1</u>	5				45	0.33	1.32	20	0.07	\$1.05		
<u>V40172-1</u>	7	18	16	20	45	0.36	1.44	20	0.09	\$1.40		
<u>V40174-1</u>	9	10	10	20		0.41	1.64	20	0.11	\$1.48		
<u>V40176-1</u>	12					0.46	1.84	20	0.14	\$2.10		
<u>V40178-1</u>	18				45	0.55	2.20	20	0.21	\$2.92		
<u>V40180-1</u>	25				60	0.64	2.56	20	0.25	\$3.90		

* Installed bend radius \geq 4x diameter

** See web store for maximum cut lengths



Please Note: Our prices on flexible control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

1-800-633-0405

16 Gauge Multi-Conductor Flexible Control Cable (Unshielded)

16 Gauge Multi-Conductor Flexible Control Cable Specifications (Unshielded)

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Conductor Gauge & Stranding	16AWG 26/30 bare copper, Class K		ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having
	600V (Type TC-ER)		Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper
Voltage Rating	1000V (Type WTTC)	-	UL 13 Power-Limited Circuit Cables UL 66 Fixture Wire Type TFFN (for sizes 18 and 16 AWG)
	1000V (UL/CSA AWM)		UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW)
Capacitance	32.78 pF/ft Nom. Conductor to Conductor]	UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1)
Resistance	4.10 Ω/kft*		UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC
Impedance	46.3 Ω	Applicable Standards	CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 - 8AWG) CSA C22.2 No.230 Tray Cables - Rated TC
Operating Temperature			CSA C22.2 No. 239 Control and instrumentation cables ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		Distribution of Electrical Energy IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
Conductor Insulation	0.015 Inch, PVC + 0.005 Inch, NYLON		Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862
Conductor Markings	#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4		CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to the material restrictions identified in the RoHS-2 (2011/65/EU) Directive NFPA 79 Electrical Standard for Industrial Machinery
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry	-	Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy
Cold Impact	-40°C (-40°F) per UL 1277		America requirements per 49 C.F.R. part 661
Min. Bend Radius	4x diameter	Approvals**	UL (E75755), CSA (90458)
Elamo Pating	FT4, IEEE 1202/383, ICEA T-29-520		Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C
Flame Rating	UL1685, UL MTW NFPA 79 2007	Sample Print Legend	Dry 75°C Wet Sun Res Oil Res I/II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR WTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA
Oil Resistance	Oil Res I & II	J	AWM I/II A/B 105°C 1000V -40°C FT4 CE

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

	16 Gauge Multi-Conductor Flexible Control Cable (Unshielded)											
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (Ib/ft)	Price per foot		
					Eight 8 Linee 3 One 1 One 1 One 2							
<u>V50196-1</u>	3					0.31	1.24	20	0.06	\$0.85		
<u>V50198-1</u>	4				50	0.34	1.36	20	0.08	\$1.05		
<u>V50200-1</u>	5					0.37	1.48	20	0.09	\$1.23		
V50202-1	7					0.40	1.60	20	0.11	\$1.67		
V50206-1	9	16	26	20		0.46	1.84	20	0.14	\$2.06		
V50208-1	12				50	0.51	2.04	20	0.20	\$2.82		
<u>V50212-1</u>	18				05	0.62	2.48	20	0.28	\$4.06		
<u>V50214-1</u>	25				65	0.72	2.88	20	0.35	\$5.61		
<u>V50216-1</u>	41				85	0.91	3.64	20	0.56	\$9.23		

* Installed bend radius \geq 4x diameter

** See web store for maximum cut lengths



Please Note: Our prices on flexible control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

1-800-633-0405 14 Gauge Multi-Conductor Flexible Control Cable (Unshielded)

14 Gauge Multi-Conductor Flexible Control Cable Specifications (Unshielded)

Паа	ago mari oonaaotor rioz		of ouble opeometations (onsinciaed)
Conductor Gauge & Stranding	14AWG 41/30 bare copper, Class K		ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
	600V (Type TC-ER)		ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables
Voltage Rating	1000V (Type WTTC)		UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG)
	1000V (UL/CSAAWM)		UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER
Capacitance	37.09 pF/ft Nom. Conductor to Conductor	Annlicable	UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable
Resistance	2.57 Ω/kft*		UL 2277 Type WTTC CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 - 8AWG)
Impedance	40.0 Ω	Standards	CSA C22.2 No.230 Tray Cables - Rated TC CSA C22.2 No. 239 Control and instrumentation cables
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862
Conductor Insulation	0.015 Inch, PVC + 0.005 Inch, NYLON		CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to the material restrictions identified in the RoHS-2 (2011/65/EU) Directive
Conductor Markings	#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4		NFPA 79 Electrical Standard for Industrial Machinery Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy America
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry		requirements per 49 C.F.R. part 661
Cold Impact	-40°C (-40°F) per UL 1277	Approvals**	UL (E75755), CSA (90458)
Min. Bend Radius	4x diameter		Courthuire VVAM/C (VVmm2) VV/C D\/C/Nuton Tune TC ED E7E7EF (111) C00\/ 00°C D-
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520	Sample Print	Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C Dry 75°C Wet Sun Res Oil Res I/II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR WTTC
riailie nauliy	UL1685, UL MTW NFPA 79 2007	Legend	1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA AWM I/II A/B 105°C 1000V -40°C FT4 CE
Oil Resistance	Oil Res I & II		
+ D 40714 D 474			

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

		14 Gaug	e Multi-Co	onductor	Flexible C	ontrol Ca	ble (Unsh	ielded)		
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (lb/ft)	Price per foot
					Eight 8 hree 3 Four 4 One 1 .wo 2					
<u>V60127-1</u>	3					0.34	1.36	20	0.82	\$1.19
<u>V60129-1</u>	4				50	0.37	1.48	20	0.11	\$1.42
<u>V60131-1</u>	5					0.41	1.64	20	0.13	\$1.45
<u>V60133-1</u>	7	14	41	20		0.45	1.80	20	0.16	\$2.52
<u>V60135-1</u>	9	14	41	20		0.52	2.08	20	0.21	\$3.09
<u>V60137-1</u>	12					0.60	2.40	20	0.28	\$4.19
<u>V60139-1</u>	18				65	0.70	2.80	20	0.40	\$5.71
<u>V60141-1</u>	25					0.81	3.24	20	0.57	\$7.97

* Installed bend radius \geq 4x diameter

** See web store for maximum cut lengths





Please Note: Our prices on flexible control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

1-800-633-0405 12 Gauge Multi-Conductor Flexible Control Cable (Unshielded)

12 Gauge Multi-Conductor Flexible Control Cable Specifications (Unshielded)

Conductor Gauge & Stranding	12AWG 65/30 bare copper, Class K		ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors
	600V (Type TC-ER)	-	Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper
Voltage Rating	1000V (Type WTTC)		UL 13 Power-Limited Circuit Cables UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG)
	1000V (UL/CSAAWM)		UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW)
Capacitance	tance 40.4 pF/ft Nom. Conductor to Conductor		UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1)
Resistance	1.62 Ω/kft*		UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC
Impedance	36.1 Ω	Applicable Standards	CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 - 8AWG) CSA C22.2 No.230 Tray Cables - Rated TC CSA C22.2 No. 239 Control and instrumentation cables
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant "		IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified
Conductor Insulation	0.015 Inch, PVC + 0.005 Inch, NYLON		V747862 CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to
Conductor Markings	"#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4		the material restrictions identified in the RoHS-2 (2011/65/EU) Directive NFPA 79 Electrical Standard for Industrial Machinery
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry		Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy
Cold Impact	-40°C (-40°F) per UL 1277		America requirements per 49 C.F.R. part 661
Min. Bend Radius	4x diameter	Approvals**	UL (E75755), CSA (90458)
Elomo Doting	FT4, IEEE 1202/383, ICEA T-29-520		Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C
Flame Rating	UL1685, UL MTW NFPA 79 2007	Sample Print Legend	Dry 75°C Wet Sun Res Oil Res I/II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR WTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA
Oil Resistance	Oil Res I & II		AWM I/II A/B 105°C 1000V -40°C FT4 CE

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

	12 Gauge Multi-Conductor Flexible Control Cable (Unshielded)										
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (Ib/ft)	Price per foot	
				(Three 3						
<u>V70107-1</u>	4	12	65	20	50	0.43	1.72	20	0.15	\$2.15	

* Installed bend radius \geq 4x diameter

** See web store for maximum cut lengths



1-800-633-0405 10 Gauge Multi-Conductor Flexible Control Cable (Unshielded)

10 Gauge Multi-Conductor Flexible Control Cable Specifications (Unshielded)

Conductor Gauge & Stranding	10 AWG 105/30 bare copper, Class K		ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having
	600V (Type TC-ER)		Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables
Voltage Rating	1000V (Type WTTC)		UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG) UL 758 AWM Style 2587
	1000V (UL/CSA AWM)		UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER
Capacitance	40.7 pF/ft Nom. Conductor to Conductor	-	UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable
Resistance	1.02 Ω/kft*	Applicable	UL 2277 Type WTTC CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 - 8AWG)
Impedance	35.8 Ω	Standards	CSA C22.2 No.230 Tray Cables - Rated TC CSA C22.2 No. 239 Control and instrumentation cables ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		Distribution of Electrical Energy IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862
Conductor Insulation	0.015 Inch, PVC + 0.005 Inch, NYLON		CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to the material restrictions identified in the RoHS-2 (2011/65/EU) Directive
Conductor Markings	#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4		NFPA 79 Electrical Standard for Industrial Machinery Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry		America requirements per 49 C.F.R. part 661
Cold Impact	-40°C (-40°F) per UL 1277	Approvals**	UL (E75755), CSA (90458)
Min. Bend Radius	4x diameter		
Flowe Deting	FT4, IEEE 1202/383, ICEA T-29-520	Sample Print	Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C Dry 75°C Wet Sun Res Oil Res I/II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR
Flame Rating	UL1685, UL MTW NFPA 79 2007	Legend	WTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA AWM I/II A/B 105°C 1000V -40°C FT4 CE
Oil Resistance	Oil Res I & II		

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

		1) Gauge N	Aulti-Conc	luctor Fle	xible Con	trol Cable			
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (Ib/ft)	Price per foot
				¢	Three 3	2				
V80059-1	4	10	105	25	50	0.50	2.00	20	0.21	\$3.36

* Installed bend radius \geq 4x diameter

** See web store for maximum cut lengths



1-800-633-0405

18 Gauge Multi-Conductor Flexible Control Cable (Shielded)

18 Gaug	ge Multi-Conductor Flexible Control Cable Specifications (Shielded)

Conductor Gauge & Stranding	18AWG 16/30 bare copper, Class K						
	600V (Type TC-ER)		ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Have Bunch-Stranded Copper Conductors				
Voltage Rating	1000V (Type WTTC)		ASTM B174 Standard Specification for Bunch-Stranded Copper				
	1000V (UL/CSAAWM)		UL 13 Power-Limited Circuit Cables				
Capacitance	72.02 pF/ft Nom. Conductor to Shield		UL 66 Fixture Wire Type TFFN (for sizes 18 and 16 AWG) UL 758 AWM Style 2587				
Capachance	40.01 pF/ft Nom. Conductor to Conductor		UL 1063 Machine Tool Wiring (MTW)				
Resistance	6.53 Ω/kft*		UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1)				
Impedance	53.8 Ω		UL 2250 Instrumentation Tray Cable				
Operating Temperature	-40°C to 90°C (-40°F to 194°F)	Applicable	UL 2277 Type WTTC CSA C22.2 No.230 Tray Cables - Rated TC				
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant	Standards	CSA C22.2 No. 239 Control and instrumentation cables ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the				
Shield	Overall aluminized polyester foil shield 100% coverage & tinned copper braid 85% coverage with 20 AWG drain		Distribution of Electrical Energy IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862				
Conductor Insulation	0.015 Inch, PVC + 0.005 Inch, NYLON		CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to				
Conductor Markings	#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4		the material restrictions identified in the RoHS-2 (2011/65/EU) Directive NFPA 79 Electrical Standard for Industrial Machinery				
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry		Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy				
Cold Impact	-40°C (-40°F) per UL 1277		America requirements per 49 C.F.R. part 661				
Min. Bend Radius	12x diameter	Approvals**	UL (E75755), CSA (90458)				
Flower De l'an	FT4, IEEE 1202/383, ICEA T-29-520	Sample Print	Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C				
Flame Rating	UII 1685 UII MTW NEPA 79 2007		Dry 75°C Wet Sun Res Oil Res I/II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR WTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA				
Oil Resistance	Oil Res I & II	Legend	AWM I/II A/B 105°C 1000V -40°C FT4 CE				

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

	18 Gauge Multi-Conductor Flexible Control Cable (Shielded)														
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (lb/ft)	Price per foot					
Tuesday 2															
<u>MCTC-18-3S-1</u>	3					0.30	3.60	20	0.06	\$1.34					
MCTC-18-4S-1	4										0.33	3.96	20	0.07	\$1.50
<u>MCTC-18-5S-1</u>	5									47	0.35	4.20	20	0.08	\$1.61
<u>MCTC-18-7S-1</u>	7	18	16	20	47	0.38	4.56	20	0.10	\$2.08					
<u>MCTC-18-9S-1</u>	9					0.44	5.28	20	0.14	\$2.27					
<u>MCTC-18-12S-1</u>	12					0.47	5.64	20	0.16	\$2.61					
<u>MCTC-18-25S-1</u>	25				62	0.66	7.92	20	0.31	\$4.95					

* Installed bend radius \geq 12x diameter

* * See web store for maximum cut lengths





Please Note: Our prices on flexible control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

1-800-633-0405 16 Gauge Multi-Conductor Flexible Control Cable (Shielded)

16 Gauge Multi-Conductor Flexible Control Cable Specifications (Shielded)

Conductor Gauge & Stranding	16AWG 26/30 bare copper, Class K		ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having				
	600V (Type TC-ER)		Bunch-Stranded Copper Conductors				
Voltage Rating	1000V (Type WTTC)	-	ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables				
	1000V (UL/CSAAWM)	-	UL 66 Fixture Wire Type TFFN (for sizes 18 and 16 AWG) UL 758 AWM Style 2587				
0 "	85.59 pF/ft Nom. Conductor to Shield	-	UL 1063 Machine Tool Wiring (MTW)				
Capacitance	47.55 pF/ft Nom. Conductor to Conductor	-	UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1)				
Resistance	4.10 Ω/kft*		UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC				
Impedance	45.3 Ω	Applicable	CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 - 8AWG)				
Operating Temperature	-40°C to 90°C (-40°F to 194°F)	Standards	CSA C22.2 No.230 Tray Cables - Rated TC CSA C22.2 No. 239 Control and instrumentation cables				
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy				
Shield	Overall aluminized polyester foil shield 100% coverage & tinned copper braid 85% coverage with 18 AWG drain		IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862				
Conductor Insulation	0.015 Inch, PVC + 0.005 Inch, NYLON	-	CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to the material restrictions identified in the RoHS-2 (2011/65/EU) Directive				
Conductor Markings	#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4		NFPA 79 Electrical Standard for Industrial Machinery Made in America: Compliant with both Buy American and Buy America Act (BAA)				
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry		requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy America requirements per 49 C.F.R. part 661				
Cold Impact	-40°C (-40°F) per UL 1277		America requirements per 49 C.F.K. part 001				
Min. Bend Radius	12x diameter	Approvals**	UL (E75755), CSA (90458)				
Flavor Dallar	FT4, IEEE 1202/383, ICEA T-29-520		Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C				
Flame Rating	UL1685, UL MTW NFPA 79 2007	Sample Print Legend	Dry 75°C Wet Sun Res Oil Res I/II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR WTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA				
Oil Resistance	Oil Res I & II	Logona	AWM I/II A/B 105°C 1000V -40°C FT4 CE				

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

	16 Gauge Multi-Conductor Flexible Control Cable (Shielded)										
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (Ib/ft)	Price per foot	
Twenty From A											
<u>MCTC-16-3S-1</u>	3					0.33	3.96	20	0.08	\$1.56	
<u>MCTC-16-4S-1</u>	4					0.36	4.32	20	0.10	\$1.74	
<u>MCTC-16-5S-1</u>	5				47	0.39	4.68	20	0.11	\$2.07	
<u>MCTC-16-7S-1</u>	7	16	26	20		0.42	5.04	20	0.14	\$2.48	
<u>MCTC-16-9S-1</u>	9	1				0.49	5.88	20	0.18	\$3.00	
<u>MCTC-16-12S-1</u>	12	1			73	0.56	6.72	20	0.28	\$4.04	
MCTC-16-25S-1	25	1			76	0.75	9.00	20	0.41	\$6.91	

* Installed bend radius \geq 12x diameter

** See web store for maximum cut lengths





Please Note: Our prices on flexible control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

1-800-633-0405 14 Gauge Multi-Conductor Flexible Control Cable (Shielded)

14 G	14 Gauge Multi-Conductor Flexible Control Cable Specifications (Shielded)									
Conductor Gauge & Stranding	14AWG 41/30 bare copper, Class K		ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having							
	600V (Type TC-ER)		Bunch-Stranded Copper Conductors							
Voltage Rating	1000V (Type WTTC)		ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables							
	1000V (UL/CSAAWM)		UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG)							
Conceitonee	99.09 pF/ft Nom. Conductor to Shield		UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW)							
Capacitance	55.05 pF/ft Nom. Conductor to Conductor		UL 1277 TC-ER							
Resistance	2.57 Ω/kft*		UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable							
Impedance	39.1 Ω		UL 2277 Type WTTC CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 - 8AWG)							
Operating Temperature	-40°C to 90°C (-40°F to 194°F)	Applicable Standards	CSA C22.2 No. 210 Appliance wining material products in Ab (Sizes 10 - 5AWG) CSA C22.2 No. 230 Tray Cables - Rated TC CSA C22.2 No. 239 Control and instrumentation cables ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy							
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant	olunuuruo								
Shield	Overall aluminized polyester foil shield 100% coverage & tinned copper braid 85% coverage with 16 AWG drain		IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862							
Conductor Insulation	0.015 Inch, PVC + 0.005 Inch, NYLON		CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to							
Conductor Markings	#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4	-	the material restrictions identified in the RoHS-2 (2011/65/EU) Directive NFPA 79 Electrical Standard for Industrial Machinery Made in America: Compliant with both Buy American and Buy America Act (BAA)							
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry		requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy America requirements per 49 C.F.R. part 661							
Cold Impact	-40°C (-40°F) per UL 1277		America requirements per 49 C.I.I.C. part 001							
Min. Bend Radius	12x diameter	Approvals**	UL (E75755), CSA (90458)							
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520	0	Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C							
	UL1685, UL MTW NFPA 79 2007	Sample Print Legend	Dry 75°C Wet Sun Res Oil Res I/II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR WTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA							
Oil Resistance	Oil Res I & II	J	AWM I/II A/B 105°C 1000V -40°C FT4 CE							

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

14 Gauge Multi-Conductor Flexible Control Cable (Shielded)										
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (Ib/ft)	Price per foot
One 1 Two 2										
<u>MCTC-14-3S-1</u>	3					0.36	4.32	20	0.10	\$2.01
<u>MCTC-14-4S-1</u>	4	14	41	20	47	0.40	4.80	20	0.13	\$2.44
<u>MCTC-14-7S-1</u>	7					0.47	5.64	20	0.20	\$3.25

* Installed bend radius ≥ 12x diameter

* * See web store for maximum cut lengths



1-800-633-0405 12 Gauge Multi-Conductor Flexible Control Cable (Shielded)

12 Gauge Multi-Conductor Flexible Control Cable Specifications (Shielded)

Conductor Gauge & Stranding	12AWG 65/30 bare copper, Class K		
	600V (Type TC-ER)	-	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
Voltage Rating	1000V (Type WTTC)	-	ASTM B174 Standard Specification for Bunch-Stranded Copper
	1000V (UL/CSAAWM)	-	UL 13 Power-Limited Circuit Cables UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG)
0	109.85 pF/ft Nom. Conductor to Shield	-	UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW)
Capacitance	61.03 pF/ft Nom. Conductor to Conductor		UL 1277 TC-ER
Resistance	1.62 Ω/kft*		UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable
Impedance	35.5 Ω		UL 2277 Type WTTC
Operating Temperature	-40°C to 90°C (-40°F to 194°F)	Applicable	CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 - 8AWG) CSA C22.2 No.230 Tray Cables - Rated TC
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant	Standards	CSA C22.2 No. 239 Control and instrumentation cables ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the
Shield	Overall aluminized polyester foil shield 100% coverage & tinned copper braid 85% coverage with 14 AWG drain		Distribution of Electrical Energy IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862
Conductor Insulation	0.015 Inch, PVC + 0.005 Inch, NYLON	-	CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to
Conductor Markings	#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4		the material restrictions identified in the RoHS-2 (2011/65/EU) Directive NFPA 79 Electrical Standard for Industrial Machinery Made in America: Compliant with both Buy American and Buy America Act (BAA)
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry		requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy
Cold Impact	-40°C (-40°F) per UL 1277		America requirements per 49 C.F.R. part 661
Min. Bend Radius	12x diameter	Approvals**	UL (E75755), CSA (90458)
Flome Doling	FT4, IEEE 1202/383, ICEA T-29-520		Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C
Flame Rating	UL1685, UL MTW NFPA 79 2007	Sample Print Legend	Dry 75°C Wet Sun Res Oil Res I/II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR WTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA
Oil Resistance	Oil Res I & II		AWM I/II A/B 105°C 1000V -40°C FT4 CE

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

12 Gauge Multi-Conductor Flexible Control Cable (Shielded)										
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (lb/ft)	Price per foot
One 1 Two 2 Two 2										
<u>MCTC-12-4S-1</u>	4	12	65	25	47	0.44	5.28	20	0.18	\$2.98

* Installed bend radius \geq 12x diameter

** See web store for maximum cut lengths



10 Gauge Multi-Conductor Flexible Control Cable (Shielded)

10 Gauge Mu	Iti-Conductor	Flexible Control Cable	e Snecifications	(Shielded)

Conductor Gauge & Stranding	10AWG 105/30 bare copper, Class K					
	600V (Type TC-ER)		ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Ha Bunch-Stranded Copper Conductors			
Voltage Rating	1000V (Type WTTC)		ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables			
	1000V (UL/CSAAWM)		UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG)			
0	110.83 pF/ft Nom. Conductor to Shield		UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW)			
Capacitance	61.57 pF/ft Nom. Conductor to Conductor		UL 1277 TC-ER			
Resistance	1.02 Ω/kft*		UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable			
Impedance	35.0 Ω		UL 2277 Type WTTC			
Operating Temperature	-40°C to 90°C (-40°F to 194°F)	Applicable Standards	CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 - 8AWG) CSA C22.2 No.230 Tray Cables - Rated TC			
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant	stanuarus	CSA C22.2 No. 239 Control and instrumentation cables ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy			
Shield	Overall aluminized polyester foil shield 100% coverage & tinned copper braid 85% coverage with 12 AWG drain		IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862			
Conductor Insulation	0.015 Inch, PVC + 0.005 Inch, NYLON		CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to			
Conductor Markings	"#1-ONE", "2-TWO", "3-THREE", etc @ 4.5 inch intervals, ICEA Method 4		the material restrictions identified in the RoHS-2 (2011/65/EU) Directive NFPA 79 Electrical Standard for Industrial Machinery Made in America: Compliant with both Buy American and Buy America Act (BAA)			
Temperature Rating	75°C (167°F) Wet, 90°C (194°F) Dry		requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy			
Cold Impact	-40°C (-40°F) per UL 1277		America requirements per 49 C.F.R. part 661			
Min. Bend Radius	12x diameter	Approvals**	UL (E75755), CSA (90458)			
	FT4, IEEE 1202/383, ICEA T-29-520		Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C			
Flame Rating	UL1685, UL MTW NFPA 79 2007	Sample Print Legend	Dry 75°C Wet Sun Res Oil Res I/II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR WTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA			
Oil Resistance	Oil Res I & II	Logonu	AWM I/II A/B 105°C 1000V -40°C FT4 CE			

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com

		10 Gaug	ge Multi-(Conductor	Flexible	Control Ca	able (Shie	elded)		
Part Number	Number of Conductors (includes ground)	AWG	Strand	Overall Conductor Insulation Thickness (Mils)	Overall Jacket Thickness (Mils)	Nominal O.D. (Inches ±10%)	Minimum Installed Bend Radius (inches)*	Minimum Cut Length (ft)**	Approximate Weight (lb/ft)	Price per foot
					One 1 Two 2	hree 3				
MCTC-10-4S-1	4	10	105	25	62	0.56	6.72	20	0.32	\$4.77

* Installed bend radius ≥ 12x diameter

* * See web store for maximum cut lengths

