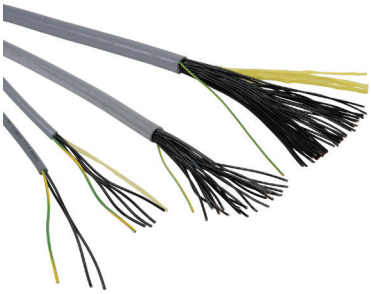
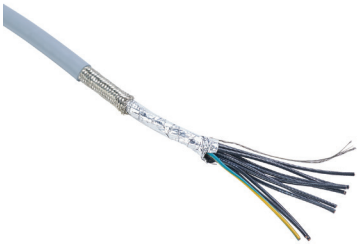
Multi-Conductor Flexible Control Cable



Unshielded Flexible Control Cable



Shielded Flexible Control Cable

Multi-conductor flexible control cable from Southwire is available in sizes from 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

Features

- 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)

Cable Use Examples*:

ZIPport

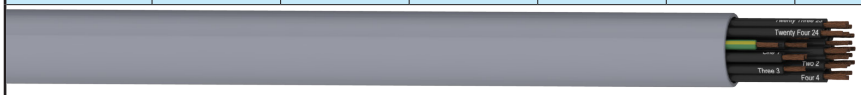
** Cables shown using AutomationDirects's ZIPport multi-wire connectors. See Terminal Blocks & Wiring Solutions section for further information.*

20 Gauge Multi-Conductor Flexible Control Cable (Unshielded)

20 Gauge Multi-Conductor Flexible Control Cable Specifications (Unshielded)			
Conductor Gauge & Stranding	20AWG 10/30 bare copper, Class K	***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) UL 2250 Instrumentation Tray Cable CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 - 8AWG) Exceeds Ecolab PM-40-1 Material Resistance Test With 30-day Exposure, UL Verified V747862
Voltage Rating	300V Power Limited Tray Cable - Exposed Run (PLTC-ER)		
	300V Instrumentation Tray Cable - Exposed Run (ITC-ER)		
	600V MTW Flexing / AWM 2587		
Capacitance	26 pF/ft Nom. Conductor to Conductor		
Resistance	10.15 Ω/kft*		
Impedance	61.0 Ω		
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	***Sample Print Legend***	Southwire EXXXXX (UL) Type PLTC-ER XXAWG (XXmm²) 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 AWM I/II A/B 105C 600V -40C FT4 -- CE RoHS -2 Made in USA Sequential Footage
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		
Cold Impact	-40°C (-40°F) per UL 1277		
Min. Bend Radius	4x diameter		
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520		
	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 specific 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 (lb/ft)***	***Price per foot***
										
V30156-1	3	20	10	16	47	0.26	1.12	20	0.04	$0.63
V30158-1	4					0.28	1.24	20	0.04	$0.76
V30160-1	5					0.30	1.32	20	0.05	$0.86
V30162-1	7				62	0.33	1.44	20	0.06	$1.05
V30164-1	9					0.41	1.64	20	0.09	$1.49
V30186-1	12					0.45	1.84	20	0.11	$1.85
V30188-1	18					0.52	2.20	20	0.15	$2.54
V30190-1	25					0.60	2.56	20	0.20	$3.48

** Installed bend radius ≥ 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.

18 Gauge Multi-Conductor Flexible Control Cable (Unshielded)

18 Gauge Multi-Conductor Flexible Control Cable Specifications (Unshielded)			
Conductor Gauge & Stranding	18AWG 16/30 bare copper, Class K	***Applicable Standards***	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 66 Fixture Wire Type TFFN (for sizes 18 and 16 AWG) UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC 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 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 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 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 requirements per 49 C.F.R. part 661
Voltage Rating	600V (Type TC-ER)		
	1000V (Type WTTC)		
	1000V (UL/CSA AWM)		
Capacitance	28.2 pF/ft Nom. Conductor to Conductor		
Resistance	6.53 Ω/kft*		
Impedance	55.0 Ω		
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		
Conductor Insulation	0.015 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		
Cold Impact	-40°C (-40°F) per UL 1277	***Approvals****	UL (E75755), CSA (90458)
Min. Bend Radius	4x diameter	***Sample Print Legend***	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 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
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520		
	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 specific 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 (lb/ft)	Price per foot
										
V40166-1	3	18	16	20	45	0.28	1.12	20	0.05	$0.72
V40168-1	4					0.31	1.24	20	0.06	$0.88
V40170-1	5					0.33	1.32	20	0.07	$1.05
V40172-1	7					0.36	1.44	20	0.09	$1.40
V40174-1	9					0.41	1.64	20	0.11	$1.48
V40176-1	12					0.46	1.84	20	0.14	$2.10
V40178-1	18				45	0.55	2.20	20	0.21	$2.92
V40180-1	25				60	0.64	2.56	20	0.25	$3.90

** Installed bend radius ≥ 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.

16 Gauge Multi-Conductor Flexible Control Cable (Unshielded)

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

Conductor Gauge & Stranding	16AWG 26/30 bare copper, Class K	***Applicable Standards***	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 66 Fixture Wire Type TFFN (for sizes 18 and 16 AWG) UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC 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 ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the 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 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 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 requirements per 49 C.F.R. part 661
Voltage Rating	600V (Type TC-ER) 1000V (Type WTTC) 1000V (UL/CSA AWM)		
Capacitance	32.78 pF/ft Nom. Conductor to Conductor		
Resistance	4.10 Ω/kft*		
Impedance	46.3 Ω		
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		
Conductor Insulation	0.015 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		
Cold Impact	-40°C (-40°F) per UL 1277		
Min. Bend Radius	4x diameter	***Approvals****	UL (E75755), CSA (90458)
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520 UL1685, UL MTW NFPA 79 2007	***Sample Print Legend***	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 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*

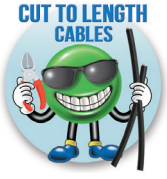
*** To obtain the most current agency approval information, see Agency Approval Checklist section on the specific part number's web page at www. AutomationDirect.com*

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 (lb/ft)	Price per foot
										
V50196-1	3	16	26	20	50	0.31	1.24	20	0.06	$0.85
V50198-1	4					0.34	1.36	20	0.08	$1.05
V50200-1	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					0.46	1.84	20	0.14	$2.06
V50208-1	12				50	0.51	2.04	20	0.20	$2.82
V50212-1	18				65	0.62	2.48	20	0.28	$4.06
V50214-1	25					0.72	2.88	20	0.35	$5.61
V50216-1	41				85	0.91	3.64	20	0.56	$9.23

** Installed bend radius ≥ 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.

14 Gauge Multi-Conductor Flexible Control Cable (Unshielded)

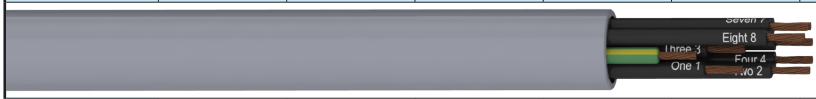
14 Gauge Multi-Conductor Flexible Control Cable Specifications (Unshielded)

Conductor Gauge & Stranding	14AWG 41/30 bare copper, Class K	***Applicable Standards***	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG) UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC 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 ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the 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 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 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 requirements per 49 C.F.R. part 661
Voltage Rating	600V (Type TC-ER) 1000V (Type WTTC) 1000V (UL/CSA AWM)		
Capacitance	37.09 pF/ft Nom. Conductor to Conductor		
Resistance	2.57 Ω/kft*		
Impedance	40.0 Ω		
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		
Conductor Insulation	0.015 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		
Cold Impact	-40°C (-40°F) per UL 1277	***Approvals****	UL (E75755), CSA (90458)
Min. Bend Radius	4x diameter	***Sample Print Legend***	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 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
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520 UL1685, UL MTW NFPA 79 2007		
Oil Resistance	Oil Res I & II		

** Per ASTM B174*

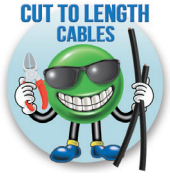
*** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com*

14 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 (lb/ft)	Price per foot
										
V60127-1	3	14	41	20	50	0.34	1.36	20	0.82	$1.19
V60129-1	4					0.37	1.48	20	0.11	$1.42
V60131-1	5					0.41	1.64	20	0.13	$1.45
V60133-1	7					0.45	1.80	20	0.16	$2.52
V60135-1	9					0.52	2.08	20	0.21	$3.09
V60137-1	12				65	0.60	2.40	20	0.28	$4.19
V60139-1	18					0.70	2.80	20	0.40	$5.71
V60141-1	25					0.81	3.24	20	0.57	$7.97

** Installed bend radius ≥ 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.

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	***Applicable Standards***	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG) UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC 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 ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the 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 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 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 requirements per 49 C.F.R. part 661
Voltage Rating	600V (Type TC-ER)		
	1000V (Type WTTC)		
	1000V (UL/CSA AWM)		
Capacitance	40.4 pF/ft Nom. Conductor to Conductor		
Resistance	1.62 Ω/kft*		
Impedance	36.1 Ω		
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant "		
Conductor Insulation	0.015 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		
Cold Impact	-40°C (-40°F) per UL 1277		
Min. Bend Radius	4x diameter	***Approvals****	UL (E75755), CSA (90458)
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520	***Sample Print Legend***	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 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
	UL1685, UL MTW NFPA 79 2007		
Oil Resistance	Oil Res I & II		

** Per ASTM B174*

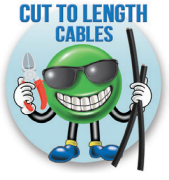
*** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com*

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 (lb/ft)	Price per foot
										
V70107-1	4	12	65	20	50	0.43	1.72	20	0.15	$2.15

** Installed bend radius ≥ 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.

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	***Applicable Standards***	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG) UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC 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 ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the 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 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 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 requirements per 49 C.F.R. part 661
Voltage Rating	600V (Type TC-ER)		
	1000V (Type WTTC)		
	1000V (UL/CSA AWM)		
Capacitance	40.7 pF/ft Nom. Conductor to Conductor		
Resistance	1.02 Ω/kft*		
Impedance	35.8 Ω		
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		
Conductor Insulation	0.015 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		
Cold Impact	-40°C (-40°F) per UL 1277	***Approvals****	UL (E75755), CSA (90458)
Min. Bend Radius	4x diameter	***Sample Print Legend***	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 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
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520		
	UL1685, UL MTW NFPA 79 2007		
Oil Resistance	Oil Res I & II		

** Per ASTM B174*

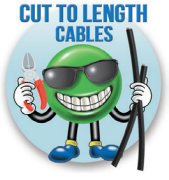
*** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com*

10 Gauge Multi-Conductor Flexible Control 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 (lb/ft)	Price per foot
										
V80059-1	4	10	105	25	50	0.50	2.00	20	0.21	$3.36

** Installed bend radius ≥ 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.

18 Gauge Multi-Conductor Flexible Control Cable (Shielded)

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

Conductor Gauge & Stranding	18AWG 16/30 bare copper, Class K	***Applicable Standards***	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 66 Fixture Wire Type TFFN (for sizes 18 and 16 AWG) UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC 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 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 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 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 requirements per 49 C.F.R. part 661
Voltage Rating	600V (Type TC-ER) 1000V (Type WTTC) 1000V (UL/CSA AWM)		
Capacitance	72.02 pF/ft Nom. Conductor to Shield 40.01 pF/ft Nom. Conductor to Conductor		
Resistance	6.53 Ω/kft*		
Impedance	53.8 Ω		
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		
Shield	Overall aluminized polyester foil shield 100% coverage & tinned copper braid 85% coverage with 20 AWG drain		
Conductor Insulation	0.015 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		
Cold Impact	-40°C (-40°F) per UL 1277		
Min. Bend Radius	12x diameter	***Approvals*****	UL (E75755), CSA (90458)
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520 UL1685, UL MTW NFPA 79 2007	***Sample Print Legend***	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 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*

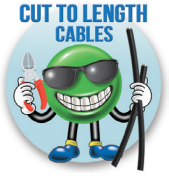
*** To obtain the most current agency approval information, see Agency Approval Checklist section on the specifict part number's web page at www. AutomationDirect.com*

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
MCTC-18-3S-1	3	18	16	20	47	0.30	3.60	20	0.06	$1.34
MCTC-18-4S-1	4					0.33	3.96	20	0.07	$1.50
MCTC-18-5S-1	5					0.35	4.20	20	0.08	$1.61
MCTC-18-7S-1	7					0.38	4.56	20	0.10	$2.08
MCTC-18-9S-1	9					0.44	5.28	20	0.14	$2.27
MCTC-18-12S-1	12					0.47	5.64	20	0.16	$2.61
MCTC-18-25S-1	25				62	0.66	7.92	20	0.31	$4.95

** Installed bend radius ≥ 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.

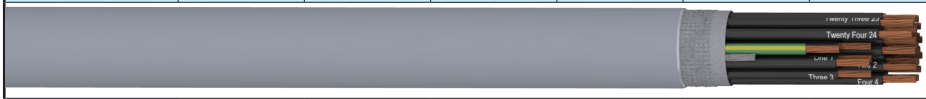
16 Gauge Multi-Conductor Flexible Control Cable (Shielded)

16 Gauge Multi-Conductor Flexible Control Cable Specifications (Shielded)			
Conductor Gauge & Stranding	16AWG 26/30 bare copper, Class K	***Applicable Standards***	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 66 Fixture Wire Type TFFN (for sizes 18 and 16 AWG) UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC 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 ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the 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 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 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 requirements per 49 C.F.R. part 661
Voltage Rating	600V (Type TC-ER)		
	1000V (Type WTTC)		
	1000V (UL/CSA AWM)		
Capacitance	85.59 pF/ft Nom. Conductor to Shield		
	47.55 pF/ft Nom. Conductor to Conductor		
Resistance	4.10 Ω/kft*		
Impedance	45.3 Ω		
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		
Shield	Overall aluminized polyester foil shield 100% coverage & tinned copper braid 85% coverage with 18 AWG drain		
Conductor Insulation	0.015 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		
Cold Impact	-40°C (-40°F) per UL 1277		
Min. Bend Radius	12x diameter	***Approvals*****	UL (E75755), CSA (90458)
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520	***Sample Print Legend***	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 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
	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*

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 (lb/ft)*	*Price per foot*
										
MCTC-16-3S-1	3	16	26	20	47	0.33	3.96	20	0.08	$1.56
MCTC-16-4S-1	4					0.36	4.32	20	0.10	$1.74
MCTC-16-5S-1	5					0.39	4.68	20	0.11	$2.07
MCTC-16-7S-1	7					0.42	5.04	20	0.14	$2.48
MCTC-16-9S-1	9					0.49	5.88	20	0.18	$3.00
MCTC-16-12S-1	12				73	0.56	6.72	20	0.28	$4.04
MCTC-16-25S-1	25				76	0.75	9.00	20	0.41	$6.91

** Installed bend radius ≥ 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.

14 Gauge Multi-Conductor Flexible Control Cable (Shielded)

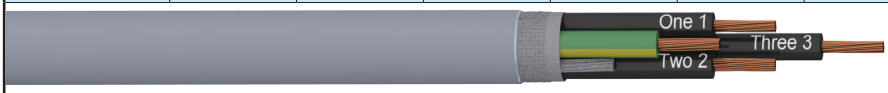
14 Gauge Multi-Conductor Flexible Control Cable Specifications (Shielded)

Conductor Gauge & Stranding	14AWG 41/30 bare copper, Class K	***Applicable Standards***	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG) UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC 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 ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the 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 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 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 requirements per 49 C.F.R. part 661
Voltage Rating	600V (Type TC-ER) 1000V (Type WTTC) 1000V (UL/CSA AWM)		
Capacitance	99.09 pF/ft Nom. Conductor to Shield 55.05 pF/ft Nom. Conductor to Conductor		
Resistance	2.57 Ω/kft*		
Impedance	39.1 Ω		
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		
Shield	Overall aluminized polyester foil shield 100% coverage & tinned copper braid 85% coverage with 16 AWG drain		
Conductor Insulation	0.015 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		
Cold Impact	-40°C (-40°F) per UL 1277		
Min. Bend Radius	12x diameter	***Approvals*****	UL (E75755), CSA (90458)
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520 UL1685, UL MTW NFPA 79 2007	***Sample Print Legend***	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 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*

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 (lb/ft)*	*Price per foot*
										
MCTC-14-3S-1	3	14	41	20	47	0.36	4.32	20	0.10	$2.01
MCTC-14-4S-1	4					0.40	4.80	20	0.13	$2.44
MCTC-14-7S-1	7					0.47	5.64	20	0.20	$3.25

** Installed bend radius ≥ 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.

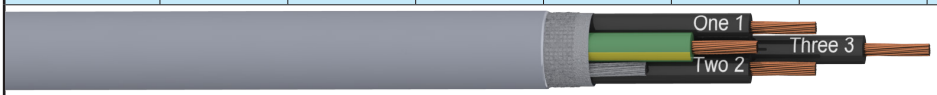
12 Gauge Multi-Conductor Flexible Control Cable (Shielded)

12 Gauge Multi-Conductor Flexible Control Cable Specifications (Shielded)			
Conductor Gauge & Stranding	12AWG 65/30 bare copper, Class K	***Applicable Standards***	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG) UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC 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 ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the 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 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 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 requirements per 49 C.F.R. part 661
Voltage Rating	600V (Type TC-ER)		
	1000V (Type WTTC)		
	1000V (UL/CSA AWM)		
Capacitance	109.85 pF/ft Nom. Conductor to Shield		
	61.03 pF/ft Nom. Conductor to Conductor		
Resistance	1.62 Ω/kft*		
Impedance	35.5 Ω		
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		
Shield	Overall aluminized polyester foil shield 100% coverage & tinned copper braid 85% coverage with 14 AWG drain		
Conductor Insulation	0.015 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		
Cold Impact	-40°C (-40°F) per UL 1277		
Min. Bend Radius	12x diameter	***Approvals****	UL (E75755), CSA (90458)
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520	***Sample Print Legend***	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 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
	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 specific 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*
										
MCTC-12-4S-1	4	12	65	25	47	0.44	5.28	20	0.18	$2.98

** Installed bend radius ≥ 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.

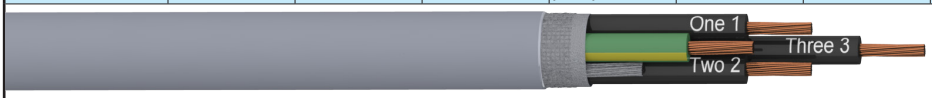
10 Gauge Multi-Conductor Flexible Control Cable (Shielded)

10 Gauge Multi-Conductor Flexible Control Cable Specifications (Shielded)			
Conductor Gauge & Stranding	10AWG 105/30 bare copper, Class K	***Applicable Standards***	ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors ASTM B174 Standard Specification for Bunch-Stranded Copper UL 13 Power-Limited Circuit Cables UL 83 Thermoplastic Insulated Wire and Cables (sizes 14 AWG to 10AWG) UL 758 AWM Style 2587 UL 1063 Machine Tool Wiring (MTW) UL 1277 TC-ER UL 1690 Data Processing Cable (DP-1) UL 2250 Instrumentation Tray Cable UL 2277 Type WTTC 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 ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the 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 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 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 requirements per 49 C.F.R. part 661
Voltage Rating	600V (Type TC-ER)		
	1000V (Type WTTC)		
	1000V (UL/CSA AWM)		
Capacitance	110.83 pF/ft Nom. Conductor to Shield		
	61.57 pF/ft Nom. Conductor to Conductor		
Resistance	1.02 Ω/kft*		
Impedance	35.0 Ω		
Operating Temperature	-40°C to 90°C (-40°F to 194°F)		
Jacket Material	Flexible Gray Thermoplastic Elastomer (TPE) - sunlight & oil resistant		
Shield	Overall aluminized polyester foil shield 100% coverage & tinned copper braid 85% coverage with 12 AWG drain		
Conductor Insulation	0.015 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		
Cold Impact	-40°C (-40°F) per UL 1277		
Min. Bend Radius	12x diameter	***Approvals****	UL (E75755), CSA (90458)
Flame Rating	FT4, IEEE 1202/383, ICEA T-29-520	***Sample Print Legend***	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 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
	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*

10 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*
										
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*

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.