1-800-633-0405

LUTZE

SYSTEMATIC TECHNOLOGY

SILFLEX® 24vdc Control Cable

Overview

LUTZE SILFLEX® 24VDC control cable from AutomationDirect is available with sizes in 18AWG and 16AWG unshielded conductors. Individual conductors are bare copper and stranded for flexibility, with blue PVC/Nylon insulation and marked with white numbers. One conductor has white and blue insulation for easy identification as a common wire. A convenient ground conductor is included in the conductor count of each cable and has insulation that is green with a yellow stripe. The cable's outer jacket is PVC 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, LUTZE SILFLEX® 24VDC multi-conductor control cable has the versatility to meet a wide range of industrial applications. Given its UL Type TC-ER Tray Cable Exposed Run rating, 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 their UL Type MTW Machine Tool Wire rating, these cables meet NFPA 79, Electrical Standard for Industrial Machinery. Other ratings and approvals include Class 1 Division 2 Hazardous Locations and Direct Burial. 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.

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

Features

- 16AWG to 18AWG, including an equal size ground
- Unshielded constructions
- Individual conductors have blue PVC/Nylon insulation and are marked with identification numbers
- Blue conductors for 24VDC circuit per NFPA 79 and UL508A
- Oil resistant PVC outer jacket
- Equal size green/yellow ground wire included
- Multiple ratings and approvals include Type TC-ER (eliminates need for conduit/armor), Type MTW (meets NFPA 79), Class 1 Division 2, Direct Burial, wet and dry location, oil resistant, sunlight resistant
- 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)

18AWG SILFLEX® Control Cable (Unshielded)

18-Gauge SILFLEX® Control Cable Specifications (Unshielded)

Conductor Gauge & Stranding	18AWG 16/30 bare copper, Class K	**Applicable Standards**	UL 1277 - Type TC-ER
Voltage Rating	600V 90C Tray Cable Exposed Run		UL 1063 - Machine Tool Wiring (MTW)
			UL 1690 - Data Processing Cable (DP-1)
	600V MTW		Class I & II, Div. 2 336, 392, 725, 727 and Class I Zone 2 per NEC 501, 502, 505
Operating Temperature	-40°C to 90°C [-40°F to 194°F]		
Jacket Material	Flexible Gray (PVC) - sunlight & oil resistant		
Conductor Colors*	Blue with white numbers and green/yellow ground, the number 2 conductor is white/blue		
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	**Approvals****	UL (E197091) CSA (LL41103)
Temperature Rating	75°C [167°F] Wet, 90°C [194°F] Dry	**Sample Print Legend**	WWW.LUTZE.COM PART# XXXXXXXX LUTZE Silflex® TRAY-ER AWGXX-XC - - (UL) TYPE TC-ER 90C DRY 75C WET 600V SUN RES DIR BUR OIL E197091 or MTW OR DP-1 ORC(UL) CIC-TC PVC/N FT4 -- LL41103 CSA AWN I/II A/B 90C 600V FT4-----CE ROHS CE-45 2133 MADE IN USA XXXXXX FT
Minimum Bend Radius	4x diameter		
Flame Rating	FT4		
Oil Resistance	Oil Res I & II		

* 3-conductor is two Blue with white numbers and green/yellow ground

**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 SILFLEX® 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
A3251803-1	3					0.29	1.12	20	0.05	$-5dlc:
A3251805-1	5					0.34	1.32	20	0.07	$-5dld:
A3251807-1	7	18	16	20	45	0.37	1.44	20	0.09	$-5dle:
A3251812-1	12					0.47	1.84	20	0.14	$;-5dlf:
A3251819-1	19					0.59	2.36	20	0.22	$-5dlg:

* Installed bend radius ≥ 4x diameter

** See web store for maximum cut lengths

16AWG SILFLEX® Control Cable (Unshielded)

16-Gauge SILFLEX® Control Cable Specifications (Unshielded)

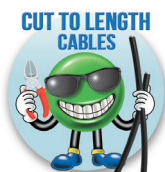|			
Conductor Gauge & Stranding	18AWG 26/30 bare copper, Class K	**Applicable Standards**	UL 1277 - Type TC-ER
Voltage Rating	600V 90C Tray Cable Exposed Run		UL 1063 - Machine Tool Wiring (MTW)
			UL 1690 - Data Processing Cable (DP-1)
	600V MTW		Class I & II, Div. 2 336, 392, 725, 727 and Class I Zone 2 per NEC 501, 502, 505
Operating Temperature	-40°C to 90°C [-40°F to 194°F]		
Jacket Material	Flexible Gray (PVC) - sunlight & oil resistant		
Conductor Colors*	Blue with white numbers and green/yellow ground, the number 2 conductor is white/blue		
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	**Approvals****	UL (E197091) CSA (LL41103)
Temperature Rating	75°C [167°F] Wet, 90°C [194°F] Dry	**Sample Print Legend**	WWW.LUTZE.COM PART# XXXXXXXX LUTZE Silflex® TRAY-ER AWGXX-XC - - (UL) TYPE TC-ER 90C DRY 75C WET 600V SUN RES DIR BUR OIL E197091 or MTW OR DP-1 ORC(UL) CIC-TC PVC/N FT4 -- LL41103 CSA AWN I/II A/B 90C 600V FT4-----CE ROHS CE-45 2133 MADE IN USA XXXXXX FT
Minimum Bend Radius	4x diameter		
Flame Rating	FT4		
Oil Resistance	Oil Res I & II		

3-conductor is two Blue with white numbers and green/yellow ground

**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 SILFLEX® 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
A3251603-1	3					0.31	1.24	20	0.06	$-5dlh:
A3251605-1	5					0.37	1.48	20	0.09	$--5dli:
A3251607-1	7	16	26	20	50	0.40	1.60	20	0.11	$--5dlj:
A3251612-1	12					0.54	2.16	20	0.20	$-5dlk:
A3251619-1	19					0.64	2.56	20	0.27	$--5dll:

Installed bend radius ≥ 4x diameter

* See web store for maximum cut lengths