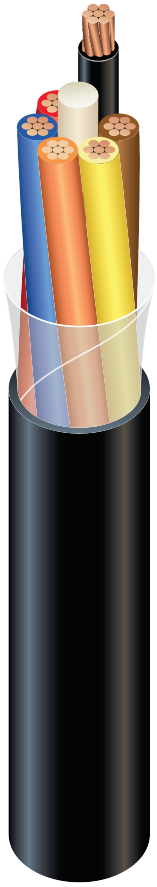
TYPE TC SDN® FLEXIBLE CONTROL CABLE
NEOPRENE JACKET



600 Volt

For Pendant, Reeling and Other Flexing Applications

Sizes 18 AWG through 12 AWG

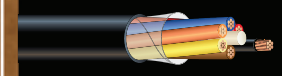
90°C Dry and 75°C Wet

APPLICATIONS

UL and CSA listed and OSHA acceptable. Recognized for use in Class 1 or 2, Division 2 hazardous locations. To be installed in trays, raceways, troughs, channels, ducts, conduit and by direct burial. Recommended for wet or dry locations and outdoors in cable trays where a sunlight resistant rating is required. Designed for control, power, lighting, telemetering, signal, relay traffic control, wherever flexible, small diameter cable is required such as cranes, hoists and some robotics applications. The cable can be used indoors and outdoors; in pendant, reeling and other flexing applications down to -55°C.

SPECIFICATIONS

This specification covers multiconductor UL listed Type TC cable consisting of stranded, uncoated annealed copper, insulated with a flame retardant polymer and nylon jacket, cabled together with fillers, as required, mylar tape wrapped and jacketed overall with a black arctic grade, flame resistant, neoprene. American's SDN® cables conform to UL Type power and control tray cables and Articles 336, 392, 500 and 501 of the 2002 NEC.® Cables pass UL-1277 and IEEE 383 70,000 BTU and the CSA FT4 flame tests. Cables are rated 600 volts, 90°C dry and 75°C wet. UL file no. E60749. CSA rated as Type CIC TC, 90°C, 600 volt Control and Tray Cable under file no. LR8825.



CONSTRUCTION

- **Conductors**
  Bare, soft annealed copper per ASTM B-3.
- **Insulation**
  Each conductor is concentrically insulated with a 15 mil wall of high dielectric flame retardant polymer with 5 mil wall of clear polyamide (nylon) jacket extruded over primary insulation and conforming to UL requirements.
- **Cabling**
  The applicable number of conductors are cabled together with fillers as necessary with a suitable lay. A clear mylar tape is helically applied over the core.
- **Overall Jacket**
  Heavy duty, flame and oil resistant arctic grade neoprene (black) per UL-1277 and ICEA S-73-532 part 4.
- **Identification**
  Cable shall be identified by surface printing.
- **Color Coding**
  ICEA Method 1 Table E-2. See Color Code Chart on page 62.
- **Construction Options**
  Consult factory for specifications on cables with alternative stranding and/or appropriate shields (aluminum/polyester tape, tinned copper or bare copper braids).

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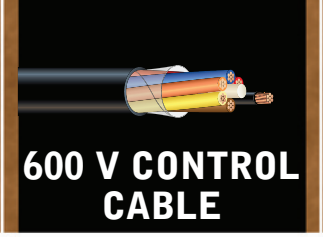
NEOPRENE JACKET

WEIGHTS AND MEASUREMENTS								
CONDUCTOR DATA					OVERALL JACKET THICKNESS (mils)	APPROXIMATE OVERALL DIAMETER (inch)	APPROXIMATE WEIGHT (lbs/1000 ft)	MINIMUM BEND RADIUS FOR DYNAMIC APPLICATIONS (inch)
NUMBER OF CONDUCTORS	STRANDS OVERALL DIAMETER (inch)	POLYMER INSULATION THICKNESS (inch)	NYLON ARMOR THICKNESS (inch)	APPROX. OVERALL DIAMETER (inch)				
18 AWG (16 STRANDS)								
2	.0100	0.015	0.004	0.088	45	0.275	46	3.250
3	.0100	0.015	0.004	0.088	45	0.285	50	3.500
4	.0100	0.015	0.004	0.088	45	0.315	60	3.750
5	.0100	0.015	0.004	0.088	45	0.335	71	4.000
6	.0100	0.015	0.004	0.088	45	0.360	83	4.500
7	.0100	0.015	0.004	0.088	45	0.380	106	4.500
8	.0100	0.015	0.004	0.088	45	0.420	109	5.000
9	.0100	0.015	0.004	0.088	45	0.450	120	5.500
10	.0100	0.015	0.004	0.088	45	0.450	126	5.500
11	.0100	0.015	0.004	0.088	45	0.470	135	5.750
12	.0100	0.015	0.004	0.088	45	0.465	142	5.750
13	.0100	0.015	0.004	0.088	45	0.490	153	6.000
14	.0100	0.015	0.004	0.088	45	0.485	165	6.000
15	.0100	0.015	0.004	0.088	45	0.515	170	6.000
16	.0100	0.015	0.004	0.088	45	0.510	175	6.000
17	.0100	0.015	0.004	0.088	60	0.590	230	7.000
18	.0100	0.015	0.004	0.088	60	0.590	230	7.000
19	.0100	0.015	0.004	0.088	60	0.590	240	7.000
21	.0100	0.015	0.004	0.088	60	0.605	270	7.250
25	.0100	0.015	0.004	0.088	60	0.680	300	8.000
30	.0100	0.015	0.004	0.088	60	0.695	335	8.500
37	.0100	0.015	0.004	0.088	60	0.775	386	9.250
16 AWG (19 STRANDS)								
2	.0117	0.015	0.004	0.097	45	0.290	51	3.500
3	.0117	0.015	0.004	0.097	45	0.305	62	3.750
4	.0117	0.015	0.004	0.097	45	0.330	77	4.000
5	.0117	0.015	0.004	0.097	45	0.360	92	4.250
6	.0117	0.015	0.004	0.097	45	0.390	107	4.750
7	.0117	0.015	0.004	0.097	45	0.420	123	5.000
8	.0117	0.015	0.004	0.097	45	0.450	137	5.500
9	.0117	0.015	0.004	0.097	45	0.475	165	5.750
10	.0117	0.015	0.004	0.097	45	0.485	165	6.000
11	.0117	0.015	0.004	0.097	45	0.500	180	6.000
12	.0117	0.015	0.004	0.097	45	0.500	188	6.000
13	.0117	0.015	0.004	0.097	60	0.555	225	6.750
14	.0117	0.015	0.004	0.097	60	0.555	240	6.750
15	.0117	0.015	0.004	0.097	60	0.585	255	7.000
16	.0117	0.015	0.004	0.097	60	0.585	258	7.000
17	.0117	0.015	0.004	0.097	60	0.635	290	7.500
18	.0117	0.015	0.004	0.097	60	0.635	290	7.500
19	.0117	0.015	0.004	0.097	60	0.635	296	7.500
21	.0117	0.015	0.004	0.097	60	0.650	340	7.750
24	.0117	0.015	0.004	0.097	60	0.715	367	8.500
25	.0117	0.015	0.004	0.097	60	0.730	380	8.750
30	.0117	0.015	0.004	0.097	60	0.750	432	9.000
37	.0117	0.015	0.004	0.097	80	0.870	556	10.50
60	.0117	0.015	0.004	0.097	80	1.045	953	12.50



600 V CONTROL CABLE

WEIGHTS AND MEASUREMENTS

CONDUCTOR DATA					OVERALL JACKET THICKNESS (mils)	APPROXIMATE OVERALL DIAMETER (inch)	APPROXIMATE WEIGHT (lbs/1000 ft)	MINIMUM BEND RADIUS FOR DYNAMIC APPLICATIONS (inch)
NUMBER OF CONDUCTORS	STRANDS OVERALL DIAMETER (inch)	POLYMER INSULATION THICKNESS (inch)	NYLON ARMOR THICKNESS (inch)	APPROX. OVERALL DIAMETER (inch)				
14 AWG (19 STRANDS)								
2	.0147	0.015	0.004	0.112	45	0.320	78	4.000
3	.0147	0.015	0.004	0.112	45	0.340	84	4.000
4	.0147	0.015	0.004	0.112	45	0.370	104	4.500
5	.0147	0.015	0.004	0.112	45	0.400	127	5.000
6	.0147	0.015	0.004	0.112	45	0.435	147	5.250
7	.0147	0.015	0.004	0.112	45	0.470	165	5.750
8	.0147	0.015	0.004	0.112	45	0.505	200	6.000
9	.0147	0.015	0.004	0.112	60	0.570	235	7.000
10	.0147	0.015	0.004	0.112	60	0.580	246	7.000
11	.0147	0.015	0.004	0.112	60	0.595	270	7.250
12	.0147	0.015	0.004	0.112	60	0.595	290	7.250
13	.0147	0.015	0.004	0.112	60	0.625	305	7.750
14	.0147	0.015	0.004	0.112	60	0.625	325	7.750
15	.0147	0.015	0.004	0.112	60	0.655	340	8.000
16	.0147	0.015	0.004	0.112	60	0.655	354	8.000
17	.0147	0.015	0.004	0.112	60	0.725	400	8.750
18	.0147	0.015	0.004	0.112	60	0.725	410	8.750
19	.0147	0.015	0.004	0.112	60	0.725	430	8.750
21	.0147	0.015	0.004	0.112	60	0.740	470	9.000
24	.0147	0.015	0.004	0.112	60	0.805	510	9.750
25	.0147	0.015	0.004	0.112	80	0.875	520	10.50
30	.0147	0.015	0.004	0.112	80	0.890	660	11.00
37	.0147	0.015	0.004	0.112	80	0.990	785	12.00
12 AWG (19 STRANDS)								
2	.0185	0.015	0.004	0.131	45	0.360	109	4.500
3	.0185	0.015	0.004	0.131	45	0.380	115	4.750
4	.0185	0.015	0.004	0.131	45	0.415	146	5.000
5	.0185	0.015	0.004	0.131	45	0.450	177	5.500
6	.0185	0.015	0.004	0.131	45	0.490	209	6.000
7	.0185	0.015	0.004	0.131	60	0.570	230	6.750
8	.0185	0.015	0.004	0.131	60	0.605	294	7.250
9	.0185	0.015	0.004	0.131	60	0.650	325	7.750
10	.0185	0.015	0.004	0.131	60	0.655	350	8.000
11	.0185	0.015	0.004	0.131	60	0.675	375	8.250
12	.0185	0.015	0.004	0.131	60	0.675	395	8.250
13	.0185	0.015	0.004	0.131	60	0.700	430	8.500
14	.0185	0.015	0.004	0.131	60	0.720	455	8.750
15	.0185	0.015	0.004	0.131	60	0.730	480	9.000
16	.0185	0.015	0.004	0.131	60	0.755	505	9.000
17	.0185	0.015	0.004	0.131	60	0.800	530	9.500
18	.0185	0.015	0.004	0.131	60	0.800	555	9.500
19	.0185	0.015	0.004	0.131	80	0.800	605	9.500
21	.0185	0.015	0.004	0.131	80	0.880	680	10.50
24	.0185	0.015	0.004	0.131	80	0.955	773	11.75
25	.0185	0.015	0.004	0.131	80	0.970	782	11.75
30	.0185	0.015	0.004	0.131	80	1.010	1032	12.25
37	.0185	0.015	0.004	0.131	80	1.145	1120	13.75

Note: 1. For static applications, the minimum bending radius would be 6 times the cable O.D.
2. Maximum reeling tension in pounds should not exceed .0024 times the circular mil area.
3. For the use of basket weave grips, a minimum of 12" in length is recommended to prolong cable life in all working applications.