

FR-XLPE/CPE (Thermoplastic)

CONSTRUCTION AT A GLANCE

CONDUCTOR TYPE ①
14 – 10 AWG COPPER

INSULATION TYPE ②
FR-XLPE

SHIELD TYPE
N/A

JACKET TYPE ③
CPE

APPLICATIONS

- Predominantly used in utility substations
- Can be installed indoors or outdoors, in cable trays, conduit, underground duct, or direct buried in wet or dry locations
- Conductor operating temperatures are not to exceed 90°C wet or dry
- Rated 600 Volts

CONSTRUCTION DETAILS

- **Conductors**
 - 14 AWG thru 10 AWG Annealed Class B Copper Unilay Compressed Stranded
- **Insulation**
 - Flame Retardant Cross-Linked Polyethylene (FR-XLPE)
 - XHHW
 - Color Coded per ICEA S-73-532, Method 1, Table E-2
- **Assembly**
 - Cabled with non-hygroscopic polyethylene fillers in order to give the cable a circular cross-section, when needed
 - Wrapped with a Mylar binder
- **Overall Jacket**
 - Heat, Moisture and Sunlight Resistant Thermoplastic Chlorinated Polyethylene (CPE)
- **Print**
 - SOUTHWIRE XXAWG XX/C FR-XLPE CDRS 90C CPE JKT 600V SUN. RES. DIRECT BURIAL YEAR SEQUENTIAL FOOTAGE MARKS

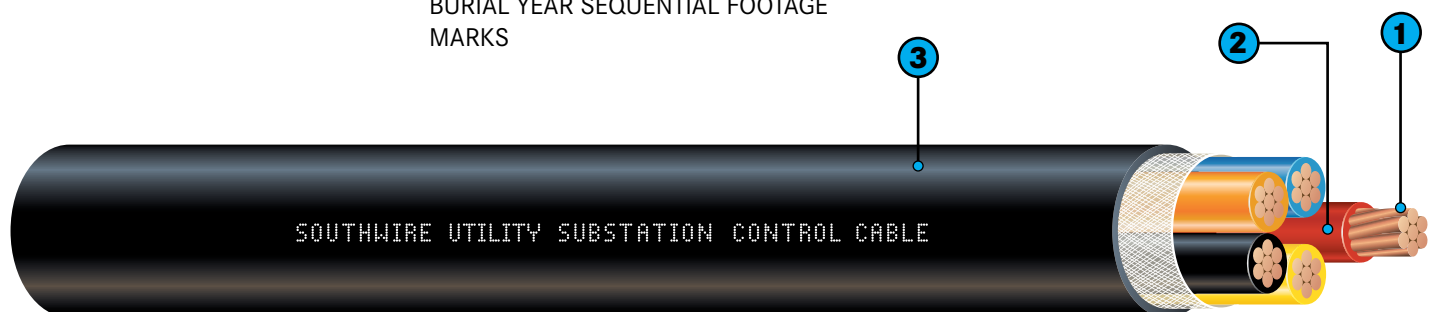
SPECIFICATIONS

Southwire's Substation Control Cable meets or exceeds:

- All applicable ASTM Standards
- ANSI/ICEA S-73-532
- UL 44 Type XHHW-2 rated VW-1
- UL 1581
- ICEA T-29-520
- RoHS Compliant

OPTIONS

- Stranding Classes – C, K
- Tin-Coated Copper Conductors
- Color Coding Methods per ICEA S-73-532
- Shielded Constructions - Longitudinal Corrugated CU Tape, Helical CU or AL Tape, or Longitudinal AL Tape with Mylar Bonding
- Rip Cord
- Ground Wire
- Jacket Materials – PVC, SOLONON® (LSZH), Thermoset CPE
- UL Listed Construction
- Other Constructions Available upon Request





Number of Conductors	Conductor Size (AWG)	Nominal Jacket Thickness (inches)	Nominal Overall Diameter		Approximate Weight	
			inches	mm	lbs/1000 ft.	kg/km
Unshielded AWG 14 (7 strands)						
2	14	0.045	0.349	8.9	60	89
3	14	0.045	0.370	9.4	82	123
4	14	0.045	0.403	10.2	101	150
5	14	0.045	0.440	11.2	119	176
6	14	0.045	0.479	12.2	138	206
7	14	0.045	0.479	12.2	155	231
8	14	0.060	0.549	13.9	191	284
9	14	0.060	0.588	14.9	211	315
10	14	0.060	0.638	16.2	234	348
12	14	0.060	0.659	16.7	270	402
Unshielded AWG 12 (7 strands)						
2	12	0.045	0.384	9.8	81	120
3	12	0.045	0.408	10.4	109	162
4	12	0.045	0.445	11.3	139	207
5	12	0.045	0.487	12.4	162	241
6	12	0.060	0.562	14.3	206	306
7	12	0.060	0.562	14.3	231	344
8	12	0.060	0.607	15.4	261	388
9	12	0.060	0.651	16.5	291	433
10	12	0.060	0.709	18.0	322	480
12	12	0.060	0.732	18.6	375	559
Unshielded AWG 10 (7 strands)						
2	10	0.045	0.431	11.0	110	164
3	10	0.045	0.459	11.7	153	227
4	10	0.045	0.502	12.8	194	289
5	10	0.060	0.581	14.8	247	367
6	10	0.060	0.632	16.1	290	432
7	10	0.060	0.632	16.1	328	488
8	10	0.060	0.685	17.4	372	553
9	10	0.060	0.736	18.7	414	617
10	10	0.060	0.803	20.4	460	684
12	10	0.080	0.870	22.1	568	845

Dimensions and weights shown above are nominal and subject to industry tolerances.