

FR-XLPE/PVC Shielded-Helical

CONSTRUCTION AT A GLANCE

CONDUCTOR TYPE ①
14 – 10 AWG COPPER

INSULATION TYPE ②
FR-XLPE

SHIELD TYPE ③
HELICAL COPPER TAPE

JACKET TYPE ④
PVC

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
- **Shield**
 - Helically applied 5 mil annealed copper tape with a minimum overlap of 10%
- **Overall Jacket**
 - Heat, Moisture and Sunlight Resistant Black Polyvinyl Chloride (PVC)
- **Print**
 - SOUTHWIRE XXAWG XX/C FR-XLPE (XHHW-2) CDRS 90C PVC JKT SHIELDED TYPE TC 600V SUN. RES. DIRECT BURIAL YEAR SEQUENTIAL FOOTAGE MARKS

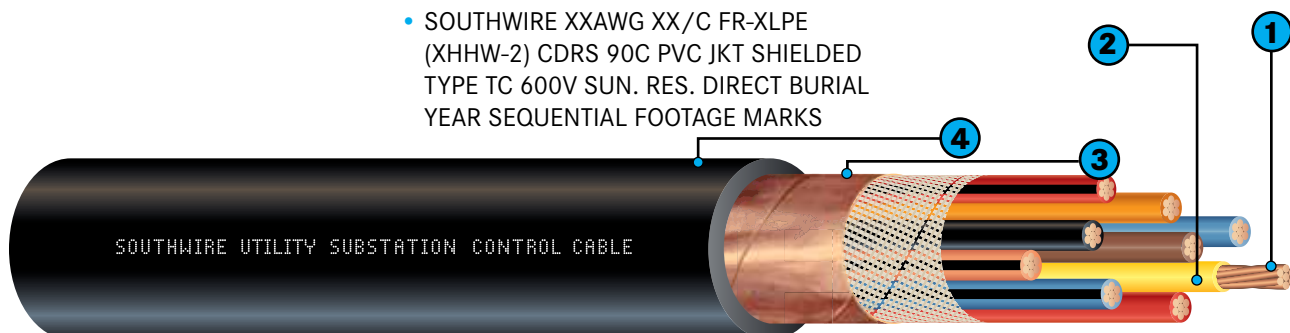
SPECIFICATIONS

Southwire's Type TC Substation Control Cable meets or exceeds:

- All applicable ASTM Standards
- ANSI/ICEA S-73-532
- UL 44 Type XHHW-2 rated VW-1
- UL 1277
- UL 1581
- UL 1685
- IEEE 1202
- ICEA T-29-520
- RoHS Compliant

OPTIONS

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



Number of Conductors	Conductor Size (AWG)	Copper Tape Shield Thickness (inches)	Nominal Jacket Thickness (inches)	Nominal Overall Diameter		Approximate Weight	
				inches	mm	lbs/1000 ft.	kg/km
Shielded AWG 14 (7 strands)							
2	14	0.005	0.045	0.375	9.5	86	128
3	14	0.005	0.045	0.396	10.1	108	160
4	14	0.005	0.045	0.429	10.9	132	196
5	14	0.005	0.045	0.466	11.8	156	232
6	14	0.005	0.045	0.505	12.8	181	269
7	14	0.005	0.045	0.505	12.8	199	297
8	14	0.005	0.060	0.575	14.6	240	357
9	14	0.005	0.060	0.614	15.6	266	396
10	14	0.005	0.060	0.664	16.9	294	437
12	14	0.005	0.060	0.685	17.4	335	498
Shielded AWG 12 (7 strands)							
2	12	0.005	0.045	0.410	10.4	109	162
3	12	0.005	0.045	0.434	11.0	140	208
4	12	0.005	0.045	0.471	12.0	173	258
5	12	0.005	0.045	0.513	13.0	207	308
6	12	0.005	0.060	0.588	14.9	257	383
7	12	0.005	0.060	0.588	14.9	284	423
8	12	0.005	0.060	0.633	16.1	320	476
9	12	0.005	0.060	0.677	17.2	356	529
10	12	0.005	0.060	0.735	18.7	394	586
12	12	0.005	0.060	0.758	19.3	452	673
Shielded AWG 10 (7 strands)							
2	10	0.005	0.045	0.457	11.6	144	214
3	10	0.005	0.045	0.485	12.3	189	281
4	10	0.005	0.060	0.558	14.2	252	374
5	10	0.005	0.060	0.607	15.4	302	449
6	10	0.005	0.060	0.658	16.7	352	524
7	10	0.005	0.060	0.658	16.7	393	584
8	10	0.005	0.060	0.711	18.1	443	660
9	10	0.005	0.060	0.762	19.4	494	735
10	10	0.005	0.080	0.869	22.1	578	861
12	10	0.005	0.080	0.896	22.8	666	991

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

