



**Southwire**<sup>®</sup>  
WE DELIVER POWER... RESPONSIBLY\*

## PRODUCT DATA SHEET

Controlled Document - Engineering Drive

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# Royal<sup>®</sup> Quad-Rated Cable Type TC-ER, PLTC, FPL and NPLF

### Construction Parameters:

**CONDUCTOR:** 14 AWG - 10 AWG Class B stranded bare copper per ASTM B-3 and B-8  
**INSULATION:** Premium Grade Polyvinyl Chloride (PVC) plus nylon  
**COLOR CODE:** ICEA Method 1, Table E-2  
**SHIELDING** Overall 100% coverage, aluminum/polyester foil shield with tinned copper drain wire  
**JACKET:** Black sunlight and moisture resistant Polyvinyl Chloride (PVC)  
**PRINT LEGEND:** CCI ROYAL XX AWG X/C SHIELDED PVCN/PVC TYPE TC-ER THHN/THWN E79496 (UL) 600V 90C DRY/75C WET OIL RES I  
 SUNLIGHT RESISTANT DIRECT BURIAL -- PLTC SUN RES --- FPL SUN RES --- NPLF SUN RES --- SEQUENTIAL MARKING

### PHYSICAL PROPERTIES:

**OPERATING TEMPERATURE RANGE:** -30°C to 90°C; (90°C Dry/75°C Wet)  
**OIL RESISTANCE:** OIL RES I  
**SUNLIGHT RESISTANT:** Yes  
**DIRECT BURIAL:** Yes

### ELECTRICAL PROPERTIES:

**VOLTAGE RATING:** 600Vrms, Max

### Industry Approvals:

- o UL Standard 1277 Type TC-ER\*, UL Standard 13 Type PLTC, UL Standard 1424 Type FPL, UL Standard 1425 Type NPLF
- o UL Standard 83 Type THHN/THWN
- o NEC Articles 336, 725, 760
- o EPA 40 CFR, Part 26, Subpart C, heavy metals per Table 1, TCLP method

Part Number	Gauge	No. Cond.	Stranding	Insulation Wall, Nom.		Jacket Wall, Nom.		O.D., Nom.		Net Weight	
				Inches	mm	Inches	mm	Inches	mm	Lb./kft.	kg/km
771412 *	14	2	7/0.0242	0.015/0.004	0.38/0.10	0.045	1.14	0.324	8.23	68	101
771413	14	3	7/0.0242	0.015/0.004	0.38/0.10	0.045	1.14	0.337	8.56	86	128
771414	14	4	7/0.0242	0.015/0.004	0.38/0.10	0.045	1.14	0.369	9.37	106	158
771415	14	5	7/0.0242	0.015/0.004	0.38/0.10	0.045	1.14	0.404	10.26	125	186
771417	14	7	7/0.0242	0.015/0.004	0.38/0.10	0.045	1.14	0.438	11.13	164	244
771422	14	12	7/0.0242	0.015/0.004	0.38/0.10	0.060	1.52	0.593	15.06	279	415
771212 *	12	2	7/0.0305	0.015/0.004	0.38/0.10	0.045	1.14	0.366	9.30	94	140
771283	12	3	7/0.0305	0.015/0.004	0.38/0.10	0.045	1.14	0.387	9.83	122	182
771214	12	4	7/0.0305	0.015/0.004	0.38/0.10	0.045	1.14	0.422	10.72	151	225
771215	12	5	7/0.0305	0.015/0.004	0.38/0.10	0.045	1.14	0.460	11.68	180	268
771217	12	7	7/0.0305	0.015/0.004	0.38/0.10	0.060	1.52	0.500	12.70	239	356
771222	12	12	7/0.0305	0.015/0.004	0.38/0.10	0.060	1.52	0.686	17.42	404	601
771012 *	10	2	7/0.0385	0.020/0.004	0.38/0.10	0.045	1.14	0.434	11.02	137	204
771093	10	3	7/0.0385	0.020/0.004	0.38/0.10	0.045	1.14	0.461	11.71	180	268
771014	10	4	7/0.0385	0.020/0.004	0.38/0.10	0.060	1.52	0.505	12.83	223	332
771015	10	5	7/0.0385	0.020/0.004	0.38/0.10	0.060	1.52	0.584	14.83	284	423
771017	10	7	7/0.0385	0.020/0.004	0.38/0.10	0.060	1.52	0.634	16.10	375	558

Note: All dimensions & weights are nominal subject to industry standards and tolerances unless otherwise noted.

\* 2 conductor not -ER.

This product complies with European Directive 2011/65/EU (RoHS-2)

The customer will accept all factory lengths and +/- 10 percent of total order requested.

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