

# DIRECT BURIAL COPPER CONTROL TRAY CABLE TYPE TC

# SPEC

P7393D - AG



INSULATION: THHN/THWN

OVERALL JACKET: PVC

SIZES: 16 AWG - 10 AWG

HEAT, MOISTURE AND SUNLIGHT  
RESISTANT. 600 VOLTS, 60°C WET OR DRY



## 1.0 APPLICATIONS

- 1.1** 600 VAC direct burial rated copper conductor cable for limited power feeder circuits or control power circuits to remote control distant electric motorized equipment or remote locating of irrigation machine main control panel.

## 2.0 SPECIFICATIONS

- 2.1** Type TC Control Cable meets or exceeds the applicable requirements of the following standards and specifications:

ASTM - (All applicable standards)

NFPA 70 (NEC)

UL 1581 Electrical Wires, Cables & Flexible Cords

ICEA S-58-679

- Control Cable Conductor
- Identification Method 1, Table 2

UL 1685 - UL Flame Exposure Test (70,000 Btu/hr)

## 3.0 CONSTRUCTION

### 3.1 CONDUCTORS:

Sizes 16 - 10 AWG individual bare annealed copper conductors.

- Type THHN or THWN 14 AWG -10 AWG
- Type TFFN Multiconductor constructions

### 3.2 INSULATION:

THHN/THWN.

### 3.3 JACKET:

Heat, moisture and sunlight resistant PVC.  
Non-halogen jacket available upon request.

## 4.0 CABLE DATA

AWG 16 (26 STRANDS) TYPE TC-TFFN* CONDUCTORS					
NUMBER OF CONDUCTORS	JACKET THICKNESS	AVG. OVERALL DIAMETER		APPROXIMATE WEIGHT	
	INCHES	INCHES	MM	LBS./1000 FT.	KG./KM.
2	0.045	0.288	7.32	43	64
3	0.045	0.303	7.70	53	79
4	0.045	0.329	8.36	66	98
5	0.045	0.357	9.07	81	120
7	0.045	0.386	9.80	103	153
9	0.045	0.447	11.35	134	199
12	0.045	0.501	12.73	165	245
15	0.060	0.585	14.86	218	324
19	0.060	0.614	15.60	263	391
25	0.060	0.713	18.11	339	504
30	0.080	0.753	19.13	396	589
37	0.080	0.812	20.62	477	709

\* Similar to type THHN except rated 75°C in wet locations or 90°C in dry locations.

AWG 14 (7 STRANDS) TYPE TC-THHN OR THWN CONDUCTORS					
NUMBER OF CONDUCTORS	JACKET THICKNESS	AVG. OVERALL DIAMETER		APPROXIMATE WEIGHT	
	INCHES	INCHES	MM	LBS./1000 FT.	KG./KM.
2	0.045	0.305	7.8	56	83
3	0.045	0.322	8.2	74	110
4	0.045	0.350	8.9	93	139
5	0.045	0.381	9.7	109	162
6	0.045	0.413	10.5	129	192
7	0.045	0.413	10.5	145	215
8	0.045	0.446	11.3	164	243
9	0.045	0.478	12.2	182	271
10	0.060	0.550	14.0	217	322
12	0.060	0.568	14.4	251	373
15	0.060	0.627	15.9	305	454
19	0.060	0.658	16.7	373	555
25	0.060	0.766	19.4	483	719
30	0.060	0.810	20.6	568	845
37	0.080	0.913	23.2	720	1072

## 4.0 CABLE DATA

AWG 12 (7 STRANDS) TYPE TC-THHN OR THWN CONDUCTORS					
NUMBER OF CONDUCTORS	JACKET THICKNESS	AVG. OVERALL DIAMETER		APPROXIMATE WEIGHT	
	INCHES	INCHES	MM	LBS./1000 FT.	KG./KM.
2	0.045	0.340	8.6	75	112
3	0.045	0.360	9.2	105	156
4	0.045	0.392	10.0	128	190
5	0.045	0.428	10.9	154	229
6	0.045	0.466	11.8	183	272
7	0.045	0.466	11.8	207	308
8	0.045	0.504	12.8	234	349
9	0.060	0.572	14.5	277	412
10	0.060	0.621	15.8	307	457
12	0.060	0.641	16.3	358	532
15	0.060	0.710	18.0	438	652
19	0.060	0.746	18.9	539	802
20	0.060	0.785	19.9	568	845
25	0.080	0.911	23.1	734	1092
30	0.080	0.963	24.4	863	1284
37	0.080	1.036	26.3	1044	1553

AWG 10 (7 STRANDS) TYPE TC-THHN OR THWN CONDUCTORS					
NUMBER OF CONDUCTORS	JACKET THICKNESS	AVG. OVERALL DIAMETER		APPROXIMATE WEIGHT	
	INCHES	INCHES	MM	LBS./1000 FT.	KG./KM.
2	0.045	0.407	10.3	111	166
3	0.045	0.433	11.0	155	230
4	0.045	0.473	12.0	198	294
5	0.060	0.549	13.9	250	371
6	0.060	0.596	15.1	294	437
7	0.060	0.596	15.1	333	495
8	0.060	0.645	16.4	377	561
9	0.060	0.693	17.6	421	626
10	0.060	0.755	19.2	467	694
12	0.060	0.780	19.8	547	814
15	0.080	0.908	23.1	706	1050
19	0.080	0.954	24.2	867	1291
20	0.080	1.003	25.5	913	1359
25	0.080	1.112	28.2	1125	1675
30	0.080	1.177	29.9	1329	1977
37	0.080	1.271	32.3	1614	2402