

**UNDERGROUND  
FEEDER CABLE (UF) & TWU  
INSULATION: POLYVINYL CHLORIDE  
SIZES: 14 AWG - 4/0 AWG**



**1.0 SCOPE:**

**1.1** This specification covers the construction requirements for Underground Feeder Cable, Type UF and TWU for use in accordance with the National Electrical Code for operation at a potential of 600 Volts or less and at a temperature of 75°C or less. Listed by UL or ETL or CSA.

**2.0 CONSTRUCTION:**

**2.1 Conductor:**

Soft drawn bare copper meeting the requirements of ASTM specification B-3 or B-8.

**2.2 Temperature Rating:**

-10°C +75°C.

**2.3 Insulation:**

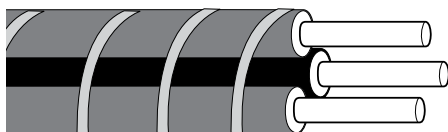
Polyvinyl chloride, 75°C rated conforming to UL Standards 493 and 83.

**2.4 Manufacturer's Identification:**

Surface marked with Paige-Electric, voltage rating, size and type, Listing file numbers, RoHS.

**2.5 Listing:**

All cables shall be tested physically and electrically in accordance with UL Standard 493, and 83. All reels and cartons bear Listing labels.



**3.0 PARALLEL CONSTRUCTION:**

**3.1** Multiple wires, of varying sizes and colors, are bound together with a reinforced filmanet tape in a helical fashion.

SIZE AWG	STRAND-ING	INSULATION WALL (INCHES)	APPROX. DIAMETER (INCHES)	CURRENT CARRY CAPACITY*
14	SOLID	.060	.190	15
12	SOLID	.060	.205	20
10	SOLID	.060	.225	30
8	SOLID	.080	.285	40
6	7	.080	.340	55
4	7	.080	.390	70
2	7	.080	.450	95
1	19	.095	.520	110
1/0	19	.095	.560	125

**4.0 SPlicing RECOMMENDATIONS:**

Wire splices are the weak link of any electrical circuit. It is especially important to make proper joints in irrigation systems because the joints are exposed to wet and damp environments that can cause corrosion of the copper conductor and premature failure. Here are Paige Electric's recommendations:

- For direct burial, above ground, or in valve box installations: Model DBR/Y-6 as manufactured by the 3M Company (Paige specification P7364D)
- For installation above ground or in valve boxes: Models 316IR or MGC as manufactured by the 3M Company (Paige specification P7365D), or Silicone-filled wire nuts as manufactured by IDEAL Industries (Paige specification P7372D)