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079D - Rev 10

DIRECT BURIAL GOLF COURSE SPRINKLER WIRE INSULATION: POLYETHYLENE SIZES: 14 AWG - 10 AWG SOLID

1.0 SCOPE:

1.1 This specification covers single conductor insulated wire sizes 14 AWG, through 10 AWG, utilizing low density high molecular weight polyethylene insulation, suitable for direct burial applications for operating temperatures up to 60°C. UL and c(UL) listed.

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:* -55°C +60°C.
- **2.3** Insulation Thickness: .045"
- 2.4 Sunlight Resistance: Available as an option
- **2.5** *Manufacturer's Identification:* Surface marked with Paige-Electric, voltage rating, size and type, and UL file number.

2.6 Underwriters' Laboratories Approval:

All cables shall be tested physically and electrically in accordance with UL Standard 493, and 83 (paragrahs 28.1, 29.1 and 29.2). All reels and cartons bear UL labels.

2.7 Tests:

Material must be able to pass the following tests without showing signs of degradation. 2.7.1 COLD BEND:

- The insulation shall not show any cracks when sample is bent around a mandrel of 3 x wire diameter, after being subjected to -55°C ± 1°C for one (1) hour.
- 2.7.2 ELECTRICAL: AC test voltage, 5 minutes at 3,000 volts.

2.7.3 ENVIRONMENTAL AGING: Immersed for 14 days in concentrated solutions of fertilizers, herbicides and insecticides.

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2.8 INSULATION COMPARISON WITH PVC TYPE UF AND TWU - 40

	PE	PVC TYPE UF	PVC TYPE TWU -40
TEMPERATURE RANGE	-55° +60°C	-10° +60°C	-55° +60°C
TENSILE STRENGTH	1400 PSI	1500 PSI	1800 PSI
INS. RES. (MEG.OHMS/1000')	50,000	200	152
ELONGATION	EXCELLENT	GOOD	GOOD
MOISTURE RES.	EXCELLENT	GOOD	FAIR
COLD BEND	EXCELLENT	GOOD	EXCELLENT
ABRASION	GOOD	GOOD	FAIR

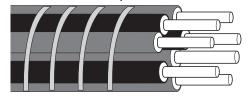
Splicing Recommendations: Splicing can be accomplished using 3M or equivalent epoxy type compounds, Paige Electric DBM, or 3M DBY/DBR/DBY-6/DBR-6 connectors. PVC adhesives or sealing compounds are not recommended.

2.10 UL Listed for 600 Volts c(UL) Listed for 30 Volts.

3.0 PARALLEL CONSTRUCTION:

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



4.0 TWISTED CONSTRUCTION:

4.1 Multiple wires are twisted together in a helical fashion.

