

# EcoWire™ Hook-Up Wire

*Better performance, better for the environment*



**AlphaWire**

*Cables you trust. Service you deserve.*

# Recyclable wire for sustainable designs

**A**lpha Wire's new EcoWire is the latest innovation in hook-up wire. A true engineering breakthrough, EcoWire combines increased performance with a minimized environmental impact. EcoWire derives its advantage from patented Noryl insulation, a modified polyphenylene ether (mPPE) thermoplastic. Noryl is inherently lighter, tougher, and more durable than PVC. The result is UL AWM wire that is smaller than PVC-based counterparts. The non-halogenated insulation contains no heavy metal pigments, allowing it to help manufacturers meet Waste Electrical and Electronic Equipment (WEEE) requirements.

- UL AWM 11028
- CSA AWM I A/B
- Oil resistant to Oil Res. 1
- VW-1 UL 1581
- Better performing than PVC
  - Up to 45% smaller diameter
  - Up to 40% lighter weight
  - Superior abrasion resistance

**mPPE Insulation:**  
**All the Advantages in Smaller, Lighter Wire**

## Environmentally friendly

EcoWire contains no halogens, phthalates, or heavy metals. It meets RoHS and WEEE requirements for the elimination of hazardous substances and recyclability.

## Better dielectric strength

The superior dielectric properties of mPPE make possible a reduced wall thickness while maintaining the same electrical properties as PVC. EcoWire's diameter is up to 45% smaller than equivalent wires.

## Low specific gravity

The 1.03 specific gravity of mPPE is 25% to 40% lower than other insulation materials, such as PVC, polyethylene, and cross-linked polyethylene. Along with the reduced wall thickness, the low specific gravity yields significant weight savings of up to 40%.

## Durability

Even with thinner walls, EcoWire's insulation offers 10x better abrasion and pinch resistance to PVC-based wire. Although thinner, the insulation is tougher.

## Good temperature range

Wire and cable with mPPE insulation meet UL 1581 requirements for operation up to 105°C end-use temperature rating. With a wide temperature range, mPPE does not require such secondary processing operations as is required with cross-linked polyethylene.

## Recyclable

EcoWire's mPPE thermoplastic insulation is more easily recycled as it does not contain hazardous materials.



# Specifications

## Materials

*Conductors* Stranded or solid tinned copper  
*Insulation* Noryl modified polyphenylene ether

## Electrical

*Voltage* 600 volts

## Physical and Mechanical

*Temperature Range* -40°C to +105°C

## Availability

100 ft (30.5 m) and 1000 ft (305 m) lengths

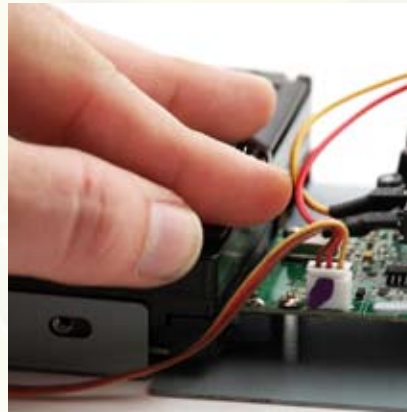
## Approvals

CSA AWM I A/B  
 UL AWM Style 11028  
 RoHS compliant  
 REACH compliant  
 VW-1 UL 1581

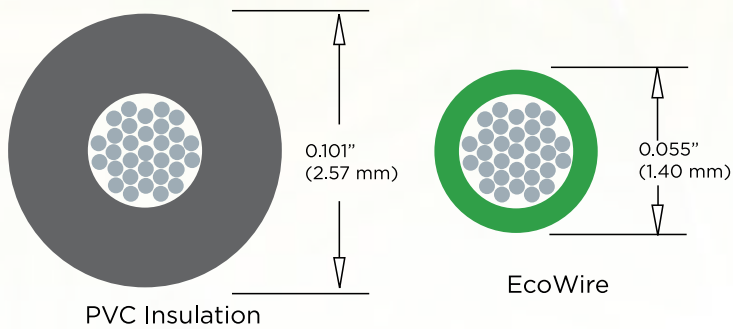


## Colors

White, Black, Red, Green, Yellow, Blue,  
 Brown, Orange, Slate, Violet, Yellow/Green



20 AWG (0.81 mm<sup>2</sup>) Wire



| Part No. | Conductor Size |                 | Stranding |            | Insulation Thickness |      | Wire Diameter |      |
|----------|----------------|-----------------|-----------|------------|----------------------|------|---------------|------|
|          | AWG            | mm <sup>2</sup> | AWG       | mm         | Inch                 | mm   | Inch          | mm   |
| 6710     | 28             | 0.07            | 7/36      | 7 x 0.12   | 0.010                | 0.24 | 0.034         | 0.86 |
| 6711     | 26             | 0.14            | 7/34      | 7 x 0.16   | 0.010                | 0.24 | 0.038         | 0.97 |
| 6712     | 24             | 0.22            | 7/32      | 7 x 0.20   | 0.010                | 0.24 | 0.043         | 1.09 |
| 6713     | 22             | 0.35            | 7/30      | 7 x 0.25   | 0.010                | 0.24 | 0.049         | 1.24 |
| 6714     | 20             | 0.51            | 10/30     | 10 x 0.25  | 0.010                | 0.24 | 0.055         | 1.40 |
| 6715     | 18             | 0.81            | 16/30     | 16 x 0.25  | 0.010                | 0.24 | 0.067         | 1.70 |
| 6715S    | 18             | 0.82            | Solid     | Solid      | 0.010                | 0.24 | 0.059         | 1.50 |
| 6716     | 16             | 1.32            | 26/30     | 26 x 0.25  | 0.011                | 0.28 | 0.081         | 2.06 |
| 6717     | 14             | 2.09            | 41/30     | 41 x 0.25  | 0.011                | 0.28 | 0.096         | 2.44 |
| 6717S    | 14             | 2.08            | Solid     | Solid      | 0.011                | 0.28 | 0.086         | 2.18 |
| 6718     | 12             | 3.31            | 65/30     | 65 x 0.25  | 0.012                | 0.30 | 0.117         | 2.97 |
| 6719     | 10             | 5.37            | 105/30    | 105 x 0.25 | 0.012                | 0.30 | 0.142         | 3.61 |

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Every application is critical and cable and wire failure is not an option when the safety of your equipment and personnel is paramount. Specify Alpha products since the integrity of your system is only as robust as the products you use.

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Alpha offers wire and cable from stock in most sizes and constructions, in both small and large put-ups, so you can order it when you need it. Our products are available for same-day shipment, eliminating long lead times.

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second-to-none**

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