



# ControlGuard®

## Substation Power Control Cables

AWG's ControlGuard® Substation Power Cables are a critical component of modern transmission and distribution substations, efficiently transferring power between transformers, switchgear, and distribution equipment in utility and renewable energy applications. Designed to support medium and high voltage systems, ControlGuard cables help maintain safe and dependable power flow within substations and grid interconnections.



ControlGuard® cables are engineered for installation in cable trays, conduit systems, and direct burial applications within substation environments, offering enhanced mechanical protection, system reliability, and resistance to harsh operating conditions. Typically insulated with materials such as cross-linked polyethylene (XLPE) or ethylene propylene rubber (EPR), these cables promote consistent electrical performance while reducing the risk of faults, leakage, and interference.

With their durable construction and capability to withstand demanding loads and environmental stress, ControlGuard® plays a key role in ensuring grid stability and operational continuity, supporting the expansion, modernization, and long-term resilience of today's energy infrastructure.

[www.buyawg.com](http://www.buyawg.com)

# Empowering a Better World with ControlGuard®

## Copper Tape Shield: When Is It Needed?

### CPE

Suitable for standard 600 V control cable applications where electromagnetic interference is minimal and no metallic shielding is required by code or specification.

This option provides reliable performance in typical substation and industrial control environments where separation from higher-voltage circuits is maintained.

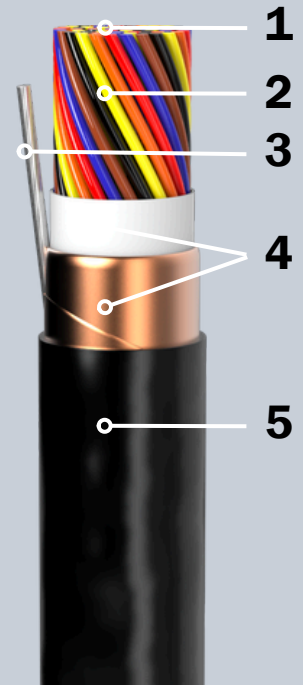


### CPE, CTS

Recommended for electrically noisy environments, installations alongside higher-voltage cables requiring a metallic barrier, or when mandated by NEC or project specifications. The copper tape shield adds an extra layer of protection to help minimize interference and support compliance in more demanding installations.

## Control Cable Construction

- 1. Conductor** Class B compressed bare copper (ASTM B3 and ASTM B8).
- 2. Insulation** Flame-retardant cross-linked polyethylene (FR-XLPE). Insulation is color-coded as per the requirements of ICEA Method 1.
- 3. Rip Cord** For ease of jacket removal.
- 4. Binder Filler** Polyester flat thread binder tape applied for cables with more than 5 conductors. Polypropylene filler on cables with 5 or less conductors.
- Copper Tape Shield (When applicable)** Flat, uncoated 5 mil thick copper tape helically applied with a minimum 25% overlap.
- 5. Outer Jacket** Black. Either thermoset chlorinated polyethylene (CPE) jacket or polyvinyl chloride (PVC) jacket.



## ControlGuard® Accessories

Along with ControlGuard cable products, we also offer hardware and accessories to provide a complete and integrated system solution, including transformers, switchgear, relays, and more.



Transformers



Circuit Breaker



Switchgear



Panel Boards



Protective Relay



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