

CAGE Code 7V821

Numerous Options for Maximum Performance

Including Protection from Radio Frequency Interference and ElectroMagnetic Interference.

Electricals

- 30V, 300V, 600V, 1000V, 2000V

AWG (Gauge) Sizes/Ranges

- 36 AWG and larger

Stranding

Common Copper Stranding(s)

- 36–20 AWG (7, 19 strands or higher)
- 18–16 AWG (19 strands or higher)
- 14–2 AWG (41 strands or higher)
- Other stranding options available

Stranding Options for Conductors

- Bunched
- Unilay
- Rope lay
- True Concentric/Unilay
- And more

Copper Conductors, Plating or Coating Options

- Tin Copper
- Silver
- Nickel
- High-strength alloys

Conductor Temperature Rating

Tinned Cu : 150°C

Bare Cu : 200°C

Silver Cu : 200°C

Alloy 135 : 200°C

Nickel Plate Cu : 260°C



Insulation Materials for Inner Conductors

PVC

- Flexible
- Semi-rigid PVC
- Semi-conductive

Olefins

- PE (Polyethylene)
- LLDPE (Linear Low-Density Polyethylene)
- HDPE (High-Density Polyethylene)
- XLPE (Cross-Linked Polyethylene)
- Foamed XLPE (Cross-Link Polyethylene)
- PP (Polypropylene)
- PP Foam (Polypropylene)
- FRPP (Flame-Retardant Polypropylene)

TPE/TPR

- Thermoplastic Elastomer/ Thermoplastic Rubber

PES (Polyester Elastomer)

Fluoropolymers

- High-temperature insulations
- FEP (Fluorinated Ethylene Propylene) 200°C
- ETFE (Ethylene Tetrafluoroethylene) 150°C
- PFA (Perfluoroalkoxy) 260°C
- Foamed FEP (Fluorinated Ethylene Propylene)
- ECTFE (Ethylene Chlorotrifluoroethylene)

Coaxial Cable

- May be added to a composite cable
- Custom options with unique electrical properties

Mechanical Strength

- Aramid fibers
- Individual galvanized or stainless steel cable
- Stainless steel braiding

Water Blocking

- Water-blocking features can be provided in conductors tape or fillers to prevent water migration if a cable jacket is damaged



Shielding – EMI/RFI Protection

- Aluminum foil tape
- Braiding with tinned copper
- Frequency spectrum: Braid or spiral/served
 - 3 kHz up to 30,000 kHz
 - Aluminum Polyester tape
 - 25,000 kHz to 300,000 kHz

Braiding Styles

- Basket weave
- Spiral
- Serve
- Steel wire armor

Tape Separation Options

- Aluminum Foil
- Aluminized Polyester
- Foam PP (Polypropylene)
- Paper
- PES (Polyester)
- PTFE (Polytetrafluoroethylene)
- Spun Nylon

Armoring

- Interlocked aluminum or steel wire

Jacket Materials

- PVC (Polyvinyl Chloride)
- TPE (Thermoplastic Elastomer)
- TPR (Thermoplastic Rubber)
- TPU (Thermoplastic Urethane)
- PUR (Polyurethane)
- FEP (Fluorinated Ethylene Propylene)
- PES (Polyester Elastomer)