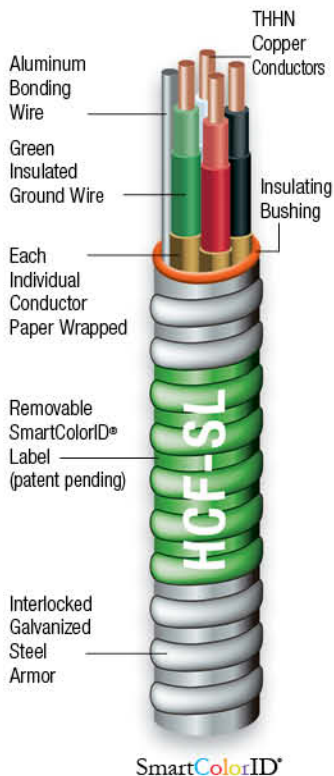


TYPE AC-HCF COPPER CONDUCTOR STEEL ARMOR/THHN INNERS



ENGINEERING SPECIFICATIONS:



SmartColorID®

Standards:

Underwriters Laboratories Standards UL-4, UL-83, Federal Specification A-A59544 National Electrical Code (NEC), and NEMA WC 70/CEA 5-95-658, and ARRA 2009; Section 1605 "Buy American" Compliant

Applications:

- Suitable for applications requiring branch and feeder circuits for non-essential, general purposes electrical systems in patient care areas of health care facilities or for use in essential electrical systems when in accordance with 2008 NEC 517.30 (C)(3). Acceptable in facilities such as hospitals, nursing homes, dental offices, and other types of medical facilities including out patient facilities
- Permitted use for services, feeders, and branch circuits in industrial, commercial, and multi-residential buildings
- Acceptable for power, lighting, control, and signal circuits
- Allowable in concealed or exposed systems
- Permitted use in dry locations and embedded in plaster finish on brick or other masonry except in damp or wet locations
- Utilized for environmental air-handling spaces (NEC 300.22)(C)
- Allowable in assembly occupancies (NEC 518.4)
- Allowable installations in approved raceways and cable trays (NEC 392)
- Suitable for installation under raised floors for IT equipment (NEC 645.5)
- Permitted in Class I Div. 2, Class II Div. 2, and Class III Div. 1 Hazardous Locations
- Listed for use in UL 1,2, and 3 Hour Through-Penetration Firestop Systems

CONSTRUCTION:

Encore's Armored Cable is constructed with soft-drawn copper, Type THHN conductors. Each insulated conductor is individually wrapped with a moisture-resistant paper covering which has flame retardant properties. These conductors, including a green insulated grounding conductor, are cabled together to form the cable core. Interlocked steel armor is applied over the entire assembly. A 16 AWG solid aluminum bond wire is placed longitudinally underneath the armor and remains in contact with the armor throughout the entire length.

Type AC-HCF Copper Conductor Steel Armor/THHN Innings 600V

Conductors		Ground Wire (AWG)	Aluminum Bond Wire (AWG)	Overall Diameter (in)	Approximate Net Weight (lbs/1000 ft)	Allowable Ampacity (Amps)*		Standard Packaging	
AWG/No.	Type					75°C	90°C	Coil (ft)	Reel (ft)
14/2	Solid	14 Solid	16	0.436	179	15	15	250'	1000'
14/3	Solid	14 Solid	16	0.465	205	15	15	250'	1000'
14/4	Solid	14 Solid	16	0.498	232	15	15	250'	1000'
12/2	Solid	12 Solid	16	0.471	216	20	20	250'	1000'
12/3	Solid	12 Solid	16	0.505	253	20	20	250'	1000'
12/4	Solid	12 Solid	16	0.542	289	20	20	250'	1000'
10/2	Solid	10 Solid	16	0.537	281	30	30	250'	1000'
10/3	Solid	10 Solid	16	0.579	334	30	30	250'	1000'
10/4	Solid	10 Solid	16	0.623	388	30	30	250'	1000'
12/2	Stranded	12 Strand	16	0.488	224	20	20	250'	1000'
12/3	Stranded	12 Strand	16	0.601	261	20	20	250'	1000'
12/4	Stranded	12 Strand	16	0.594	299	20	20	250'	1000'
10/2	Stranded	10 Strand	16	0.560	292	30	30	250'	1000'
10/3	Stranded	10 Strand	16	0.604	347	30	30	250'	1000'
10/4	Stranded	10 Strand	16	0.653	403	30	30	250'	1000'

Note: Ampacities are based on Table 310.15(B)(16) of the NEC. *Ampacities shown are for general use as specified by the NEC, Section 310.15.

For equipment marked for use at higher temperatures, the conductor ampacity shall be limited to the following per NEC 110.14(C).

60°C when terminated to equipment for circuits rated 100 amperes or less or marked for size 14 AWG through 1 AWG conductor.

75°C when terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG.

90°C for ampacity derating purposes.

When the neutral is considered current-carrying conductor, the ampacity of 4/C cables shall be reduced by a factor of 0.80 per NEC 310.15(B)(2)(a).

Circuit sizes 12 AWG and 10 AWG are available as stranded conductors.

The above data is approximate and subject to normal manufacturing tolerances.

Features:

NEC Article 250.118(8) recognizes the combination of the interlocking armor and bond wire as an equipment grounding conductor. Installation costs reduced up to 50% over conduit and wire. Insulating anti-short bushings are supplied with each reel or coil. SmartColorID® labels are spaced at regular intervals on the exterior of the metal sheathing and are removable. For ease of installation and pulling, cable is reverse wound on reels. Coils are designed to be pulled from the inside.

Standard Conductor Color Coding

Number	120/208Y
2	Black/White
3	Black/Red/White
4	Black/Red/Blue/White
Ground	Green

Additional colors available subject to ERQ

SmartColorID® Legend:



See page 104 for complete legend

Number	277/480Y
2	Brown/Gray
2	Orange/Gray
2	Yellow/Gray
2	Purple/Gray
3	Brown/Yellow/Gray
3	Brown/Orange/Gray
4	Brown/Orange/Yellow/Gray
4	Brown/Yellow/Purple/Gray
Ground	Green