

Covered Conductors - Tree Wire Systems



Description:

Tree wire or covered open wire consists of the conductor (aluminum, aluminum alloy or ACSR) and the extruded covering (conductor shield, low density inner layer and protective outer layer). Covering thickness depends on the system voltage. It is designed for full span applications and is supported on polyethylene insulators. We also offer a two layer covered conductor design for 15kV systems that are not subject to heavy tree contact. Covered conductors are available in black or gray depending on visual preference.

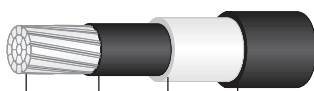
Benefits:

- Covering prevents faults due to contact
- Proprietary, high density outer layer resists abrasion, electrical tracking and UV degradation.
- Reduced NESC phase spacing is possible due to high impulse strength covering.
- Pole hardware is the same as bare wire construction except that Hendrix polyethylene insulators are required.

Application:

Hendrix provides tree wire designed for systems from 15kV through 46kV. Polyethylene insulators must be used to insure dielectric compatibility with conductor covering. Conductors are supported on crossarms or standoff brackets. Span lengths are limited by the conductor breaking strength and the amount of sag that is permissible. Covered conductors are rated for continuous operation at 75°C. (Consult Hendrix sales representative for 46kV tree wire systems).

15kV Tree Wire

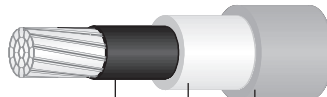


0.075" black or gray high density polyethylene (0.080" for 795 kcmil)

0.075" natural linear low density polyethylene (0.080" for 795 kcmil)

0.015" black semiconducting polyethylene (0.020" for 477 kcmil and larger)

25kV Tree Wire

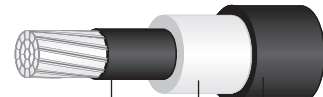


0.125" black or gray high density polyethylene

0.125" natural linear low density polyethylene

0.015" black semiconducting polyethylene (0.020" for 477 kcmil and larger)

35kV Tree Wire



0.125" black or gray high density polyethylene

0.175" natural linear low density polyethylene

0.015" black semiconducting polyethylene (0.020" for 477 kcmil and larger)

Aluminum, Aluminum Alloy or ACSR (copper, AWAC, ACAR conductors are also available)

continued

Covered Conductors - Tree Wire Systems



ACSR Concentric Round Conductors*

15kV

Part Number	Size	Code Word	Strands (Al/Steel)	15kV Tree Wire	
				Conductor Diameter (in)	Cable Weight (lbs/1000 ft)
T0010RR15B3-00	1/0 AWG	Raven	6/1	0.728	284
T0020RR15B3-00	2/0 AWG	Quail	6/1	0.777	336
T0030RR15B3-00	3/0 AWG	Pigeon	6/1	0.832	400
T0040RR15B3-00	4/0 AWG	Penguin	6/1	0.893	478
T0266RR15B3-00	266.8 kcmil	Waxwing	18/1	0.939	480
T0336RR15B3-00	336.4 kcmil	Merlin	18/1	1.014	576
T0397RR15B3-00	397.5 kcmil	Chickadee	18/1	1.073	660
T0477RR15B3-00	477.0 kcmil	Pelican	18/1	1.154	775

25kV

Part Number	Size	Code Word	Strands (Al/Steel)	25kV Tree Wire	
				Conductor Diameter (in)	Cable Weight (lbs/1000 ft)
T0010RR25B3-00	1/0 AWG	Raven	6/1	0.928	391
T0020RR25B3-00	2/0 AWG	Quail	6/1	0.977	450
T0030RR25B3-00	3/0 AWG	Pigeon	6/1	1.032	521
T0040RR25B3-00	4/0 AWG	Penguin	6/1	1.093	607
T0266RR25B3-00	266.8 kcmil	Waxwing	18/1	1.139	615
T0336RR25B3-00	336.4 kcmil	Merlin	18/1	1.214	720
T0397RR25B3-00	397.5 kcmil	Chickadee	18/1	1.273	812
T0477RR25B3-00	477.0 kcmil	Pelican	18/1	1.354	938

35kV

Part Number	Size	Code Word	Strands (Al/Steel)	35kV Tree Wire	
				Conductor Diameter (in)	Cable Weight (lbs/1000 ft)
T0010RR35B3-00	1/0 AWG	Raven	6/1	1.028	454
T0020RR35B3-00	2/0 AWG	Quail	6/1	1.077	516
T0030RR35B3-00	3/0 AWG	Pigeon	6/1	1.132	591
T0040RR35B3-00	4/0 AWG	Penguin	6/1	1.193	681
T0266RR35B3-00	266.8 kcmil	Waxwing	18/1	1.239	691
T0336RR35B3-00	336.4 kcmil	Merlin	18/1	1.314	802
T0397RR35B3-00	397.5 kcmil	Chickadee	18/1	1.373	897
T0477RR35B3-00	477.0 kcmil	Pelican	18/1	1.454	1,028

*Conductor selection must be based on rated breaking strength, span length and regional loading conditions. Conductor sizes not shown may be available upon request.

continued

Covered Conductors - Tree Wire Systems



Aluminum Alloy (6201-T81) Concentric Round Conductors

15kV

Part Number	Size	Code Word	15kV Tree Wire	
			Conductor Diameter (in)	Cable Weight (lbs/1000 ft)
T0010RY15B3-00	1/0 AWG	Azusa	0.728	255
T0020RY15B3-00	2/0 AWG	Anaheim	0.777	299
T0030RY15B3-00	3/0 AWG	Amherst	0.832	353
T0040RY15B3-00	4/0 AWG	Alliance	0.893	419

25kV

Part Number	Size	Code Word	25kV Tree Wire	
			Conductor Diameter (in)	Cable Weight (lbs/1000 ft)
T0010RY25B3-00	1/0 AWG	Azusa	0.928	362
T0020RY25B3-00	2/0 AWG	Anaheim	0.977	413
T0030RY25B3-00	3/0 AWG	Amherst	1.032	474
T0040RY25B3-00	4/0 AWG	Alliance	1.093	548

35kV

Part Number	Size	Code Word	35kV Tree Wire	
			Conductor Diameter (in)	Cable Weight (lbs/1000 ft)
T0010RY35B3-00	1/0 AWG	Azusa	1.028	424
T0020RY35B3-00	2/0 AWG	Anaheim	1.077	478
T0030RY35B3-00	3/0 AWG	Amherst	1.132	543
T0040RY35B3-00	4/0 AWG	Alliance	1.193	621

Conductor sizes not shown may be available upon request.