Covered Line Wire With Thermoplastic Polyethylene (PE)

Aluminum Conductor Covered with Black Polyethylene (PE)

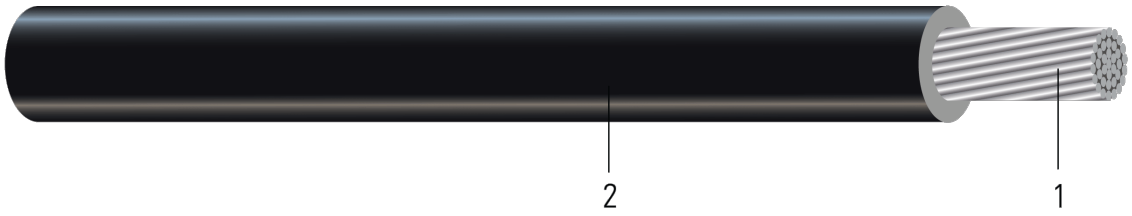

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Conductors are solid or stranded compressed aluminum
2. **Covering:** Black Polyethylene (PE)

APPLICATIONS AND FEATURES:

Aluminum alloy 1350-H19 or 6201 concentrically stranded. Covered with Black Polyethylene (PE). Used primarily for, but not limited to, overhead secondary distribution lines. Installed on insulators, otherwise treated as a bare conductor. Black Polyethylene (PE) covered line wires have the below temperature ratings:

- Normal Service temperature of 75ºC
- Emergency Overload of 95ºC
- Short Circuit temperature of 150ºC

SPECIFICATIONS:

- ASTM B230 Aluminum, 1350-H19 Wire for Electrical Purposes
- ASTM B231 Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors
- ASTM B400 Standard Specification for Compact Round Concentric-Lay-Stranded, Aluminum 1350 Conductors
- ICEA S-70-547 Weather Resistant Polyethylene Covers Conductors

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Table 1 – Weights and Measurements

Code Word	Phase Cond. Size	Phase Strand	Dia. Over Phase Conductor	Phase Insul. Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	No.	inch	mil	inch	lb/1000ft
PEAR	4	SOLID	0.204	45	0.294	58

All dimensions are nominal and subject to normal manufacturing tolerances
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

Table 2 – Electrical and Engineering Data

Code Word	Phase Cond. Size	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	GMR	Allowable Ampacity In Air 75/90°C
	AWG/Kcmil	Ω/1000ft	Ω/1000ft	Ω/1000ft	ft	Amp
PEAR	4	0.258	0.321	0.048	0.084	100/115

* Ampacity ratings based on 75ºC conductor temperature 40ºC ambient temperature. Wind speed 2 ft./sec. in sun.
* Diameter equivalent to ACSR construction or 1350 aluminum equivalent.

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