Transformer Riser Wire, Protected Ground Wire (PGW), Cathodic Protection (CP) Cables, LLDPE

Black Polyethylene Covered. Solid or Stranded Soft Drawn Copper Conductor

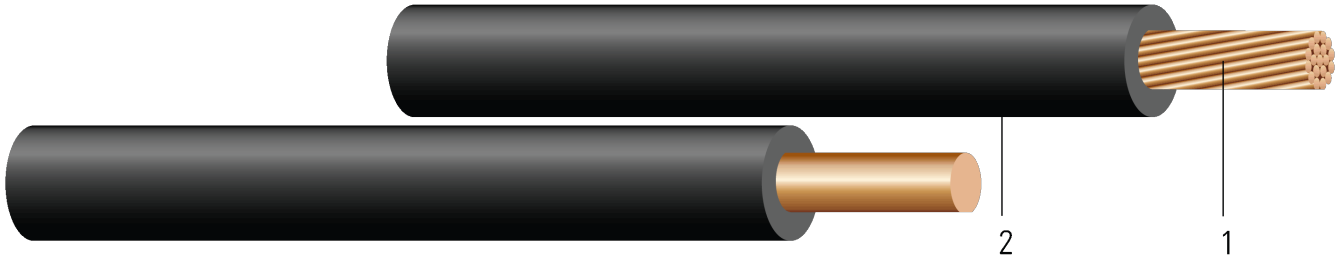

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Conductors are solid or stranded compressed copper
2. **Covering:** Black Linear Low Density Polyethylene (LLDPE) also known as High Molecular Weight Polyethylene (HMWPE)

APPLICATIONS AND FEATURES:

Used as covered grounding conductors, protected ground wires (PGW), cathodic protection (CP) cables, or on transformers as connection between line conductor and transformer primary bushing in applications where protection from momentary contact from wildlife is needed. Although not treated as an insulation, the thermoplastic polyethylene covering does provide an increased level of protection from momentary grounded contacts caused by wildlife, excessive wind and tree limbs or other grounded objects in the proximity of the high voltage lead. May be used on distribution system voltages up to 35kV line-to-line.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ICEA S-70-547 Weather Resistant Polyethylene Covers Conductors

Copyright © 2026 Southwire Company, LLC. All Rights Reserved

Table 1 – Weights and Measurements

Stock Number	Phase Cond. Size	Phase Strand	Dia. Over Phase Conductor	Phase Insul. Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	No.	inch	mil	inch	lb/1000ft
142745	4	SOLID	0.204	110	0.424	170

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

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
4	0.258	0.32	0.048	0.084	125/140

Copyright © 2026 Southwire Company, LLC. All Rights Reserved