

WP

Aluminium Polacen Wire



GENERAL INFORMATION

The WP Polacen is an aluminum AAC, ACSR or AAAC conductor, with insulation either thermoplastic (LDPE) or thermoset black crosslinked polyethylene (XLPE).

FEATURES

- The WP cables are designed with a high resistance thermoset cross-linked polyethylene insulation (XLPE) to be installed on dry, damp or wet locations at temperatures not exceeding 90°C, and 1000 V or with thermoplastic Polyethylene designed to operate at 75°C and 600 V maximum operating voltage.
- The WP tensile capability depends on the core conductor: AAC lower tensile and ACSR / AAAC higher tensile.
- The carbon black insulation content provides UV resistance, allowing product installation directly exposed to sunlight.

CERTIFICATIONS AND DESIGN STANDARDS

Standards of design: ASTM B230, ASTM B231, ASTM B398, ASTM B399 and ANSI/ICEA S-95-658

Certifications: CIDET 03543

CABLE DESIGN

Conductor material	Aluminium
Core insulation material	XLPE

ELECTRICAL & THERMAL PARAMETERS

Nominal voltage U [V]	600
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INSTALLATION DETAILS

Application	Industrial Installations;Oil & Gas;Power Distribution
Outdoor installation	Yes
Underground installation	No
Suitable as installation cable	Yes

SPECIFIC APPLICATIONS

- The WP conductors are designed mainly for secondary aerial power distribution in highly contaminated urban areas.
- The XLPE crosslinked insulation provides high-performance during overload and short-circuit conditions.

LEGEND ON THE CABLE

For all gauges, in LDPE insulation, the legend to be printed is:

WP (GAUGE) AWG ((GAUGE) mm²) PRYSMIAN (R) PHELPS DODGE (R)

For all gauges, in XLPE insulation, the legend to be printed is:

XLPE (GAUGE) AWG ((GAUGE) mm²) PRYSMIAN (R) PHELPS DODGE (R)

PRODUCT CHARACTERISTICS

External code	Nominal cross section conductor AWG [kcmil]	Nominal cross section conductor [mm ²]	Conductor strand count	Nominal thickness insulation [mm]	Diameter conductor [mm]	Cable weight [kg/km]
Apple	6	13.3	1	1.14	6.39	54
Plum	6	13.3	7	1.14	6.94	60
Pear	4	21.2	1	1.14	7.47	79
Apricot	4	21.2	7	1.14	8.16	88
Peach	2	33.6	7	1.14	9.7	130
Quince	1/0	53.5	7	1.52	12.4	210
Haw	1/0	53.5	19	1.52	12.5	207
Orange	2/0	67.4	7	1.52	13.55	257
Ironwood	2/0	67.4	19	1.52	13.67	250
Fig	3/0	85	7	1.52	14.84	316
Lemon	3/0	85	19	1.52	14.98	307
Olive	4/0	107	7	1.52	16.29	389
Pomegranate	4/0	107	19	1.52	16.44	380
Sassafras	250	127	19	2.03	18.63	364
Mulberry	266.8	135.2	19	2.03	19.11	480
Basswood	300	152.2	19	2.03	20.02	535

The conductor operating amperage is defined by the installation condition and operating temperatures identified. See Table 6 on Ampacities for Aluminum & ACSR Overhead Electrical Conductors issued by the Aluminum Association. Note: The values given may vary according to the manufacturing tolerances.