Product Overview

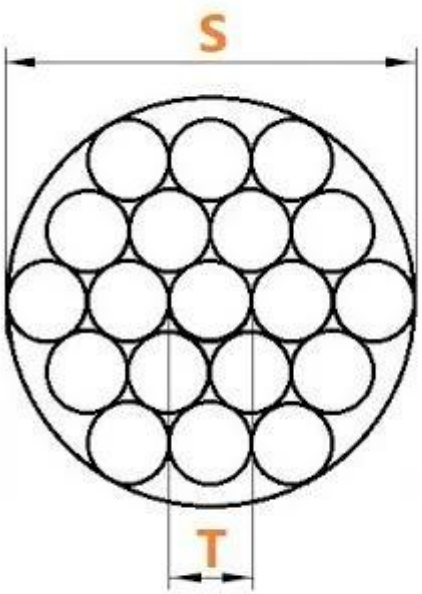
AAAC AL7 (All Aluminium Alloy Conductor) is an alloyed aluminium conductor manufactured in accordance with EN 50182. It is designed to provide a favorable strength-to-weight ratio while maintaining good electrical performance.

Compared with conventional FeAl conductors, AAAC AL7 offers excellent corrosion resistance and favorable tensioning characteristics, making it suitable for overhead power networks exposed to demanding environmental conditions.

With its combination of mechanical strength, electrical performance, and corrosion resistance, AAAC AL7 is widely used in power distribution and medium- to high-voltage transmission networks. Optional grease filling during the stranding process can provide additional protection against corrosion and help extend the conductor's service life.

Conductor Construction





AAAC AL7 consists of stranded aluminium alloy wires concentrically laid to form an overhead conductor.

★ Address: West Industrial Park, Zhulin Town, Gongyi City, Henan Province, China. ★
★ Tel:+86-371-5502-1747 Mob:+86-173-3570-4553 www.qzcablegroup.com E-mail: info@qzcablegroup.com ★

- **Conductor Material:** Aluminium alloy (AL7)
- **Construction:** Concentric-lay stranded wires
- **Conductor Type:** All Aluminium Alloy Conductor (AAAC)
- **Surface Treatment:** Optional grease filling during stranding

The conductor configuration, number of wires, and nominal cross-sectional area can be customized according to applicable standards and project requirements.

Applications

AAAC AL7 conductors are suitable for overhead power networks requiring a combination of mechanical strength, electrical performance, and corrosion resistance.

Typical applications include:

- **Power Distribution Networks:** Overhead distribution lines in utility networks.
- **Medium-Voltage Transmission:** Overhead conductors for medium-voltage power systems.
- **High-Voltage Transmission:** Applications requiring favorable strength-to-weight characteristics.
- **Corrosive Environments:** Power networks exposed to demanding environmental conditions.
- **Utility Infrastructure:** Overhead line construction and network expansion projects.

Key Features & Benefits

- **High Strength-to-Weight Ratio:** Provides favorable mechanical performance relative to conductor weight.
- **Good Electrical Performance:** Maintains suitable electrical characteristics for overhead power networks.
- **Excellent Corrosion Resistance:** Offers improved corrosion resistance compared with conventional FeAl conductors.
- **Favorable Tensioning Characteristics:** Suitable for overhead line installations requiring mechanical tension.
- **Optional Grease Filling:** Grease can be applied during stranding to provide additional corrosion protection.
- **Wide Network Applications:** Suitable for distribution, medium-voltage, and high-voltage overhead power networks.

Applicable Standards

- **Conductor Standard:** SS EN 50182

Conductor design, dimensions, and testing requirements can be confirmed according to the applicable project specification.

Technical Specifications

★ Address: West Industrial Park, Zhulin Town, Gongyi City, Henan Province, China. ★
★ Tel:+86-371-5502-1747 Mob:+86-173-3570-4553 www.qzcablegroup.com E-mail: info@qzcablegroup.com ★

Name	Old code	Cross section	Number of strands	Strand diameter	Conductor diameter	Total weight	Maximum breaking load	DC resistance
62-AL7	AlMgSi - 62	55 mm²	7	3.37 mm	10.1 mm	170 kg/km	17.2 kN	0.4858 Ω/km
99-AL7	AlMgSi - 99	97 mm²	7	4.25 mm	12.8 mm	271 kg/km	25.3 kN	0.3055 Ω/km
159-AL7	AlMgSi - 157	158 mm²	19	3.26 mm	16.3 mm	429 kg/km	43.6 kN	0.1923 Ω/km
241-AL7	AlMgSi - 241	241 mm²	19	4.02 mm	20.1 mm	648 kg/km	61.5 kN	0.1265 Ω/km
330-AL7	AlMgSi - 329	330 mm²	37	3.37 mm	23.6 mm	909 kg/km	90.8 kN	0.0927 Ω/km
454-AL7	AlMgSi - 454	449 mm²	61	3.08 mm	27.7 mm	1256 kg/km	125 kN	0.0676 Ω/km
594-AL7	AlMgSi - 593	593 mm²	61	3.52 mm	31.7 mm	1640 kg/km	157.3 kN	0.0517 Ω/km
774-AL7	AlMgSi - 774	774 mm²	61	4.02 mm	36.2 mm	2139 kg/km	197.4 kN	0.0397 Ω/km
911-AL7	AlMgSi - 910	910 mm²	61	4.36 mm	39.2 mm	2513 kg/km	232.2 kN	0.0337 Ω/km

Detailed technical data can be provided according to the required conductor size, standard, and project specifications.

Why Choose QZ Cable?

QZ Cable manufactures overhead conductors for power transmission and distribution projects. We support customers with conductor configurations and technical specifications based on project requirements.

- Direct manufacturer supply
- Conductor configurations for different network applications
- Production according to confirmed technical specifications
- Optional grease filling where required
- Support for project and bulk procurement requirements

Contact QZ Cable with your required conductor size, applicable standard, and order quantity for technical information and a quotation.

Frequently Asked Questions

1. What is AAAC AL7 conductor?

AAAC AL7 is an all aluminium alloy conductor made from stranded aluminium alloy wires. It is designed to provide a favorable strength-to-weight ratio, good electrical performance, and excellent corrosion resistance.

2. What standard applies to AAAC AL7?

★ Address: West Industrial Park, Zhulin Town, Gongyi City, Henan Province, China. ★
★ Tel:+86-371-5502-1747 Mob:+86-173-3570-4553 www.qzcablegroup.com E-mail: info@qzcablegroup.com ★

The supplied product reference specifies EN 50182, with SS EN 50182 listed as the conductor standard. The applicable standard designation should be confirmed for each project.

3. Where is AAAC AL7 commonly used?

It is used in overhead power distribution, medium-voltage, and high-voltage networks, particularly where mechanical performance and corrosion resistance are important.

4. Can AAAC AL7 be supplied with grease filling?

Yes. Grease filling can be applied during the stranding process when additional corrosion protection is required.

5. Can QZ Cable manufacture AAAC AL7 according to project requirements?

Conductor dimensions and stranding configurations can be discussed according to the confirmed standard, technical specification, and order quantity.

★ Address: West Industrial Park, Zhulin Town, Gongyi City, Henan Province, China. ★
★ Tel:+86-371-5502-1747 Mob:+86-173-3570-4553 www.qzcablegroup.com E-mail: info@qzcablegroup.com ★