

Aluminum Strip For Cable Shielding



Aluminum strip for cable shielding is used for electrical shielding, electromagnetic interference protection and wrapping layers in power cables, communication cables, control cables and special cables. With good conductivity, stable mechanical properties, smooth surface and excellent slitting quality, aluminum shielding strip ensures reliable cable production and long-term shielding performance.

Specifications

Product Name	Aluminum Strip for Cable Shielding
Alloy	1050, 1060, 1070, 1100, 3003, 5052, 5154, 5754, 8011
Temper	O, H12, H14, H16, H18, H22, H24, H26
Thickness	0.05–1.00 mm or customized
Width	10–1200 mm or customized
Inner Diameter	76 mm, 150 mm, 300 mm, 400 mm, 500 mm or customized
Surface	Mill finish, clean, smooth, oil-free
Edge	Slit edge, trimmed edge, burr-free edge
Coil Type	Coil, strip, tape
Conductivity	According to alloy and temper
Application	Cable shielding, cable screening, cable wrapping, EMI shielding

Available Alloys

Alloy Series	Common Alloys	Main Features	Typical Use
1000 Series	1050,1060, 1070, 1100	High conductivity, soft, good ductility	General cable shielding, cable screening, wrapping
3000 Series	3003, 3004	Better strength than pure aluminum, good corrosion resistance	Shielding layer requiring moderate strength
5000 Series	5052,5154, 5754	Higher strength, good corrosion resistance, better mechanical stability	Special cables, marine cables, industrial cables, high-strength shielding
8000 Series	8011, 8079	Good formability, stable foil/strip performance	Thin shielding tape, laminated cable tape

Common Tempers

Temper	Description	Application
O	Soft annealed condition	Flexible wrapping, high ductility shielding layer
H12 / H22	Quarter hard / strain hardened and partially annealed	Good flexibility and moderate strength
H14 / H24	Half hard / stable strength	General shielding strip with better dimensional stability
H16 / H26	Three-quarter hard	Higher strength shielding applications
H18	Full hard	Thin hard aluminum tape, stable high-speed production

Mechanical Properties

Aluminum strip for cable shielding requires stable tensile strength, proper elongation and good flexibility to ensure smooth unwinding, continuous wrapping and reliable shielding performance. Soft temper aluminum strip provides excellent formability and flexibility, while hard temper aluminum strip offers better tension resistance and dimensional stability during high-speed cable production.

Alloy	Temper	Tensile Strength Rm	Yield Strength Rp0.2	Elongation A
1060	O	60 – 95 MPa	20 – 45 MPa	20 – 35%
1060	H18	120 – 160 MPa	100 – 145 MPa	1 – 5%
1100	O	75 – 110 MPa	25 – 55 MPa	18 – 30%
3003	H14	140 – 180 MPa	115 – 160 MPa	3 – 10%
5052	O	170 – 215 MPa	65 – 100 MPa	12 – 25%
5052	H32	210 – 260 MPa	130 – 190 MPa	5 – 12%
5154	H32	255 – 305 MPa	160 – 220 MPa	6 – 14%
5754	H22/H32	220 – 270 MPa	130 – 190 MPa	8 – 16%
8011	O	80 – 120 MPa	30 – 65 MPa	8 – 25%
8011	H18	150 – 200 MPa	130 – 180 MPa	1 – 5%

Conductivity

Alloy	Conductivity Level	Description
1050 / 1060 / 1070	High	Suitable for high-conductivity shielding applications
1100	Medium-high	Good balance of conductivity and formability
3003	Medium	Better strength, moderate conductivity
5052 / 5154 / 5754	Lower than 1000 series	Higher strength and corrosion resistance

Alloy	Conductivity Level	Description
8011	Medium	Suitable for thin aluminum tape and laminated shielding tap

For applications requiring higher electrical conductivity, 1000 series aluminum strip is commonly recommended. For applications requiring higher strength and corrosion resistance, 5000 series aluminum strip can be selected according to cable design requirements.

Key Features

- Good electrical shielding performance
- Stable electromagnetic interference protection
- Smooth and clean surface
- Good flexibility and wrapping performance
- Stable tensile strength and elongation
- Suitable for high-speed cable production
- Burr-free edge after precision slitting
- Good corrosion resistance
- Custom thickness, width and coil size available

Applications

- Power cables
- Medium voltage cables
- High voltage cables
- Communication cables
- Control cables
- Instrument cables
- Coaxial cables
- Special industrial cables
- Marine cables
- Outdoor cables
- EMI shielding cable structures
- Cable screening and wrapping layers

Packaging

Aluminum strip for cable shielding is packed with moisture-proof paper, plastic film, wooden pallet or wooden case according to export requirements. Each coil can be packed securely to prevent moisture, oxidation, edge damage and deformation during transportation.