



EV HIGH VOLTAGE ALUMINIUM CABLE

ISO 19642

11 orderable sizes

STANDARD ISO 19642	VOLTAGE CLASS 600 V, 1 kV or specified high-voltage class	TEMPERATURE CLASS -40 °C to +125 °C or specified class
CONDUCTOR Flexible automotive aluminium conductor	INSULATION / JACKET Orange high-voltage insulation or sheath	CROSS-SECTION RANGE 2.5 mm ² to 120 mm ²

Construction

- 1

Conductor – Flexible automotive aluminium conductor · 7 × Ø2.52 mm · IEC 60228 cl.2
- 2

Insulation – High-voltage automotive insulation · Wall 0.8–1.2 mm

Size selection — all available cross-sections

Cable reference	Cross-section	Conductor construction	Max DC resistance at 20 °C (Ω/km)	Voltage class	Insulation / sheath wall guide (mm)	Overall diameter guide (mm)	Bend radius guide
EV HV Single Core Al Unshielded 2.5 mm ²	2.5 mm ²	Compacted Al strands	12.1	600 V, 1 kV or specified high-voltage class	0.8–1.2	4.05	33 mm moving guide
EV HV Single Core Al Unshielded 4 mm ²							
EV HV Single Core Al Unshielded 6 mm ²	6 mm ²	Compacted Al strands	5.05	600 V, 1 kV or specified high-voltage class	0.8–1.2	5.18	42 mm moving guide
EV HV Single Core Al Unshielded 10 mm ²	10 mm ²	Compacted Al strands	3.03	600 V, 1 kV or specified high-	0.8–1.2	6.10	49 mm moving guide

Cable reference	Cross-section	Conductor construction	Max DC resistance at 20 °C (Ω/km)	Voltage class	Insulation / sheath wall guide (mm)	Overall diameter guide (mm)	Bend radius guide
				voltage class			
EV HV Single Core Al Unshielded 16 mm ²	16 mm ²	Compacted Al strands	1.89	600 V, 1 kV or specified high-voltage class	0.8–1.2	7.19	58 mm moving guide
EV HV Single Core Al Unshielded 25 mm ²	25 mm ²	Compacted Al strands	1.21	600 V, 1 kV or specified high-voltage class	0.8–1.2	8.49	68 mm moving guide
EV HV Single Core Al Unshielded 35 mm ²	35 mm ²	Compacted Al strands	0.866	600 V, 1 kV or specified high-voltage class	0.8–1.2	9.68	78 mm moving guide
EV HV Single Core Al Unshielded 50 mm ²	50 mm ²	Compacted Al strands	0.606	600 V, 1 kV or specified high-voltage class	1.2–1.6	11.98	96 mm moving guide
EV HV Single Core Al Unshielded 70 mm ²	70 mm ²	Compacted Al strands	0.433	600 V, 1 kV or specified high-voltage class	1.2–1.6	13.66	110 mm moving guide
EV HV Single Core Al Unshielded 95 mm ²	95 mm ²	Compacted Al strands	0.319	600 V, 1 kV or specified high-voltage class	1.2–1.6	15.45	124 mm moving guide
EV HV Single Core Al Unshielded 120 mm ²	120 mm ²	Compacted Al strands	0.253	600 V, 1 kV or specified high-voltage class	1.2–1.6	17.01	137 mm moving guide