



EV HIGH VOLTAGE 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, +150 °C or specified class
CONDUCTOR Flexible stranded copper conductor	INSULATION / JACKET Orange high-voltage insulation or sheath	CROSS-SECTION RANGE 2.5 mm ² to 120 mm ²

Construction

- 1  Conductor – Flexible stranded copper conductor · 276 × Ø0.4 mm
- 2  Insulation – XLP0, silicone or high-voltage automotive compound · 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 Cu Unshielded 2.5 mm ²	2.5 mm ²	50/0.25	7.6	600 V, 1 kV or specified high-voltage class	0.8–1.2	4.05	33 mm moving guide
EV HV Single Core Cu Unshielded 4 mm ²	4 mm ²	Fine stranded Cu	4.7	600 V, 1 kV or specified high-voltage class	0.8–1.2	4.60	37 mm moving guide
EV HV Single Core Cu Unshielded 6 mm ²	6 mm ²	84/0.30	3.1	600 V, 1 kV or specified high-voltage class	0.8–1.2	5.18	42 mm moving guide
EV HV Single Core Cu Unshielded 10 mm ²	10 mm ²	80/0.40	1.83	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 Cu Unshielded 16 mm ²	16 mm ²	126/0.40	1.15	600 V, 1 kV or specified high-voltage class	0.8–1.2	7.19	58 mm moving guide
EV HV Single Core Cu Unshielded 25 mm ²	25 mm ²	196/0.40	0.727	600 V, 1 kV or specified high-voltage class	0.8–1.2	8.49	68 mm moving guide
EV HV Single Core Cu Unshielded 35 mm ²	35 mm ²	276/0.40	0.524	600 V, 1 kV or specified high-voltage class	0.8–1.2	9.68	78 mm moving guide
EV HV Single Core Cu Unshielded 50 mm ²	50 mm ²	396/0.40	0.387	600 V, 1 kV or specified high-voltage class	1.2–1.6	11.98	96 mm moving guide
EV HV Single Core Cu Unshielded 70 mm ²	70 mm ²	360/0.50	0.268	600 V, 1 kV or specified high-voltage class	1.2–1.6	13.66	110 mm moving guide
EV HV Single Core Cu Unshielded 95 mm ²	95 mm ²	475/0.50	0.193	600 V, 1 kV or specified high-voltage class	1.2–1.6	15.45	124 mm moving guide
EV HV Single Core Cu Unshielded 120 mm ²	120 mm ²	608/0.50	0.153	600 V, 1 kV or specified high-voltage class	1.2–1.6	17.01	137 mm moving guide