



SHIELDED EV MULTICORE CABLE

ISO 19642

33 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 copper or aluminium power conductors	INSULATION / JACKET Orange high-voltage sheath	CROSS-SECTION RANGE 2.5 mm² to 120 mm²

Construction

- 1

 Conductor (per core) – Copper Conductor · 80 × Ø0.4 mm
- 2

 Core insulation – High-voltage automotive insulation · Wall 0.8–1.2 mm
- 3

 Filler – PP filler
- 4

 Shield – Braid shield (C)
- 5

 Sheath – Orange high-voltage sheath

Size selection — all available cross-sections

Cable reference	Core layout / size	Conductor construction	Max DC resistance at 20 °C (Ω/km)	Voltage class	Insulation / sheath wall guide (mm)	EMC screen	Overall diameter guide (mm)	Bend radius guide
EV HV Multicore Shielded Cu 2C x 2.5 mm ²	2C x 2.5 mm ²	50/0.25	7.6	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	10.3	83 mm moving guide
EV HV Multicore Shielded Cu 3C x 2.5 mm ²	3C x 2.5 mm ²	50/0.25	7.6	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	11.5	92 mm moving guide
EV HV Multicore Shielded Cu 4C x 2.5 mm ²	4C x 2.5 mm ²	50/0.25	7.6	600 V, 1 kV or specified high-	0.8–1.2	Overall copper braid or tape	13.1	105 mm moving guide

Cable reference	Core layout / size	Conductor construction	Max DC resistance at 20 °C (Ω/km)	Voltage class	Insulation / sheath wall guide (mm)	EMC screen	Overall diameter guide (mm)	Bend radius guide
				voltage class		screen for EMC control		
EV HV Multicore Shielded Cu 2C x 4 mm ²	2C x 4 mm ²	Fine stranded Cu	4.7	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	12.9	104 mm moving guide
EV HV Multicore Shielded Cu 3C x 4 mm ²	3C x 4 mm ²	Fine stranded Cu	4.7	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	14.7	118 mm moving guide
EV HV Multicore Shielded Cu 4C x 4 mm ²	4C x 4 mm ²	Fine stranded Cu	4.7	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	11.5	92 mm moving guide
EV HV Multicore Shielded Cu 2C x 6 mm ²	2C x 6 mm ²	84/0.30	3.1	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	16.4	132 mm moving guide
EV HV Multicore Shielded Cu 3C x 6 mm ²	3C x 6 mm ²	84/0.30	3.1	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	12.7	102 mm moving guide
EV HV Multicore Shielded Cu 4C x 6 mm ²	4C x 6 mm ²	84/0.30	3.1	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	14.3	115 mm moving guide
EV HV Multicore Shielded Cu 2C x 10 mm ²	2C x 10 mm ²	80/0.40	1.83	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen	14.7	118 mm moving guide

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						for EMC control		
EV HV Multicore Shielded Cu 3C x 10 mm ²	3C x 10 mm ²	80/0.40	1.83	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	16.5	132 mm moving guide
EV HV Multicore Shielded Cu 4C x 10 mm ²	4C x 10 mm ²	80/0.40	1.83	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	19.0	152 mm moving guide
EV HV Multicore Shielded Cu 2C x 16 mm ²	2C x 16 mm ²	126/0.40	1.15	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	19.2	154 mm moving guide
EV HV Multicore Shielded Cu 3C x 16 mm ²	3C x 16 mm ²	126/0.40	1.15	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	22.1	177 mm moving guide
EV HV Multicore Shielded Cu 4C x 16 mm ²	4C x 16 mm ²	126/0.40	1.15	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	17.1	137 mm moving guide
EV HV Multicore Shielded Cu 2C x 25 mm ²	2C x 25 mm ²	196/0.40	0.727	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	25.8	207 mm moving guide
EV HV Multicore Shielded Cu 3C x 25 mm ²	3C x 25 mm ²	196/0.40	0.727	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	19.9	160 mm moving guide

Cable reference	Core layout / size	Conductor construction	Max DC resistance at 20 °C (Ω/km)	Voltage class	Insulation / sheath wall guide (mm)	EMC screen	Overall diameter guide (mm)	Bend radius guide
EV HV Multicore Shielded Cu 4C x 25 mm²	4C x 25 mm²	196/0.40	0.727	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	22.4	180 mm moving guide
EV HV Multicore Shielded Cu 2C x 35 mm²	2C x 35 mm²	276/0.40	0.524	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	22.4	180 mm moving guide
EV HV Multicore Shielded Cu 3C x 35 mm²	3C x 35 mm²	276/0.40	0.524	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	25.3	203 mm moving guide
EV HV Multicore Shielded Cu 4C x 35 mm²	4C x 35 mm²	276/0.40	0.524	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	29.2	234 mm moving guide
EV HV Multicore Shielded Cu 2C x 50 mm²	2C x 50 mm²	396/0.40	0.387	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	31.0	248 mm moving guide
EV HV Multicore Shielded Cu 3C x 50 mm²	3C x 50 mm²	396/0.40	0.387	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	35.7	286 mm moving guide
EV HV Multicore Shielded Cu 4C x 50 mm²	4C x 50 mm²	396/0.40	0.387	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	27.4	220 mm moving guide

Cable reference	Core layout / size	Conductor construction	Max DC resistance at 20 °C (Ω/km)	Voltage class	Insulation / sheath wall guide (mm)	EMC screen	Overall diameter guide (mm)	Bend radius guide
EV HV Multicore Shielded Cu 2C x 70 mm²	2C x 70 mm²	360/0.50	0.268	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	40.5	324 mm moving guide
EV HV Multicore Shielded Cu 3C x 70 mm²	3C x 70 mm²	360/0.50	0.268	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	31.0	248 mm moving guide
EV HV Multicore Shielded Cu 4C x 70 mm²	4C x 70 mm²	360/0.50	0.268	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	35.1	281 mm moving guide
EV HV Multicore Shielded Cu 2C x 95 mm²	2C x 95 mm²	475/0.50	0.193	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	34.8	279 mm moving guide
EV HV Multicore Shielded Cu 3C x 95 mm²	3C x 95 mm²	475/0.50	0.193	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	39.5	316 mm moving guide
EV HV Multicore Shielded Cu 4C x 95 mm²	4C x 95 mm²	475/0.50	0.193	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	45.6	365 mm moving guide
EV HV Multicore Shielded Cu 2C x 120 mm²	2C x 120 mm²	608/0.50	0.153	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	43.3	347 mm moving guide

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				voltage class		for EMC control		
EV HV Multicore Shielded Al 4C x 4 mm ²	4C x 4 mm ²	Compacted Al strands	7.58	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	11.5	92 mm moving guide
EV HV Multicore Shielded Al 2C x 6 mm ²	2C x 6 mm ²	Compacted Al strands	5.05	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	16.4	132 mm moving guide
EV HV Multicore Shielded Al 3C x 6 mm ²	3C x 6 mm ²	Compacted Al strands	5.05	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	12.7	102 mm moving guide
EV HV Multicore Shielded Al 4C x 6 mm ²	4C x 6 mm ²	Compacted Al strands	5.05	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	14.3	115 mm moving guide
EV HV Multicore Shielded Al 2C x 10 mm ²	2C x 10 mm ²	Compacted Al strands	3.03	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	14.7	118 mm moving guide
EV HV Multicore Shielded Al 3C x 10 mm ²	3C x 10 mm ²	Compacted Al strands	3.03	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	16.5	132 mm moving guide
EV HV Multicore Shielded Al 4C x 10 mm ²	4C x 10 mm ²	Compacted Al strands	3.03	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	19.0	152 mm moving guide

Cable reference	Core layout / size	Conductor construction	Max DC resistance at 20 °C (Ω/km)	Voltage class	Insulation / sheath wall guide (mm)	EMC screen	Overall diameter guide (mm)	Bend radius guide
EV HV Multicore Shielded Al 2C x 16 mm²	2C x 16 mm²	Compacted Al strands	1.89	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	19.2	154 mm moving guide
EV HV Multicore Shielded Al 3C x 16 mm²	3C x 16 mm²	Compacted Al strands	1.89	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	22.1	177 mm moving guide
EV HV Multicore Shielded Al 4C x 16 mm²	4C x 16 mm²	Compacted Al strands	1.89	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	17.1	137 mm moving guide
EV HV Multicore Shielded Al 2C x 25 mm²	2C x 25 mm²	Compacted Al strands	1.21	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	25.8	207 mm moving guide
EV HV Multicore Shielded Al 3C x 25 mm²	3C x 25 mm²	Compacted Al strands	1.21	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	19.9	160 mm moving guide
EV HV Multicore Shielded Al 4C x 25 mm²	4C x 25 mm²	Compacted Al strands	1.21	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	22.4	180 mm moving guide
EV HV Multicore Shielded Al 2C x 35 mm²	2C x 35 mm²	Compacted Al strands	0.866	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	22.4	180 mm moving guide

Cable reference	Core layout / size	Conductor construction	Max DC resistance at 20 °C (Ω/km)	Voltage class	Insulation / sheath wall guide (mm)	EMC screen	Overall diameter guide (mm)	Bend radius guide
EV HV Multicore Shielded Al 3C x 35 mm²	3C x 35 mm²	Compacted Al strands	0.866	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	25.3	203 mm moving guide
EV HV Multicore Shielded Al 4C x 35 mm²	4C x 35 mm²	Compacted Al strands	0.866	600 V, 1 kV or specified high-voltage class	0.8–1.2	Overall copper braid or tape screen for EMC control	29.2	234 mm moving guide
EV HV Multicore Shielded Al 2C x 50 mm²	2C x 50 mm²	Compacted Al strands	0.606	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	31.0	248 mm moving guide
EV HV Multicore Shielded Al 3C x 50 mm²	3C x 50 mm²	Compacted Al strands	0.606	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	35.7	286 mm moving guide
EV HV Multicore Shielded Al 4C x 50 mm²	4C x 50 mm²	Compacted Al strands	0.606	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	27.4	220 mm moving guide
EV HV Multicore Shielded Al 2C x 70 mm²	2C x 70 mm²	Compacted Al strands	0.433	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	40.5	324 mm moving guide
EV HV Multicore Shielded Al 3C x 70 mm²	3C x 70 mm²	Compacted Al strands	0.433	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	31.0	248 mm moving guide

Cable reference	Core layout / size	Conductor construction	Max DC resistance at 20 °C (Ω/km)	Voltage class	Insulation / sheath wall guide (mm)	EMC screen	Overall diameter guide (mm)	Bend radius guide
EV HV Multicore Shielded Al 4C x 70 mm ²	4C x 70 mm ²	Compacted Al strands	0.433	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	35.1	281 mm moving guide
EV HV Multicore Shielded Al 2C x 95 mm ²	2C x 95 mm ²	Compacted Al strands	0.319	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	34.8	279 mm moving guide
EV HV Multicore Shielded Al 3C x 95 mm ²	3C x 95 mm ²	Compacted Al strands	0.319	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	39.5	316 mm moving guide
EV HV Multicore Shielded Al 4C x 95 mm ²	4C x 95 mm ²	Compacted Al strands	0.319	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	45.6	365 mm moving guide
EV HV Multicore Shielded Al 2C x 120 mm ²	2C x 120 mm ²	Compacted Al strands	0.253	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	43.3	347 mm moving guide
EV HV Multicore Shielded Al 3C x 120 mm ²	3C x 120 mm ²	Compacted Al strands	0.253	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	50.1	401 mm moving guide
EV HV Multicore Shielded Al 4C x 120 mm ²	4C x 120 mm ²	Compacted Al strands	0.253	600 V, 1 kV or specified high-voltage class	1.2–1.6	Overall copper braid or tape screen for EMC control	38.2	306 mm moving guide