



EN 50620 / IEC 62893 AC & DC Electric Vehicle Charging Cables

DC EV Charging Cable

1000–1500 V DC IEC 62893-4-1 Mode 4 CCS1/CCS2/NACS fast-charging cable
(125–800 A)



1000 / 1500 V DC IEC 62893-4-1

CCS2 / CCS1 / NACS / CHAdEMO

125–300 A Uncooled & 500–800 A Cooled

Application

DC EV Charging Cable is engineered to IEC 62893-4-1, EN 50620 and UL 2263 for Mode 4 high-power DC fast-charging dispensers (CCS2, CCS1, NACS / SAE J3400, CHAdEMO and GB/T 20234.3). Rated up to 1,500 V DC, it integrates extra-flexible Class 6 / Class 5 copper

Typical uses: Highway 150–400 kW DC fast plazas, CCS2 / CCS1 / NACS dispensers, Electric truck & bus depot chargers, CHAdEMO & GB/T DC fast stations, Mobile battery-buffered DC chargers

Construction



Cross-section, not to scale

1	Class 5 / Class 6 DC+ & DC– copper	IEC 60228
2	Type EVI-2 cross-linked LSZH elastomer	IEC 62893-4-1
3	Shielded PLC / CAN & sensor sub-elements	IEC 62893-4-1
4	Type EVM-1 polyurethane (PUR) jacket	IEC 62893-4-1

Technical data

Typical values

Rated DC voltage	1,000 V DC / 1,500 V DC (power cores) · 30 V AC / 60 V DC (control/signal)	Dielectric test voltage	6.0 kV DC or 3.5 kV AC rms on DC power cores · 1.0 kV AC on signal cores
Communication & thermal sensing	Shielded ISO 15118 PLC (CCS) or CAN (CHAdeMO/GB) + PT1000 plug temp pairs	Max. conductor operating temperature	+90 °C continuous · max outer sheath surface temperature ≤+60 °C
Ambient operating window	-40 °C to +50 °C outdoor dispenser operation	Minimum bending radius	6 × cable OD (flexing)
Crush & torsional endurance	Passes 11,000 N vehicle drive-over & ±180°/m torsional flexing per IEC 62893-4-1	Environmental & fluid immunity	AD7 water immersion; resists gasoline, diesel, hydraulic oil, battery acid & UV
Flame & halogen emission	IEC 60332-1-2 flame-retardant · EN 60754-1/2 halogen-free	Standards	IEC 62893-4-1, BS EN 50620 & UL 2263

Sizes

9 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Designation	DC Power + PE + Signal	DC Current / Power @ 800V	Nom. OD mm	Copper kg/km	Total mass ≈ kg/km	Min. bend R mm
DC EV Charging Cable size schedule 9 sizes						
☐ 2×16 + 1G16 + Sig	2×16 + 1G16 mm ²	80 A · 64 kW DC	19.50	480.0	680.0	117.0
☐ 2×25 + 1G16 + Sig	2×25 + 1G16 mm ²	125 A · 100 kW DC	22.40	660.0	910.0	134.4
☐ 2×35 + 1G16 + Sig	2×35 + 1G16 mm ²	150 A · 120 kW DC	24.60	860.0	1,150.0	147.6
☐ 2×50 + 1G25 + Sig	2×50 + 1G25 mm ²	200 A · 160 kW DC	27.80	1,230.0	1,590.0	166.8
☐ 2×70 + 1G35 + Sig	2×70 + 1G35 mm ²	250 A · 200 kW DC	31.20	1,710.0	2,150.0	187.2
☐ 2×80 + 1G35 + Sig	2×80 + 1G35 mm ²	280 A · 225 kW DC	32.80	1,910.0	2,380.0	196.8
☐ 2×95 + 1G50 + Sig	2×95 + 1G50 mm ²	300 A · 240 kW DC	35.00	2,320.0	2,860.0	210.0
☐ HPC Cooled 2×35 + Sig	2×35 mm ² Cooled	500 A · 400 kW HPC	28.50	740.0	1,180.0	171.0
☐ HPC Cooled 2×50 + Sig	2×50 mm ² Cooled	650 A · 520 kW HPC	30.20	1,020.0	1,460.0	181.2

– Dimensions and tolerances conform to IEC 62893-4-1 / EN 50620 / UL 2263.

Electrical data

9 sizes

DC Power + PE + Signal	Max. DC R @ 20 °C Ω/km	Current in air A	Installed / duty A
2×16 + 1G16 mm ²	1.210	80	64
2×25 + 1G16 mm ²	0.780	125	100
2×35 + 1G16 mm ²	0.554	150	120
2×50 + 1G25 mm ²	0.386	200	160
2×70 + 1G35 mm ²	0.272	250	200
2×80 + 1G35 mm ²	0.238	280	224
2×95 + 1G50 mm ²	0.206	300	240
2×35 mm ² Cooled	0.554	500	400
2×50 mm ² Cooled	0.386	650	520

– Reference ampacities at +30 °C ambient; apply duty-cycle or grouping correction factors per standard.

Standards and approvals

- ✓ IEC 62893-4-1 (1.5 kV DC)
- ✓ BS EN 50620
- ✓ UL 2263 EV Charging Cable
- ✓ TÜV / VDE / DEKRA Certified
- ✓ RoHS 3 & REACH

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/dc-ev-charging-cable



Typical values for this cable type, based on IEC 62893-4-1 / EN 50620 / UL 2263. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.