

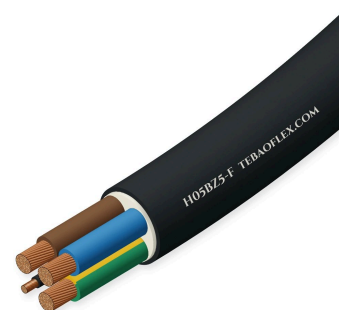


EN 50620 / IEC 62893 AC & DC Electric Vehicle Charging Cables

H05BZ5-F

AC EV Charging Cable

300/500 V EN 50620 light-duty Mode 2/3 AC EV charging cable (EVI-2 cores + EVM-1 PUR sheath)



300/500 V EN 50620 / IEC 62893

EVI-2 Cores + EVM-1 PUR Sheath

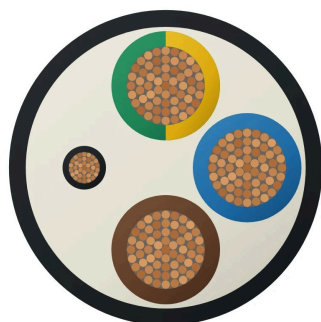
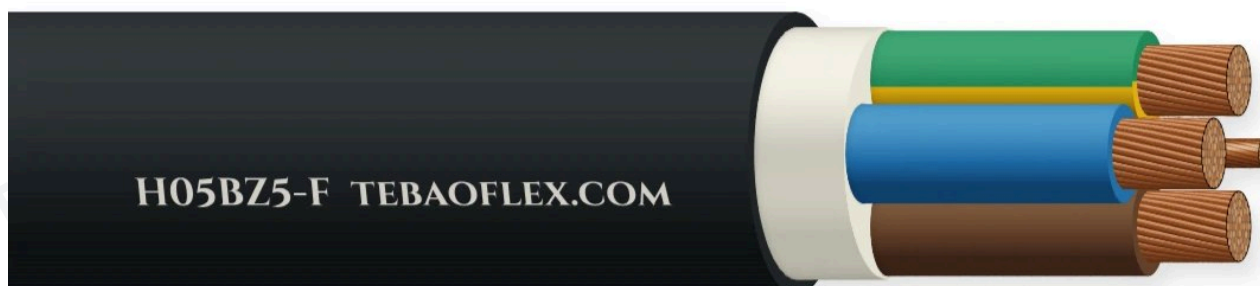
3G1.5 to 5G2.5 + 0.5/0.75 Pilot

Application

H05BZ5-F is the harmonized European light-duty AC electric vehicle charging cable per BS EN 50620 and IEC 62893-2 (62893 IEC 121). Rated 300/500 V for Mode 1, Mode 2 (IC-CPD portable cords) and compact Mode 3 home wallboxes up to 16 A / 20 A (3.7 kW single-pha

Typical uses: Residential Mode 3 wallboxes, Portable Mode 2 IC-CPD cords, Spiral / coiled EV trunk cables, Light commercial fleet chargers, E-mobility two-wheeler stations

Construction



Cross-section, not to scale

1	Class 5 fine-stranded bare copper	EN 60228
2	Type EVI-2 cross-linked LSZH elastomer	EN 50620
3	Low-friction fleece separator wrap	EN 50620
4	Type EVM-1 polyurethane (PUR) jacket	EN 50620

Technical data

Typical values

Rated voltage (U0/U)	300 / 500 V AC (power cores) · 30 V AC / 60 V DC (pilot core)	AC test voltage	2.0 kV rms on power cores · 1.0 kV rms on pilot core (15 min)
Control pilot communication	0.50 mm ² or 0.75 mm ² PWM pilot core per IEC 61851-1	Max. conductor operating temperature	+90 °C continuous · +250 °C short-circuit
Ambient operating temperature	-40 °C to +50 °C (mobile flexing & charging)	Minimum bending radius	5 × cable OD (free flexing) · passes EN 50620 flexing apparatus test
Vehicle drive-over crush resistance	Passes EN 50620 5,000 N crush / tyre run-over test	Fuel, oil & chemical resistance	Resistant to gasoline, diesel, mineral oil, battery acid & road salt per EN 50620
Halogen-free & flame retardancy	Halogen-free per EN 60754-1/2 · self-extinguishing per IEC 60332-1-2	Standards	BS EN 50620 & IEC 62893-2 (62893 IEC 121)

Sizes

9 standard constructions

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

Designation	Power + Pilot Cores	AC Rating / Phase	Nom. OD mm	Copper kg/km	Total mass ≈ kg/km	Min. bend R mm
H05BZ5-F size schedule 9 sizes						
☐ 3G1.5	3G 1.5 mm ²	16 A · Mode 2 Grid	8.40	43.2	95.0	42.0
☐ 3G1.5 + 1×0.5	3G1.5 + 1×0.5 mm ²	16 A · 3.7 kW 1-Ph	8.80	48.0	108.0	44.0
☐ 3G1.5 + 2×0.5	3G1.5 + 2×0.5 mm ²	16 A · 3.7 kW CP+PP	9.10	52.8	116.0	45.5
☐ 3G2.5	3G 2.5 mm ²	20 A · Mode 2 Grid	9.80	72.0	142.0	49.0
☐ 3G2.5 + 1×0.5	3G2.5 + 1×0.5 mm ²	20 A · 4.6 kW 1-Ph	10.30	76.8	155.0	51.5
☐ 3G2.5 + 2×0.5	3G2.5 + 2×0.5 mm ²	20 A · 4.6 kW CP+PP	10.60	81.6	165.0	53.0
☐ 5G1.5 + 1×0.5	5G1.5 + 1×0.5 mm ²	16 A · 11 kW 3-Ph	10.80	76.8	168.0	54.0
☐ 5G2.5 + 1×0.5	5G2.5 + 1×0.5 mm ²	20 A · 11 kW 3-Ph	12.60	124.8	240.0	63.0
☐ 5G2.5 + 2×0.5	5G2.5 + 2×0.5 mm ²	20 A · 11 kW CP+PP	12.90	129.6	252.0	64.5

– Dimensions and tolerances conform to EN 50620 / IEC 62893-2.

Electrical data

9 sizes

Power + Pilot Cores	Max. DC R @ 20 °C Ω/km	Current in air A	Installed / duty A
3G 1.5 mm ²	13.300	16	13
3G1.5 + 1×0.5 mm ²	13.300	16	13
3G1.5 + 2×0.5 mm ²	13.300	16	13
3G 2.5 mm ²	7.980	20	16
3G2.5 + 1×0.5 mm ²	7.980	20	16
3G2.5 + 2×0.5 mm ²	7.980	20	16
5G1.5 + 1×0.5 mm ²	13.300	16	13
5G2.5 + 1×0.5 mm ²	7.980	20	16
5G2.5 + 2×0.5 mm ²	7.980	20	16

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

Standards and approvals

- ✓ BS EN 50620 (H05BZ5-F)
- ✓ IEC 62893-2 (62893 IEC 121)
- ✓ VDE / TÜV Approved
- ✓ CE / RoHS 3 & REACH Compliant

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/h05bz5-f-ac-ev-charging-cable



Typical values for this cable type, based on EN 50620 / IEC 62893-2. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.