

Charging cables



Bals Elektrotechnik Simply. Well. Connected.

made
in
Germany



Over half a century competence and experience

Bals is a quality brand for innovation, reliability and service worldwide. For more than 60 years we have been producing connectors for the world market. From the very first day to the present, we rely on the highest quality "Made in Germany". Our plants in Kirchhundem-Albaum and Freiwalde have highly qualified, motivated teams, state-of-the-art production facilities and high-performance logistics.



Our product range ranges from plugs, phase inverters and couplings, through sockets and distribution combinations to special plug-in devices. Numerous certifications of domestic and foreign test institutes as well as utility models and patents document the high technical standard of our products. A special quality feature and exclusively developed by Bals is the maintenance-free quick-connect technology QUICK-CONNECT.

Two modern factories One consistent quality standard

From the beginning the headquarters of our company is located in Kirchhundem-Albaum (North-Rhine-Westphalia). Product development, marketing and sales, as well as administration are located here. The factory in Freiwalde (Brandenburg), built in 1994 and expanded many times since, has state-of-the-art production facilities for fully-automatic manufacturing of unique plugs and sockets as well as a highly-effective logistics centre.



Plugs and sockets for the world market

As an independent, medium-sized, family-owned company, we produce standardised industrial plugs and sockets acc. to IEC 60309 1-2 as well as charging components and distributors for the global market. We set new technical standards with innovations and ground-breaking, partially patented new developments such as MULTI-GRIP or QUICK-CONNECT. Our products are sold in more than 80 countries.



Our responsibility to the highest quality

Quality does not permit any compromise. This has always been the maxim at Bals. The ISO-9001-certified production process in all factories ensures the well-known high product quality. This proof of quality is reflected in patents, certificates from German and foreign testing institutes, as well as the specification of Bals products by highly renowned companies. Innovation is an important quality benchmark for us. This way, we are always setting new standards with intelligent solutions that bring the user sustainable advantages.

Consistent further development in design and function

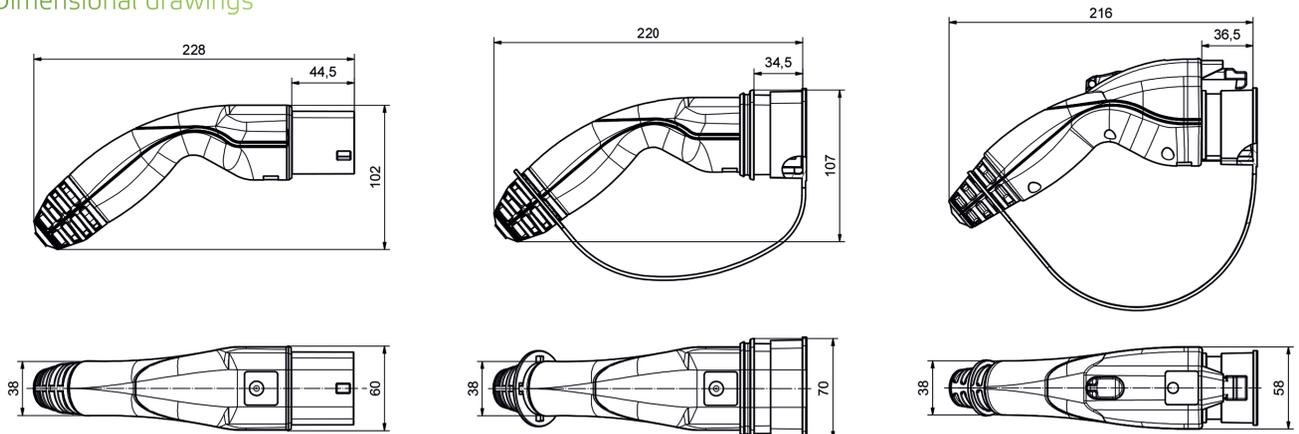
Type 2 charging cable with plug and connector 3.0



Type 1 charging connector 3.0



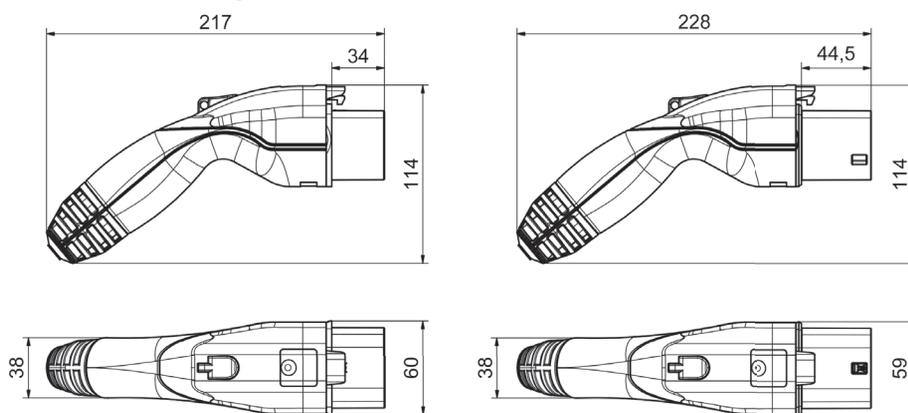
Dimensional drawings



Type GB/T charging cable mit plug EV und EVCS side 3.0



Dimensional drawings



Simple definition of our part numbers for charging cables

Our part numbers have a meaningful structure. This provides our customers with a logical ordering system/order number which describes the electrical design, colours and length of the charging cable.

This is explained below using an example:

Charging cable (cable length: 5m) with charging plug and charging connector, mode 3, type 2, 1-phase, 20A



E-329|151|X|050

Cable length (customer request)

1 5 1

Colour of top shell

Colour of middle shell

Colour of bottom shell

Type of plug connector



Charging cable with charging plug and charging connector, mode 3, type 2, 1-phase, 20A
Cable type: flat

- Vehicle side (EV): 20A 1-phase type 2 charging connector
- Infrastructure side (EVCS): 20A 1-phase type 2 charging plug
- Resistance: 680 Ω in charging plug and connector
- Cable variant: 3x2.5+1x0.5 mm²
- Cable colour: black
- Cable ø: approx. 11 mm
- Max. capacity: 3,7kW



Color of connectors: black - gray - black

Version	Part No.
Cable length 4,0m	E-329151X040
Cable length 5,0m	E-329151X050

Charging cable with charging plug and charging connector, mode 3, type 2, 1-phase, 20A
Cable type: coiled

- Vehicle side (EV): 20A 1-phase type 2 charging connector
- Infrastructure side (EVCS): 20A 1-phase type 2 charging plug
- Resistance: 680 Ω in charging plug and connector
- Cable variant: 3x2.5+1x0.5 mm²
- Cable colour: black
- Cable ø: approx. 11 mm
- Max. capacity: 3,7kW



Color of connectors: black - gray - black

Version	Part No.
Working length 4,0m	E-329151XG040
Working length 5,0m	E-329151XG050

Charging cable with charging plug and charging connector, mode 3, type 2, 1-phase, 32A
Cable type: flat

- Vehicle side (EV): 32A 1-phase type 2 charging connector
- Infrastructure side (EVCS): 32A 1-phase type 2 charging plug
- Resistance: 220 Ω in charging plug and connector
- Cable variant: 3G6+1x0.5 mm²
- Cable colour: black
- Cable ø: approx. 14 mm
- Max. capacity: 7,4kW



Color of connectors: black - gray - black

Version	Part No.
Cable length 4,0m	E-330151X040
Cable length 5,0m	E-330151X050

Charging cable with charging plug and charging connector, mode 3, type 2, 1-phase, 32A
Cable type: coiled

- Vehicle side (EV): 32A 1-phase type 2 charging connector
- Infrastructure side (EVCS): 32A 1-phase type 2 charging plug
- Resistance: 220 Ω in charging plug and connector
- Cable variant: 3G6+1x0.5 mm²
- Cable colour: black
- Cable ø: approx. 14 mm
- Max. capacity: 7,4kW



Color of connectors: black - gray - black

Version	Part No.
Working length 4,0m	E-330151XG040
Working length 5,0m	E-330151XG050

Charging cable with charging plug and charging connector, mode 3, type 2, 3-phase, 20A
Cable type: flat

- Vehicle side (EV): 20A 3-phase type 2 charging connector
- Infrastructure side (EVCS): 20A 3-phase type 2 charging plug
- Resistance: 680 Ω in charging plug and connector
- Color of connectors: blue
- Cable variant: 5G2.5+1x0.5 mm²
- Cable colour: black
- Cable ø: approx. 13 mm
- Max. capacity: 11kW



Color of connectors: black - gray - black

Version	Part No.
Cable length 4,0m	E-331151X040
Cable length 5,0m	E-331151X050

Charging cable with charging plug and charging connector, mode 3, type 2, 3-phase, 20A
Cable type: coiled

- Vehicle side (EV): 20A 3-phase type 2 charging connector
- Infrastructure side (EVCS): 20A 3-phase type 2 charging plug
- Resistance: 680 Ω in charging plug and connector
- Color of connectors: blue
- Cable variant: 5G2.5+1x0.5 mm²
- Cable colour: black
- Cable ø: approx. 13 mm
- Max. capacity: 11kW



Color of connectors: black - gray - black

Version	Part No.
Working length 4,0m	E-331151XG040
Working length 5,0m	E-331151XG050

Charging cable with charging plug and charging connector, mode 3, type 2, 3-phase, 32A
Cable type: flat

- Vehicle side (EV): 32A 3-phase type 2 charging connector
- Infrastructure side (EVCS): 32A 3-phase type 2 charging plug
- Resistance: 220 Ω in charging plug and connector
- Color of connectors: blue
- Cable variant: 5G6+1x0.5 mm²
- Cable colour: black
- Cable ø: approx. 17 mm
- Max. capacity: 22kW



Color of connectors: black - gray - black

Version	Part No.
Cable length 4,0m	E-332151X040
Cable length 5,0m	E-332151X050

Charging cable with charging plug and charging connector, mode 3, type 2, 3-phase, 32A
Cable type: coiled

- Vehicle side (EV): 32A 3-phase type 2 charging connector
- Infrastructure side (EVCS): 32A 3-phase type 2 charging plug
- Resistance: 220 Ω in charging plug and connector
- Color of connectors: blue
- Cable variant: 5G6+1x0.5 mm²
- Cable colour: black
- Cable ø: approx. 17 mm
- Max. capacity: 22kW



Color of connectors: black - gray - black

Version	Part No.
Working length 4,0m	E-332151XG040
Working length 5,0m	E-332151XG050

Charging cable with charging plug and charging connector, mode 3, type 2 to type 1, 1-phase, 20A
cable type: flat

- Vehicle side (EV): 20A 1-phase type 1 charging connector
- Infrastructure side (EVCS): 20A 1-phase type 2 charging plug
- Cable variant: 3x2.5+1x0.5 mm²
- Cable colour: black
- Cable ø: approx. 11 mm
- Resistance: 680 Ω in type 2 charging plug, integrated circuit of the total resistance between CS and PE in type 1 charging connector



Color of connectors: black - gray - black

Version	Part No.
Cable length 4,0m	E-322151X040
Cable length 5,0m	E-322151X050

Charging cable with charging plug and charging connector, mode 3, type 2 to type 1, 1-phase, 20A cable type: coiled

- Vehicle side (EV): 20A 1-phase type 1 charging connector
- Infrastructure side (EVCS): 20A 1-phase type 2 charging plug
- Cable variant: 3x2.5+1x0.5 mm²
- Cable colour: black

- Cable ø: approx. 11 mm
- Resistance: 680 Ω in type 2 charging plug, integrated circuit of the total resistance between CS and PE in type 1 charging connector



Color of connectors: black - gray - black

Version	Part No.
Working length 4,0m	E-322151XG040
Working length 5,0m	E-322151XG050

Charging cable with charging plug and charging connector, mode 3, type 2 to type 1, 1-phase, 32A cable type: flat

- Vehicle side (EV): 32A 1-phase type 1 charging connector
- Infrastructure side (EVCS): 32A 1-phase type 2 charging plug
- Cable variant: 3G6+1x0.5 mm²
- Cable colour: black

- Cable ø: approx. 14 mm
- Resistance: 220 Ω in type 2 charging plug, integrated circuit of the total resistance between CS and PE in type 1 charging connector



Color of connectors: black - gray - black

Version	Part No.
Cable length 4,0m	E-323151X040
Cable length 5,0m	E-323151X050

Charging cable with charging plug and charging connector, mode 3, type 2 to type 1, 1-phase, 32A cable type: coiled

- Vehicle side (EV): 32A 1-phase type 1 charging connector
- Infrastructure side (EVCS): 32A 1-phase type 2 charging plug
- Cable variant: 3G6+1x0.5 mm²
- Cable colour: black

- Cable ø: approx. 14 mm
- Resistance: 220 Ω in type 2 charging plug, integrated circuit of the total resistance between CS and PE in type 1 charging connector



Color of connectors: black - gray - black

Version	Part No.
Working length 4,0m	E-323151XG040
Working length 5,0m	E-323151XG050

Charging cable with vehicle charging plug and infrastructure charging connector, mode 3, type GB/T 1-phase, 20A, cable type: flat

- Vehicle side (EV): charging plug 20A 1-phase type GB/T
- Infrastructure side (EVCS): charging plug 20A 1-phase type GB/T
- Cable variant: 3x2,5+1x0,5 mm²
- Cable colour: black
- Cable ø: approx. 11 mm
- Resistance: 680 Ω in charging plug EV side, integrated circuit of the total resistance between CC and PE in charging plug EV side



Color of connectors: black - gray - black

Version	Part No.
Cable length 4,0m	E-249151X040
Cable length 5,0m	E-249151X050

Charging cable with vehicle charging plug and infrastructure charging connector, mode 3, type GB/T 1-phase, 20A, cable type: coiled

- Vehicle side (EV): charging plug 20A 1-phase type GB/T
- Infrastructure side (EVCS): charging plug 20A 1-phase type GB/T
- Cable variant: 3x2,5+1x0,5 mm²
- Cable colour: black
- Cable ø: approx. 11 mm
- Resistance: 680 Ω in charging plug EV side, integrated circuit of the total resistance between CC and PE in charging plug EV side



Color of connectors: black - gray - black

Version	Part No.
Working length 4,0m	E-249151XG040
Working length 5,0m	E-249151XG050

Charging cable with vehicle charging plug and infrastructure charging connector, mode 3, type GB/T 1-phase, 32A, cable type: flat

- Vehicle side (EV): charging plug 32A 1-phase type GB/T
- Infrastructure side (EVCS): charging plug 32A 1-phase type GB/T
- Cable variant: 3G6+1x0,5 mm²
- Cable colour: black
- Cable ø: approx. 14 mm
- Resistance: 220 Ω in charging plug EV side, integrated circuit of the total resistance between CC and PE in charging plug EV side



Color of connectors: black - gray - black

Version	Part No.
Cable length 4,0m	E-250151X040
Cable length 5,0m	E-250151X050

Charging cable with vehicle charging plug and infrastructure charging connector, mode 3, type GB/T 1-phase, 32A, cable type: coiled

- Vehicle side (EV): charging plug 32A 1-phase type GB/T
- Infrastructure side (EVCS): charging plug 32A 1-phase type GB/T
- Cable variant: 3G6+1x0,5 mm²
- Cable colour: black
- Cable ø: approx. 14 mm
- Resistance: 220 Ω in charging plug EV side, integrated circuit of the total resistance between CC and PE in charging plug EV side



Color of connectors: black - gray - black

Version	Part No.
Working length 4,0m	E-250151XG040
Working length 5,0m	E-250151XG050

Charging cable with vehicle charging plug and infrastructure charging connector, mode 3, type GB/T 3-phase, 20A, cable type: flat

- Vehicle side (EV): charging plug 20A 3-phase type GB/T
- Infrastructure side (EVCS): charging plug 20A 3-phase type GB/T
- Cable variant: 5G2,5+1x0,5 mm²
- Cable colour: black
- Cable ø: approx. 13 mm
- Resistance: 680 Ω in charging plug EV side, integrated circuit of the total resistance between CC and PE in charging plug EV side



Color of connectors: black - gray - black

Version	Part No.
Cable length 4,0m	E-251151X040
Cable length 5,0m	E-251151X050

Charging cable with vehicle charging plug and infrastructure charging connector, mode 3, type GB/T 3-phase, 20A, cable type: coiled

- Vehicle side (EV): charging plug 20A 3-phase type GB/T
- Infrastructure side (EVCS): charging plug 20A 3-phase type GB/T
- Cable variant: 5G2,5+1x0,5 mm²
- Cable colour: black
- Cable ø: approx. 13 mm
- Resistance: 680 Ω in charging plug EV side, integrated circuit of the total resistance between CC and PE in charging plug EV side



Color of connectors: black - gray - black

Version	Part No.
Working length 4,0m	E-251151XG040
Working length 5,0m	E-251151XG050

Charging cable with vehicle charging plug and infrastructure charging connector, mode 3, type GB/T 3-phase, 32A, cable type: flat

- Vehicle side (EV): charging plug 32A 3-phase type GB/T
- Infrastructure side (EVCS): charging plug 32A 3-phase type GB/T
- Cable variant: 5G6+1x0,5 mm²
- Cable colour: black
- Cable ø: approx. 17 mm
- Resistance: 220 Ω in charging plug EV side, integrated circuit of the total resistance between CC and PE in charging plug EV side



Color of connectors: black - gray - black

Version	Part No.
Cable length 4,0m	E-252151X040
Cable length 5,0m	E-252151X050

Charging cable with vehicle charging plug and infrastructure charging connector, mode 3, type GB/T 3-phase, 32A, cable type: coiled

- Vehicle side (EV): charging plug 32A 3-phase type GB/T
- Infrastructure side (EVCS): charging plug 32A 3-phase type GB/T
- Cable variant: 5G6+1x0,5 mm²
- Cable colour: black
- Cable ø: approx. 17 mm
- Resistance: 220 Ω in charging plug EV side, integrated circuit of the total resistance between CC and PE in charging plug EV side



Color of connectors: black - gray - black

Version	Part No.
Working length 4,0m	E-252151XG040
Working length 5,0m	E-252151XG050

We get e-Mobile going

As one of only a few providers, we offer system components according to type 1 and type 2. Numerous manufacturers of charging stations, power supply companies, public utilities and facility management companies depend on the high BALS quality and use our E-mobility components worldwide.





mobile charging station
ePower-Gum



Bals Elektrotechnik GmbH & Co. KG
D-57399 Kirchhundem-Albaum
Phone: +49 27 23/771-0
E-mail: emobile@bals.com
Internet: www.bals.com