

E-Mobility made by LAPP



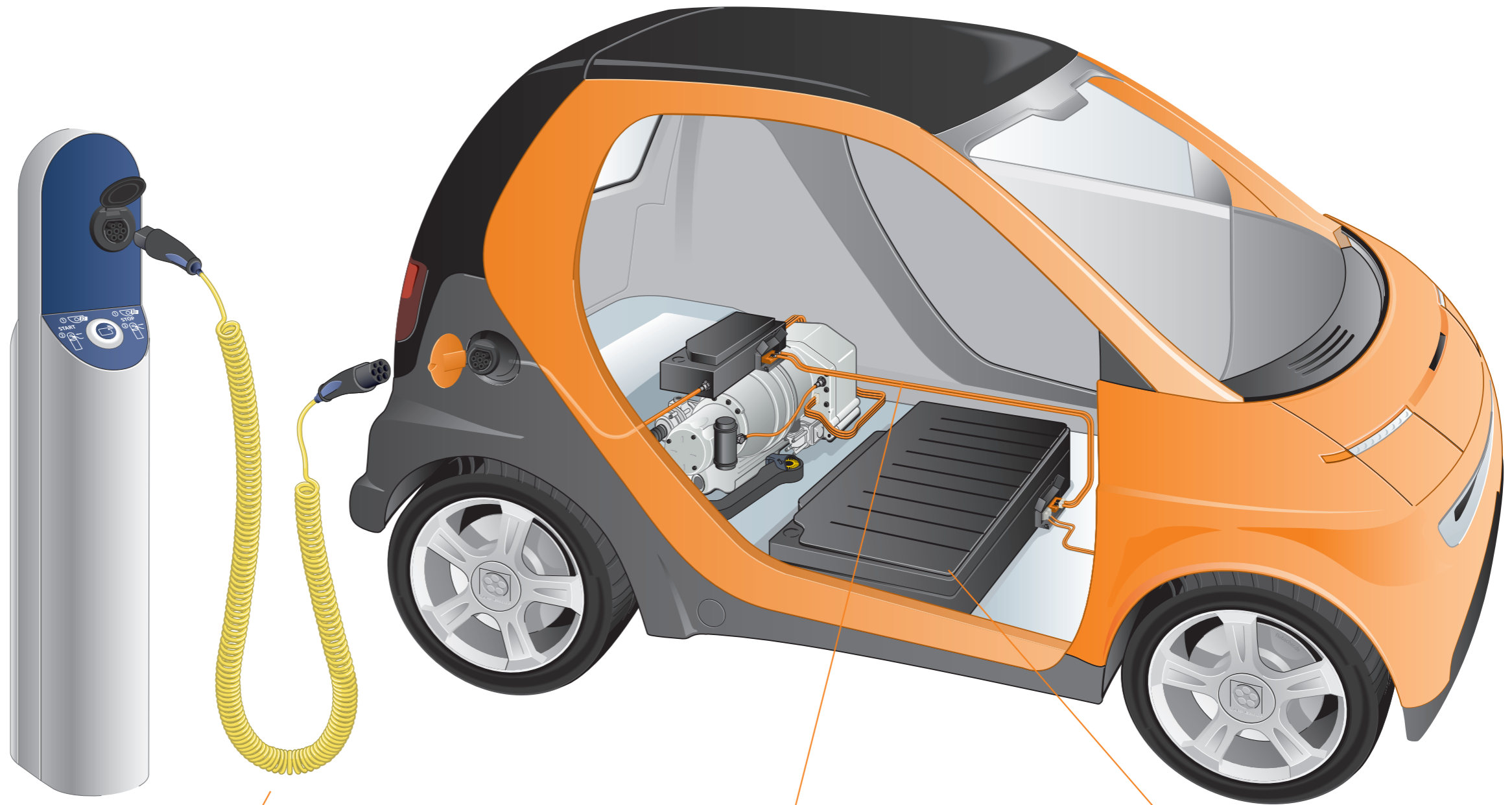
E-Mobility

Charging system, internal connection cables and high-voltage connections

System solutions from the Lapp Group are internationally recognised as being of superior quality and extremely reliable. Even automotive manufacturers and suppliers stand to benefit from the 50 plus years of experience boasted by Lapp in mechanical and plant engineering, particularly when it comes to hybrid and electric vehicles.

The Lapp Group is a pioneer of e-mobility: It is one of the first companies to develop a compatible, production-ready complete charging system with cables and connector that complies with the new VDE standard. The charging system was developed by the Lapp Group in conjunction with Bals Elektrotechnik GmbH from Germany's North-Rhine Westphalia.

Lapp products do not only provide charging solutions but are also capable of meeting the latest requirements set by the hybrid and electric vehicles. Patented high-voltage cabling from Lapp is used to supply the electric motors with energy. Leading automotive manufacturers and suppliers also already use the cables and connectors from Lapp for the internal connections in lithium-ion batteries.



Charging system – Joint development from Lapp Kabel and Bals Elektrotechnik

- Complies with VDE standard for connectors used in the charging of electric vehicles
- Cable is flame retardant as per IEC 60332.1-2
- Oil resistant
- Temperature range -40 to +90°C

Patented high-voltage connections

- Maximum 800V/400A
- Temperature range up to 180°C
- Conforms to protection class IP69K
- Resistant to vibrations, mechanical and chemical connections

Internal connecting cables for lithium-ion battery

- Cable harness for energy storage
- Current sensor cable harness, HV connection cable harness, CSE connection cable harness, DCDC connection, electrical system cable harness
- Extrusion with silicone
- Temperature-resistant ETFE cables

Charging plug connectors in accordance with new standard

		Dimension drawing	Bals type no.	Lapp Systems type no.
	<p>Charging flush-mounted socket 32A</p> <ul style="list-style-type: none"> • according to VDE-AR-E-2623-2-2 • Square design • Flange 85 x 85 mm • Protection class IP54 • Bore hole 70 x 70 mm • with crimped single cores 5 x 10 mm² + 2 x 0.5 mm² • Single core length 1000 mm 		E-131-1000	LS731234
	<p>Charging flush-mounted socket 32A</p> <ul style="list-style-type: none"> • according to VDE-AR-E-2623-2-2 • Round design without flip-up lid • Flange Ø 100 mm • with crimped single cores 5 x 10 mm² + 2 x 0.5 mm² • Single core length 1000 mm 		E-132-1000	LS731235
	<p>Charging flush-mounted socket 32A</p> <ul style="list-style-type: none"> • according to VDE-AR-E-2623-2-2 • Round design with flip-up lid • Flange Ø 100 mm • Protection class IP54 • with crimped single cores 5 x 10 mm² + 2 x 0.5 mm² • Single core length 1000 mm 		E-133-1000	LS731236
	<p>Charging flush-mounted socket 32A</p> <ul style="list-style-type: none"> • according to VDE-AR-E-2623-2-2 • Round design without flip-up lid and without cover • Three-point fixing for rear mounting • with crimped single cores 5 x 10 mm² + 2 x 0.5 mm² • Single core length 1000 mm 		E-134-1000	LS731565
	<p>Electromechanical locking/ Actuator</p> <ul style="list-style-type: none"> • for flush-mounted socket types E-131, E-132, E-133, E-134 • compact design 		E-182	LS111085
	<p>Charging line 16A 1P + N + PE and PP + CP</p> <ul style="list-style-type: none"> • 2 charging plugs according to VDE-AR-E-2623-2-2 • Smooth cable design • a 680 ohm resistor in every plug connector • 4000 mm Lapp Kabel charge 3G 2.5 mm² + 2 x 0.5 mm² 		E-82325G4000	LS730954
	<p>Charging line 16A 1P + N + PE and PP + CP</p> <ul style="list-style-type: none"> • 2 charging plugs according to VDE-AR-E-2623-2-2 • Spiral cable design, solid length 1500 mm • a 680 ohm resistor in every plug connector • 4000 mm Lapp Kabel charge 3G 2.5 mm² + 2 x 0.5 mm² 		E-82325S4000	LS730951

Charging plug connectors in accordance with new standard



Dimension drawing

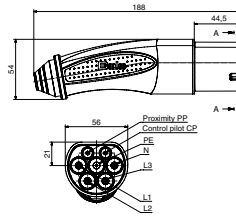
Bals type no.

Lapp Systems type no.



Charging line 16A 3P + N + PE and PP + CP

- 2 charging plugs according to VDE-AR-E-2623-2-2
- Smooth cable design
- a 680 ohm resistor in every plug connector
- 4000 mm Lapp Kabel charge
- 5G 2.5 mm² + 2 x 0.5 mm²



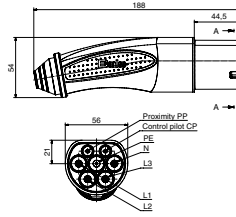
E-82525G4000

LS730955



Charging line 16A 3P + N + PE and PP + CP

- 2 charging plugs according to VDE-AR-E-2623-2-2
- Spiral cable design, solid length 1500 mm
- a 680 ohm resistor in every plug connector
- 4000 mm Lapp Kabel charge
- 5G 2.5 mm² + 2 x 0.5 mm²



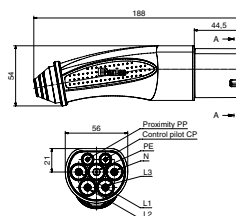
E-82525S4000

LS730952



Charging line 32A 3P + N + PE and PP + CP

- 2 charging plugs according to VDE-AR-E-2623-2-2
- Smooth cable design
- a 220 ohm resistor in every plug connector
- 4000 mm Lapp Kabel charge
- 5G 6 mm² + 2 x 0.5 mm²



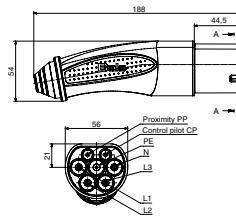
E-82560G4000

LS730956



Charging line 32A 3P + N + PE and PP + CP

- 2 charging plugs according to VDE-AR-E-2623-2-2
- Spiral cable design, solid length 1500 mm
- a 220 ohm resistor in every plug connector
- 4000 mm Lapp Kabel charge
- 5G 6 mm² + 2 x 0.5 mm²



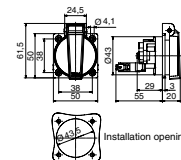
E-82560S4000

LS730953



Flush-mounted earthed socket 16A 230V

- Protection class IP54
- Flange 50 x 50 mm
- Bore hole 38 x 38 mm
- with auxiliary „normally open“ contact



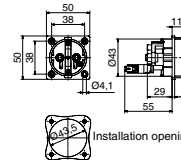
E-7184

LS111060



Flush-mounted earthed socket 16A 230V

- without flip-up lid
- Flange 50 x 50 mm
- Bore hole 38 x 38 mm
- with auxiliary „normally open“ contact



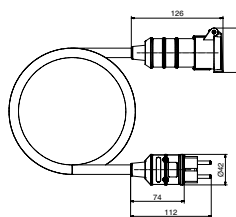
E-71070

LS111061



Charging line 16A 230V earthed contact

- Earthed plug 16A 230V, with nickel-plated contacts
- Earthed contact coupling 16A 230V, with self-locking flip-up lid
- Smooth cable design
- 4000 mm Lapp ÖLFLEX® 540 P 3G 2.5



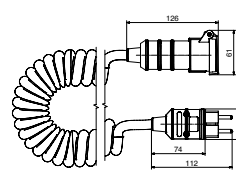
E-81645

LS731583



Charging line 16A 230V earthed contact

- Earthed plug 16A 230V, with nickel-plated contacts
- Earthed contact coupling 16A 230V, with self-locking flip-up lid
- Spiral cable design
- 4000 mm Lapp ÖLFLEX® 540 P 3G 2.5



E-81646

LS731591

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