

Type-1 – Charging Cable



Specification	Type-1 – Charging Connector + Charging Cable
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Product Definition

Charging standard	Type-1
Standards / regulations	IEC 62196-2 SAE J1772
Approval	JET / PSE
Confection line end	On request

Dimensions Charging Connector

Width	55,5 mm
Height	121 mm
Depth	222 mm
Conductor length	On request

Ambient Conditions

Ambient temperature (operation)	-30°C ... +50°C
Ambient temperature (storage/transport)	-40°C ... +80°C
Max. altitude	5.000 m (above sea level)
Degree of protection (plugged)	IP44
Degree of protection (protective cap)	IP44



Electrical Properties

Number of phases	1	
Rated voltage for power contacts	250 V AC	
Rated current for power contacts	16 A	40 A
Maximum charging power	4 kW	10 kW
Number of power contacts	3 (L1, N, PE)	
Rated voltage for signal contacts	30 V AC	
Rated current for signal contacts	2 A	
Number of signal contacts	2 (CP, PP)	
Note on the connection method	Crimp termination (cannot be disconnected)	
Resistor coding (between PE and CS)	480 Ω (lever operated) 150 Ω (lever not operated)	

Mechanical Properties

Mating cycles	> 10.000
Insertion force	< 75 N
Withdrawal	< 75 N

Design

Colour housing / handle area	black
Colour mating face / locking lever	black
Colour protective cap	black
Housing with customer logo	On request

Material

Material housing / handle area	Plastic
Material mating face	Plastic
Material protective cap	Soft plastic
Flammability rating	V0
Material contacts	Cu-Alloy
Material surface of contacts	Ag



Cable

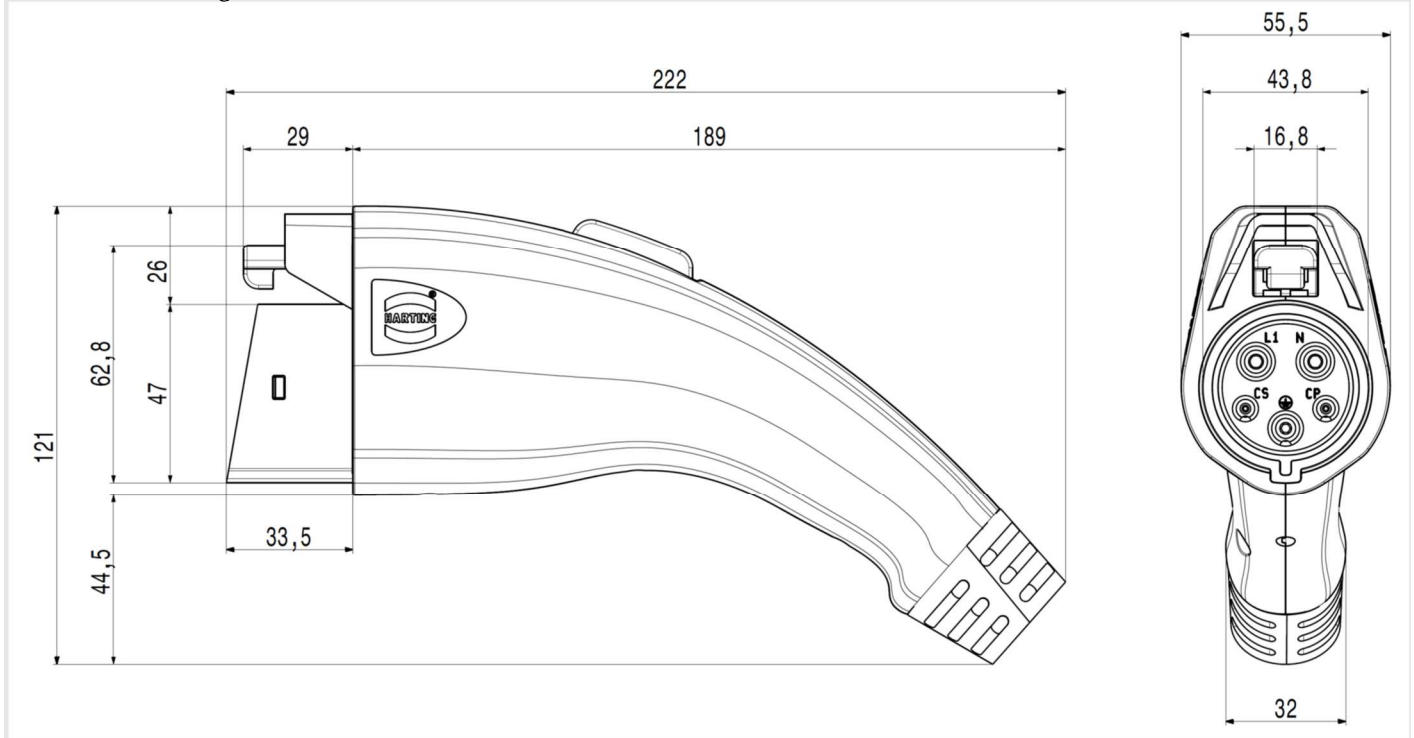
Cable structure	1 phase			
	16 A	41 A	50 A	80 A
	3 x 2,1 mm ² + 0,56 mm ²	3 x 5,3 mm ² + 0,56 mm ²	3 x 8,5 mm ² + 0,82 mm ²	2 x 13,2 mm ² + 8,5 mm ² + 0,82 mm ²
Cable diameter	10,5 ± 0,3 mm	15,9 ± 0,3 mm	22,4 ± 0,3 mm	24,0 ± 0,3 mm
Cable resistance at 20°C (2,1 mm ²)	≤ 8,88 Ω/km			
Cable resistance at 20°C (5,3 mm ²)	≤ 3,51 Ω/km			
Cable resistance at 20°C (8,5 mm ²)	≤ 2,23 Ω/km			
Cable resistance at 20°C (13,2 mm ²)	≤ 1,40 Ω/km			
Cable resistance at 20°C (0,56 mm ²)	≤ 35,7 Ω/km			
Cable resistance at 20°C (0,82 mm ²)	≤ 22,4 Ω/km			
Wiring standard	UL 62 - EVE			
Type of conductor	Straight, more types on request			
Outer sheath, material	TPE-U			
Outer sheath, colour	On request			
Minimum bending radius	9 x cable diameter			

Environmental Product Compliance

REACH SVHC	Lead CAS 7439-92-1
China RoHS	Environmentally Friendly Use Period: 50 years

Drawings

Dimensional drawing



Pin assignment of the vehicle connector

