

## Type-1 – Charging Cable



Specification

Type-1 – Charging Connector +  
Charging Cable

### Product Definition

Charging standard	Type-1
Standards / regulations	IEC 62196-2 SAE J1772
Approval	UL
Country approval	On request
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	41 A	50 A	80 A
Maximum charging power	4 kW	10 kW	12,5 kW	20 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 $\Omega$ (lever operated) 150 $\Omega$ (lever not operated)			

## Mechanical Properties

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

## Design

Color housing / handle area	black
Color mating face / locking lever	black
Color 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

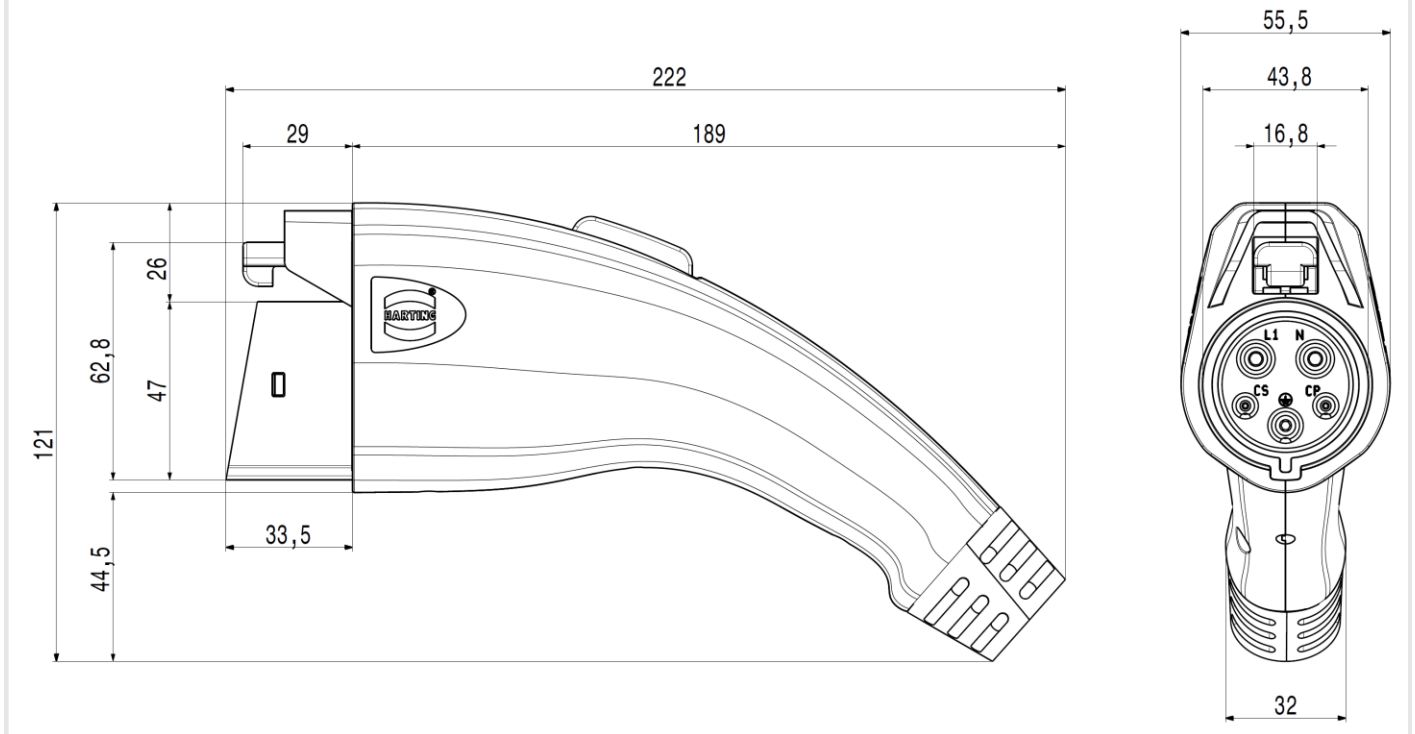
Cable structure	1 phase			
	16 A	41 A	50 A	80 A
	3 x 2,1 mm <sup>2</sup> + 0,56 mm <sup>2</sup>	3 x 5,3 mm <sup>2</sup> + 0,56 mm <sup>2</sup>	3 x 8,5 mm <sup>2</sup> + 0,82 mm <sup>2</sup>	2 x 13,2 mm <sup>2</sup> + 8,5 mm <sup>2</sup> + 0,82 mm <sup>2</sup>
Cable diameter	10,5 ± 0,3 mm	15,9 ± 0,3 mm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

