

Mode-3 – Charging Cable



Specification

Charging Cable Mode-3 –
Type-2 – Type-2

Product Definition

Charging standard	Typ-2
Standards / regulations	IEC 62196-2
Approval	VDE
Country approval	On request
Confection line end	On request

Dimensions Charging Connector

Width	70 mm
Height	110 mm
Depth	200 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		3	
Rated voltage for power contacts	250 V AC		480 V AC	
Rated current for power contacts	20 A	32 A	20 A	32 A
Charging power	4,7 kW	7,4 kW	11 kW	22 kW
Maximum charging power	5 kW	8 kW	16,6 kW	26,6 kW
Resistor coding (between PE and PP)	680 Ω	220 Ω	680 Ω	220 Ω
Number of power contacts	3 (L1, N, PE)		5 (L1, L2, L3, 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)			

Mechanical Properties

Mating cycles	> 10.000
Insertion force	< 100 N
Withdrawal	< 100 N

Design

Color housing / handle area	black
Color mating face	black
Color protective cap	black
Housing with customer logo	On request

Material

Material housing / handle area	Plastic – FRIANYL B3 GF25 V0 BK 9005/P/F1
Material mating face	Plastic – FRIANYL B3 GF25 V0 BK 9005/P/F1
Material protective cap	Soft plastic – Irogran A78 P4766
Flammability rating	V0
Material contacts	Cu-Alloy
Material surface of contacts	Ag (silverplating)
Material Rawcable	TPU / TPE



Cable

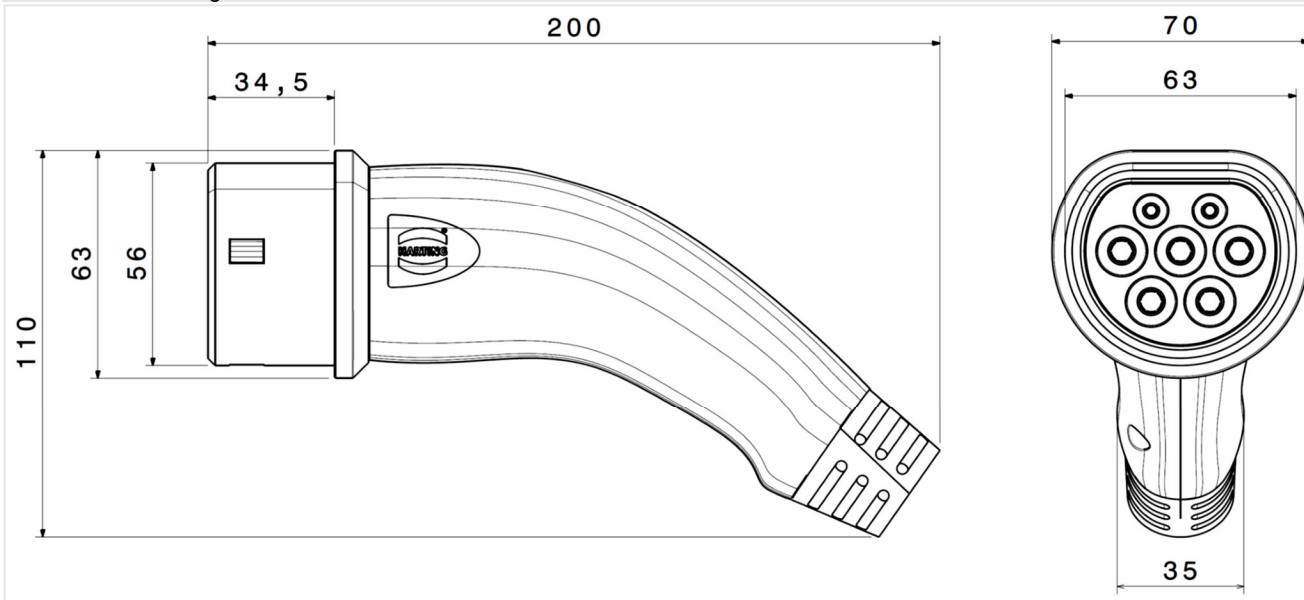
Cable structure	1 phase		3 phases	
	20 A	32 A	20 A	32 A
	3 x 2,5 mm ² + 0,5 mm ²	3 x 6,0 mm ² + 0,5 mm ²	5 x 2,5 mm ² + 0,5 mm ²	5 x 6,0 mm ² + 0,5 mm ²
Cable diameter	10,2 ± 0,3 mm	12,8 ± 0,4 mm	12,8 ± 0,4 mm	16,5 ± 0,3 mm
Cable resistance at 20°C (2,5 mm ²)	≤ 7,98 Ω/km			
Cable resistance at 20°C (6,0 mm ²)	≤ 3,3 Ω/km			
Cable resistance at 20°C (0,5 mm ²)	≤ 39,0 Ω/km			
Wiring standard	IEC 62893			
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			
Specification vehicle side	Type-2 charging connector			
Specification infrastructure side	Type-2 charging connector			

Environmental Product Compliance

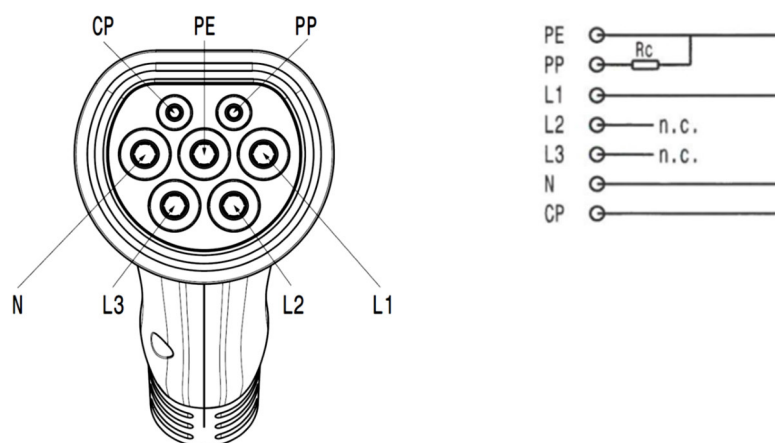
REACH SVHC	Lead CAS 7439-92-1
China RoHS	Environmentally Friendly Use Period: 50 years

Drawings

Dimensional drawing female vehicle connector

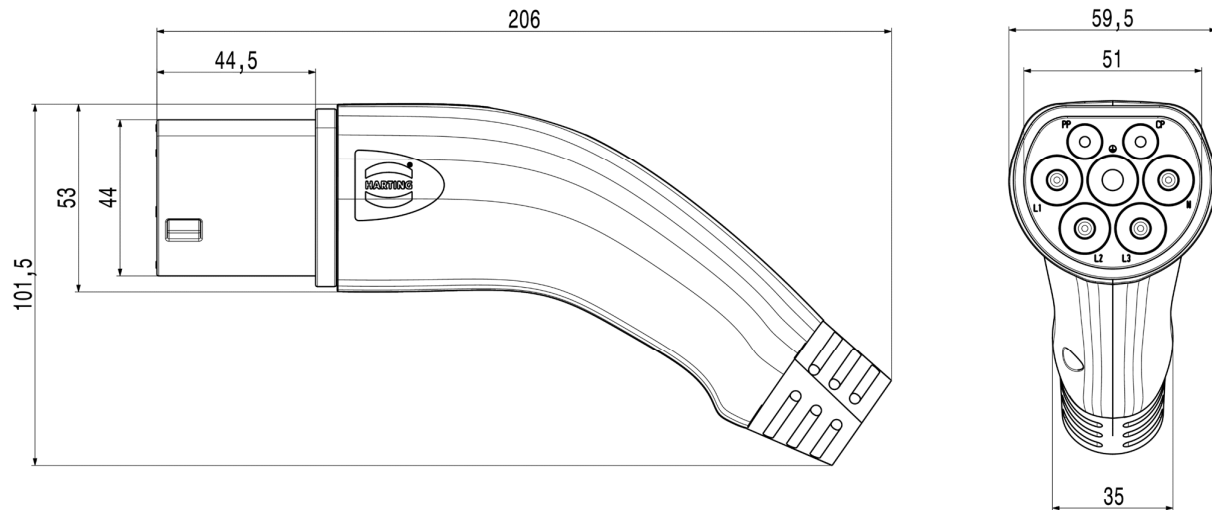


Pin assignment of the female vehicle connector



Drawings

Dimensional drawing male vehicle connector



Pin assignment of the male vehicle connector

