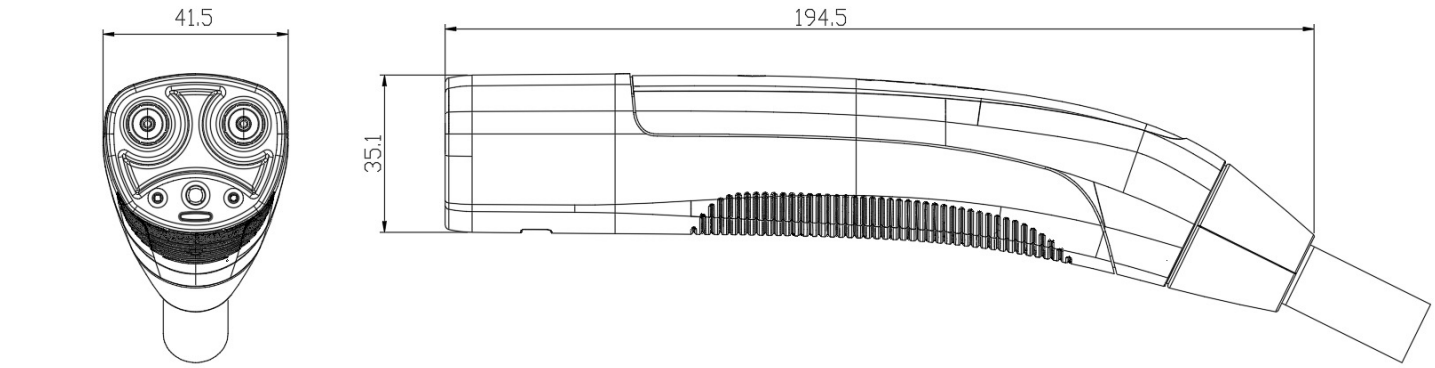
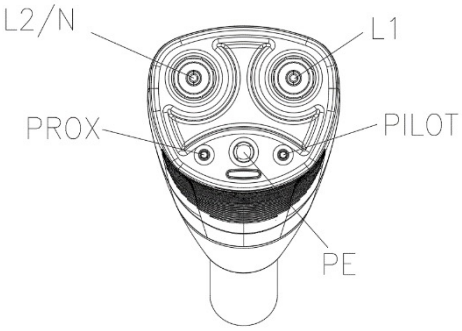
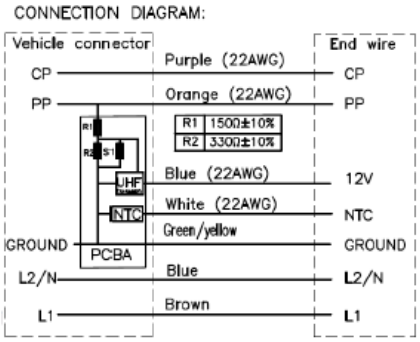
NACS 40A / 48A / 80A Charging Cable

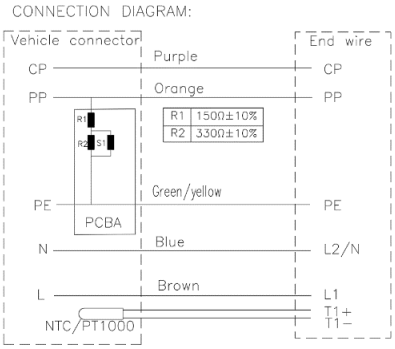
PRODUCT DEFINITION			
Charging Standard	SAE J3400		
Approvals & Certification	UL 2251, CSA C22.2 NO. 282		
DIMENSIONS CHARGING CONNECTOR			
Width	41.5 mm		
Height	35.1 mm		
Depth	194.5 mm		
Cable Length & End Treatment	5.5 m, 6.1 m, 7.6 m or On Request		
AMBIENT CONDITIONS			
Ambient Temperature (Operation)	-40°C to +50°C		
Ambient Temperature (Storage / Transport)	-40°C to +105°C		
Max. Altitude	4,000 m (above sea level)		
Operating Humidity	Up to 95% RH, Condensing		
UV Resistance	F1 per UL 746C		
Degree of Protection (Unmated)	Type 4 / IP67		
ELECTRICAL PROPERTIES			
Number of Phases	1		
Rated Voltage for Power Contacts	250V AC		
Rated Current for Power Contacts	32A / 40A	48A / 50A	80A
Maximum Charging Power	7.7 kW / 9.6 kW	11.5 kW / 12 kW	19.2 kW
Number of Power Contacts	3 (L1, N, PE)		
Temperature Sensor Type	NTC 10K or Pt1000		
Temperature Sensor Threshold	75°C (NTC on PCBA) 90°C (NTC on Terminal)		
Insulation Resistance	≥ 100 MΩ		
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	< 90 N		
Withdrawal	< 90 N		
Rated Drop Resistance	200 Drops		

NACS MECHANICAL DRAWING









MATERIAL		DESIGN	
Material Housing / Handle Area	Plastic	**Housing / Handle Area Colour**	Black
Material Mating Face	Plastic	**Mating Face / Locking Lever Colour**	Black
Flammability Rating	V-0	**Protective Cap Colour**	Black
Material Contacts	Cu-Alloy	**Housing with Customer Logo**	On Request

CABLE

CABLE IS UL-R (SET APPROVAL IS REQUIRED WHEN USING UL-R CABLE)

AMPERAGE	CABLE STRUCTURE	CABLE O.D.	PHASE
32A / 40A	3 x 10 AWG + 4 x 22 AWG	12 mm	1 Phase
48A / 50A	2 x 8 AWG + 1 x 10 AWG + 4 x 22 AWG	14.5 mm	
80A	2 x 6 AWG + 1 x 8 AWG + 6 x 22 AWG	19.1 mm	

CABLE RESISTANCE AT 20°C

6 AWG	8 AWG	10 AWG	18 AWG	22 AWG
≤ 1.4 Ω/km	≤ 2.23 Ω/km	≤ 3.51 Ω/km	≤ 22.4 Ω/km	≤ 56.8 Ω/km

Cable Standard	UL 2263
Type of Conductor	Per Above Construction
Outer Sheath Material	TPE
Outer Sheath Colour	Black

ENVIRONMENTAL PRODUCT COMPLIANCE	
REACH SVHC	Compliant
China RoHS	Compliant
EU RoHS	Compliant

Contact us at **sales@volex.com**
for assistance in finding the right solution for your needs.