

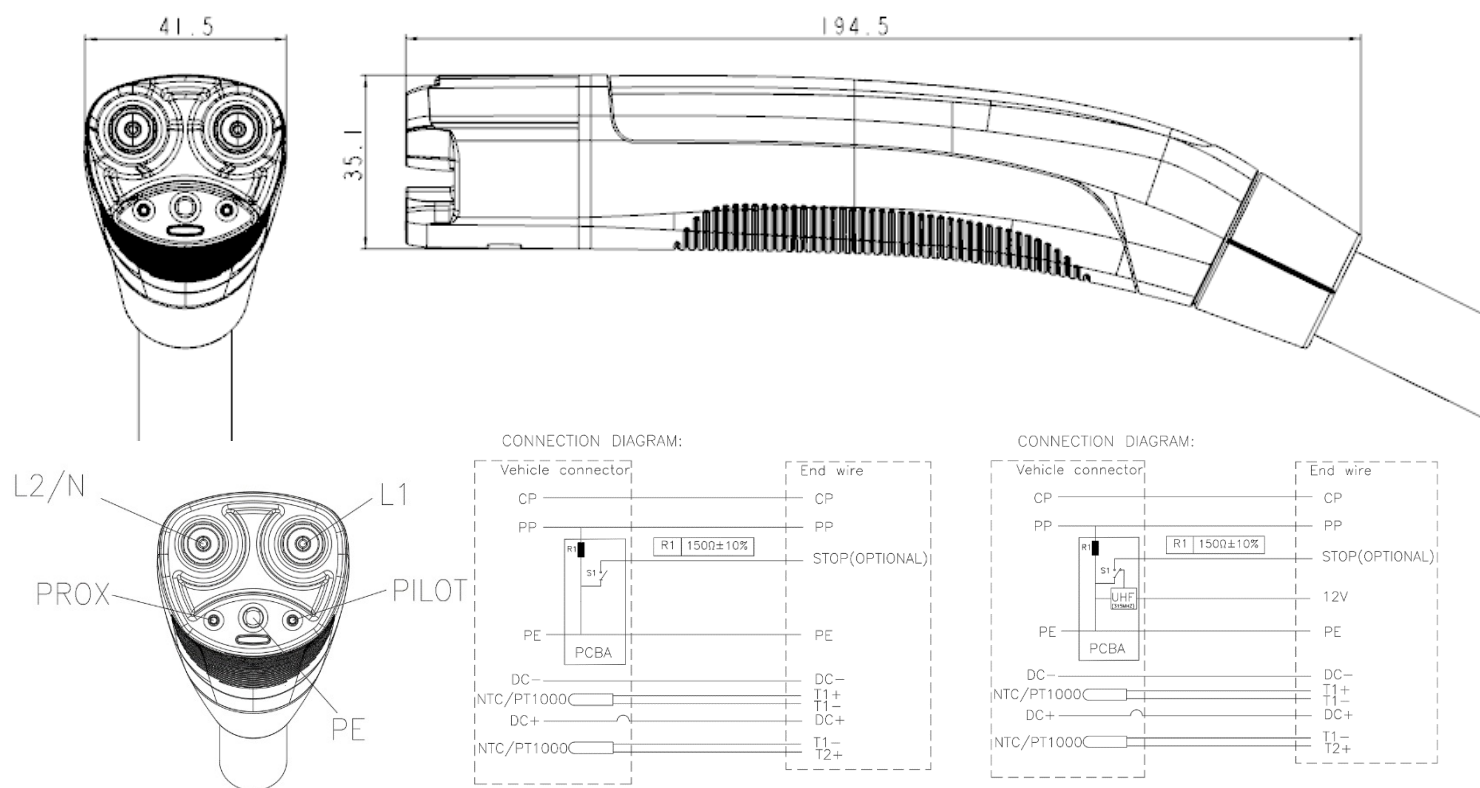
NACS 40/50A DC

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	4000 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	1000V DC	
Rated Current for Power Contacts	32A / 40A	48A / 50A
Maximum Charging Power	32 kW / 40 kW	48 kW / 50 kW
Number of Power Contacts	3 (DC+, DC-, PE)	
Temperature Sensor Type	NTC 10K / PT 1000	
Temperature Sensor Threshold	75°C (NTC on PCBA) 90°C (NTC on Terminal)	
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)	
UHF Transmitter	Silicon Labs Si4010-C2-ATR	
UHF Transmitter Frequency	315 MHz	
Withstanding voltage	3000V	
MECHANICAL PROPERTIES		
Mating Cycles	> 10,000	
Insertion Force	< 90 N	
Withdrawal	< 90 N	
Rated Drop Resistance	200 Drops	

NACS 40/50A DC MECHANICAL DRAWING



MATERIAL

Material Housing / Handle Area	Plastic
Material Mating Face	Plastic
Flammability Rating	V0
Material Contacts	Cu-Alloy

DESIGN

Housing / Handle Area Colour	Black
Mating Face / Locking Lever Colour	Black
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	EVC 3 x 10AWG + 4 x 22AWG	12 mm	1 Phase
48A / 50A	EVC 2 x 8AWG + 1 x 10AWG + 4 x 22AWG	14.5 mm	

CABLE RESISTANCE AT 20°C

8AWG	10AWG	22AWG
≤ 2.23 Ω/km	≤ 3.51 Ω/km	≤ 56.8 Ω/km
Cable Standard	UL 62	
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.