

FS series EV charging inlet

Brief introduction

- Comply with GB/T20234-2011
- Various types, DC charging connector (125A, 250A), AC charging connector (Vehicle side, power side, 16A, 32A)
- Humanized design, nice control hand feeling, easy to operate
- Optional function component: indicator light, electronic lock, etc.
- Various accessory types, dust cap has damping cap, metal string cap, etc.
- Crimping termination
- Protection degree: IP55



Application:

It is applied in the high voltage circuit connection in EV inside environment.

Operating environment:

Vehicle-mounted charger, high voltage distribution box, machine controller, air conditioner, PTC, battery, built-in short circuit for controlling.

Main technical characteristics

[Material]

- Shell: thermoplastic
- Insulator: thermoplastic
- Sealing ring: rubber
- Insulator flame retardant rating:UL94-V0
- Contact: copper alloy, power contact: gold plating, signal contact, gold plating

[Electrical]

- Rating current and contact resistance:

Contact size mm	Contact resistance mΩ	Rating current A	Applicable wire mm ²
12	0.25	125	50
		250	70
6	0.5	32	6
		16	2.5
3	0.75	2	0.5

- Rating voltage: 440 AC 750 DC
- Insulation resistance: ≥1000MΩ(AC charging connector); ≥2000MΩ (DC charging connector)

[Environmental]

- Operating temperature:-30℃~+50℃
- Relative humidity : 98% at 40℃
- Protection degree: IP55 (in charging process)

[Mechanical]

- Endurance: ≥1000 cycle (mated in non-charged state)

Ordering information

AC charging connector

Basic series	FS charging connector
Connecting type	C means vehicle side G means power side
Contact number	7, Z-receptacle
Rating current	16A or 32A
Rating voltage	250/440V
Dust cap type	0 (without dust cap), 1 (with steel string dust cap), 2 (sealing cap)
Electronic lock	0 (without electronic lock), 1 (with electronic lock)
LED light	0 (without LED light), 1 (with LED light)
Alternative code	Cable assembly wiring type (according to customers' need)
Cable length	(according to customers' need)
Example: FS C-7Z (16A-250/440V) -0 00 5m 16A, vehicle side receptacle, without dust cap, electronic lock, LED light, 5m of cable length.	
Basic series	FS charging connector
Connecting type	C means vehicle side G means power side
Contact number	7, T-plug
Rating current	16A or 32A
Rating voltage	250/440V
Dust cap type	0 (without dust cap), 1 (with steel string dust cap)
Linked switch	0 (without linked switch), 1 (with linked switch)
Charging mode	1, 2, 3
Connecting type	A, B, C
Cable length	(according to customers' need)
Example: FS C-7T (16A-250/440V) -0 1 1 A 5m 16A, vehicle side plug, without dust cap, with linked switch, wiring uses charging mode 1, connecting type A, cable length 5m.	

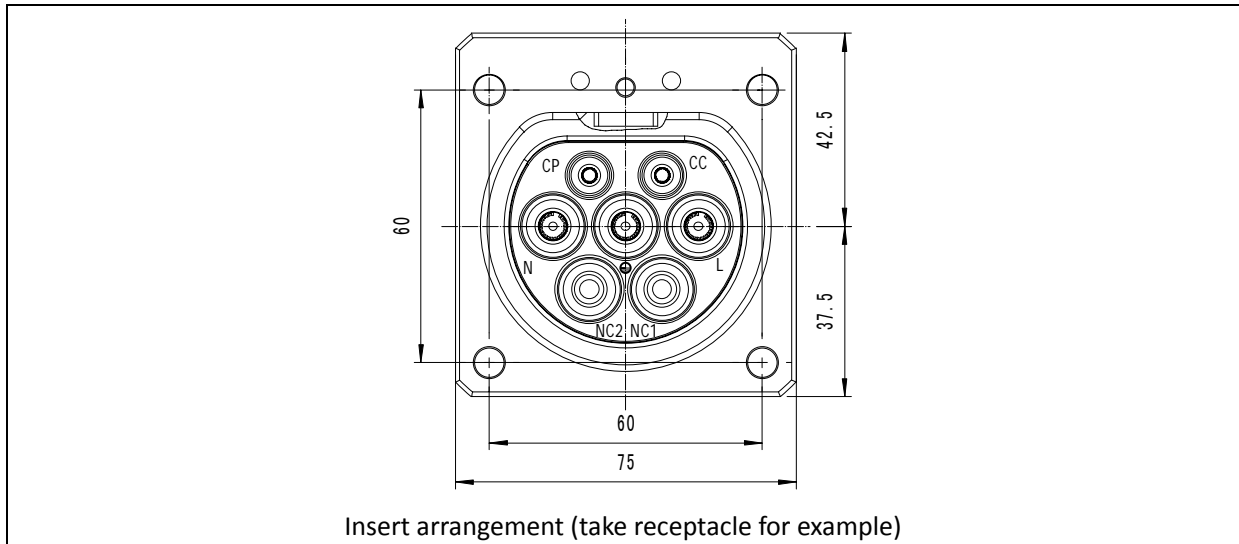
DC charging connector

Basic series	FS charging connector
Contact number	9, Z-receptacle
Rating current	250A or 125A
Rating voltage	750V
Dust cap type	0 (without dust cap), 1 (with steel string dust cap), 2 (sealing cap)
LED light	0 (without LED light), 1 (with LED light)
Alternative code	Cable assembly wiring type (according to customers' need)
Cable length	(according to customers' need)
Example: FS -9Z (250A-750V) -0 0 5m 250A DC receptacle, without dust cap, LED light, 5m of cable length.	
Basic series	FS charging connector
Contact number	9, T-plug
Rating current	125A or 250A


Rating voltage	750V
Dust cap type	0 (without dust cap), 1 (with steel string dust cap)
Linked switch	0 (without linked switch), 1 (with linked switch)
Cable length	(according to customers' need)
Example: FS -9T (250A-750V) -0 1 5m 250A DC plug, without dust cap, with linked switch, 5m of cable length.	

AC inlet outline dimensions

AC charging connector insert arrangement and terminal function definition

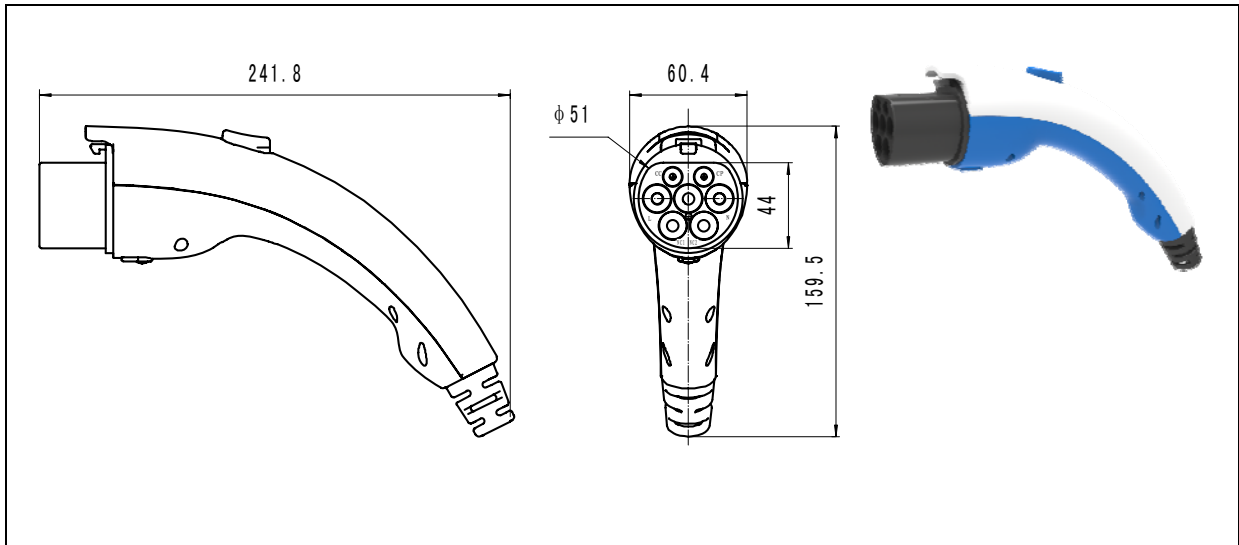


Terminal definition:

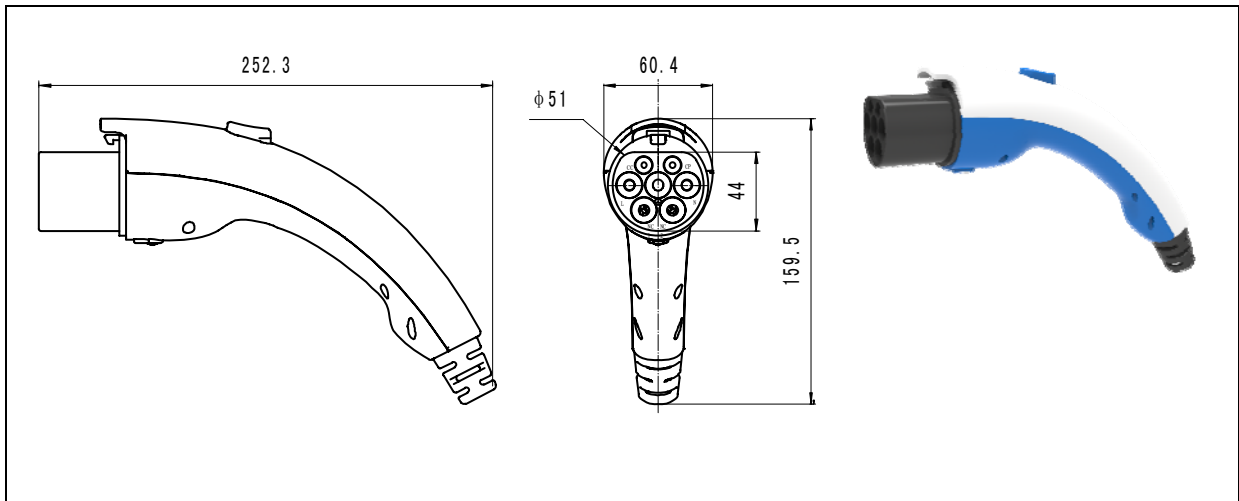
Terminal P/N	Rating voltage and rating current	Function definition
L	250/440V 16A/32A	AC power
NC1	/	Spare contact
NC2	/	Spare contact
N	250/440V 16A/32A	Center line
	/	Protective grounding, connect power supply equipment ground wire and vehicle chassis ground wire
CC	30V 2A	Charging connection verification
CP	30V 2A	Control verification

AC charging plug

[Vehicle side plug]

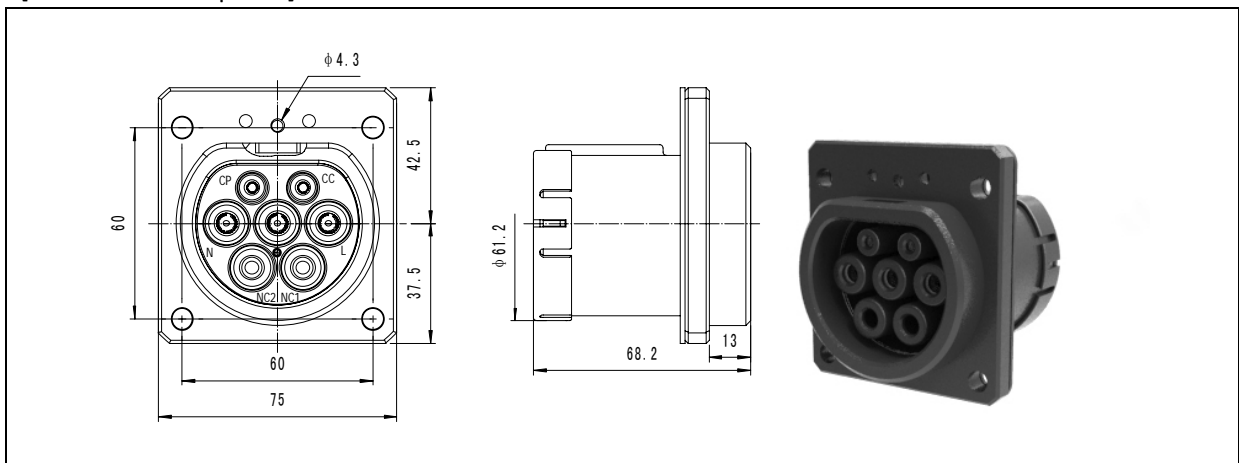


[Power side plug]

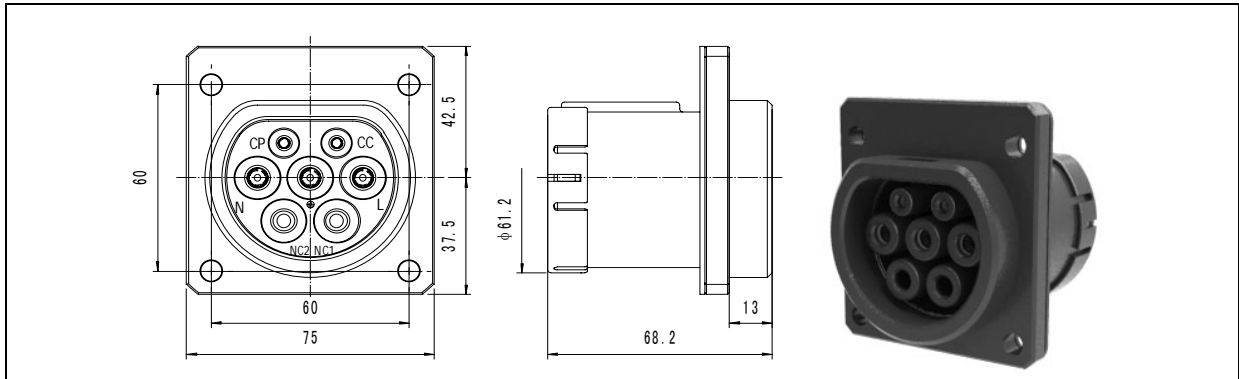


AC charging receptacle

[Vehicle side receptacle]

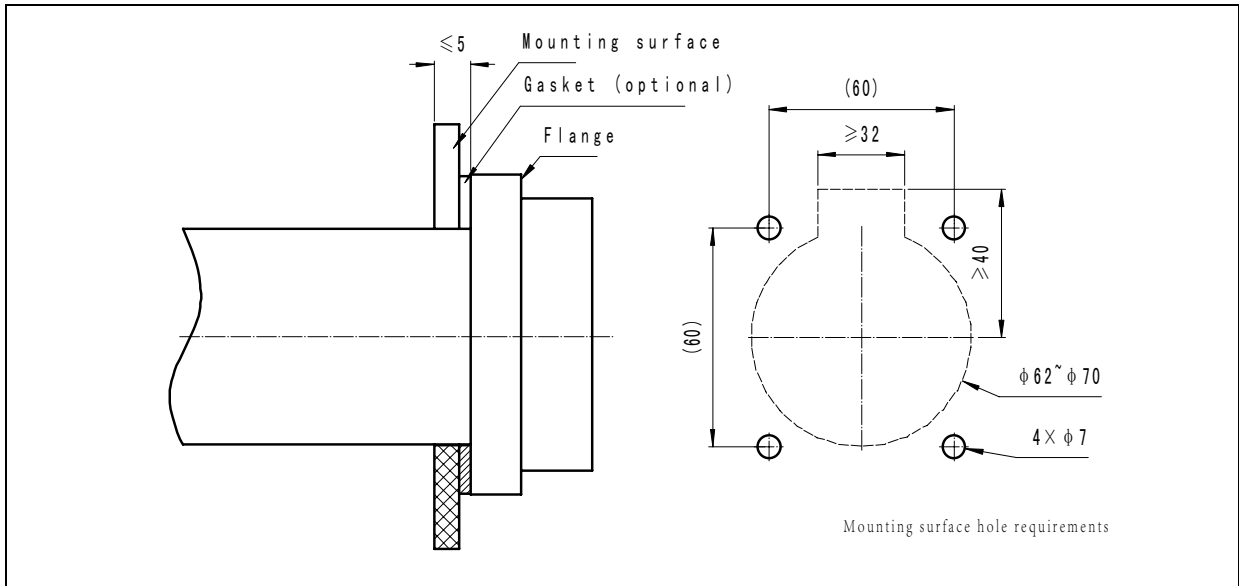


[Power side receptacle]

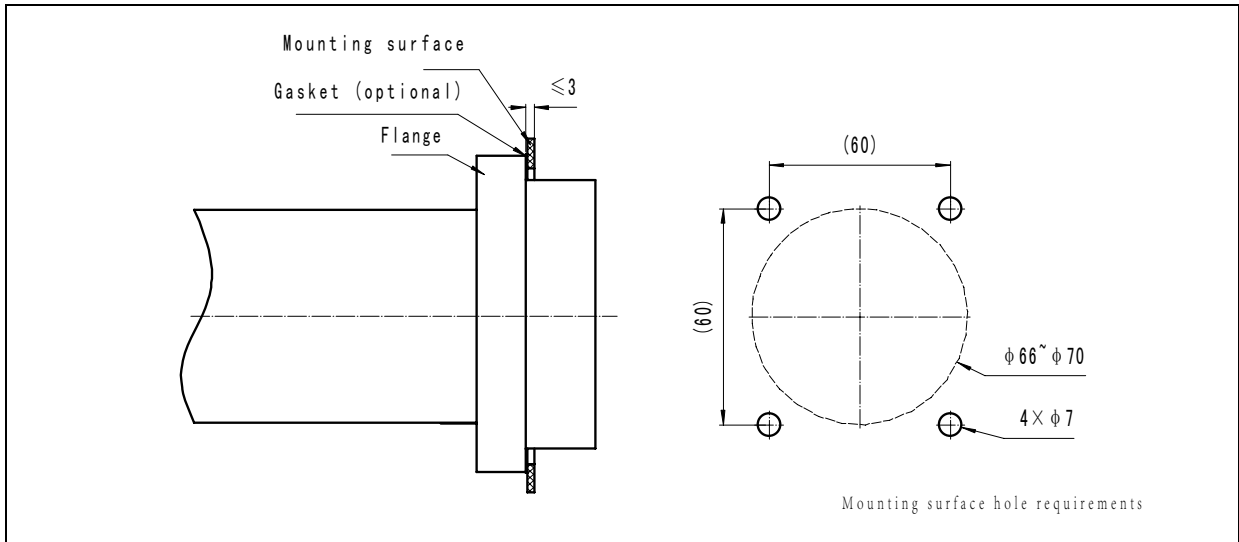


Mounting dimensions for vehicle side charging receptacle

[Front mounting view of vehicle side charging receptacle]

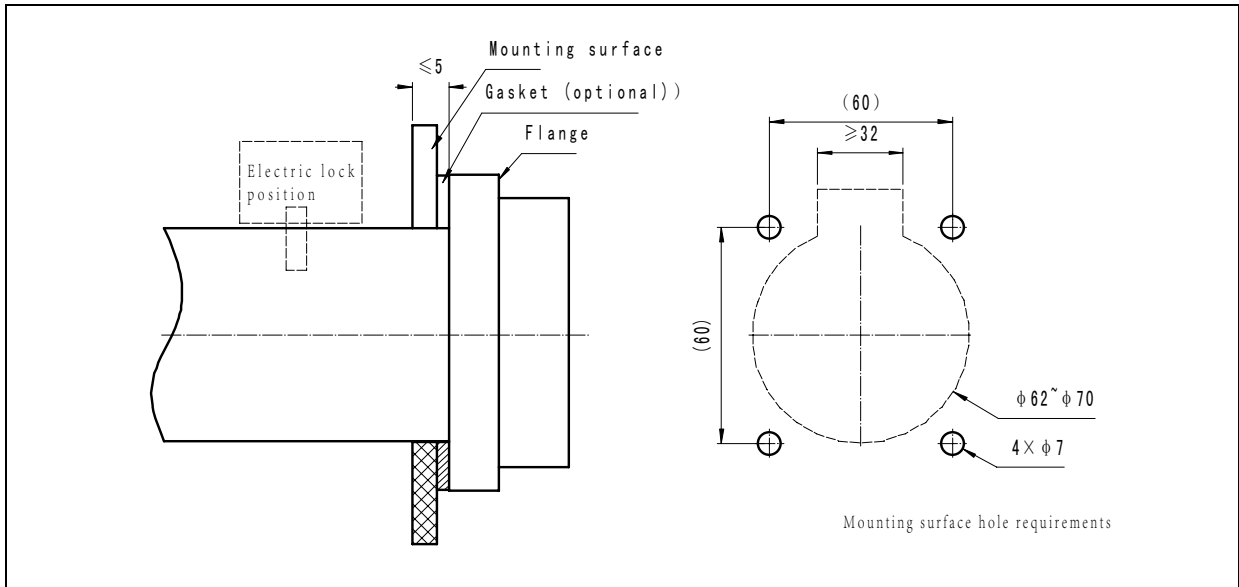


[Rear mounting view of vehicle side charging receptacle]

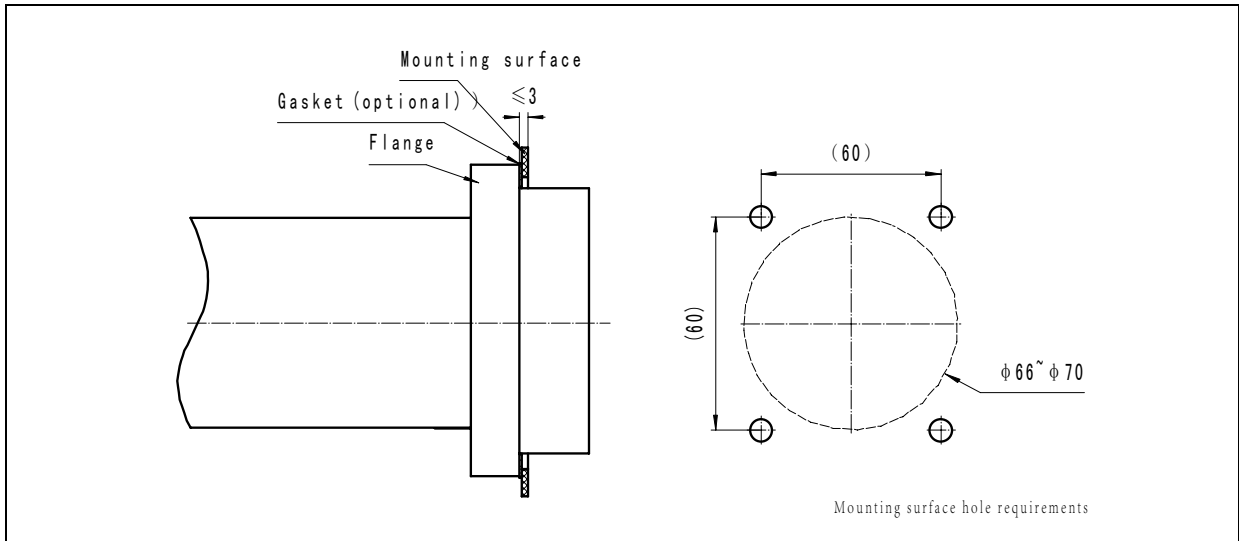


Mounting dimensions for power side charging receptacle

[Front mounting view of power side charging receptacle]

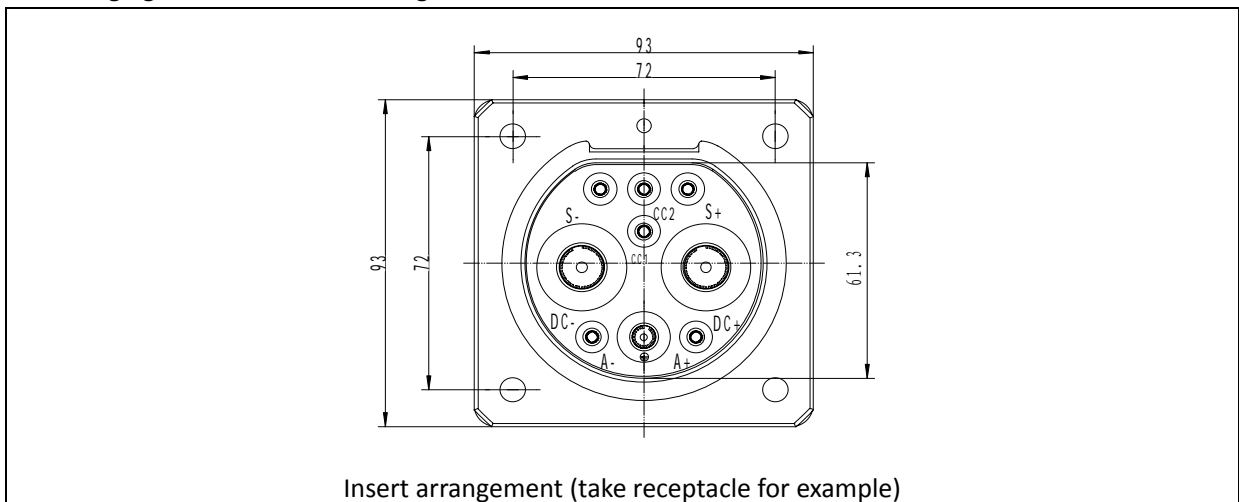


[Rear mounting view of power side charging receptacle]




DC inlet outline dimensions

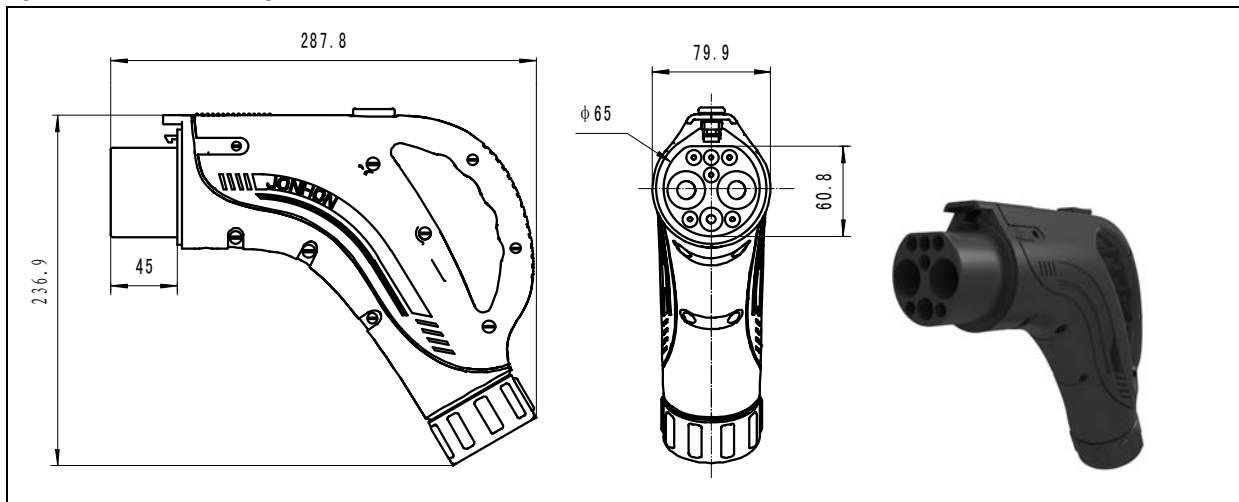
DC charging connector insert arrangement and terminal function definition



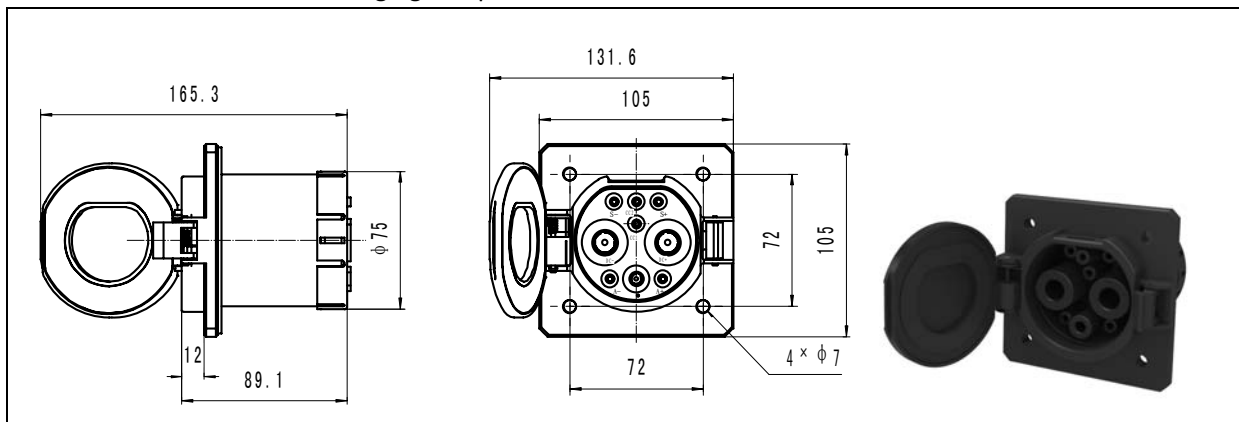
Terminal definition:

Terminal P/N	Rating voltage and rating current	Function definition
DC+	750V 125A/250A	DC power positive pole
DC-	750V 125A/250A	DC power negative pole
	/	Protective grounding, connect power supply equipment ground wire and vehicle chassis ground wire
S+	30V 2A	Charging communication CAN_H, connect non-vehicle charging devices with EV
S-	30V 2A	Charging communication CAN_H, connect non-vehicle charging devices with EV
CC1	30V 2A	Charging connection verification 1
CC2	30V 2A	Charging connection verification 2
A+	30V 20A	Low voltage auxiliary power positive pole
A-	30V 20A	Low voltage auxiliary power negative pole

Outline dimensions

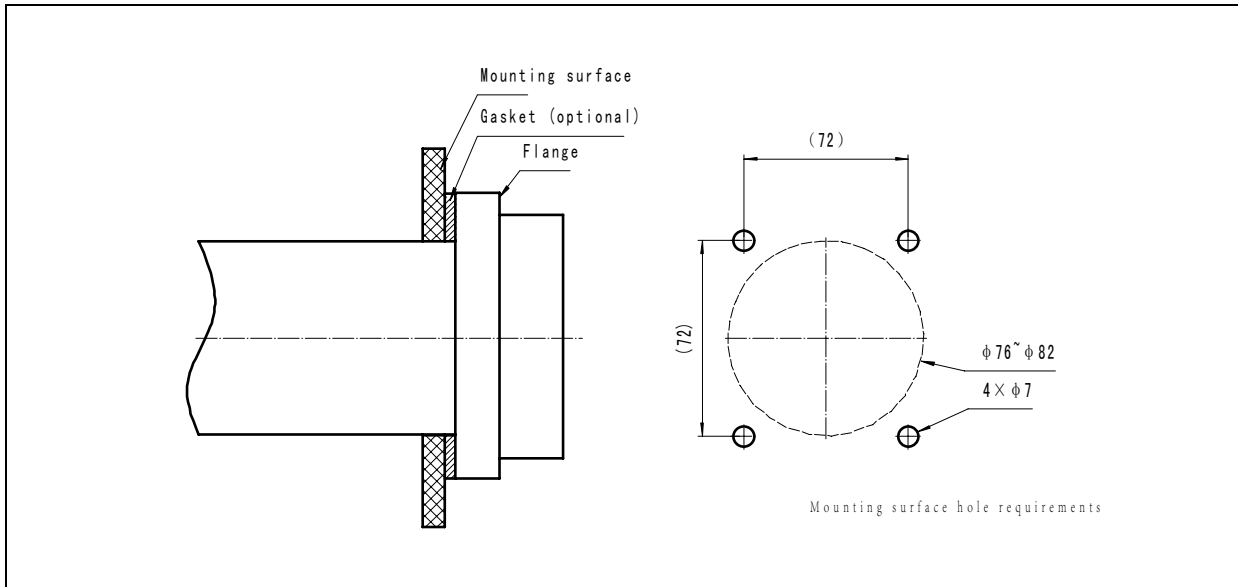
 Outline dimensions for DC charging plug
 [FS9T (250A-750V)]


Outline dimensions for DC charging receptacle



DC charging receptacle mounting dimensions

[Front mounting view of power side charging receptacle]



[Rear mounting view of vehicle side charging receptacle]

