EV Charging Socket Outlet

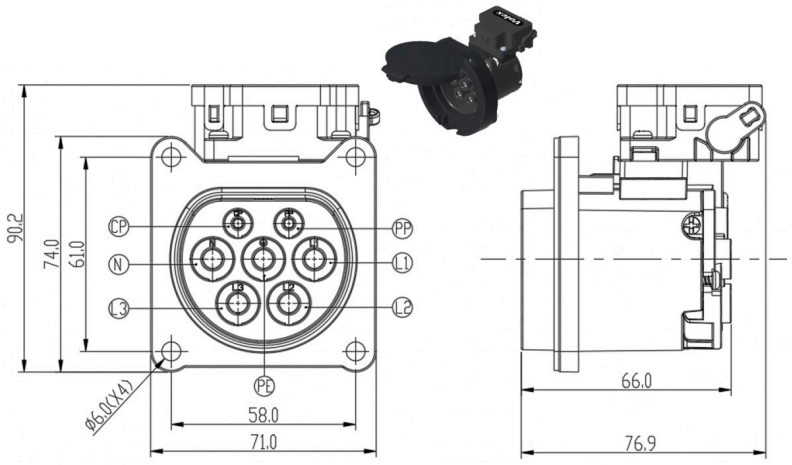
Volex is a leading manufacturer and supplier of EV charging solutions. Volex offers AC socket outlets for use with electric vehicle charging stations or home charging.

ELECTRICAL PROPERTIES	
Type of Signal Transmission	Pulse width modulation
Notes on the Connection Method	Connection via spade connector, separable
Type of Charging Current	AC 1-phase / 3-phase
Charging Power	Max. 22 kW
Charging Current	Max. 32A
POWER CONTACT	
Number	3 (L1, N, PE) / (L1, L2, L3, N, PE)
Rated Voltage	250V AC / 480V AC
Rated Current	16A / 32A
SIGNAL CONTACT	
Number	2 (CP, PP)
Rated Voltage	30V AC
Rated Current	2A
Cable Length	0.5 m
Cable Structure	3 x 2.5 mm^2 + 2 x 0.5 mm^2 5 x 2.5 mm^2 + 2 x 0.5 mm^2 3 x 6 mm^2 + 2 x 0.5 mm^2 5 x 6 mm^2 + 2 x 0.5 mm^2
DIMENSIONS	
Width	74 mm
Height	71 mm
Depth	90 mm
Bore Dimensions	61 mm x 58 mm
MECHANICAL PROPERTIES	
Insertion / Withdrawal Cycles	>10,000
Insertion Force	<100N
Withdrawal Force	<100N

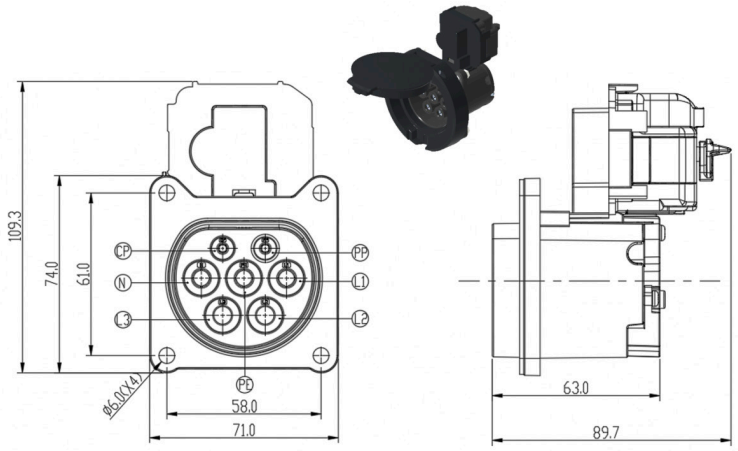
LOCKING ACTUATOR	
Operating Voltage	12V
Note Number of Positions	4-pos
Position of the Locking Actuator	Top Center
Possible Power Supply Range at the Motor	9V to 16V
Maximum Voltage for Locking Detection	12V / 50mA
Typical Motor Current for Locking	0.3A
Reverse Current of the Motor	Max 1A
Max. Dwell Time with Reverse Current	0.5s
Recommended Adaptation Time	500ms
Locking Resistance	>300N
Pause Time After Entry or Exit Path	3s
Service Life Insertion Cycles	>10,000 Load Cycles
Lock Recognition	Available
Mechanical Emergency Release	Available
Ambient Temperature (Operation)	-30°C to 50°C
ENVIRONMENTAL AND REAL-LIFE CONDITIONS	
Degree of Protection (when plugged in)	IP44 (plugged in)
Degree of Protection	IP44 (plugged in) IP54 (with protective cover, see accessories)
Ambient Temperature (operation)	-30°C to +50°C
Ambient Temperature (storage / transport)	-40°C to +80°C
Altitude	2,000 m (above sea level)
STANDARDS AND REGULATIONS	
Standards / Regulations	IEC 62196-1, IEC 62196-2
Approvals	TUV, E.V. READY
MOUNTING	
Mounting Type - Infrastructure Charging Socket	Rear panel mounting (0 to 150° frontal inclination possible)
Mounting Type - Protective Cover	Rear panel mounting (available separately)
Maximum Wall Thickness	Max. 5 mm (rear panel mounting, normative maximum specification for infrastructure plug) Max. 3 mm (rear mounting, normative maximum specification for infrastructure plug when using protective cover 1405217)
Mounting Hole Diameter	6.00 mm (ø)
Fixing Screws	M5 Thread
Screws Included in the Scope of Delivery	None
OPTION	
Wire End Termination	Customised
Cover Color	Black (or customised)
Cover Design	Round or Square (or customised)
Thermistor	NTC (or customised)

EV CHARGING SOCKET OUTLET MECHANICAL DRAWING

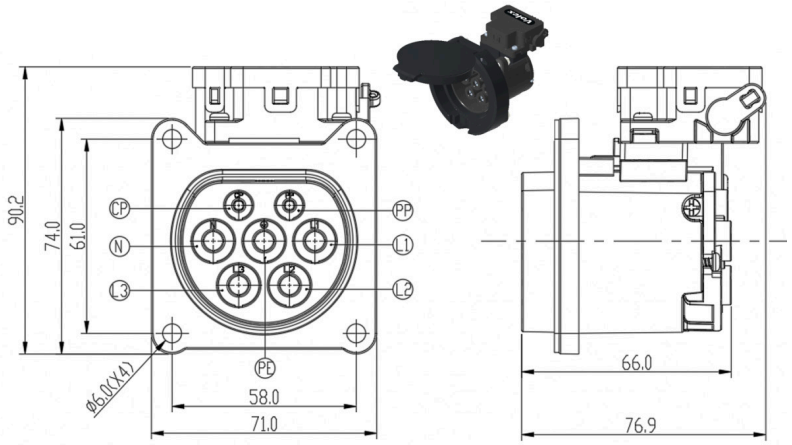
Crimping Version – 1 Phase



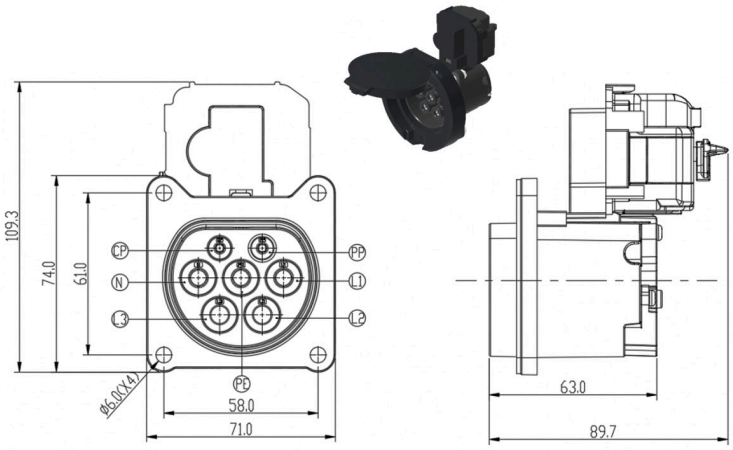
Crimping Version – 3 Phase



Screw Version – 1 Phase

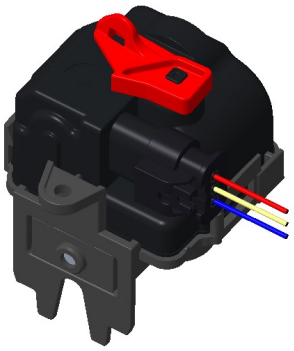


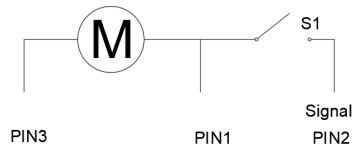
Screw Version – 3 Phase



EV CHARGING SOCKET OUTLET MECHANICAL DRAWING

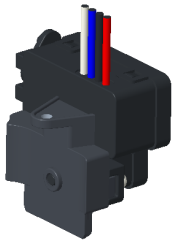
Signal Wire With Spare Connector Solution

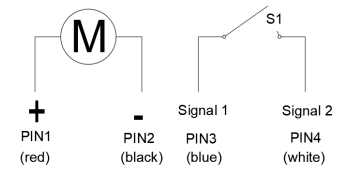




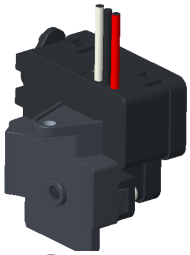
PIN 1	PIN 3	Electronic lock status	Feedback switch status
–	+	Unlock status	On (closed)
+	–	Locked state	to break off

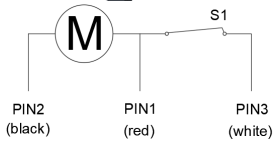
Signal Wire With Pigtail Solution





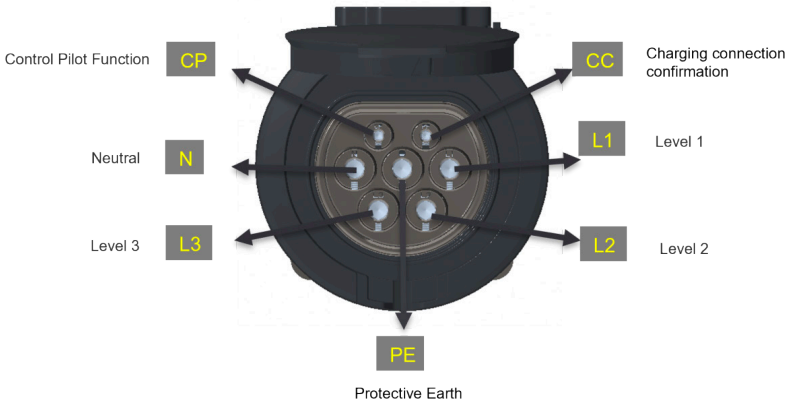
PIN 1	PIN 2	Electronic lock status	Feedback switch status
–	+	Unlock status	On (closed)
+	–	Locked state	to break off



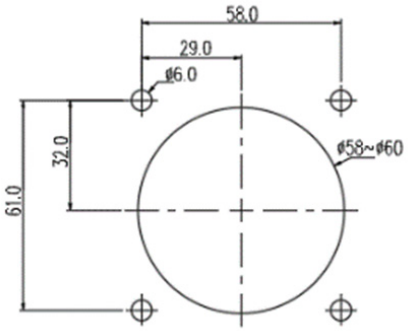


PIN 1	PIN 2	Electronic lock status	Feedback switch status
+	–	Locked state	to break off
–	+	Unlock status	On (closed)

EV Socket Outlet PIN Definition



EV Socket Outlet Schematic Design



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