EV02 Battery-Swap Connectors, 250 A, Floating Mount

Battery swap · 250 A · ±5 mm float · 10,000 cycles



Current rating	250 A or 80 A power; 40 A; 10 A control
Contacts	13 or 40
Float	±5 mm (40-contact)
Protection	IP65 (mated)
Mating cycles	≥ 10,000

Key features

- Built for automated battery swapping
- Floating mount absorbs ±5 mm misalignment (X, Y, Z) and twist
- Guided blind mating
- Wire-spring and crown-spring contacts with many contact points
- Arc-resistant, touch-safe and waterproof design
- 40 contacts: 2 × 250 A, ground, 37 × 40 A; 13 contacts: 5 × 80 A power, 8 × 10 A control

Specifications

Electrical

Parameter	Value	Condition
Rated current, 40-contact	250 A (Ø 12), 125 A (Ø 6), 40 A (Ø 3)	
Rated current, 13-contact	80 A power, 10 A control	
Withstanding voltage	4000 VAC / 1500 VAC	Power / control
Insulation resistance	≥ 5000 MΩ	
Contact resistance	≤ 0.25 mΩ	Ø 12 mm

Mechanical and environmental

Parameter	Value	Condition
Durability	≥ 10,000 mating cycles	
Float	±5 mm X, Y, Z	40-contact
Vibration	50 and 200 Hz fixed; 55–500 Hz sweep, 147 m/s²	Interruption ≤ 1 µs
Shock	30 g, 11 ms	
Operating temperature	−55 to +125 °C	
Protection	IP65	Mated

Mechanical and environmental		
Parameter	**Value**	**Condition**
Flammability	UL94 V-0	

Request a quote or drawing: https://sinoxh.com/request-a-quote/?product=EV02