

BPC10/BPC50 trunk battery connector

Brief introduction

- Termination type: signal and auxiliary: crimping; power and grounding: thread coupling
- Enterprise standard: Q/21E1660

Application

The product is push-pull in-line connector without locking function which is achieved by the locking mechanism between equipments. This series is used in the current transmission between battery box and vehicle side, battery wire and charging side.

Operating environment

The product is applied in vibration environment in EV driving process.

Main technical characteristics

[Mechanical]

- Shell: PBT, flame retardant rating: UL94-V0
- Insulator: PBT, flame retardant rating: UL94-V0
- Contact: copper alloy, gold plating
- Vibration: 10~500Hz
- Endurance: 10000 cycles

[Environmental]

- Operating temperature: -40℃ ~ +80℃
- Salt spray: 240 hours

[Electrical]

- Rating current:
Signal 2A, auxiliary 20A, power 400A, grounding 250A
- Contact resistance:
Signal and auxiliary ≤0.75 mΩ, power and grounding ≤0.2 mΩ
- Insulation resistance:
≥100MΩ (normal temperature, after grounding)
- Withstanding voltage:
between power and grounding 3000V AC
Between signal cavities: 500VAC

Note: BPC10 series are developed for Xuchang Relay Company, not for promotion.

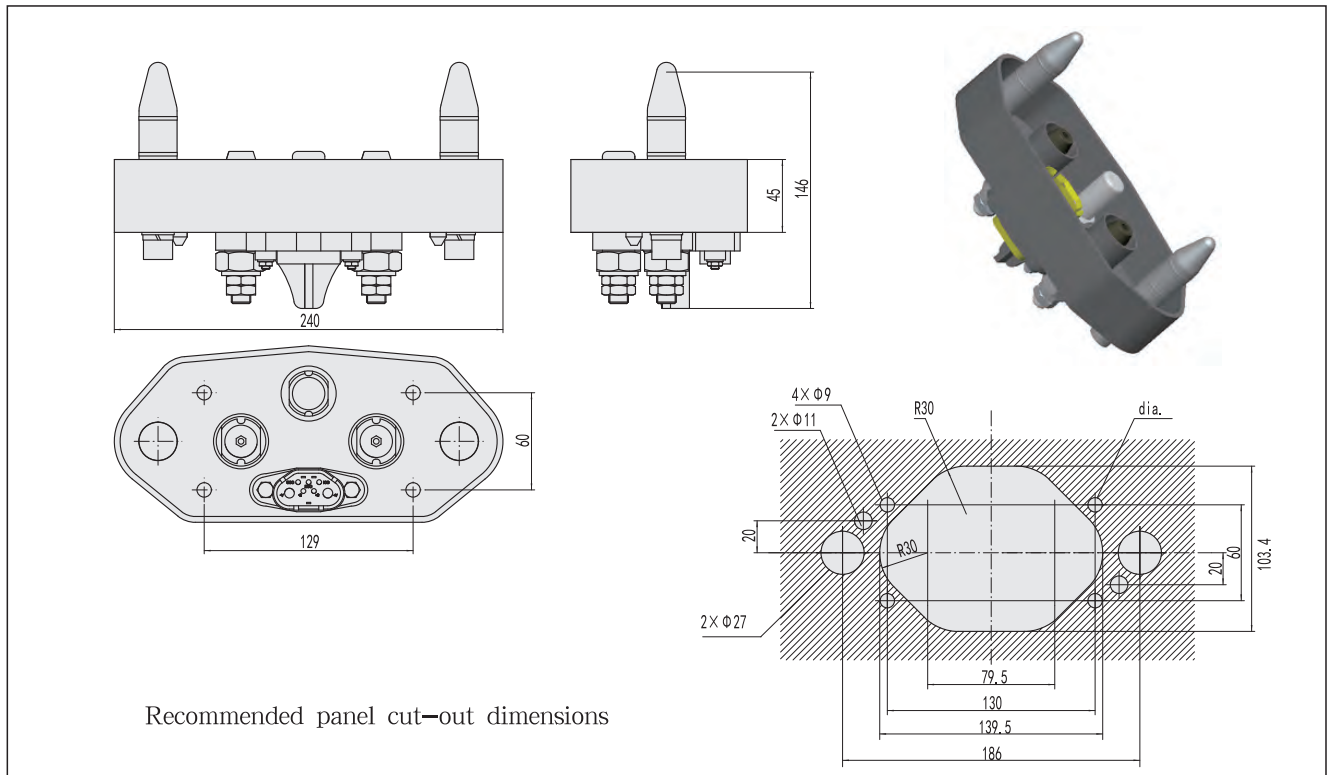
Ordering information

Basic series		BPC	50/10	-S-	400A	/	750V
Connector type	10						
Contact type	S-socket P-pin						
Rating current	400A						
Separator	/						
Rating voltage	750V						



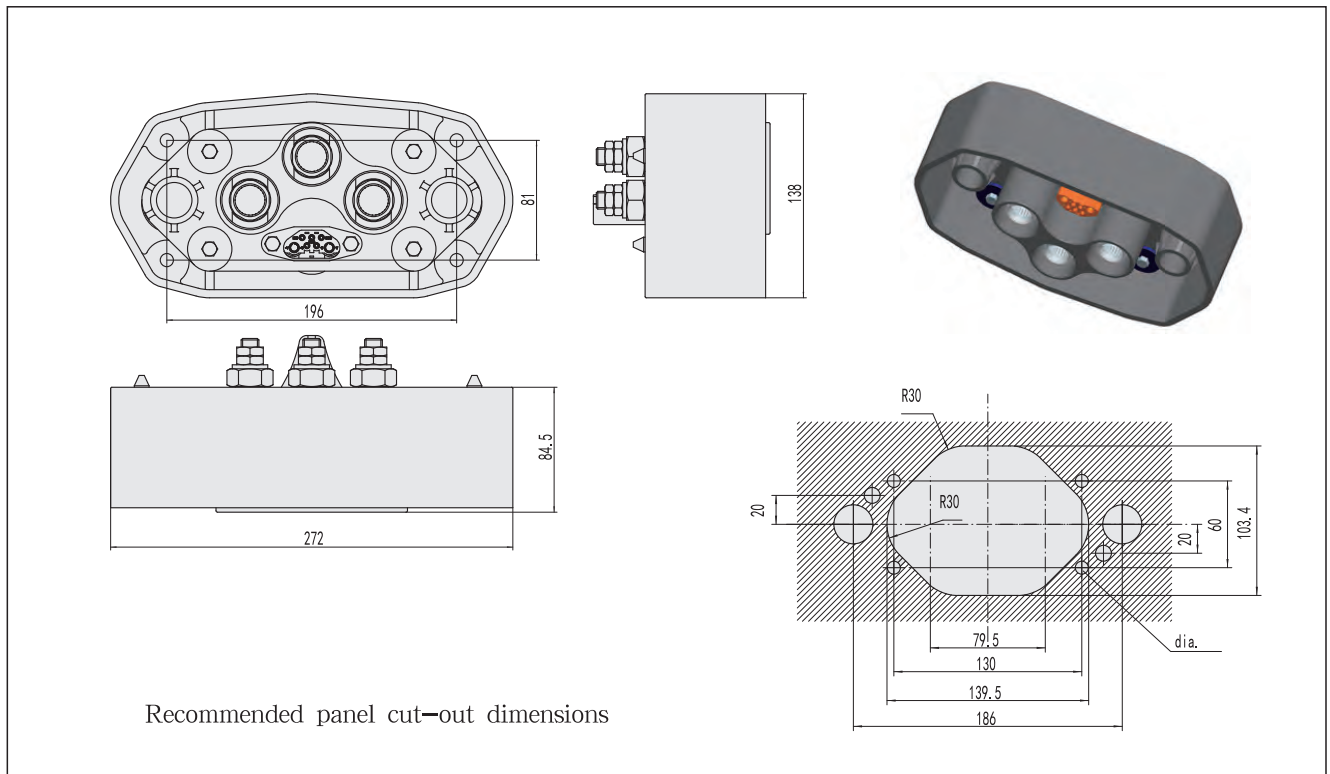
Outline dimensions

[BPC10-P-400A/750V (plug)]



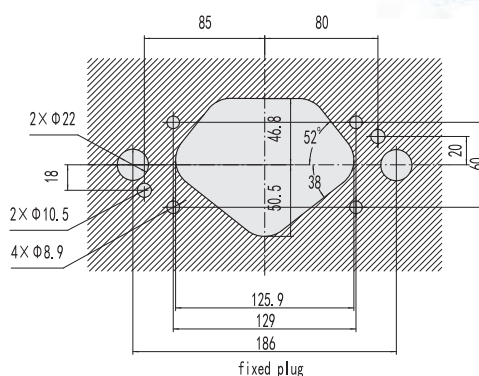
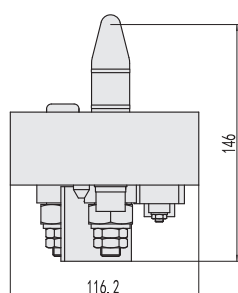
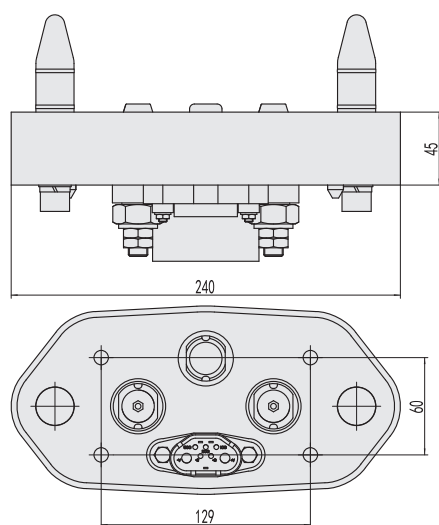
Recommended panel cut-out dimensions

[BPC10-S-400A/750V (receptacle)]



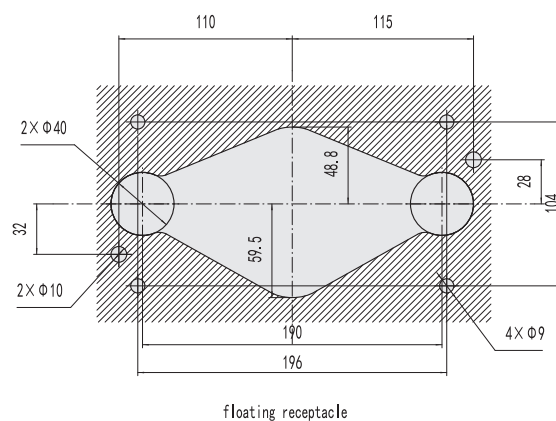
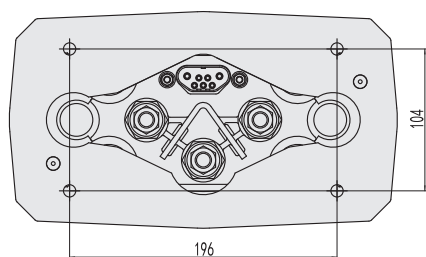
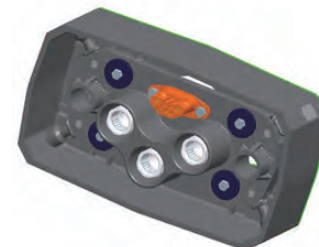
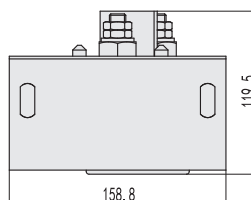
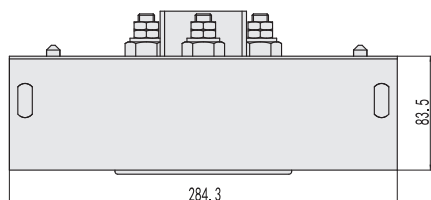
Recommended panel cut-out dimensions

[BPC50-P-400A/750V (plug)]



Recommended panel cut-out dimensions

[BPC50-S-400A/750V (receptacle)]



Recommended panel cut-out dimensions