

BF BATTERY FIGHTER

BFP SERIES BATTERY CHARGERS

BFP012, BFP024 / BFP024XLR



The BFP series of chargers are fully automatic, ruggedized, waterproof, vibration proof, lightweight, chassis mountable chargers suitable for all types of lead acid batteries especially in battery powered mobile devices such as golf buggies, wheelchairs & mobility scooters where the BFP chargers are suitable for chassis mounting.

Available in two voltage output models - suitable for 12 volt batteries with a 5 amp output & suitable for 24 volt batteries with a 3 amp output. Featuring microprocessor control over 4 stages that charges more efficiently plus extending battery life compared to other similar output chargers.

- High Frequency Switching Mode Power Supply
- 4-Steps Intelligent Battery Charging Program
- Chassis mountable
- Full Protection : Anti-vibration , spark proof , reverse polarity protection , short circuit protection, over charge protection , over heat protection
- Water ingress Protection (IP) 65 rated
- 2 LED indicators show the charging status

OUTPUT CABLE CONNECTIONS:

The BFP chargers come with interchangeable connector leads. For BFP012 & BFP024 connector leads BFL1 and BFL2 are included with the charger. For model BFL24XLR BFL10 is included.

All accessory leads listed below are also available as options for this charger.

BFL1	BFL2	BFL3	BFL4	BFL5	BFL6	BFL7	BFL8	BFL9	BFL10	BFL11	BFL12
Alligator clips	Ring terminals	3 pin microphone connector	DC, Merit, Hella plug	4.8mm (F1) female spades	6.35mm (F2) female spades	BFL extension lead	Female DC socket	In line voltage reader	XLR Connector	5V (regulated) USB socket	Anderson connectors

Charger Specification Summary

Part Number:		BFP012	BFP024 / BFP024XLR
Nominal Output Voltage:		12 Volts	24 Volts
Nominal Output Current:		5 Amps	3 Amps
Input Voltage:		230 to 240 VAC	
Input Frequency:		47 to 62 Hz	
Maximum Input Current:		0.81 Amps @ 180 VAC	
Nominal Efficiency:		80%	
Nominal Power Factor:		0.6	
Charger Output:			
Maximum Power: @ 25 °C:		70 Watts (+2, -5) Watts	
Maximum Current During Bulk Charge:		5.0 Amps (+/- 10%)	3.0 Amps (+/- 10%)
Absorption Voltage:		14.4 VDC = (2.42 vpc)	28.8 VDC = (2.4 vpc)
Absorption to Float Transition:		Charge Current drops: below 2.5 Amps.	Charge Current drops: below 1.0 Amp.
Float Voltage:		13.2 VDC = (2.2 vpc)	26.4 VDC = (2.2 vpc)
Charge Reset: Battery Voltage Threshold:		11.5 to 12.0 VDC (2 to 2.08 vpc)	23.5 to 24.0 VDC (2 to 2.04 vpc)
Output Regulation:	Line (Typical):	1%	
Electrical Isolation:	Input / Output:	2500 VAC	
Electrical Isolation:	Input / Chassis:	2500 VAC	
Electrical Isolation:	Output / Chassis:	500 VAC	
Operating Temp:		-20°C to 50°C	
Dimensions & Weight:		5 in (127mm)L x 4.9 in (125mm)W x 2 in (51mm)H, 800 grams	
Enclosure:		Powder Coated Aluminum Chassis	

- **Stage 1) Qualification:** Ensure the battery is in good condition and safely able to be charged.
- **Stage 2) Bulk Charge:** Red Light On, Green Light Off, Constant Current = 5.0 Amps, Transition to Stage 2, Absorption Charge when battery voltage reaches 14.4 VDC.
- **Stage 3) Absorption Charge:** Red Light On, Absorption Voltage = 14.4 VDC Transition to Float Charge (Stage 3) when battery charging current drops below 2.5 amps.
- **Stage 4) Float Charge:** Red Light Off, Green Light On. Float Voltage = 13.2 VDC. If an external load is applied to the battery while the charger is in stage 3, Float Charge, and if the battery voltage drops below a range between 11.5 to 12.0 VDC, then the charge cycle restarts.

Figure 1 Charging Graph: Float Maintain Charger 'Fighter' 12Vdc 5A

