# PFC Boost Flat Wire Inductor

Product Design Reference | PMT-PR-2026-1112-16 | Rev A/0 | 2026-11-12

This reference reproduces published product information and its stated evidence status. Final project specifications require an approved drawing and sample acceptance record.

## Published Parameters and Conditions

| Parameter | Published value / interpretation |
|---|---|
| Power range: | 3 kW - 60 kW |
| Inductance: | 50 μH - 1000 μH |
| Operating frequency: | 16 kHz - 100 kHz |
| Current ripple: | <30% |
| Insulation class: | Class F / Class H |

## Application and Validation

Boost inductor designed for single-phase/three-phase PFC circuits. Flat wire technology achieves low DCR and low temperature rise, supporting wide power range - core component for charging stations and server power PFC applications.

A redacted 20 kW-class EV charger PFC-stage case has been prepared to show how inductance, DCR, current stress, insulation, thermal path, and mounting limits are reviewed before sample validation. Product-specific electrical and thermal values should be confirmed by the approved sample record.

PROMAGTECH supports custom inductance, current rating, core material, insulation class, cooling method, and mounting structure based on your converter topology and application environment.

Selection and calculation notes for charging-station and industrial three-phase PFC inductors.

Insulation, partial-discharge and thermal review points for 800 V EV power platforms.

Round-wire versus flat-wire trade-offs for window fill, AC loss, thermal path and production consistency.

## Project Review and Contact

Send voltage, topology, frequency, RMS and peak current, loaded inductance or turns ratio, thermal boundary, insulation and available mounting dimensions. Sample fees and delivery schedule are confirmed in the project quotation.

3rd Floor, Building 1, No. 22 Dongda Road, Dongkeng Community, Fenghuang Street, Guangming District, Shenzhen, Guangdong 518132, China

Phone: +86 13537658938 | Email: zyong@promagtech.cn | www.promagtech.com

Product page: https://www.promagtech.com/products/pfc-boost-inductor.html

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