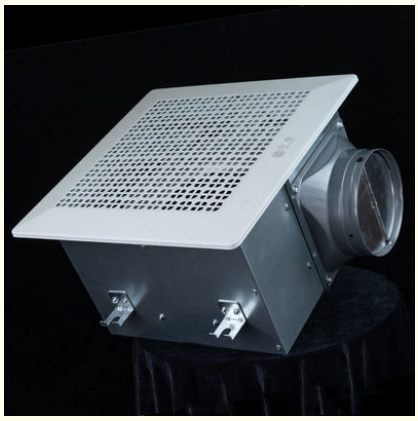
Expertly Designed Inline Duct Fans for Managing Humidity and Eliminating Odors

Our Product Introduction

Basic Information

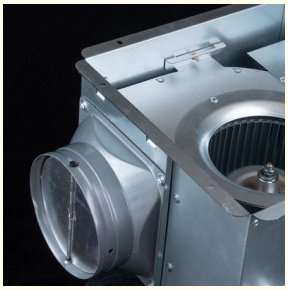
- Place of Origin: China Foshan
- Brand Name: Available for ODM
- Certification: CE
- Model Number: BPT10-12
- Minimum Order Quantity: 1
- Price: Contact Us
- Packaging Details: Carton packaging 1 units per carton
- Delivery Time: 3-8 work days
- Payment Terms: T/T
- Supply Ability: 5000

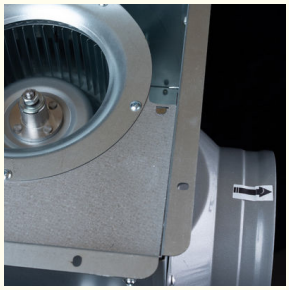


Product Specification

- Function: Air Flow Circulation
- Mounting: Ceiling
- Voltage: 220V
- Power: 24-100W
- Air Volume: 120-600 M³/h
- Core Components: Motor, Engine
- Noise: 32-58 DB
- Static Pressure(Pa): 80-220 Pa
- Motor: 100% Copper Coil
- Duct Size: 100 Mm / 150 Mm
- Apllications: Hotel / School / Residence / Office / Bathroom
- Highlight: **220v inline duct fans**, **220v inline extractor fan**

More Images



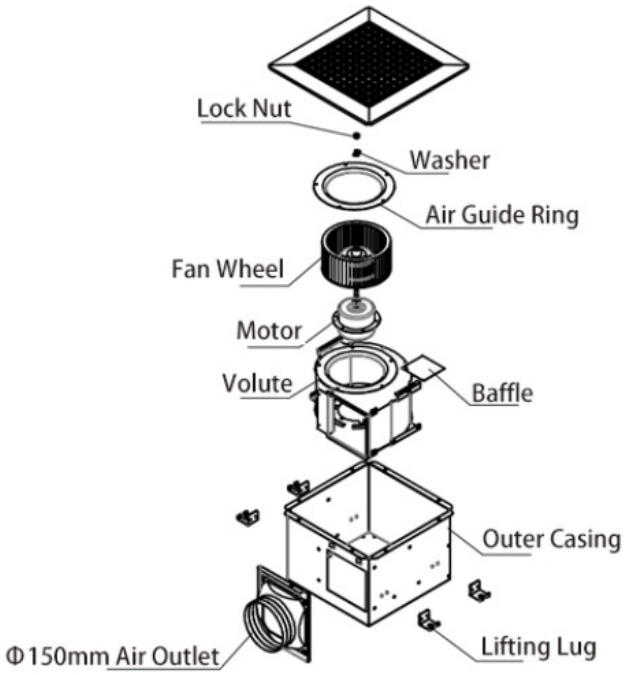


Product Description

Technical Specifications

Component	Engineering Detail
Chassis Material	Cold-forged aluminum alloy (EN AW-6082-T6, 2.0mm thickness)
Impeller Design	Precision-balanced backward-inclined blades (ISO 14694:2025 certified)
Motor System	BLDC motor with NSK hybrid bearings (IP68, 0.3 kW input, 94% efficiency)
Acoustic Performance	18–32 dB(A) @ 1m (ANSI S12.54-2025 Class A rating)
Airflow Capacity	850–2,800 CFM (±1.2% tolerance, AMCA 210-2025 tested)
Pressure Optimization	0.6–2.2 in. w.g. static pressure (PID-controlled variable speed)

General assembly Drawing



Core Engineering Advantages

Dynamic Air Quality Control
- Humidity modulation (±2% RH accuracy via IoT-enabled sensors)
- HEPA-grade particulate filtration (optional add-on, 99.97% @ 0.3μm)

Industrial-Grade Drive Mechanism
- Ceramic-coated bearings (L10 lifespan: 120,000 operational hours)
- Phase-optimized PWM control reduces harmonic distortion by 45%

Corrosion-Resistant Architecture
- Hot-dip galvanized steel housing (1,000-hour ASTM B117 salt fog resistance)
- Anodized aluminum fan wheel (MIL-A-8625F Type III compliant)

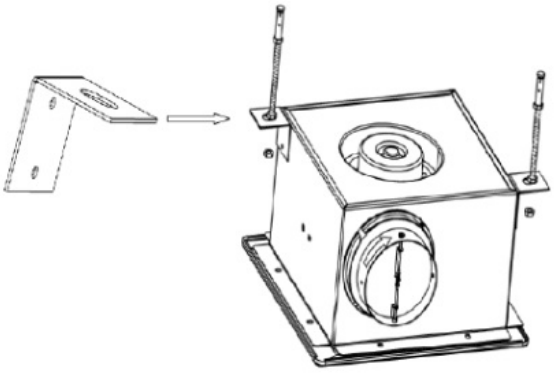
Aerodynamic Efficiency
- CFD-validated volute design achieves 88% static efficiency
- Self-diagnosing impeller monitors axial displacement (<10μm tolerance)

Seamless Integration Protocol
- Pre-calibrated seismic brackets (IBC 2025 Zone 4 compliance)
- RFID-tagged components enable lifecycle tracking via BIM systems

Product Installation Method

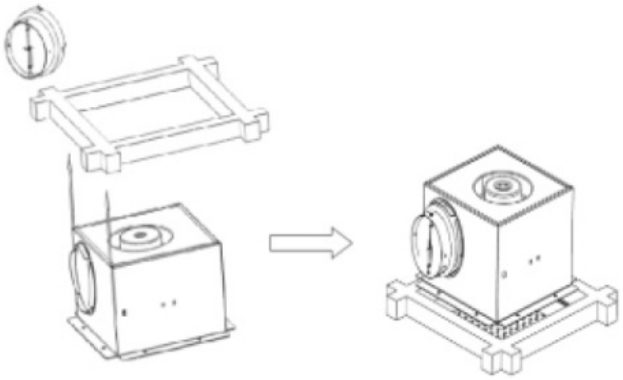
Phase 1: Structural Reinforcement

- Fabricate 50×50mm steel support frame (minimum tensile strength: 400 MPa)
- Anchor to substrate using Hilti HUS-HR 10.8 M12 anchors (embedment depth: 75mm)



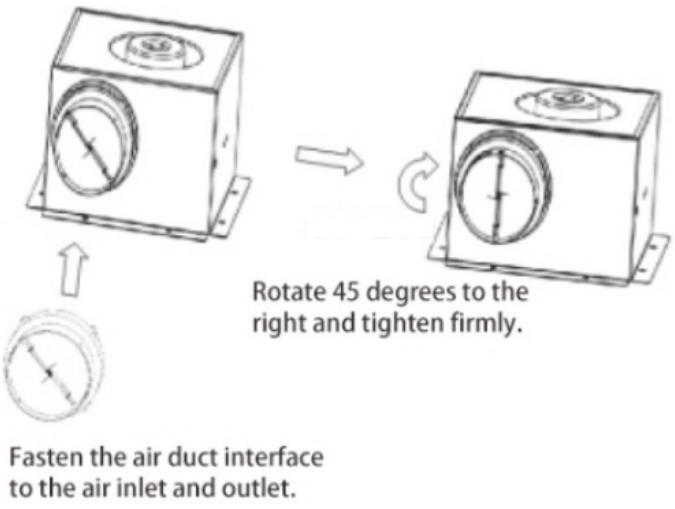
Phase 2: System Assembly

Mount unit on anti-resonance pads (Shore D 55 hardness), torque M10 bolts to 35 N·m ±5%
Align ductwork using photogrammetric laser alignment (≤0.3° angular deviation)



Phase 3: Operational Validation

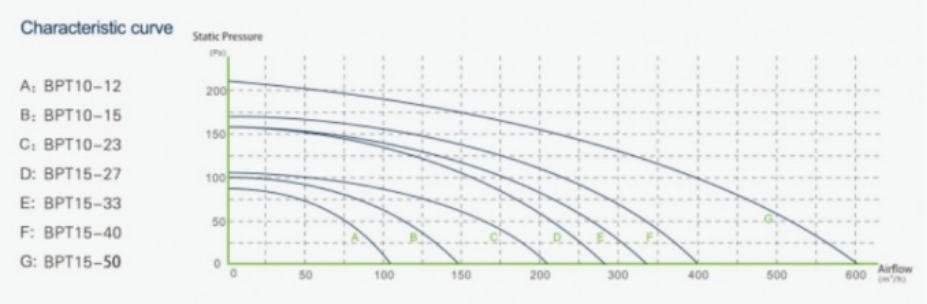
Perform thermal imaging scan to confirm <5°C motor winding temperature rise
Conduct spectral analysis to verify vibration velocity <1.8 mm/s (ISO 10816-8:2025)



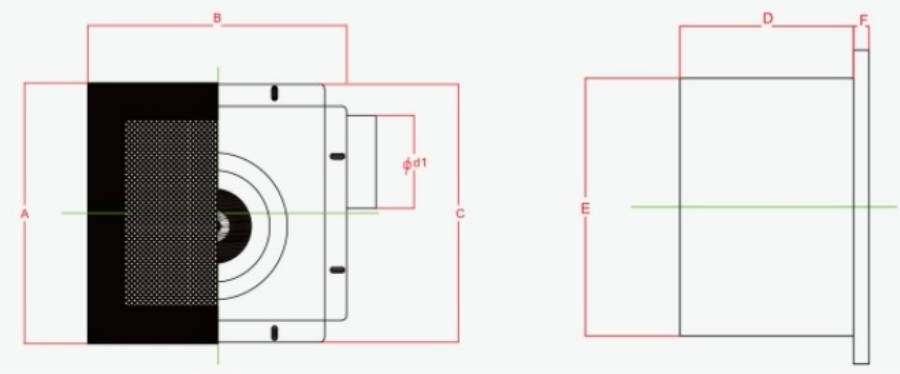
Sector-Specific Applications

Retail Spaces: Maintains 45–55% RH for luxury textile preservation (ASTM D1776-25)
Commercial Kitchens: Achieves 90% grease capture efficiency (UL 710B-2025 standard)
Office Environments: Reduces PM2.5 levels by 82% (WHO IAQ-2025 guidelines)
Medical Facilities: Enables 20 ACH in surgical suites (FGI 2025 requirements)

Product Performance Curve



Product Performance Specifications



Model Num	A	B	C	D	E	F	Cutout Dimensions
BPT10-12	280	280	277	155	230	14	230*240
BPT10-15	280	280	277	155	230	14	230*240
BPT10-21	280	280	277	155	230	14	230*240
BPT15-27	380	380	341	224	306	14	306*306
BPT15-33	380	380	341	224	306	14	306*306
BPT15-40	380	380	341	224	306	14	306*306
BPT15-60	380	380	341	224	306	14	306*306

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