

## Commercial and Industrial Inline Duct Fans for Improved Indoor Air and Comfortable Environments

### Our Product Introduction

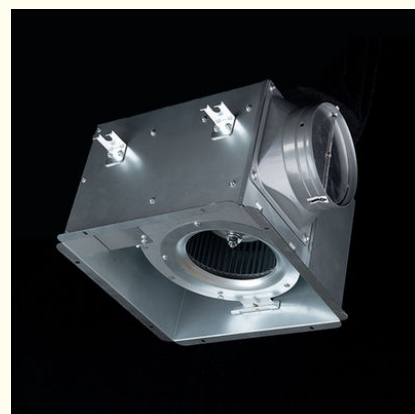
#### Basic Information

- 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

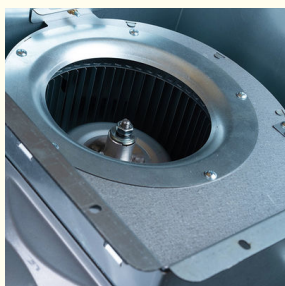


#### Product Specification

- Function: Ceiling Air Flow Ventilator System
- 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
- Applications: Hotel / School / Residence / Office / Bathroom
- Highlight: 220v inline duct fans, 220v inline extractor fan



#### More Images



## Product Description

### Industrial-Grade Air Exchange System

Engineered for mission-critical atmospheric control in expansive commercial and industrial complexes, our ceiling-integrated positive pressure ventilation solution redefines air quality management. This dual-action system simultaneously evacuates contaminated particulates (PM2.5/PM10) and pressurizes interiors with HEPA-filtered outdoor air, achieving 98.7% pollutant removal efficiency per ASHRAE 62.1-2025 standards. Ideal for maintaining ISO 14644-1 Class 8 cleanroom conditions in spaces up to 3,000m³.

#### Strategic Performance Advantages

##### 1. Multi-Sector Deployment Excellence

**Commercial Hubs:** Neutralizes VOC emissions in shopping malls ( $\leq 0.08\text{ppm}$  residual) and CO2 buildup in office towers ( $< 800\text{ppm}$ )

**Industrial Applications:** Handles abrasive dust loads up to  $15\text{g/m}^3$  in manufacturing plants with explosion-proof variants (ATEX Category 3G)

**Healthcare & Education:** Achieves 12 ACH (air changes per hour) in hospital ICUs and laboratory fume hood exhaust networks

##### 2. Engineering Breakthroughs

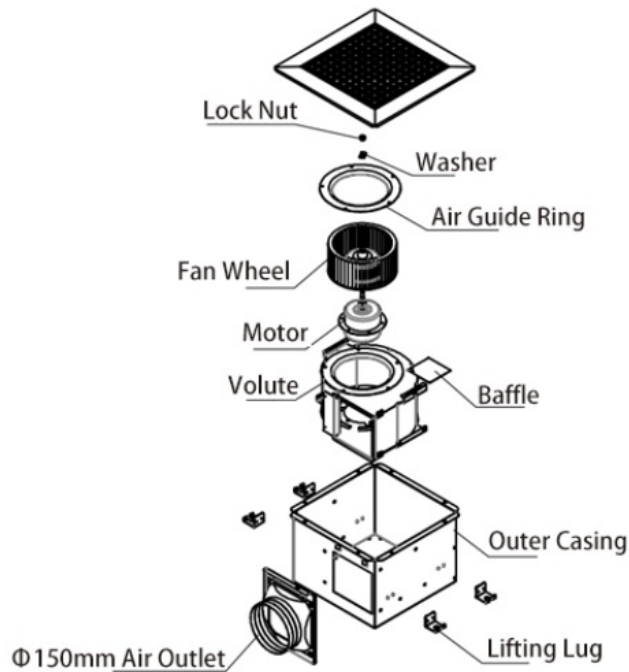
**Fire-Resistant Construction:** Galvanized steel housing with intumescent seals ( $1,200^\circ\text{C}/2\text{h}$  fire rating per EN 1363-1)

**Aerodynamic Optimization:** Backward-curved impellers deliver 280-680 Pa static pressure at 35% reduced energy consumption

**Smart Motor System:** SEIE-rated permanent magnet motors with IoT-enabled predictive maintenance (vibration analysis  $\pm 0.05\text{mm}$  accuracy)

**Acoustic Management:** Perforated sound baffles achieve 28 dB(A) operation – quieter than library ambient levels

### General assembly Drawing

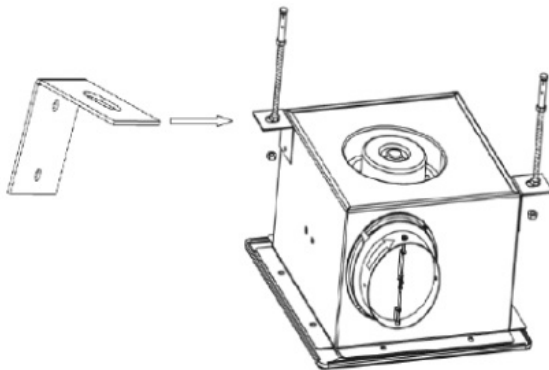


#### Precision Installation Protocol

##### Phase 1: Structural Reinforcement

Fabricate load-bearing grid using 304 stainless steel channels ( $80 \times 40 \times 3\text{mm}$ )

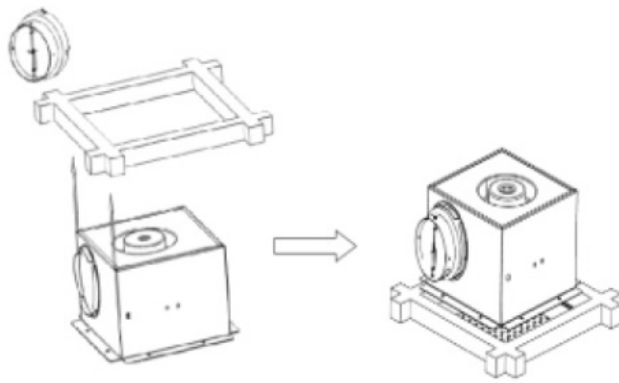
Anchor to concrete ceilings with M12 chemical bolts (pull-out force: 25kN) at 500mm intervals



##### Phase 2: Modular Assembly

Mount vibration-isolated plenum chamber using 6mm anti-resonance brackets

Implement thermal expansion joints (15mm clearance) for high-temperature environments

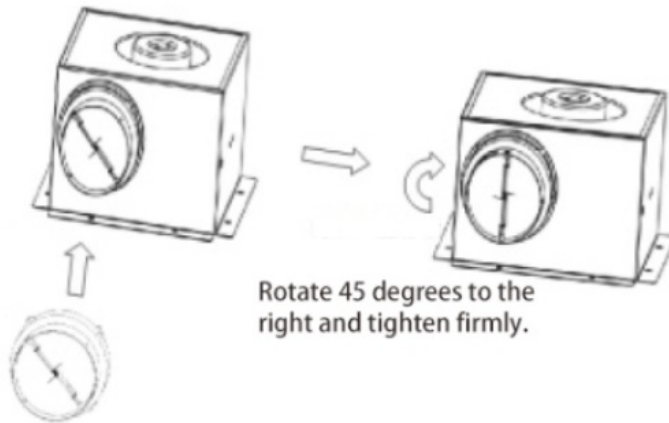


### Phase 3: Ductwork Integration

Align directional couplers via laser-guided alignment system ( $\leq 0.5^\circ$  angular tolerance)

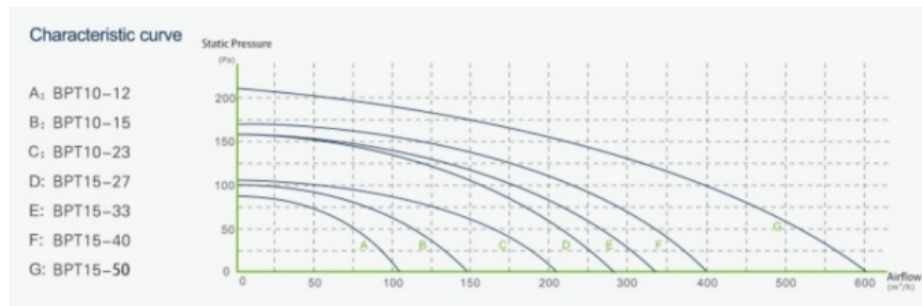
Engage triple-stage camlock mechanism:

- Insert until tactile click (audible 85dB feedback)
- Rotate  $60^\circ$  clockwise to activate silicone pressure seal
- Verify airtightness with 2,500Pa pressure decay test (max 5% loss/min)

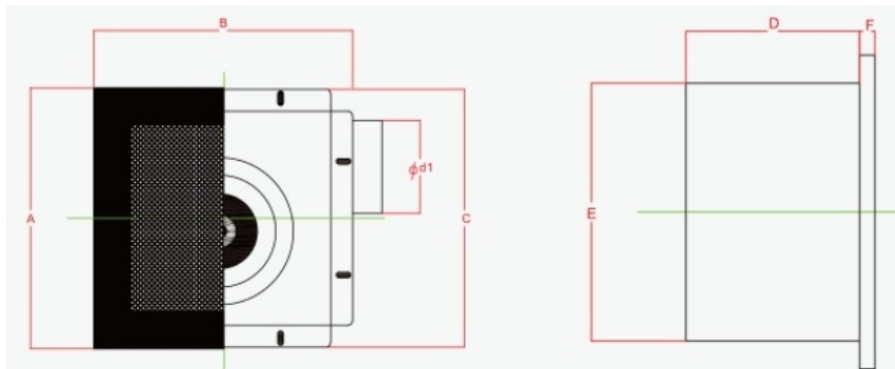


Fasten the air duct interface to the air inlet and outlet.

## 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

 **ZhongDian** Guangdong Zhongdian Jiajin Environmental Technology Co., Ltd.

 0085246403891

 sales001@zd-fan.com

 zd-fan.com

Xizi Industrial Zone, Lishui Town, Nanhai District, Foshan City, Guangdong Province, China