## Quiet and Stylish Inline Duct Fans for Optimal Air Control in Commercial and **Residential Spaces**

China Foshan

CE

1

5000

BPT10-12

Contact Us

Available for ODM

## **Basic Information**

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity:
- Price:
- · Packaging Details:
- Delivery Time:
- 3-8 work days • Payment Terms: T/T
- Supply Ability:



### **Product Specification**

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

Carton packaging 1 units per carton





### More Images





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#### Product Description

#### **Technical Specifications**

Component	Engineering Detail					
Chassis Material	Cold-rolled steel casing (1.5mm thickness, ASTM A366)					
Impeller Design	Aerodynamically optimized backward-curved fan wheel (EN 12101-3:2025 certified)					
Motor System	Dual-ball bearing EC motor (IP55, 0.25 kW power input)					
Noise Level	20-38 dB(A) @ 1m (ANSI S12.54-2024 standard)					
Airflow Capacity	800–2,500 CFM (±1.5% tolerance)					
Pressure Range	0.5-2.0 in. w.g. static pressure					

# **General assembly Drawing**



#### **Advanced Air Purification Architecture**

Humidity regulation (±3% RH accuracy via PID-controlled airflow) Activated carbon filter slot (optional) for VOC absorption (85% efficiency) **Precision Engineered Drive System** 

SKF/C&U hybrid ceramic bearings (L10 life: 100,000 hours) Soft-start technology reduces inrush current by 70%

#### **Corrosion-Resistant Construction**

Electro-galvanized steel housing (720-hour salt spray tested per ASTM B117) Powder-coated finish (RAL 9016 color code, 5-stage pretreatment process)

#### Intelligent Airflow Optimization

Computational Fluid Dynamics (CFD)-designed volute casing reduces turbulence Self-balancing impeller system (ISO 1940 G1.0 balance grade) Modular Installation System

Pre-assembled seismic restraint brackets (IBC 2025 compliant) Laser-etched alignment guides for  $\pm 0.3$ mm duct connection accuracy

## **Product Installation Method**

#### **Stage 1: Structural Preparation**

Fabricate 50×50mm steel support frame (minimum yield strength: 250 MPa) Anchor to concrete substrate using M12 mechanical expansion anchors (Hilti HSL-3)



#### Stage 2: Unit Integration

Mount chassis on neoprene isolators (50 Shore hardness), torque fasteners to 30 N·m Align ducting system using infrared laser alignment tool (max deviation:  $0.5^{\circ}$ )



#### Stage 3: Performance Validation

Conduct airflow measurement with rotating vane anemometer (accuracy:  $\pm1\%$  FS) Verify vibration levels <2.5 mm/s RMS (ISO 10816-8:2025 criteria)



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

#### **Sector-Specific Benefits**

Commercial Kitchens: Removes 95% of grease particles (NFPA 96-2025 compliance) Healthcare Facilities: Achieves 15 ACH in isolation rooms (ASHRAE 170-2025) Data Centers: Maintains 45–55% RH for server integrity (ASHRAE TC9.9 guidelines) Residential: Integrates with smart home systems via Matter 2.0 protocol

# **Product Performance Curve**



## **Product Performance Specifications**





Model Num	A	В	С	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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