GentleTyphoon™ NEW

D1225C Series

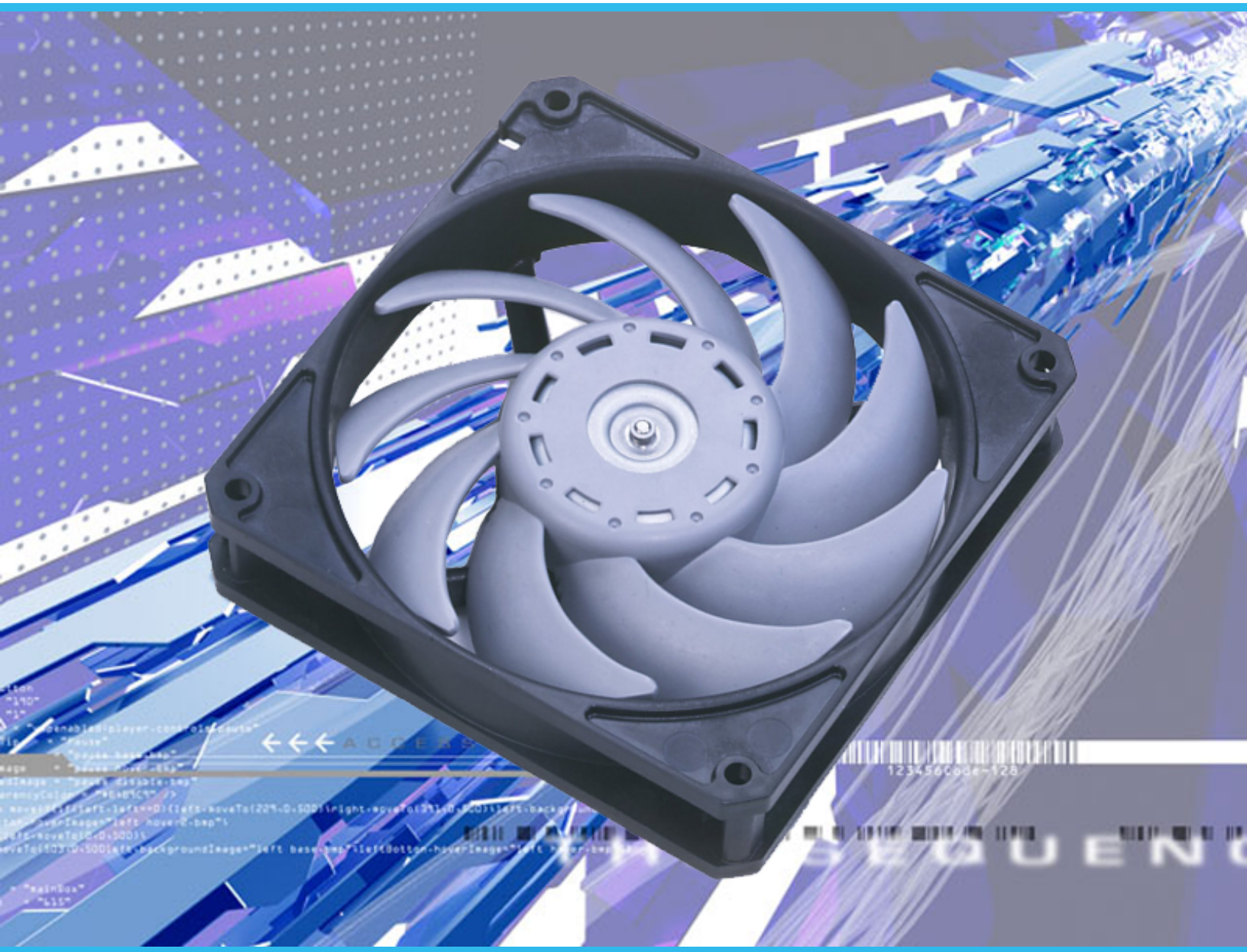
(for low speed applications)

D1225C Series

A Nidec Group Company

SERVO

All for dreams



A fan to hush the noise in your next device. : 120mm x 25mm, Thin Form and Low Noise.

NIDEC SERVO CORPORATION

Brushless DC Fans & Blowers

GentleTyphoon™ D1225C (for low speed applications) *Series* □ 120×25mm

GentleTyphoon™
D1225C

NEW

□ 120×25mm
Max. airflow : 1.65m³/ min
Max. static pressure : 20Pa
Mass : 200g

Fan model code
D1225C12B4AZ-00
D1225C12B5AZ-00
D1225C12B6AZ-00
D1225C24B4AZ-00
D1225C24B5AZ-00

■Features

- Wide low-noise range (noise reduced in high density devices)
- 2-way vibration reduction (lowers resonant noise of entire device)
- Energy Efficient (wide reduction compared to previous model)
- Design to improve sound (for low speed applications)
- Sensors Available (lock, pulse)
- Variable speed available (PWM, voltage, resistance)

■Standard specification

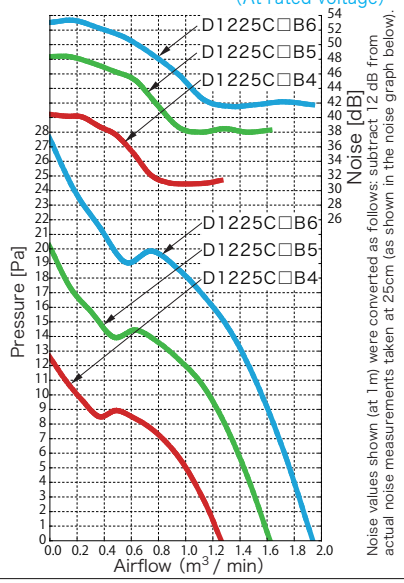
Max.Airflow		Max.Static Pressure		Noise	Speed	Voltage Spec.V		Current mA		Model Code	Operating Temp. Range ℃
m³/min	CFM	Pa	inH₂0	dB	r/min	Rating	Operating Range	Rating	Starting		
1.95	69	28	0.113	30*	2150	12	5.0 -13.2	123	530	D1225C12B6AZ-00	−10～+60
1.65	58	20	0.081	26*	1850	12	5.0 -13.2	83	360	D1225C12B5AZ-00	
						24	12.0 -26.4	45	190	D1225C24B5AZ-00	
1.30	46	13	0.051	19*	1450	12	7.0 -13.2	49	210	D1225C12B4AZ-00	
						24	12.0 -26.4	29	100	D1225C24B4AZ-00	

* Noise values shown (at 1m) were converted as follows: subtract 12 dB from actual noise measurements taken at 25cm (as shown in the noise graph below).

- Figures in the table are average measured values. Please request the product delivery specification when preparing a purchase specification.
- The characteristics are the values at rated voltage , and normal temperature and humidity.
- The only venturi shape available for these products is a ribbed flange.
- Depending on quantities, Nidec Servo can meet many of your requirements for customization, such as special connectors, sensors, variable speedspecifications and other modifications. Please contact Nidec Servo for more information.
- This fan is specially designed for long life. At rated voltage and in continuous operation the expected life is 60,000 hours at 60 ℃. (100,000 hours at 35 ℃). (5,6speed model : 55,000 hours at 60 ℃).

■Standard airflow and static pressure characteristics

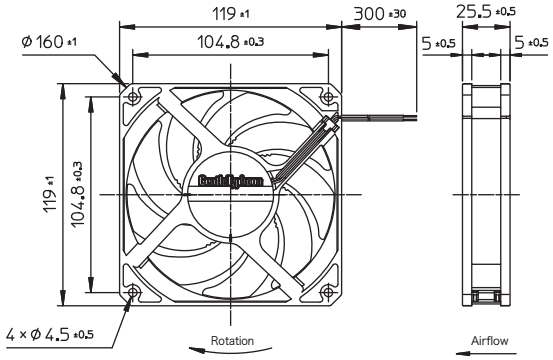
(At rated voltage)



■General specification

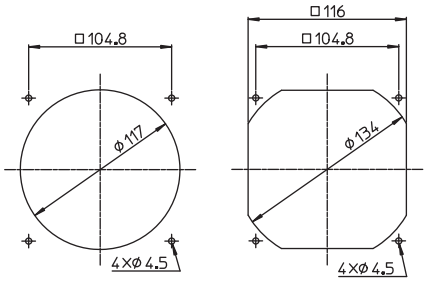
Materials Used	Venturi : PBT-ABS synthetic resins Propeller : PBT-ABS synthetic resins Bearing : Both side shielded ball bearing
Motor	Brushless DC motor,Protection type : Current shut off by detecting lock state,automatically reset

■External dimensions in mm



Lead wire spec UL3265 AWG26
Color (+) Red (-) Black

■Mounting Hole Dimensions



⚠WARNING

- Please do not exceed the specifications noted in this catalog, otherwise there is a chance of electric shock, injury, or other damage.
- Please do not insert your fingers or any other object into the fan's interior, otherwise there is a chance of electric shock, injury, or fire.
- Any modifications made to this fan are beyond the limits of our guarantee. Japan Servo cannot take responsibility for any customer modifications.
- Please ensure that a thorough evaluation has been done before using this fan in medical equipment or other devices related to human lives.
- Please ensure that a thorough evaluation has been done before using this fan in applications that have a serious effect on the public.

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Nidec Servo brings you a Box Fan with high performance and low noise made with our cutting edge technology*.

■User Optimization - Point #1

You can reduce noise in your device even in high-density applications, because of the wider low-noise operating range.

The recent trend in electronics is for smaller, higher-density devices which emit heat internally. System impedance for cooling fans in such high-density devices is high, and often designers are only able to obtain about 50% of max airflow. Prior to being remodeled, this fan's application point was in the area of greatest noise however, as the GentleTyphoon Series has a wide low-noise range in area of 50% Max Airflow, it is widely applicable in various devices for reducing noise.

When designing in this new fan, our 2-Way vibration reduction technology allows users to significantly lower resonance within their products.

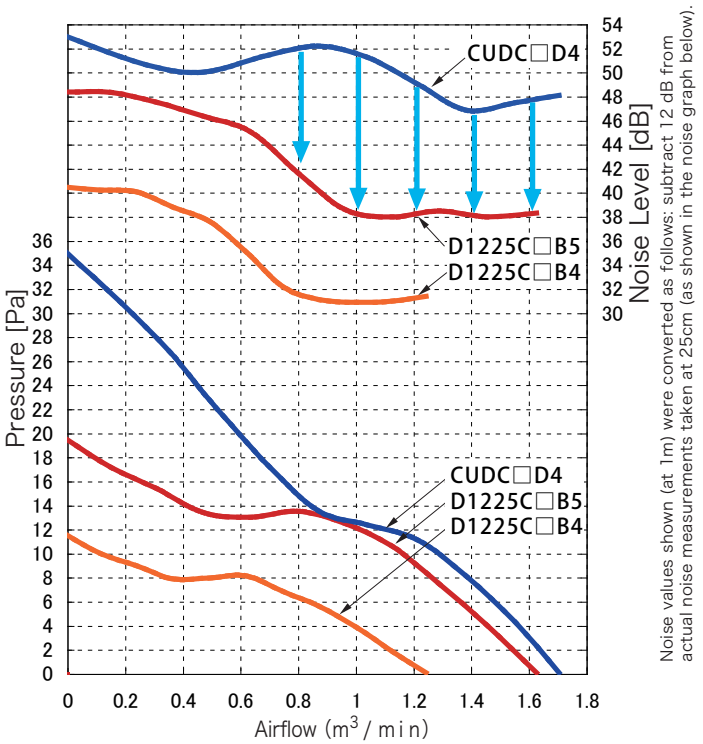

Figure-A: Comparison with our previous model.

■User Optimization - Point #2

Our 2-way vibration reduction technology protects against resonant noise throughout the device.

2-way noise reduction using (a) a large motor having low flux rotation torque and (b) noise absorbing structure; together the motor vibration transfer to the venturi is greatly reduced. When designed into your product, less noise from the fan casing results in noise suppression throughout the device.

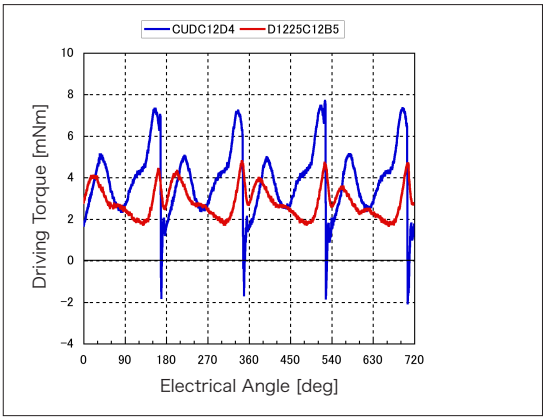

Figure-B: Comparison of driving torque variation.

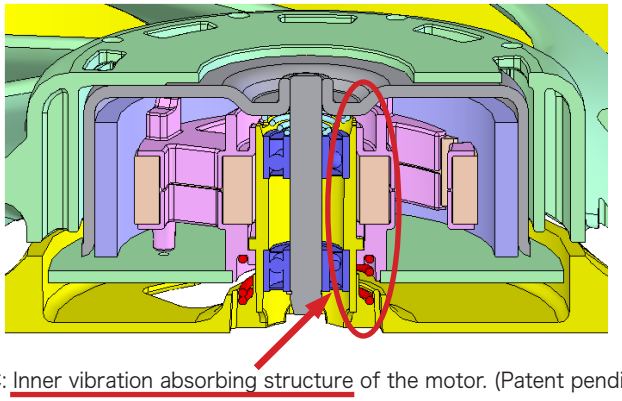

Figure-C: Inner vibration absorbing structure of the motor. (Patent pending)

*Implementing cutting edge technology: In cooperation with Hitachi and making use of our fluid, structural, and magnetic analysis techniques we have completely redesigned the fan motor greatly improving its performance.

Nidec Servo presents the Gentle Typhoon a venturi fan to subdue the noise in your next generation device.

■User Optimization - Point #3

Energy saving.

Compared to our conventional CUDC□D4 model fan, we have significantly reduced power consumption by applying a propeller and a circuit with highly efficient designs.

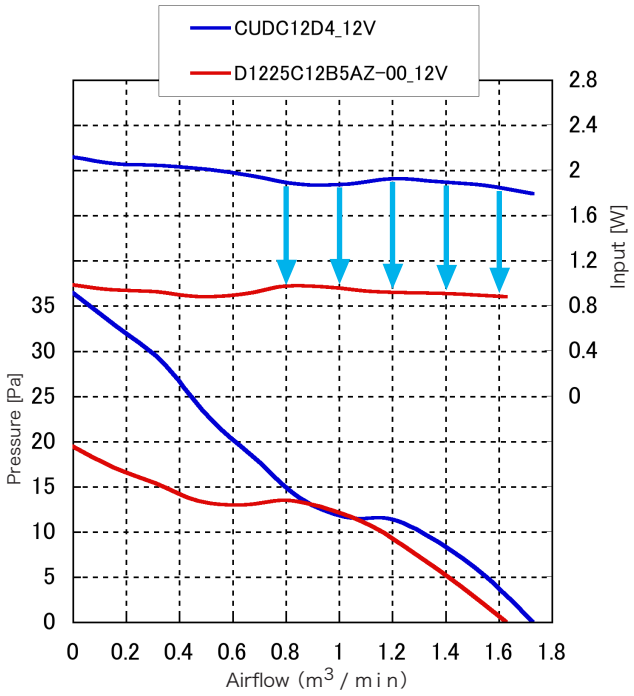

Figure-D: Input power comparison with previous model.

■User Optimization - Point #4

Timbre is also a factor ! !

The Gentle Typhoon is not just about reduced resonance as our engineers were particular about the quality of noise also. A smoother rotation with lowered cogging torque was achieved by optimizing motor torque exclusively for low speed applications resulting in a dramatic improvement in noise quality. From the noise spectrum comparison in Figure-E, it is easy to discern a prominent difference in the noise waves especially in the *quiet zone. Try the improved timbre of the Gentle Typhoon in your own device.

*Quiet Zone: areas at which noise is lowest both at high efficiency points and 70% air flow.

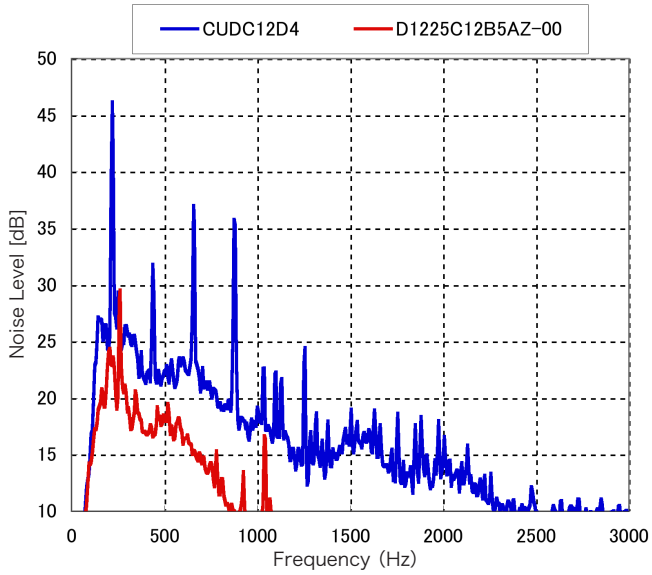

Figure-E: Noise Spectrum Analysis (Low Noise Comparison)

■User Optimization - Point #5

The Gentle Typhoon is growing.

We continue to expand our Gentle Tyhoon product offering.
A high speed version (Max. Air Flow over 4m^3/min) is presently under development.
Please contact your local sales rep for details.

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