Brushless DC Fans & Blowers

GentleTyphoon™ D0925C *series* □ 92×25mm

GentleTyphoon™
D0925C

NEW

□ 92×25mm
Max. airflow : 2.0m³/ min
Max. static pressure : 67Pa
Mass : 100g

Fan model code

D0925C12B4AZ-00
D0925C12B6AZ-00
D0925C12B8AZ-00

■Features

- Wider low-noise operating range (50% increase)
- Significant vibration reduction using two methods.
- Energy efficiency (30% less input power than previous models)
- New design improves quality of sound.
- Sensor (lock, pulse) can be installed
- Variable speed (PWM, voltage, resistance) available

■Standard specification

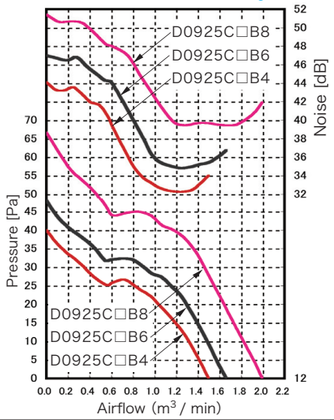
Max.Airflow		Max.Static Pressure		Noise	Speed	Voltage Spec.V		Current mA		Model Code	Operating Temp. Range˚C
m³/min	CFM	Pa	inH₂0	dB	r/min	Rating	Operating Range	Rating	Starting		
2.0	71	67	0.27	40	4450	12	10.2-13.2	330	850	D0925C12B8AZ-00	-20 to +65
1.66	59	48	0.19	35	3750			200	650	D0925C12B6AZ-00	-20 to +70
1.50	53	40	0.16	32	3400			150	530	D0925C12B4AZ-00	

- 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 (10.2-13.2V), and normal temperature and humidity.
- The only venturi shape available for these products is a ribbed flange.
- Depending on quantities, Japan Servo can meet many of your requirements for customization, such as special connectors, sensors, variable speedspecifications and other modifications. Please contact Japan 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 ˚C. (100,000 hours at 40 ˚C)

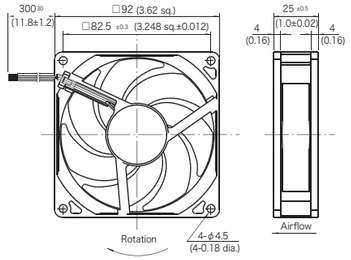
■General specification

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

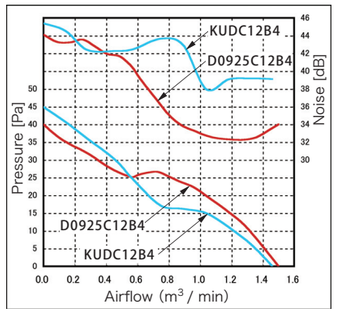
■Standard airflow and static pressure characteristics (At rated voltage)



■External dimensions in mm (inches)



Lead wire spec UL3266 AWG24 or UL3265 AWG28
Color (+) Red (-) Black



Comparison with our previous model.

⚠ 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.

Japan Servo Co., Ltd. Sales Headquarters
7 Kanda-Mitoshirocho Chiyodaku, Tokyo 101-0053 Japan
Tel:+81-(0)3-3292-3506 Fax:+81-(0)3-3292-3509
www.japanservo.com
ISO 9001 / ISO 14001

Japan Servo USA Inc.
2050 Center Ave, suite 318 Fort Lee, NJ 07024, USA
Tel:+1-(0)201-585-0720 Fax:+1-(0)201-585-0670
Japan Servo Co., Ltd. Europe Branch
PO Box 1099,3840 BB Harderwijk The Netherlands
Tel:+31-(0)3414-27575 Fax:+31-(0)3414-23388
Japan Servo Europe GmbH
Europark Fichtenhain A12 47807 Krefeld, Germany
Tel:+49-(0)2151-821184-451 Fax:+49-(0)2151-821184-459
PO Box 7084, Hook, Hampshire, RG27 9XL, UK
Tel:+44-(0)1256-767712 Fax:+44-(0)1256-767715

Japan Servo Co., Ltd. Singapore Branch
No.50, Kallang Avenue #05-01,
Noel Corporate Buildings, Singapore 339505
Tel:+65-(0)6743-7655 Fax:+65-(0)6842-7839
Japan Servo (Hong Kong) Limited
Unit 1008-09, Saxon Tower, 7 Cheung Shun Street,
Lai Chi Kok, Kowloon, HONG KONG
Tel:+852-(0)2314-0037 Fax:+852-(0)2314-4768
Japan Servo (Hong Kong) Limited
Taiwan Representative Office
10/F., Shin Kang Chung Shan Bldg.,44 SEC.2,
Chung Shan N.Rd., Taipei 104 Taiwan
Fax:+852-(0)3007-8924

SERVO All for dreams

07JS0300

A Nidec Group Company

SERVO All for dreams

New 92x25 mm Low Noise Fan

GentleTyphoon™ NEW

D0925C Series

The Gentle Typhoon™ Has Arrived!

After many years our cutting edge technology* has made this high efficiency and low noise fan a reality.

■User Optimization - Point #1

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

Over the operating range from 50% of maximum airflow and above the "GentleTyphoon" is 5 dB quieter than our previous fans. (An increase in 30% of the low-noise range compared with our previous fans.) You can now reduce noise even in your high-density devices with high system impedance. Using our cutting edge fluid analysis technology we have achieved a significant reduction in noise.

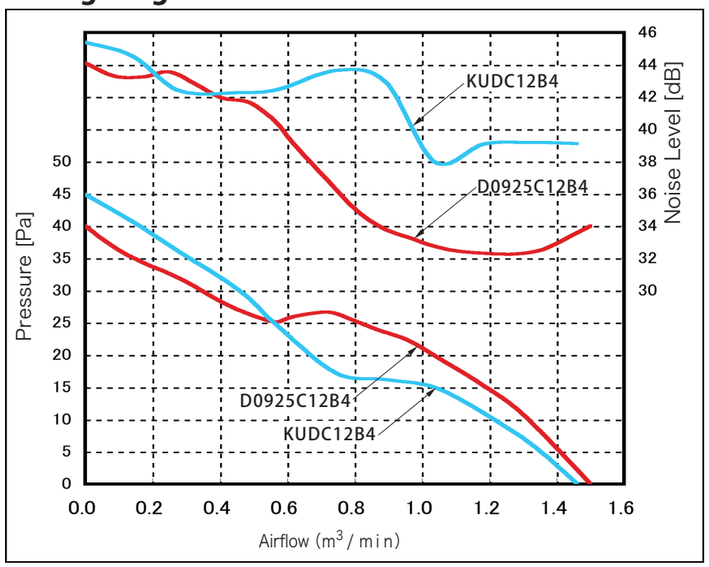


Figure-A: Comparison with our previous model.

■User Optimization - Point #2

The "GentleTyphoon" uses two methods to reduce vibration with a third of the vibration of our previous fans. Resonant noise has also been suppressed.

Typically vibration from the fan motor will transfer to the fan case, which often causes resonant vibration in the device and an increase in noise. Our newly developed low vibration motor and vibration absorbing structure work together to reduce this problem. (A vibration reduction of about 66% compared to our other fans.) Also the motor stator uses an adhesive free design increasing its recyclability.

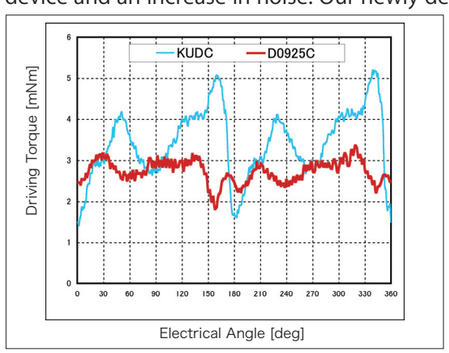


Figure-B: Comparison of driving torque variation.

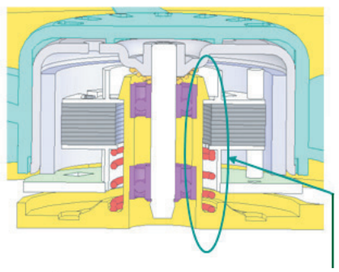


Figure-C: Inner vibration absorbing structure of the motor. (Patent pending)

*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.

■User Optimization - Point #3

The 25 mm thick "GentleTyphoon" has the same high air flow as a 32 mm thick fan.

(System impedance in your high-density application can be reduced.)

If airflow and noise are the same, the 7 mm difference between a 32 mm fan and a 25 mm fan is a major benefit. The extra 7 mm allows you to reduce the system impedance of the entire system which will increase airflow and improve the level of cooling By keeping the same level of cooling, and reducing the rotational speed of the fan will also allow for much quieter operation. The graph to the right compares the same level of cooling at the same time in two different fans.

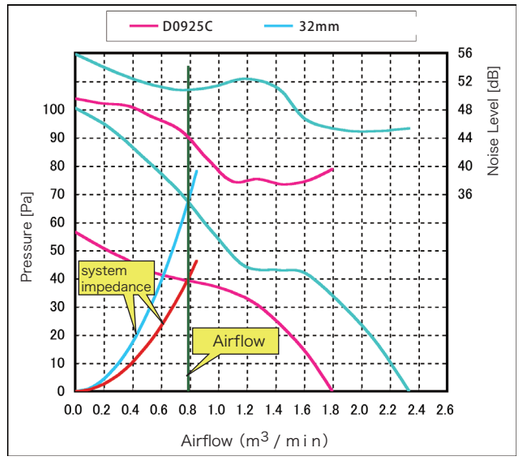


Figure-D: Comparison of installed 25 mm and 32 mm fan performance and system impedance.

■User Optimization - Point #4

Our newly developed high efficiency motor and custom IC control result in energy savings.

(This savings is a 30% reduction in energy use compared with our previous 12 V fans)

Using the latest magnetic field analysis technology, we have made a smaller high efficiency motor core which requires less input than previous designs. An energy savings of 30% is achieved by using a specially designed bipolar 12V IC.

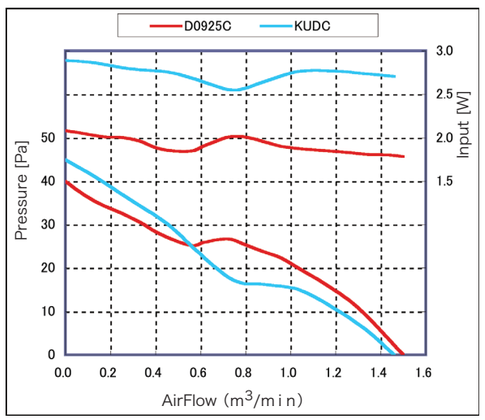


Figure-E: Input power comparison with previous model.

■User Optimization - Point #5

Significant improvement in sound quality by focusing on an understanding of timbre.

Up until now it has been difficult to satisfy users concerned with sound quality through the measured values of fan noise alone. This difficulty stems from the fact that a fan motor's sound quality can be more disturbing than the actual noise level itself. We have studied the causes and mechanisms of bad sound quality (such as the peaks near 1000 Hz) and developed the know-how needed to produce fan motors avoiding these problems.

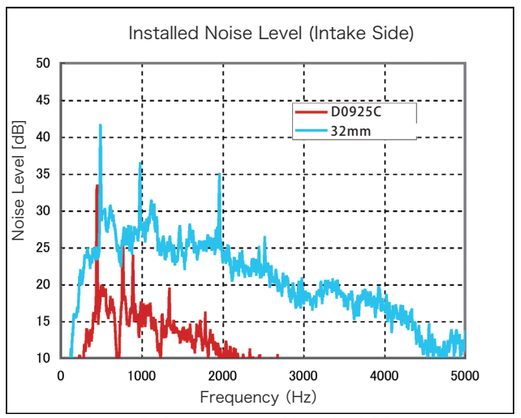


Figure-F: Comparison of installed 25 mm and 32 mm fan noise spectrum.