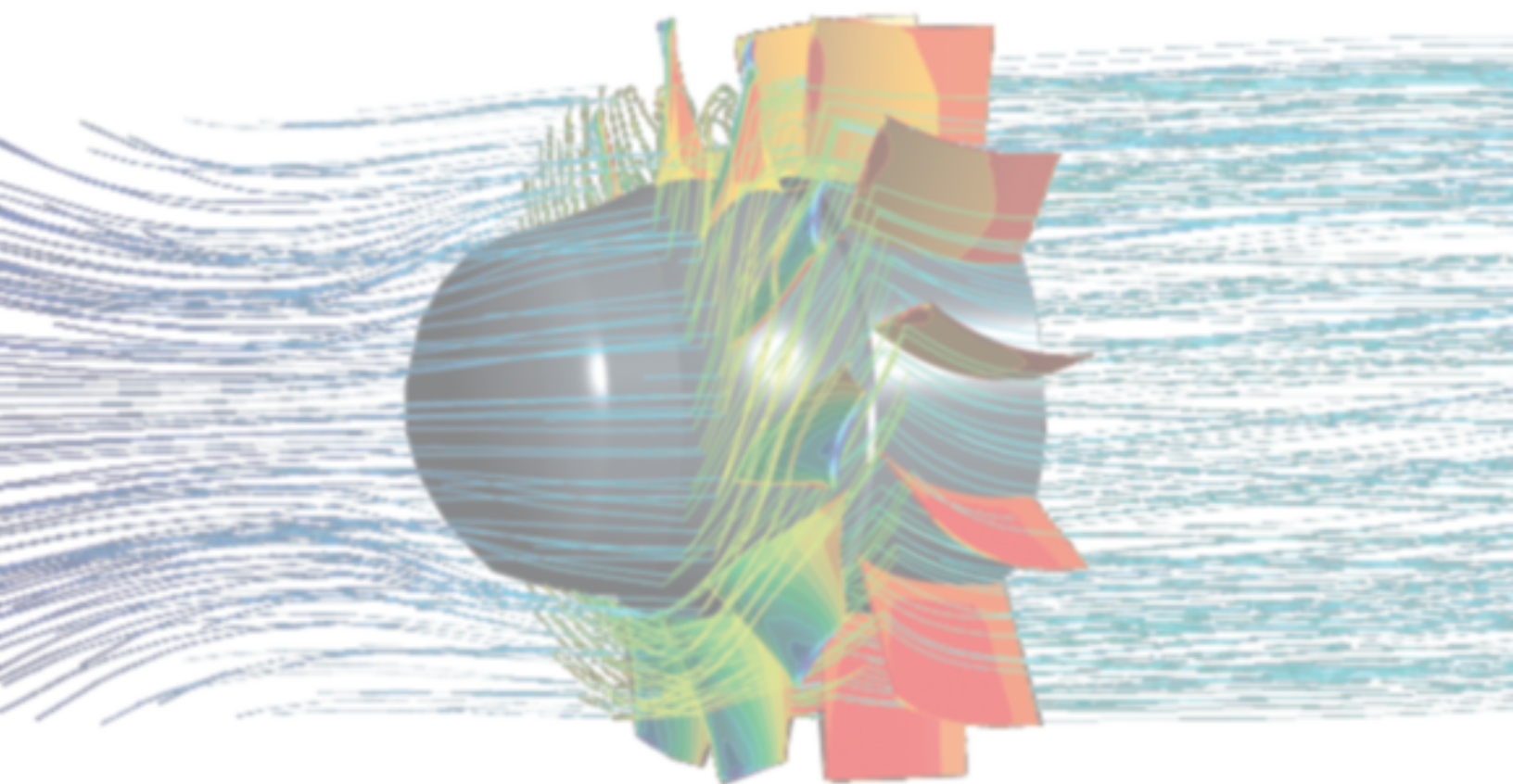




40x40x56 Counter-Rotating



 **STAY COOL**

800.580.6688
WWW.JMCPRODUCTS.COM



Looking for powerful airflow against high system impedance? JMC has you covered.

JMC's 40x56mm counter-rotating fan is ideal for high-density 1U servers and power supplies or any other high-density electronic enclosures. Counter-rotating technology creates extremely powerful and concentrated airflow while maintaining high efficiency and an outstanding performance (PQ) curve.

JMC's 40x56mm CR fan possesses the following attributes:

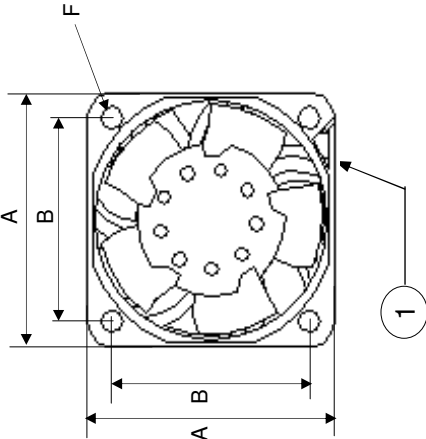
- 20,000 RPM
- 40 CFM
- 3.4 inches of H₂O
- 69 dBA
- 3.1 Amps at 12 Vdc
- Life data of 70,000 hours L10 at 40C
- 4 ball bearings
- UL & TUV certified and 100% RoHS compliant

Features:

- Counter-rotation allows for much better performance than standard tube-axial fan against high system impedance
- Pulse Width Modulation (PWM) available for both motors independently or in parallel
- Of the following two features, one can be assigned to both motors, or one of each can be applied by request:
 - Tachometer output
 - Locked rotor signal



RELEASED FOR PRODUCTION

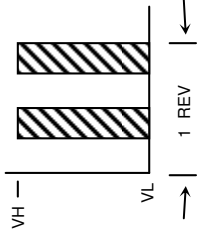
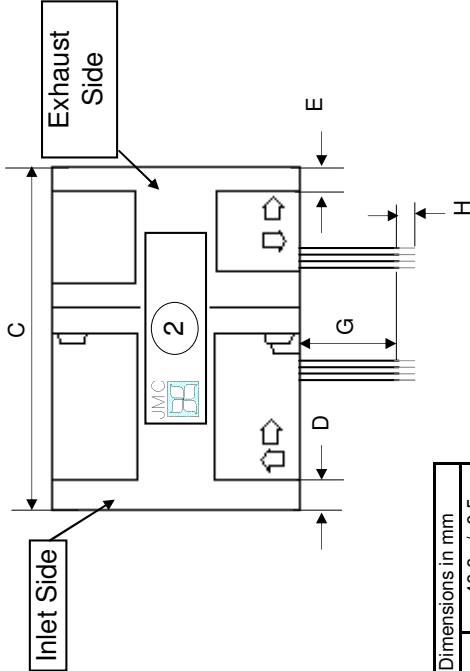


All Dimensions in mm	
A	40.0 +/- 0.5
B	32.0 +/-0.5
C	56.0 +/-1.0
D	4.8 +/- 0.3
E	4.0 +/- 0.3
F	8 X 3.5 +/-0.3
G	300 +/-25
H	6.3 +/- 1.0

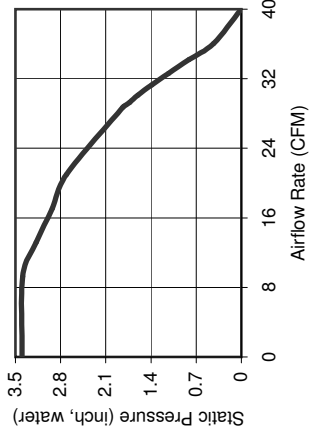
WIRE DESIGNATIONS	
WIRE COLOR	FUNCTION
Black	GND
Yellow	PWR, +12Vdc
Green	TACH
Blue	PWM



Frame Type
(Open Flange)

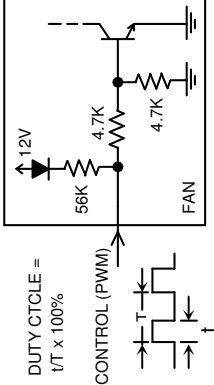
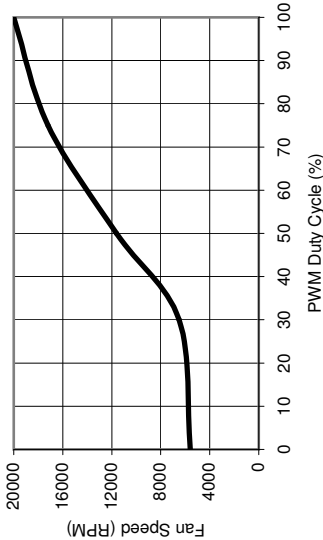


TACH OUTPUT



PQ CURVE

PWM DUTY CYCLE vs. FAN SPEED
AIR INLET FAN



FRONT END PWM CIRCUIT

- NOTES
- 1.- THIS FAN AND ALL OF ITS COMPONENTS COMPLY WITH THE REQUIREMENTS OF RoHS DIRECTIVE 2002/95/EC
 - 2.- UTILIZATION OF VIBRATION ISOLATION GROMMETS OR MOUNTS IS RECOMMENDED FOR FAN SPEED HIGHER THAN 15,000 RPM.
 - 2.- RPM TOLERANCE IS +/-30% AT DUTY CYCLES BELOW 30%.
 - AT DUTY CYCLES BETWEEN 30% AND 100%, RPM TOLERANCE CONVERGES LINEARLY TO 10%.

MECHANICAL		PHYSICAL		ELECTRICAL	
ITEM	SPECIFICATION	UNITS / NOTES			
Speed	20000 +/- 10%	RPM at 12 Vdc			
Airflow	40.0	CFM in Free Air			
Static Pressure	3.4	Inch, H ₂ O			
Bearing Type	Dual Ball	N/A			
Operating Temp	(-)10 to 60	Deg C			
Storage Temp	(-)40 to 70	Deg C			
Noise Level	68.0	dBA Max at 1M			
Blade Material	UL 94V-0	N/A			
Frame Material	UL 94V-0	N/A			
Wire Size	28.0	AWG			
Wire Type	UL 1061	N/A			
Wire Assembly	Single Slot, Inlet and Exhaust	N/A			
Regulatory Approvals	UL CUL TUV	N/A			
Net Weight	93.0	Grams			
Operating Voltage	10.8 - 12.6	Vdc			
Start up voltage	NA	Vdc			
Start up PWM duty cycle	30	%			
Rated Current	3.10 (3.60 Max.)	Amp			
Input Power	37.2 (43.2 Max.)	Watts			
Tach Output	2.0	Pulses/Rev			
Polarity Protection	Yes	N/A			
Motor Protection	Auto-Restart	N/A			

Revision History

EC No	REV	Date	Description	Approvals
110857	B	3/14/12	Updt. PWM Curve	JE
110880	C	2/19/13	Updt. Static Pressure	JE

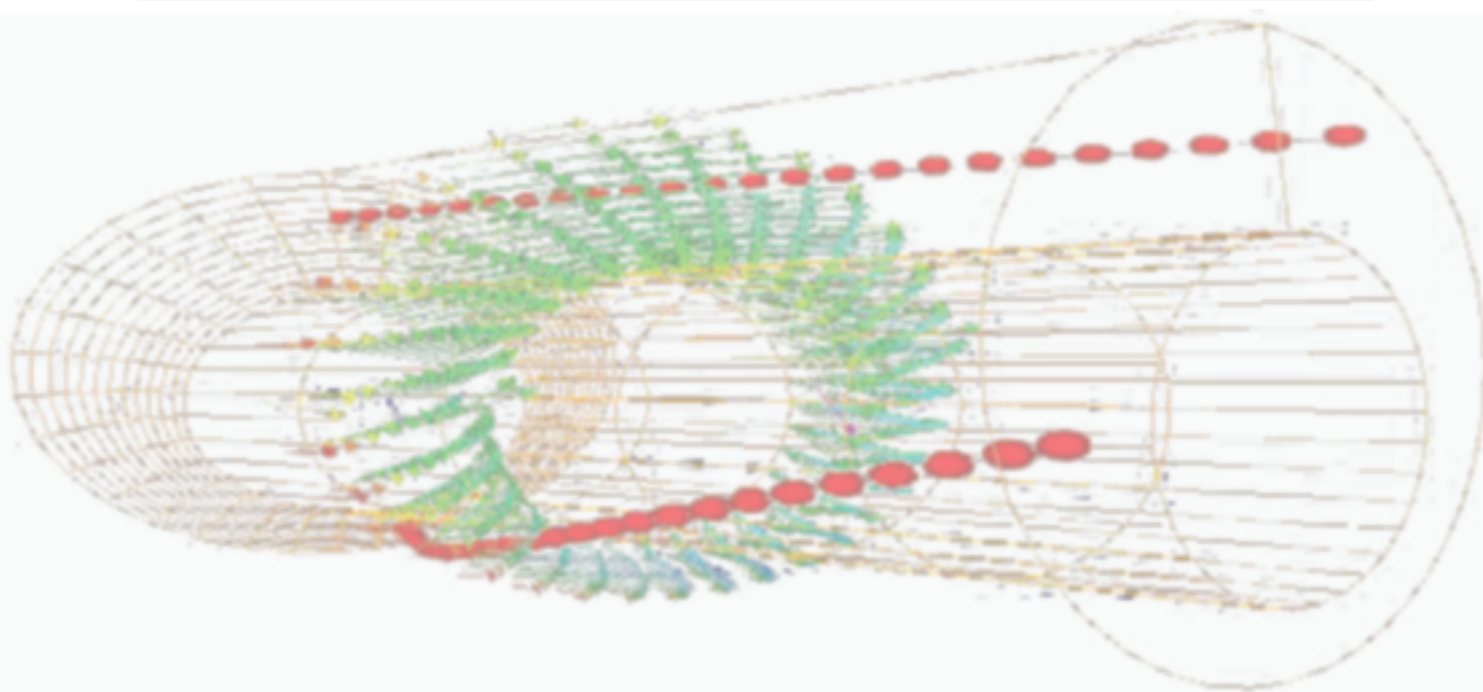
Austin Texas, USA		JMC® The Fan Company Fan, 40x40x56 mm, 12Vdc Dual Ball, Base Model		
Dong Guan, PRC				
Mechanical Engineer		Size	Drawing Number	Rev
S. Apsangl		A1	04005B0004	C
Electrical Engineer		Scale: None		Sheet 1 of 1
J. Elmo				
2	1	Logo Label	L04005B0004	JMC
1	1	Fan Model	404056-12	JMC
Item	Qty	Description	Part Number	MFG



Samples of this superior 40x56 Counter-Rotating fan
are available right now!

Ask for **04005B0004**

Call 800.580.6688 or email sales@jmcproducts.com



About JMC Products

JMC is a thermal solutions provider with headquarters located in the beautiful city of Austin, Texas. Application development and customer support reside in the Austin headquarters, while manufacturing occurs at JMC's Dong Guan, China 60,000 square ft. facility. In addition, JMC has application centers in Europe and Taiwan. JMC sells its products to major Original Equipment Manufacturers (OEM) in Europe, Asia and the Americas. JMC focuses on developing and innovating high performance, reliable air-moving devices that are utilized in consumer electronics, personal computers, networking, storage and server applications. Our exceptional products and customer support insure our customers always STAY COOL.



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