

# 愛立德電子(香港)有限公司 INEED ELECTRONICS (HONGKONG) LIMITED

Company No.: 1653395 - Registered Office: Room 1103, Hang Seng Mongkok Building, 677 Nathan Road, Mongkok, Kowloon, Hong Kong China Office:Room 4-1904, Yuan Meng Ya Ju, Zongbu 3rd Road, Songshanhu North Hi-Tech Park, Dongguan, Guangdong 523808, China Tel: (+86) 769 2289 1073 Fax: (+86) 769 2289 1076 URL: http://www.ineed.hk

## 產品規格說明書

## **Product Specification**

客戶名稱 Buyer Name		客戶代碼 Buyer Code	
產品名稱 Product Name	Cylinder Type Micro Vibration Motor	產品編碼 Product Part No.	IND-YZ0612H-2536
規格書號 Specification No.	IND314	發佈日期 Date of Release	2010-1-13

聲明:本產品符合歐盟 2005/618/EC 環保指令相關要求。

We declare that the product is compliant with EU 2005/618/EC directives.

貴司確認本產品樣品後,在決定採購本產品之前,請您仔細閱讀本產品規格說明書,並在客戶承認欄內簽名及蓋章並回傳此頁給我司相關人員備案。After you approve the product samples, please read this specification carefully and return this page to us with your signature and company chop in below *Customer Approval* table before you decide to purchase this product.

客戶承認欄 Customer Approval				
	工程Engineering	品質 Quality	生產 Production	採購 Procurement
簽名及蓋章				
Signature & Company Chop				
日期 Date				

愛立德工廠承認欄 INEED Factory Approval			
簽名及蓋章	批准 Approved by	審核 Checked by	編制 Prepared by
嫉 口 久 曲 早 Signature & Company Chop	倪曉萍 MXAOPW	白兵 <b>BAJBJNG</b>	孟紅麗 MENG HONG!
日期 Date	2010-1-13	2010-1-13	2010-1-13

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# 規格說明SPECIFICATIONS

#### 1. 適用範圍 General Scope

本文規定 IND-YZ0612H-2536 直流永磁電動機有關技術要求和試驗方法。。

This specification specifies the related technical data and test methods of DC motor IND-YZ0612H-2536.

### 2. 使用條件 Operating Conditions

序號 No.	專案 Items	規格 Specifications	
2-1	使用溫度範圍	-10°C~+60°C	
2-1	Operating Temperature Ranges	-10 C~T00 C	
2-2	使用濕度範圍	10%~90% RH	
2-2	Operating Humidity Ranges	1070~9076 KH	
2.2	測試環境	溫度:+15℃~+30℃、相對濕度:30%~70% RH。	
2-3	Test Environment	Temperature: +15°C~30°C; Humidity: 30%~70% RH.	
2-4	旋轉方向	從輸出軸側看,CW或CCW均可。	
	Direction of Rotation	CW or CCW, viewed from output shaft side.	

#### 3. 初期電氣性能 Initial Electrical Characteristics

序號 No.	專案 Items	規格 Specifications	
3-1	額定電壓	3.0V DC	
3-1	Rated Voltage		
3-2	使用電壓範圍	2.2-3.6V DC	
3-2	Operating Voltage Ranges		
3-3	額定負載	Counterweight R2.5*3.6	
3-3	Rated Load	Counterweight K2.3 5.0	
3-4	額定轉速	0 500±2 500 PPM	
3-4	Rated Speed	9,500±2,500 RPM	
3-5	額定電流	45mA Max	
3-3	Rated Current	45IIIA Wax	
3-6	起動電流	85mA Max	
3-0	Starting Current	OSHIA Wax	
3-7	起動電壓	1.7V DC Max	
3-7	Starting Voltage	1./V DC Max	
3-8	電樞電阻	50Ω±10%	
3-6	Terminal Resistance	3052-1070	
3-9	絕緣電阻	$1.0 \text{ M}\Omega$ MIN, at 100V DC meg	
3-7	Insulation Resistance	1.0 MB2 MIN, at 100 v DC meg	

### 4. 機械性能 Mechanical Characteristics

序號 No.	專案 Items	規格 Specifications		
4-1	軸向間隙(串量)	0.1-0.3mm		
	Axial End Play			
4-2	軸伸徑向圓跳動量	距軸端部1.0mm處測試應不大於0.1mm。		
T-2	Shaft Radial Run-out	(It shall be no more than 0.1mm from the 1.0mm place of output shaft side.)		
4-3	單臺重量	2.52 g (ref. )		
4-3	Weight			
4-4	軸向垂直度	90°±1°		
4-4	Axial Upright Degree	70 ±1		
4-5	振子固定力	49N (5kgf) Min		
4-3	Holding Force of Counterweight	491V (JARI) IVIIII		
	Mechanical Noise	50 dB (MAX) 100mm (background noise within 32dB).		
	機械雜訊			
	測試方法:在額定電壓、額定負載(振子)下。背景雜音:不大於32dB(A計權)。測試儀器:B&k夾具重量:700g。			
	Test Method: At rated voltage. Back ground noise: 32dB (A) Max. Measuring instruments: B&k. Weight of jig: 700g.			
4-6	Microphone  Mator  Jig  (Weight Ref.700g)  Urethone foon  Fig. A	Nicrophone Notor Notor Jg Oveign1 Ref.700g)  Urethone Foon  Fig. B  Fig. C		

### 5. 壽命測試及後期要求 Lifetime Test & Post Requirements

序號 No.	專案 Items	規格 Specifications
5-1	壽命測試 Lifetime Test	按一個週期8秒開、52秒關,連續運轉48小時後,按5-2、5-3進行相關專案測試驗證。
		8 secs on 52 secs off as 1 cycle, for 48 hours, and then test and verify according to item 5-2 and 5-3.
5.0	額定轉速	不低於初始值-50%,不高於初始值+50%。
5-2 Rated Speed		No less than initial data -50%, no more than initial data +50%.
5.2	額定電流	不低於初始值-50%,不高於初始值+50%。
5-3	Rated Current	No less than initial data -50%, no more than initial data +50%.

### 6. 使用時注意事項 Precautions in Use

序號 No.	使用時注意事項 Precautions in Use		
6-1	必須按照此產品規格說明書使用,否則性能和壽命都將受到相當地減少。尤其注意電壓的使用範圍。		
	Please operate the motors in accordance with this specification, especially be careful with the operating voltage ranges,		
	otherwise the performance and lifetime of the motors would be considerably reduced.		
	建議馬達收貨後六個月內必須使用。不可以在以下環境中使用及保存馬達:		
	◇ 高溫高濕區域;		
	◆ 腐蝕性氣體環境,如:H <sub>2</sub> S、SO <sub>2</sub> 、NO <sub>2</sub> 、Cl <sub>2</sub> ,等等;		
6-2	◆ 易導致金屬物生銹場所。		
0-2	It is suggested to use the motors within 6 months after delivery. It is not allowed to use or store the motors at such environments:		
	→ High damp and high temperature areas.		
	♦ Places full of corrosive gas, such as H <sub>2</sub> S, SO <sub>2</sub> , NO <sub>2</sub> , Cl <sub>2</sub> , etc.		
	♦ Areas that easily cause metals rusty.		
	注意清潔工作環境,避免含鐵質雜物被馬達吸進,否則馬達將會產生雜訊,性能會受影響,從而降低產品可靠性。		
6-3	Please pay much attention to clean the working environment, to avoid iron sundries from being sucked into the motors;		
	otherwise, the motors would make noise, the performance would be affected, and reliability would be reduced.		
6-4	拿馬達時,要輕拿輕放。不允許隨意丟置。		
0-4	Please place the motors gently and carefully in use. It is not allowed to throw it at random.		
6-5	機殼鋼板面或邊緣有少許鏽斑是允許的。		
0-3	It is allowed to have a little rust on the brim of steel plate of the housing.		
6-6	因為測試設備可能有誤差,所以±5%的轉動頻率偏差是允許的。		
0-0	It is allowed to have a tolerance of ±5% rotation frequency due to discrepancies between different testing equipments.		
6-7	用戶自身應確信使用本產品不會與相關標準、法律、政令相背。		
6-7	Users shall assure themselves that they do not violate related standards, laws or any political policies when they use this product.		

### 7. 外形圖 Outline Drawing

