

SINCE 1975
Conos®

技友牌工業級電動起子

PROFESSIONAL
INDUSTRY
TORQUE-CONTROL
ELECTRIC SCREWDRIVER

AC-BL Series
AC直插無碳刷
Brushless
Direct Plug-In 110V/220V

AC Series
Direct Plug-In 110V/220V

X Series
Direct Plug-In 110V/220V

A Series
Direct Plug-In 110V/220V

S Series
Direct Plug-In 110V/220V

RE/F Series
DC 30V

RE/F-BL Series
Brushless Motor Series

CY-D Series
DC 30V

Traditional / **V**acuum Series



9001

Patent

榮獲世界專利

Had passed through and
got the patent certificates from

Taiwan
台灣專利

Korea
韓國專利

Italy
義大利專利

Germany
德國專利

U.S.A.
美國專利



台灣第一家工業級電動起子製造廠



PROFESSIONAL INDUSTRY TORQUE-CONTROL ELECTRIC SCREWDRIVER

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Conos® 技友牌電動起子

PROFESSIONAL INDUSTRY TORQUE-CONTROL ELECTRIC SCREWDRIVER

專業、品質、服務、創新

技友牌電動起子不斷秉持「創新求進，永續經營」的精神，致力於自行研究開發，堅持不抄襲或仿冒國外產品，至今具有雄厚的新產品開發能力，並擁有創新進取的專業研發、生產和行銷管理等團隊，以生產製造符合客戶需要及經久耐用的工業級電動起子為目標，產品已行銷世界各國多年，並深獲客戶的肯定及信賴。在其創建30多年後的今天，技友企業仍致力於不斷提供新的技術、產品和服務，確保客戶和合作夥伴可以相互依存、共同發展。

Professional, Quality, Service, Innovation

Holding the spirits of "innovation and continuation", CONOS devotes herself to the intensive researches and development. Insistency on "No counterfeit" and with exceptional competence to develop new products, CONOS owns the professional R & D manufacture and market work team. To meet customers sophisticated needs, we aim at industrial used electric screwdrivers and sell to world-wide market 30 years more. We receive full recognition and reliance from our end users, consequently.

Today, we wish to provide more advanced technology to ensure our end user to get more benefit in facilities and service.

公司組織 Company Organization

TAIWAN

台灣總公司
技友企業有限公司
TOP DRIVER ENTERPRISE CO., LTD. (Taiwan)

EAST CHINA

中國華東
技友(南京)科技發展有限公司
TOP DRIVER (Nanjing) ENTERPRISE CO., LTD. (China)

SOUTH CHINA

中國華南
深圳市技元機電設備有限公司
深圳市技友電動工具有限公司
CONOS ELECTRIC SCREWDRIVER SOUTH CHINA
SERVICE CENTER (China)

INTERNATIONAL DEPARTMENT

國際事業部
上瑞實業有限公司
SHINERAY INDUSTRIAL CO., LTD.

Conos®



1972 年

技友牌電動起子前身：德基企業社成立，進行工業級電動起子研究及開發。

Top Driver has founded, specializing in research and development of industry electric screwdrivers since 1972.

1975 年

創立技友企業有限公司，研發推出台灣第一支自製工業用電動起子。

Top Driver Enterprise Co., Ltd. has been the first manufacturer of professional industry electric screwdriver in Taiwan.

1979 年

推出台灣第一支「低壓直流離合器型全自動電動起子」。

Top Driver had launched the first “Mechanical DC full-automatic Clutch electric screwdriver”, in Taiwan

1998 年

已於德國、美國、義大利、中國、韓國、台灣等區域，通過專利認證許可超過30多件。

Top Driver has already possessed more than 30 patents in Taiwan, Korea, China, Italy, the United States, Germany, and etc.

2000 年

通過 ISO9001 品質管理系統認證。

Top Driver had the honor to get ISO9001 Quality Management System Certification in 2000.

2003 年

成立“技友（南京）科技發展有限公司”。

Top Driver (Nanjing) Enterprise Co., Ltd. has been established since 2003.

2005 年

設立“深圳市技王科技開發有限公司”。

Conos Electric Screwdriver South China Service Center has been established since 2005.

2007 年

公司產品及ODM客戶已通過CE、UL、CCC、BSMI、KC…等標準認證。

Top Driver and ODM customers have had approval of CE, CCC, BSMI, KC.. etc. standard certification.

2008 年

推出低壓直流無碳刷全自動電動起子。

Top Driver has launched Low Voltage DC Brushless Electric Screwdriver since 2008

2014 年

推出直接插電無碳刷馬達多功能型全自動電動起子。

Top Driver has launched Direct Plug-In Electric Screwdriver 110V/220V Full Automatic Multifunction Brushless Electric Screwdriver in 2014

2019 年

南京新廠興建完成正式啟用

Top Driver(Nanjing) New Plant Completed and Started Production in 2019



9001



CE



UL



CCC



BSMI



KC mark



RoHS

技友牌電動起子已獲得的國際認證

Conos world wide

Conos® 技友牌電動起子

PROFESSIONAL INDUSTRY
TORQUE-CONTROL ELECTRIC SCREWDRIVER

已銷售全球區域20多個國家



美洲	美國、加拿大、墨西哥、巴西、阿根廷
America	USA, Canada, Mexico, Brazil, Argentina
歐洲	英國、德國、荷蘭、法國、丹麥、義大利、比利時、波蘭
Europe	United Kingdom, Germany, Holland, France, Denmark, Italy, Belgium, Poland
亞洲	中國、韓國、日本、越南、印度、馬來西亞、新加坡、泰國、印尼、沙烏地阿拉伯
Asia	China, Korea, Japan, Vietnam, India, Malaysia, Singapore, Thailand, Indonesia, Saudi Arabia
澳洲	澳大利亞
Australia	Australia
非洲	南非
Africa	South Africa



America



Europe



Asia



Australia



Africa

技友牌電動起子特點

Conos Electric Screwdriver's Key Specifications/Special Features

- 全自動離合器機構** 世界多國專利機械式全自動離合器機構，扭力達到設定自動跳脫，超低後座力。
Clutch Mechanism Worldwide Patented Clutch Mechanism: more durable and reduce backlash.
- 全合金鋼一體成形齒輪** 全合金鋼一體電腦加工成形齒輪機構，精密度及耐用度非塑鋼或粉末冶金齒輪可比較。
Steel Alloy Gear Block Steel Alloy Gear Block: high reliability and sturdiness.
- 專利黃金接點** 專利黃金接點特殊剎車觸發機構，無使用壽命之問題，經久耐用。
Patented Brake Switch Patented Brake Switch.
- 無段式扭力調整** 無段式扭力調整，配合輸出扭力高低範圍廣，一支起子可通用於不同的產品生產線。
External knurled Torque External knurled Torque nut allows easy torque setup and adjustment.
- 精確穩定** 輸出扭力精確穩定，精度±3.0%以內。
High stability High stability ±3%
- 永久磁石馬達** 稀土系製永久磁石馬達，體積小，輸出扭力大，密集作業溫升穩定。
High Power Rare Earth High Power Rare Earth Magnet Motor: smaller dimension, higher torque output, and lower temperature.
- 機種齊全** 機種齊全，按板啟動、下壓啟動、抗靜電等各種機型可供客戶自行選擇。
A Wide Selection of Models The models are well-found, dual mode selectable, anti-static...etc. Customers can choose various models.

扭力對照表 Torque Reference Chart



計數器
Screw
Counter



自動化
PLC



90度彎頭
90 Angle



氣吸頭
Vacuum
Pick-up



法蘭
Flange



扭力
保護套
Torque
Protect



槍套
Pistol
Grip



反牙基座
Fixed Base

無碳刷馬達
Brushless

碳刷馬達
Carbon Brush

類別 TYPE	型號 MODEL	扭力範圍 OUTPUT TORQUE (kgf-cm)	建議適用螺絲(mm) APPLICATION SCREW
直接插電 無碳刷式 Direct Plug-In Brushless 110V/220V	AC-115BL / AC-215BL	0 ~ 15	2.0~3.5
	AC-125BL / AC-225BL	0 ~ 25	2.6~4.0
	AC-135BL / AC-235BL	0 ~ 35	3.0~5.0
	AC-145BL / AC-245BL	0 ~ 45	3.0~5.5
低壓直流 無碳刷式 DC 30V Brushless Torque Control type DC 30V	F-31BL / F-31BLL	0 ~ 1	<2.0
	F-33BL	0 ~ 2	<2.0
	F-35BL	0 ~ 3	<2.6
	F-603BL	0 ~ 1	<2.0
	F-607BL	0 ~ 5	1.0~3.0
	RE-612BL	0 ~ 10	1.7~3.5
	RE-618BL	0 ~ 20	1.7~4.0
	RE-625BL	0 ~ 25	2.0~5.0
	RE-630BL	0 ~ 30	2.0~5.0
直接插電 110V/220 Direct Plug-In 110V/220V	AC-12A/12S *	0 ~ 10	1.7~3.0
	AC-18A/18S *	0 ~ 15	1.7~3.5
	AC-1110/2210	0 ~ 10	2.0~3.0
	AC-1120/2220(HS)	0 ~ 15	2.6~4.0
	AC-1130/2230	0 ~ 20	3.0~5.0
	AC-1155/2255	0 ~ 55	3.0~6.0
	AC-1120S/2220S/20S *	0 ~ 20	2.0~4.5
	X-1115/2215	0 ~ 15	1.7~4.0
	X-1125/2225	0 ~ 20	1.7~5.0
低壓直流 DC 30V Torque Control type DC 30V	F-3000/4300SS/43DS	0 ~ 2	<2.0
	F-3500	0 ~ 3	<2.6
	F-4000/40D	0 ~ 8	1.0~3.0
	F-4300/43D	0 ~ 10	1.7~3.0
	RE-4500/45D	0 ~ 10	1.7~3.5
	RE-4800/48D	0 ~ 15	1.7~4.0
	RE-4500P	0 ~ 10	2.0~5.0
	RE-4800P	0 ~ 15	2.0~6.0
	RE-5000	0 ~ 20	2.0~5.0
	CY-16C/16D	0 ~ 25	2.0~6.0
	CY-26C/26D	0 ~ 35	2.0~5.0
	CY-16CP	0 ~ 25	2.0~6.0
	CY-26CP	0 ~ 35	1.0~2.0
	KS-2500 ▲	0 ~ 1	2.6~3.0
	KM-800 ▲	0 ~ 2	2.0~3.0
	CY-56L ▲	0 ~ 5	2.0~3.0
	CY-66L ▲	0 ~ 25	2.6~4.0
	CY-76L ▲	0 ~ 35	2.0~5.0
	V-3000 ▲	0 ~ 1	<2.0

備註：1. * 為半自動電動起子，▲ 為傳統式電動起子。

其餘均為全自動式電動起子。

2. 1.0kgf-cm = 0.098Nm 1.0kgf-cm = 0.868 lbf-in

3. 轉速 (R.P.M.) 會因輸入電壓的高低而有所變化。

4. 如有其他本型錄未列出規格需要，本公司可針對不同需求訂制。

5. 建議適用螺絲規格為機械牙。

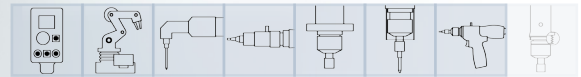
Remarks: 1. * Means semiautomatic, ▲ Electric torque control type, the others are automatic clutch torque control type.

2. 1.0kgf-cm = 0.098Nm 1.0kgf-cm = 0.868 lbf-in

3. R.P.M. might be varied by input voltage.

4. Special model is also available as request.

5. Suggested screw specifications are machine screw.



AC-BL series

BL
Brushless



直接插電全自動無碳刷電動起子AC-BL系列

Direct Plug-In 110/220V Full Automatic Clutch Brushless Electric Screwdriver AC-BL Series

- 技術領先業界，直接插電高壓無偵測器無碳刷高精度內轉馬達多功能全自動扭力電動起子。
- 不需搭配DC電源，即插即用，極具高穩定、低溫升特點，適合長時間精密操作。
- 內建6段速控，可直接依產品別選擇1000rpm/700rpm/400rpm及1000rpm(緩啟動)/700rpm(緩啟動)/400rpm(緩啟動)，一機可適用多種產品。
- 可連接PLC直接外部控制啟動，適合自動化設備使用(選配機種)。
- 最高扭力可達45kgf·cm，電動起子本體外徑僅34.0mm，體積小，輸出扭力大。
- 完全免除碳刷粉塵困擾及耗材更換問題，可用於無塵室。
- 黃金接點專利耐衝擊利車觸發開關，無使用壽命問題(專利第52686號)。
- 專利緩衝裝置整合新式離合器，具有低衝擊、高精度特點(專利第35465號)。
- 無段式扭力調整，系列機種涵蓋扭力輸出範圍更廣，足以應付多樣需求。
- 極簡絕佳的外觀手感，長時間操作不疲勞。

AC110V/AC220V Direct plug-in sensorless(no sensor) brushless of high-precision internal rotation motor & Multi-functional Electric Screwdriver.

Plug-and-use without DC power supply, high stability, and low temperature rise characteristics, for long-precision operation.

Six rotation speed: 1000rpm / 700rpm / 400rpm and 1000rpm (softstart) / 700rpm (soft-start)/400rpm(softstart). It can be applied to various products.

Can be used with Programmable logic controller (PLC) and operate via external control unit. It's suitable for automatic equipments (optional model).

Maximum torque can be reach to 45kgfcm. The outer diameter is only 34.0mm, small size, and high output torque.

Free from the troubles of carbon brush dust and supplies replacement, can be used in the clean room.

Special made patented brake switch has high resistance on impulsive vibration that will lengthen the switch life. (Taiwan patent No.52686)

Integration of new patent buffer clutch, low impact, high-precision features, and lengthen the life of its usage. (Taiwan patent No.35465)

Stepless torque adjustment, the series of models covering a wider range of torque output, is sufficient to meet diverse needs.

Minimalist appearance and excellent feel, effectively reduce the prolonged use of fatigue.

選配BC-01無刷外接式計數器
Screw Counter BC-01

AC-115BL
AC-215BL
AC-125BL
AC-225BL
AC-135BL
AC-235BL
AC-145BL
AC-245BL



AC-115BL-P
AC-215BL-P
AC-125BL-P
AC-225BL-P
AC-135BL-P
AC-235BL-P
AC-145BL-P
AC-245BL-P



※可選擇AT機種供自動化設備專用

機型 MODEL		AC-115BL	AC-215BL	AC-125BL	AC-225BL	AC-135BL	AC-235BL
適用電壓 Voltage Type		110V	220V	110V	220V	110V	220V
無負載轉速 Unloaded Rotation Speed (rpm) ±10%		400 / 700 / 1100 rpm					
帶緩啟動模式 With soft Start Model		○	○	○	○	○	○
扭力範圍 Output Torque Range	N.m	0.08~1.5	0.08~1.5	0.2~2.5	0.2~2.5	0.5~3.5	0.5~3.5
	lbf.in	0.69~13.0	0.69~13.0	1.74~21.7	1.74~21.7	4.34~30.4	4.34~30.4
	kgf.cm	0.8~15.0	0.8~15.0	2.0~25.0	2.0~25.0	5.0~35.0	5.0~35.0
啟動方式 Start type		按板啟動 Lever Start					
適用起子頭 (單一) Bit Type		M6(φ5.0) / HEX5.0+M6 / HEX1/4"					
選配 Option	下壓啟動機種 Push-start type	AC-115BL-P	AC-215BL-P	AC-125BL-P	AC-225BL-P	AC-135BL-P	AC-235BL-P
	自動化外控機種 For AutoControl Technology (AT Type)	AC-115BL-AT	AC-215BL-AT	AC-125BL-AT	AC-225BL-AT	AC-135BL-AT	AC-235BL-AT
	選配套件 Option Accessories	AC-BL1: 槍把套件 Pistol Grip Set GR-01: 扭力識別止滑色環組 (紅、黃、藍) Torque Identification & Anitslip Color Ring Set GL-03: 扭力保護套 Torque Locking Cover					

功能部位說明

Function Description

AC-BL Series (110V/220V) 直接插電 全自動無碳刷電動起子

Conos Direct Plug-In Electric 110V/220V

Full Automatic Clutch Brushless Electric Screwdriver AC-BL Series



AC-BL1

AC-BL1槍把獨特設計可提供3種走線模式
Three Mode Combination



後走線模式
REAR Mode

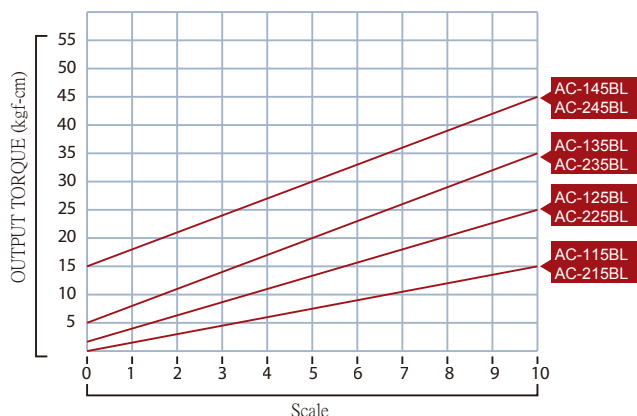


下走線模式
BOTTOM mode



上走線模式
UPPER mode

刻度扭力對照表 TORQUE REFERENCE



AC-145BL	AC-245BL	AC-135BL-13	AC-235BL-13	AC-115BL-16	AC-215BL-16	AC-125BL-16	AC-225BL-16
110V	220V	110V	220V	110V	220V	110V	220V
300 / 500 / 700 rpm		500 / 900 / 1400 rpm		1600 rpm			
○	○	○	○	○	○	○	○
1.5~4.5	1.5~4.5	0.5~3.5	0.5~3.5	0.08~1.5	0.08~1.5	0.2~2.5	0.2~2.5
13.0~39.0	13.0~39.0	4.34~30.4	4.34~30.4	0.69~13.0	0.69~13.0	1.74~21.7	1.74~21.7
15.0~45.0	15.0~45.0	5.0~35.0	5.0~35.0	0.8~15.0	0.8~15.0	2.0~25.0	2.0~25.0
按板啟動 Lever Start							
M6(φ5.0)、HEX5.0+M6、HEX1/4"							
AC-145BL-P	AC-245BL-P	AC-135BL-13-P	AC-235BL-13-P	AC-115BL-18-P	AC-215BL-P	AC-125BL-18-P	AC-225BL-18-P
AC-145BL-AT	AC-245BL-AT	AC-135BL-13-AT	AC-235BL-13-AT	AC-115BL-18-AT	AC-215BL-AT	AC-125BL-18-AT	AC-225BL-18-AT

AC-BL1 : 槍把套件 Pistol Grip Set
GR-01 : 扭力識別止滑色環組 (紅、黃、藍) Torque Identification & Anitslip Color Ring Set
GL-03 : 扭力保護套Torque Locking Cover

插頭型式 Plug Type :

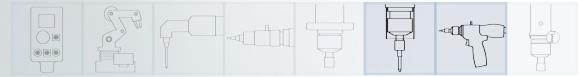
Type 1

Type 2

Type 3

Type 4

Type 5



AC series



機械式離合器全自動電動起子AC系列

Direct Plug-In 110/220V Mechanical Full Automatic Clutch Brushless Electric Screwdriver AC Series

- 超低後座力設計:因應勞工安全考量,首創於離合器動力入端設置瞬間動力釋放開關,當扭力到達設定值時自動釋放動力,後座力少一倍以上,減少工作疲勞。
- 碳刷壽命加倍延長:機械式離合器廢除慣用的電子剎車電路,完全以機械式邏輯程式動作取代,革除電子剎車電路易故障之點,更由於免除剎車時產生的火花,碳刷加倍耐用,並減緩溫升。
- 一機可切換按板式或下壓式啟動:可配合個人使用習慣選擇,提高工作效率。
- 首創同一機種可通用5.0 ϕ 圓柱凸耳型或六角型起子頭(專利第47646號),提供多選擇。
- 獨家採用隔離基座設計,防止碳灰進入齒輪箱內,延長齒輪機組壽命。(專利第47848號)
- 離合器周圍加設防衝擊套筒,避免離合器凸塊因強力衝擊而磨損,影響扭力精密度(專利第53504號)
- 安全與人性化之設計,起子頭換裝控制環採用外拉式,不會因更換起子頭而誤啟動起子,傷及手部,符合作業安全規則。

Super Low Inertia Effect Design: Based on the consideration of operators' health, Top Driver is the first company to invent such distinctive feature as to release clutch automatically without "backlash" when preset torque is achieved, in order to eliminate over torquing by operators.

Longer Life of Carbon Brush: Use Mechanical clutch to replace the common-use of electric brake circuit. This design will not only get rid of the sparks when using the traditional circuit, but also extend the life of carbon brush, and reduce the heat.

Dual Mode Switch Selectable: All AC models have the unique feature of selectable push-to-start or push-lever start at the flick of a switch. This allows the operator to customize the tool to the personal liking and application.

Innovative design of interchangeable 5.0 ϕ HB and Hex bits within the same electric screwdriver, which allows the operator with greater variety of usage. (Taiwan Patent No. 47646)

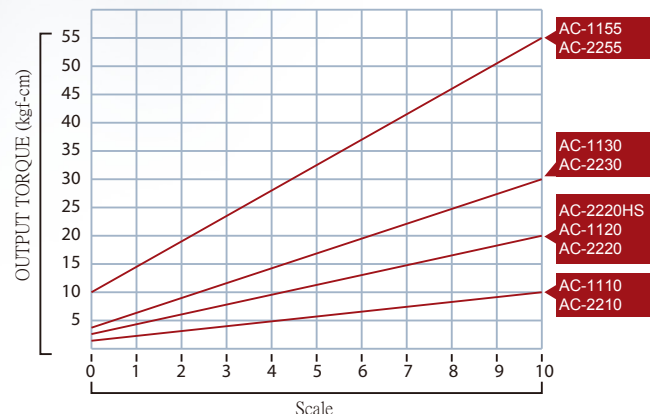
Exclusive invention of the isolation set that prevents carbon ashes get into the gear, which will help longer the life of the gear. (Taiwan Patent No. 47848)

By adding the impulse protection shaft to the clutch, which will avoid further grinding on the clutch and have an effect on the precision of the torque. (Taiwan Patent No. 53504)

Our user-friendly design of quick and easy bit change: just pull the collect ring outwards, insert the desired bit, then release the collect ring, and the bit is automatically locked into its position. Unlike other electric screwdrivers, this safety feature will not start the screwdriver during bit change by mistake and hurt the operator's hands.



刻度扭力對照表 TORQUE REFERENCE

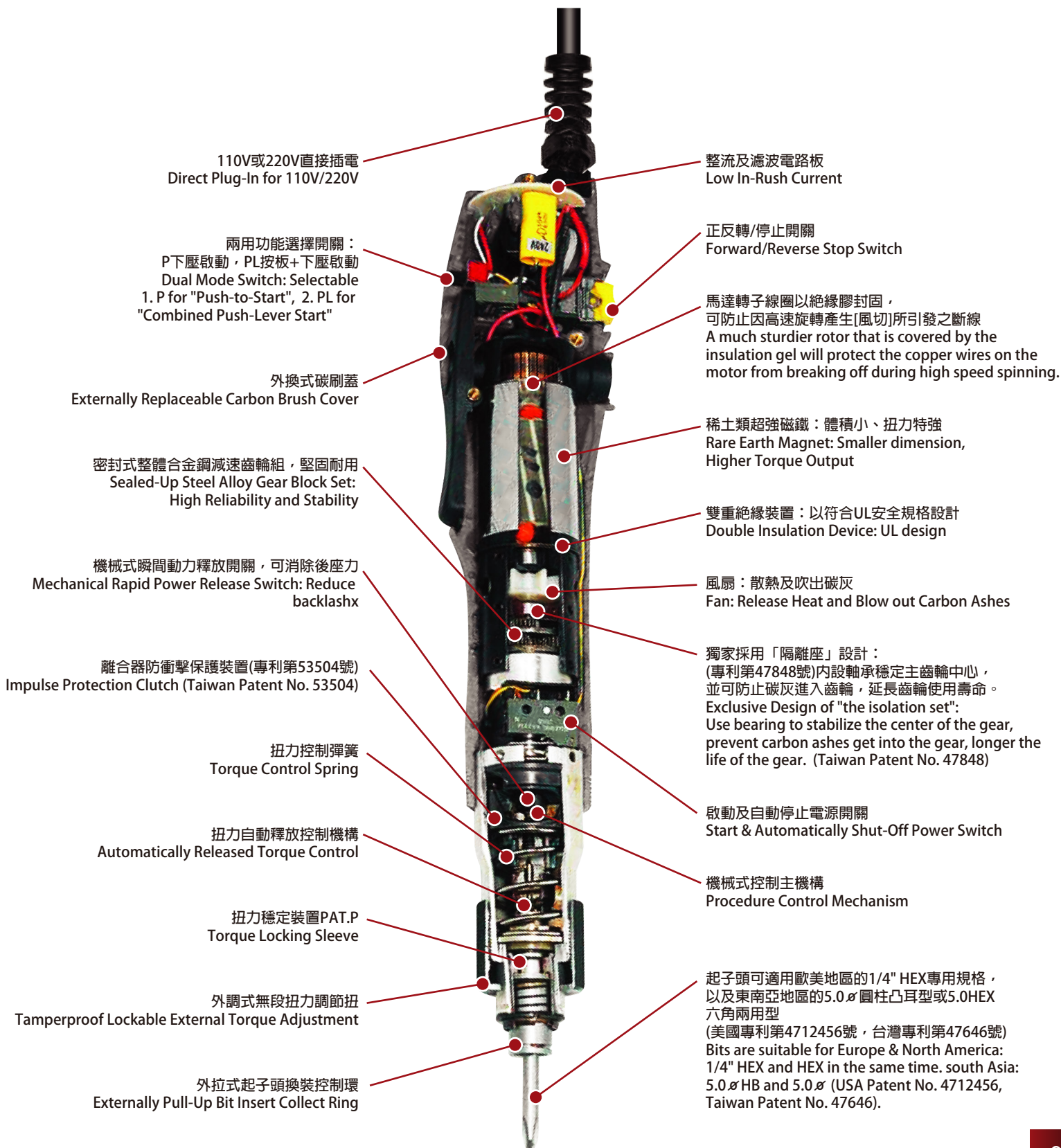


機型 MODEL	AC-1110	AC-2210	AC-1120	AC-2220	AC-1130	AC-2230	AC-1120HS	AC-2220HS	AC-1155	AC-2255	
轉速 FREE SPEED (rpm)	1000	1000	1000	1000	1000	1000	1800	1800	400	400	
扭力範圍 OUTPUTTORQUE	N.m	0.2 ~ 1.0	0.2 ~ 1.0	0.3 ~ 2.0	0.3 ~ 2.0	0.4 ~ 3.0	0.4 ~ 3.0	0.4 ~ 2.0	0.4 ~ 2.0	1.0 ~ 5.5	1.0 ~ 5.5
	lbf.in	1.7 ~ 8.7	1.7 ~ 8.7	2.6 ~ 17.4	2.6 ~ 17.4	3.5 ~ 26.0	3.5 ~ 26.0	3.5 ~ 17.4	3.5 ~ 17.4	8.7 ~ 47.7	8.7 ~ 47.7
	kgf.cm	2.0 ~ 10.0	2.0 ~ 10.0	3.0 ~ 20.0	3.0 ~ 20.0	4.0 ~ 30.0	4.0 ~ 30.0	4.0 ~ 20.0	4.0 ~ 20.0	10.0 ~ 55.0	10.0 ~ 55.0
啟動方式 START	下壓 / 下壓按板 PUSH START / PUSH-LEVER START										
適用電壓 VOLTAGE	110V	220V	110V	220V	110V	220V	110V	220V	110V	220V	

結構剖面說明 Section Structure

AC Series (110V/220V) 直接插電 機械式離合器全自動電動起子

Conos Direct Plug-In 110V/220V
Mechanical Full Automatic clutch Electric Screwdriver AC Series





X/A series



直接插電全自動電動起子X/A系列

Direct Plug-In 110/220V Full Automatic Clutch Screwdriver X/A Series

- 專利全自動剎車控制回路,可保護延長啟動開關等消耗性零件之壽命,降低更換消耗品之次數及費用。
- 三重保護裝置,可避免超載、短路等所造成之故障損害。
- 可使用電壓範圍廣,克服於不穩定供電環境下尖峰與離峰操作。
- 專利黃金接點特殊剎車觸發機構,取代一般舊用開關(switch)之設計,經久耐用。
- EMC防電磁干擾設計。
- 全系列稀土永久強磁馬達,溫升低及長時間使用扭力不衰退。
- 馬達轉子繞線以特殊膠封固,加強保護馬達轉子漆包線,延長馬達壽命。

Special made patented brake switch has high resistance on impulsive vibration that will lengthen the switch life.

Triple safety protection device can prevent damages from electrical overload or short circuit.

Our X series and A series are designed to have high tolerance to a wide voltage range. This feature helps to overcome various issues of operating in an unstable power supply environment.

Special designed brake switch has high resistibility to impulsive vibration. This unique feature will extend the duration of switch life.

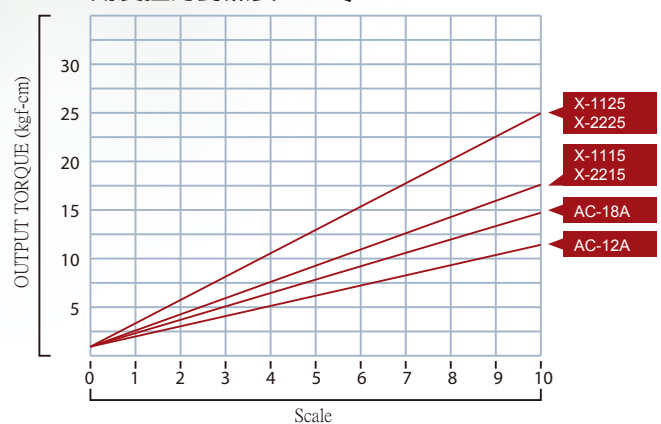
EMC (Electromagnetic Compatibility) feature.

High Power Rare Earth Magnet Motor offers consistent performance in torque output.

A special gel is applied to our motor axle which laminates and strengthens the winding wire. This unique procedure will lengthen the motor life.



刻度扭力對照表 TORQUE REFERENCE



機型 MODEL		X-1115	X-1125	X-2215	X-2225	AC-12A	AC-18A
轉速 FREE SPEED (rpm)		900	900	900	900	1000	700
扭力範圍 OUTPUT TORQUE	N.m	0.08 ~ 1.5	0.08 ~ 2.5	0.08 ~ 1.5	0.08 ~ 2.5	0.08 ~ 1.2	0.08 ~ 1.8
	lbf.in	0.7 ~ 13.0	0.7 ~ 21.7	0.7 ~ 13.0	0.7 ~ 21.7	0.7 ~ 10.4	0.7 ~ 15.6
	kgf.cm	0.8 ~ 15.0	0.8 ~ 25.0	0.8 ~ 15.0	0.8 ~ 25.0	0.8 ~ 12.0	0.8 ~ 18.0
啟動方式 START		按板式 LEVER START					
適用電壓 VOLTAGE		110V	110V	220V	220V	110V	110V

直接插電半自動電動起子S系列

Direct Plug-In 110/220V Semi-Automatic Clutch Screwdriver S Series

- 雙重緩衝吸收震動裝置,防止其他機構因震動而損壞,堅固耐用。
- 稀土系永久磁石馬達,體積小、輸出扭力大、密集作業溫升穩定、雙重絕緣保護。
- 外換式碳刷蓋更換設計,維護簡易方便。
- 無段式扭力調整,配合輸出扭力高低範圍廣,一支起子可通用於不同產品 的生產線。
- 馬達轉子繞線以特殊膠封固,加強保護馬達轉子漆包線,延長馬達壽命。

Double buffer shock absorber device will block the damage of parts from vibration.

High Power Rare Earth Magnet Motor has distinguished characteristics, including smaller dimension, higher torque output, double insulation device that is UL designed, and great safety.

Externally Replaceable Carbon Brush is easy and convenient.

Externally knurled torque nut allows easy torque setup and adjustment.

Spiral Winding Wire in All Model s Cable greatly reduces the possibility of bent or broken shafts.

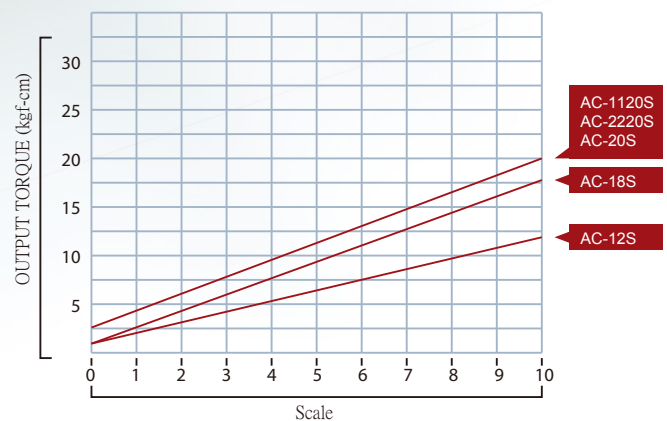
AC-1120S
AC-2220S
AC-20S



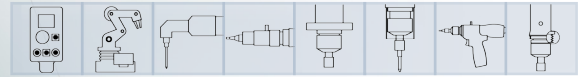
AC-12S
AC-18S



刻度扭力對照表 TORQUE REFERENCE



機型 MODEL		AC-1120S	AC-2220S	AC-20S	AC-12S	AC-18S
轉速 FREE SPEED (rpm)		1000	1000	1000	1000	700
扭力範圍 OUTPUT TORQUE	N.m	0.3 ~ 2.0	0.3 ~ 2.0	0.3 ~ 2.0	0.08 ~ 1.2	0.08 ~ 1.8
	lbf.in	2.6 ~ 17.4	2.6 ~ 17.4	2.6 ~ 17.4	0.7 ~ 10.4	0.7 ~ 15.6
	kgf.cm	3.0 ~ 20.0	3.0 ~ 20.0	3.0 ~ 20.0	0.8 ~ 12.0	0.8 ~ 18.0
啟動方式 START		按板式 LEVER START				
適用電壓 VOLTAGE		110V	220V	220V	110V	110V



RE/F-6 BL series

BL
Brushless



低壓直流全自動無碳刷電動起子RE/F-6系列

Low Voltage DC Full Automatic Clutch Brushless Electric Screwdriver RE/F-6 Series

- 採用全新研發sensorless(無偵測器)無碳刷高精度內轉馬達,具高穩定,低溫升特點,適用長時間精密操作。
- 電動起子體積小,輸出扭力高。
- 完全免除碳刷粉塵困擾及耗材更換問題,可用於無塵室。
- 黃金接點專利耐衝擊剎車觸點開關,無使用壽命問題(專利第52686號)。
- 專利緩衝裝置整合新式離合器,具有低衝擊,高精度特點(專利第35465號)。
- 無段式扭力調整,系列機種涵蓋扭力輸出範圍更廣,足以應付多樣需求。
- 電動起子本體與連接線採用分離式架構,更便於維護保養。
- 極簡絕佳的外觀手感,長時間操作不疲勞。

Developed with a new sensorless (no sensor) brushless of high-precision internal rotation motor, high stability, low temperature rise characteristics, for long-precision operation.

Small size, high output torque.

Completely remove the carbon brush dust from the troubled and supplies replacement can be used in the clean room.

Special made patented brake switch has high resistance on impulsive vibration that will lengthen the switch life. (Taiwan patented No.52686).

The combination of the buffer device and a new clutch model will greatly reduce the shock, improve the precision of torque, and lengthen the life of its usage. (Taiwan patent No.35465).

Stepless torque adjustment, the series of models covering a wider range of torque output, enough to meet diverse needs.

Electric screwdriver body and the cable to adopt a separate structure, maintenance is more convenient.

Minimalist excellent appearance and feel, prolonged use of fatigue.



選配BC-01無刷外接式計數器
Screw Counter BC-01

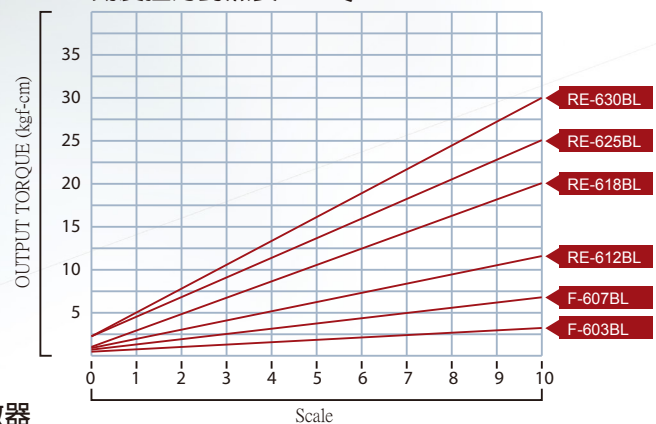
F-603BL
F-607BL
RE-612BL
RE-618BL



RE-625BL
RE-630BL



刻度扭力對照表 TORQUE REFERENCE



※可選擇AT機種供自動化設備專用 ※可搭配外接式計數器

機型 MODEL		F-603BL	F-607BL	RE-612BL	RE-618BL	RE-625BL	RE-630BL
轉速 FREE SPEED (rpm)		660 / 480	1000 / 750	1000 / 750	1000 / 750	660 / 480	660 / 480
扭力範圍 OUTPUTTORQUE	N.m	0.02 ~ 0.3	0.05 ~ 0.7	0.08 ~ 1.2	0.08 ~ 2.0	0.2 ~ 2.5	0.2 ~ 3.0
	lbf.in	0.17 ~ 2.6	0.43 ~ 6.1	0.7 ~ 10.4	0.7 ~ 17.4	1.7 ~ 21.7	1.7 ~ 26.0
	kgf.cm	0.2 ~ 3.0	0.5 ~ 7.0	0.8 ~ 12.0	0.8 ~ 20.0	2.0 ~ 25.0	2.0 ~ 30.0
啟動方式 START		按板式 LEVER START(反轉按鈕式 BUTTON)/反轉撥切式(SLIDE)/下壓式 PUSH START					
適用控制器 CONTROLLER		SW2-B / T-1-SWB			T-1-SWB		
抗靜電 ESD		YES					



F-3 BL series

BL
Brushless



低壓直流全自動無碳刷電動起子F-3 BL系列

Low Voltage DC Full Automatic Clutch Brushless Electric Screwdriver F-3 BL Series

- 採用全新研發sensorless(無偵測器)無碳刷高精密內轉馬達,極具高穩定、低溫升特點,適合長時間精密操作。
- 電動起子體積小,輸出扭力高。
- 完全免除碳刷粉塵困擾及耗材更換問題,可用於無塵室。
- 黃金接點專利耐衝擊殺車觸發開關,無使用壽命問題(專利第52686號)。
- 專利緩衝裝置整合新式離合器,具有低衝擊、高精度特點(專利第35465號)。
- 無段式扭力調整,系列機種涵蓋扭力輸出範圍更廣,足以應付多樣需求。
- 電動起子本體與連接線採分離式架構,更便於維護保養。
- 極簡絕佳的外觀手感,長時間操作不疲勞。

Using the new sensorless (non detector) in turn brushless motor with high precision, high stability, low temperature characteristics, suitable for long precision operation.

Small size, high torque output.

Entirely free from trouble any supplies replacement and carbon brush dust problem can be used for clean rooms.

Patented impact resistant golden contact brake trigger switch, lifetime use (Patent No. 52686).

Integration of new patent buffer clutch, low impact, high-precision features (Patent No. 35465).

Non-stage torque adjustment, series models cover a wider range of torque output, sufficient to meet the needs.

Separate structure, convenient for maintenance.

Simple looking & great feeling for a long time operation without fatigue.



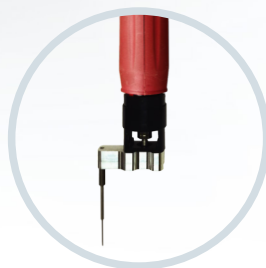
選配BC-01無刷外接式計數器
Screw Counter BC-01

F-31BLL
F-31BL
F-33BL
F-35BL

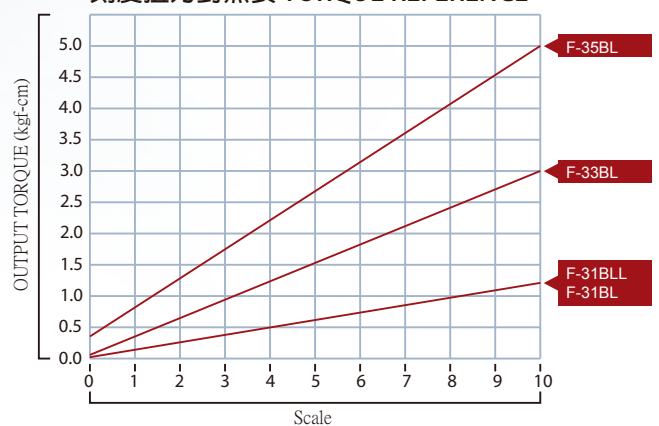
ESD 加強型
ESD enhancement



F-3BL Z型轉接頭
iPhone / iPad組裝專用
For iPhone / iPad assembly

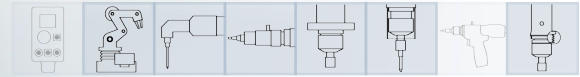


刻度扭力對照表 TORQUE REFERENCE



※可選擇AT機種供自動化設備專用 ※可搭配外接式計數器

機型 MODEL		F-31BLL	F-31BL	F-33BL	F-35BL
轉速 FREE SPEED (rpm)		300 / 150	1000 / 750	1000 / 750	1000 / 750
扭力範圍 OUTPUT TORQUE	N.m	0.015-0.12	0.015-0.12	0.02-0.3	0.04-0.5
	lbf.in	0.13-1.04	0.13-1.04	0.17-2.6	0.35-4.34
	kgf.cm	0.15-1.2	0.15-1.2	0.20-3.0	0.4-5.0
啟動方式 START		按板式 LEVER START(反轉按鈕式 BUTTON)/反轉撥切式(SLIDE)			
適用控制器 CONTROLLER		SW2-B / T-1-SWB			
抗靜電 ESD		Yes			
適用起子頭 APPLICABLE BIT (mm)		M3			



F series



低壓直流全自動電動起子F系列

Low Voltage DC Automatic Clutch Electric Screwdriver F Series

- 首創正反轉均用按板之一全按鈕式控制,作業效率最高,使用方便。(專利 第39204號)
- 黃金接點特製耐衝擊觸發開關,永久保用。(專利第52686號)
- 稀土類強磁精製馬達,體積小,扭力大,雙重絕緣裝置,UL規格設計,安全性高。
- 緩衝裝置配合新式離合器,減低衝擊力,提高扭力精度,增長使用壽命(專利第35465號)
- 體積小,作業輕巧靈活,長時間操作不疲勞。
- 碳刷可簡易外換,保養方便,不需專業人員維修。(專利第41549號)
- 內建扭力調整反鎖圈設計,可直接鎖定欲輸出扭力,避免現場作業人員誤更動 扭力,無需另外購買配件。

※ F系列反轉操作方式提供按板及切換兩種機型, 可供客戶依作業習慣選擇。

※ F系列可選擇搭配AT基座, 滿足自動化鎖付安裝需求。

First to specialize in Fwd/Rev trigger: just one easy step of pressing on the trigger will enhance work efficiency significantly. (Taiwan Patent No.39204)

Special made patented brake switch has high resistance on impulsive vibration that will lengthen the switch life. (Taiwan Patent No. 52686)

High Power Rare Earth Magnet Motor has distinguished characteristics, including smaller dimension, higher torque output, double insulation device that is UL designed, and great safety.

The combination of the buffer device and a new clutch model will greatly reduce the shock, improve the precision of torque, and lengthen the life of its usage. (Taiwan Patent No. 35465)

Slim and small housing can be grasped and operated for a long period of time.

Externally Replaceable Carbon Brush is easy and convenient; you do not need any professionals to do the maintenance. (Taiwan Patent No. 41549).

Lockable external torque adjustment easy to set up and secure, do not need to purchase another accessories.

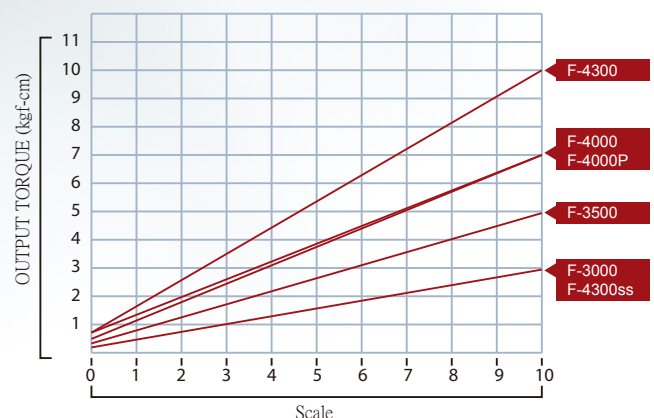
※ We provide lever or switch selection for part of F Series models reverse function.

Customers can choose the operation, depending on their preference.

※ RE/F series is compatible with AT base, fulfill automation needs.

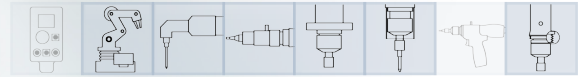


刻度扭力對照表 TORQUE REFERENCE



機型 MODEL		F-3000	F-3500	F-4300SS	F-4000	F-4300	F-4000P
轉速 FREE SPEED (rpm)		1000	1000	660	1000	660	1000
扭力範圍 OUTPUT TORQUE	N.m	0.02 ~ 0.3	0.04 ~ 0.5	0.02 ~ 0.3	0.05 ~ 0.7	0.08 ~ 1.0	0.08 ~ 0.7
	lbf.in	0.17~ 2.6	0.35 ~ 4.34	0.17 ~ 2.6	0.43 ~ 6.1	0.7 ~ 8.7	0.7 ~ 6.1
	kgf.cm	0.2 ~ 3.0	0.4 ~ 5.0	0.2 ~ 3.0	0.5 ~ 7.0	0.8 ~ 10.0	0.8 ~ 7.0
啟動方式 START		按板式 LEVER START					下壓式 PUSH START
適用控制器 CONTROLLER		A / B / C / D / H / I					C / F
抗靜電 ESD		YES					

※ 搭配控制器 CONTROLLER: A:T-I-CL B:T-I-CLG C:T-I-CL EB D:T-I-CL HL E:CLT-1 F:CLT-1 EB G:T-I-CLGD H:T-I-SW I:SWI



RE series



低壓直流全自動電動起子RE系列

Low Voltage DC Full Automatic Clutch Electric Screwdriver RE Series

- 首創正反轉均用按板之一全按鈕式控制,作業效率最高,使用方便。(專利 第39204號)
- 黃金接點特製耐衝擊觸發開關,永久保用。(專利第52686號)
- 稀土類強磁精製馬達,體積小,扭力大,雙重絕緣裝置,UL規格設計,安全性高。
- 緩衝裝置配合新式離合器,減低衝擊力,提高扭力精度,增長使用壽命(專利 第35465號)
- 體積小,作業輕巧靈活,長時間操作不疲勞。
- 碳刷可簡易外換,保養方便,不需專業人員維修。(專利第41549號)
- 內建扭力調整反鎖圈設計,可直接鎖定欲輸出扭力,避免現場作業人員誤更動扭力,無需另外購買配件。

※RE系列反轉操作方式提供按板及切換兩種機型,可供客戶依作業習慣選擇。

※RE系列可選擇搭配AT基座,滿足自動化鎖付安裝需求。

First to specialize in Fwd/Rev trigger: just one easy step of pressing on the trigger will enhance work efficiency significantly. (Taiwan Patent No.39204)

Special made patented brake switch has high resistance on impulsive vibration that will lengthen the switch life. (Taiwan Patent No. 52686)

High Power Rare Earth Magnet Motor has distinguished characteristics, including smaller dimension, higher torque output, double insulation device that is UL designed, and great safety.

The combination of the buffer device and a new clutch model will greatly reduce the shock, improve the precision of torque, and lengthen the life of its usage. (Taiwan Patent No. 35465)

Slim and small housing can be grasped and operated for a long period of time.

Externally Replaceable Carbon Brush is easy and convenient; you do not need any professionals to do the maintenance. (Taiwan Patent No. 41549).

Lockable external torque adjustment easy to set up and secure, do not need to purchase another accessories.

※We provide lever or switch selection for part of RE Series models reverse function.

Customers can choose the operation, depending on their preference.

※RE/F series is compatible with AT base, fulfill automation needs.

RE-4500
RE-4800



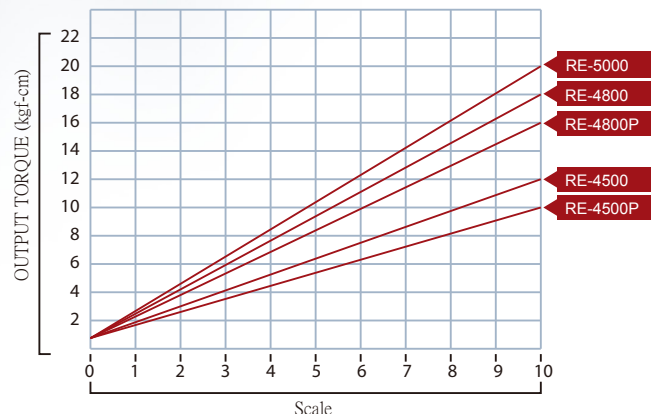
RE-4500P
RE-4800P



RE-5000



刻度扭力對照表 TORQUE REFERENCE



機型 MODEL		RE-4500	RE-4800	RE-5000	RE-4500P	RE-4800P
轉速 FREE SPEED (rpm)		1000	660	900	1000	660
扭力範圍 OUTPUT TORQUE	N.m	0.08 ~ 1.2	0.08 ~ 1.8	0.08 ~ 2.0	0.08 ~ 1.0	0.08 ~ 1.6
	lbf.in	0.7 ~ 10.4	0.7~ 15.6	0.7 ~ 17.4	0.7 ~ 8.7	0.7 ~ 13.9
	kgf.cm	0.8 ~ 12.0	0.8 ~ 18.0	0.8 ~ 20.0	0.8 ~ 10.0	0.8 ~ 16.0
啟動方式 START		按板式 LEVER START			下壓式 PUSH START	
適用控制器 CONTROLLER		A / B / C / D / E / F / G / H			C / F	
抗靜電 ESD		YES				

※ 搭配控制器 CONTROLLER: A:T-1-CL B:T-1-CLG C:T-1-CL EB D:T-1-CL HL E:CLT-1 F:CLT-1 EB G:T-1-CLGD H:T-1-SW I:SW1

RE/F-D series



低壓直流全自動電動起子RE/F-D系列

Low Voltage DC Full Automatic Clutch Electric Screwdriver RE/F-D Series

- 黃金接點耐衝擊觸發開關,永久保用(專利第52686號)。
- 稀土類強磁精製馬達,體積小、扭力大,雙重絕緣裝置,UL規格設計,安全性高。
- 緩衝裝置配合新式離合器,減低衝擊力,提高扭力精度,增長使用壽命(專利第35465號)。
- 體積小,作業輕巧靈活,長時間操作不疲勞。
- 內建扭力調整反鎖圈設計,可直接鎖定輸出扭力,避免現場作業人員誤 更動,無需另外購買配件。
- 新式碳刷蓋設計,更換碳刷更方便,不需專業人員維護,節省維護費用。
- 電動起子本體與連接線採分離式架構,保養維護更方便。
- 更加舒適的外殼設計及手感。

Special made patented brake switch has high resistance on impulsive vibration that will lengthen the switch life. (Taiwan patented No.52686)

High power rare earth magnet motor has distinguished characteristics, including smaller dimension, higher torque output, double insulation device that is UL designed, and great safety.

The combination of the buffer device and a new clutch model will greatly reduce the shock, improve the precision of torque, and lengthen the life of its usage. (Taiwan patent No.35465).

Slim and small housing can be grasped and operated for a long period of time.

Lockable external torque adjustment easy to set up and secure, do not need to purchase another accessories.

Externally replaceable carbon brush is easy and convenient; you do not need any professionals to do the maintenance.

Electric screwdriver body and the cable to adopt a separate structure, maintenance is more convenient.

More comfortable housing design and feel.

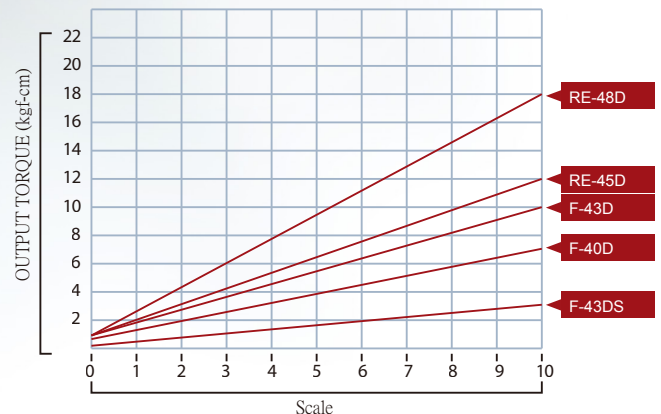
F-43DS
F-40D
F-43D



RE-45D
RE-48D

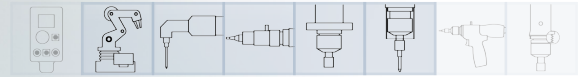


刻度扭力對照表 TORQUE REFERENCE



機型 MODEL		F-43DS	F-40D	F-43D	RE-45D	RE-48D
轉速 FREE SPEED (rpm)		660	1000	660	1000	660
扭力範圍 OUTPUT TORQUE	N.m	0.02 ~ 0.3	0.05 ~ 0.7	0.08 ~ 1.0	0.08 ~ 1.2	0.08 ~ 1.8
	lbf.in	0.17 ~ 2.6	0.43 ~ 6.1	0.7 ~ 8.7	0.7 ~ 10.4	0.7 ~ 15.6
	kgf.cm	0.2 ~ 3.0	0.5 ~ 7.0	0.8 ~ 10.0	0.8 ~ 12.0	0.8 ~ 18.0
啟動方式 START		按板式 LEVER START(反轉按鈕式 BUTTON)/反轉撥切式(SLIDE)/下壓式 PUSH START				
適用控制器 CONTROLLER		G / H / I			G / H	
抗靜電 ESD		YES				

※ 搭配控制器 CONTROLLER: A:T-1-CL B:T-1-CLG C:T-1-CL EB D:T-1-CL HL E:CLT-1 F:CLT-1 EB G:T-1-CLGD H:T-1-SW I:SW1



CY series



低壓直流全自動電動起子CY系列

Low Voltage DC Full Automatic Clutch Electric Screwdriver CY Series

- 黃金接點特製耐衝擊觸發開關,永久保用。(專利第52686號)
- 稀土類強磁精製馬達,體積小,扭力大,雙重絕緣裝置,UL規格設計,安全性高。
- 緩衝裝置配合新式離合器,減低衝擊力,提高扭力精度,增長使用壽命(專利第35465號)
- 碳刷可簡易外換,保養方便,不需專業人員維修。(專利第41549號)
- 內建扭力調整反鎖圈設計,可直接鎖定欲輸出扭力,避免現場作業人員誤更動 扭力,無需另外購買配件。

DSpecial made patented brake switch has high resistance on impulsive vibration that will lengthen the switch life. (Taiwan Patent No. 52686)

High Power Rare Earth Magnet Motor has distinguished characteristics, including smaller dimension, higher torque output, double insulation device that is UL designed, and great safety.

The combination of the buffer device and a new clutch model will greatly reduce the shock, improve the precision of torque, and lengthen the life of its usage.(Taiwan Patent No. 35465)

Externally Replaceable Carbon Brush is easy and convenient; you do not need any professionals to do the maintenance.(Taiwan Patent No. 41549).

Lockable external torque adjustment easy to set up and secure, do not need to purchase another accessories.

CY-16C
CY-26C



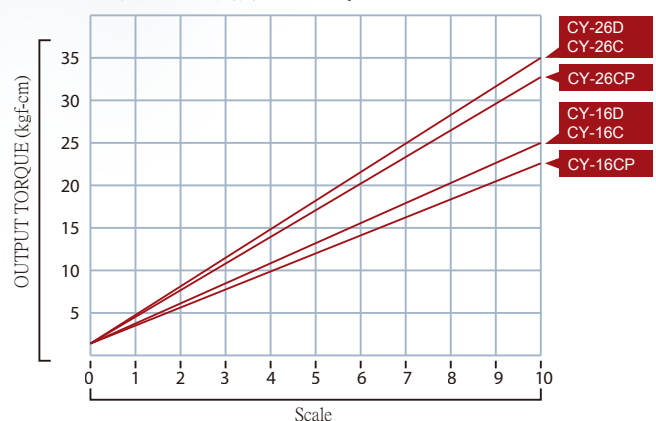
CY-16CP
CY-26CP



CY-16D
CY-26D



刻度扭力對照表 TORQUE REFERENCE



機型 MODEL		CY-16D	CY-26D	CY-16C	CY-26C	CY-16CP	CY-26CP
轉速 FREE SPEED (rpm)		1000	660	1000	660	1000	660
扭力範圍 OUTPUTTORQUE	N.m	0.2~ 2.5	0.2 ~ 3.5	0.2 ~ 2.5	0.2 ~ 3.5	0.2~ 2.3	0.2 ~ 3.3
	lbf.in	1.7~ 21.7	1.7 ~ 30.4	1.7 ~ 21.7	1.7 ~ 30.4	1.7 ~ 20.0	1.7 ~ 28.6
	kgf.cm	2.0 ~ 25.0	2.0 ~ 35.0	2.0 ~ 25.0	2.0 ~ 35.0	2.0 ~ 23.0	2.0 ~ 33.0
啟動方式 START		按板式 LEVER START				下壓式 PUSH START	
適用控制器 CONTROLLER		G / H		A/B/C/D/E/F/H		C / F	
抗靜電 ESD		YES					

※ 搭配控制器 CONTROLLER: A:T-1-CL B:T-1-CLG C:T-1-CL EB D:T-1-CL HL E:CLT-1 F:CLT-1 EB G:T-1-CLGD H:T-1-SW I:SW1

Traditional Vacuum

電子控制傳統式電動起子 / 氣吸式電動起子

Traditional Electric Screwdrivers Vacuum Electric Screwdriver

電子控制傳統式電動起子 KM-800 KS-2500 CY-56L CY-66L CY-76L

- 電子控制傳統式電動起子系採用調整電壓高低及電流大小之設計達到扭力自動控制。
- 旋鈕可調整所需之輸出扭力及轉速。
- 體積短小,重量輕巧,作業靈活輕鬆。
- 可選擇不同電源控制器,一台控制器可同時供應2或4支電動起子使用,而不會相互干擾,經濟便利

氣吸式電動起子 V-3000

- 專利電動起子輸出端起子夾頭設計,起子頭不偏擺,穩定度高,作業無誤失。
- 體積短小,重量輕巧,作業靈活輕鬆。
- 可搭配[真空轉換器]使用,工廠僅需空氣壓縮機供氣,自動轉換成吸力吸取螺絲。
- 適合磁力無法吸附之螺絲或人手無法拿取之微小螺絲作業使用。
※ 氣吸式電動起子前端風嘴處須配合作業螺絲之規格而訂制。
※ 配件:真空轉換器、螺絲排列盤。

Traditional Electric Screwdriver KM-800 KS-2500 CY-56L CY-66L CY-76L

Traditional Electric screwdriver uses the adjustable electric high/low voltage and the design of electric current size to control torque automatically.

The Knob is adjustable to the need of exportation torque and speed turn.

The body is compact, light and well balanced to minimize fatigue of operator's hand.

Can be working with either ST-2 or BT-4 controller, and a single controller is capable working with 2-4 screwdrivers simultaneously, which is convenient and cost-effective.

Vacuum Electric Screwdriver : V-3000

Special structure at the tip of torque output that stabilizes bits from swinging.

The body is compact, light and well balanced to minimize fatigue of operator's hand.

Connect to a vacuum source like vacuum pump on vacuum converter with the appropriate Vacuum Attachment.

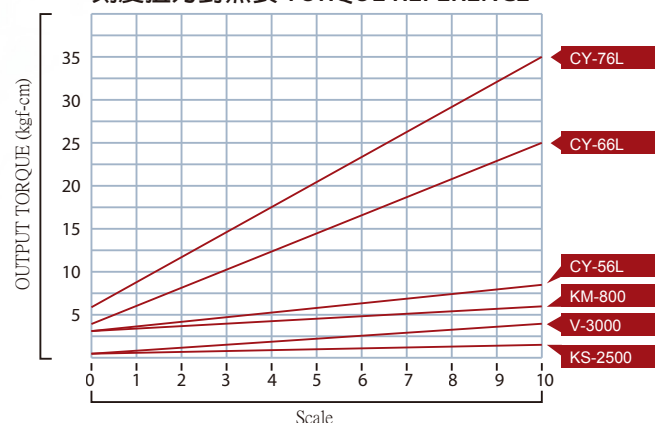
Suitable with minute screws such as glasses assemblies.

※ Must match with the specification of screws and order system when using vacuum electric screwdriver.

※ Accessories: Vacuum Attachment, Screw Setter.



刻度扭力對照表 TORQUE REFERENCE



機型 MODEL		KS-2500	CY-56L	CY-76L	KM-800	CY-66L	V-3000
轉速 FREE SPEED (rpm)		1000 ~ 2500	1000 ~ 2500	250 ~ 750	600 ~ 1000	500 ~ 1000	2000 ~ 3300
扭力範圍 OUTPUT TORQUE	N.m	0.05 ~ 0.2	0.3 ~ 0.8	0.6 ~ 3.5	0.3 ~ 0.6	0.4 ~ 2.5	0.05 ~ 0.4
	lbf.in	0.43 ~ 1.7	2.6 ~ 7.0	5.2 ~ 30.4	2.6 ~ 5.2	3.5 ~ 21.7	0.43 ~ 3.5
	kgf.cm	0.5 ~ 2.0	3.0 ~ 8.0	6.0 ~ 35.0	3.0 ~ 6.0	4.0 ~ 25.0	0.5 ~ 4.0
啟動方式 START		按板式 LEVER START					
適用控制器 CONTROLLER		ST-2S, BT-4S	ST-2L, BT-4L	ST-2L	ST-2M, BT-4M	ST-2L	ST-2S, BT-4S



Conos® 技友

T-10 / T-100 數位扭力測試儀 DIGITAL TORQUE METER

電動起子扭力校正專用，內有充電式電池。
Electronic Screwdriver Torque Calibration Expert Including Rechargeable Battery



- 同時顯示正扭力及反扭力。
- 自動Reset功能、提昇測試速度。(不需要手按歸零鍵)
- 單位切換：kgf-cm、N-m、lb-in。
- Peak、Track切換功能。
- 治具固定尺寸與一般扭力計(如HP-100)相同。

Dual monitor to display positive and negative torque values.
Auto reset function to improve speed. (without pushing zero button by manual)
Selectable unit: kgf-cm, N-m, lb-in.
Peak, Track switching functions.
The fixing size of fixtures and normal torque tester (HP-100) are the same.

型號 Model	T-10	T-100
測定扭力 Torque Capacity	0.15~10.00 kgf-cm 0.015~0.981 N-m 0.13~8.68 Lbf-in	1.5~100.0 0.15~9.81 1.3~86.8
測量模式 Mode Operating	Track/Peak/First peak	
精度 Accuracy	0.5% F.S.	
容許負荷 Max Torque	最大扭力150%	
外觀尺寸 Dimension	230(W)×140(D)×65(H)mm	
機台重量 Weight	2.2kg	
電池規格 Battery	充電8小時、連續使用8小時/充放電500次	
充電器 Charge	INPUT AC100V~AC240V 50-60Hz 0.5A	

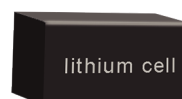
T-10 / T-100 數位扭力測試儀配件 DIGITAL TORQUE METER Accessories



電動起子測試座
測定範圍:
0.5N-m 以下



Φ4, Φ5, 5mm, 1/4
四種尺寸
起子頭



lithium cell

內建鋰電池
電池壽命長



電動起子測試座彈簧
測定範圍:
0.5N-m~10N-m



TS-10

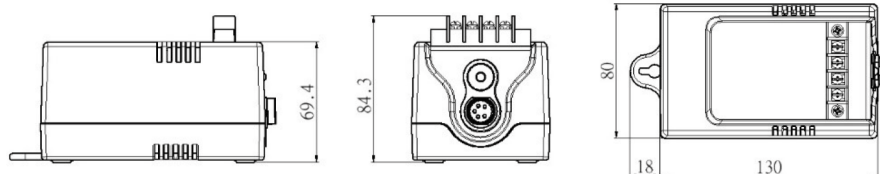
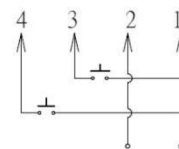
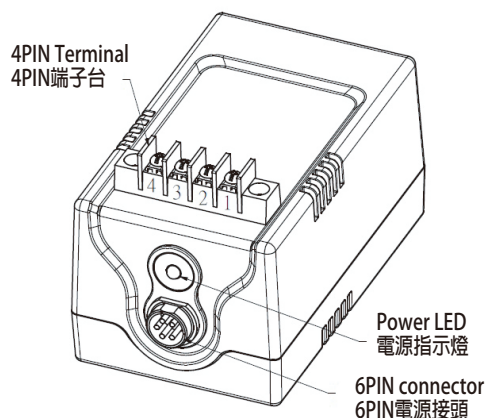
TS-40

標準重量校正棒
用以確認扭力值
是否準確。

(選配Option)

AT-2 外接訊號控制器 AT-2 External Signal Controller

AT-2 外接訊號控制器
AT-2 External Signal Controller
Electric Screwdriver External
Signal Controller.



規格 Specifications
輸入 INPUT: AC110V or 220V or 240V
輸出 OUTPUT: DC32V
重量 WEIGHT: 1.1kg

產品型號 MODEL: AT-2(扭力到達煞車後 DC+5V 持續輸出) (When break DC+5V continuous output)

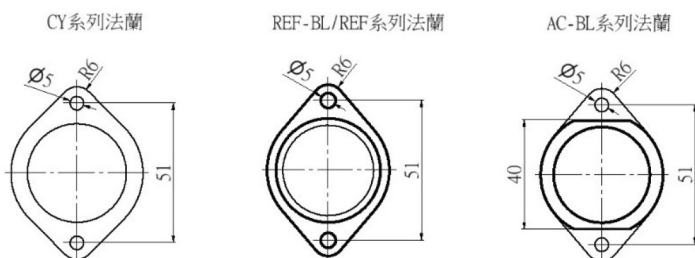
AT-2.J(扭力到達煞車後 1、2 腳導通) (When break pin1 & pin2 connected)

適用機種 Applicable model: F/RE/CY 系列 DC 低壓直流有碳刷全自動電動起子

F/RE/CY Low voltage DC Full automatic clutch Electric screwdriver

接點 PIN	性質 Function	使用端定義 Definition
1	共地 COM	共線 COM
2	煞車監控輸出 Break output	AT-2:達到設定扭力煞車時，腳位 2 持續輸出 DC+5V，啟動控制(1+4)斷開後重置(reset) AT-2:When break, PIN2 continuous output DC+5V until start control PIN (1+4) disconnected and reset. AT-2:達到設定扭力煞車時，1+2 持續導通(0Ω)，啟動控制(1+4)斷開後重置(reset) AT-2:When break, pin1 & pin2 connected until start control PIN (1+4) disconnected and reset.
3	控制輸入 INPUT	1-3 接點導通，電動起子退螺絲(反轉)PIN1+PIN3 connected, Counterclockwise
4	控制輸入 INPUT	1-4 接點導通，電動起子鎖螺絲(正轉)PIN1+PIN4 connected, Clockwise

自動化相關配件 Automation Accessories



自動化專用法蘭 AFL-REF、AFL-CY、AFL-ACBL
Automation Flange AFL-REL、AFL-CY、AFL-ACBL



無刷電動起子外接式計數器 BC-01
Brushless Electric Screwdriver
External Screw counter BC-01

適用機型
Applicable Models

AC 無碳刷系列 AC Brushless series
DC 無碳刷系列 DC Brushless series



無刷電動起子 PLC 控制套件 BP-01
Brushless Electric Screwdriver
PLC Control Suite BP-01

適用機型
Applicable Models

AFL-REF : REF/REF-BL series
AFL-CY : CY series
AFL-ACBL : AC-BL series

適用機型
Applicable Models

AC 無碳刷系列 AC Brushless series
DC 無碳刷系列 DC Brushless series



鎖定式扭力調整頭 Torque Adjustment

防止現場作業人員自行變更已設定扭力。
To minimize tampering or accidental turning once torque is set.

適用機型
Applicable Models

直接插電機械式全自動離合器型電動起子。
Applicable for series Mechanical full automatic clutch electric screwdriver

AC機械式鎖定扭力頭：TL-01, 調整器：TA-01



電動起子放置座 SSR-01 Suspension Rack

固定于作業台邊放置起子，供無法懸吊使用的作業環境使用，避免掉落地面損壞工具。
Can be fixed on the side of the table avoid falling off damage.

適用機型
Applicable Models

全系列電動起子
All series electric screwdriver



真空轉換器組 VHH10 Vacuum hose and vacuum converter

可直接利用空氣壓縮機吹出之風力轉換為吸取螺絲之吸力。
Connect to a vacuum source like vacuum pump or vacuum converter

適用機型
Applicable Models

吸氣式電動起子。
Vacuum Electric Screwdriver



鎖定式扭力調整頭 Torque Locker

可防止現場作業人員自行變更已設定扭力
To minimize tampering or accidental turning once torque is set

適用機型
Applicable Models

RE/F及X系列電動起子
RE/F、X series electric screwdriver

RE/F鎖定式扭力頭：TL-02, 調整器：TA-01



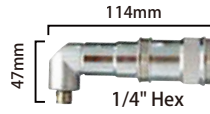
彈簧吊車 SB-1200 Spring Balancer

功能：可調整作業高度，使用後自動回復定位，避免電動起子連接線因長期使用彎折斷線，便利並減輕使用者負擔
Can hold screwdrivers at any height in accordance with their weight Best suited for long-time operation The convenience also lightens user burden

適用機型
Applicable Models

技友全系列電動起子
All series Conos electric screwdriver

負重 0.6 ~ 1.5kg, 拉伸長度 150 cm

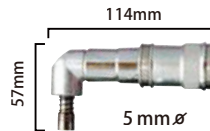


90度轉接彎頭 (1/4" Hex) AH-U5 90 Degree Angle Head Attachment

適合無法直接操作之組裝作業使用。
Get into tight places with low profile angle head attachments

適用機型
Applicable Models

X / F / RE / CY系列全自動電動起子。
X/F/RE/CY series full automatic electric screwdriver



90度轉接彎頭 (5 mm $\varnothing$) AH-M6 90 Degree Angle Head Attachment

適合無法直接操作之組裝作業使用。
Get into tight places with low profile angle head attachments

適用機型
Applicable Models

X / F / RE / CY系列全自動電動起子。
X/F/RE/CY series full automatic electric screwdriver



電動起子氣吸頭 VA-REF Vacuum Pick-up Attachment

適合無法以磁力吸附螺絲之組裝作業使用。
To pick-up small screws.

適用機型
Applicable Models

F / RE系列全自動電動起子。
F/RE series Electric screwdriver



扭力保護套 GL-01, GL-02, GL-03 Torque Locking Cover

保護扭力設定，避免人員誤觸調整
Protecting Torque setting value, preventing miss-adjustment by operator.

適用機型
Applicable Models

GL-01：F-3000、F-3XBL
GL-02：RE/F、RE/F-BL
GL-03：AC-BL、CY



扭力識別止滑色環組 GR-01 Torque identification & anti-slip color ring GR-01

工位扭力設定顏色識別，電動起子機身止滑
To identify torque setting and prevent slips during operation.

適用機型
Applicable Models

技友全系列電動起子
All series Conos electric screwdriver



輔助手臂支架 AA-01 Auxiliary Arm

輔助作業人員平衡精確操作並可降低工作負荷減少疲勞
To assist operators in maintaining balance and improving accuracy during operation, it reduces workload and workers' fatigue.

適用機型
Applicable Models

技友全系列電動起子
All series Conos electric screwdriver

電源供應及控制器 Power Supply & Controller



	T-1-CL	T-1-CL HL	T-1-CL EB	T-1-CLG / D	T-1-SW	SW2
適用機型 Suitable model	F/RE Series	F/RE Series	F/RE P Series	F/RE/CY Series	RE/F & BL series	RE/F & BL series
輸入電壓 Input V	AC 110V / 220V / 240V	AC 110V / 220V / 240V	AC 110V / 220V / 240V	AC 220V / 240V	AC 100-240V 50/60Hz	AC 100-240V 50/60Hz
輸出電壓 Output V	DC30V	DC30V	DC30V	DC30V	DC 24/32V	DC 24/32V
輸出電流 Output A	0.7A (F Series) 1.5A (RE Series)	1.5A (RE Series)	1.5A (RE P Series)	1.5A (RE Series)	3.3A	1.5A
體積 Dimension	90×68×58 mm	90×68×58 mm	90×68×58 mm	128×68×77 mm	150x65x95 mm	140x65x32 mm
重量 Weight	0.75 kg	0.75 kg	0.75 kg	1.3 kg	600g	190 / 210g
功能 Function		可調整切換高低轉速	電子式電源供應		寬電壓	寬電壓

電源供應及控制器 Power Supply & Controller

扭力自動控制器 Power Supply & Controller



	CLT-1	T-1+4P	BT-4 (S/M/L)	ST-2 (S/M/L)
適用機型 Suitable model	F/RE/CY Series	CY-56L , CY-66L , CY-76L	電子控制傳統式電動起子 / 氣吸式電動起子 Traditional Electric Screwdrivers / Vacuum Electric Screwdrivers	
輸入電壓 Input V	AC 110V / 220V / 240V	AC 110V / 220V / 240V	AC 110V / 220V / 240V	AC 110V / 220V / 240V
輸出電壓 Output V	DC30V	DC 15V ~ 30V	DC 15V ~ 30V	DC 15V ~ 30V
輸出電流 Output A	1.5A	可調式 Adjustable	可調式 Adjustable	可調式 Adjustable
體積 Dimension	115×175×90 mm	115×175×90 mm	270×175×90 mm	160×170×90 mm
重量 Weight	2.2 kg	2.2 kg	4.3 kg	3.0 kg
功能 Function	可調整高低轉速、 全/半自動車切換控制、 提供電動起子最高輸出扭力。	一台控制器可同時供2支 電動起子個別控制使用， 七 段轉速調整。	一台控制器可同時供4支 電動起子個別控制使用， 七 段轉速調整。	一台控制器可同時供2支 電動起子個別控制使用， 七 段轉速調整。

※ 插頭形式 PLUG TYPE : Type 1  Type 2  Type 3  Type 4  Type 5 

技友牌提供高品質鋼料及精密加工製造的高品質耐用起子頭

Our screwdriver bits, hex sockets, nutsetters...etc., made of high grade tool steel, offer the best value for durability, performance & price.



十字型起子頭 Phillips Screw Bit

後部型式 Shank	4 mmø	5 mmø	5 mm Hex	1/4" Hex
前部外徑 Body (mm)	1.4 ~ 2.0	2.0 ~ 2.6	2.5 ~ 5.0	3.0 ~ 5.0
前端 Point #	00	0	1	2
長度 Overall Length (mm)	40 ~ 200			



一字型起子頭 Slotted Screw Bit

後部型式 Shank	4 mmø	5 mmø	5 mm Hex	1/4" Hex
寬度 Width	2.0 ~ 3.0	3.0 ~ 4.0	4.0 ~ 5.0	
厚度 Thickness	0.4	0.6	0.8	
長度 Overall Length (mm)	40 ~ 100			



內六角起子頭 Bit for Hex Socket

後部型式 Shank	4 mmø	5 mmø	5 mm Hex	1/4" Hex
六角對邊 Hex Across Flat (mm)	1.27 / 1.5 / 2.0 / 2.5 / 3.0 / 4.0 / 5.0 / 6.0			
長度 Overall Length (mm)	40 ~ 100			



內六角套筒 Nutsetter, Magnetic or Non-magnetic

後部型式 Shank	4 mmø	5 mmø	5 mm Hex	1/4" Hex
六角對邊 Hex Across Flat (mm)	2.2 ~ 14.0			
長度 Overall Length (mm)	50 ~ 150			

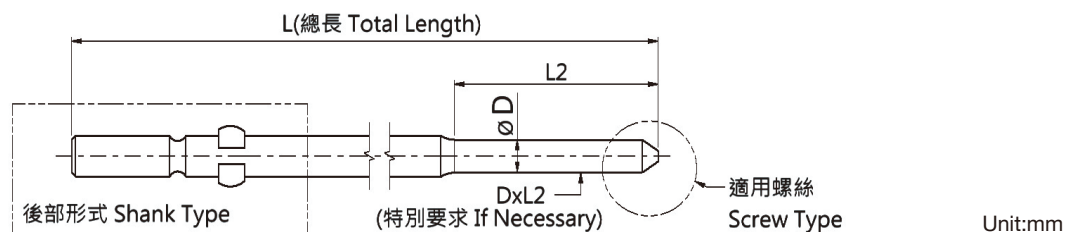


梅花型起子頭 Torx Screw Bit

後部型式 Shank	4 mmø		5 mmø		5 mm Hex		1/4" Hex	
前部外徑 Body (mm)	2.0	2.5	3.0	3.5	4.0	5.0	6.0	
規格 Specification	T5~T6	T7~T8	T9~T10	T15	T20	T25	T30	
長度 Overall Length (mm)	40 ~ 100							

※ 各種特殊規格起子頭，均可依客戶要求定制。

ALSO AVAILABLE Pozidriv, Torx Tamper Resistant and other Special design or size are available depend on ordering quantity



起子頭編號說明 ORDERING CODE

M6 - P #1 - L100 - D2.5x60

尾部型式 / Shank:

M3 : 4mm
M6 : 5mm
U4 : 5mmø HEX
U5 : 1/4" HEX

適用螺絲 / Screw Type:

P : 十字起子頭 Phillips Screw Bit
S : 一字起子頭 Slotted Screw Bit
H : 內六角起子頭 Hex Socket
N : 套筒 (無磁) Nutsetter, Non-magnetic
G : 套筒 (合磁) Nutsetter, Magnetic
T : 梅花型起子頭 Torx Screw Bit

輸出端規格

Point # or Thickness
(#00, 0, 1, 2 0.4, 0.6, ...)

起子頭長度

Overall Length
(40~200mm)

前端外徑及長度
Front Body Size and length
or Width
or Blade
or Size
or Hex Across Flat

GB-H1 套筒式手持系列鎖螺絲機

GB-H1 Sleep Type Handheld Automatic Screwing Machine

自動送料+高效鎖付+比手工鎖螺絲提高2倍以上的效率

- GB-H1適用於鎖螺絲孔在平面上的螺絲且四周無障礙；GB-H2適用於鎖沉頭孔和螺絲孔在凹凸不平的面上的螺絲；螺絲必須帶磁性；
- GB-H1重量輕（略重於推拉式），靈活性強；GB-H2穩定性強；重量輕，靈活性強；對產品無刮傷；
- 通用性強，使用方便，適用流水線或不定點作業；
- 採用電磁感應信號送料控制，不會出現缺料或重複給料現象；
- 智能缺料報警系統，0.35完成送料，每小時可鎖3600顆螺絲。

Automatic feeding + high efficiency locking + more than twice the efficiency of manual locking

GB-H1 is more suitable on flat surface; GB-H2 is more suitable on non-flat surface; screw is magnetic

GB-H1 is lightweight; GB-H2 is lightweight; won't scratch product

High utility, convenient, suitable for manufacture line

Uses electromagnetic signal to control feeding

Smart alert system, capable of 3600 screws per hour

GB-H2 推拉式手持系列鎖螺絲機

GB-H2 Push-pull Type Handheld Automatic Screwing Machine



GB-H1

GB-H2

GB-S331 三軸吹氣系列鎖螺絲機

GB-S331 Triaxial Blowing Screwing Machine

自動送料+智能運行+高效鎖付+依產品設計最佳鎖付方式=比手工鎖螺絲提高2倍以上的效率

- 智能運行，自動送料。送料不佔時間，標準產品，每小時可鎖3000顆螺絲
- 採用PLC+觸摸屏控制系統，操作方便，單機存儲30組程序，無需再次編程
- 採用進口絲桿及進口伺服馬達傳動，定位精度達±0.02mm,高速移動確保穩定性
- 標準工作平台，滿足不同產品鎖付，可方便搬入生產線，標配前後取功能
- 品質檢測系統，檢測漏鎖、滑牙、鎖不到位等，有效監控鎖付品質與數量

Automatic feeding + smart operation + high efficiency + suitable according to product = More than twice the efficiency of manual screwing

Smart running, 3000 screws per hour

PLC + touch panel operation system, convenient, capable of saving 30 sets of programs

Imported helicoid screw and servomotor, accuracy of ± 0.02mm

Quality detecting system, effective monitoring of quality and amount



GB-S331

型號 Model	GB-H1 套筒式手持系列鎖螺絲機 GB-H2 推拉式手持系列鎖螺絲機	GB-S331系列鎖螺絲機
牙徑 Screw	M0.8-M6.0mm	M1.0-M6.0mm
長徑比 Aspect ratio	總長L>=1.2P頭徑	總長L>=1.2P頭徑（或總長比頭徑大1.5mm）
工作電源 Input	AC220V 50HZ	AC220V 50HZ 300W
工作氣壓 Pressure	0.55±0.05 MPa	0.55±0.05 MPa
扭力上限 Max torque	45kgf.cm(4.5N.m)	45kgf.cm(4.5N.m)
送料速度 Speed	氣吹式送料（0.3S/顆）	氣吹式送料（0.3S/顆）
鎖付效率 Efficiency	30-60PCS/min	運行速度 600mm/sec
適用起子 Suitable screwdriver	無刷電動起子 brushless electric screwdriver	無刷電動起子 brushless electric screwdriver
外型尺寸 Dimension	260*385*260mm(可依產品定制)	600 (L) *820(W)*800(H)mm(可依產品定制)
整機重量 Weight	約15KG	100KG
檢測功能 Detect function	數量統計 不良報警 Statistics	滑牙 漏鎖 數量統計 不良報警 Stripped thread, loose lock, Statistics
有效行程 Effective operating distance	/	300 (X) *300(Y)*100(Z)mm(可依產品定制)
儲存容量 Capacity	/	至少30組 每組150點 At least 30 set, 150 point per set
定位精度 Accuracy	/	±0.02mm/axis
操作模式 Mode	/	PLC+高清觸摸屏 PLC + HD touch panel
選購部件 Option	/	CCD/角度檢測/高度檢測/扭力檢測 CCD / Angle / Height / Torque
驅動方式 Drive mode	/	伺服馬達 Servomotor
運動模組 Module		精密絲桿+直線滑軌 Precise screw + linear rail



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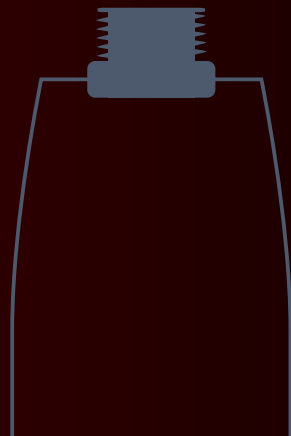
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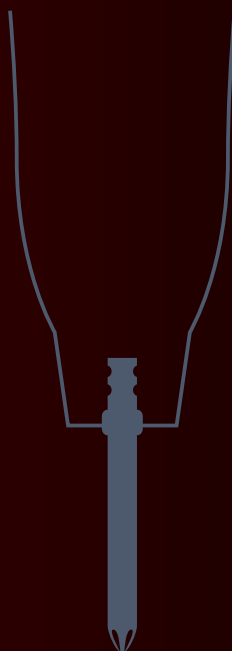
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