各種工業用
專業製造

離合器・制動器

SPECIALIST IN MANUFACTURING INDUSTRIAL-USE CLUTCHES AND BRAKES

Clutch & Brake

仟岱有限公司
CHAIN TAIL CO., LTD.

公司全景 Exterior views of the plant

Company History | 沿革

1984年 成立慶豐工業社，資本額30萬元，設廠於台中市復興路二段398巷198號，
員工1人從事產品開發，廠房33平方公尺。
1986年 公司遷移至台中市南屯路3段38號廠房198平方公尺，員工4人，開始研發電磁式離合剎車器。
1988年 生產第一個捆包機用離合器剎車器。
1989年 遷廠至台中縣烏日鄉溪南路興農路44之15號，資本額600萬元，員工10人，廠房660坪。
1991年 引進CNC電腦車床加工設備，完成ABS安全剎車器及電動代步車與電動輪椅安全剎車器。
1994年 開發濕式多板離合剎車器，第一次完成外銷離合器至日本。
1996年 研發磁粉式離合剎車器，10月份代步車安全剎車器的產量突破1萬個，東南亞市場開發成功。
1999年 廠房拓寬為3960平方公尺，磁粉式離合剎車器開發成功，員工增至35人。
2001年 在廣東省成立中國銷售中心
2003年 通過ISO 9001:2000認證及CE認證，並成功開發安全剎車器，在美國的市場。
2005年 成立外銷業務部門，並成功將仟岱產品推廣至全世界，並取得UL認證。
2006年 廠房拓寬為5000平方公尺，員工增至55人。

1984 Chingfong Industrial Co, is established with capital of NT$300,000 at No. 198, Alley 398, Fuhsing Rd., Sec. 2 in Taichung. One employee begins product development in a factory 33 sq.m. in size.
1986 Company moves to No. 38 Nantun Rd. Sec. 3 in Taichnug. Four employees are working on a new solenoid brake
1988 The first sealed clutch for machinery is produced.
1989 Company relocates to No. 44-15 Hsing-nung Rd., Hsinan-tsun, Wu-jih Hsiang in Taichung County. Capitalization stands at NT$6 million, there are ten employees and the plant occupies 660 sq.m.
1991 A CNC lathe is imported for finishing work. ABS safety brake and transporter and wheel chair brake are introduced
1994 Wet multi-plate solenoid clutch is developed; first overseas sales of clutches to Japan.
1996 Powder type clutch and brake are developed Production of safety brakes reaches 10,000 by October, and Southeast Asian market is successfully opened.
1999 3960 sq.m. plant is inaugurated and powder type clutch is launched. Work force reaches 35.
2001 China sales office in established in Guangdong Province
2002 Certified for ISO 9001/2000 and CE; safety automobile brake is successfully developed and introduced to the US market
2005 Export Division is set up to handle sales of Chien-tai products to markets throughout the world; UL certification is granted
2006 Workforce grows to 55 as factory floor space is expanded to 5000 sq.m.

Quality 品質

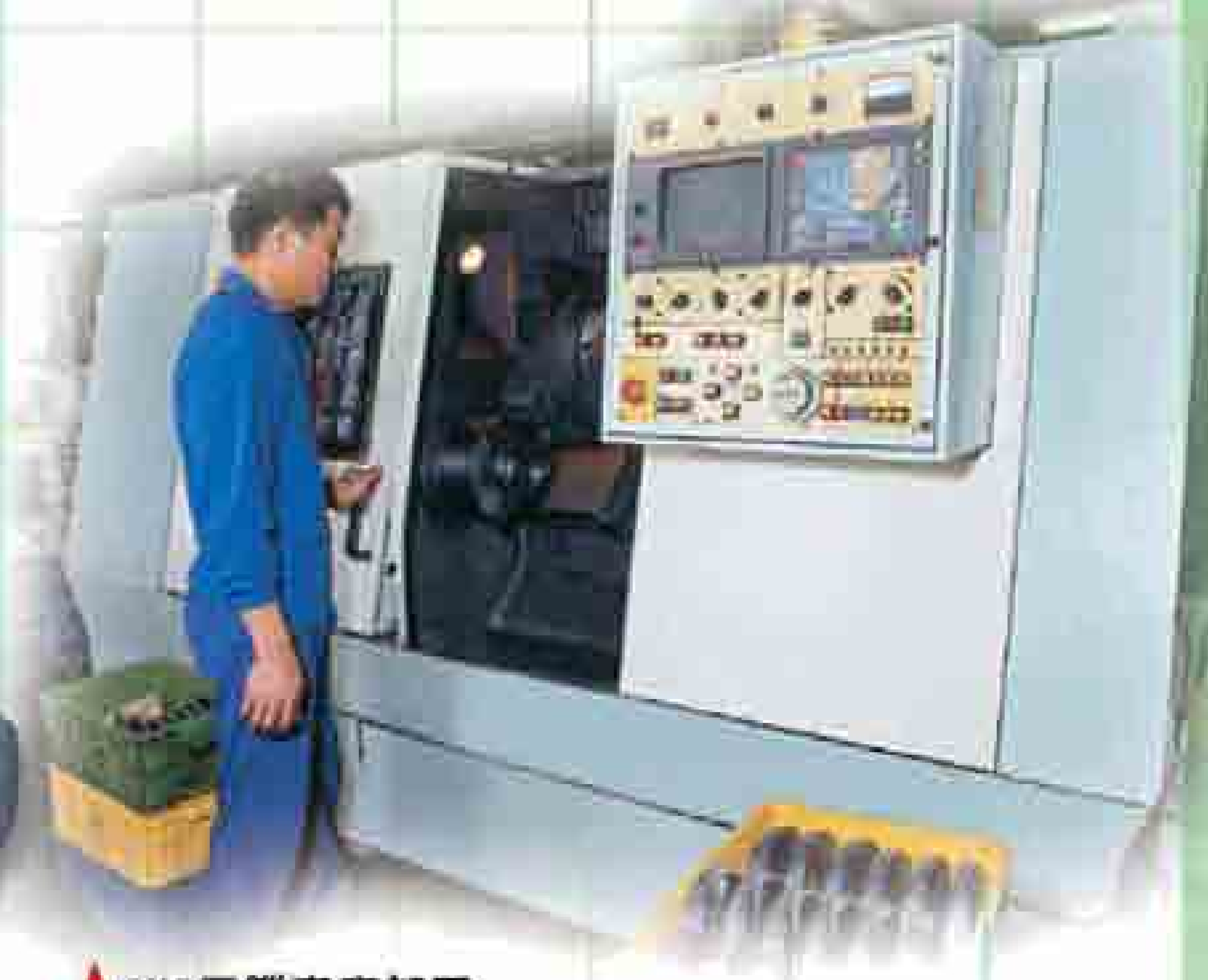
仟岱的品保研發團隊，提供可信賴的經驗及創新的想法，不斷研究發展創新的技術和測試機台、檢驗模具，產品本身也通過ISO 9001:2000及CE與UL的認證出廠前，也都100%全檢以達到產品100%安全及零故障。

Chain-Tail's Quality Research Team offers reliable experience and creative ways of thinking. They are constantly putting forth new technology and testing new products including machines and experimental molds. These products all undergo extensive checks under the ISO 9001/2000, CE and UL systems and are 100% guaranteed for quality, safety and zero defects before they leave the factory.

此外，為響應綠色環保觀念，在2005年仟岱產品全部符合歐盟RoHS規範，一起為保護地球生態努力。

In addition, Chain-Tail instituted RoHS standards for all of our products in 2005 as a part of our 'green' policy on protection of the environment and the earth around us.

設備 EQUIPMENT



▲CNC電腦車床加工
Finishing performed on a CNC lathe

▲磁粉式離合煞車器電流、扭力轉速自動測試台
Automatic testing station to check current, torque and speed of particle type clutches and brakes

▲電動代步車、電動輪椅之安全煞車器與減速機及馬達測試扭力、轉速溫升電流、噪音、使用壽命檢測台
A testing station to evalue the torque, speed, temperature, voltage, noise and durability of safety brakes and speed reducers and motor for self-ambulators and wheelchairs

▲CNC電腦鑽孔機加工
Finishing holes with a CNC drill

▲瑞士全自動真空AB膠灌注機
Fully-automatic AB extruder from Switzerland

▲電機檢測儀器
Electric inspection instruments

▲研究與開發
Research and development of new products

▲現場測試絕緣、耐壓、阻抗
On-site testing of insulation, durability and impedance

▲磁場線圈加工
Finishing a magnetic field coil

▲包裝出貨
Packing and shipping finished products

▲現場組裝
An on-site installation

▲安全煞車器現場組裝
Assembling a safety brake

OEM

本公司除生產標準規格以外的產品，亦針對客戶所需的特殊規格及特殊性能生產該需求的產品，以滿足客戶的需求。

In addition to production of standard products we also offer products designed to meet the specific needs and capabilities of the customer.

▲電磁式離合器
Solenoid clutch

圖為客戶所生產的OEM產品

Below is a sample of the OEM products we manufacture on behalf of clients.

◀機械式離合器▼
Mechanical clutch

▲電磁式煞車器
Magnetic brake

◀自動調整型離合器▼
Self-adjustment clutch

Products | 產品

仟岱提供超過1000種以上的離合器及剎車器可供客戶選擇，
產品扭力範圍為0.1Nm~2000Nm，此外也提供為客戶量身訂製產品的服務，
除了本身標準品的規格外，並且提供具競爭性的價格。

Chain tail offers more than a thousand types of clutch and brake parts and assemblies to customers. Torque specifications range from 0.1Nm to 2000Nm, and we can also provide customer specifications on request, all at very competitive prices.

本公司專業生產各式機械用電磁式單板離合器、制動器，電磁式安全制動器，電磁式濕式多板離合器、制動器，電磁式磁粉離合器、制動器，已經20幾年，秉承研發創新的精神及不斷提高產品品質為本公司宗旨。

在研發方面，本公司有專業工程師群，針對客戶特殊的需求，做最適當的設計；在創新產品方面，本公司每年亦提撥營利百分之十作為開發新產品基金。至於品質方面，材質使用高導磁率低殘磁，此外亦使用非石綿摩擦係數高及低磨耗的高級來令片，以提高產品品質，延長使用壽命。

This company specializes in the production of solenoid cluthces, actuators, magnetic safety actuators, solenoid power-type multi-plate clutches and actuators, and solenoid powder clutches and actuators, with more than 20 years of experience. Our hallmark is the R&D of innovative products that offer the highest quality to the customer.

Our R&D staff works to meet every need of the customer, incorporating the most suitable designs. We devote ten percent of our income each year to new product development. In addition, our tight quality standards mean the finest in magnetic materials with no asbestos abrasives as well as premium guide bearing in all motors. The result is high-quality products that last a long time.

索引

P11~P31
磁粉式離合器.煞車器
MAGNETIC PARTICLE CLUTCH AND BRAKE

P32~P72
乾式單板電磁離合器.制動器
DRY SINGLE-PLATE MAGNETIC CLUTCH AND BRAKE

P73~P81
濕式多板電磁離合器.煞車器
WET MULTIPLE PLATE MAGNETIC CLUTCH AND BRAKE

P82~P87
電磁式安全煞車器
POWER OFF BRAKE

P88~P96
電磁式安全煞車器
電動代步車-電動輪椅專用系列
MAGNETIC SAFETY BRAKE
SCOOTER AND WHEELCHAIRS SERIES

P97~P101
其他特殊產品
OTHER PRODUCTS

(OEM & ODM)

☆本公司目錄規格如有變更，不另行通知。Specifications Subject to change without notice.
☆接受特殊規格訂製。Consult the Factory The Customer Specification.

乾式單板電磁離合器制動器

DRY SINGLE-PLATE MAGNETIC CLUTCH AND BRAKE

Dry Single-plate Magnetic Clutch and Brake

乾式單板電磁離合器 制動器

由本公司多年製造經驗及開發專業工程師做精湛的設計及CNC電腦鉆孔機及CNC電腦加工設備材料方面使用了最佳導磁率的材質來令片使用摩擦係數高，底摩耗的高級非石綿來令片，提高產品的應答時間及產品的使用壽命，是值得您信賴的供應廠商。

This product is designed by professional engineers with many years of experience, and produced using CNC boring and finishing machines. We use the finest materials available for magnetic components to yield high friction indexes, as well as premium non-asbestos linings to improve response times and extend useful life. We are the brand to rely on for these products.

乾式單板電磁離合器・制動器特性 SPECIAL FEATURES：

A. 高速應答：因為是乾式類所以扭力的傳答很快，可以達到便捷的動作。
B. 耐久性大：散熱情況良好，而且使用高級的材料，即使是高頻率，高能量的使用，也十分耐用。
C. 組裝、維護容易：屬於滾珠軸承內藏的磁場線圈靜止形，所以不需要將中蕊取出也不必利用碳刷，使用簡便。
D. 不需要進行磨耗調整：由於本結構不需要進行摩擦面的磨耗調整。因此安裝後不需要進行調整（一部份除外）。
E. 動作確實：使用板狀彈片，雖有強烈震動亦不會產生鬆動，耐久性佳。
F. 可以進行扭力調整：可以利用電流來調整摩擦扭力，因此可以進行各種不同用途的運轉。

A. Fast response. Dry design means instant reaction to commands
B. Durability. Excellent heat dissipation and quality materials mean long life, even under high frequency and high performance conditions
C. Easy to install and maintain. Sealed bearing race eliminates the need for removal of the center core. No dust brush is needed, and operation is simpler and easier.
D. No adjustment of the motor. The motor is designed so that it does not need adjustment of the friction surface, and once it is installed only very minor adjustments are needed.
E. Sure motion. One-piece plate will not slip even under the strongest vibration for longer life.
F. Adjustable torque. Torque levels can be increased or decreased by changing the current, making it suitable for a variety of applications.

乾式離合器、制動器廣被利用爲機械的啓動、停止之用、或傳送速度、傳送方向的變換之用。具代表性的使用機械如下所述：

- 包裝及打包機械...包裝機、捆包機、打包機械
- 纖維機械...撚絲機、準備機械、紡織機械
- 金屬加工機械...壓延機、伸線機、沖床機、焊接機、鋼線歸還機、切斷機、製管機械、捲線機。
- 工作機械...車床、銑床、出鐵機、自動CNC床、專用機
- 搬運機械...起重機、進給機、輸送機、捲上機、捲揚機。
- 紙用機械...製袋機、紙箱機、縱斷器、製書機、切斷機、抄紙機。
- 印刷機械...輪轉機、進給印刷機。
- 木工機械...鋸木機、木工機、合板機械
- 事務機械...電子複寫機、計算機、傳真機、銅板點算機、印表機
- 測量機械...試驗機、耐久試驗裝置、測量機
- 食品加工機械...切肉機械、製餅機械、裝瓶機械、製麵機。
- 其他...減速機、電鍍裝置、理化學機械、製紙機械、樹脂加工機械。

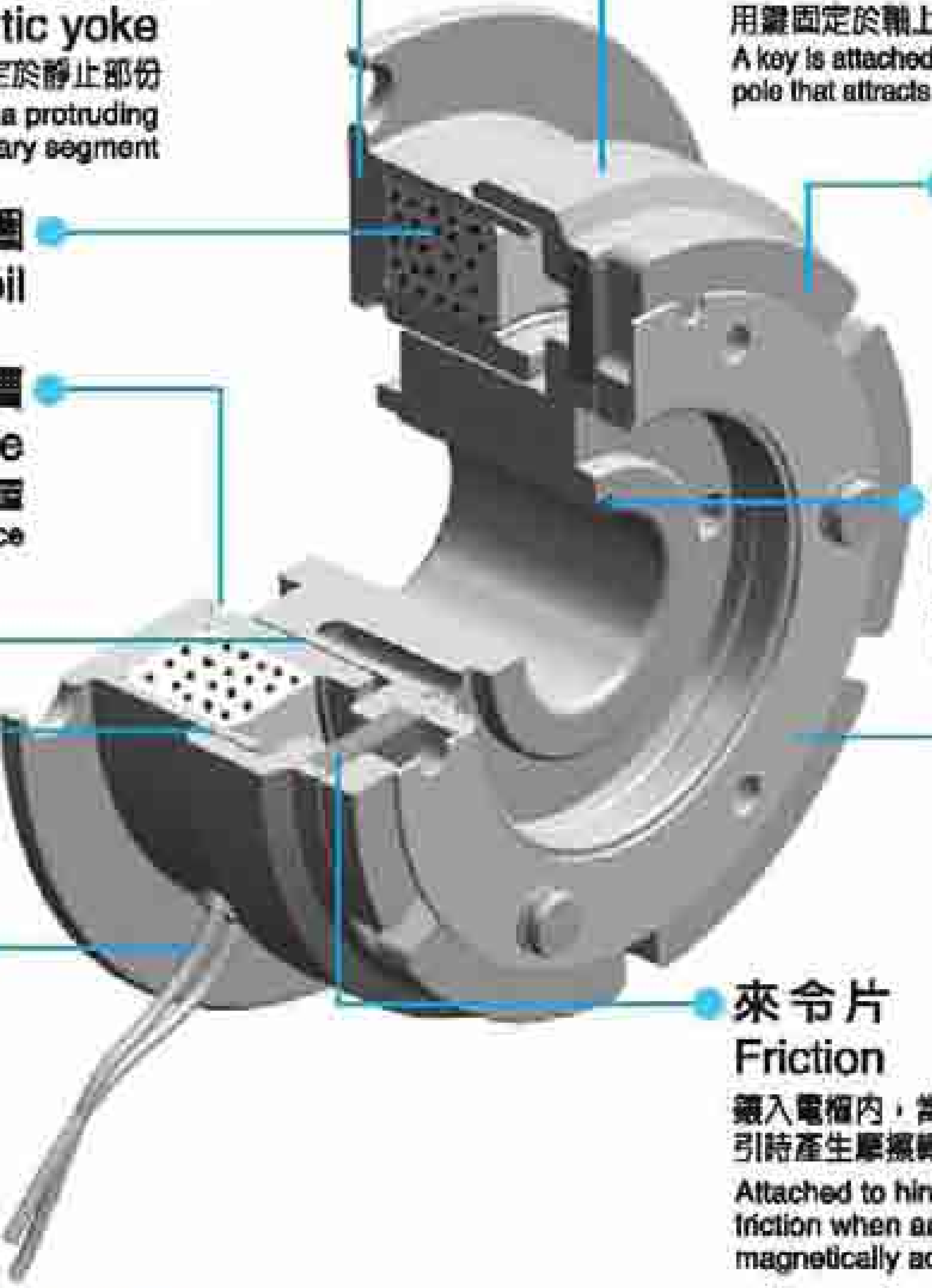
Dry clutch and driver can be used to drive and disengage machines, to transfer speeds and directions and for other applications including:

- Packing and wrapping systems: packing machines, strapping machines, wrapping machinery
- Textile machinery: fiber twisters, treatment machines, weaving machines
- Metal finishing systems: extruders, wire stretchers, presses, welders, steel wire retractors, cutters, pipe makers, wire winding machines
- Machine tool systems: lathes, millers, steel extruders, CNC lathes, specialized machinery
- Transportation equipment: hoists, feeders, conveyors, rollers, winders
- Paper-making systems: bag-making machines, box-making machines, slitters, book-making machinery, cutters, copy paper machines
- Printing systems: conveyors and in-feeders
- Wood-working systems: saws, wood-working machines, laminators
- Office equipment: electronic copy machines, calculators, fax machines, coin counters, printers
- Testing systems: lab machines, durability testers, measuring systems
- Food processing systems: meat cutting machines, cookie making machines, canning machines, noodle making machines
- Others: speed reducers, electroplating machinery, physics and chemistry machines, paper-making machines, pulp processing machines

Basic Construction

基本構造

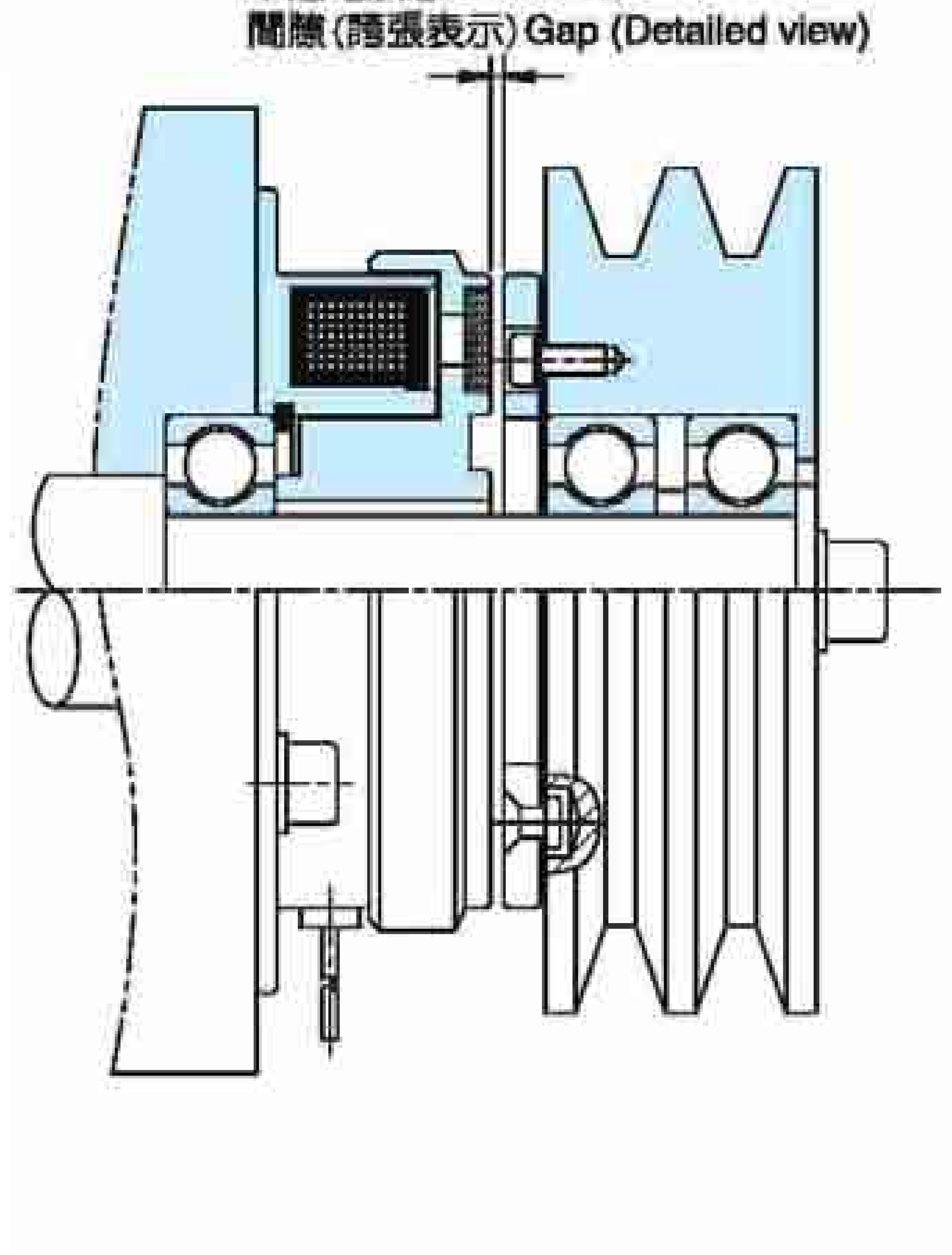
離合器 Clutch

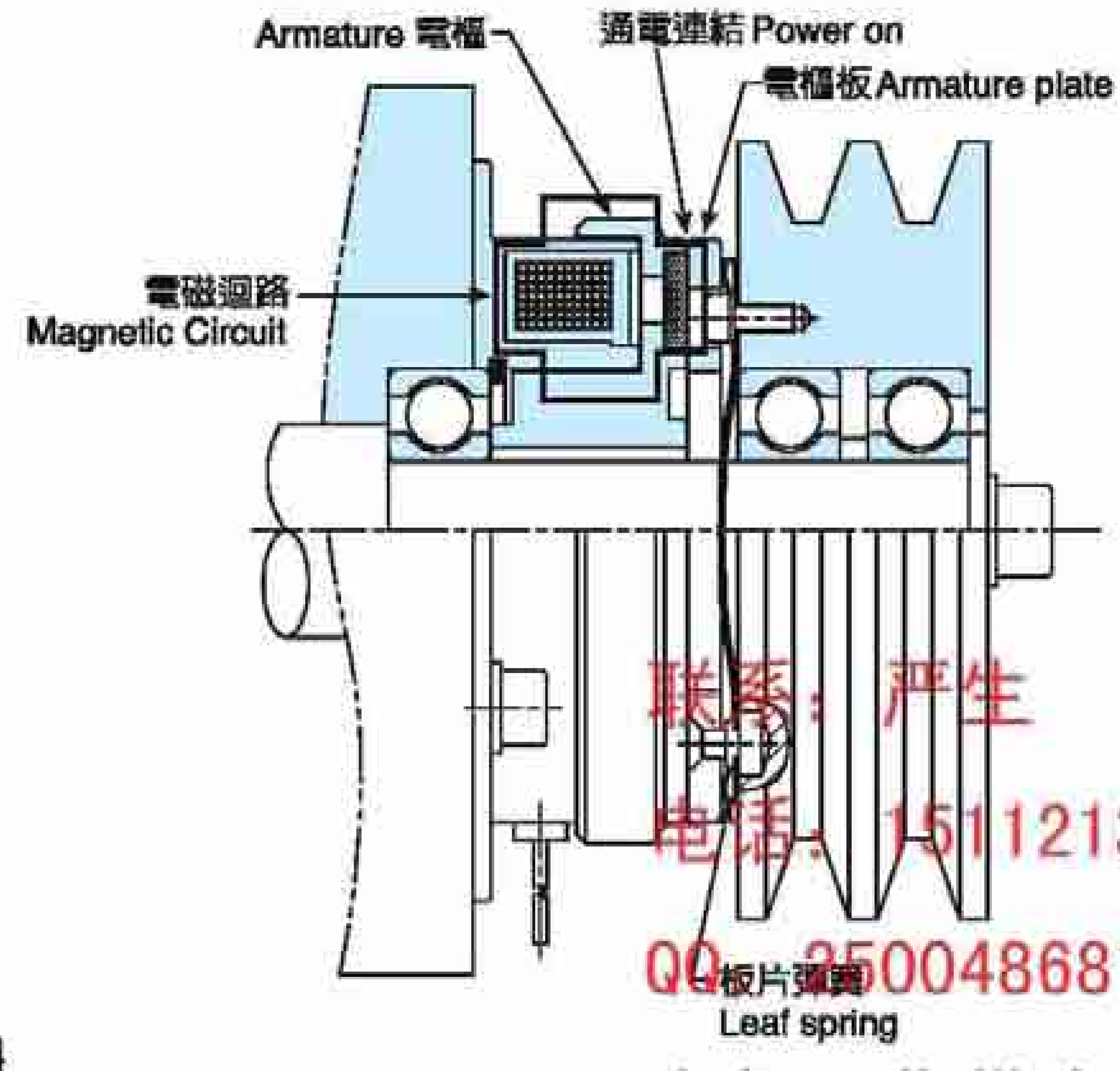


離合器的動作狀態及彈片的動作如下圖—
Diagram shows the actions of the clutch and spring

- 當磁場線圈通電時，電樞產生磁場，將電樞板吸住而產生連結，此時彈片形成伸張，其他另件保持不動，可避免產生磨耗或鬆動，此時已經產生連結動作。
  When the magnetic coil is energized it becomes magnetic, drawing the armature plate over to make contact. At this point the spring is tensioned while no other parts are moving. This minimizes friction and possible looseness. Clutch is engaged.
- 當磁場線圈切斷電源時，電樞磁場消失，電樞板因沒有磁場吸住而被彈片拉回原來位置，而形成間隙，此時已經產生無連結動作。
  When power to the coil is cut it loses its magnetism. The armature plate is no longer drawn over and the spring pulls it back in place to restore the gap. Clutch is now disengaged.

未通電狀態 Power off
間隙(誇張表示) Gap (Detailed view)





Basic Construction

基本構造

煞車 Brake

■當磁場線圈切斷電源時，磁軛上的磁場消失，電樞板因沒有磁場吸住，而被彈片拉回原來位置而形成間隙，此時已經無制動動作。

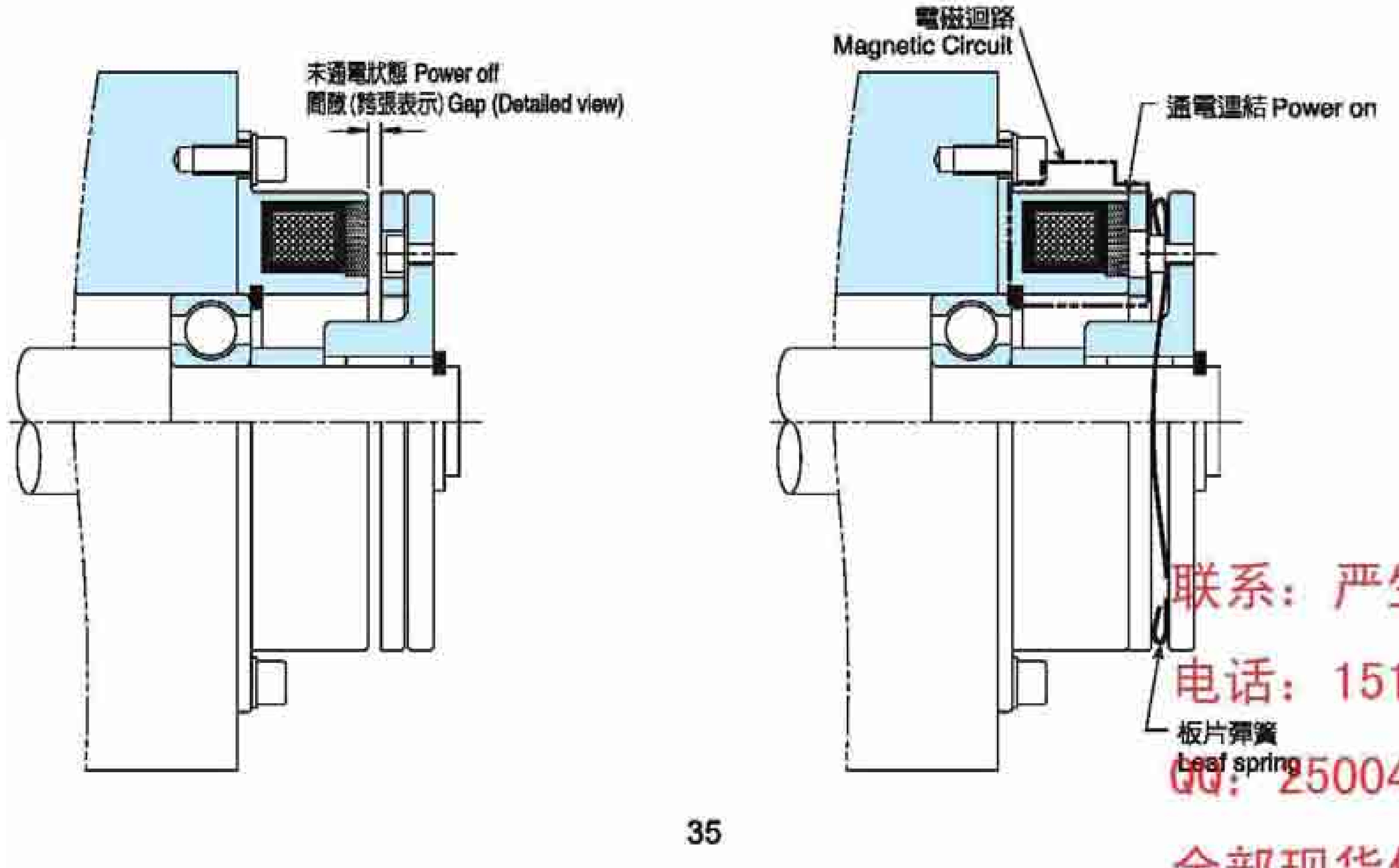
When power to the magnetic coil is cut the magnetic field on the yoke collapses and the armature plate is no longer attracted. It is pulled back by the spring and motion transmission is cut

作動原理 Principles of Operation

剎車的動作狀態及彈片的動作 Actions of the brake and spring:

■當磁場線圈通電時，磁軛產生磁場將電樞板吸住，磁軛上的來令片與電樞板產生摩擦，此時已經產生制動動作。

When the magnetic coil is energized the yoke is magnetized and draws the armature plate over. This causes friction between the lining on the yoke and the armature, and the clutch is engaged.

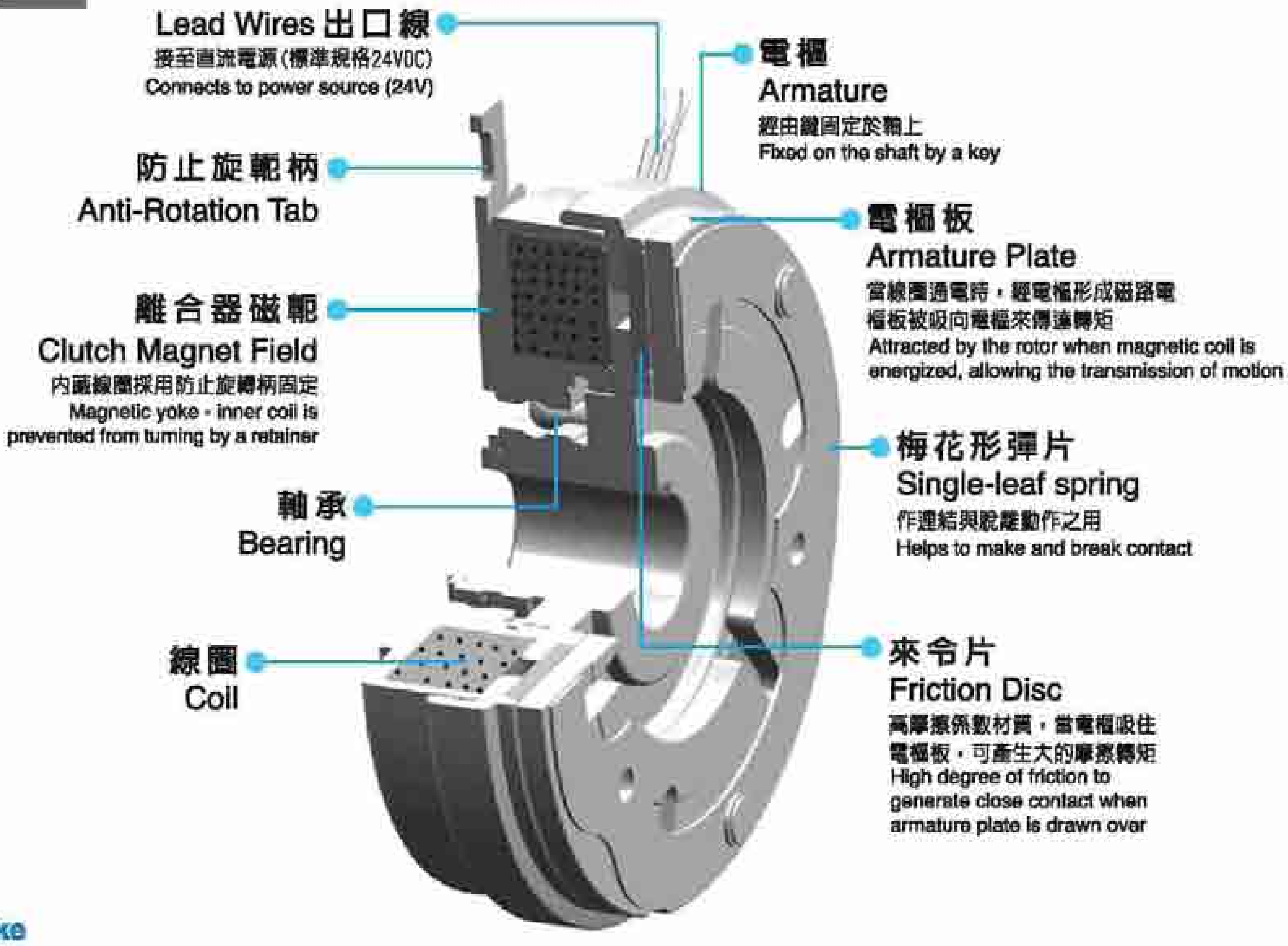


Basic Construction

基本構造

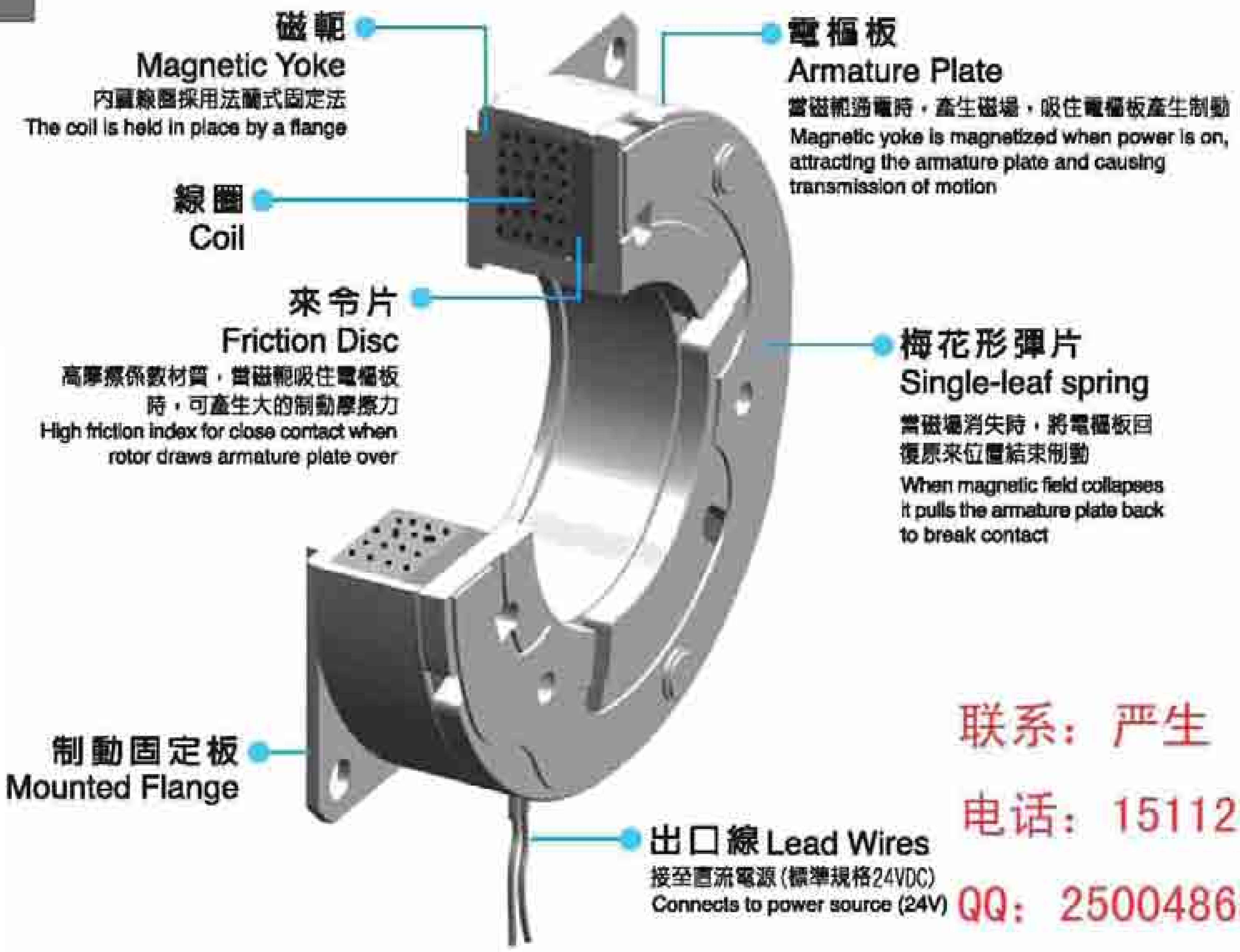
離合器 Clutch

CDJ



制動器 Brake

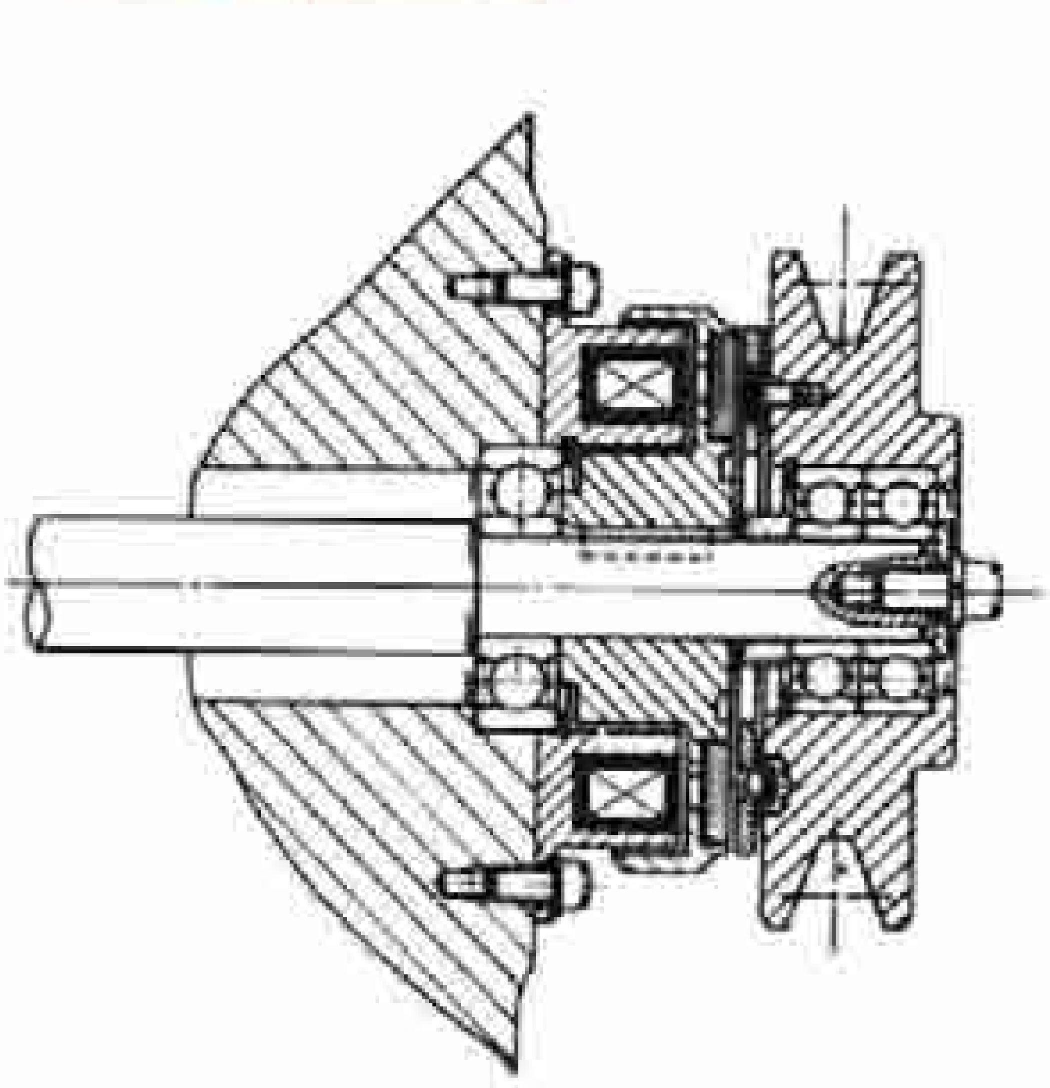
CDI



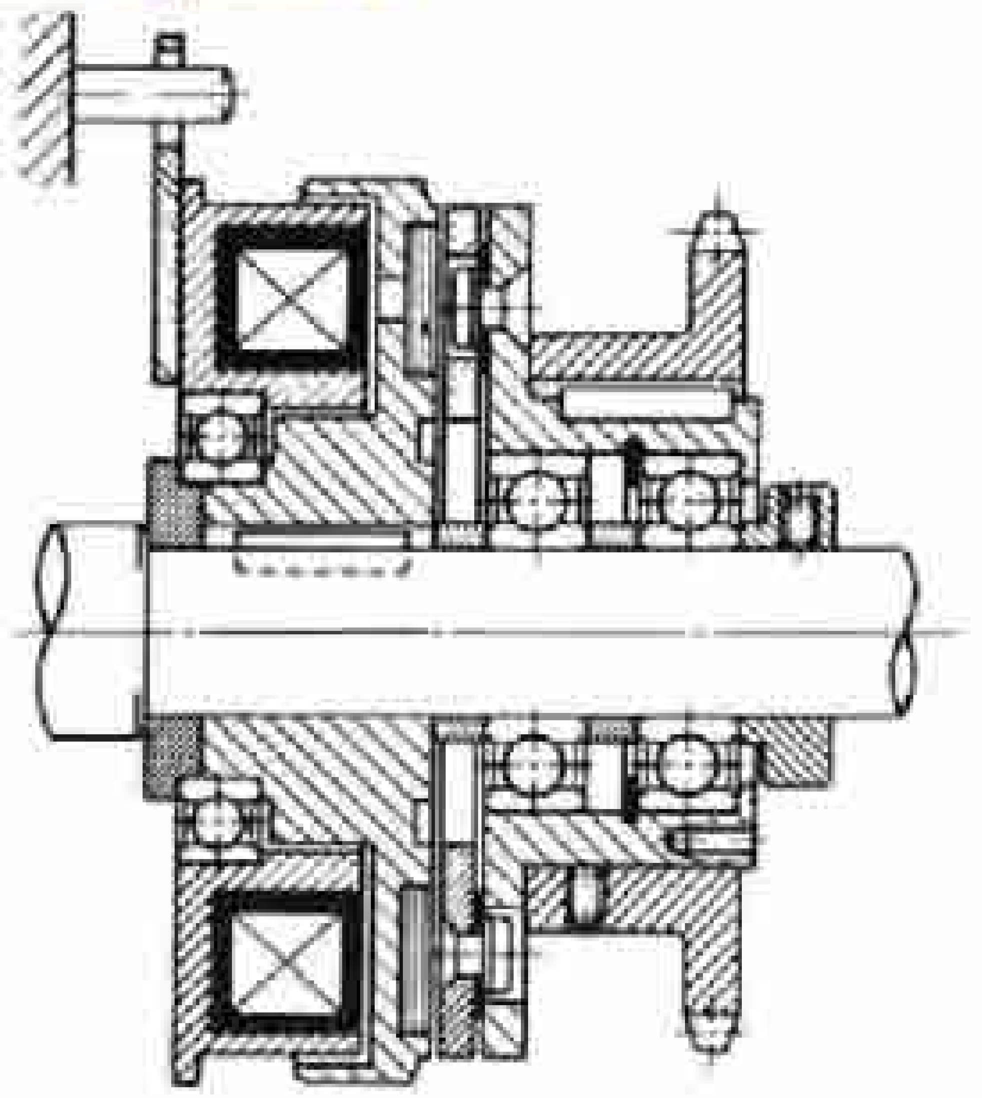
Applicatoins

使用範例

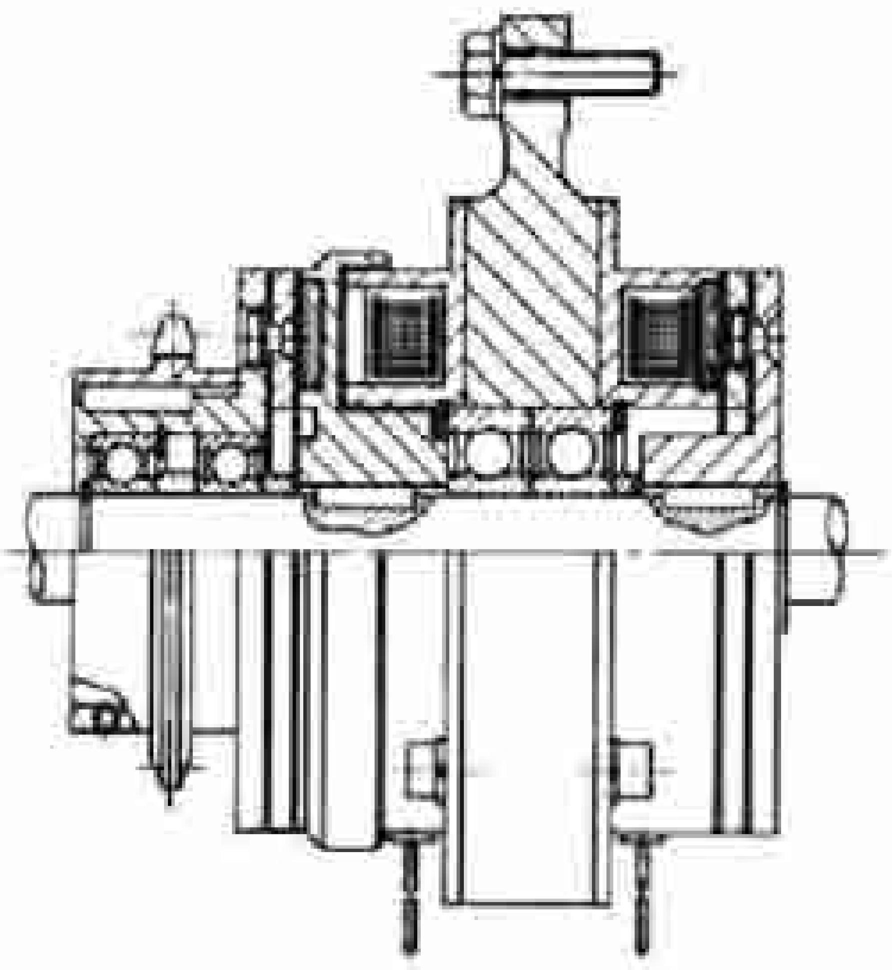
CDF 使用例
CDF Applications



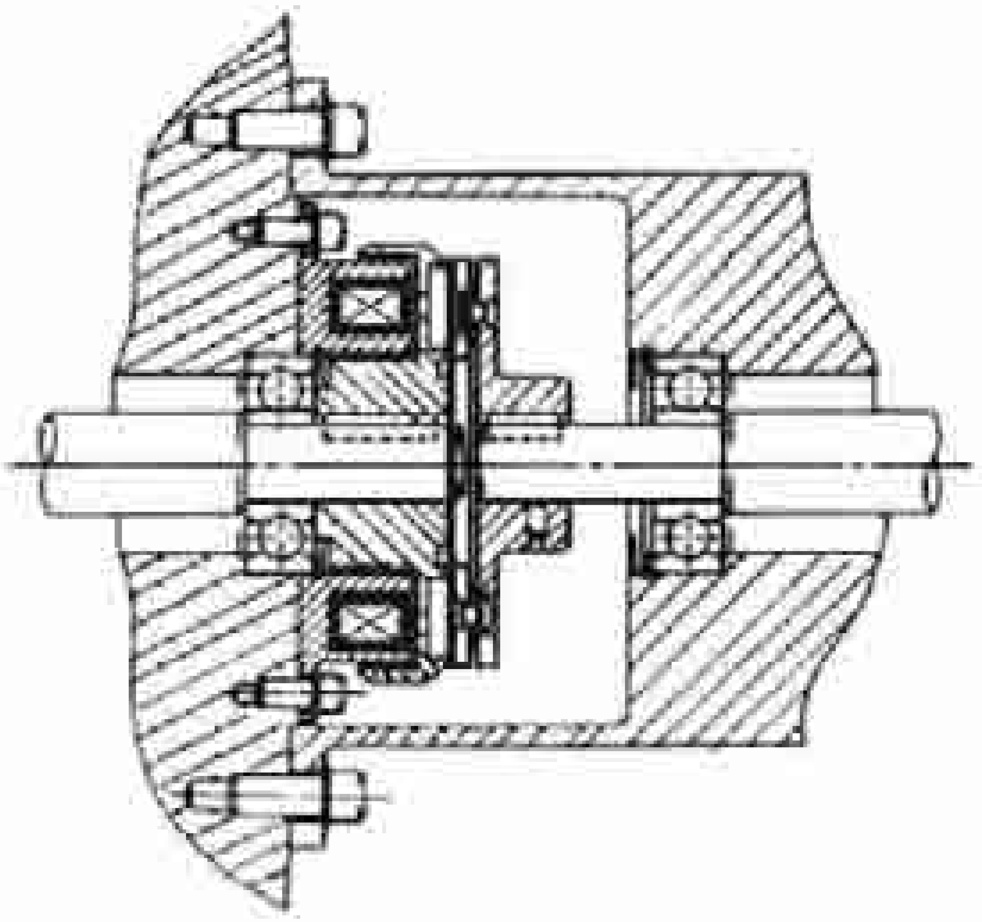
CDE使用例
CDE Applications



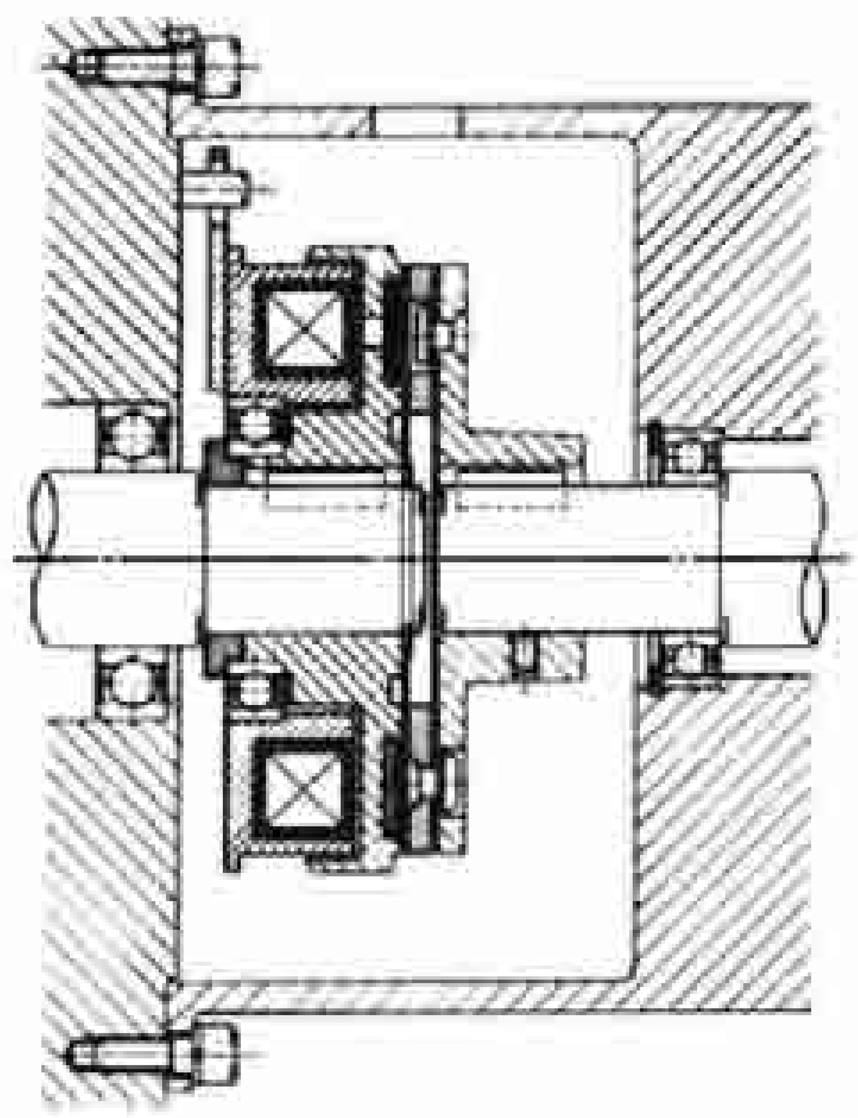
CDF與CDG組合使用例
CDF and CDG assembly applications



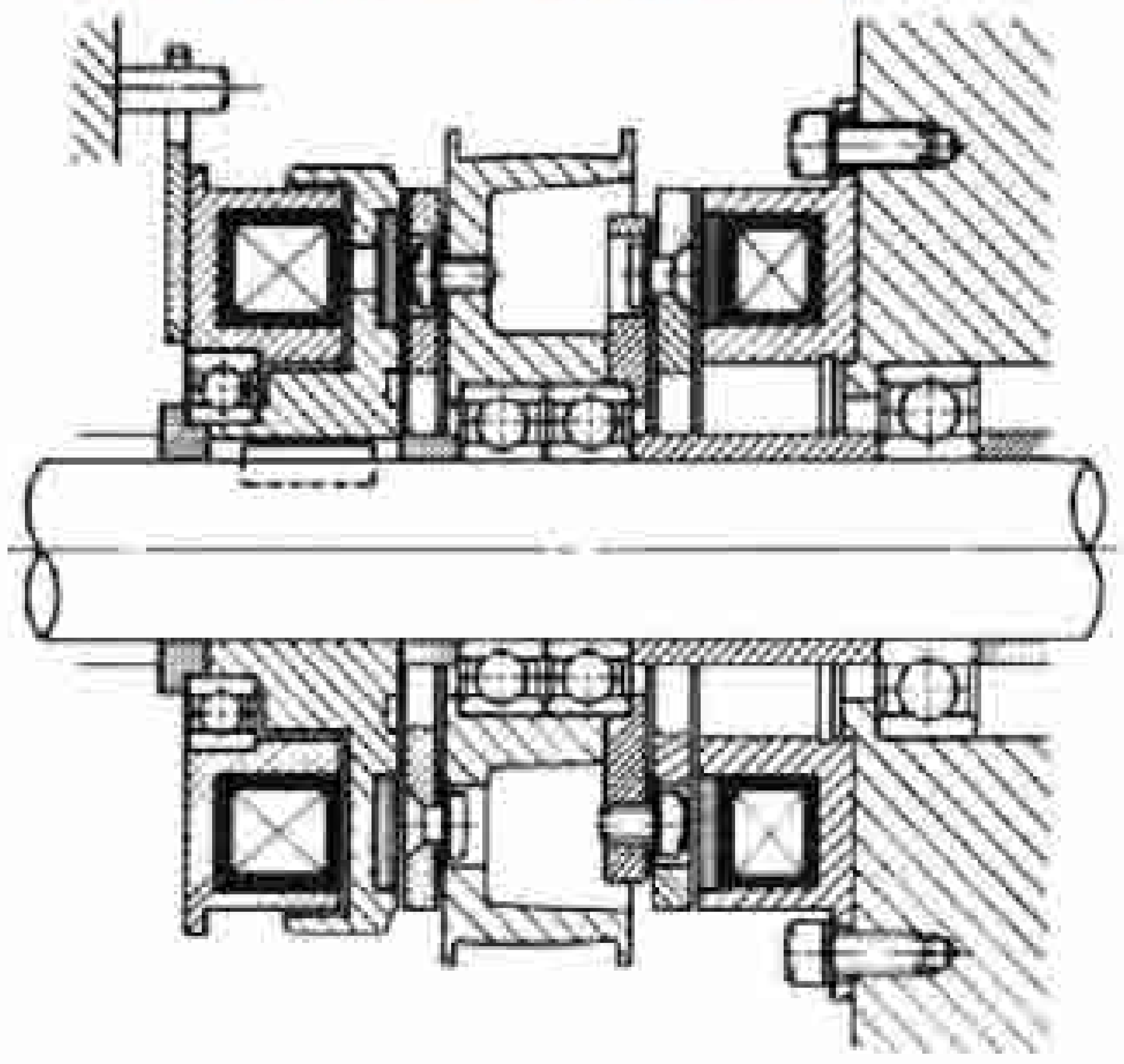
CF1



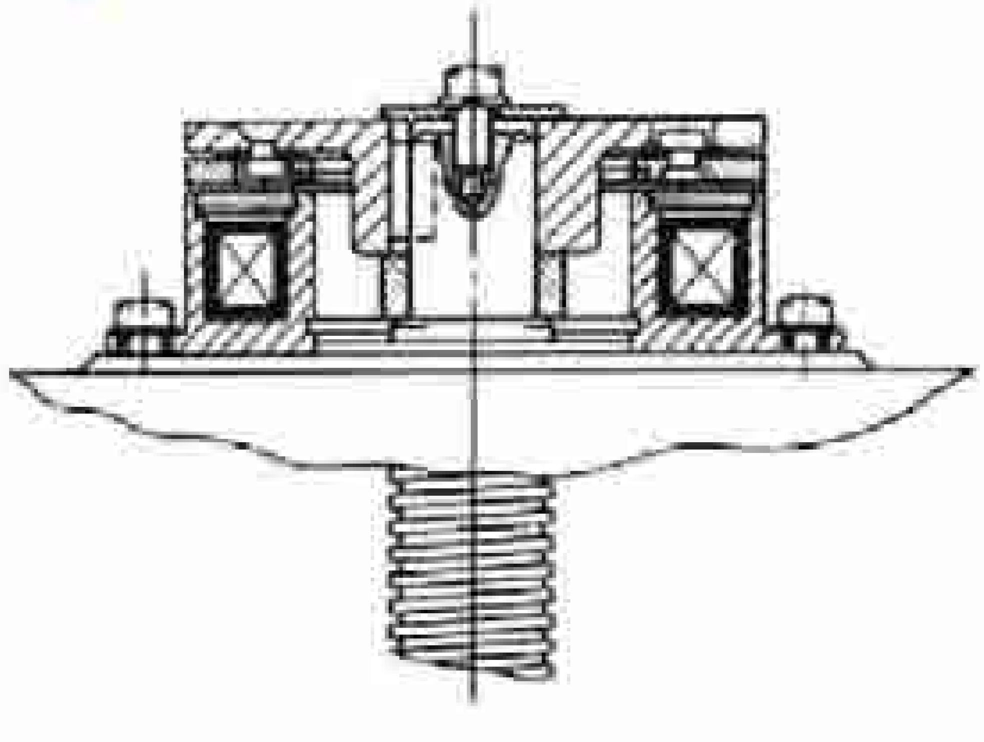
CE2使用例
CE2 Applications



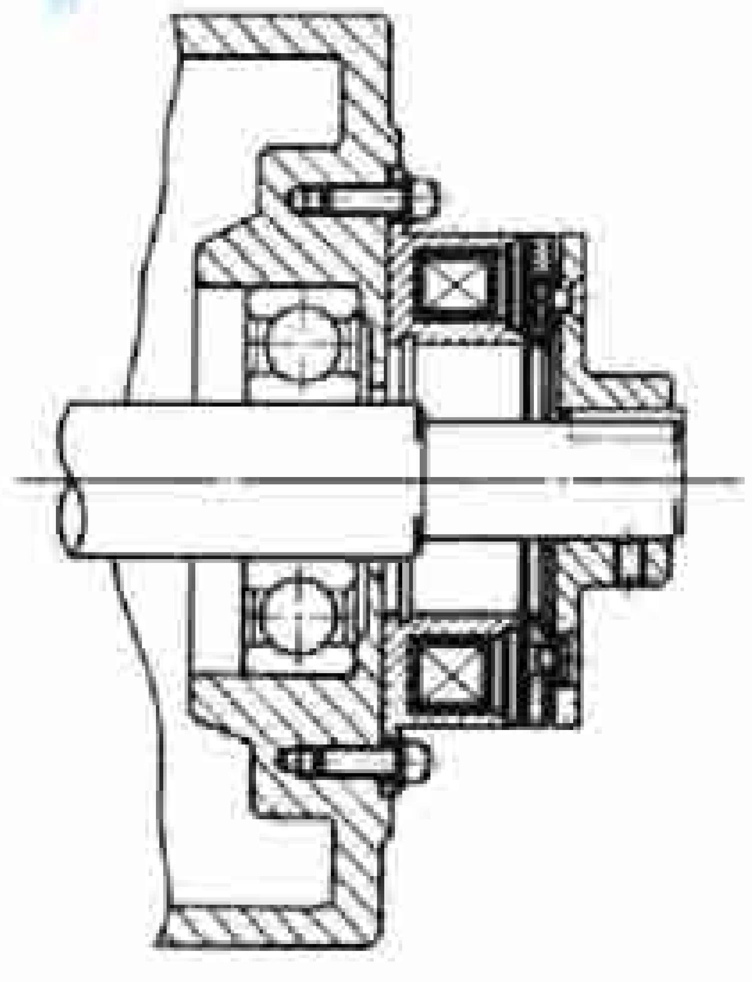
CDE與CDG組合使用例
CDE and CDG assembly applications



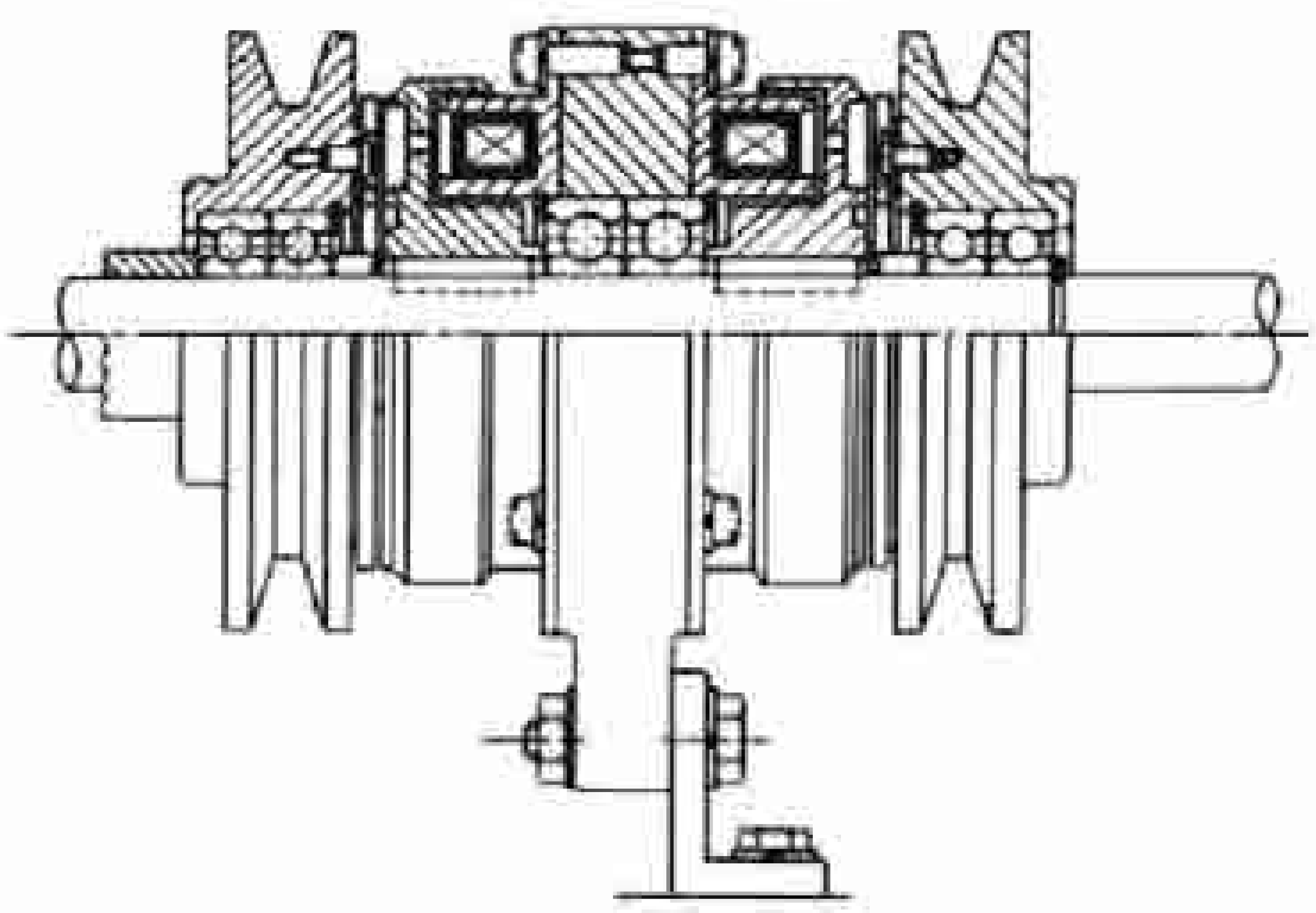
CG1



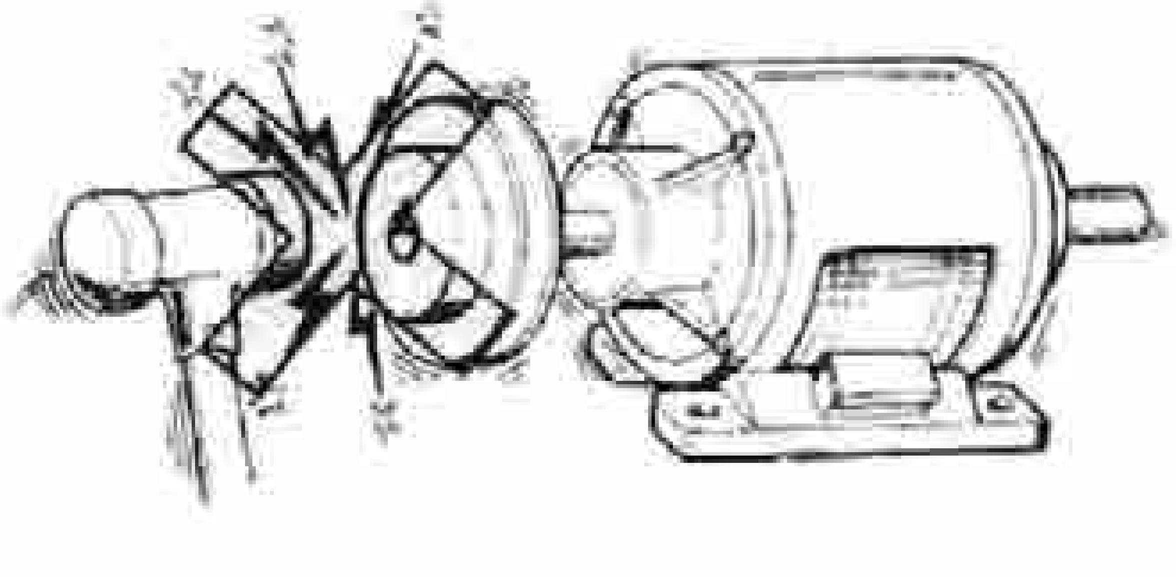
CG2



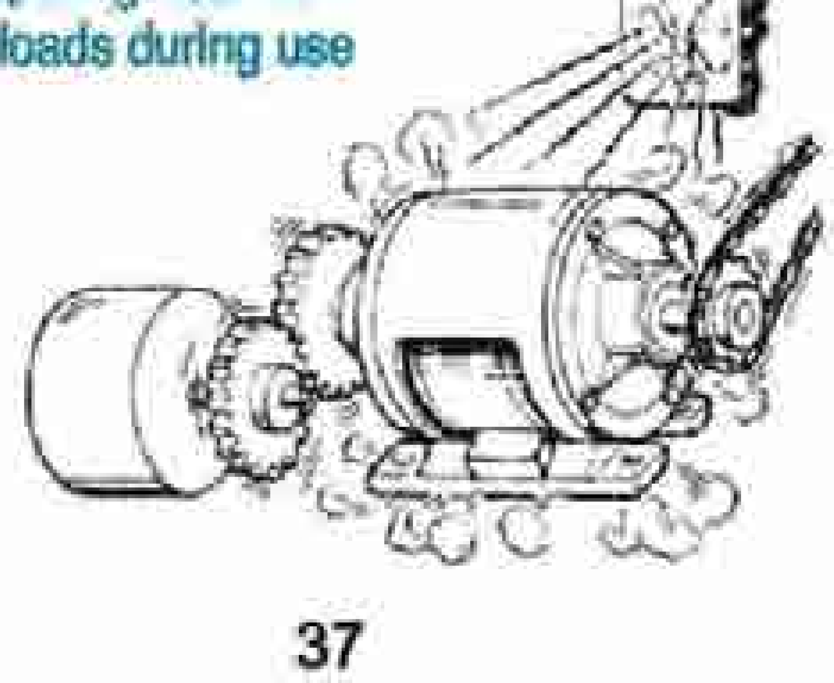
CDF雙組合使用例
CDF dual assembly applications



裝用時勿重力搥打
Non-gravity hammer for installation



使用超負荷加以散熱
Dissipating heat from overloads during use



勿加油脂
Do no lubricate

Reference Chart for Available Models

型號選用參考表

離合器使用條件分二種情況 Clutches are used in two main areas：

1. 啓動完成後再加上負載之情況（例如車床加工為被加工物已達一定轉速再行切削）
   Load is applied following activation (for example, in lathes, where the work piece is allowed to reach a certain turning speed before cutting work begins)
2. 啓動時已加上負載之情況：（例如輸送帶其起動時負載已聯結上同時啓動）
   Activation under load (as in conveyor belts where load is already present when the clutch is engaged)

選定表 I ：啓動完成後再加上負載之情況 Option Chart I: Application of load after engagement

馬達容量 Specifications of the motor	r.p.m	100	200	300	400	500	600	700	800	900	1000	1100	1200	1500	1800	2000	2400	3000	3600	4000	4600	5000
0.015kw	1/50 HP																					
0.035	1/20																					
0.065	1/12																					
0.1	1/8																					
0.125	1/5									1-5												
0.2	1/4																					
0.25	1/3																					
0.4	1/2																					
0.55	3/4									2-5												
0.75	1																					
1.1	11/2																					
1.5	2									5												
2.2	3									10												
3.7	5									10												
5.5	71/2																					
7.5	10									20												
11	15									40												
15	20																					
19	25									65												
22	30																					
30	40																					
37	50									100												
45	60																					
55	75										200											
75	100																					
92	125																					
110	150																					

選定表 II ：啓動時已加上最大負載之情況 Option Chart II: Engagement under load

馬達容量 Specifications of the motor	r.p.m	100	200	300	400	500	600	700	800	900	1000	1100	1200	1500	1800	2000	2400	3000	3600	4000	4600	5000
015kw	1/50 HP																					
0.035	1/20																					
0.065	1/12																					
0.1	1/8									1-5												
0.125	1/6																					
0.2	1/4																					
0.25	1/3									2-5												
0.4	1/2																					
0.55	3/4																					
0.75	1									5												
1.1	11/2																					
1.5	2									10												
2.2	3																					
3.7	5									20												
5.5	71/2									40												
7.5	10																					
11	15									65												
15	20									100												
19	25																					
22	30									200												
30	40																					

Sizes and Specifications

規格大小選定表

1 轉矩之檢討

連結・制動負荷所需要之轉矩 T，可由下式計算

$T=(Ta \pm T\ell) \times f$ (Kgm) .... (1)

Ta：加速轉矩=在一定之時間內加速到一定之回轉數時所需要之轉矩。

$Ta=\dfrac{GD^2 x N}{375 x ta}$ (kgm) .... (2)

GD^2：負荷側之慣性（飛輪效應）(Kgm^2)

N：相對回轉數

ta：加速時間 (sec)

$T\ell$：負荷轉矩=負荷阻抗及機械之摩擦阻抗 (Kgm)

在（1）式中Te之符號在離合器時取十，剎車時為一

f：安全係數

2 動作量之檢討

一次之連結，制動所需要之動作量Ee可由下式計算

$Ee=\dfrac{GD2xN2}{7160} \cdot \dfrac{Td}{Td \pm T\ell}$ (kgm) .... (3)

Td：離合器（剎車）之轉矩 (kgm)

T之符號在離合器時取一，剎車時取十

Ee之值必需比容許摩擦量Ea為小。

$Ee<Ea$ .... (4)

高頻率之ON.OFF時，不可超過散熱能力Pa。

$Ee \times S < Pa$ (kgm/min) .... (5)

S：動作頻度（次／min）

3 動作時間之檢討

連結・制動負荷所需要之轉矩 t，為離合器・剎車本身之動作時間及負荷加速（減速）時間之總和。

$t=t_1+ta$ (sec) .... (6)

t_1：離合器・剎車之轉矩建立時間 (sec)

ta：加速時間 (sec)

$Ta=\dfrac{GD^2 x N}{375 x (Td \pm T\ell)}$ (sec) .... (7)

之符號離合器時取一，剎車時為十

4 動作次數之檢討

間隙調整前所能動作次數可由下式計算（次）

$L=E_T/Ee$ (回) .... (8)

E_T：第一次間隙調整前之容許動作總量

SIZE	0S6AA	1S5AA	2S5AA	005AA	010AA	020AA	040AA
E_T	36×10^5	60×10^5	130×10^5	250×10^5	470×10^5	10×10^7	20×10^7

1 Torque

The torque needed for engagement and drive under load can be calculated as follows:

$T = (Ta \pm T\ell) \times f$ (kgm)................(1)

Ta : acceleration torque = the torque needed to reach a given turning speed within a given time

$Ta = \dfrac{GD^2 \times N}{375 \times Ta}$ (kgm).......................(2)

GD2: Abnormalcy of the load (applied force on the flywheel (kgm2)

N: number of revolutions

Ta: acceleration time (sec.)

Tl: load torque = load resistance + friction resistance of system (kgm)

In equation (1), Tl is positive during engagement and negative during braking

f = safety index

2 Amount of work

The amount of work or Ee needed for engagement can be calculated as shown:

$Ee = \dfrac{GD^2 \times N^2}{7160} \times \dfrac{Td}{Td \pm T\ell}$ (kgm)................(3)

Td: Clutch (brake) torque (kgm)

T is negative during engagement and positive during braking

Ee must be less than the acceptable friction amount Ea

$Ee < Ea$ .... (4)

During high-frequency switching on and off, this value cannot exceed the heat radiation capacity Pa.

$Ee \times S < Pa$ (kgm/min)..................(5)

S = cycle speed (times/min)

3 Operating Times

The torque t needed for engagement and motion is the total during movement of the clutch and brake as well as the load during acceleration (or deceleration)

$t = t1 + ta$ (sec) ....(6)

t1: time needed to establish torque for clutch and brake (sec)

ta: acceleration time

$Ta = \dfrac{GD^2 \times N}{375 \times (Td \pm T\ell)}$ (sec) ....(7)

This value is positive for clutches and negative for brakes

4 Number of Operations

The number of operations possible before adjustment of the gap is needed can be calculated as shown:

L - Et/Ee .... (8)

Et - amount of operations allowed before the first adjustment of the gap

考慮負荷條件之係數（原動機爲電動機時） 依照使用制動器之機械或用途，分別適用下列安全係數—

Load Factor Index (when driving machine is electrical) The following safety factors apply for these machines and applications –

負荷條件 Load condition	
(a) 負荷變動少之低循環動作。例如事務機械、小型工作，木工機械。 Low cycle operation with little change in load (office machines, small shop equipment, wood-working machinery)	1.5 (~1.75)
(b) 負荷變動為中程度之低循環動作。例如中形沖壓機械、 泵 空壓機。 Low cycle operation with moderate variations in load (medium-sized presses, pumps, air compressors)	20 (1.75~2.25)
(c) 負荷荷變動大，高循環且慣性大。例如印刷機械、剪床。 High cycle repetitious operation with large variation is load (printing machinery, cutting machines)	25 (2.25~)

Basic Control Circuit

基本控制電路

於電磁離合器，制動器之線圈流過直流之勵磁電流時，在線圈內蓄積能量。切斷電流時，由於被蓄積之能量，在線圈之端子間產生逆電壓。此逆電壓依切斷速度、切斷電流時，有達到1000伏特以上者，因此，由於可能成為線圈之絕緣破壞或開閉器之接點損壞等之原因，有必要設置適當之保護電路以防止這些問題。

When the coils in the clutch and driver are energized with direct current a certain level of energy is stored in the coils. When the current is cut the accumulated energy will create a negative voltage
between the terminals of the coils. This negative voltage may be 1000V or more depending on the speed and timing of the cut-off. This could result in damage to the coil or the switch contacts, and protective circuits are built in to prevent this possibility.

1 電阻+二極體 Resistors and diodes

- 可以使電源部消耗電力小，電阻之容量也可以小。電樞釋放時間有些延遲，高頻度使用需要注意。
- These help to lower power consumption and resistance capacity. They may cause slight delays when the armature is released, a point which should be kept in mind in high-frequency applications.

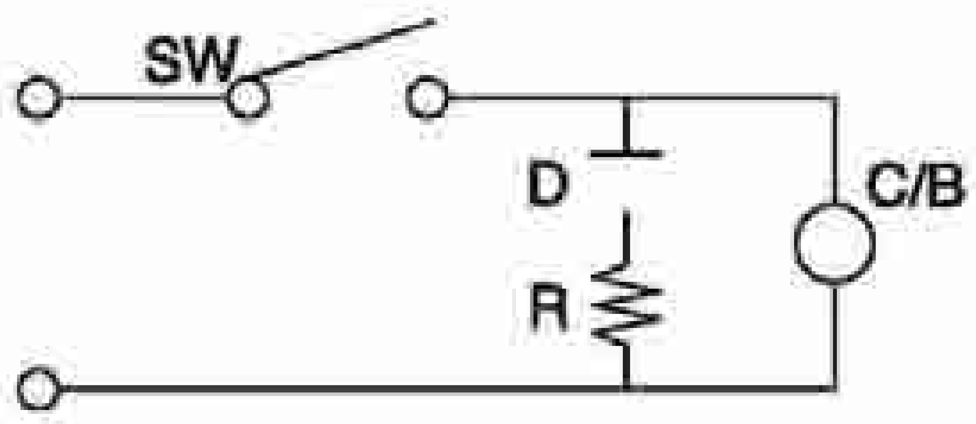


圖1

2 電阻+電容器 Resistors and capacitors

- 電樞釋放時間速度，有必要耐壓性高之電容器。
- Capacitors with high voltage resistance are needed to speed the release of the armature.

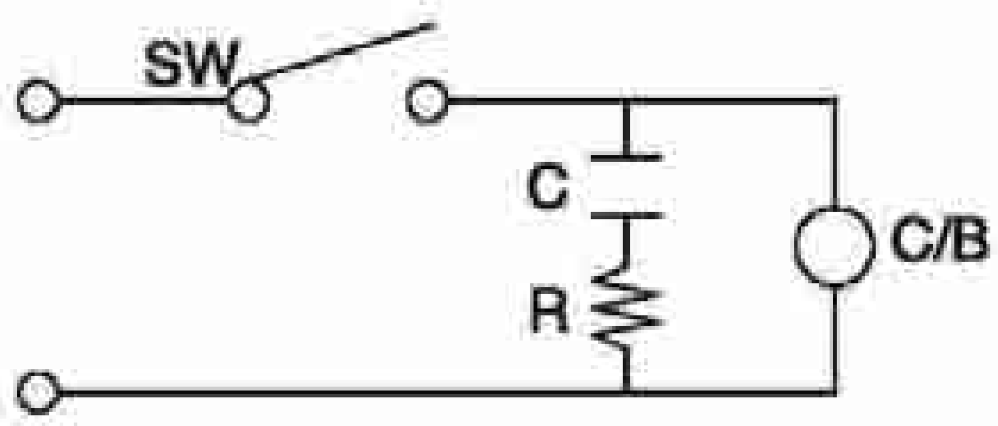


圖2

3 突波吸收器 Surge buffer

- 抑制突波效果大，無電樞釋放時間延遲。
- Offers firm control of surge currents to avoid delays in the release of the armature.

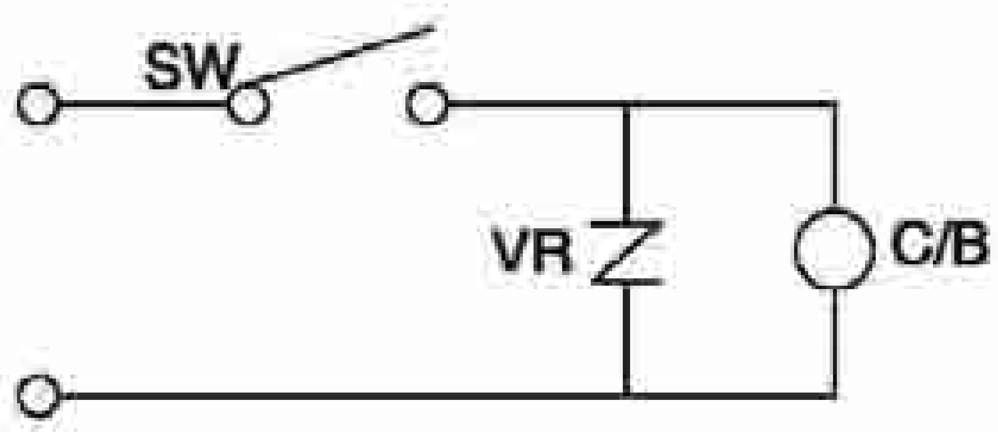


圖3

4 二極體 Diodes

- 抑制突波效果大，但是電樞釋放時間會延遲，易引起離合器剎車器之相互干涉，不適合高頻度使用。
- Offer good control of surges but may result in delayed release of armature, and can cause conflicts between the clutch and the brake. Not suitable for high frequency applications.

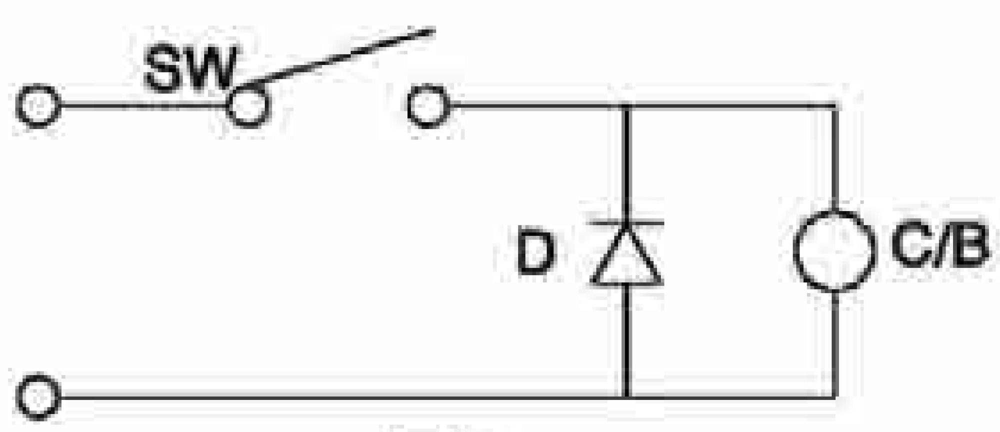
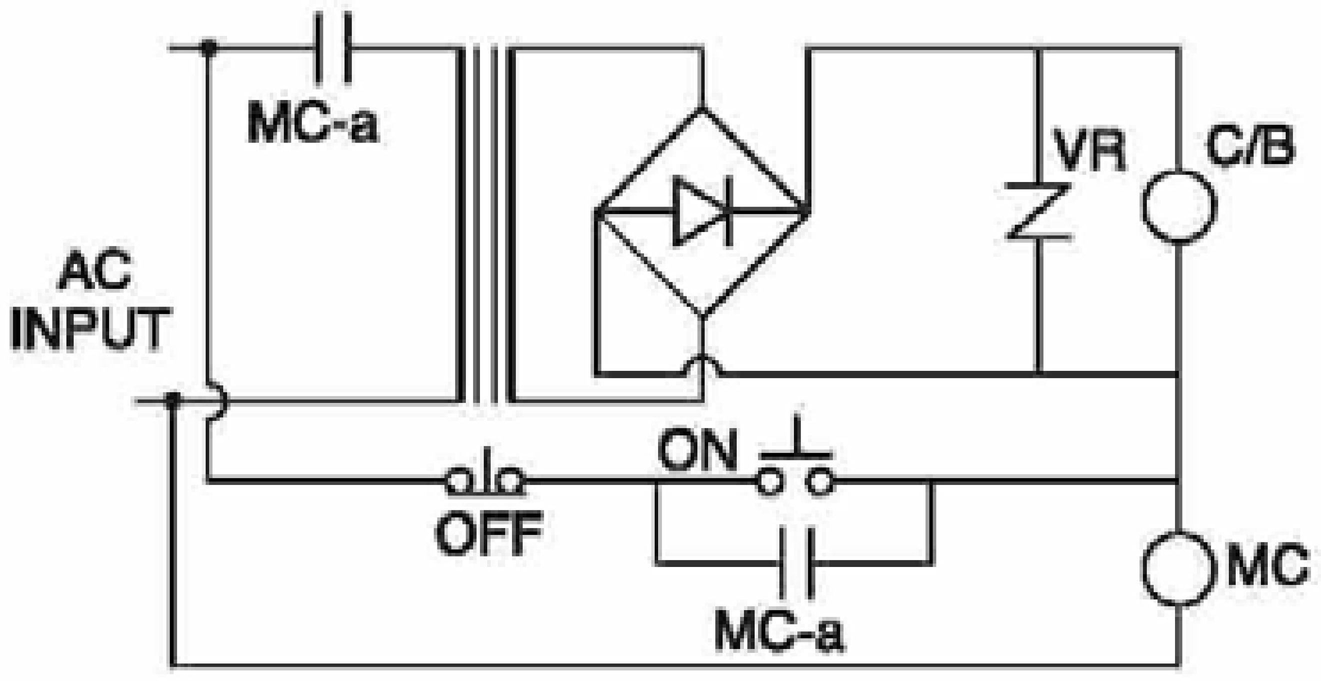


圖4

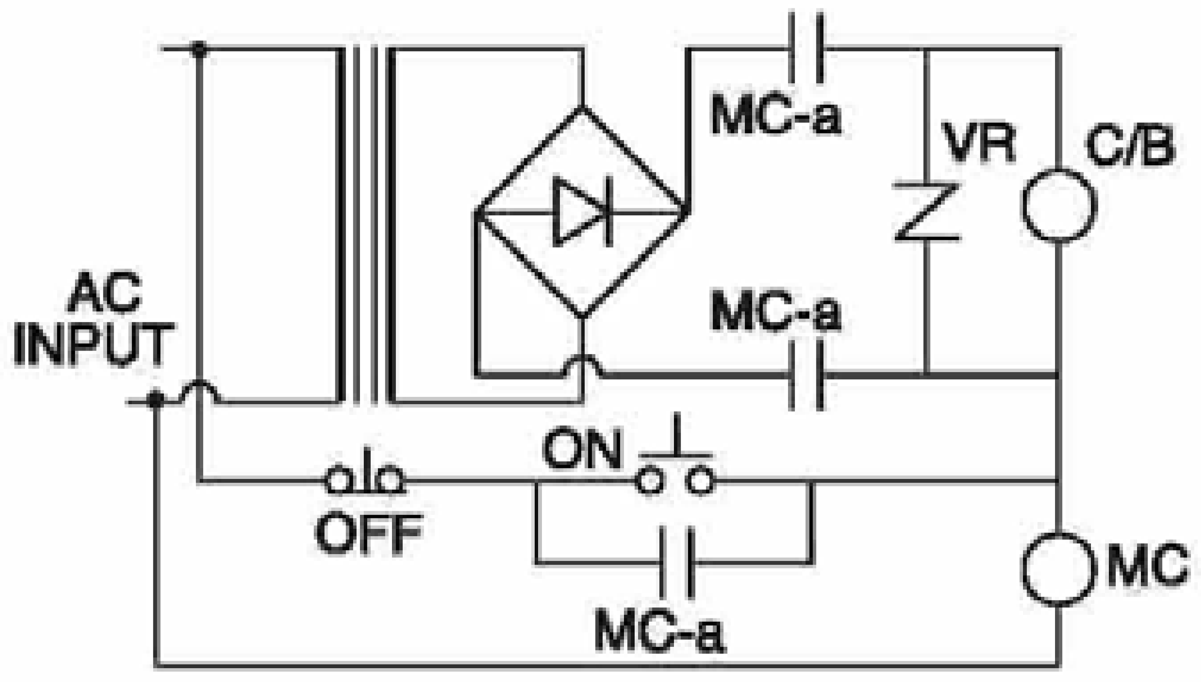
Basic Control Circuit

基本控制電路



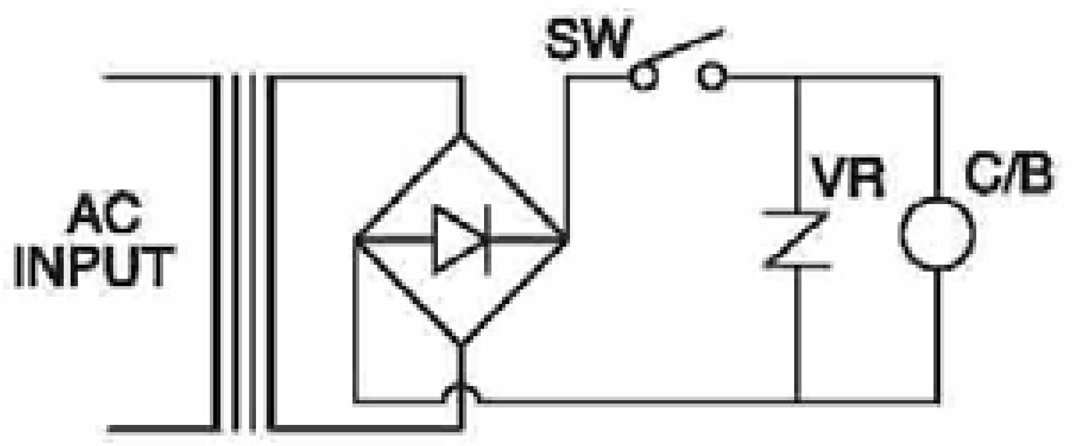
▶ 電磁繼電器接點在交流側，所以接點容量可選用小容量。
但釋放時間較在直流側長。

Connector for solenoid relay is on the AC side, making it possible to use a small-capacity connector.
Release time is slower with direct current.



▶ 電磁繼電器接點在直流側，所以接點容量應選用標準負荷8倍左右。

Magnetic relay contacts are on the DC side, so standard load capacity should be in the range of 10A.

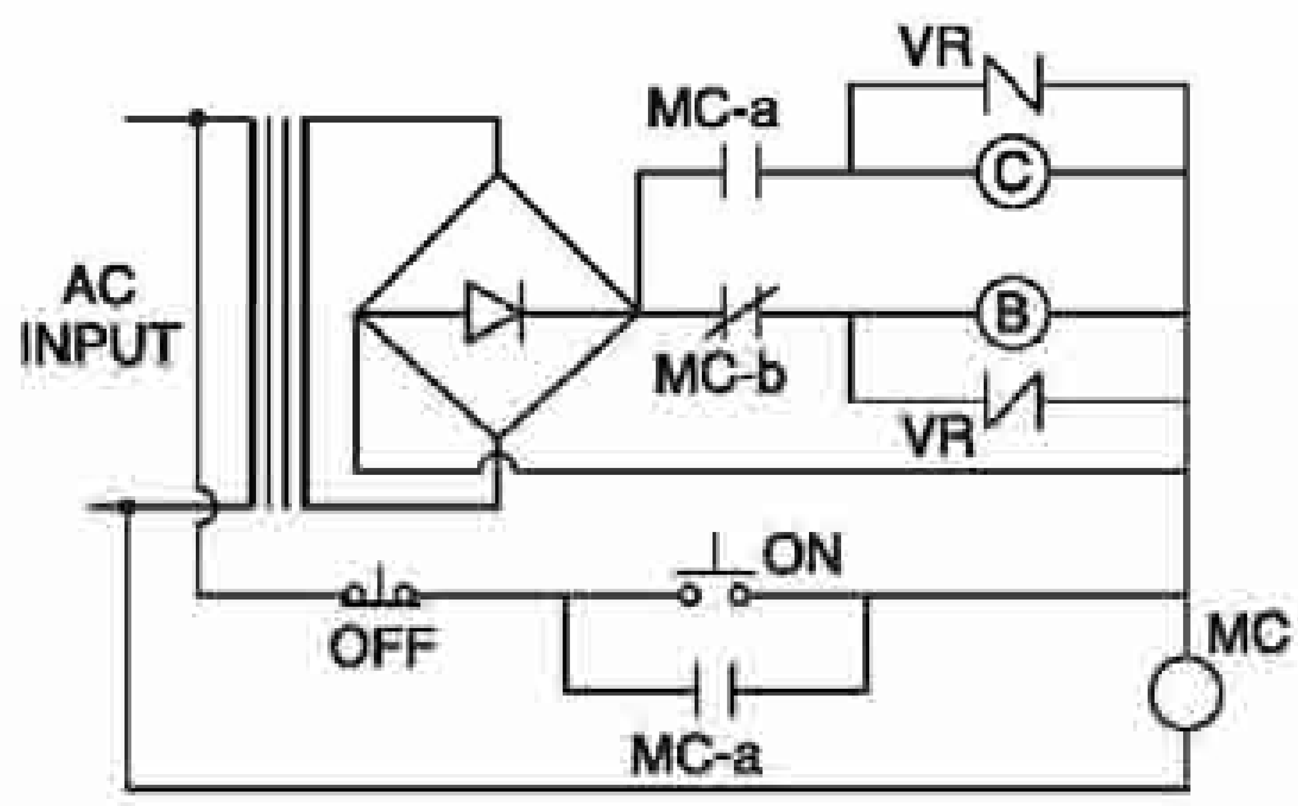


▶ 為控制離合器、制動器最基本回路，是由變壓器、整流器、突波吸收器及開關所構成。

The basic control circuit for clutch and brake consists of a transformer, rectifier, surge protector and switch

此電路常為離合器，制動器組使用，
是以電磁繼電器 a 、 b 接點來切換，若均保持離合器。
制動器OFF，須加裝開關來控制。

The circuit in figure 18 is widely used in clutch designs. Magnetic relays a and b are for switches. To ensure that the clutch and driver remain off it will be necessary to add another control switch.



Operating Guidelines

使用注意事項

電磁離合器在機械內部屬於一個重要的機械要素，一定要和機械本身取得十分的協調，因此使用請注意以下各點：

The magnetic clutch is a critical component in any machine, and it must be carefully adjusted to fit the rest of the system. Thus the following points should be carefully monitored during operation:

1 使用處所 Location

■請在完全沒有水分、油分等的狀態下使用乾式電磁離合器、剎車器。如果摩擦部位沾有水分或油分等物質，會使摩擦扭力大為降低，離合器的靈敏度也會變差。為了在使用上避免這些情況，請加設罩蓋。

■Dry clutch and brake assemblies should be used in locations which are free of water, oil and other impurities. Water and oil can affect the friction of the clutch plate and decrease the effectiveness of the clutch. For added protection a cover should be installed.

■在塵埃很多場所使用時，請將離合器及剎車器全部放入箱中。60kgm以下的電磁離合器、剎車器可以使用直立型。即使是更高的機種也可以使用。

■In dusty areas the clutch and brake assemblies should be completely enclosed. Magnetic clutches rated at 60KGM or less can be used vertically and in some cases with large machines.

2 安裝到機械上 Installation machinery

1. 與機械側的安裝 Side installation

■用來安裝離合器及剎車器的長軸尺寸請使用JIS 0401 h6或js6的規格。
■用於安裝軸的鍵(Key)請使用JIS B1301-1959 所規定的其中一種。另外，鍵的長度請採用接近尺寸圖L、N長度的數值。
■考慮到熱膨脹等因素，安裝軸的推力溝請選擇在0.2mm以下。 ■凸緣（離合器）及軛（剎車器）的安裝尺寸請使用JIS B 0401 H7 h7 的規格。
■Consult JIS 0401 h6 or js6 guidelines in accordance with clutch and brake shaft lengths
■Use one of the guidelines in JIS B1301-1959 regarding installation of the key. Also, the length of the key should be in line with specification charts L and N.
■Check heating and other factors; the thrust duct of the installed shaft should be within 0.2mm.
■Consult JIS B0401 H7 H7 for specifications regarding installation of the clutch flange and brake yoke.

2. 貫通軸的安裝 Installation of the through shaft

■在離合器安裝軸上的某些位置電樞的空轉安裝方法。
■此時，特別是轉子及凸緣的保持部位在長軸方向務必鎖緊，不可有鬆弛現象。另外，用於安裝凸緣的機械部份，其結構一定要確保為直角度。
■用於凸緣部位的螺栓請使用JIS B 1180機械性質7T以上的規格。 ■輸送帶進行驅動時，在設計上，請將負重落於軸承以上。
■Free-turning installation of armatures at several points on the shaft of the clutch
■At this time, ensure that the rotor and flange are tightly in place on the long shaft. In addition, the portion of the machinery used to install the flange must be precisely at a right angle.
■Use 7T or better quality bolts and nuts for the flange in accordance with JIS B 1180.
■Lay out conveyor belts so that the load is higher than the bearings

3. 相對軸型的安裝 Installation of opposing shafts

■將驅動側及從動側分別安裝於兩個軸端、成為一體的狀況。
■轉子、栓槽輪轂要用固定環、安裝螺釘及兩個孔狀金屬板等固定於長軸方向，不可有鬆弛現象。另外要注意兩軸之間的同心度及直角度。
■Install driving side and driven side on the two ends of the shaft to form a single piece
■The rotor and spline wheel hub are installed on the long shaft using a retaining band, installation screws and a metal plate with two holes; assembly must be tight. Check the centering and angles of the two shafts.

4. 剎車器的安裝 Installation of the brake

■栓槽輪轂要用鎖定螺帽、固定環、安裝螺釘及軸環等固定於長軸方向，不可有鬆弛現象。另外要注意軛的安裝面與軸心之間的同心度及直角度。
■請設置6φ～10φ的空氣抽取道，以供摩擦粉散逸用。 ■設置防止磨耗粉侵入軸承內部的薄片（氈片、橡膠旋轉片）。
■Use lock nuts, the retaining band and safety screws to hold the spline wheel hub in place along the long shaft. Ensure that everything is tight. Check the centering and angles of the yoke installation face and the shaft.
■Leave an air relief passage of 6~ to 10~ to allow dust from friction to dissipate
■Install a dust guard to keep friction-generated debris out of the bearing linings (felt strips and rubber rotators)

5. 一般注意事項 Routine checkpoints

■安裝時，請在機械上將吸引間隙調整為規定值的±20%以內。 ■請使托架保持輕盈，不要使離合器的軸承承受過重的壓力。
■關於組裝用的螺釘，請利用彈簧金屬片、接著劑等進行防止鬆弛的處理。 ■利用機械側的框架維持引線的同時，還要利用端子板等進行確實的連接。
■During installation adjust the draw space above the machinery to +/- 20% of specifications
■Use a hoist to lighten the load of the machinery and avoid pressure on the clutch bearing
■Use spring clips and glue wherever needed with screws and bolts to prevent loose connections
■Utilize the frames on the sides of the machinery to hold lead wires, and use the terminal box to ensure good connections

3 其他 Other

■摩擦離合器會因摩擦面所遇到的狀況使扭力有所變化。因此機械剛安裝時，可能無法達到規定的扭力。此時，要盡量施以較輕的負載，給予定格電流，進行運轉使之習慣。
■在軸端使用聯軸器時，一定要使用彈性聯軸器或相當等級的聯軸器。這是為了讓中心對準更容易進行。
■使用CDE形CDA形、機組時，要注意軸端所承受的輻射形負載。特別是在高速運轉時，皮帶盤的驅動會產生問題。另外，在CDA形的皮帶盤驅動時，請在扭力啟動時間內完成連結。
■使用CDA形、附原動機的機組時，負載的CDA很大時，驅動原動機會超過負荷（原動機的旋轉降低等），所以在選擇這種機器時要多加注意。
■The torque of the friction surface may change due to various conditions. A newly-installed clutch may not have the torque that is specified. During the break-in period keep loads relatively light and ensure that power levels are sufficient to allow proper operation.
■Use single-piece shaft joints to ensure sold jointing where necessary. This helps to keep shaft centers properly aligned
■Check radial loads on the shaft ends of models CDE and CDA during operation.
Problems are particularly likely to occur when drive belts are used with high turning speeds.
■When CDA is used with a primary driver and the load on CDA is significant, the primary driver may exceed load limits (especially when its speed slows). Keep this in mind when using this type of machinery.

CDA Clutch and Brake Combination

CDA 電磁離合器煞車組合體

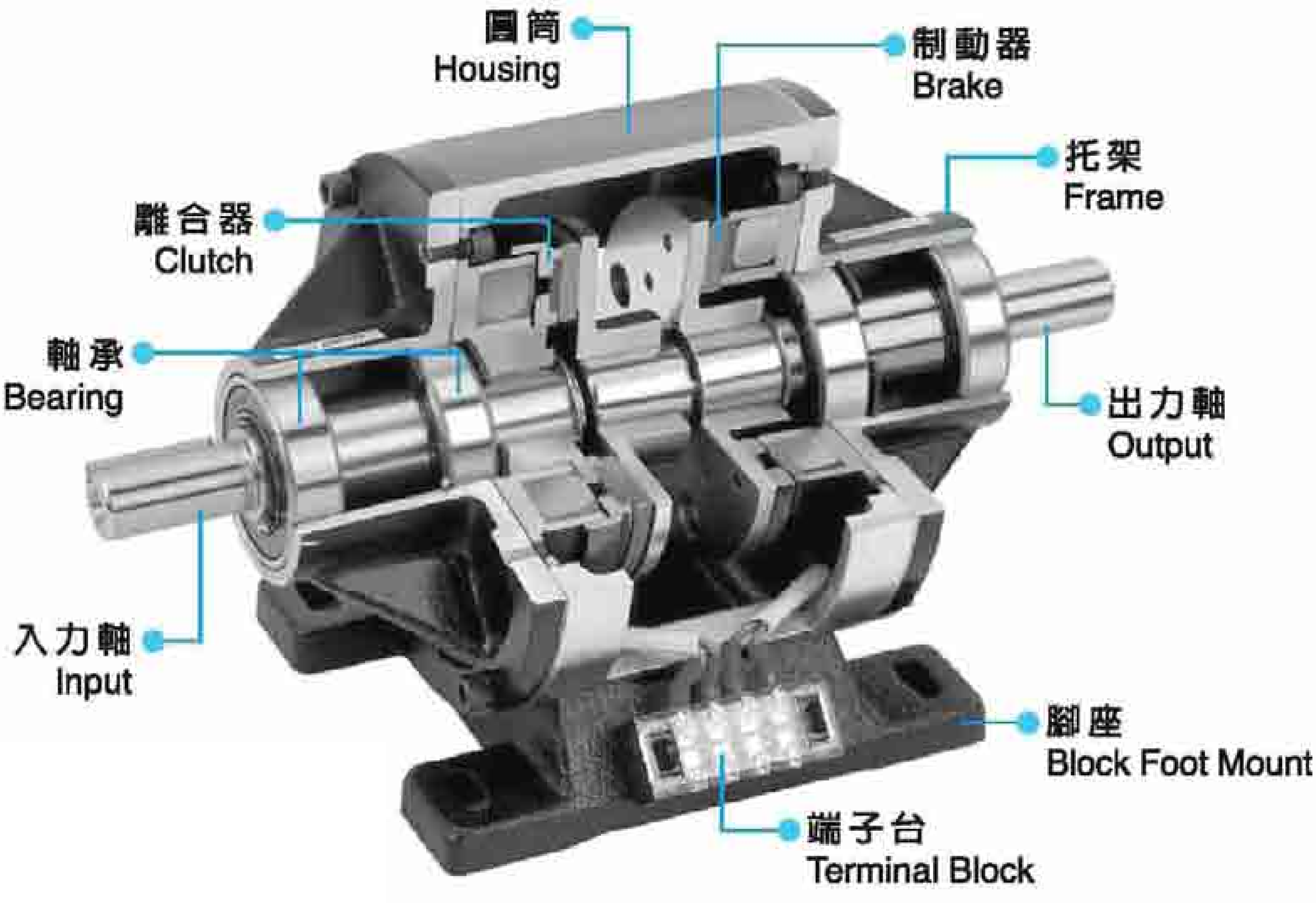
CDA型離合器剎車組合體為—CDF離合器與—CDG剎車之組合。

The CDA clutch and brake assemble incorporates the CDF clutch and the CDG brake into one unit.

- 離合器之轉子被固定於入力軸上，離合器之電樞與剎車則在同軸而形成的出力軸，離合器之軛與剎車裝置於機架上。當電流通過離合器時，出力軸即被帶動當離合器分離。剎車有電流通過時，出力軸就停止轉動。
- The clutch rotor is attached to the input shaft, and the clutch armature and brake use the same shaft which acts as an output shaft.
  The clutch yoke and brake are set on the frame of the machine, and when the clutch is energized the output shaft is instantly moved away from the clutch. When the brake is energized the output shaft stops turning.

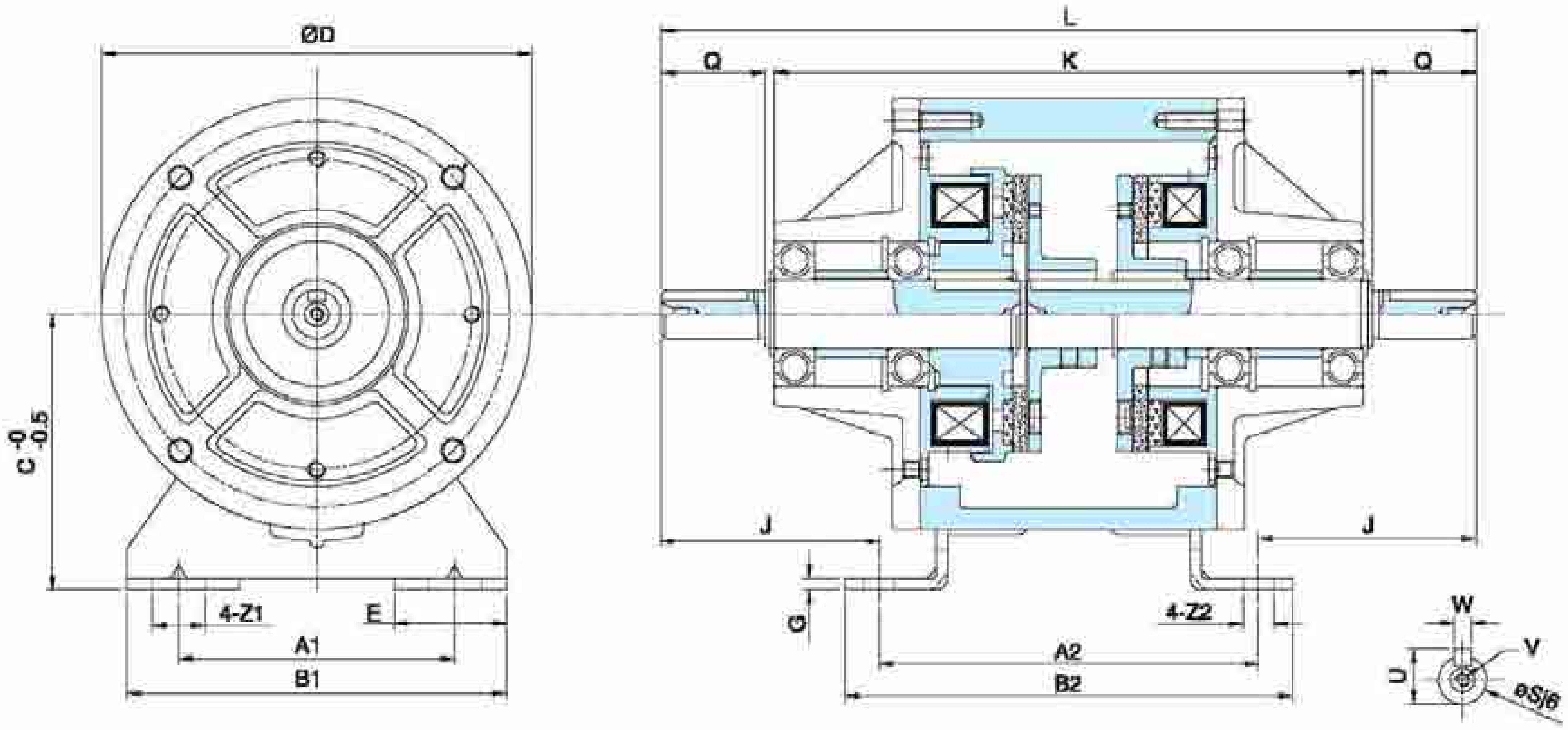
- 本機種適用於起動、停止、高頻運轉，寸動定位。
- This unit is suitable for starting, stopping, high frequency cycles and stationary passive applications

構造 Construction



CDA Series

內藏式電磁離合、煞車器組 Internal Magnetic Clutch and Brake Combination



型號 MODEL		CDA0S6AA	CDA1S5AA	CDA2S5AA	CDA005AA	CDA010AA	CDA020AA
靜摩擦轉距 Static Friction Torque	[kgm](Nm)	0.55 (5.5)	1.1 (11)	2.2 (22)	4.5 (45)	9 (90)	17.5 (175)
功率 Power	[24V](W) at 20℃	11	15	20	25	35	45
懸垂荷重 Suspended load	(kgf)	32	48	70	90	130	180
徑方向 Radius	A1	65	80	105	135	155	195
	B1	90	110	140	175	200	240
	C	65	80	90	112	132	160
	D	100	125	150	190	230	290
	E	27.5	32.5	35	42	45	47
	S	11	14	19	24	28	38
	U	12.5	16	21	27	31	41.5
	W	4	5		7		10
	Z1	13.5	15.5	20	24	28	28
軸方向 Shaft	A2	90	110	135	160	200	240
	B2	105	130	160	185	230	270
	G	2.6	3.2	3.2	4.5	6	20
	J	47.5	63.2	80.1	107.95	145.1	188
	K	132	171	210	270	362	448
	L	187	236.2	295.3	375.8	490.3	616.2
	Q	25	30	40	50	60	80
	V	M4*0.7P*8L		M6*1P*11L			M10*1.5P*17L
	Z2	6.5	9	11		14	
重量 Weight	(kg)	2.1	4.2	6.8	12	22	49
保護素子 Protective band		470KD07	G80KD10		G80KD14		

CDB Clutch and Brake Combination

CDB 電磁離合器煞車組合體

CDB型離合器剎車組合體結構為開放式入力處出力之處。

The CDB clutch and brake assembly uses an pen design for power input and output

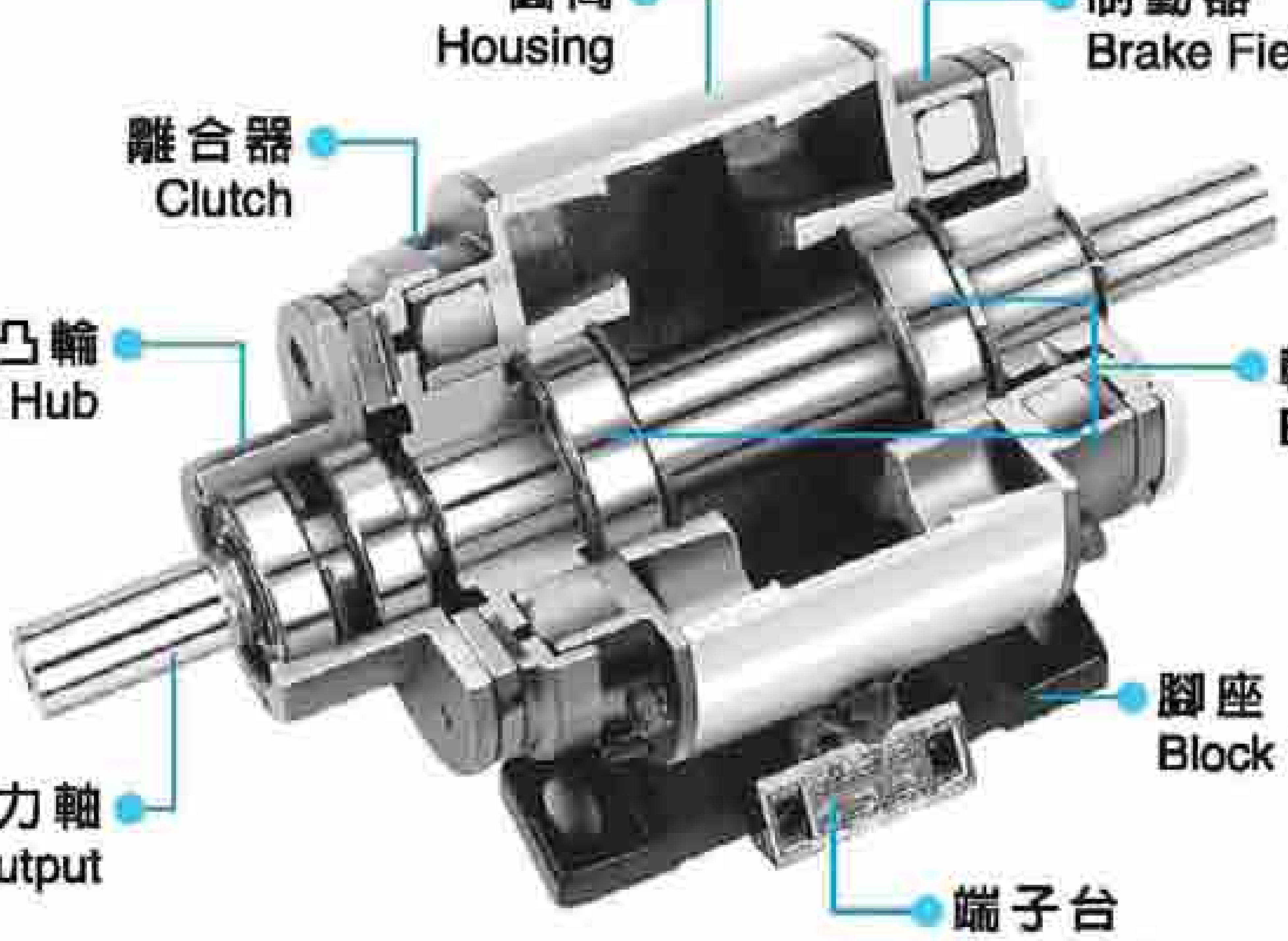
■離合器之轉子與剎車器被固定在同軸而形成出力車，入出為軸承凸輪當離合器電流通過時出入軸被帶動，當離合器斷電時出力軸與軸承凸輪分離，當剎車電流通電時，出力軸就停止運轉。

■The clutch rotor and the brake are attached to the same rotor to form an output shaft with input via a bearing cam. When the clutch is energized, motion is transmitted to the input shaft. When power to the clutch is cut off the output shaft and the bearing cam are separated. When the brake is energized the output shaft stops turning.

■此機種適用於起動、停止、定位、高頻率起動、寸動。

■This unit is suitable for starting, stopping and positioning and for high frequency starts and holding

構造 Construction



联系：严生

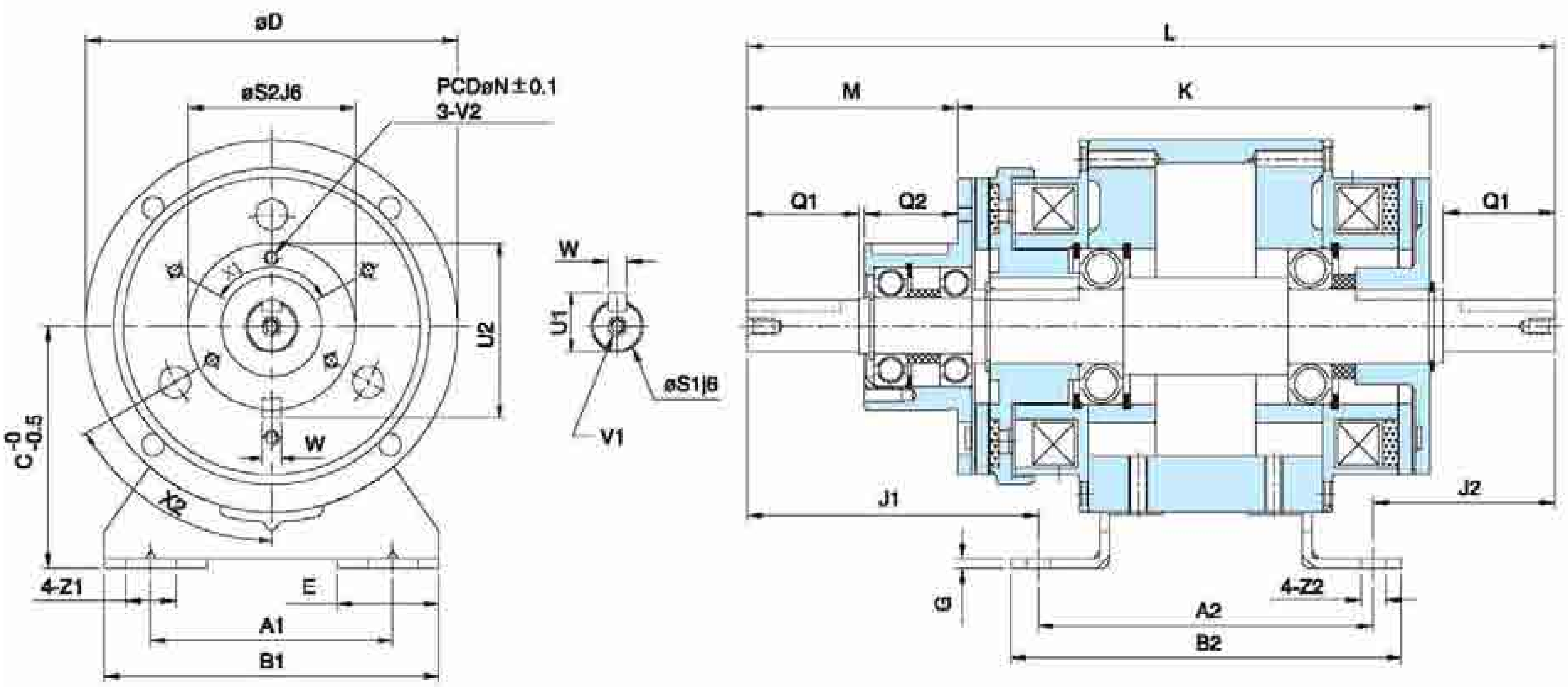
电话：15112136402

QQ：250048681

全部现货供应

CDB Series

外露式電磁離合、煞車器組 Exposed Magnetic Clutch and Brake Combination



型 號 MODEL		CDB0S6AA	CDB1S5AA	CDB2S5AA	CDB005AA	CDB010AA	CDB020AA	CDB040AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55 (5.5)	1.1(11)	2.2 (22)	4.5 (45)	9 (90)	17.5 (175)	35 (350)
功率 Power [24V](W) at 20°C		11	15	20	25	35	45	60
懸垂荷重 Suspended load (kgf)	A	30	45	70	90	140	200	290
	B	14	25	45	70	100	180	260
徑方向 Radius	A2	75	90	110	135	160	200	240
	B2	95	105	130	160	185.5	230	270
	G	10	2.6	3.2	3.2	4.5	6	20
	J1	66.25	78.2	98	120.3	149..5	186.7	238
	J2	43.15	48.8	62	74.7	89.5	117.3	154
	K	105.5	126.9	149.4	182.1	221.5	276.9	334
	L	181	217	270	330	399	504	632
	M	46.5	56.5	72	92	113	142	183
	Q1	25	30	40	50	60	80	110
	Q2	20	25	30	40	50	60	70
	V1	M4*0.7P*8L		M6*1P*11L			M10*1.5P*17L	
	Z2	6.5	6.5	9	11	11.5	14	14
軸方向 Shaft	A1	52	65	80	105	135	155	195
	B1	72	90	110	140	175	200	240
	C	55	65	80	90	112	132	160
	D	80	100	125	150	190	230	290
	E	27.5	27.5	32.5	35	42	45	47
	N	33	37	47	52	62	74.5	101.5
	S1	11	14	19	24	28	38	42
	S2	38	45	55	64	75	90	115
	U1	12.5	16	21	27	31	41.5	45.5
	U2	39.5	47	57	67	78	93.5	118.5
	V2	M4*0.7P*6L		M4*0.7P*8L		M6*1P*12L		
	W	4	5		7		10	12
	X1	3-120°		4-90°				8-45°
	X2	60°		45°				22.5°
	Z1	13.5	13.5	15.5	20	24	28	28
重量 Weight (kg)		1.5	2.7	5.5	9.6	18.5	35	64
保護素子 Protective band		470KD07	GD80KD10		GD80KD14			

CDC Clutch and Brake Combination

CDC 離合器煞車組合體

■離合器之轉子與刹車器被固定在出力軸上，入力的電樞板可固定在入力的飛輪上，當電流通過離合器時飛輪帶動出力軸，當離合器分離時，刹車有電流通過出力軸就停止。

■Clutch rotor and brake are fixed on the output shaft, and the input armature plate can be set onto the input flywheel so that when the clutch is energized the fly wheel will drive the output shaft. When the clutch is disengaged and the brake is energized the output shaft will stop.

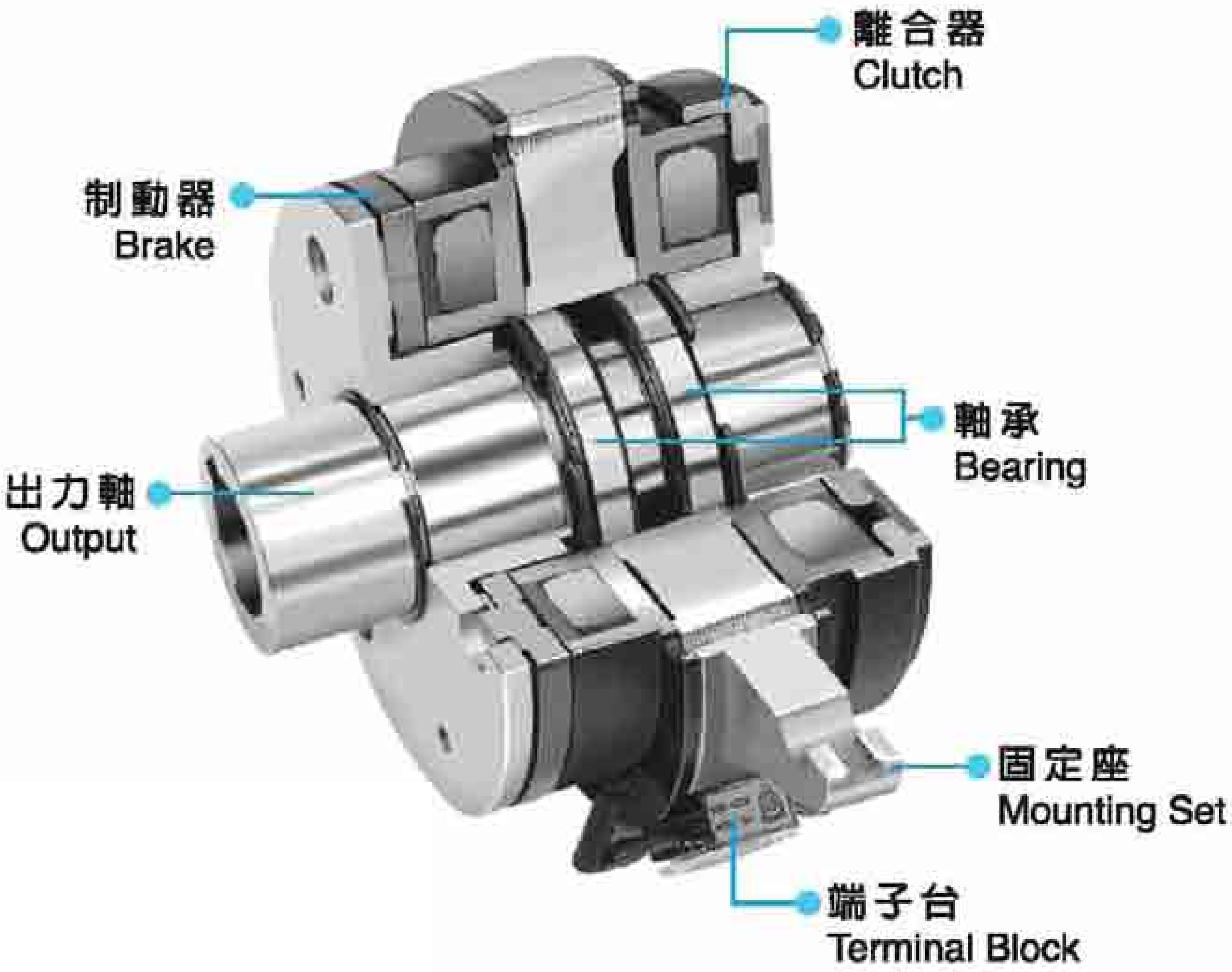
■此機種採用鋁合金體，離合制動器相背貼，佔地空間小易於安裝。

■This unit features aluminum alloy construction with the clutch and drive attached back-to-back to save space and make installation easier.

■適用於起動、停止、定位、高頻率起動。

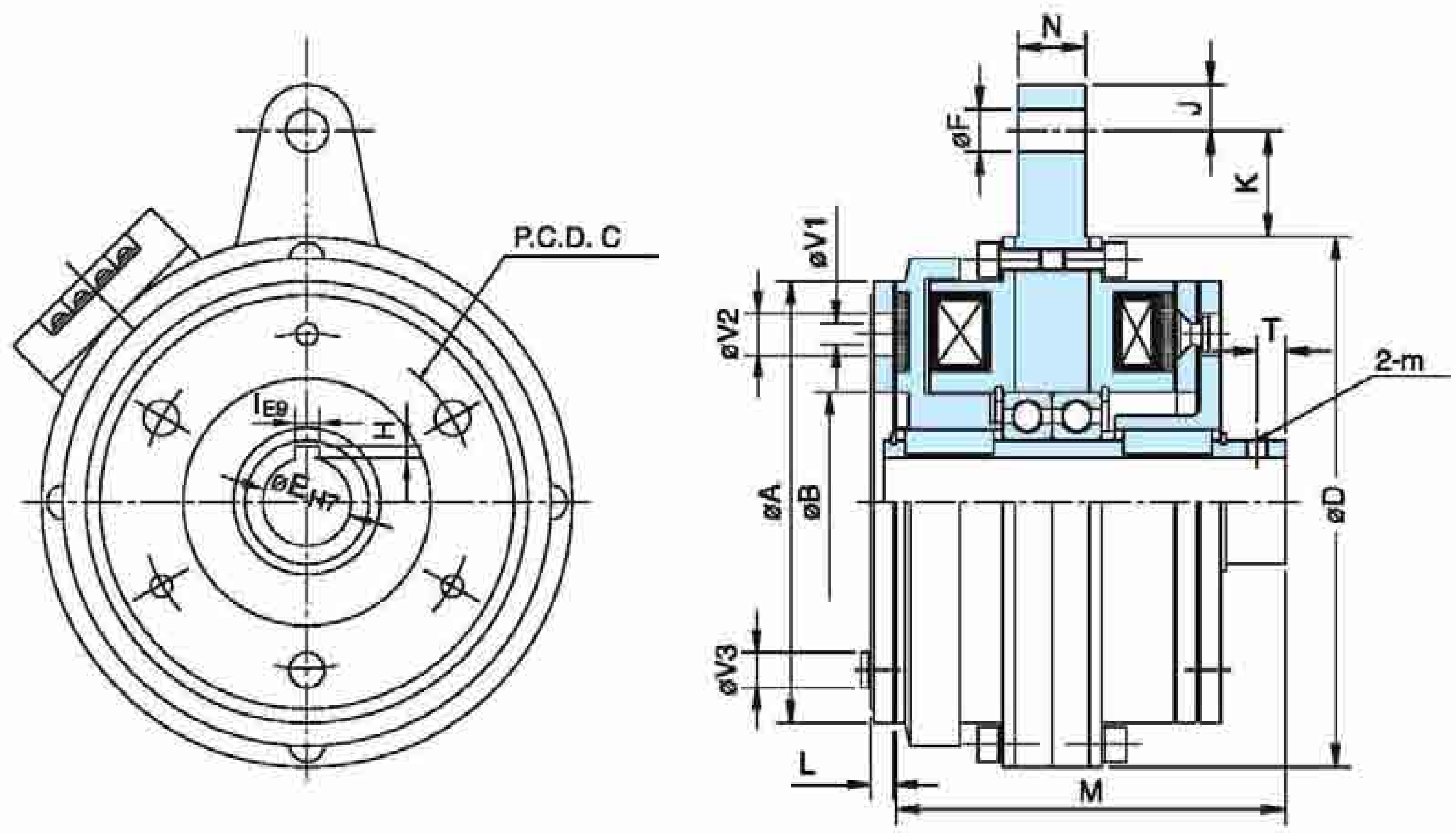
■It can be used for starting, stopping, positioning and high frequency starting.

構造 Construction



CDC Series

套筒式電磁離合、煞車器組 Sleeve-type Magnetic Clutch and Brake Combination



型 號 MODEL		CDC1S5AA	CDC2S5AA	CDC005AA	CDC010AA	CDC020AA	CDC040AA
靜摩擦轉距 Static Friction Torque	[kgm](Nm)	1.1(11)	2.2(22)	4.5(45)	9.0(90)	17.5(175)	35(350)
動摩擦轉距 Dynamic Friction Torque	[kgm](Nm)	1.0(10)	2.0(20)	4.0(40)	8.0(80)	16(160)	32(320)
功率 Power	[24V](W) at 20°C	15	20	25	35	45	60
徑方向 Radius	A	80	100	125	160	200	250
	B	42	52	62	80	100	124.5
	D	100	125	150	190	230	290
	F	10	10	12	15	18	21
	J	9	11	13	18	20	25
	K	20	25	30	37	44	50
	V1	3-4.1	3-5.1	3-6.1	3-8.1	3-10.2	4-12.2
	V2	3-8	3-10.5	3-12	3-15	3-18	4-22
	V3	3-7	3-9	3-10.5	3-14	3-17	4-19
軸方向 Shaft	C	60	76	95	120	158	210
	E	12	15	25	35	40	48
	H	1.8	2.3	3.3	3.8		
	I	4	5	7	10		12
	L	4.6	5.6	6.8	9.4	11.8	13
	M	97	107		148		148.3
	N	15	16	20			30
	T	8			12		
	m	M6			M8		
重量 Weight	(kg)				13.5	23	41.5
保護素子 Protective band		G80KD10		G80KD14			

CDD Dual Clutch Combination

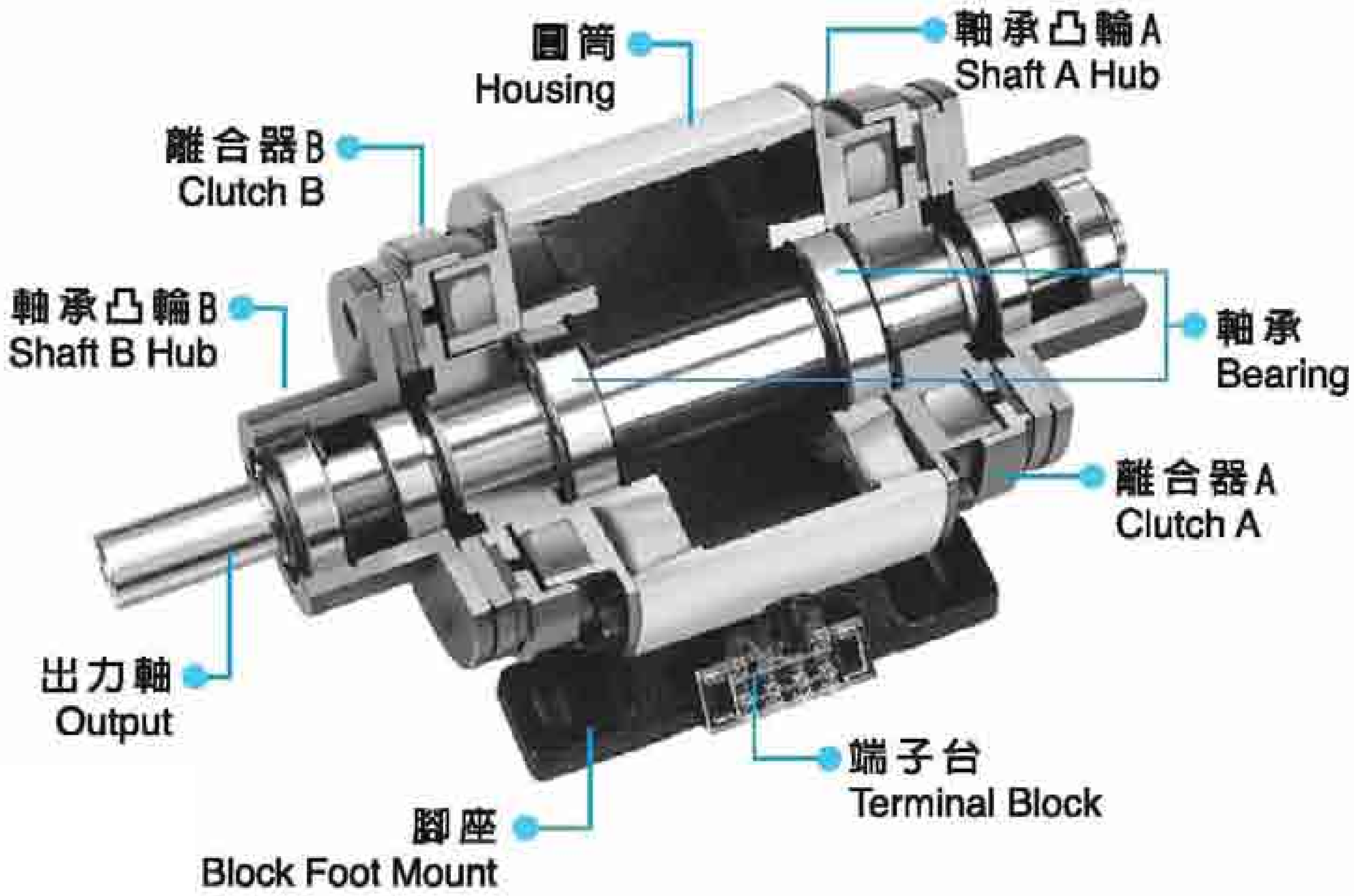
CDD 雙離合器組合體

■結構為開防式離合器2側出力軸1處
■Open-design dual clutch with one output shaft

■雙側的離合器轉子被固定在出力軸上而離合器的軸承凸輪在出入軸上，當右側的離合器通過電流時出力軸就會被帶動，當右側斷電時離合器就會分離，出入軸就停止。當左離合器通電時出力軸被帶動，左側斷電時離合器就會分離，出力軸就停止。
■Two-way clutch rotor is attached to the output shaft, and clutch bearing cam is on the output-input shaft. When the right side is energized the output-input shaft is driven and when current is cut to the right side it disengages so the output-input shaft stops. When the left side is energized the output-input shaft is driven, and when current to the left side is cut the clutch disengages and the output-input shaft stops.

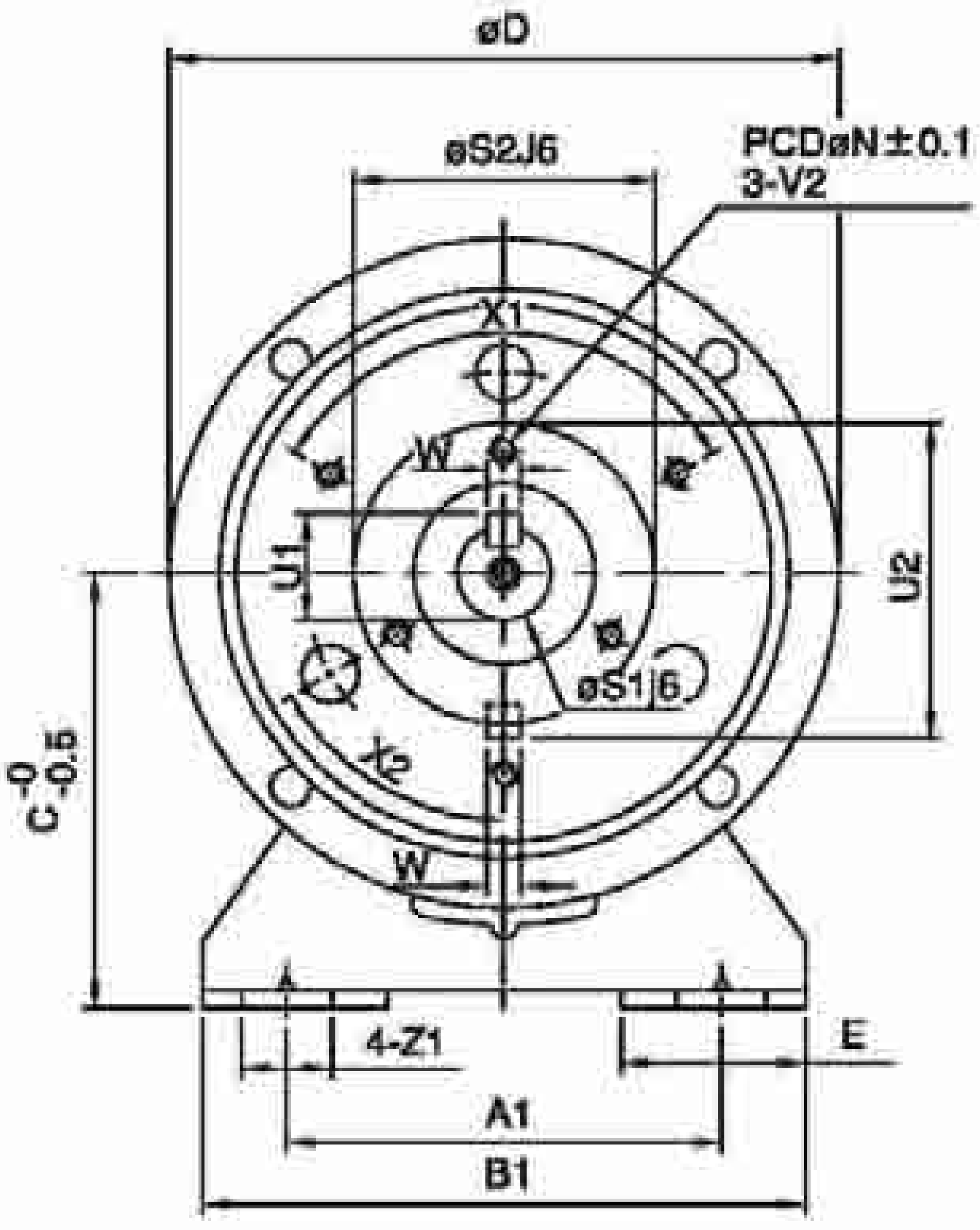
■此機種適用於2段變速組合，正反轉組合動力傳達分配。
■This unit can be used in two-speed applications or where bi-directional rotation is used to transmit power.

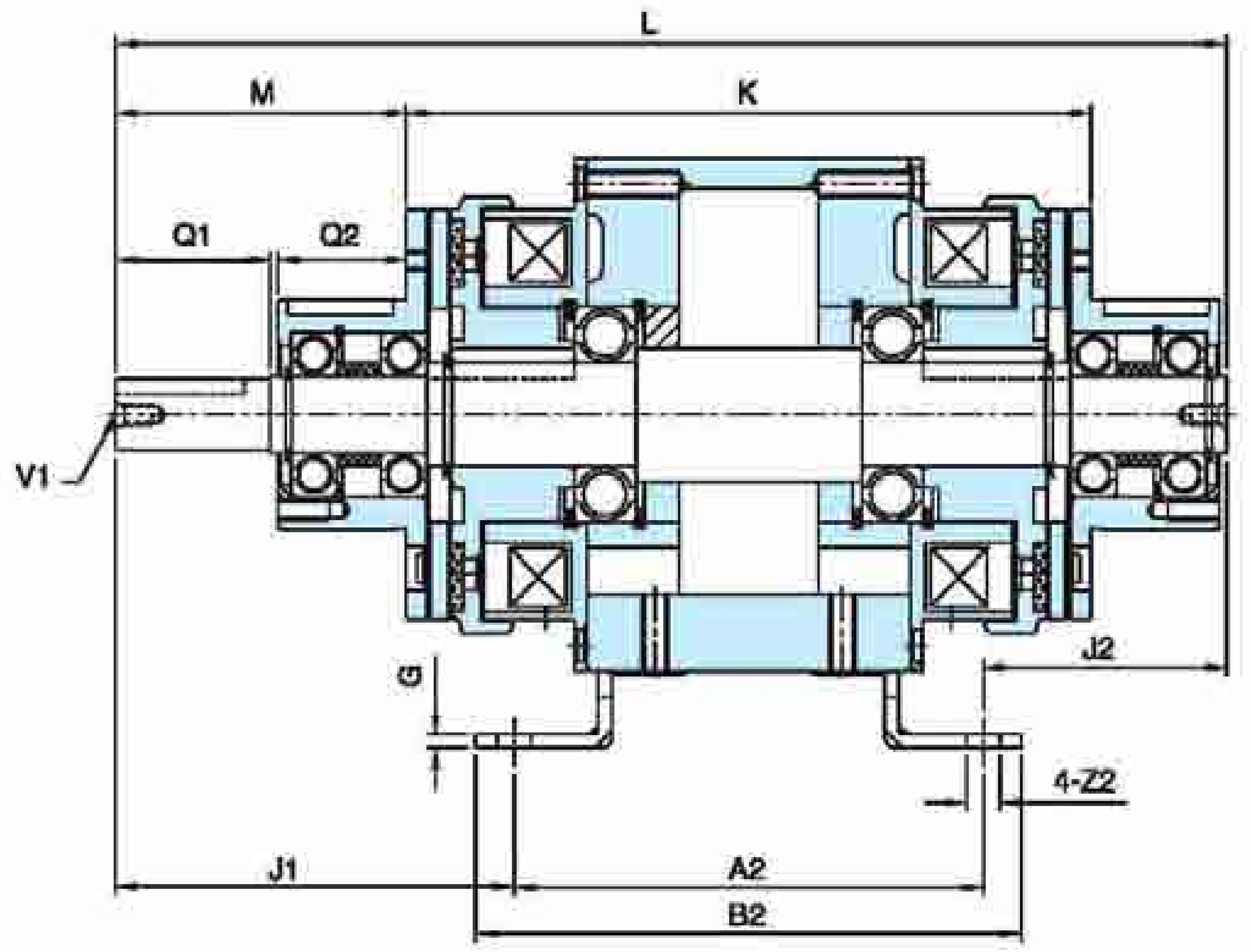
構造 Construction



CDD Series

雙電磁離合器組 Dual Magnetic Clutch Combination





型 號 MODEL		CDD0S6AA	CDD1S5AA	CDD2S5AA	CDD005AA	CDD010AA	CDD020AA	CDD040AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55(5.5)	1.1(11)	2.2(22)	4.5(45)	9(90)	17.5(175)	35(350)
功率 Power [24V](W) at 20℃		11	15	20	25	35	45	60
懸垂荷重 Suspended load (kgf)		14	25	45	70	100	180	260
徑方向 Radius	A2	75	91.4	110	135	160	200	240
	B2	95	106.4	130	160	185.5	230	270
	G	10	2.6	3.2	3.2	4.5	6	20
	J1	65.5	77.5	97.7	120.3	149.5	186.7	238
	J2	40.5	47.5	58.3	71.7	87.5	105.3	154
	K	111.5	133	161.4	191.6	233	289.4	350
	L	181	217	266	327	397	492	603
	M	46.5	56.5	72	92	113	142	183
	Q1	25	30	40	50	60	80	110
	Q2	20	25	30	40	50	60	70
	V1	M4*0.7P*8L		M6*1P*11L			M10*1.5P*17L	
	Z2	6.5	6.5	9	11	11.5	14	14
軸方向 Shaft	A1	52	65	80	105	135	155	195
	B1	80	90	110	140	175	200	240
	C	55	65	80	90	112	132	160
	D	80	100	125	150	190	230	290
	E	27.5	27.5	32.5	35	42	45	47
	N	33	37	47	52	62	74.5	101.5
	S1	11	14	19	24	28	38	42
	S2	38	45	55	64	75	90	115
	U1	12.5	16	21	27	31	41.5	45.5
	U2	39.5	47	57	67	78	93.5	118.5
	V2	M4*0.7P*6L		M4*0.7P*8L		M6*1P*12L		
	W	4	5		7		10	12
	X1	3-120°		4-90°				8-45°
	X2	60°		45°				22.5°
	Z1	13.5	13.5	15.5	20	24	28	28
重量 Weight (kg)		1.5	2.7	5.5	9.6	18.5	35	64
保護素子 Protective band		470KD07	GD80KD10		GD80KD14			

CFG Dual Clutch and Single Brake Combination

CFG 雙離合器單剎車組合體

■結構為開放式，入力2處，出力1處

■Open style with two input points and one output point

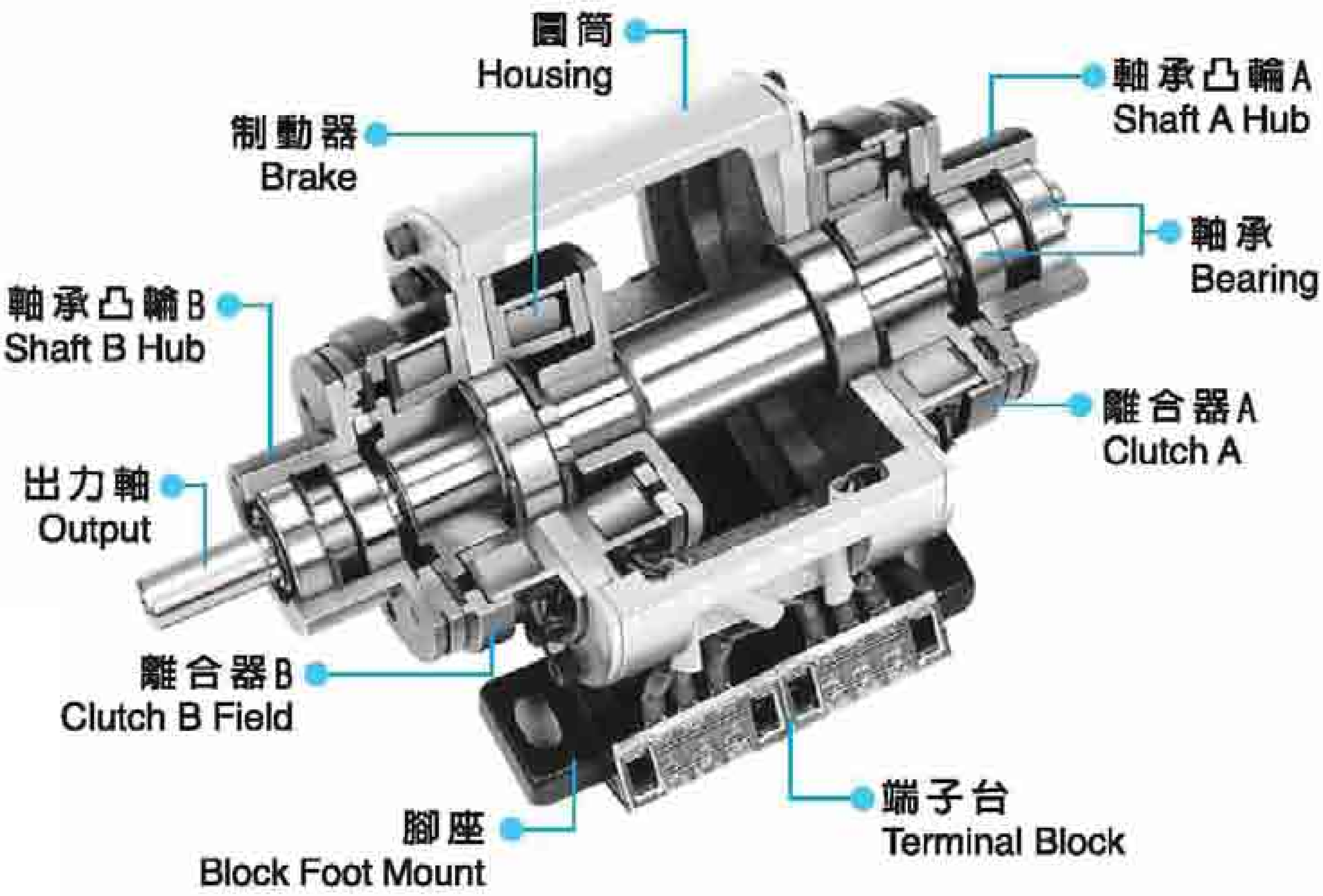
■雙側的離合器轉子及剎車器被固定在同一出力軸上而雙側的離合器軸承凸輪被鑲在出力軸上當右側離合器電流通過時右側的軸承凸輪帶動出力軸，當右側離合器斷電時，軸承凸輪與出力軸分離，剎車器通電流時出力軸停止。當左側離合器通電流時，左側的軸承凸輪帶動出力軸，當左側離合器斷電時，左側軸承凸輪與出力軸分離

■Dual clutch rotor and brake are fixed on the same output shaft, and a dual clutch bearing cam is attached to the output shaft. When the right side is energized the right bearing cam drives the output shaft, and when current to the right side is cut the bearing cam and output shaft separate. When the brake is energized the output shaft stops. When the left side is energized the left bearing cam drives the output shaft, and when power to the left side is cut the left bearing cam and the output shaft separate.

■此機種適用2段變速定位置停止，高頻率正逆轉，動力分配精確定位的傳動組合。

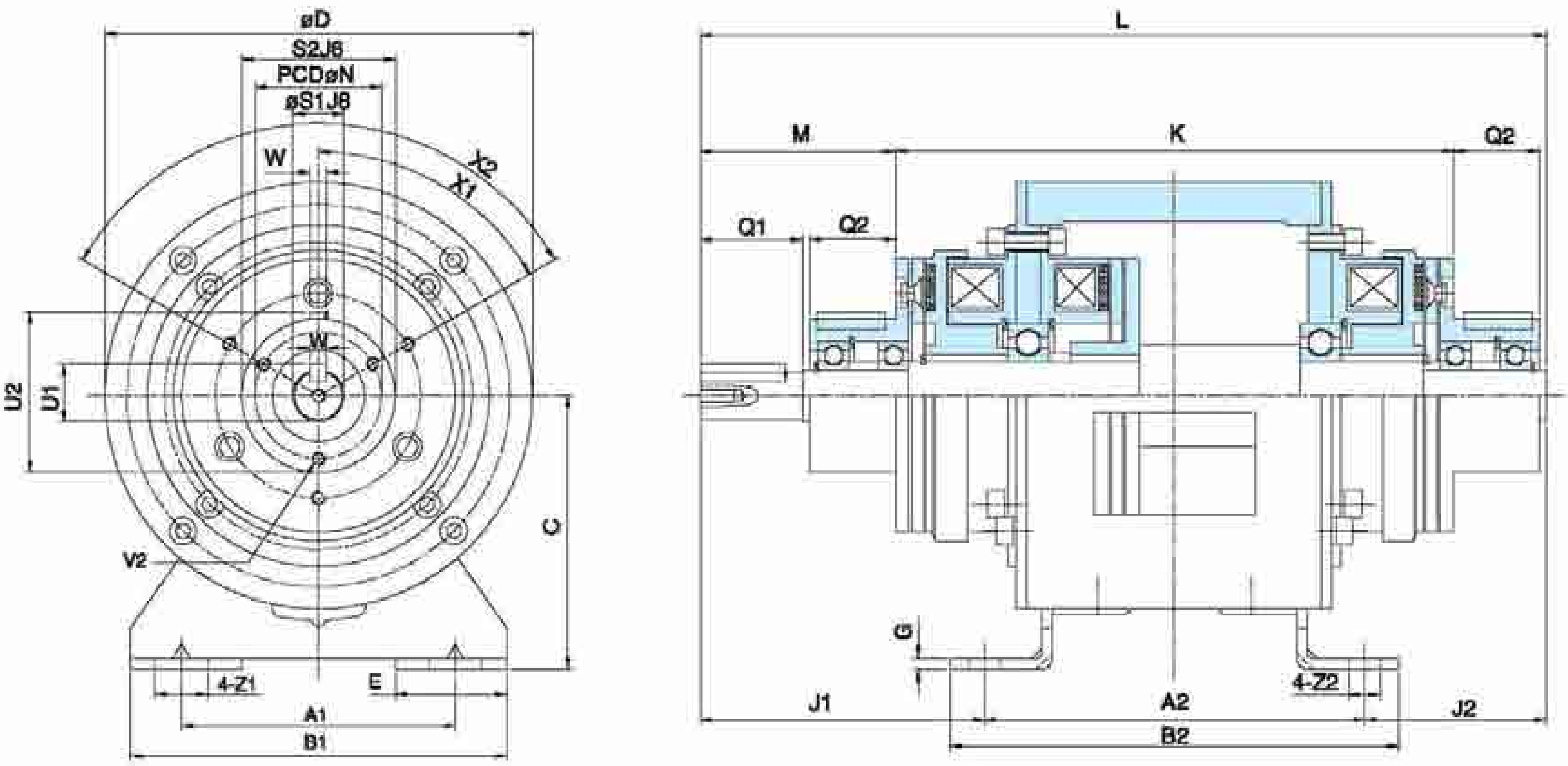
■This unit can be used for positioning and stopping in two-speed applications as well as high frequency and bi-directional rotation and precision positioning applications.

構造 Construction



CFG Series

外露式雙電磁離合器內單電磁煞車組 Exposed Dual Magnetic Clutch and Internal Single Magnetic Brake Combination



型 號 MODEL		CFG0S6AA	CFG1S5AA	CFG2S5AA	CFG005AA	CFG010AA	CFG020AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55(5.5)	1.1(11)	2.2(22)	4.5(45)	9(90)	17.5(175)
功率 Power [24V](W) at 20℃		11	15	20	25	35	45
懸垂荷重 Suspended load		14	25	45	70	100	180
徑方向 Radius	A2	91.4	110	135	157.5	200	240
	B2	106.4	130	160	183	230	270
	G	2.6	3.2	3.2	4.5	6	20
	J1	73	83.6	99.5	124	150	197
	J2	48	53.6	59.5	74	90	114
	K	142	163.2	190	222	272	348
	L	211	247.2	294	358	440	551
	M	47	57	72	93	114	143
	Q1	25	30	40	50	61	80
	Q2	20	25	30	40	50	60
	V1	M4*0.7P*8L		M6*1P*11L			M10*1.5P*17L
	Z2	6.5	9	11	11.5	14	14
軸方向 Shaft	A1	65	80	105	135	155	195
	B1	90	110	140	175	200	240
	C	65	80	90	112	132	160
	D	100	125	150	190	230	290
	E	27.5	32.5	35	42	45	47
	F	60	68	81	97	110	129
	N	33	37	47	52	62	74.5
	S1	11	14	19	24	28	38
	S2	38	45	55	64	75	90
	U1	12.5	16	21	27	31	41.5
	U2	39.5	47	57	67	78	93.5
	V2	3-M4*0.7P*4L	3-M4*0.7P*6L	4-M4*0.7P*8L		6-M5*0.8P*8L	4-M6*1P*12L
	W	4	5		7		10
	X1	3-120°		4-90°		6-60°	4-90°
	X2	60°		45°		30°	45°
	Z1	13.5	15.5	20	24	28	28
重量 Weight (kg)		4	6	9	17	29	58
保護素子 Protective band		470KD07	GD80KD10		GD80KD14		

CDN Clutch and Brake Combination

CDN 離合器剎車組合體

■為雙法蘭面入力1處，出力1處

■Flange surface with one input point and one output point

■離合器的轉子固定在入力軸，而離合器的電樞板與剎車被固定在出力軸上。當電流通過離合器時，出力軸被帶動，當離合器分離時，剎車有電流通過時，出力軸就停止

■The clutch rotor is fixed on the input shaft and the clutch armature is fixed on the output shaft. When the clutch is energized the output shaft is driven; and when the clutch is disengaged and the brake is energized, the output shaft stops.

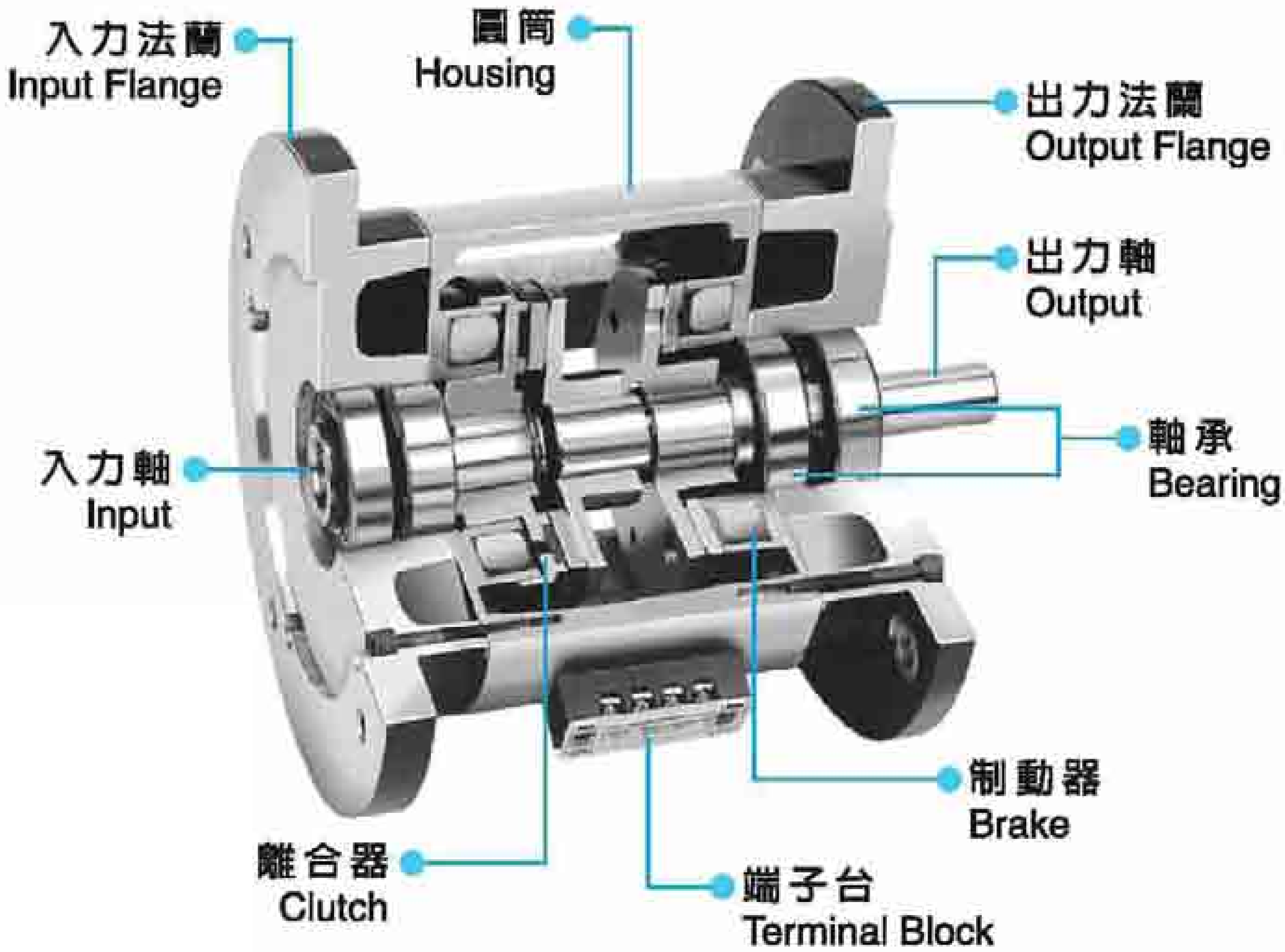
■此機種適用於馬達連結出力軸再連結減速機法蘭面配合IEC國際規格安裝容易不佔空間

■This unit can be used for connections motors to output shafts and gear reduction flange interfaces under IEC standards. The unit is compact and very easy to install.

■此機種用途：走動，停止、高頻運轉、定位、手動。

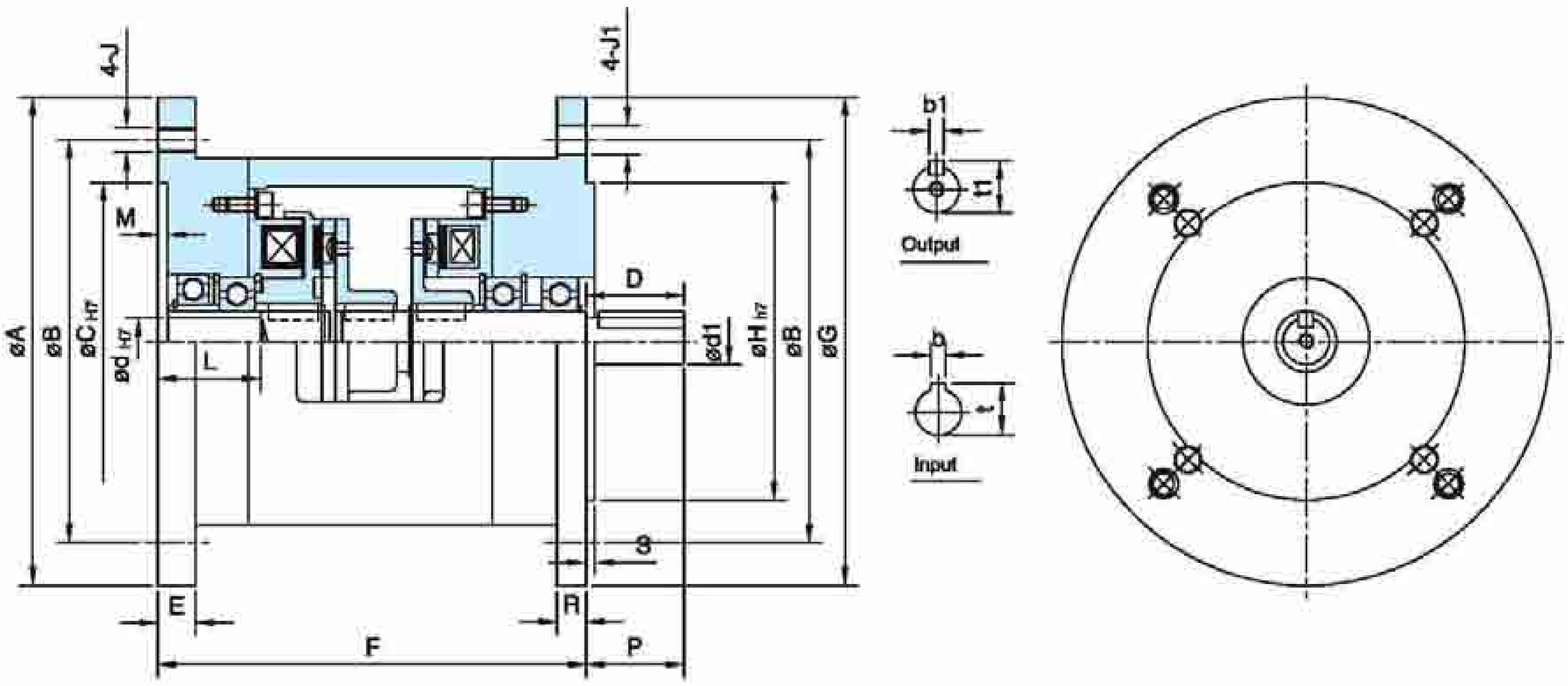
■Applications: start-up, stopping, high frequency operation, positioning, manual operation

構造 Construction



CDN Series

雙法蘭電磁離合、煞車器組 Dual-flange Magnetic Clutch-brake Combination



型 號 MODEL		CDN0S6AA	CDN1S5AA	CDN2S5AA	CDN005AA	CDN010AA	CDN020AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55(5.5)	1.1 (11)	2.2 (22)	4.5 (45)	9.0 (90)	17.5 (175)
動摩擦轉距 Dynamic Friction Torque [kgm](Nm)		0.5(5.0)	1.0 (10)	2.0 (20)	4.0 (40)	8.0 (90)	16.0 (160)
功率 Power [24V](W) at 20℃		11	15	20	25	35	45
徑方向 Radius	A	160	160	200	200	250	300
	B	130	130	165	165	215	265
	C	110	110	130	130	180	230
	H	110	110	130	130	180	230
	J	M8		M10		M12	
	J1	10		12		14	15
	d	11	14	19	24	28	38
	d1	11	14	19	24	28	38
	D	25	30	40	50	60	80
軸方向 Shaft	E	12		15.5	14	12.3	17
	F	131	150	175.5	241.5	285	430
	L	29	30	40	50	66	81
	M	3.5	4	4	4	4.5	6
	P	25	30	39.45	48.5	60.75	80
	R	9	9.5	12	10.5	9.5	13
	S	3	3	3.5		4.5	4
	b	4	5	6	8		10
	t	13	16.5	22	27.5	32	41.8
	b1	4	5	6	8		10
	t1	12.5	16	21.5	27	31	41.5
重量 Weight (kg)		2.5	4.8	8.5	14	24	47
保護素子 Protective band		470KD07	G80KD10		G80KD14		

CDM Clutch and Brake Combination

CDM型 離合器剎車組合體

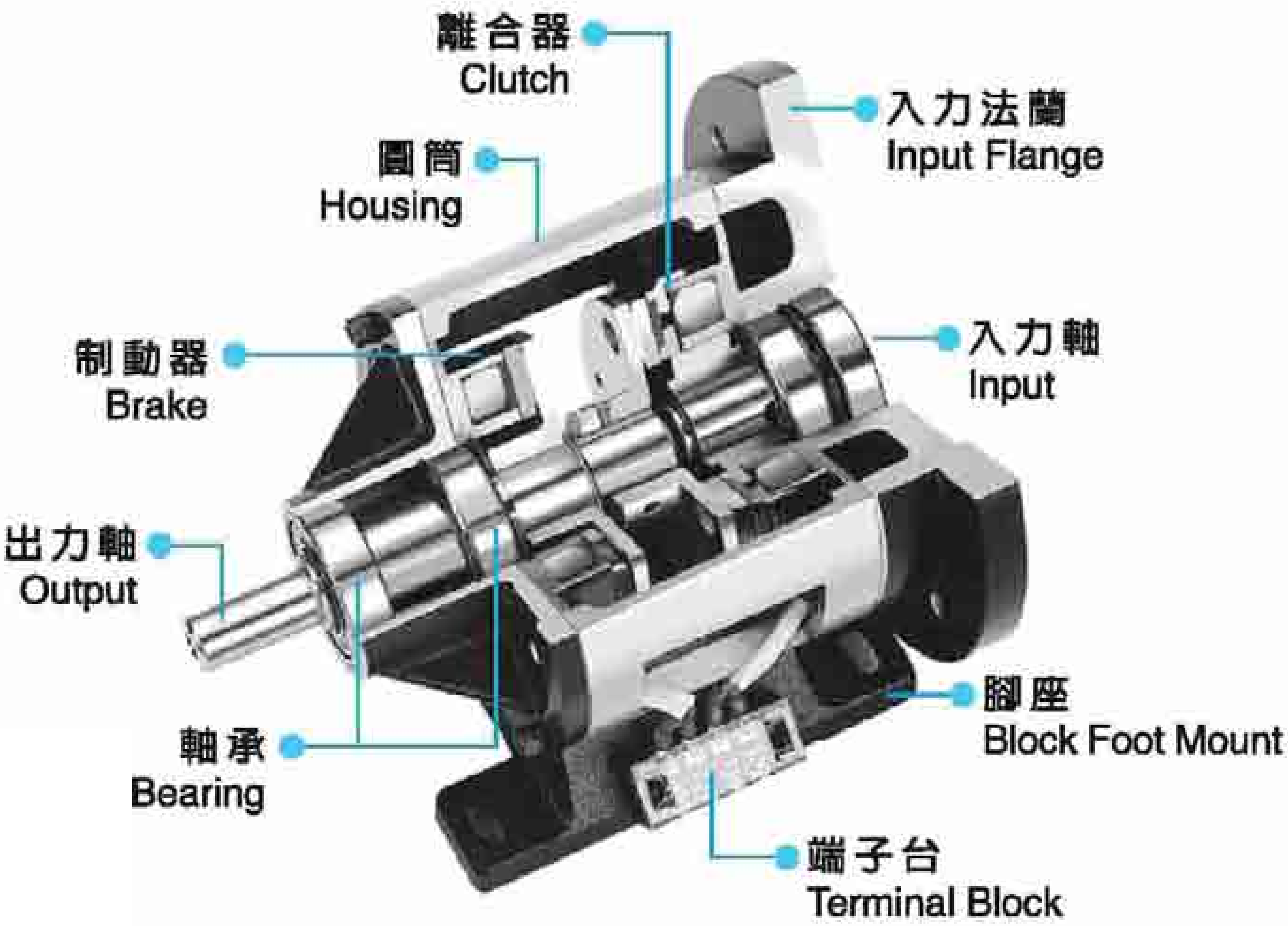
■為單法蘭面入力1處，出力1處
■Single FA LAN surface with one input point and one output point

■離合器的轉子固定在入力軸，而離合器的電樞板與剎車被固定在出力軸上。
當電流通過離合器時，出力軸被帶動，當離合器分離時，剎車有電流通過時，出力軸就停止
■The clutch rotor is fixed on the input shaft while the clutch armature and brake are fixed on the output shaft. When the clutch is energized the output shaft is driven; and when the clutch is disengaged and the brake is energized, the output shaft stops.

■此機種適用於馬達直接連結，法蘭面配合IEC國際規格安裝容易不佔空間。
■This unit can be used in dual drive motors with IEC standard flange interfaces. The unit is compact and easy to install.

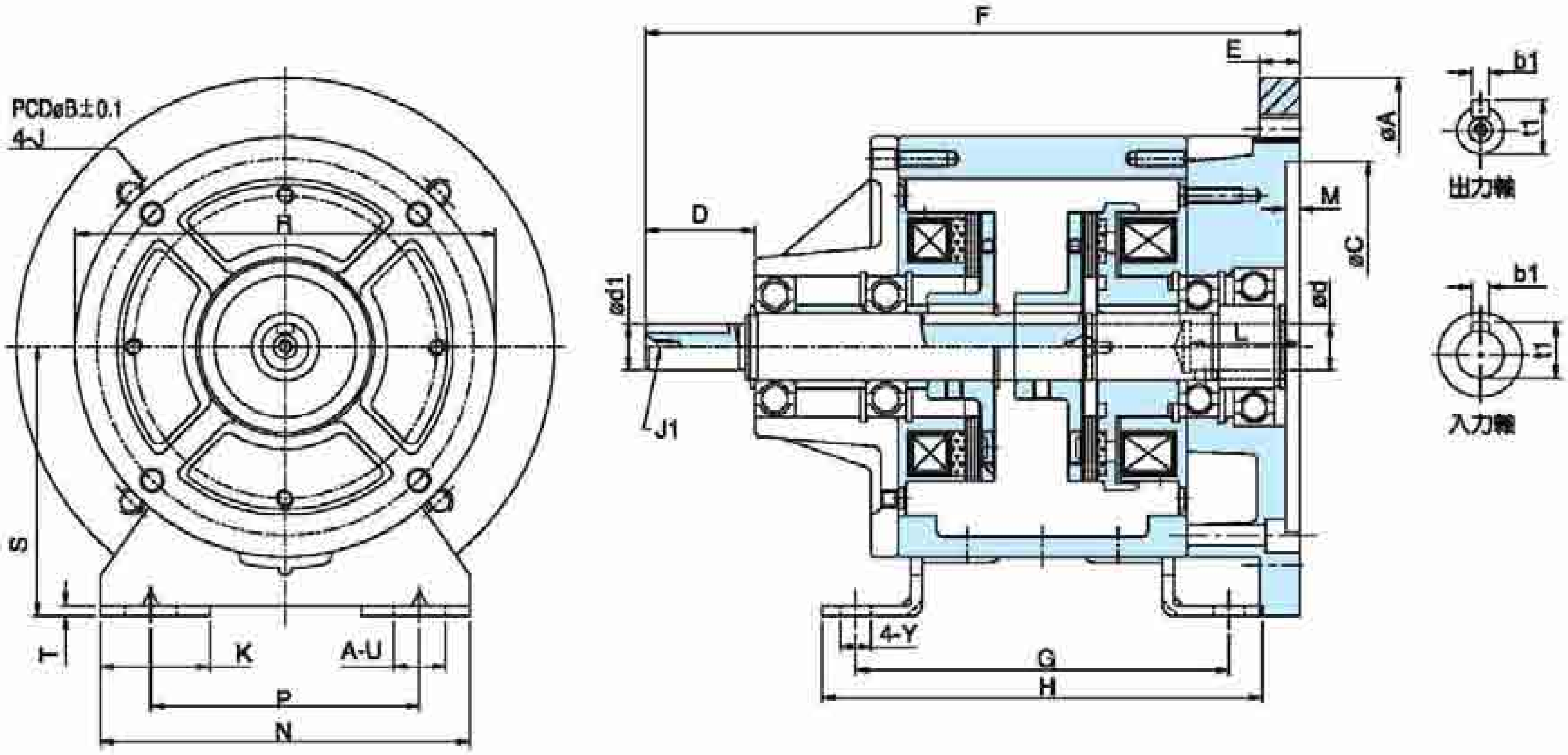
■此機種用途：高頻運轉、定位、手動、起動停止。
■Applications: high speed rotation, positioning, manual operation, starting and stopping

構造 Construction



CDM Series

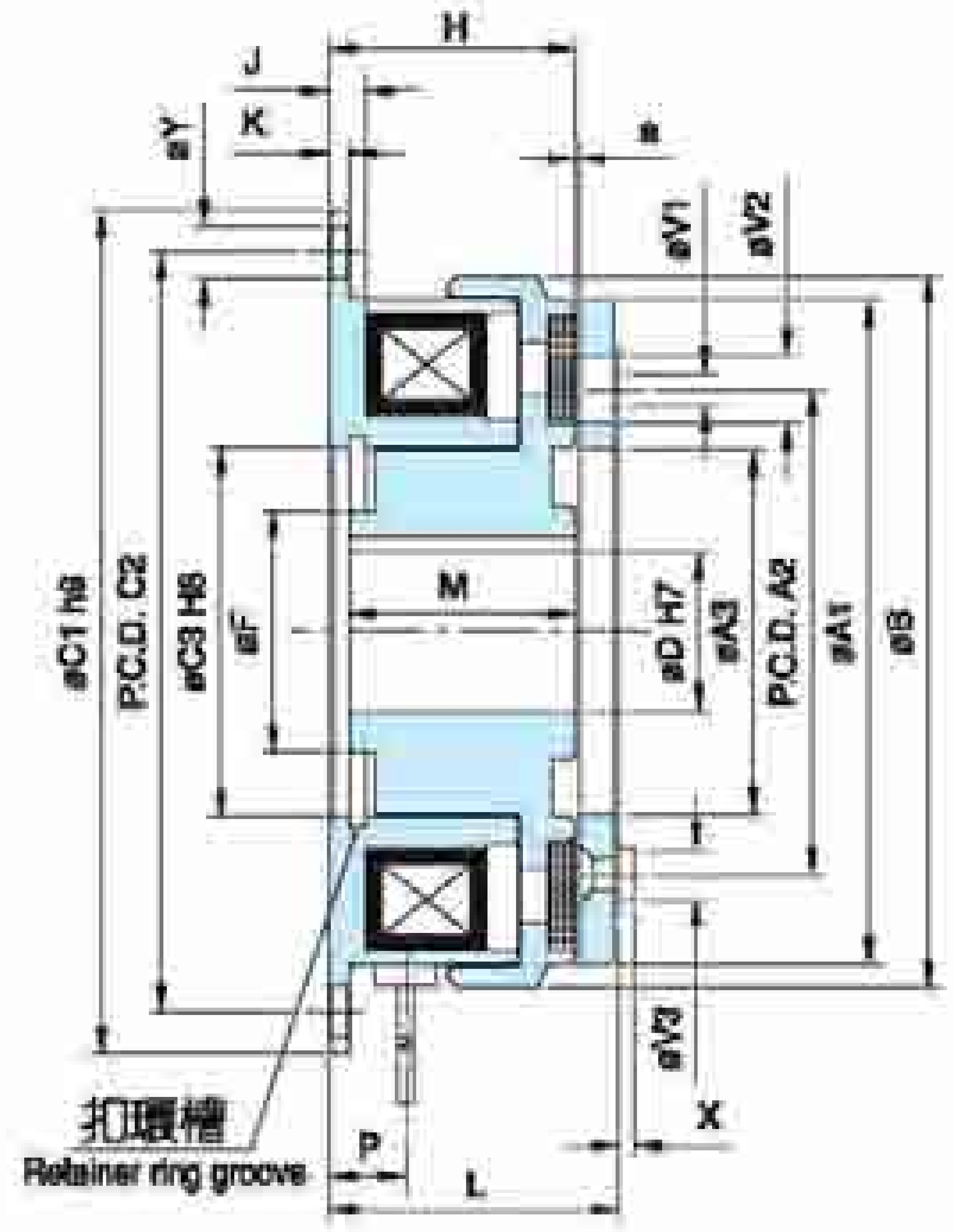
單法蘭電磁離合、煞車器組 Single-flange Magnetic Clutch-brake Combination

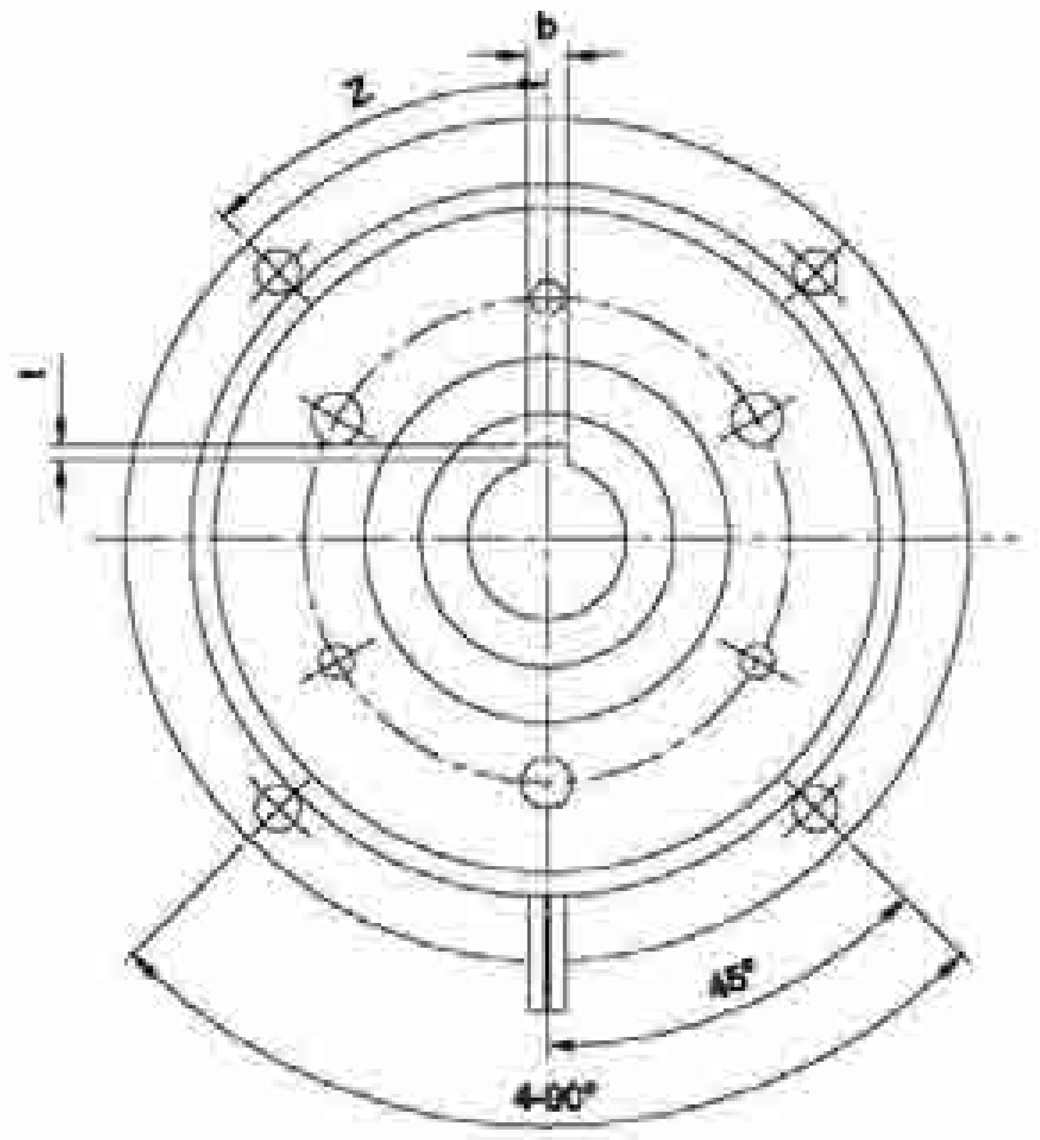


型 號 MODEL		CDM0S6AA	CDM1S5AA	CDM2S5AA	CDM005AA	CDM010AA	CDM020AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55(5.5)	1.1(11)	2.2(22)	4.5(45)	9.0(90)	17.5(175)
動摩擦轉距 Dynamic Friction Torque [kgm](Nm)		0.5(5.0)	1.0(10)	2.0(20)	4.0(40)	8.0(80)	16.0(160)
功率 Power [24V](W) at 20°C		11	15	20	25	35	45
徑方向 Radius	A	160	160	200	200	250	300
	B	130	130	165	165	215	265
	C	110	110	130	130	180	230
	J	M8		M10		M12	
	J1	M4*0.7P*8L		M6*1P*11L			M10*1.5P*17L
	R	100	125	150	190	230	290
	S	65	80	90	112	132	160
	T	2.6	3.2	3.2	4.5	6	20
	d	11	14	19	24	28	38
	d1	11	14	19	24	28	38
軸方向 Shaft	D	27.5	32.7	42.6	52.95	64.1	84
	E	12		15.5	14	12.5	17
	F	160.5	194.7	234.6	310.5	389.1	525
	G	90	110	135	57.5	200	240
	H	105	130	160	183	230	270
	K	27.5	32.5	35	42	45	47
	L	29	32.5	41.2	54.25	71.25	85
	M	3.5	4	4	4	4.5	6
	N	90	110	140	175	200	240
	P	65	80	105	135	155	195
	U	13.5	15.5	20	24	28	28
	Y	6.5	9	11	11.5	14	
	Z	47.5	62.7	80	109.2	145.1	188
	b	4	5	6	8		10
	t	13	16.5	22	27.5	32	41.8
	b1	4	5	5	7		10
	t1	12.5	16	21	27	31	41.5
重量 Weight (kg)		2.6	5	9	15	25	48
保護素子 Protective band		470KD07	GD80KD10		GD80KD14		

CDF Series

乾式單板電磁離合器-突圓固定型 Dry Single-plate Magnetic Clutch, Fixed-cylinder



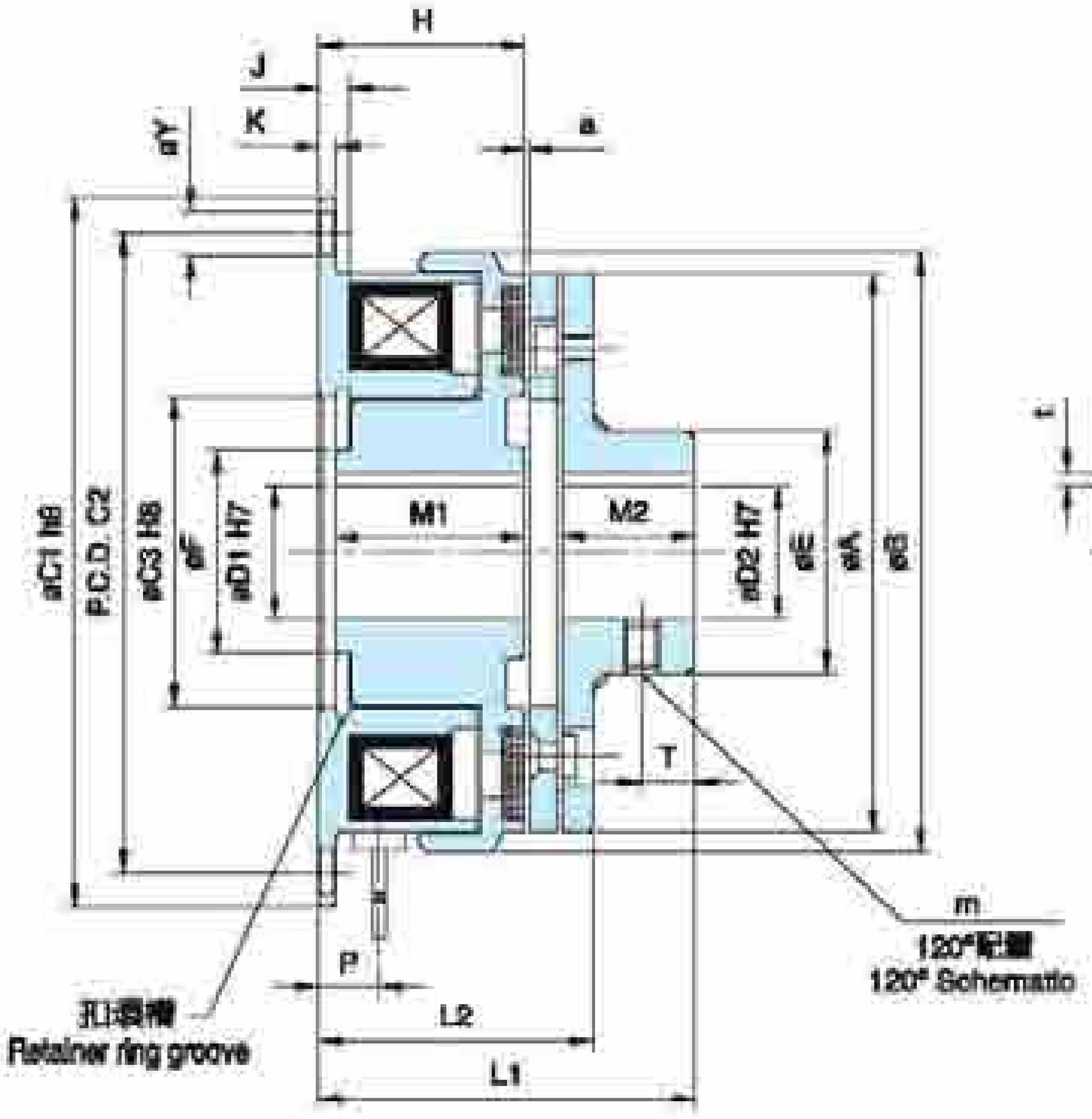


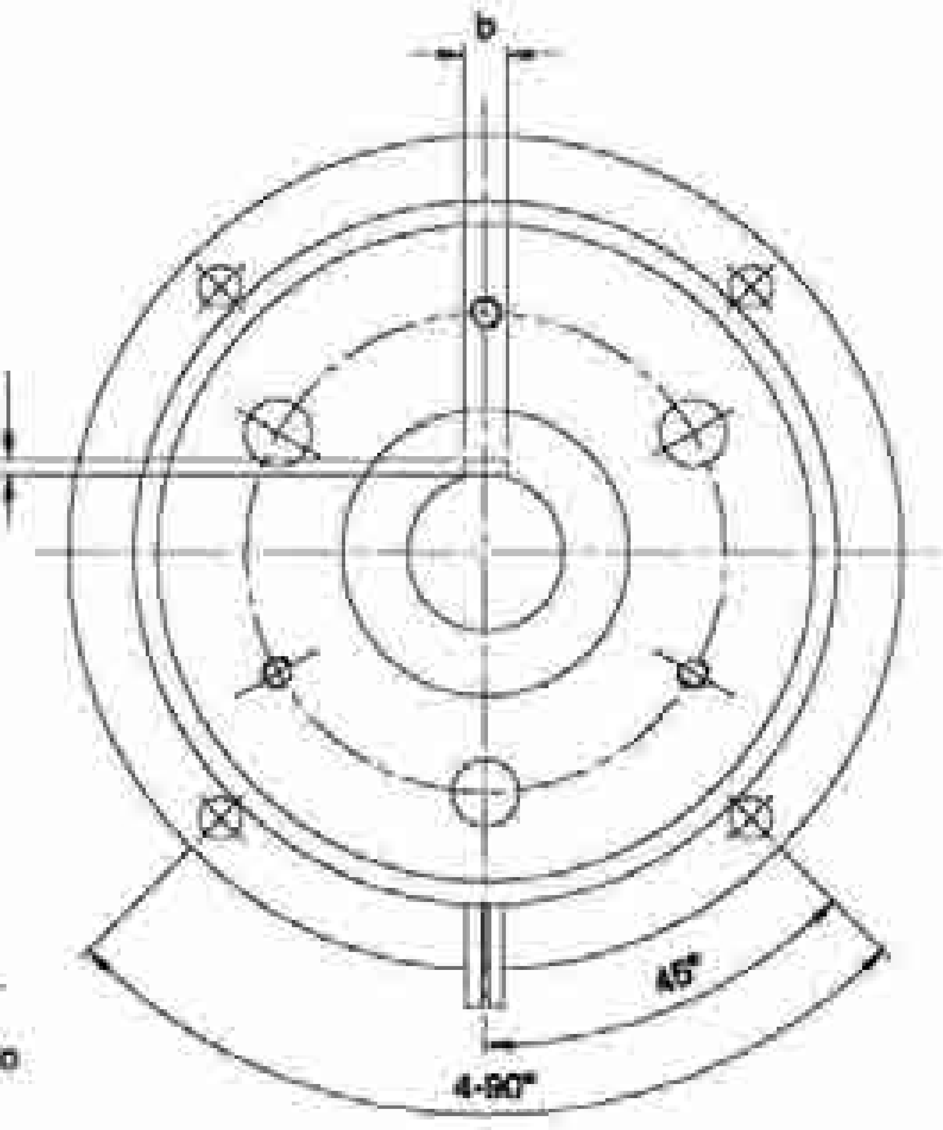
型號 MODEL		CDF0S6AA	CDF1S5AA	CDF2S5AA	CDF005AA	CDF010AA	CDF020AA	CDF040AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55(5.5)	1.1(11)	2.2(22)	4.5(45)	9(90)	17.5(175)	35(350)
動摩擦轉距 Dynamic Friction Torque [kgm](Nm)		0.5(5.0)	1.0(10)	2.0(20)	4(40)	8(80)	16(160)	32(320)
功率 Power [24V](W) at 20℃		11	15	20	25	35	45	60
徑方向 Radius	A1	63	80	100	125	160	200	250
	A2	46	60	76	95	120	158	210
	A3	34.5	41.8	52	62	80	99.5	125
	B	67.5	85	106	133	169	212.5	264
	C1	80	100	125	150	190	230	290
	C2	72	90	112	137	175	215	270
	C3	35	42	52	62	80	100	125
	D	12 / 15	15 / 20	20 / 25	25 / 30	30 / 40	40 / 50	50 / 60
	F	23	288	40	45	62	77	100
	V1	3-3.1	3-4.1	3-5.1	3-6.1	3-8.1	3-10.2	4-12.2
	V2	3-6.3	3-8	3-12	3-12.5	3-15	3-17.3	4-20.8
	V3	3-6	3-6	3-7.5	3-9.8	3-13	3-18	4-23
	Y	5	6	7	7	9.5	9.5	11.5
	Z	6-60°						8-45°
軸方向 Shaft	H	24	26.5	30	33.5	37.5	44	51
	J	3.5	4.3	5	5.5	6	7	7.85
	K	2	2.5	3	3.5	4	5	6
	L	28.05	31.3	35.9	8	47	56.2	64.47
	M	22	24.1	27	30	33	40.15	47.15
	P	7.5	9.5	8.9	9.5	9.5	10.5	15.5
	X	1.5	1.4	1.7	2	2.5	5.7	6.4
	a	0.2 (±0.05)			$0.3\left(^{+0.05}_{-0.1}\right)$		$0.5\left(^{0}_{-0.2}\right)$	
	b	4 / 5	5 / 5	5 / 7	7 / 7	7 / 10	10 / 12	12 / 15
	t	1.8 / 2.3	2.3 / 2.3	2.3 / 3.3	3.3 / 3.3	3.3 / 3.8	3.8 / 3.8	3.8 / 5.3
重量 Weight (kg)		0.46	0.83	1.5	2.76	5.1	9.3	17
保護素子 Protective band		470KD07	GD80KD10		GD80KD14			

CF1 Series

乾式單板電磁離合器-突圓固定型 Dry Single-plate Magnetic Clutch, Fixed-cylinder

附導座 with plating hub



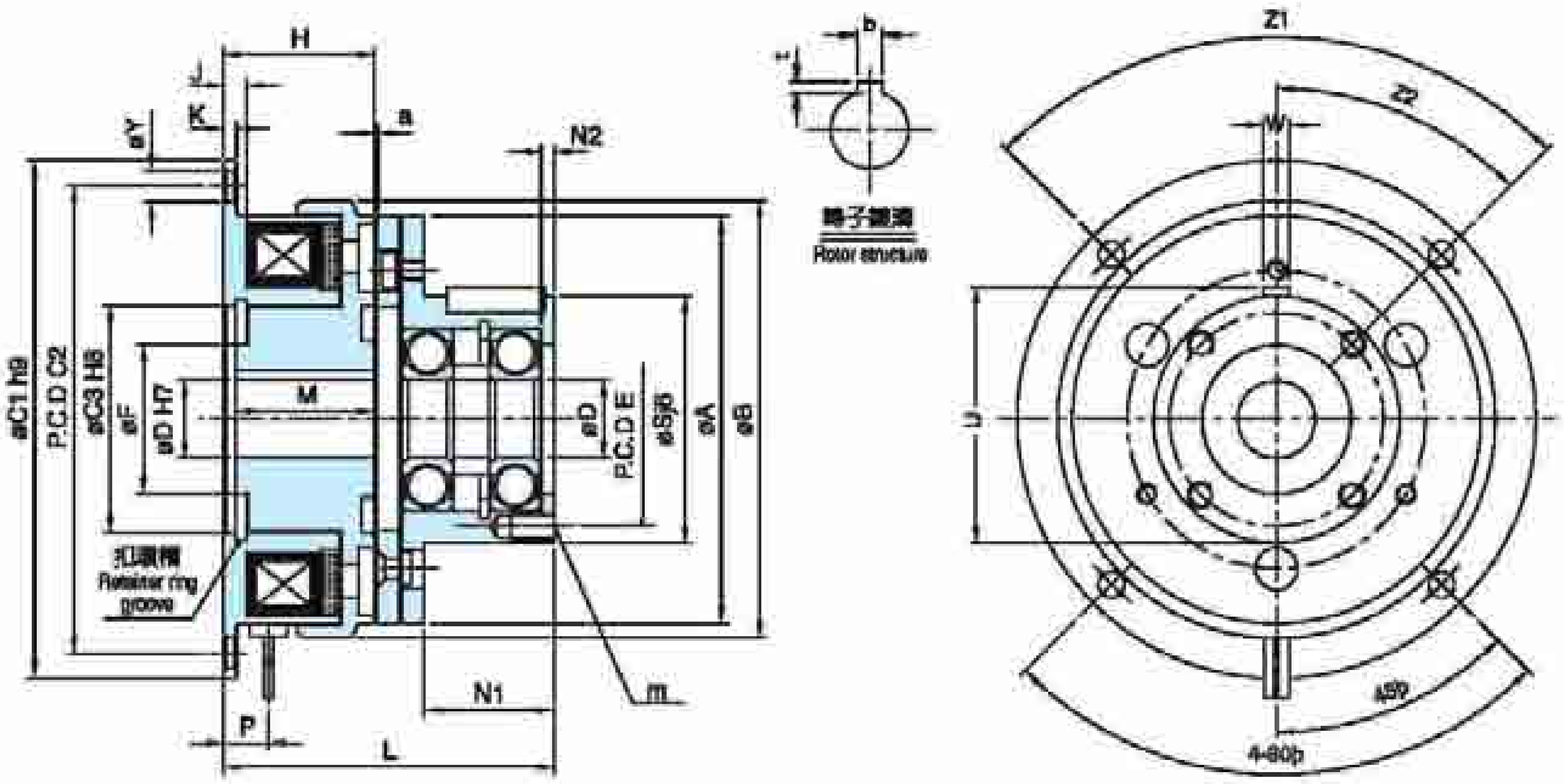


型 號 MODEL		CF10S6AA		CF11S5AA		CF12S5AA		CF1005AA		CF1010AA		CF1020AA		CF1040AA	
靜摩擦轉距 Static Friction Torque	[kgm](Nm)	0.55(5.5)		1.1(11)		2.2(22)		4.5(45)		9(90)		17.5(175)		35(350)	
動摩擦轉距 Dynamic Friction Torque	[kgm](Nm)	0.5(5.0)		1.0(10)		2.0(20)		4(40)		8(80)		16(160)		32(320)	
功率 Power	[24V](W) at 20℃	11		15		20		25		35		45		60	
徑方向 Radius	A	63		80		100		125		160		200		250	
	B	67.5		85		106		133		169		212.5		264	
	C1	80		100		125		150		190		230		290	
	C2	72		90		112		137		175		215		270	
	C3	35		42		52		62		80		100		125	
	D1	12	15	15	20	20	25	25	30	30	40	40	50	50	60
	D2	12	15	15	20	20	25	25	30	30	40	40	50	50	60
	E	27.5		31		41		49		65		83		105	
	F	23		28		40		45		62		77		100	
	Y	5		6		7		7		9.5		9.5		11.5	
軸方向 Shaft	H	24		26.5		30		33.5		37.5		44		51	
	J	3.5		4.3		5		5.5		6		7		8	
	K	2		2.5		3		3.5		4		5		6	
	L1	43.05		51.3		60.9		70.8		85		101.2		118.5	
	L2	31.55		35.3		40.9		46.8		54		65.2		75.47	
	M1	22		24.1		27		30		34		40.15		47.15	
	M2	15		20		25		30		38		45		54	
	P	7.5		9.5		8.9		9.5		9.5		10.5		15.5	
	T	6		8		10		12		14		18		22	
	m	2-M4		2-M5				2-M6		2-M8				2-M10	
	a	0.2 (±0.05)						0.3 ($^{+0.05}_{-0.1}$)				0.5 ([illegible])			
	b	4	5	5	5	5	7	7	7	7	10	10	12	12	15
	t	1.8	2.3	2.3	2.3	2.3	3.3	3.3	3.3	3.3	3.8	3.8	3.8	3.8	5.3
重量 Weight	(kg)	0.5		0.91		1.66		3.05		5.4		10.5		18.7	
保護素子 Protective band		470KD07		G80KD10				GD80KD14							

CF2 Series

乾式單板電磁離合器-突圓固定型 Dry Single-plate Magnetic Clutch, Fixed-cylinder

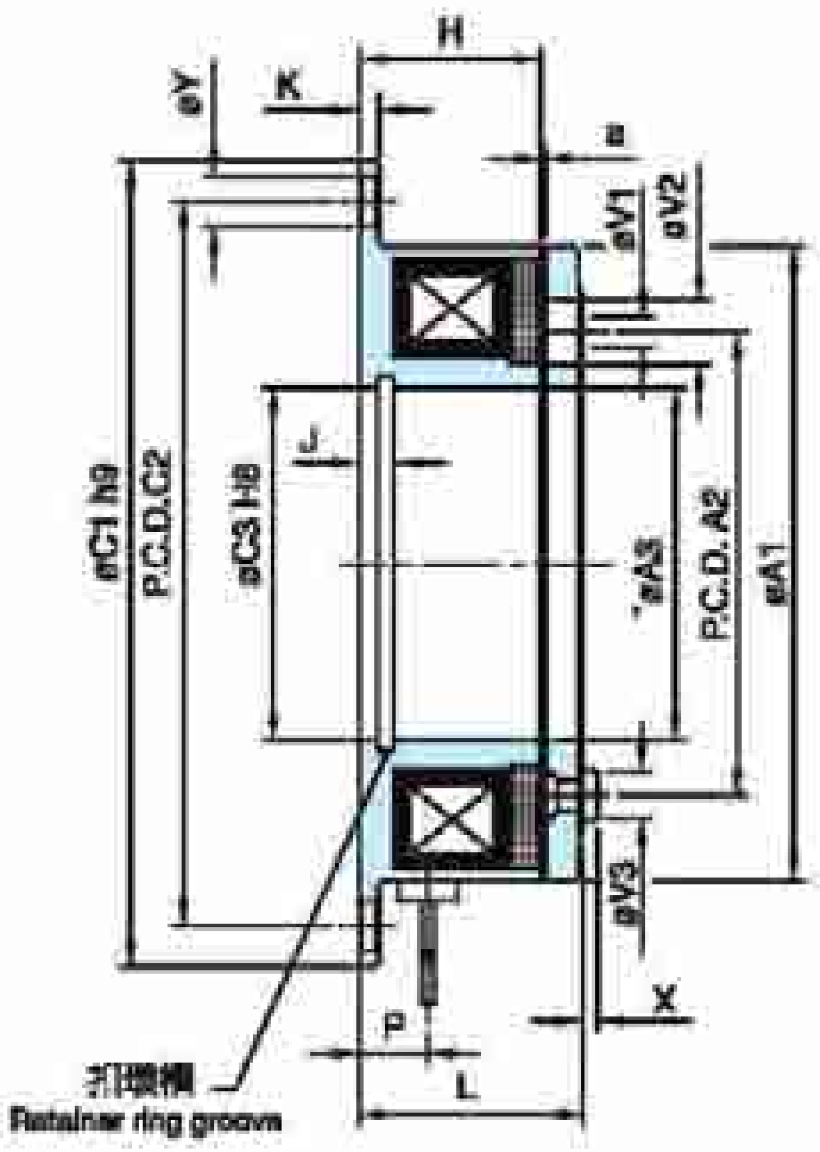
附軸承導座 with bearing plating hub

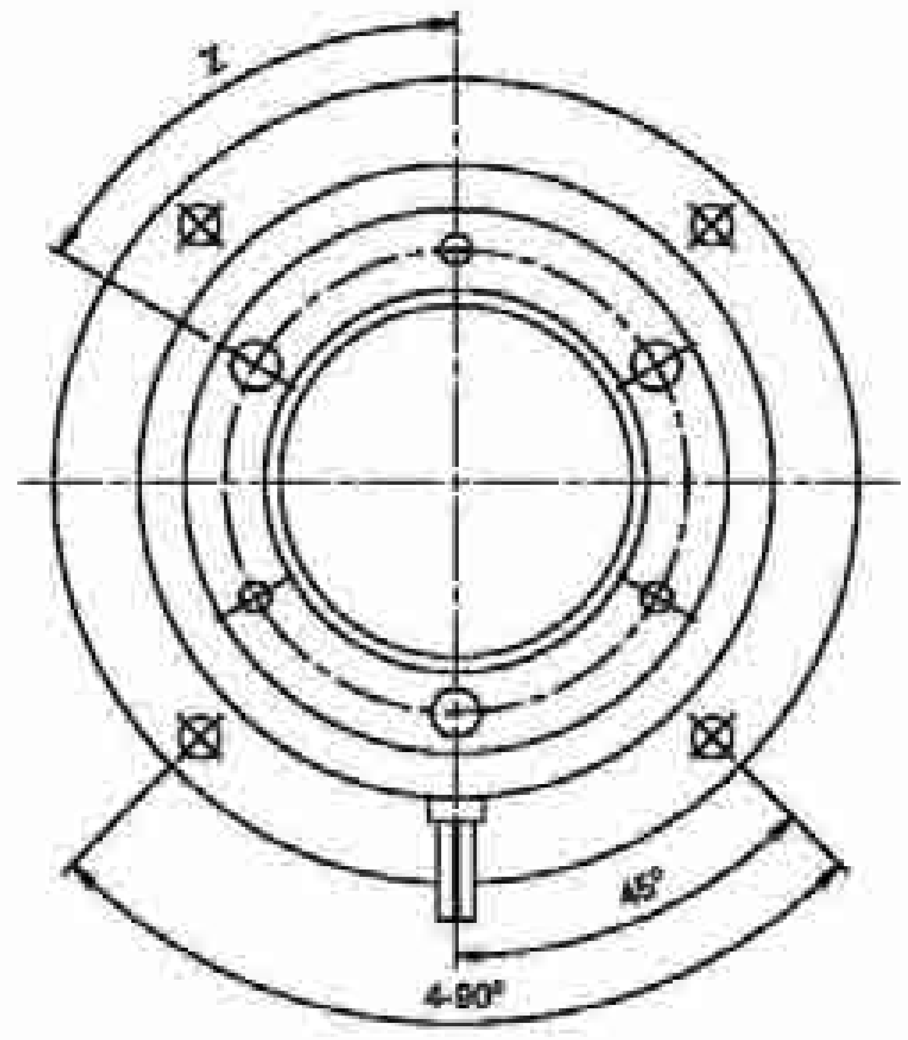


型號 MODEL		CF20S6AA	CF21S5AA	CF22S5AA	CF2005AA	CF2010AA	CF2020AA	CF2040AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55(5.5)	1.1(11)	2.2(22)	4.5(45)	9(90)	17.5(175)	35(350)
動摩擦轉距 Dynamic Friction Torque [kgm](Nm)		0.5(5.0)	1.0(10)	2.0(20)	4(40)	8(80)	16(160)	32(320)
功率 Power [24V](W) at 20℃		11	15	20	25	35	45	60
徑方向 Radius	A	63	80	100	125	160	200	250
	B	67.5	85	106	133	169	212.5	264
	C1	80	100	125	150	190	230	290
	C2	72	90	112	137	175	215	270
	C3	35	42	52	62	80	100	125
	D	12	15	20	25	30	40	50
	E	33	37	47	52	62	74.5	101.5
	F	23	28	40	45	62	77	100
	S	38	45	55	64	75	90	115
	U	39.5	47	57	67	78	93.5	118.5
	Y	5	6	7	7	9.5	9.5	11.5
軸方向 Shaft	H	24	26.5	30	33.5	37.5	44	51
	J	3.5	4.3	5	5.5	6	7	8
	K	2	2.5	3	3.5	4	5	6
	L	51.55	60.3	70.9	86.8	104	124.2	145.5
	M	22	24.1	27	30	34	39.15	47.15
	N1	20	25	30	40	50	60	70
	N2	2	2.5	3	2	3	5	6
	P	7.5	9.5	8.9	9.5	9.5	10.5	15.5
	W	4	5	5	7	7	10	12
	Z1	3-120°		4-90°		6-60°	4-90°	8-45°
	Z2	60°	60°	45°	45°	30°	45°	225°
	m	3-M4*0.7P*4L	3-M4*0.7P*6L	4-M4*0.7P*8L		6-M5*0.8P*8L	4-M6*1P*12L	8-M6*1P*12L
	a	0.2 (± 0.05)			0.3 ($^{+0.05}_{-0.1}$)		0.5 ($^{0}_{-0.2}$)	
	b	4	5	5	7	7	10	12
	t	1.8	2.3	2.3	3.3	3.3	3.8	3.8
重量 Weight (kg)		0.66	1.19	2.11	3.8	6.9	13	23.6
保護素子 Protective band		470KD07	GD80KD10		GD80KD14			

CDG Series

乾式單板電磁煞車器 Dry Single-plate Magnetic Brake



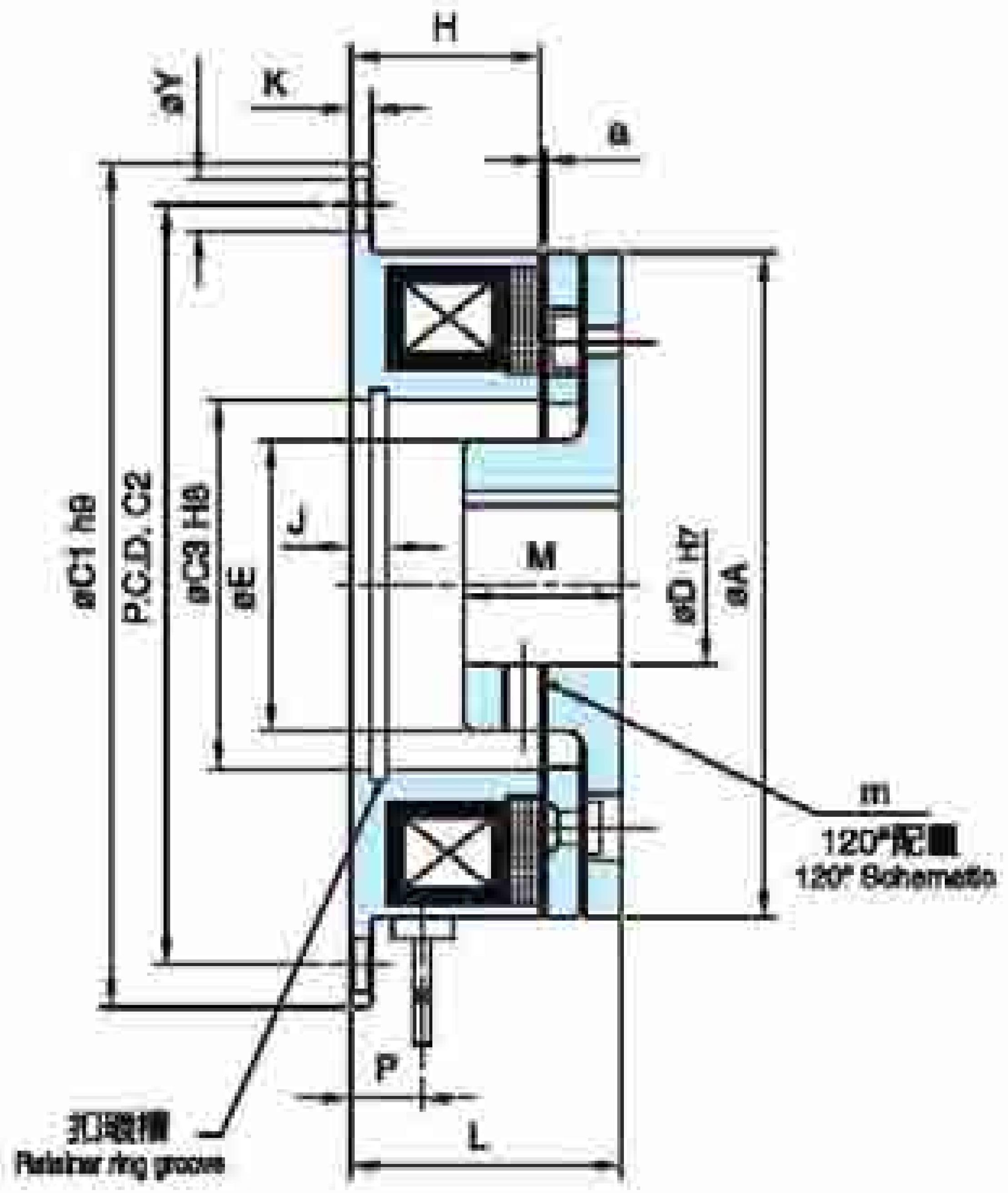


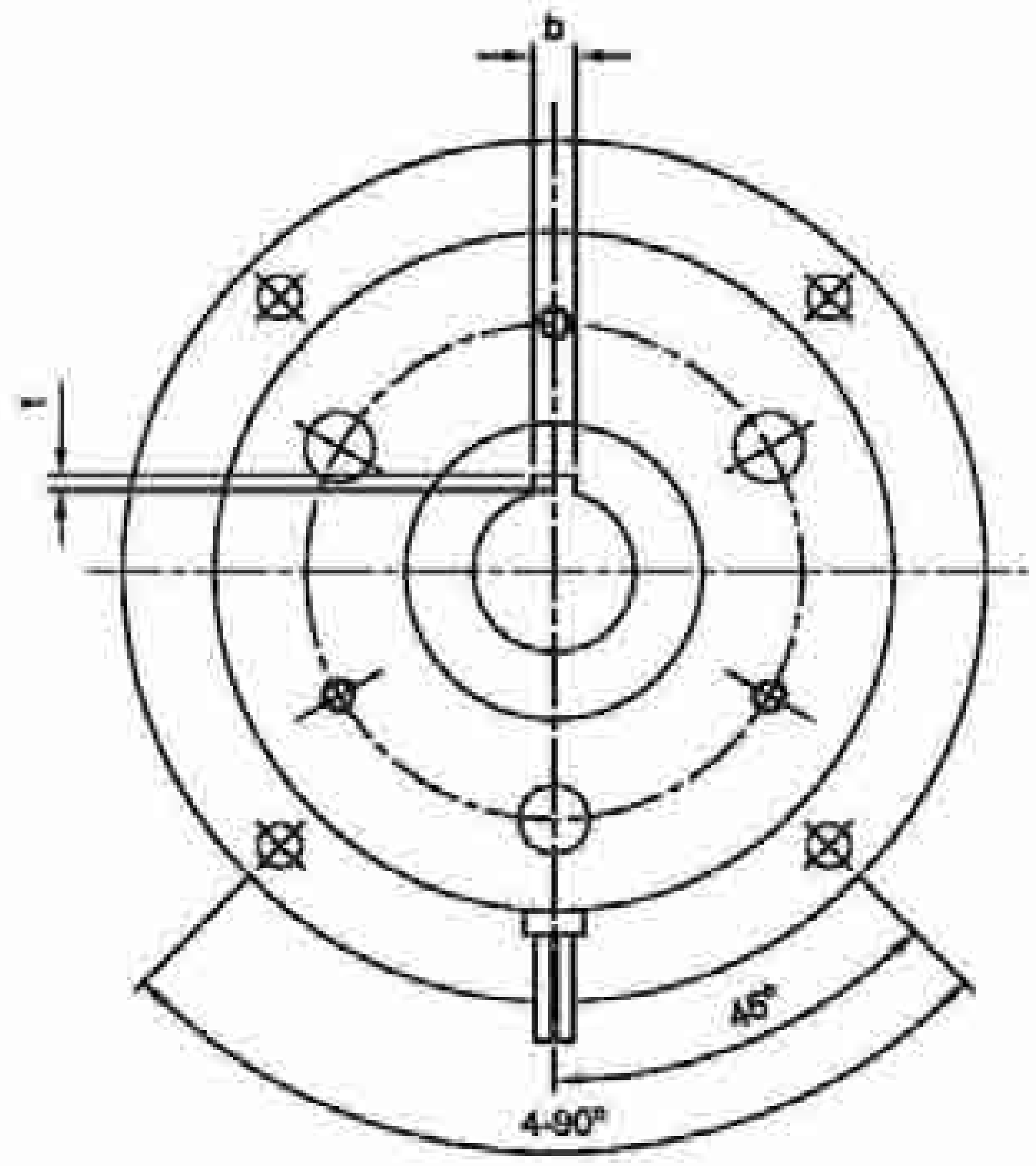
型 號 MODEL		CDG0S6AA	CDG1S5AA	CDG2S5AA	CDG005AA	CDG010AA	CDG020AA	CDG040AA
靜摩擦轉距 Static Friction Torque	[kgm](Nm)	0.55 (5.5)	1.1 (11)	2.2 (22)	4.5 (45)	9 (90)	17.5 (175)	35 (350)
動摩擦轉距 Dynamic Friction Torque	[kgm](Nm)	0.5 (5.0)	1.0 (10)	2.0 (20)	4.0 (40)	8 (80)	16 (160)	32 (320)
功率 Power	[24V](W) at 20℃	11	15	20	25	35	45	60
徑方向 Radius	A1	63	80	100	125	160	200	250
	A2	46	60	76	95	120	158	210
	A3	34.5	41.8	52	62	80	99.5	125
	C1	80	100	125	150	190	230	290
	C2	72	90	112	137	175	215	270
	C3	35	42	52	62	80	100	125
	V1	3-3.1	3-4.1	3-5.1	3-6.1	3-8.1	3-10.2	4-12.2
	V2	3-6.3	3-8	3-12	3-13	3-15	3-17.3	4-23
	V3	3-6	3-6	3-7.5	3-9.8	3-13	3-18	4-20.8
	Y	5	6	7	7	9.5	9.5	11.5
軸方向 Shaft	H	18	20	22	24	26	30	35
	J	3.5	4.3	5	5.5	6	7	8
	K	2	2.5	3	3.5	4	5	6
	L	22.05	24.8	27.9	31.3	35.5	42.2	48.6
	P	7.5	9.5	8.9	9	9.5	10.5	15.5
	X	1.5	1.4	1.7	2	2.5	5.7	6.4
	Z	6-60°						8-45°
	a	0.2 ($\pm$0.05)			0.3 ($^{+0.05}_{-0.1}$)		0.5 ($^{-0}_{-0.2}$)	
重量 Weight	(kg)	0.28	0.5	0.91	1.68	3.15	5.9	10.5
保護素子 Protective band		470KD07	GD80KD10		GD80KD14			

CG1 Series

乾式單板電磁煞車器 Dry Single-plate Magnetic Brake

附導座 with plating hub



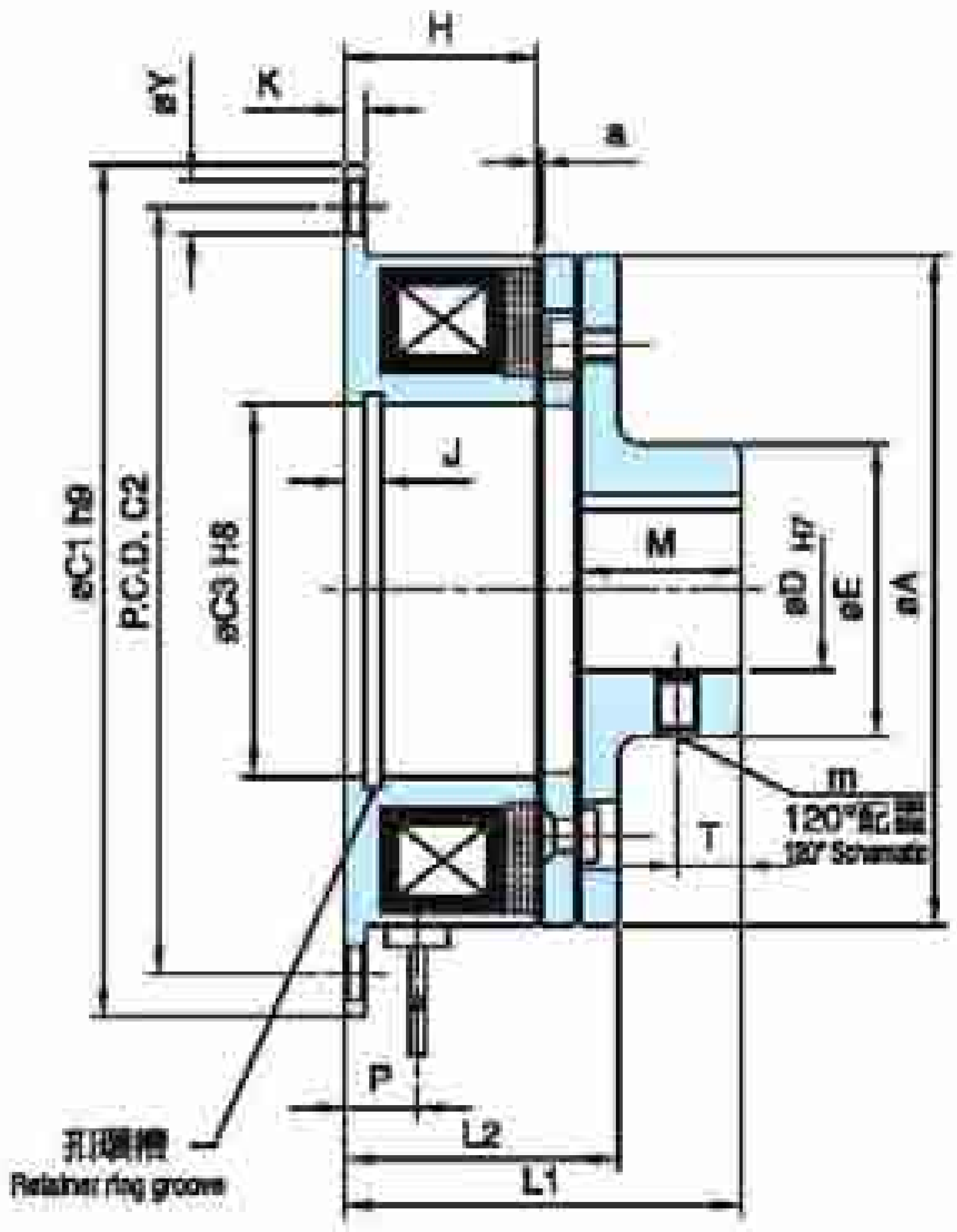


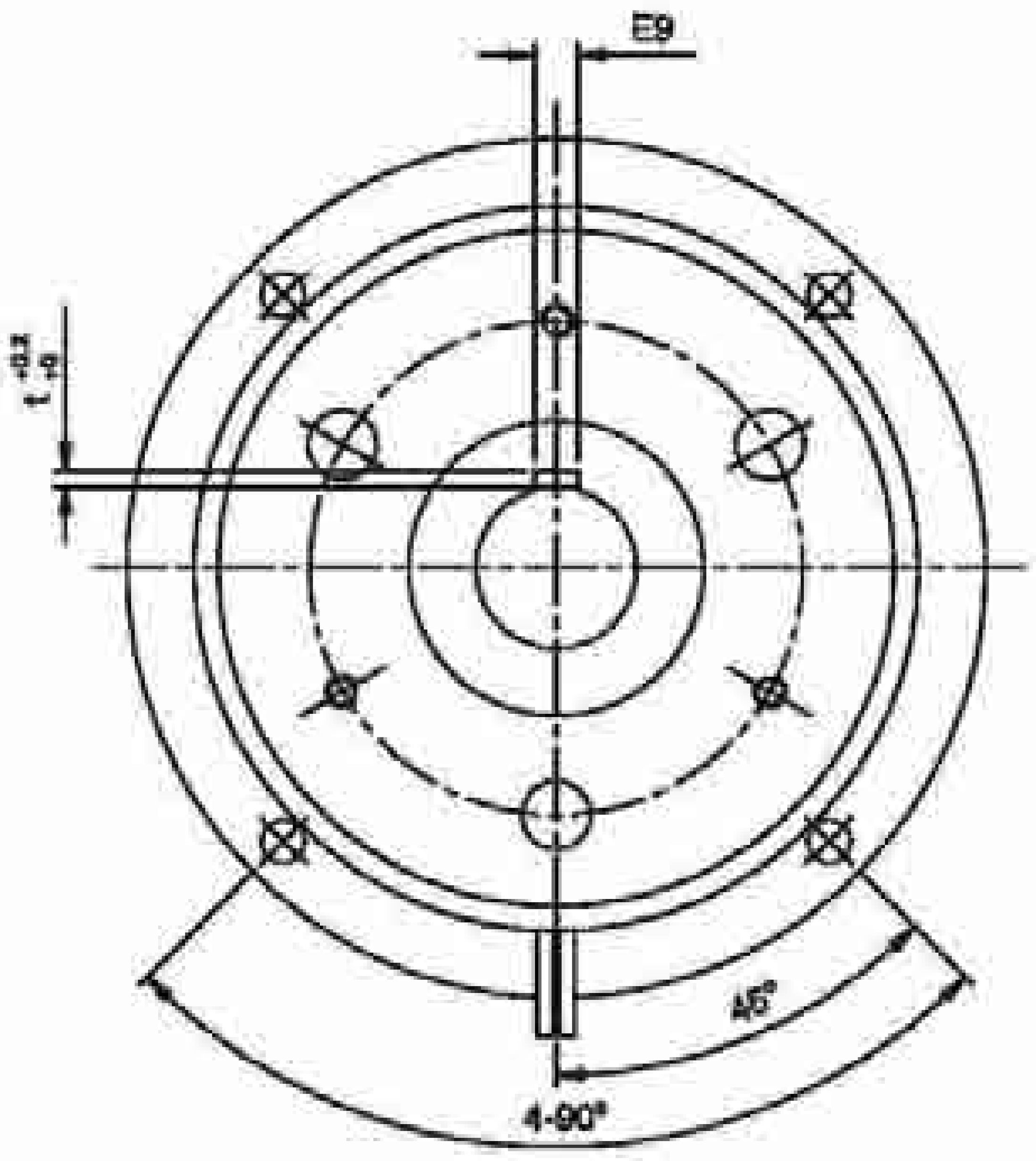
型 號 MODEL		CG10S6AA	CG11S5AA	CG12S5AA	CG1005AA	CG1010AA	CG1020AA	CG1040AA
靜摩擦轉距 Static Friction Torque	[kgm](Nm)	0.55(5.5)	1.1 (11)	2.2(22)	4.5(45)	9(90)	17.5(175)	35(350)
動摩擦轉距 Dynamic Friction Torque	[kgm](Nm)	0.5 (5.0)	1.0(10)	2.0(20)	4.0(40)	8(80)	16(160)	32(320)
功率 Power	[24V](W) at 20°C	11	15	20	25	35	45	60
徑方向 Radius	A	63	80	100	125	160	200	250
	C1	80	100	125	150	190	230	290
	C2	72	90	112	137	175	215	270
	C3	35	42	52	62	80	100	125
	D	12 15	15 20	20 25	25 30	30 40	40 50	50 60
	E	27.5	31	41	49	65	83	105
軸方向 Shaft	H	18	20	22	24	26	30	35.1
	J	3.5	4.3	5	5.5	6	7	8
	K	2	2.5	3	3.5	4	5	6
	L	25.55	28.8	32.9	37.3	42.5	50.5	59.6
	M	15	20	25	30	38	45	54
	P	7.5	9.5	8.9	9	11.5	9.5	15.5
	Y	5	6	7	7	9.5	9.5	11.5
	m	2-M4	2-M5		2-M6	2-M8		2-M10
	a	0.2 (±0.05)			0.3 $\left(^{+0.05}_{-0.1}\right)$		0.5 $\left(^{-0}_{-0.2}\right)$	
	b	4 5	5 5	5 7	7 7	7 10	10 12	12 15
	t	1.8 2.3	2.3 2.3	2.3 3.3	3.3 3.3	3.3 3.8	3.8 3.8	3.8 5
重量 Weight	(kg)	0.32	0.58	1.07	1.97	3.45	7.1	12.2
保護素子 Protective band		470KD07	GD80KD10		GD80KD14			

CG2 Series

乾式單板電磁煞車器 Dry Single-plate Magnetic Brake

附導座with plating hub

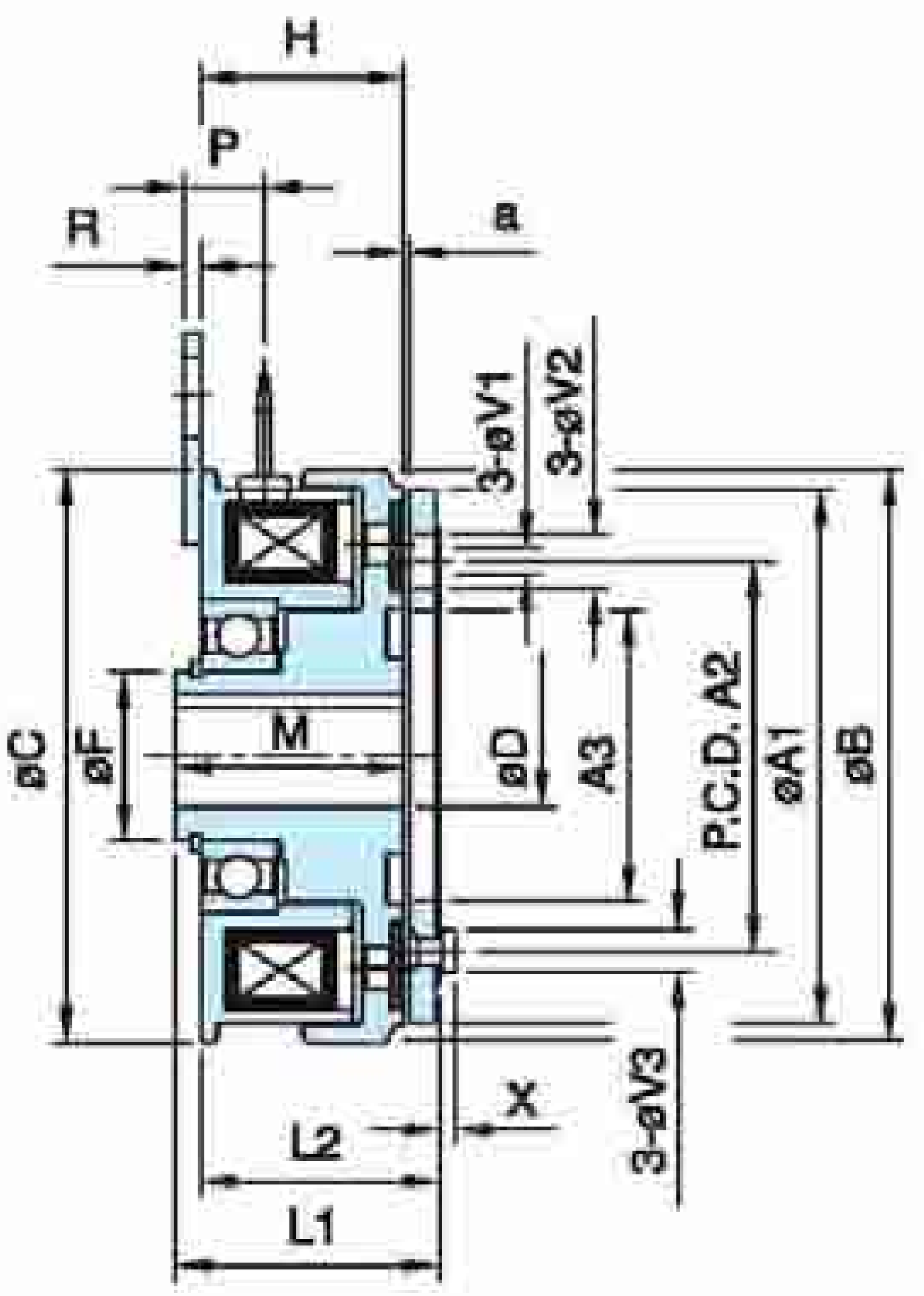


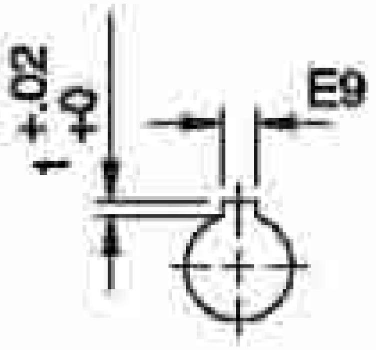


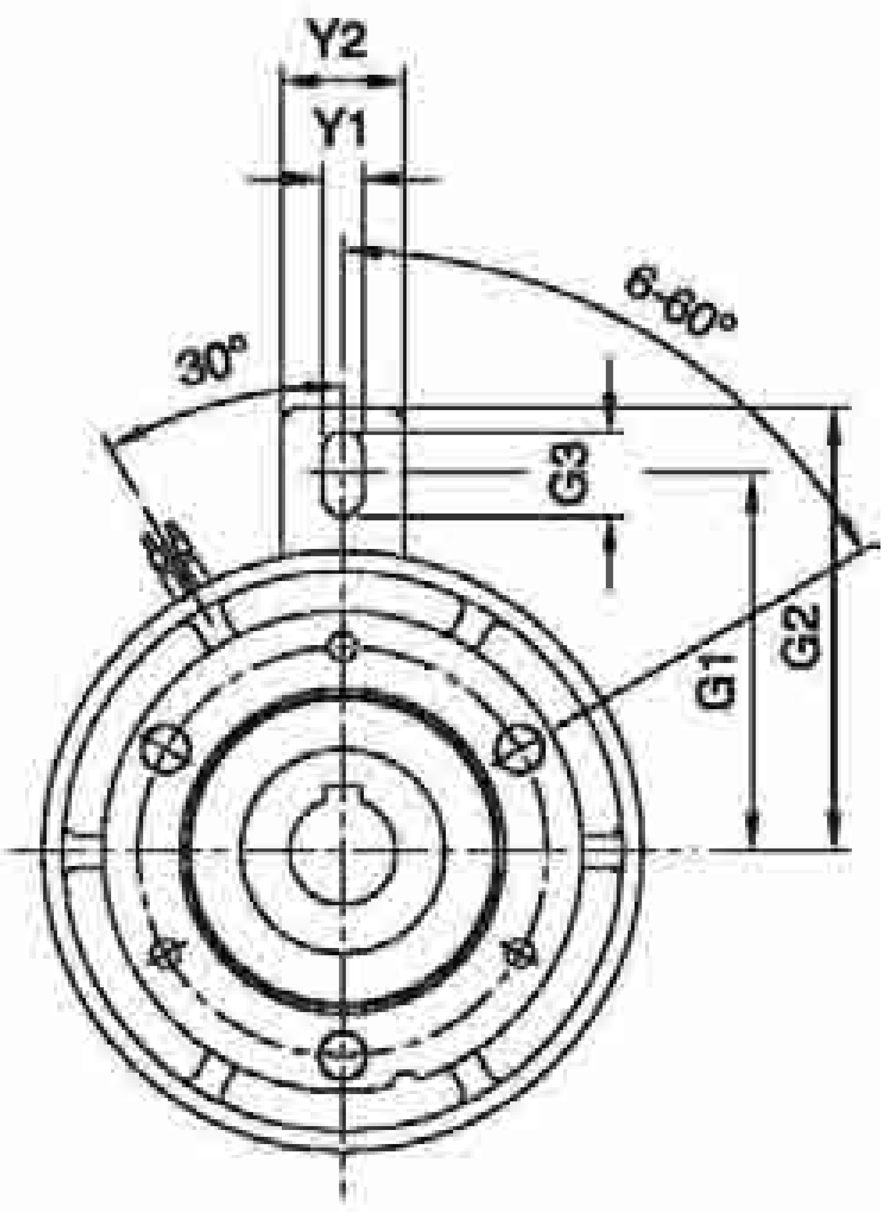
型 號 MODEL		CG20S6AA		CG21S5AA		CG22S5AA		CG2005AA		CG2010AA		CG2020AA		CG2040AA	
靜摩擦轉距 Static Friction Torque	[kgm](Nm)	0.55 (5.5)		1.1 (11)		2.2 (20)		4.5 (45)		9 (90)		17.5 (175)		35 (350)	
動摩擦轉距 Dynamic Friction Torque	[kgm](Nm)	0.5 (5.0)		1.0 (10)		2.0 (22)		4.0 (40)		8 (80)		16 (160)		32 (320)	
功率 Power	[24V](W) at 20°C	11		15		20		25		35		45		60	
徑方向 Radius	A	63		80		100		125		160		200		250	
	C1	80		100		125		150		190		230		290	
	C2	72		90		112		137		175		215		270	
	C3	35		42		52		62		80		100		125	
	D	12	15	15	20	20	25	25	30	30	40	40	50	50	60
	E	27.5		31		41		49		65		83		105	
軸方向 Shaft	H	18		20		22		24		26		30		35	
	J	3.5		4.3		5		5.5		6		7		8	
	K	2		2.5		3		3.5		4		5		6	
	L1	37		44.8		53		61.3		73.5		87.2		102.6	
	L2	25.5		28.8		33		37.3		42.5		51.2		59.6	
	M	15		20		25		30		38		45		54	
	P	7.5		9.5		9		9		9.5		10.5		15.5	
	T	6		8		10		12		14		18		22	
	Y	5		6		7		7		9.5		9.5		11.5	
	m	2-M4		2-M5				2-M6		2-M8				2-M10	
	a	0.2 (±0.05)						0.3 ($^{+0.05}_{-0.1}$)				0.5 ($^{0}_{-0.2}$)			
	b	4	5	5	5	5	7	7	7	7	10	10	12	12	15
	t	1.8	2.3	2.3	2.3	2.3	3.3	3.3	3.3	3.3	3.8	3.8	3.8	3.8	5.3
重量 Weight	(kg)	0.32		0.5		0.9		1.97		3.45		7.1		12.2	
保護素子 Protective band		470KD07		GD80KD10				GD80KD14							

CDE Series

內軸承式電磁離合器 Internal Bearing-type Magnetic Clutch



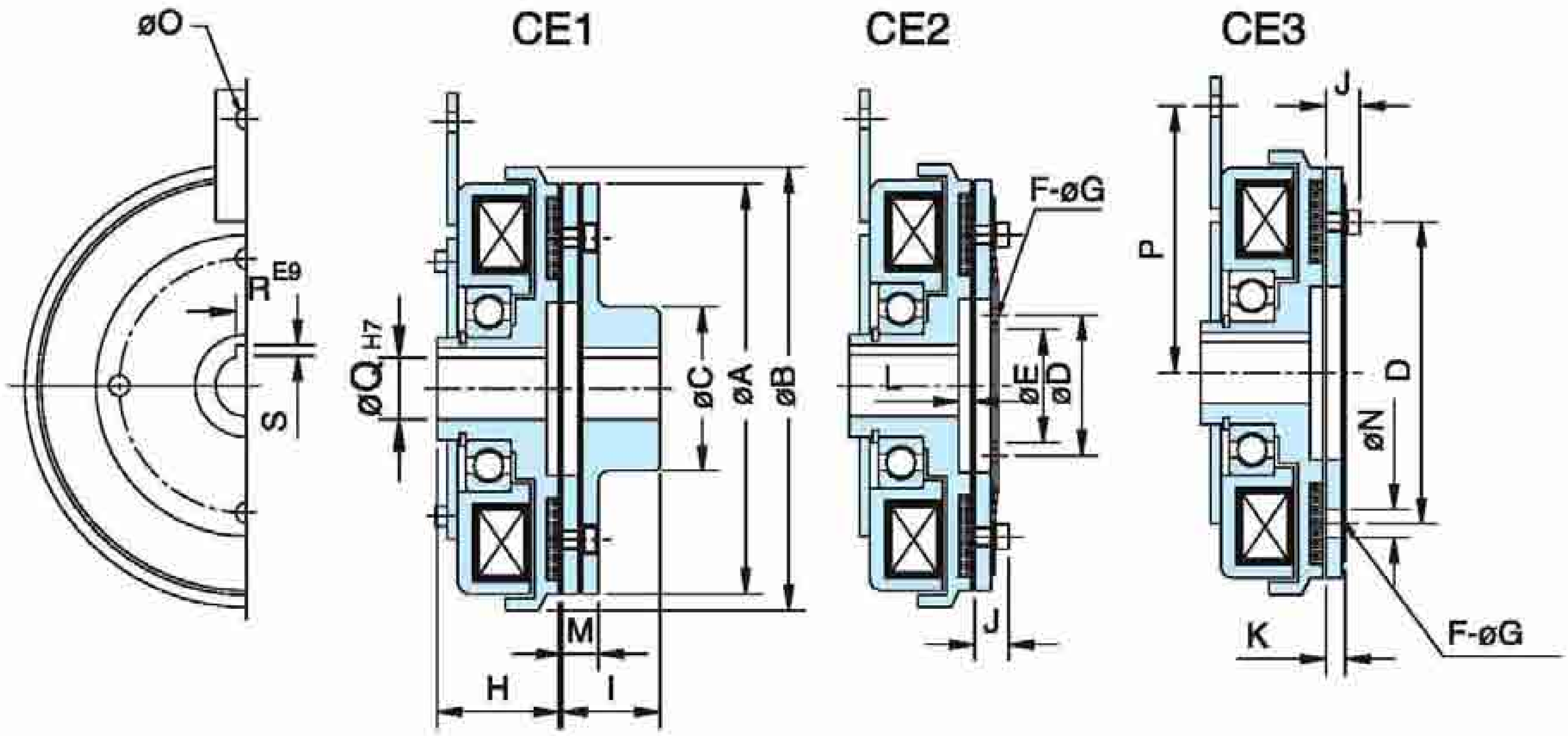




<table>
<tr><th colspan="2">型 號 MODEL</th><th colspan="2">CDE0S6AA</th><th>CDE1S5AA</th><th>CDE2S5AA</th><th>CDE005AA</th><th>CDE010AA</th></tr>
<tr><td colspan="2">靜摩擦轉距 Static Friction Torque [kgm](Nm)</td><td colspan="2">0.55(5.5)</td><td>1.1(11)</td><td>2.2(22)</td><td>4.5(45)</td><td>9(90)</td></tr>
<tr><td colspan="2">動摩擦轉距 Dynamic Friction Torque [kgm](Nm)</td><td colspan="2">0.5(5.0)</td><td>1.0(10)</td><td>2.0(20)</td><td>4(40)</td><td>8(80)</td></tr>
<tr><td colspan="2">功率 Power [24V](W) at 20℃</td><td colspan="2">11</td><td>15</td><td>20</td><td>25</td><td>35</td></tr>
<tr><td rowspan="18">徑方向 Radius</td><td>A1</td><td colspan="2">63</td><td>80</td><td>100</td><td>125</td><td>160</td></tr>
<tr><td>A2</td><td colspan="2">46</td><td>60</td><td>76</td><td>95</td><td>120</td></tr>
<tr><td>A3</td><td colspan="2">34.5</td><td>41.5</td><td>52</td><td>62</td><td>80</td></tr>
<tr><td>B</td><td colspan="2">67.5</td><td>85</td><td>106</td><td>133</td><td>169</td></tr>
<tr><td>C</td><td colspan="2">67.5</td><td>85</td><td>106</td><td>133</td><td>169</td></tr>
<tr><td>D</td><td>12</td><td>15</td><td>15</td><td>20</td><td>25</td><td>30</td></tr>
<tr><td>F</td><td colspan="2">20</td><td>25</td><td>30</td><td>40</td><td>50</td></tr>
<tr><td>H</td><td colspan="2">24.6</td><td>27</td><td>30</td><td>33.5</td><td>38.9</td></tr>
<tr><td>R</td><td colspan="2">2</td><td>2</td><td>2</td><td>2</td><td>3</td></tr>
<tr><td>L1</td><td colspan="2">31.1</td><td>34.2</td><td>40</td><td>45</td><td>52.7</td></tr>
<tr><td>L2</td><td colspan="2">28.6</td><td>31.6</td><td>36</td><td>40.8</td><td>48.4</td></tr>
<tr><td>M</td><td colspan="2">27.1</td><td>29.5</td><td>34</td><td>37.7</td><td>43.2</td></tr>
<tr><td>P</td><td colspan="2">9.5</td><td>11.5</td><td>11.6</td><td>11.6</td><td>14.5</td></tr>
<tr><td>V1</td><td colspan="2">3.1</td><td>4.1</td><td>5.1</td><td>6.1</td><td>8.1</td></tr>
<tr><td>V2</td><td colspan="2">6.3</td><td>8</td><td>12</td><td>13</td><td>15</td></tr>
<tr><td>V3</td><td colspan="2">6</td><td>6</td><td>7.5</td><td>9.8</td><td>13</td></tr>
<tr><td>X</td><td colspan="2">1.5</td><td>1.4</td><td>1.7</td><td>2</td><td>2.5</td></tr>
<tr><td>a</td><td colspan="4">0.2 (±0.05)</td><td colspan="2">0.3 ($^{+0.05}_{-0.1}$)</td></tr>
<tr><td rowspan="7">軸方向 Shaft</td><td>G1</td><td colspan="2">42.75</td><td>55</td><td>61.75</td><td>76.3</td><td>98.4</td></tr>
<tr><td>G2</td><td colspan="2">49.5</td><td>63.5</td><td>72.5</td><td>85</td><td>112</td></tr>
<tr><td>G3</td><td colspan="2">9.5</td><td>10.5</td><td>15.5</td><td>11.5</td><td>18.5</td></tr>
<tr><td>Y1</td><td colspan="2">4.5</td><td>5.5</td><td>6.5</td><td>6.5</td><td>8.5</td></tr>
<tr><td>Y2</td><td colspan="2">12</td><td>14</td><td>16</td><td>16</td><td>25</td></tr>
<tr><td>b</td><td>4</td><td>5</td><td>5</td><td>5</td><td>7</td><td>7</td></tr>
<tr><td>t</td><td>1.8</td><td>2.3</td><td>2.3</td><td>2.3</td><td>3.3</td><td>3.3</td></tr>
<tr><td colspan="2">重量 Weight (kg)</td><td colspan="2">1.0</td><td>1.5</td><td>2.5</td><td>4</td><td>7</td></tr>
<tr><td colspan="2">保護素子 Protective band</td><td colspan="2">470KD07</td><td colspan="2">GD80KD10</td><td colspan="2">GD80KD14</td></tr>
</table>

CDE Series

內軸承式電磁離合器組 Internal Bearing-type Magnetic Clutch

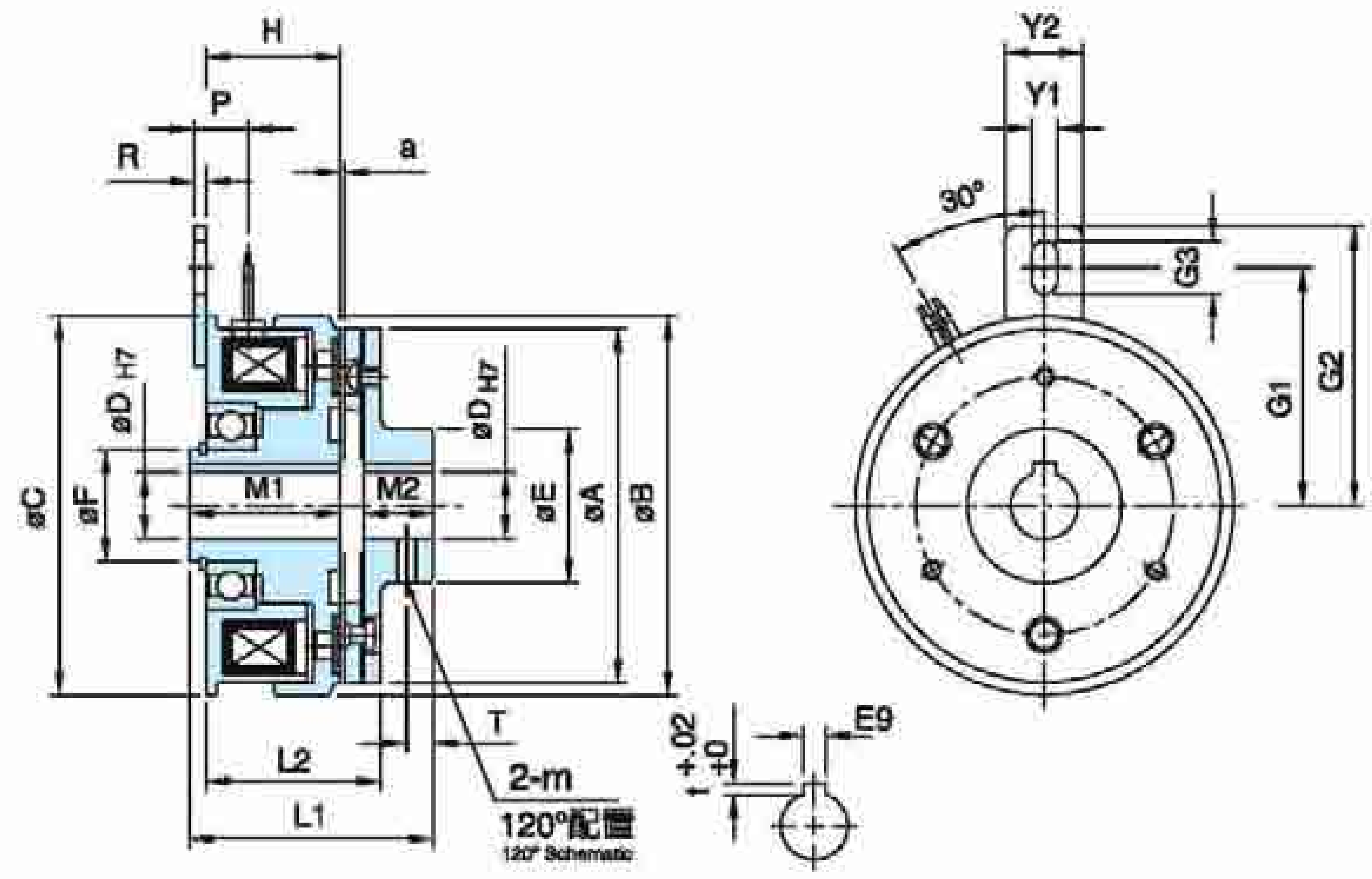


型 號 MODEL		CDE020AA	CDE040AA	CDE065AA	CDE100AA	CDE200AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		20(200)	40(400)	65(650)	100(1000)	200(2000
動摩擦轉距 Dynamic Friction Torque [kgm](Nm)		18(180)	35(350)	58(580)	90(900)	180(1800)
功率 Power [24V](W) at 20°C		45	60	90	135	200
徑方向 Radius	A	208	265	315	400	400
	B	220	280	330	420	420
	C	83	—	—	—	—
	D	158	120	130	156	156
	E	—	100	110	120	120
	O	10	10	12	15	15
	P	129	162	197	250	250
	Q	40	50	60	60	75
軸方向 Shaft	F	3	6	6	8	8
	G	10.2	10	10	13	13
	H	68	81	90	105	136
	I	56	—	—	—	—
	J	22	23	23	23	23
	K	10	12	12	13	13
	L	—	5.5	7.7	10	10
	M	20	—	—	—	—
	N	18	—	—	—	—
	R	10	12	15	15	20
	S	3.5	3.5	5	5	6
重量 Weight (kg)		12	20	35	65	65
保護素子 Protective band		GD80KD14				

CE1 Series

內軸承式電磁離合器 Internal Bearing-type Magnetic Clutch

附導座 with plating hub

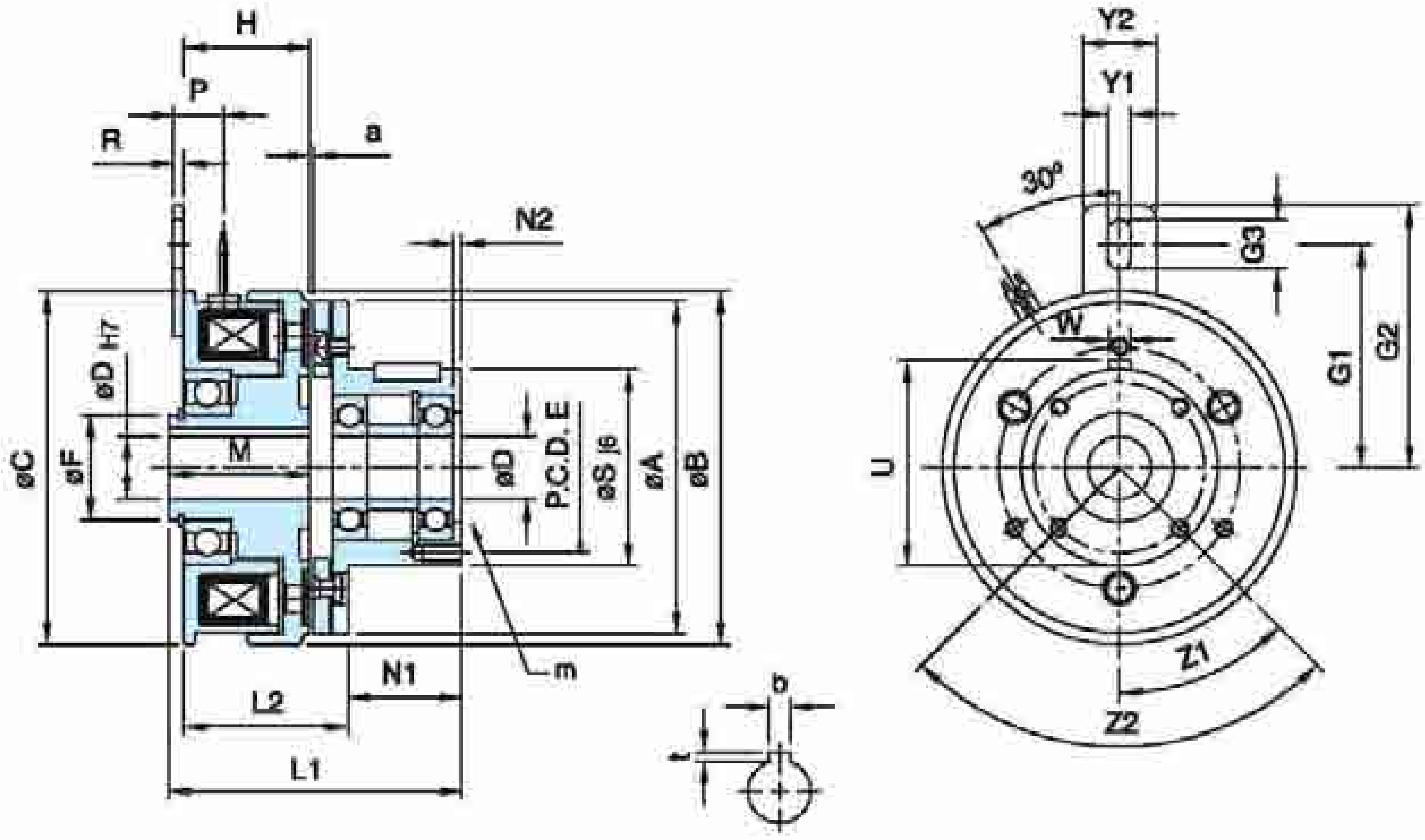


型 號 MODEL		CE10S6AA	CE11S5AA	CE12S5AA	CE1005AA	CE1010AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55(5.5)	1.1(11)	2.2(22)	4.5(45)	9(90)
動摩擦轉距 Dynamic Friction Torque [kgm](Nm)		0.5(5.0)	1.0(10)	2.0(20)	4(40)	8(80)
功率 Power [24V](W) at 20℃		11	15	20	25	35
徑方向 Radius	A	63	80	100	125	160
	B	67.5	85	106	133	169
	C	67.5	85	106	133	169
	D	12	15	20	25	30
	E	27.5	31	41	49	65
	F	20	25	30	40	50
	H	24	27	30	33.5	38.9
	L1	46.2	54.2	64.9	75	90.7
	L2	32.2	35.6	40.9	46.8	55.4
	M1	27.1	29.5	34	37.7	43.2
	M2	9.5	20	25	30	38
	P	7.5	11.5	11.6	11.6	14.5
	R	2	2	2	2	3
	T	6	8	10	12	14
	a	0.2 (±0.05)			0.3 ($^{+0.05}_{-0.1}$)	
軸方向 Shaft	G1	42.75	55.3	61.75	76.3	98.35
	G2	49.5	63.5	72.5	85	112
	G3	9.5	10.5	15.5	11.4	18.5
	Y1	4.5	5.5	6.5	6.4	8.5
	Y2	12	14	16	16	25
	b	4	5	5	7	7
	t	1.8	2.3	2.3	3.3	3.3
	m	M4*0.7P	M5*0.8P		M6*1P	M8*1.25P
重量 Weight (kg)		0.54	0.95	1.73	3.18	5.6
保護素子 Protective band		470KD07	GD80KD10		GD80KD14	

CE2 Series

內軸承式電磁離合器 Internal Bearing-type Magnetic Clutch

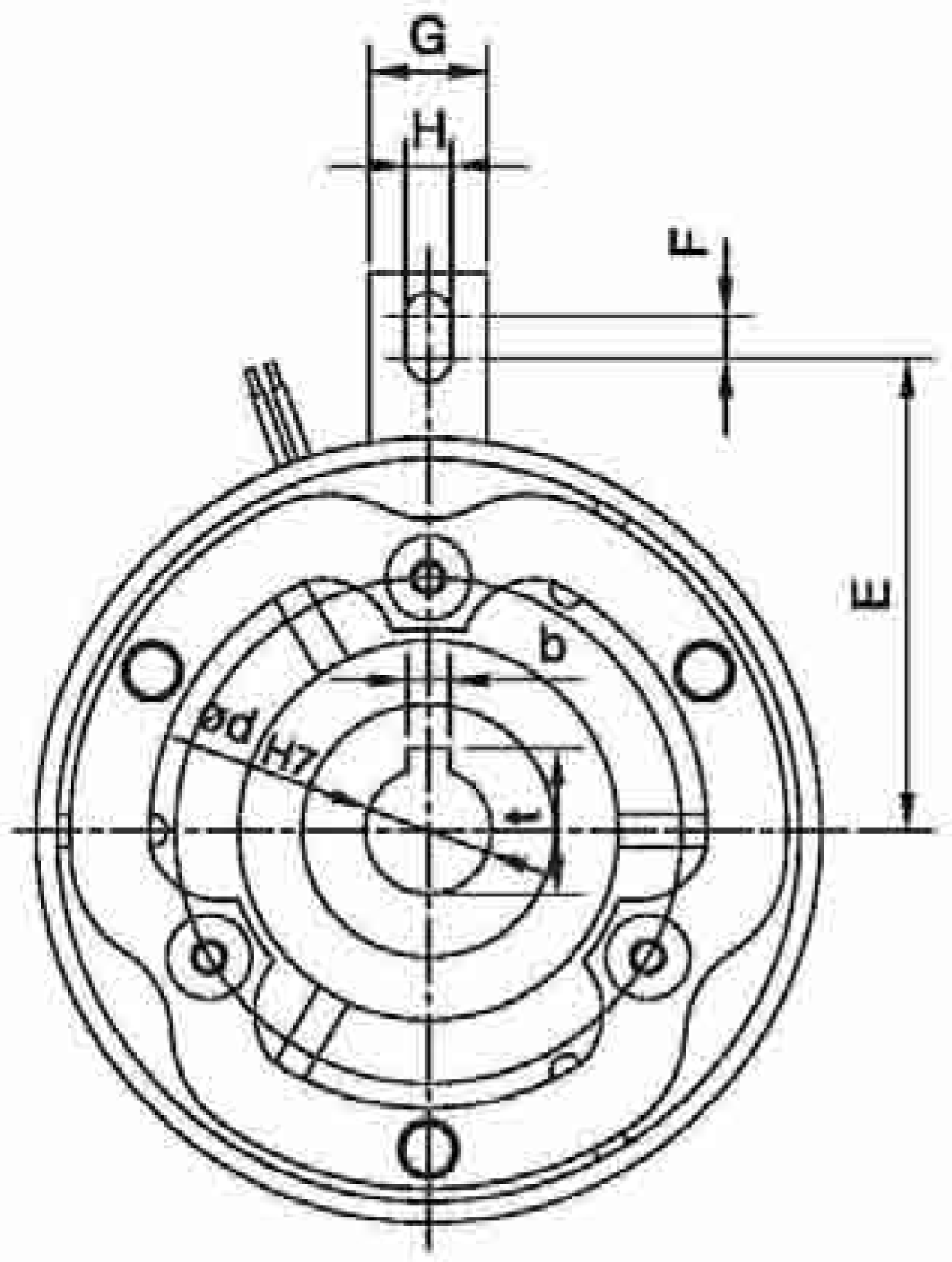
附軸承導座 with bearing plating hub

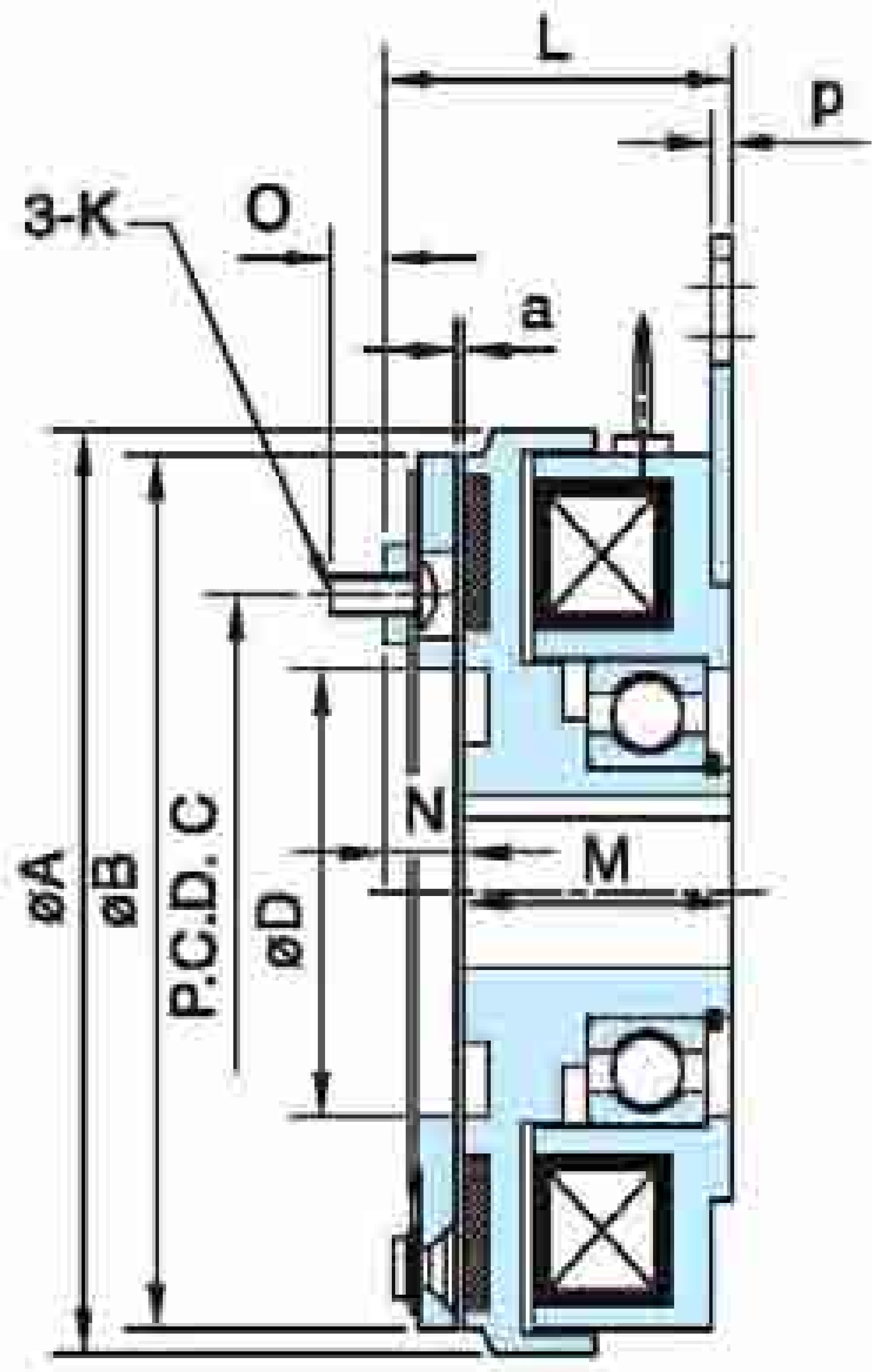


型 號 MODEL		CE20S6AA	CE21S5AA	CE22S5AA	CE2005AA	CE2010AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55(5.5)	1.1(11)	2.2(22)	4.5(45)	9(90)
動摩擦轉距 Dynamic Friction Torque [kgm](Nm)		0.5(5.0)	1.0(10)	2.0(20)	4(40)	8(80)
功率 Power [24V](W) at 20°C		11	15	20	25	35
徑方向 Radius	A	63	80	100	125	160
	B	67.5	85	106	133	169
	C	67.5	85	106	133	169
	D	12	15	20	25	30
	E	33	37	47	52	62
	F	20	25	30	40	50
	H	24.6	27	30	33.5	38.9
	L1	54.65	63.25	74.9	91	109.7
	L2	32.15	35.75	40.9	46.8	55.4
	M	27.1	29.5	34	37.7	43.2
	N1	20	25	30	40	50
	N2	2	2.5	3	2	3
	P	9.5	9.5	9.6	9.6	11.5
	R	2	2	2	2	3
	S	38	45	55	64	75
	a	0.2 (±0.05)			0.3 ($^{+0.05}_{-0.1}$)	
軸方向 Shaft	G1	42.75	55.25	61.75	76.3	98.35
	G2	49.50	3.5	72.5	85	112
	G3	9.5	10.5	15.5	11.4	18.5
	U	39.5	47	57	67	78
	W	4	5	5	7	7
	Y1	4.5	5.5	6.5	6.4	8.5
	Y2	12	14	16	16	25
	Z1	0°		45°		30°
	Z2	3-120°		4-90°		6-60°
	b	4	5	5	7	7
	t	1.8	2.3	2.3	3.3	3.3
	m	M4*0.7P*6L		M4*0.7P*8L		M5*0.8P*8L
重量 Weight (kg)		0.7	1.23	2.18	3.93	7.1
保護素子 Protective band		470KD07	GD80KD10		GD80KD14	

CDJ Series

乾式單板標準超薄型電磁離合器 Dry Single-plate Magnetic Clutch



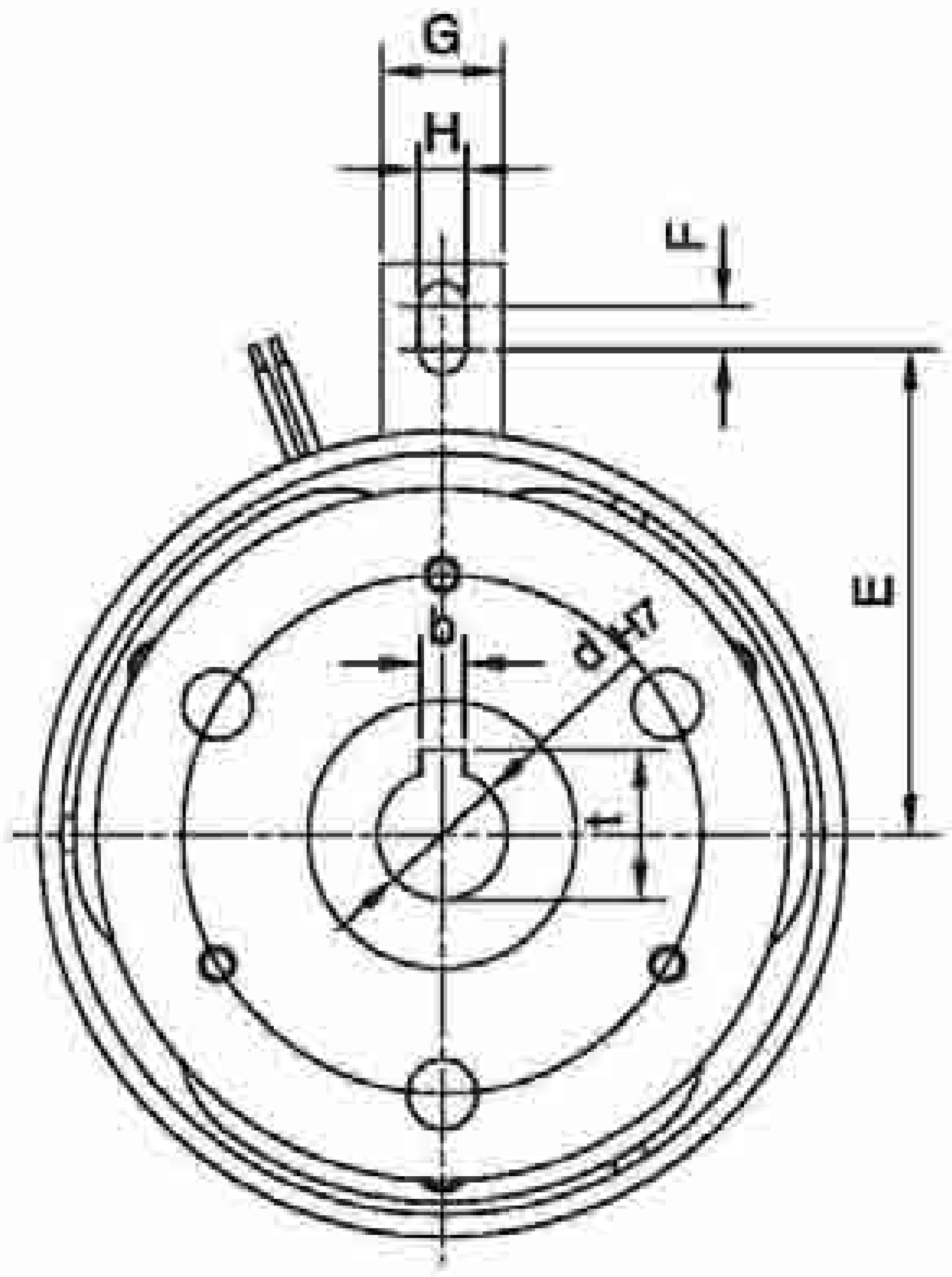


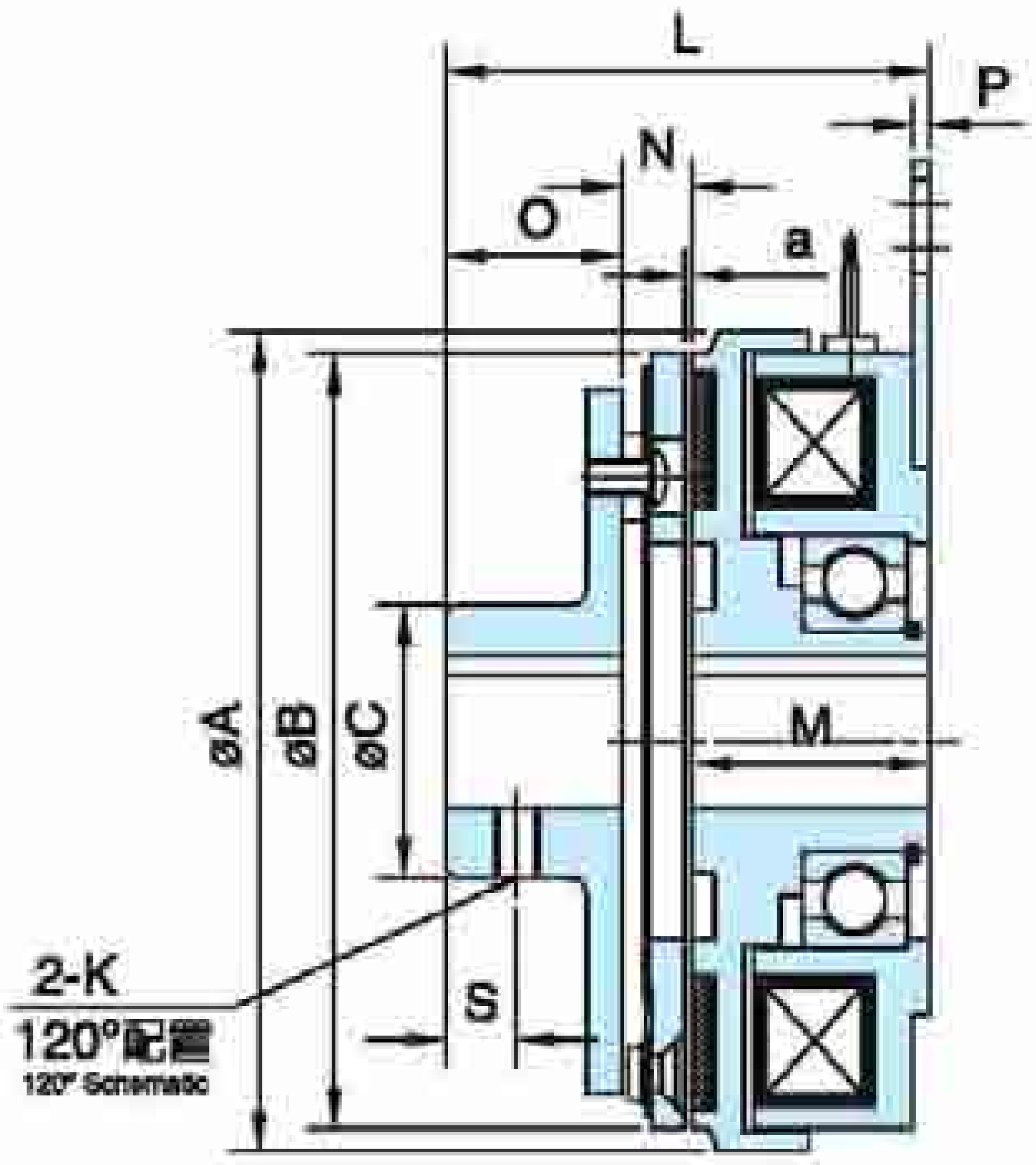
型 號 MODEL		CDJ0S6AA	CDJ1S5AA	CDJ2S5AA	CDJ005AA	CDJ010AA	CDJ020AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55 (5.5)	1.1 (11)	2.2 (22)	4.5 (45)	9.0 (90)	17.5 (175)
動摩擦轉距 Dynamic Friction Torque [kgm](Nm)		0.5 (5.0)	1.0 (10)	2.0 (20)	4.0 (40)	8.0 (80)	16 (160)
功率 Power [24V](W) at 20℃		11	15	20	25	35	45
徑方向 Radius	A	74	93	116	144	178	225
	B	70	88	110	137	172	217
	C	50	60	76	95	120	158
	D	35	47	55	67	90	110
	E	39.75	56	61.45	77.15	99	117
	F	5	5	4.3	4.9	10	10
軸方向 Shaft	G	12	14	16	16	25	25
	H	4.5	5.5	6.5	6.5	8.5	8.5
	K	M3	M4	M5	M6	M8	M10
	L	30.2	34.75	39.1	44.4	55.8	66.2
	M	25	26.5	30.1	34	43	50
	N	6.2	7.75	8.8	10.9	12.8	16.2
	O	5	6.5	8	11	14	17.5
	P	2	2	2	2	3	3
	d	10/12	15	20	25	30	40
	b	4	5		7		10
	t	11.8/13.8	17.3	22.3	28.3	33.3	43.8
	a	0.2 (±0.05)			0.3 ($^{+0.05}_{-0.1}$)		0.5 ($^{-0}_{-0.2}$)
重量 Weight (kg)		0.5	1.0	1.8	3.5	6.5	11.5
保護素子 Protective band		470KD07	GD80KD10		GD80KD14		

CJ1 Series

乾式單板標準超薄型電磁離合器 Dry Single-plate Magnetic Clutch

附導座 with plating hub



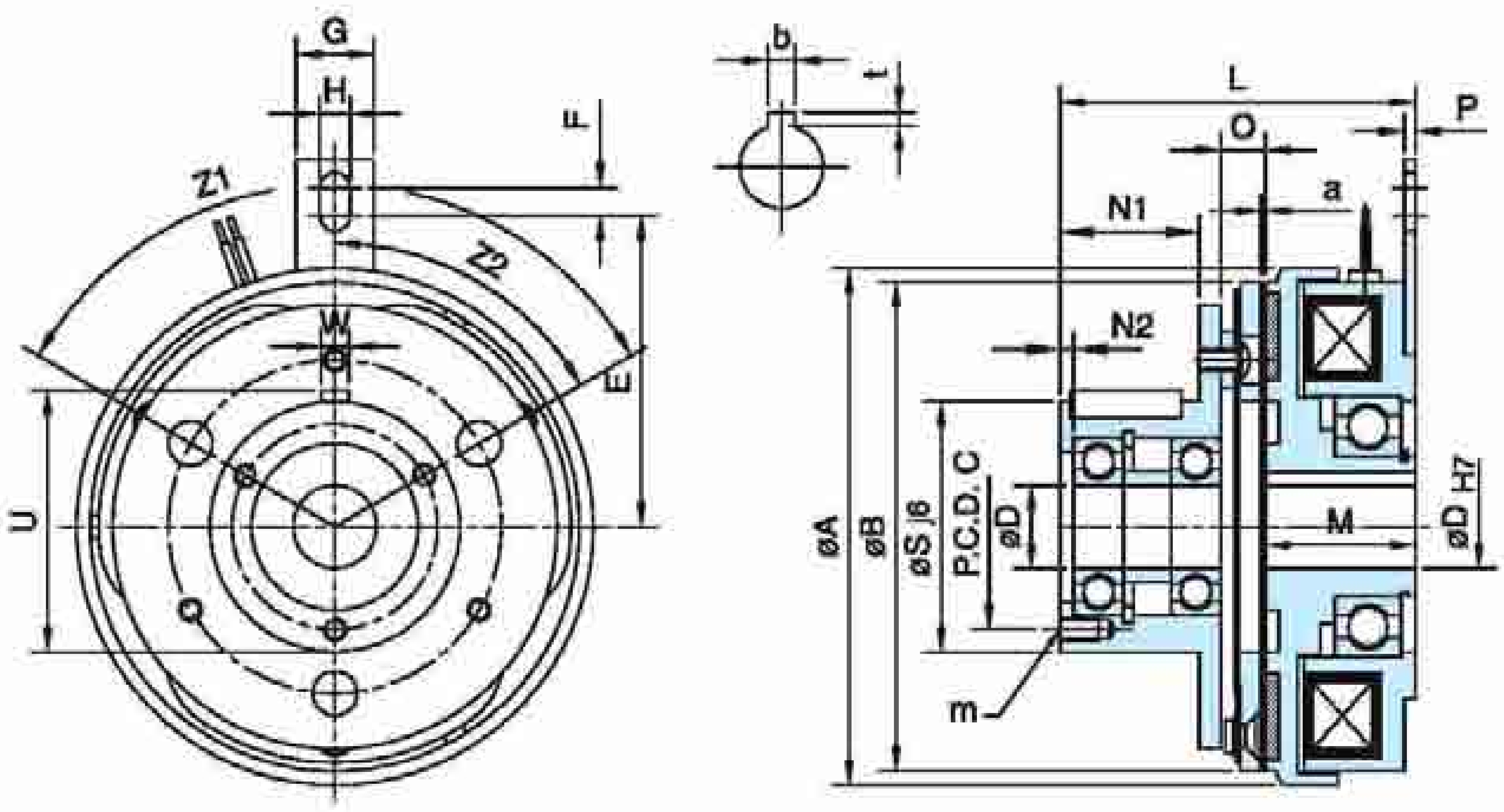


型 號 MODEL		CJ10S6AA	CJ11S5AA	CJ12S5AA	CJ1005AA	CJ1010AA	CJ1020AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55(5.5)	1.1(11)	2.2(22)	4.5(45)	9.0(90)	17.5(175)
動摩擦轉距 Dynamic Friction Torque [kgm](Nm)		0.5(5.0)	1.0(10)	2.0(20)	4.0(40)	8.0(80)	16(160)
功率 Power [24V](W) at 20°C		11	15	20	25	35	45
徑方向 Radius	A	74	93	116	144	178	225
	B	70	88	110	137	172	217
	C	26	31	41	49	65	83
	E	43	56	61.45	77.15	99	117
	F	5	5	4.3	4.9	10	10
	G	12	14	16	16	25	25
軸方向 Shaft	H	4.5	5.5	6.5	6.5	8.5	8.5
	K	M4	M5	M6	M6	M8	M8
	L	45.3	54.75	64.1	73.6	93.8	111.2
	M	25	26.5	30.1	34	43	50
	N	6.3	7.75	9	10.9	12.8	16.2
	O	15	20	25	30	38	45
	P	1.6	2	2	2	3	3
	S	6	8	10	12	14	18
	d	12	15	20	25	30	40
	b	4	5		7		10
	t	13.8	17.3	22.3	28.3	33.3	43.8
	a	0.2 (±0.05)			0.3 ($^{+0.05}_{-0.1}$)		0.5 ($^{-0}_{-0.2}$)
重量 Weight (kg)		0.6	1.1	1.9	3.4	7.2	13
保護素子 Protective band		470KD07	GD80KD10		GD80KD14		

CJ2 Series

乾式單板標準超薄型電磁離合器 Dry Single-plate Magnetic Clutch

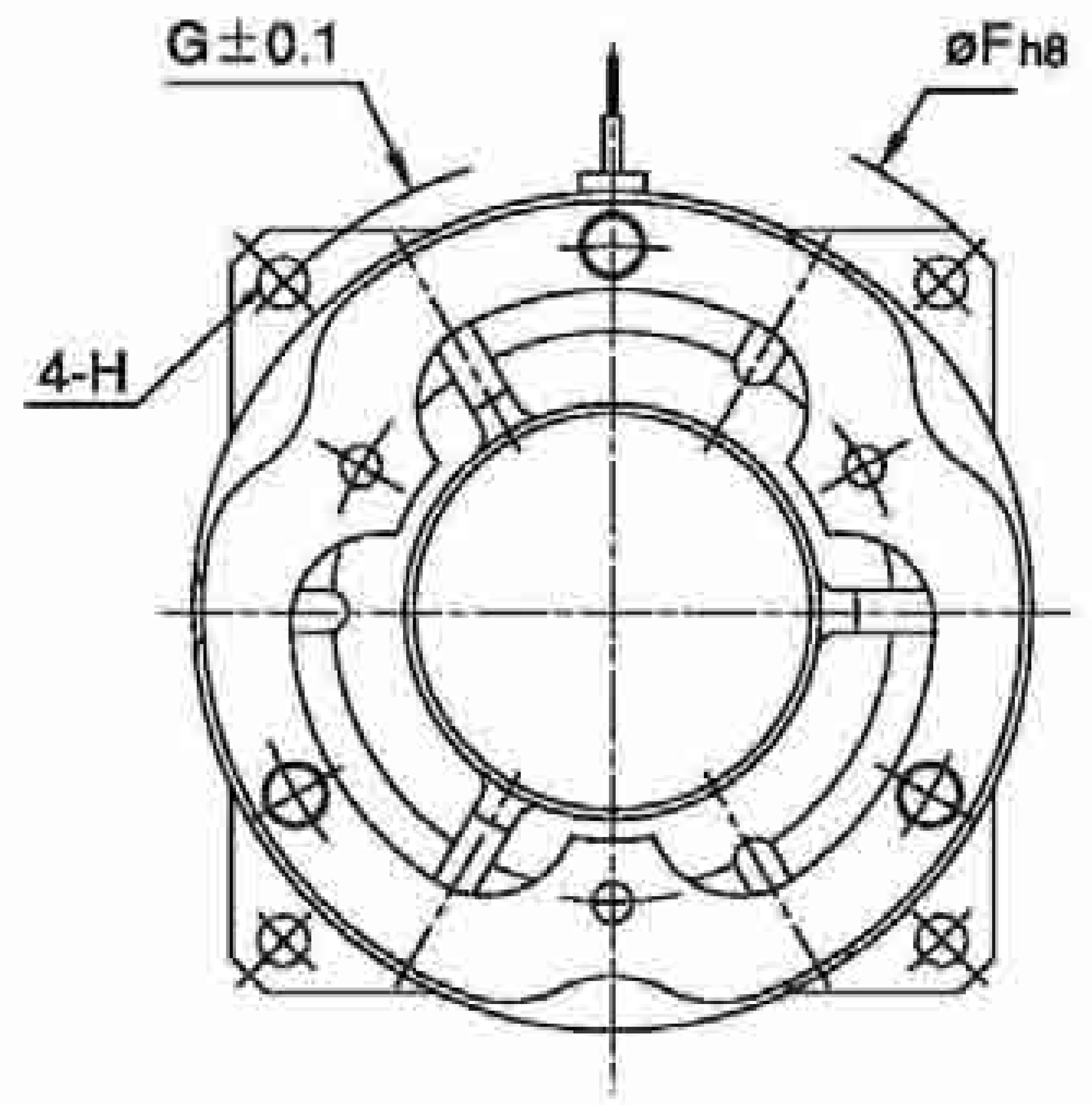
附軸承導座 with bearing plating hub

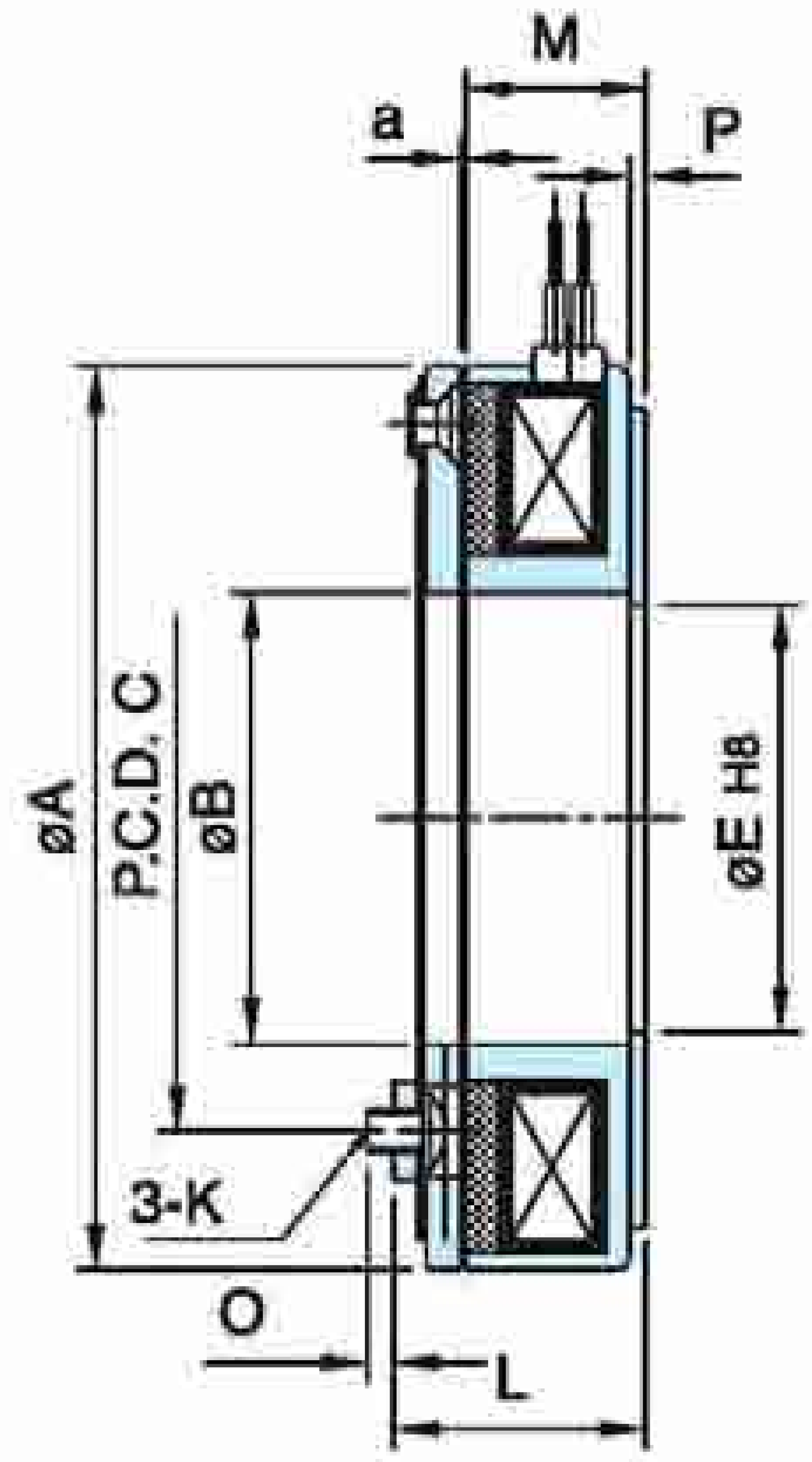


型 號 MODEL		CJ20S6AA	CJ21S5AA	CJ22S5AA	CJ2005AA	CJ2010AA	CJ2020AA
靜摩擦轉距 Static Friction Torque [kgm](N-m)		0.55 (5.5)	1.1 (11)	2.2 (22)	4.5 (45)	9.0 (90)	17.5 (175)
動摩擦轉距 Dynamic Friction Torque [kgm](N-m)		0.5 (5.0)	1.0 (10)	2.0 (20)	4.0 (40)	8.0 (80)	16 (160)
功率 Power [24V](W) at 20℃		11	15	20	25	35	45
徑方向 Radius	A	74	93	116	144	178	225
	B	70	88	110	137	172	217
	C	33	37	47	52	62	74.5
	D	12	15	20	25	30	40
	E	43	56	61.45	77.15	99	117
	F	5	5	4.5	4.9	10	10
	S	38	45	55	64	75	90
	U	39.5	47	57	67	78	93.5
軸方向 Shaft	G	12	14	16	16	25	25
	H	4.5	5.5	6.5	6.5	8.5	8.5
	L	53.8	63.75	74.1	89.6	112.8	134.2
	M	25	26.5	30.1	34	43	50
	N1	20	25	30	40	50	60
	N2	2	2.5	3	2	3	5
	O	6.3	7.75	9	11.9	12.8	16.2
	P	1.6	2	2	2	3	3
	W	4	5		7		10
	Z1	3-120°		4-90°		6-60°	4-90°
	Z2	60°		45°		30°	45°
	a	0.2 (±0.05)			0.3 ($^{+0.05}_{-0.1}$)		0.5 ($^{0}_{-0.2}$)
	b	4	5		7		10
	t	1.8	2.3		3.3		3.8
	m	3-M4*0.7P*4L	3-M4*0.7P*6L	4-M4*0.7P*8L		6-M5*0.8P*8L	4-M6*1P*12L
重量 Weight (kg)		0.8	1.3	2.4	4.2	8.6	15.2
保護素子 Protective band		470KD07	GD80KD10		GD80KD14		

CDI Series

乾式單板超薄型電磁煞車器 Dry Single-plate Magnetic Brake



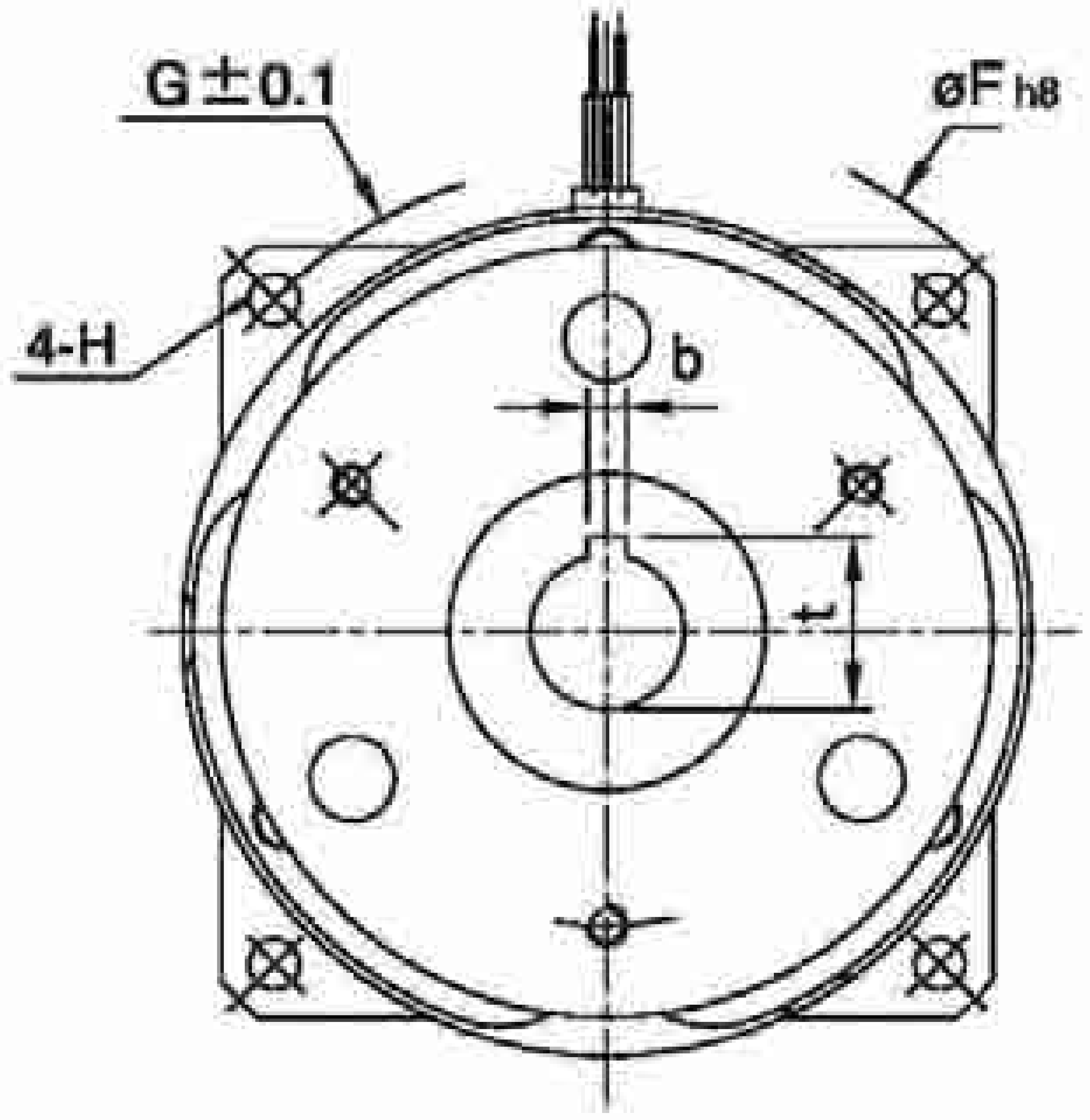


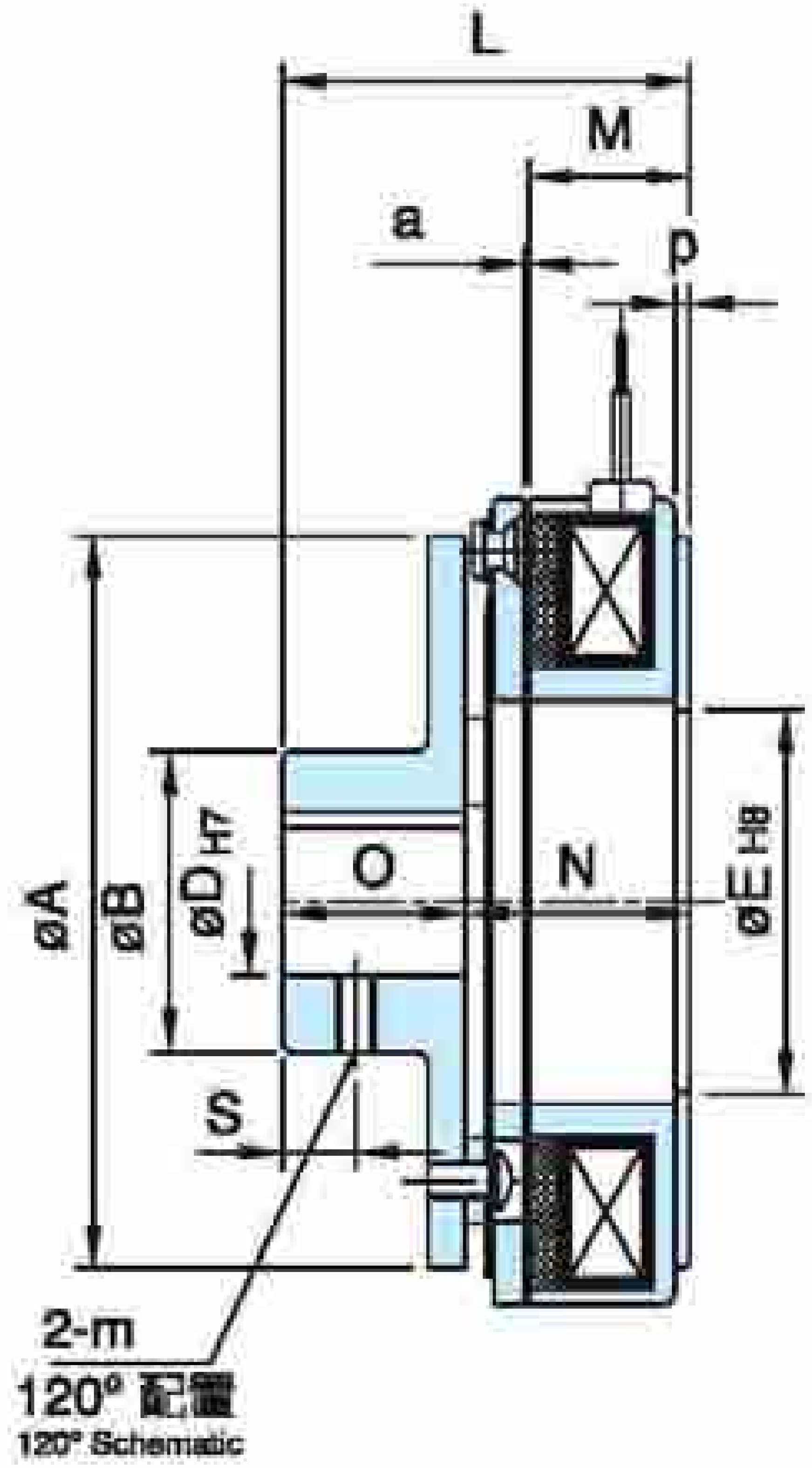
型 號 MODEL		CDI0S6AA	CDI1S5AA	CDI2S5AA	CDI005AA	CDI010AA	CDI020AA
靜摩擦轉距 Static Friction Torque	[kgm](N-m)	0.55 (5.5)	1.1 (11)	2.2 (22)	4.5 (45)	9.0 (90)	17.5 (175)
動摩擦轉距 Dynamic Friction Torque	[kgm](N-m)	0.5 (5.0)	1.0 (10)	2.0 (20)	4.0 (40)	8.0 (80)	16 (160)
功率 Power	[24V](W) at 20℃	11	15	20	25	35	45
徑方向 Radius	A	70	88	110	137	172	215
	B	35	47	55	67	90	107
	C	50	60	76	95	120	158
	E	35	45	52	65	80	107
	F	90	110	135	165	210	265
	G	80	98	122	150	190	240
	H	4.5	5.5	6.5	6.5	8.5	11
軸方向 Shaft	K	M3	M4	M5	M6	M8	M10
	L	25.2	27.75	29.9	36.7	40	47.4
	M	19	20	21	26	27	31
	O	5	6.15	8	11	14	17.5
	P	2	2	2	2.5	3	3.2
	a	0.2 (±0.05)			0.3 ($^{+0.05}_{-0.1}$)		0.5 ($^{-0}_{-0.2}$)
重量 Weight	(kg)	0.4	0.7	1.1	2.2	3.4	6.8
保護素子 Protective band		470KD07	GD80KD10		GD80KD14		

CI1 Series

乾式單板超薄型電磁煞車器 Dry Single-plate Magnetic Brake

附導座 with plating hub



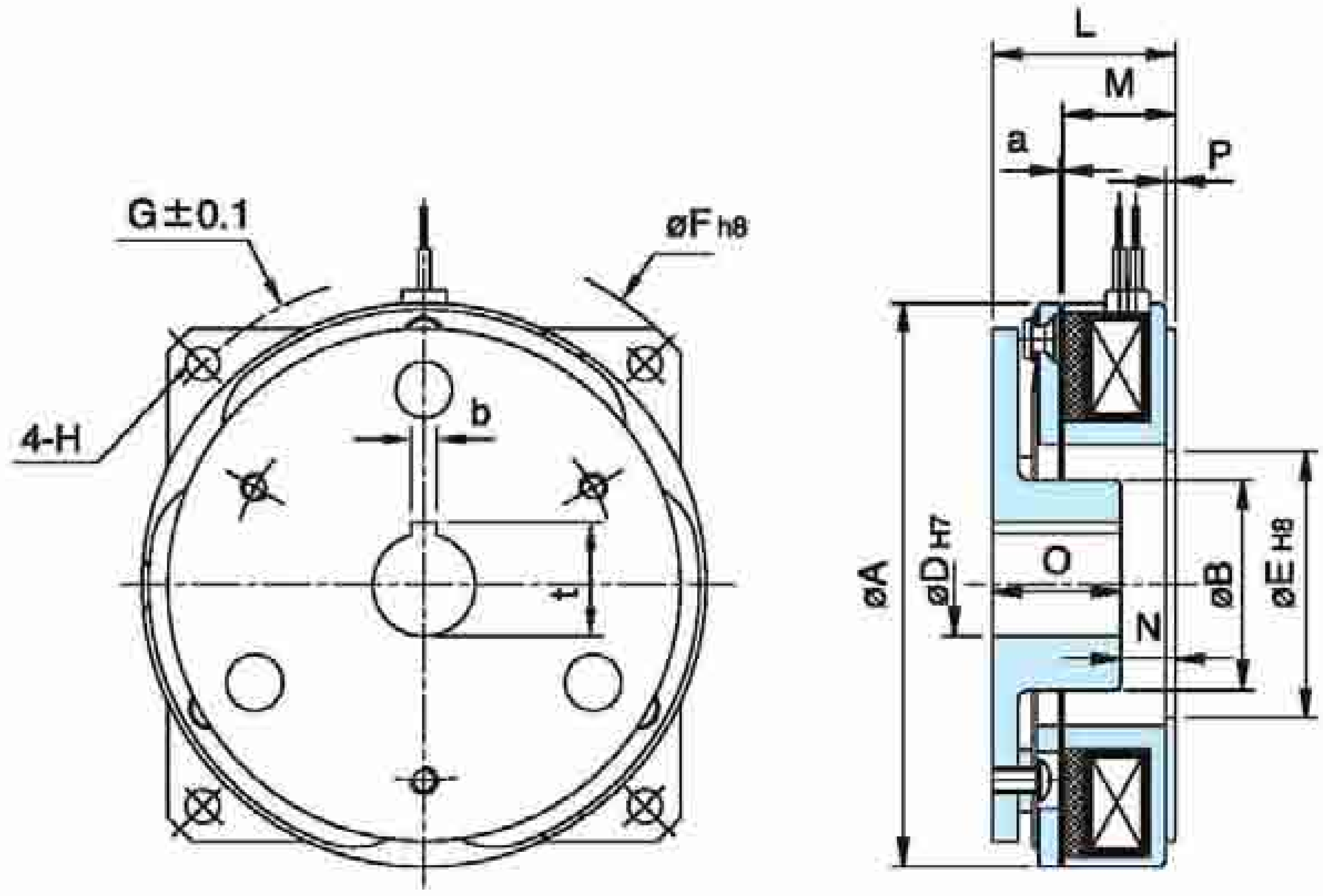


型 號 MODEL		CI10S6AA	CI11S5AA	CI12S5AA	CI1005AA	CI1010AA	CI1020AA
靜摩擦轉距 Static Friction Torque [kgm](Nm)		0.55 (5.5)	1.1 (11)	2.2 (22)	4.5 (45)	9.0 (90)	17.5 (175)
動摩擦轉距 Dynamic Friction Torque [kgm](Nm)		0.5 (5.0)	1.0 (10)	2.0 (20)	4.0 (40)	8.0 (80)	16 (160)
功率 Power [24V](W) at 20°C		11	15	20	25	35	45
徑方向 Radius	A	70	80	100	125	160	200
	B	28	31	41	49	65	83
	D	12	15	20	25	30	40
	E	35	45	52	65	80	107
	F	90	110	135	165	210	265
	G	80	98	122	150	190	240
	H	4.5	5.5	6.5	6.5	8.5	11
軸方向 Shaft	L	39.3	47.75	54.9	65	78	92.4
	M	18	20	21	26	27	31
	N	25.7	27.75	29.9	36.7	40	47.4
	O	15	20	25	30	38	45
	P	2	2	2	2.5	3	3.2
	S	6	8	10	12	14	18
	m	M3	M4	M5	M6	M8	M10
	a	0.2 (±0.05)			0.3 ($^{+0.05}_{-0.1}$)		0.5 ($^{0}_{-0.2}$)
	b	4	5	5	7	7	10
	t	13.8	17.3	22.3	28.3	33.3	43.8
重量 Weight (kg)		0.5	0.7	1.3	2.5	4.2	8
保護素子 Protective band		470KD07	GD80KD10		GD80KD14		

CI2 Series

乾式單板超薄型電磁煞車器 Dry Single-plate Magnetic Brake

附導座 with plating hub



型 號 MODEL		CI20S6AA	CI21S5AA	CI22S5AA	CI2005AA	CI2010AA	CI2020AA
靜摩擦轉距 Static Friction Torque	[kgm](Nm)	0.55 (5.5)	1.1 (11)	2.2 (22)	4.5 (45)	9.0 (90)	17.5 (175)
動摩擦轉距 Dynamic Friction Torque	[kgm](Nm)	0.5 (5.0)	1.0 (10)	2.0 (20)	4.0 (40)	8.0 (80)	16 (160)
功率 Power [24V](W) at 20°C		11	15	20	25	35	45
徑方向 Radius	A	70	88	110	137	172	215
	B	28	31	41	49	65	83
	D	12	15	20	25	30	40
	E	35	45	52	65	80	107
	F	90	110	135	165	210	265
	G	80	98	122	150	190	240
	H	4.5	5.5	6.5	6.5	8.5	11
軸方向 Shaft	L	27.8	31.75	34.9	42.7	47	56.4
	M	18	20	21	26	27	31
	N	12.8	11.75	9.9	12.7	9	11.4
	O	15	20	25	30	38	45
	P	2	2	2	2.5	3	3.2
	a	0.2 (±0.05)			0.3 $\left(^{+0.05}_{-0.1}\right)$		0.5 $\left(^{-0}_{-0.2}\right)$
	b	4	5	5	7	7	10
	t	13.8	17.3	22.3	28.3	33.3	43.8
重量 Weight	(kg)	0.5	0.7	1.3	2.5	4.2	8
保護素子 Protective band		470KD07	GD80KD10		GD80KD14		

Clutch & Brake

仟岱有限公司 CHAIN TAIL CO., LTD.

台灣省台中縣烏日鄉溪南路一段460巷305號

No.305, Lane 460, Sec.1, Hsinan Rd., Wujih Hsiang, Taichung Hsien, Taiwan 41462

TEL:886-4-23353024 FAX:886-4-23354027

E-mail:chain.tail@msa.hinet.net http://www.chaintail.com

ISO 9001:2000 CE