

# 乾式單板電磁離合器 煞車器

ELECTROMAGNETIC POWER-APPLIED  
FRICTION CLUTCH AND BRAKE

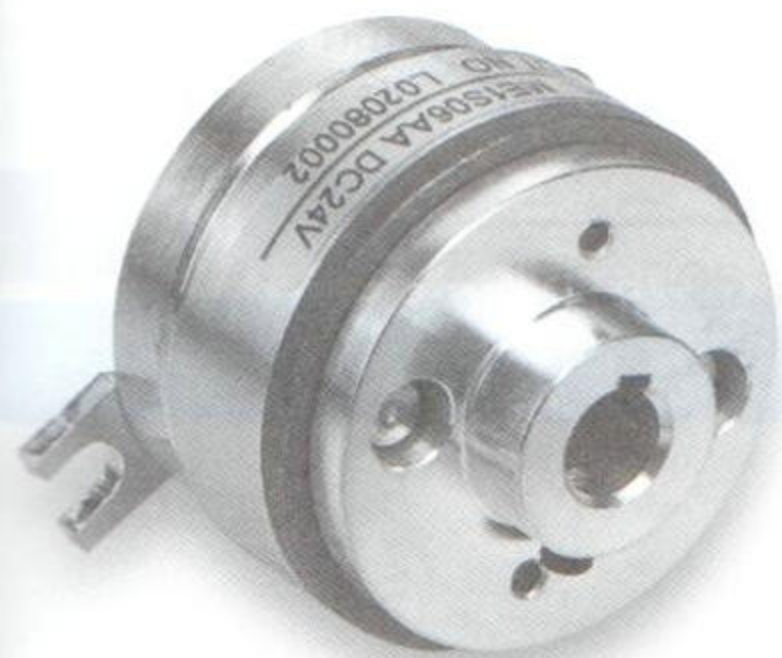
微型 MINIATURE TYPE



MF1



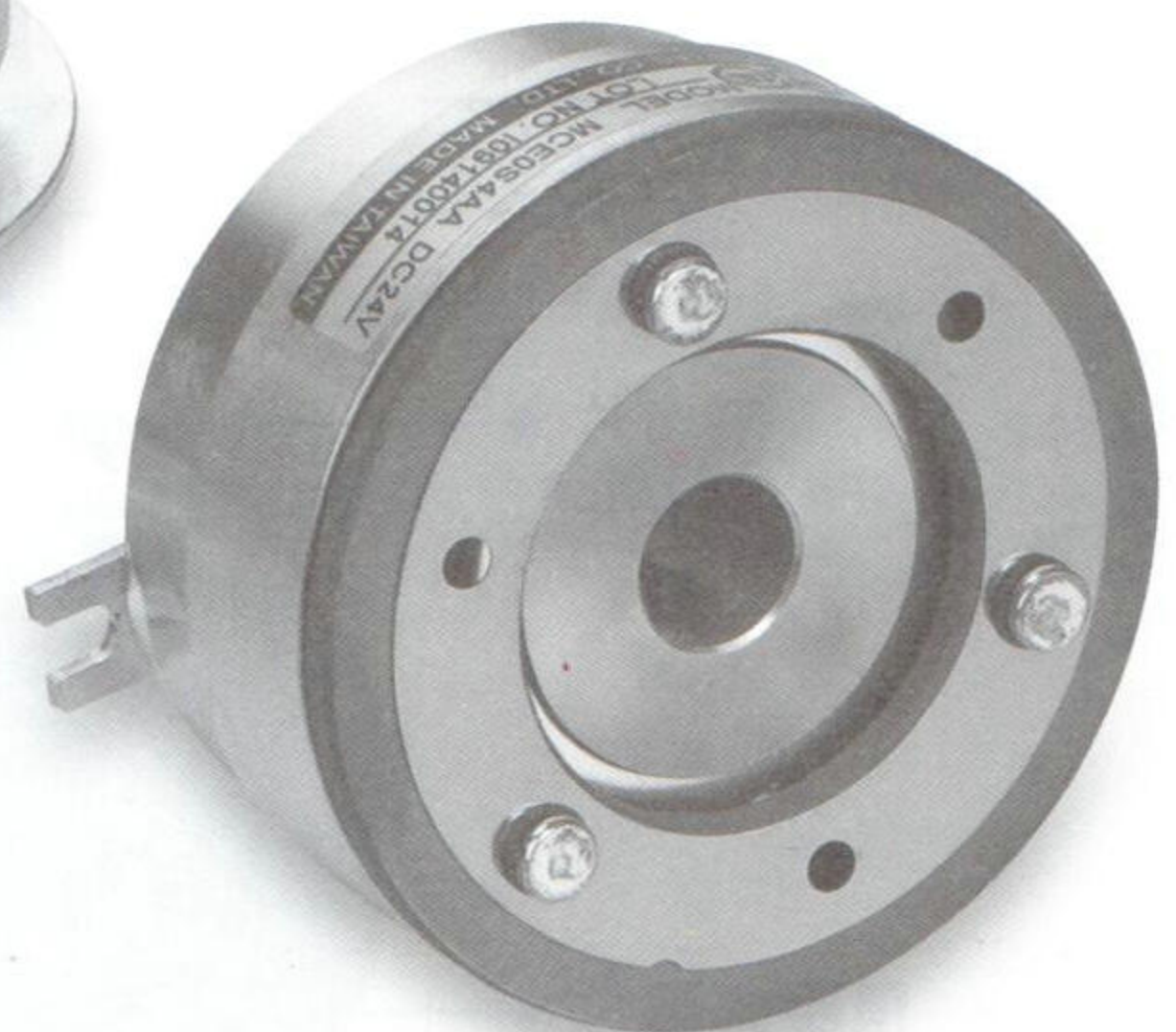
MG1



ME1



MCF

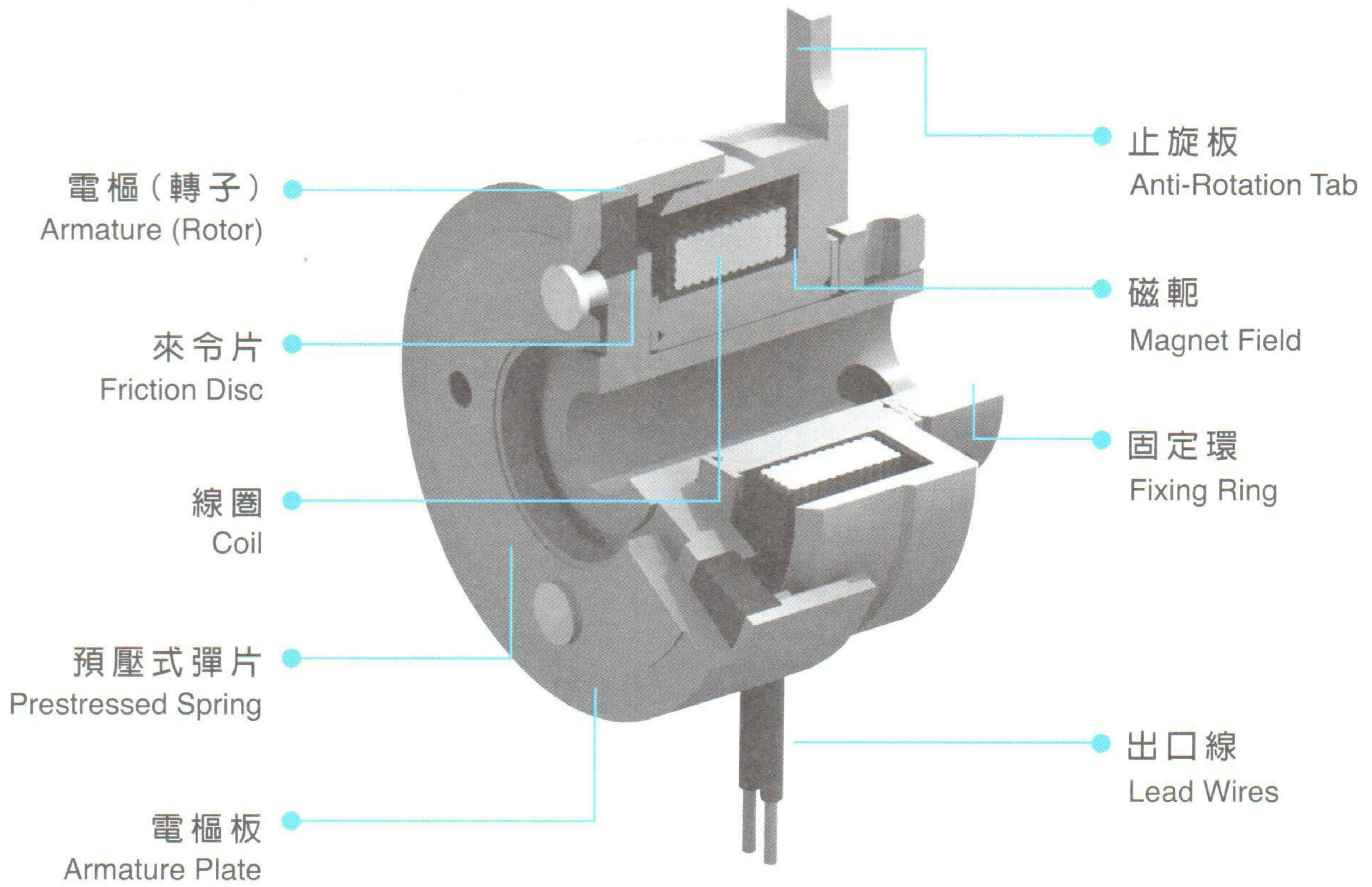


MCE

# 基本構造 Basic Construction

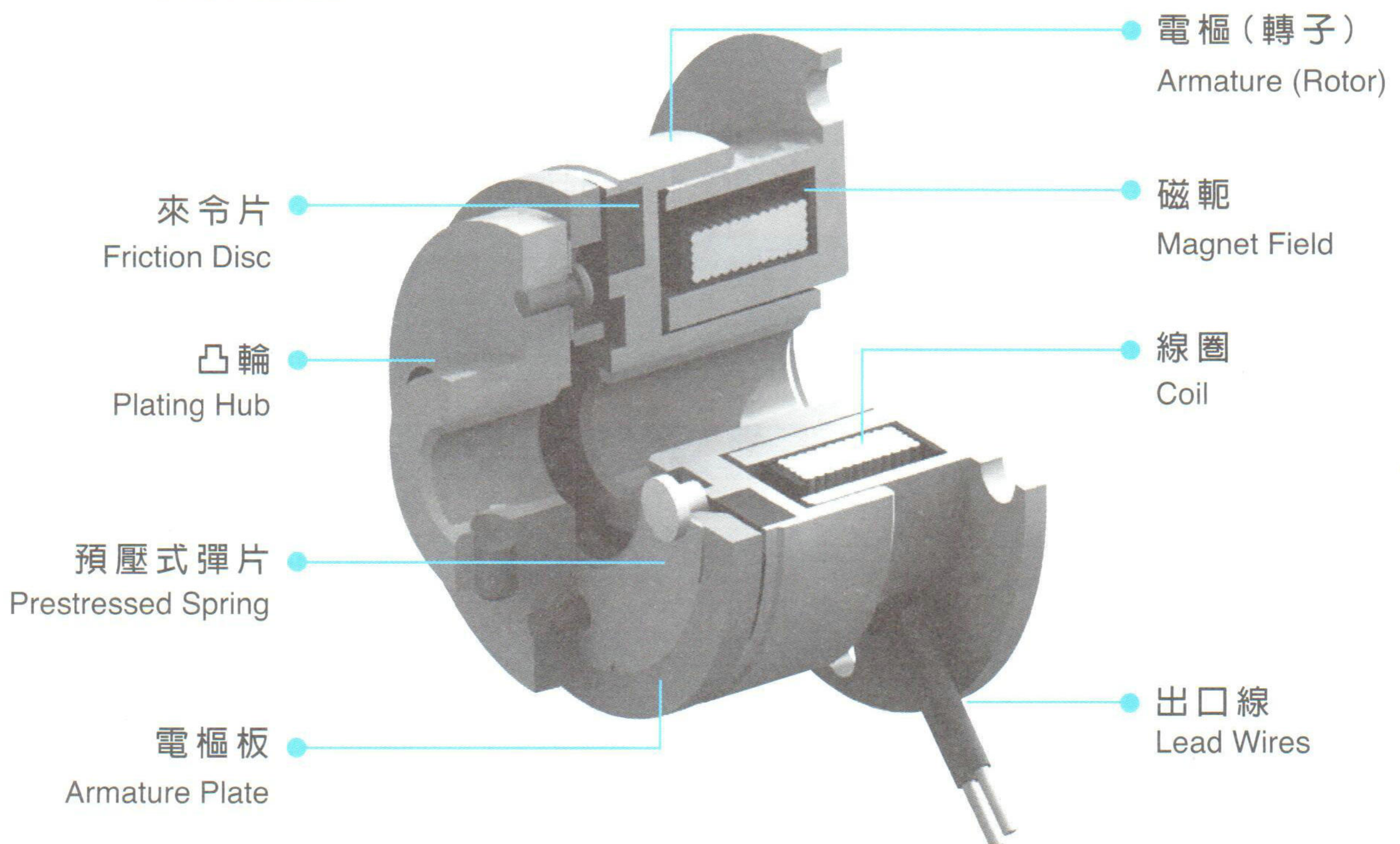
## MCE

系列 series



## MF1

系列 series



## 乾式單板電磁離合器/煞車器-微型 Electromagnetic Power-applied Friction Clutch And Brake- Miniature Type

- 乾式單板電磁離合器·煞車器 微型 系列是用於乾式運轉時，利用摩擦力來傳輸扭力和停止扭力。當供應直流電源時，扭力的傳輸是無背隙的，因為使用預壓式的板片彈簧和電樞板作組合，可確保釋放時沒有殘餘的扭力。

此系列的離合器和煞車器，可以於任何固定的位置來安裝，且不太需要作任何保養。如果必要的話，可依據實際的工作情形，檢查及調修工作間隙的距離。此種型式的離合器和煞車器可廣泛的應用在事務機械和自動化工業上，如：折紙機、提款機、影印機、電動門...等。

Micro electromagnetic clutches and brakes are suitable for dry running, which transmit and stop the torque through friction. With DC voltage supplied, the torque is transmitted without backlash. Due to the coordination of prestressed plating spring and armature plate, a release free of residual torque is ensured.

This series of micro electromagnetic clutches and brakes can be installed in any mounting position and hardly need maintenance. Depending on actual operation, the air gap can be checked and adjusted to achieve required characteristics if necessary. Micro electromagnetic clutches and brakes are widely applied for office equipments and automatic machines, such as folders, ATM, copy machines, automatic door...and so on.

### ■ 特色 SPECIAL FEATURES

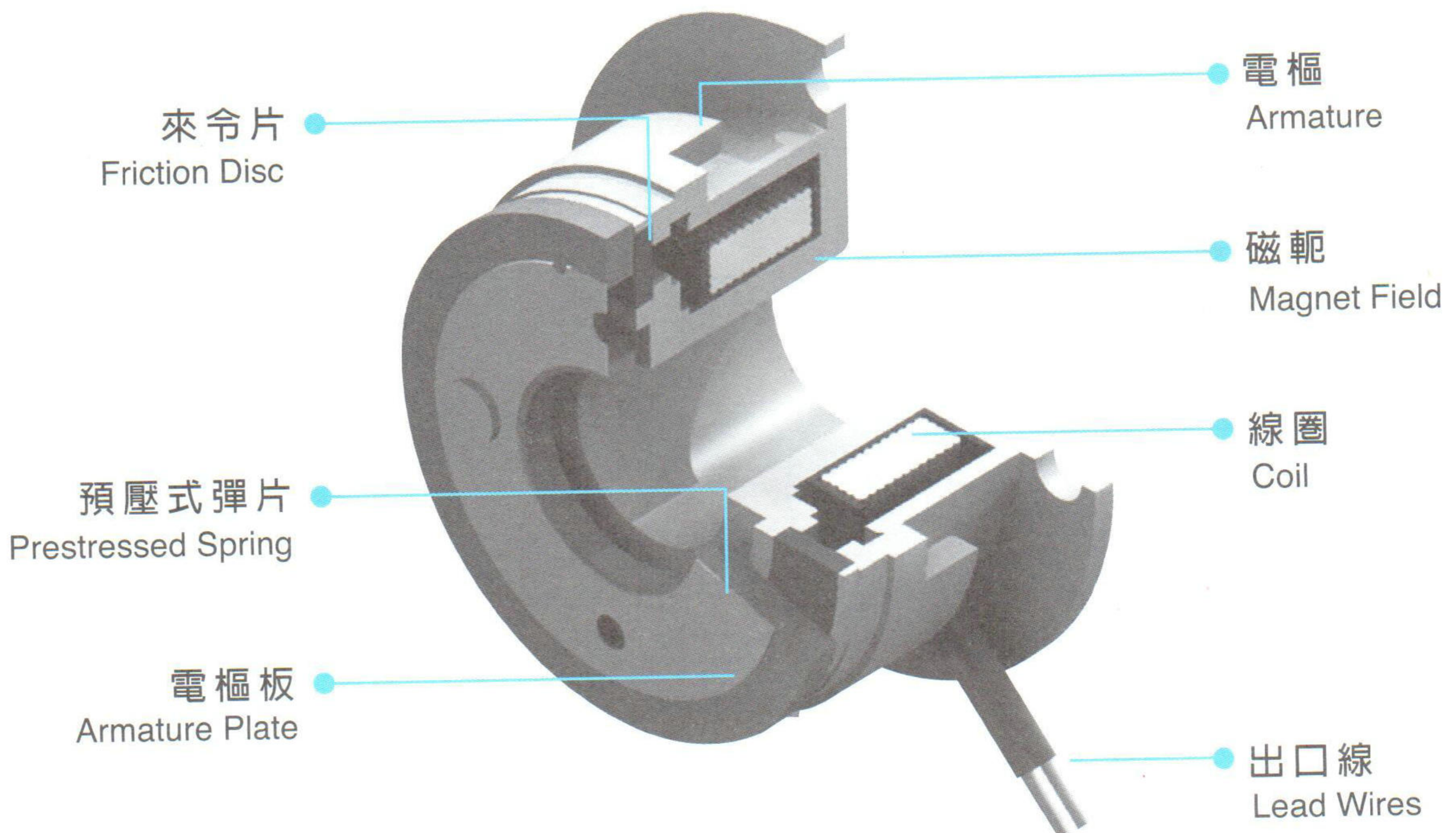
- 1 無石棉：使無石棉的來令片，客戶可安心使用，無任何環境污染及為害人體的問題。
- 2 無殘留的扭力：使用預壓式板片彈簧，在釋放時可確保沒有殘餘的扭力。
- 3 小型化設計：小型化、輕量化、高扭力設計，便於客戶設計組裝。
- 4 快速作動：傳輸及釋放扭力的時間快速確實，起動停止精確度高。
- 5 高散熱性：高散熱特性，適合高頻率使用，可獲得高效率。
- 6 無背隙

- 1 Non-asbestos: Non-asbestos materials are used for friction disc
- 2 No residual magnetism: Using prestressed plating spring to ensure that there is no residual magnetism when clutch/brake is released.
- 3 Small-size design: Miniaturized, high-torque and light design is easy for customers to install.
- 4 Quick response : Quick time for torque transmitting and releasing. High accuracy for starting and stopping.
- 5 Excellent heat dissipation: Suitable for high-frequency using, can increase work efficiency.
- 6 Zero backlash

## 基本構造 Basic Construction

MBG

系列series

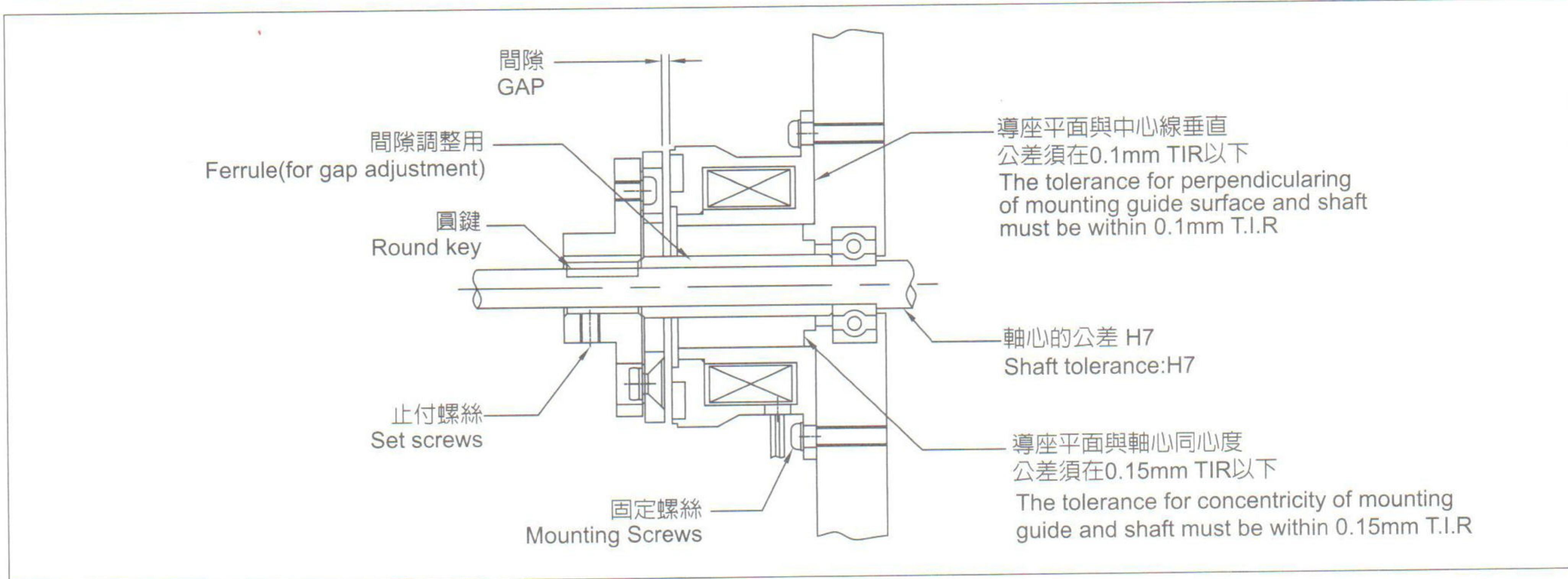


# 安裝範例 Examples of Installation

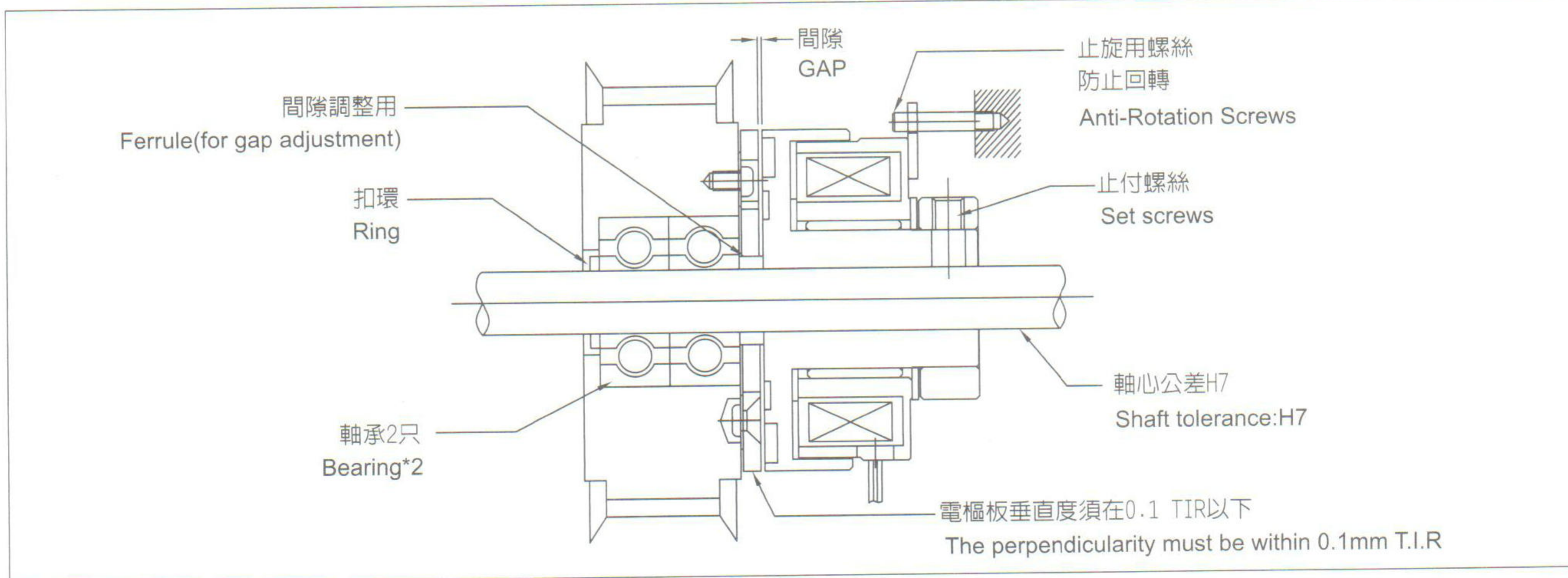
1. 安裝時避免摩擦面接觸油污，而引起扭力不足。
2. 調整間隙時，間隙值須於規格值的 $\pm 20\%$ 以內，避免電樞板無法釋放或作動。  
間隙值調整後，需送電測試，若電樞板釋放或作動不良，則應重新調整間隙。
3. 安裝時，避免敲打離合器、煞車器，或不小心掉落引起的變形。
4. 不可不當扭曲板片彈簧或板片彈簧上的來令凸輪，引起變形則不能使用

1. Please prevent the friction surface from grease contamination or it would cause low torque.
2. To insure normal operation of armature plate, the air gap must be noticed and kept within  $\pm 20\%$  of specification while adjusting gap. Voltage needs to be input for inspection of armature plate. The air gap needs to be re-adjusted if armature plate can not be released or engaged.
3. Please do not knock or drop clutches or brakes while mounting. A deformation of parts may cause failures.
4. Please do not bend the prestressed spring or plating hub. A deformation may cause failures.

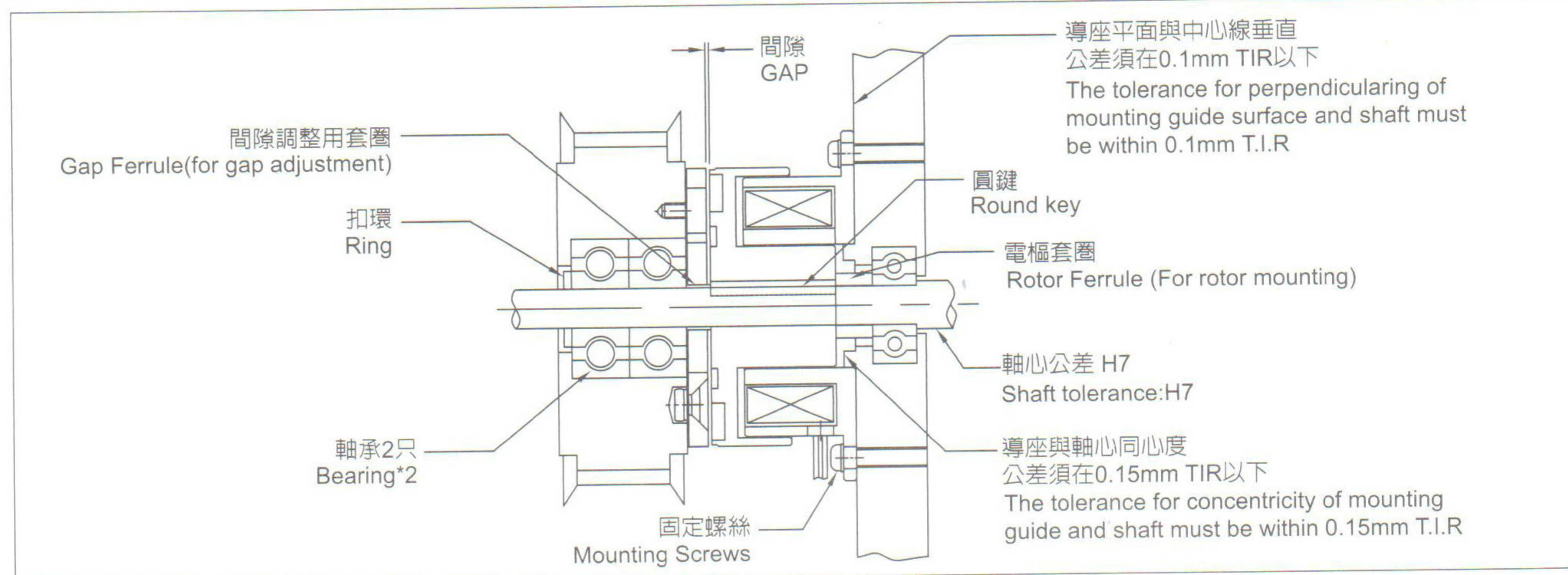
## MBG 系列 series



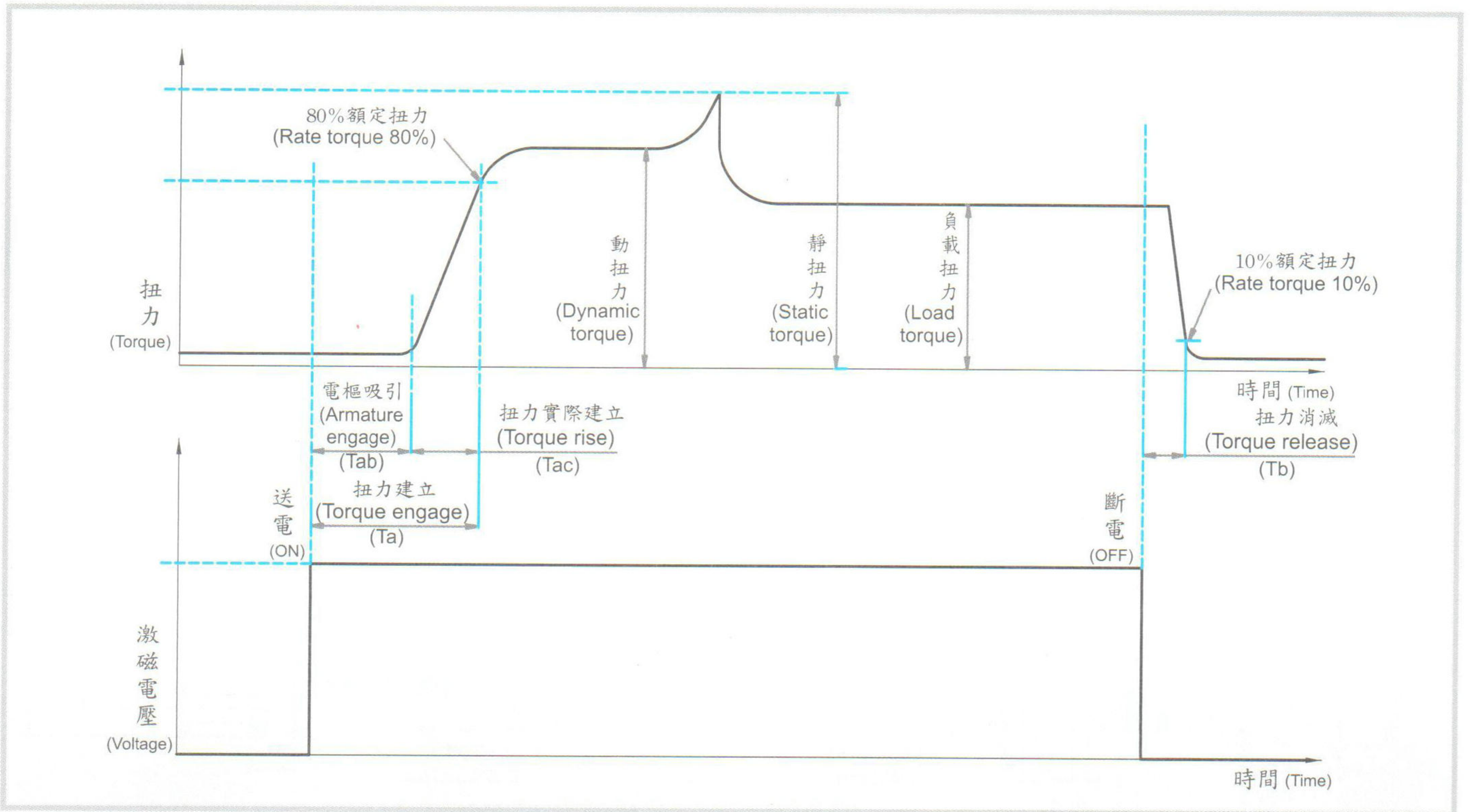
## MCE 系列 series



## MCF 系列 series



# 扭力關係圖 TORQUE



## 微型系列時間規格表 SPECIFICATIONS

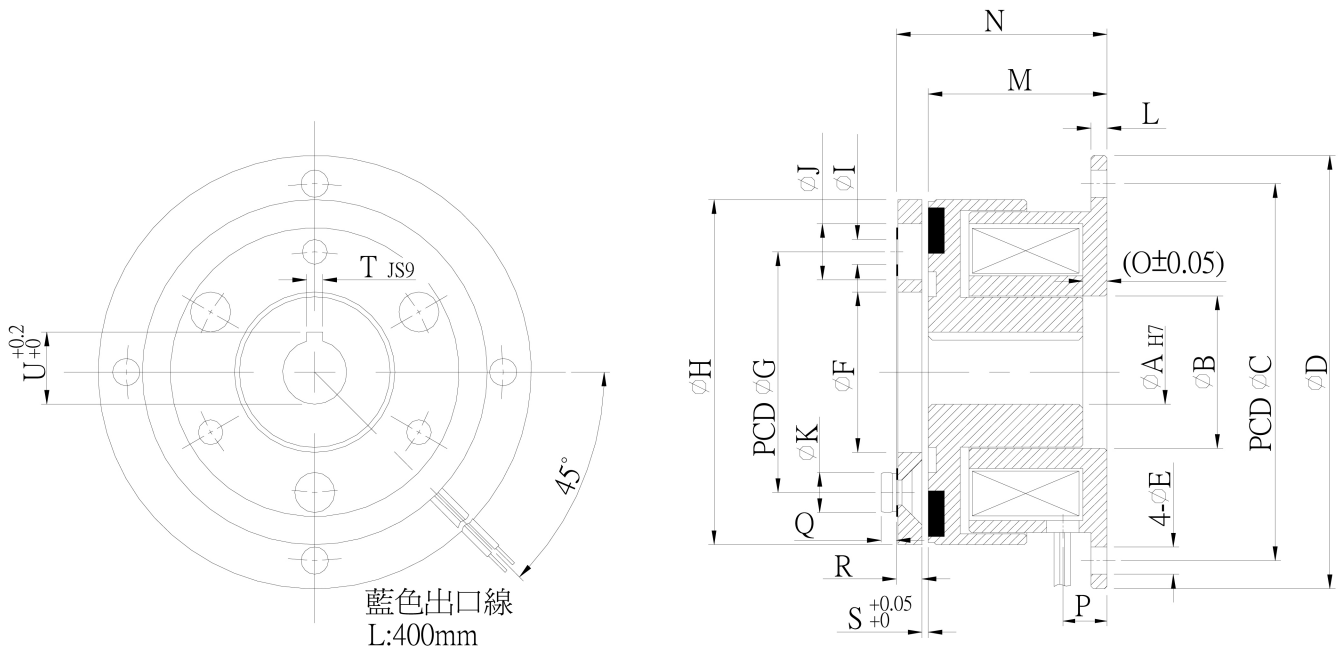
型號 MODEL	動作時間 Working time (ms)				最高轉速 Max. speed (rpm)	電樞慣性(J) Armature inertia	離合板慣性(J) Plate inertia
	Ta	Tab	Tac	Tb		(10 <sup>-5</sup> kgm <sup>2</sup> )	
MCFS06AA	25	8	17	18	10000	0.34	0.14
MCFS09AA	25	8	17	18		0.56	0.21
MCF0S2AA	30	10	20	20		1.58	0.66
MCF0S4AA	40	16	24	20		4.55	1.66

型號 MODEL	動作時間 Working time (ms)				最高轉速 Max. speed (rpm)	電樞慣性(J) Armature inertia	煞車板慣性(J) Plate inertia
	Ta	Tab	Tac	Tb		(10 <sup>-5</sup> kgm <sup>2</sup> )	
MBGS06AA	15	7	8	15	10000	-	0.14
MBGS09AA	20	8	12	18			0.21
MBG0S2AA	25	10	15	20			0.66
MBG0S4AA	35	15	20	20			1.66

型號 MODEL	動作時間 Working time (ms)				最高轉速 Max. speed (rpm)	電樞慣性(J) Armature inertia	離合板慣性(J) Plate inertia
	Ta	Tab	Tac	Tb		(10 <sup>-5</sup> kgm <sup>2</sup> )	
MCES06AA	20	8	12	15	1500	0.36	0.14
MCES09AA	25	8	17	16		0.6	0.21
MCE0S2AA	35	12	23	18		1.77	0.66
MCE0S4AA	40	16	24	20		5.14	1.66

# MCF Series

微小型電磁離合器(法蘭固定型) Micro Magnetic Clutch Flange-Mounted Type



型號 MODEL	MCFS06AA	MCFS09AA	MCF0S2AA	MCF0S4AA	
靜摩擦轉距 (Nm)	0.6	0.9	1.8	3.6	
功率 [24V](W) at 20°C	6.2	6	8	10	
徑向尺寸	A	6	6	8	10
	B	11	13	19	26
	C	33.5	38	47	58
	D	39	45	54	65
	E	3.4	3.4	3.4	3.4
	F	12.5	15	20	29
	G	19.5	23	30	38
	H	31	34	43	54
	I	2-2.1	3-2.6	3-3.1	3-3.2
	J	2-5	3-6	3-7	3-6.5
軸向尺寸	K	2-3.7	3-4.5	3-5	3-5
	L	1.5	2	2	2
	M	16	19	22.3	23.5
	N	18.3	21.5	25.6	26.8
	O	2	2	3	3
	P	4	5	5.5	6
	Q	0.8	1.5	1.9	1.3
	R	2.2	2.4	3.2	3.1
	S	0.1	0.15	0.15	0.2
	T	2	2	2	3
U	7	7	9	11.4	

联系: 严生

电话: 15112136402

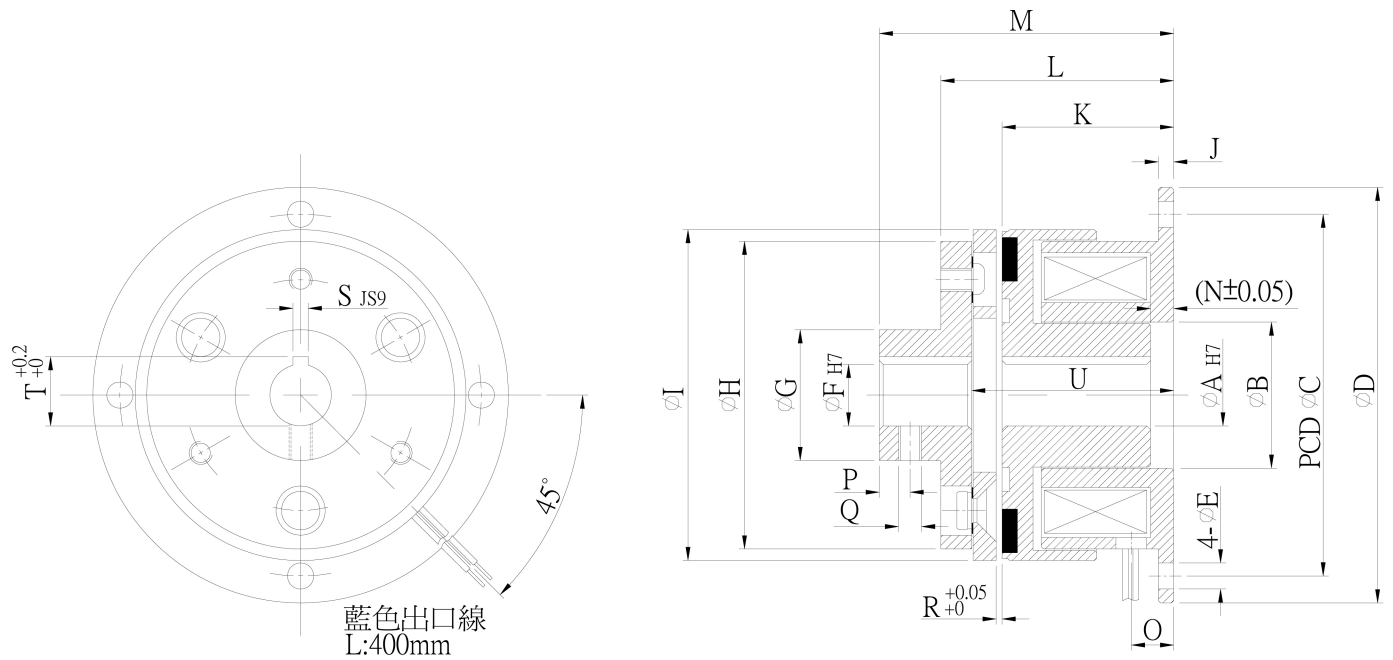
QQ: 250048681

# MF1

# Series

微型電磁離合器(法蘭固定型) Micro Magnetic Clutch Flange-Mounted Type

附導座 with plating hub



型號 MODEL	MF1S06AA	MF1S09AA	MF10S2AA	MF10S4AA	
靜摩擦轉距 (Nm)	0.6	0.9	1.8	3.6	
功率 [24V](W) at 20°C	6.2	6	8	10	
徑向尺寸	A	6	6	8	10
	B	11	13	19	26
	C	33.5	38	47	58
	D	39	45	54	65
	E	3.4	3.4	3.4	3.4
	F	6	6	8	10
	G	13	15	17	24
	H	28	32	40	50
	I	31	34	43	54
軸向尺寸	J	1.5	2	2	2
	K	16	19	22.3	23.5
	L	21.3	23.5	29.6	29.8
	M	26.3	31.5	37.6	38.8
	N	2	2	3	3
	O	4	5	5.5	6
	P	2.5	4	4	5
	Q	M3*P0.5	M3*P0.5	M3*P0.5	M3*P0.5
	R	0.1	0.15	0.15	0.2
	S	2	2	2	3
	T	7	7	9	11.4
U	18.3	21.6	25.6	26.8	

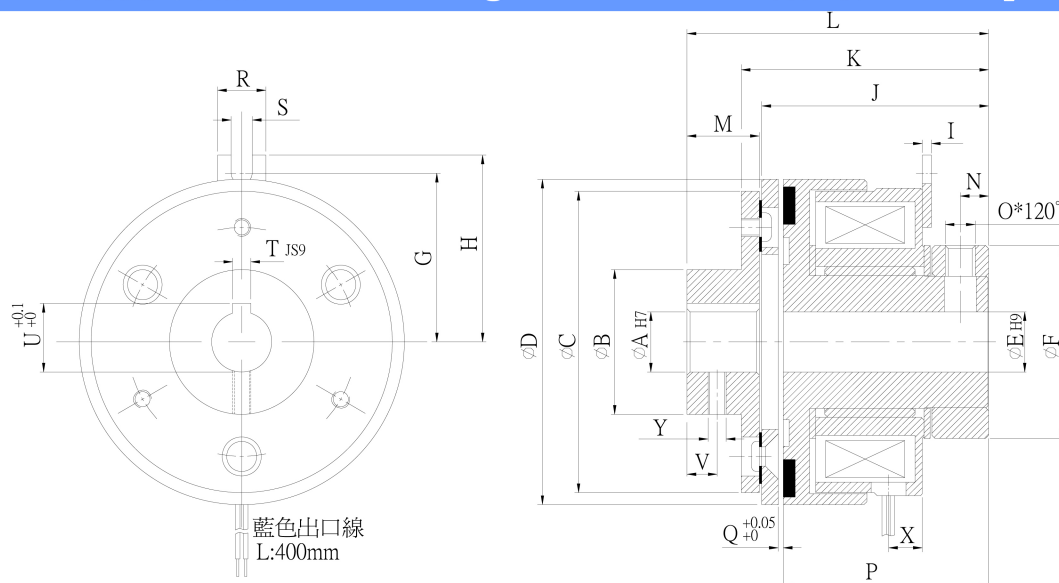
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# ME1 Series

微型電磁離合器 Micro Magnetic Clutch 附導座 with plating hub



型號 MODEL		ME1S06AA	ME1S09AA	ME10S2AA	ME10S4AA
靜摩擦轉距 (Nm)		0.6	0.9	1.8	3.6
功率 [24V](W) at 20°C		6.2	6	8	10
徑向尺寸	A	6	6	8	10
	B	12.9	15	17	24
	C	28	32	40	50
	D	31	34	42	54
	E	6	6	8	10
	F	16	18	25	32
	G	17.9	20	23	28
	H	20.9	23	26	31
軸向尺寸	I	1.5	1.5	1.5	1.5
	J	15.6	18.6	21.7	37
	K	27.8	30.7	38.55	40.4
	L	32.8	38.7	46.55	49.4
	M	8	10	12	12
	N	3	2.5	3	4.7
	O	3-M3*P0.5	2-M3*P0.5	2-M4*P0.7	2-M5*P0.8
	P	22.5	26.1	31	34.1
	Q	0.1	0.15	0.15	0.2
	R	8	8	8	8
	S	3.5	3.5	3.5	3.5
	T	2	2	2	3
	U	7	7	9	11.4
	V	2.5	4	4	5
	Y	M3*P0.5	M3*P0.5	M3*P0.5	M3*P0.5

联系: 严生

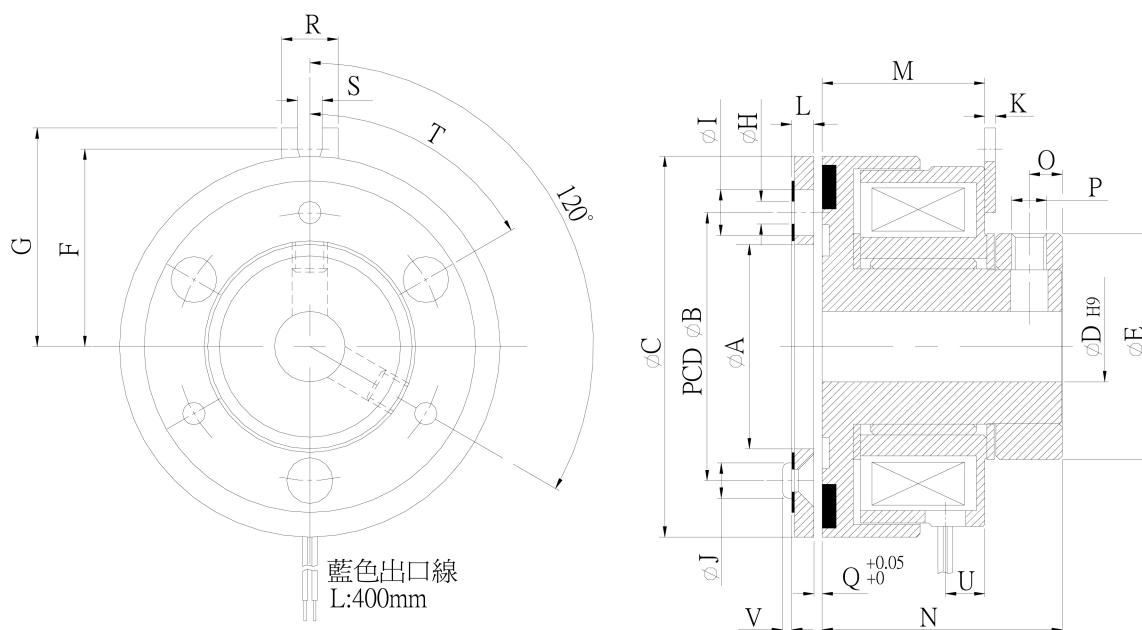
电话: 15112136402

QQ: 250048681



# MCE Series

## 微型電磁離合器 Micro Magnetic Clutch



型號 MODEL	MCES03AA	MCES06AA	MCES09AA	MCE0S2AA	MCE0S4AA	
靜摩擦轉距 (Nm)	0.3	0.6	0.9	1.8	3.6	
功率 [24V](W) at 20°C	3.9	6.2	6	8	10	
徑向尺寸	A	10	12.5	15.2	20	29
	B	17.6	19.5	23	30	38
	C	25	31	34	43	54
	D	5	6	6	8	10
	E	14	16	18	25	32
	F	12	18	20	23	28
	G	14.5	21	23	26	31
	H	2-2.1	2-2.1	3-2.6	3-3.1	3-3.1
	I	2-5	2-5	3-6	3-7	3-6.5
	J	2-3.7	2-3.7	3-5	3-5	3-5
軸向尺寸	K	1	1.5	1.5	1.5	1.5
	L	2.1	2.2	2.4	3.4	3.15
	M	15.7	17	18.5	21.7	23
	N	22	22.5	26	31	34
	O	2.75	3	2.5	3	4.7
	P	2-M3*P0.5	3-M3*P0.5	2-M3*P0.5	2-M4*P0.7	2-M5*P0.8
	Q	0.1	0.1	0.15	0.15	0.2
	R	8	8	8	8	8
	S	3.5	3.5	3.5	3.5	3.5
	T	90°	90°	60°	60°	60°
	U	4	4	4	5.5	5.5
	V	0.6	0.6	1.5	2	2

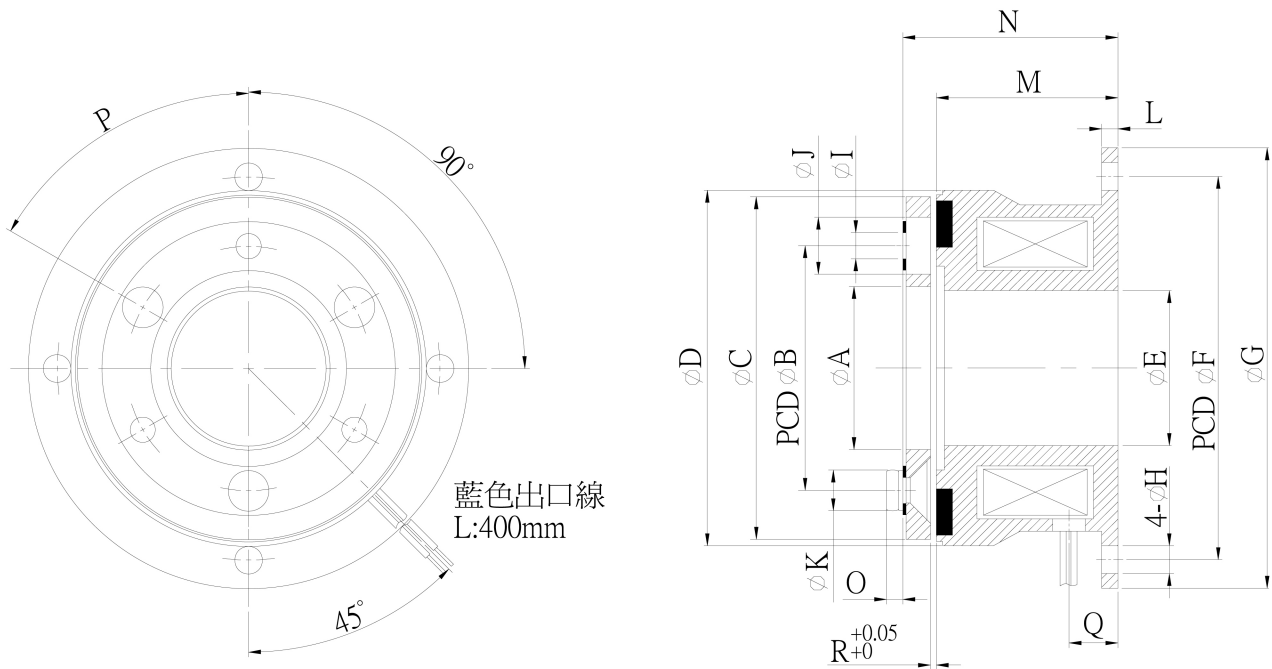
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电话：15112136402

QQ:250048681

# MBG Series

## 微小型電磁煞車器 Micro Magnetic Brake



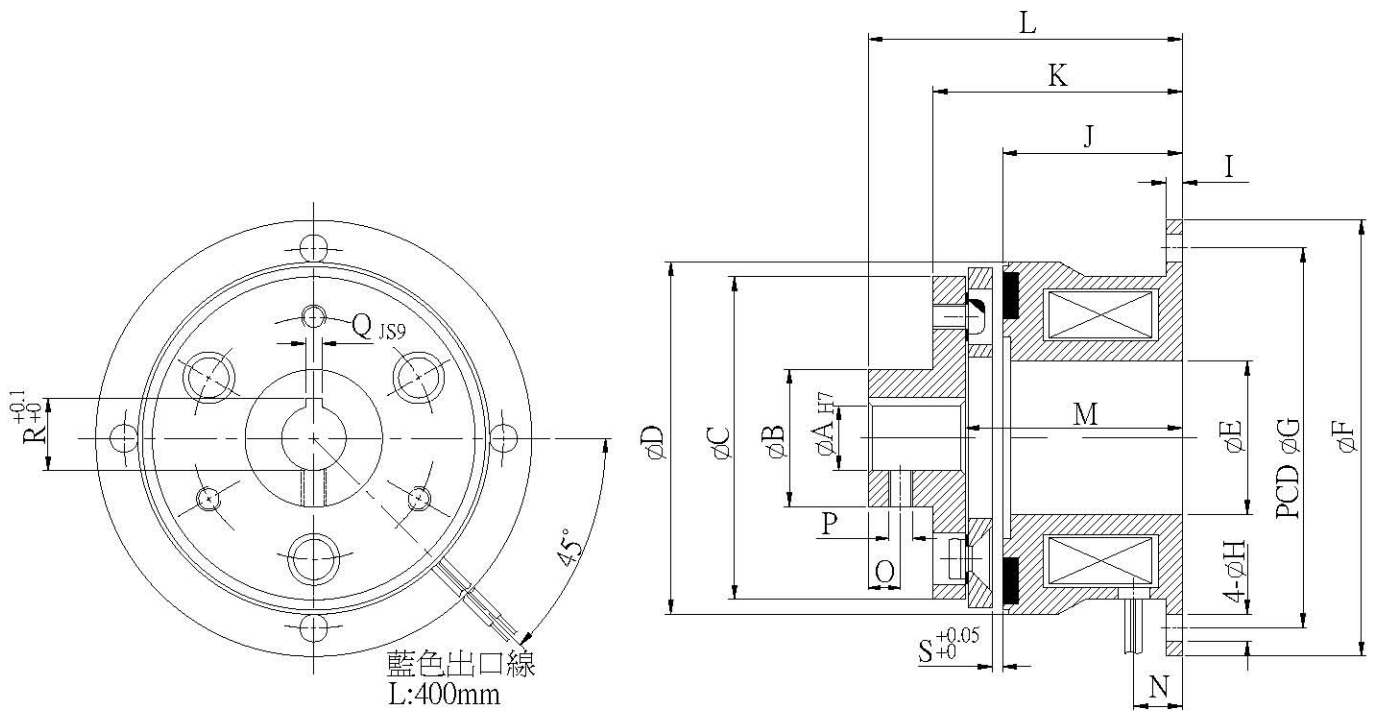
型號 MODEL	MBGS06AA	MBGS09AA	MBG0S2AA	MBG0S4AA	
靜摩擦轉距 (Nm)	0.6	0.9	2.2	4.5	
功率 [24V](W) at 20°C	6.2	6	8	10	
徑向尺寸	A	12.5	15	20	29
	B	19.5	23	30	38
	C	31	34	42	54
	D	31.9	34.2	43.6	54.5
	E	11	13	19	26
	F	33.5	38	47	58
	G	39	45	54	65
	H	3.4	3.4	3.4	3.4
	I	2-2.1	3-2.6	3-3.1	3-3.1
	J	2-5	3-6	3-7	3-6.5
	K	2-3.7	3-4.5	3-5	3-5
軸向尺寸	L	1.5	2	2	2
	M	16	18.9	22.3	23.5
	N	18.3	21.4	25.85	26.7
	O	0.8	1		
	P	90°	60°	60°	60°
	Q	4	5		
	R	0.1	0.10	0.15	0.2

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15112136402

# MG1 Series

微小型電磁煞車器 Micro Magnetic Brake 附導座 with plating hub

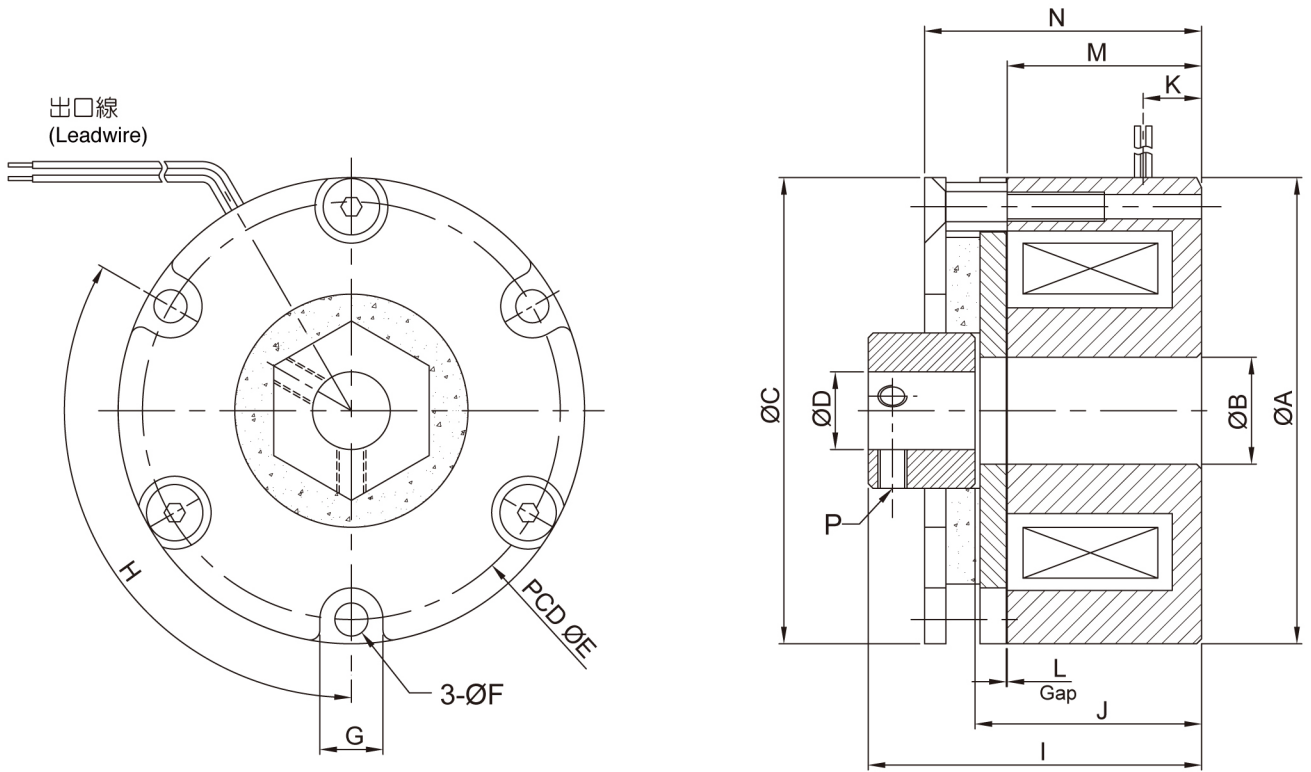


型號 MODEL	MG1S06AA	MG1S09AA	MG10S2AA	MG10S4AA	
靜摩擦轉矩 (Nm)	0.6	0.9	2.2	4.5	
功率 [24V](W) at 20°C	6.2	6	8	10	
徑向尺寸	A	6	6	8	10
	B	13	15	17	24
	C	28	32	40	50
	D	31	34	43.6	54.5
	E	11	13	19	26
	F	39	45	54	65
	G	33.5	38	47	58
	H	3.4	3.4	3.4	3.4
軸向尺寸	I	1.5	2	2	2
	J	16	18.9	22.3	23.5
	K	21.3	23.4	29.8	29.7
	L	26.3	31.4	37.8	38.7
	M	18.3	21.4	25.8	26.7
	N	4	5	6	6
	O	2.5	4	4	5
	P	M3*P0.5	M3*P0.5	M3*P0.5	M3*P0.5
	Q	2	2	3	3
	R	7	7	9	11.4
	S	0.1	0.1	0.15	0.2

联系：严生

电话：15112136402

QQ：250048681



15112136402 严生  
QQ: 250048681

型號 MODEL	MHBS013AA	MHBS02AA	MHBS03AA	MHBS05AA	MHBS13AA	
靜摩擦轉距 Static Friction Torque [kgm](Nm)	0.012 (0.12)	0.02 (0.2)	0.03 (0.3)	0.05 (0.5)	0.13 (1.3)	
電壓 Voltage (VDC)	24					
功率 Power [24V](W) at 20°C	3.84	4.2	6	6.5	8.6	
外型尺寸 Exterior dimensions	A	34.9	40	34.9	48	56
	B	7.22	9	7.22	11	15
	C	37.5	40	37.5	48	56
	D	4	6	6	8	8
	E	30	35	30	43	50
	F	3.2	3	3.2	3.4	3.5
	G	6	6	6	6.5	7
	H	120				
	I	22.4	32	27.75	34.3	-
	J	13.9	21	19.75	23.3	21.25
	K	7	6.5	6	6	13.3
	L	0.08~0.12	0.1~0.15	0.08~0.12	0.1~0.15	0.08~0.13
	M	11.7	18	17.7	20	17.8
	N	17.65	26.2	23.7	28.5	28.5
P	2-M3					

註：部分型號軸套外型為四角型。  
Part of models are designed with square hubs.