

CLUTCH BRAKE MOTOR

離合剎車馬達



● 特徵 FEATURES

■ 適用高頻率的間歇運轉 SUITABLE FOR HIGHLY FREQUENT START/STOP OPERATION

使用高精密度、高應答性的離合器及煞車器，最適合高頻率啟動/停止的機構。
High precision and responsive clutch and brake are most suitable for frequent start/stop applications.

■ 定位精準 PRECISE POSITIONING

當煞車器作動時，離合器會將馬達的連結跳開，因無馬達過轉問題，可使定位相當精準。

When the brake is in use, the clutch will separate the link from the brake, so there are no overruns, making positioning precise and accurate.

■ 設計精簡 SIMPLE DESIGN

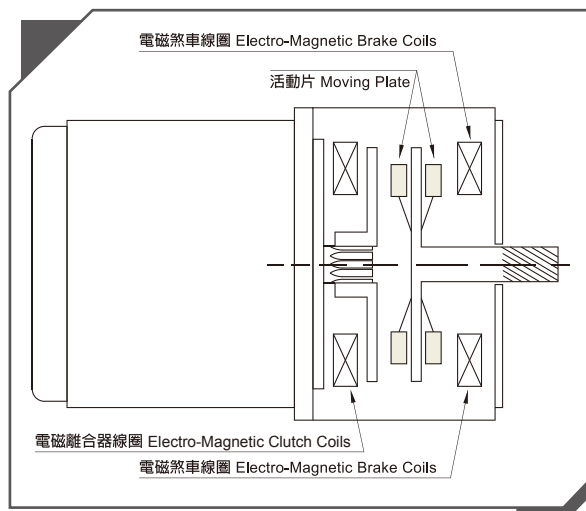
採用精巧、不佔空間的設計理念，不但操作容易，且能使機械美觀、簡潔。
Adapting compact and space-saving design, making it easy to operate and looking elegant.

● 離合剎車器的構造 CONSTRUCTION OF CLUTCH BRAKER

離合剎車器是使用精密離合器與煞車器加以組合，適用於高頻率的啟動/停止。在與減速機結合後，很容易達成位置決定、寸動及間接輸送等動作。
A clutch brake is a precision clutch assembled with a brake, suitable for highly frequent start/stop operation. After adjoining with a speed reducer, it can easily accomplish actions such as positioning, inch movement and interval transportation.

■ 離合剎車器的規格 SPECIFICATION OF THE CLUTCH BRAKER

機型 MODELS	GK機型 GK TYPE		GS機型 GS TYPE	
	剎車器 BRAKER	離合器 CLUTCH	剎車器 BRAKER	離合器 CLUTCH
靜摩擦力矩 (kg.cm) STATIC FRICTION TORQUE	10	10	15	15
動摩擦力矩 (kg.cm) DYNAMIC FRICTION TORQUE	7	7	10	10
額定電壓 (DC-V) RATED VOLTAGE	24	24	24	24
容量(W) CAPACITY (AT 20°C)	8	6	8	6
動作程度 BRAKE FREQUENCY	最大100回 /分鐘 Max. : 100 rounds /min			



■ 絕緣阻抗 INSULATING RESISTANCE :

線圈與外殼間以DC 500V高阻計量測，測定值在10MΩ以上。
Tested value at 10MΩ and above, measured by DC 500V hi-resistance meter between the coil and housing.

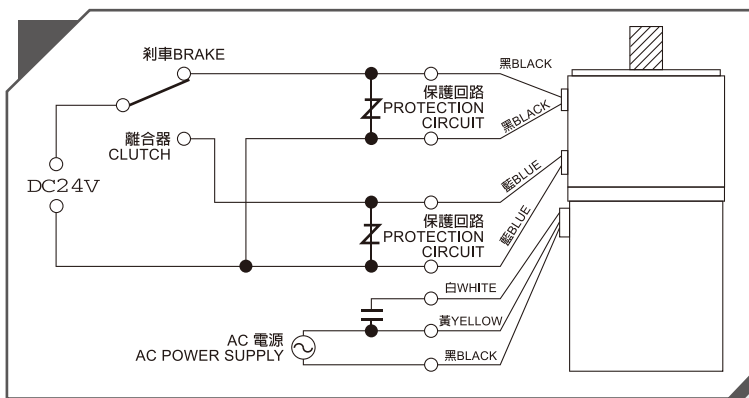
■ 絕緣耐力 INSULATION ENDURANCE :

線圈與外殼間以60Hz, 1kV加入一分鐘無異狀。
No damages caused after 1kV at 60Hz was tested between the coil and housing.

● 離合剎車器的結線圖 WIRING OF A CLUTCH BRAKE

馬達電源(AC)與離合器、煞車用電源(DC24V)必須分開。馬達在運轉狀態時，開關切向離合器側時，出力軸開始迴轉並將動力傳出。切向煞車側時瞬間停止，且保有很大的保持力。若將DC電源切斷時，出力軸可以自由轉動。

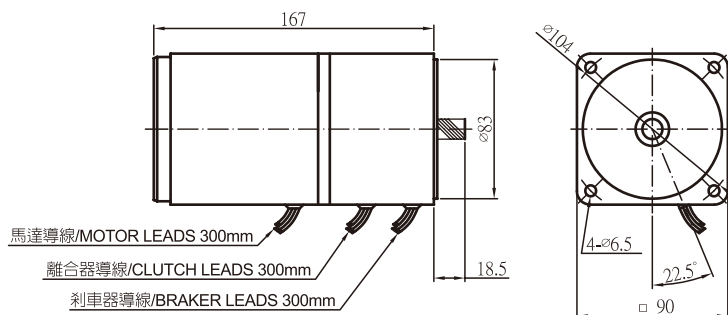
The power source for the motor (AC) and the clutch/brake (DC24V) must be separated. As the switch is on the clutch side when the motor is rotating, the output shaft will start rotating and transmits power accordingly. As the switch is on the brake side, it would stop instantly and hold great retention force. If the DC power is shut off, the output shaft can rotate freely.



INDUCTION CLUTCH BRAKE MOTOR

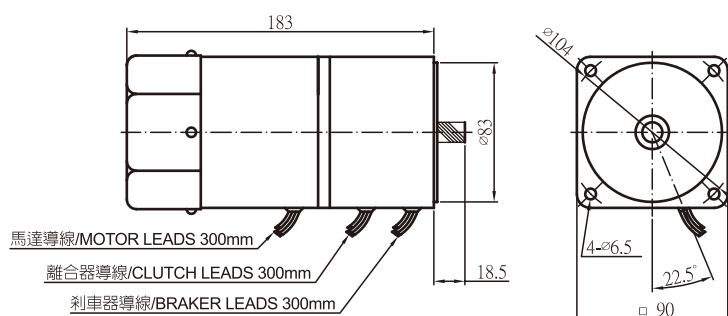
離合剎車 連續運轉型

- 外形圖與規格表
- OUTLINE & SPECIFICATION
- 單位/UNIT : mm



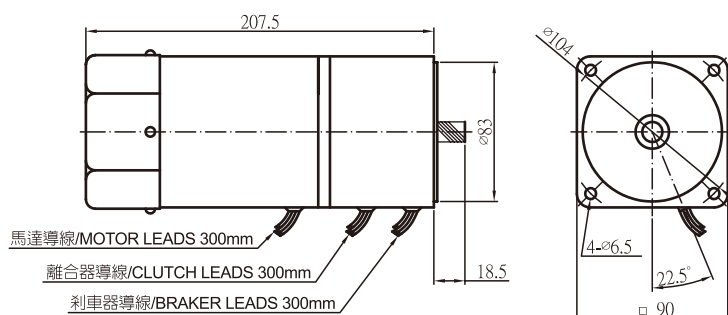
40W

40W機型MODEL		出力(W)	電壓(V)	頻率(HZ)	極數(P)	額定轉數(rpm)	額定時間	起動轉矩(Kg.cm)	額定轉矩(Kg.cm)	額定電流(A)	電容量(μF)
馬達MOTOR	離合剎車器CLUTCH BRAKE	OUTPUT	VOLTAGE	FREQ.	POLE	RATED SPEED	RATED TIME	STARTING TORQUE	RATED TORQUE	RATED CURRENT	CAPACITY
5IK40GK-A	MBC90GN-DC24V	40	1ø100/110	50/60	4	1250/1600	連續Continuous	2.14/2.66	3.17/2.41	0.87/0.76	10/300V
5IK40GK-C	MBC90GN-DC24V	40	1ø200/220	50/60	4	1300/1650	連續Continuous	1.75/2.17	3.01/2.35	0.4/0.34	2.5/450V
5IK40GK-CE	MBC90GN-DC24V	40	1ø230/240	50	4	1350/1350	連續Continuous	2.3/2.58	2.87/2.84	0.32/0.32	2.5/450V
5IK40GK-S	MBC90GN-DC24V	40	3ø220	60	4	1400/1600	連續Continuous	10.51/7.83	2.83/2.4	0.29/0.27	-
5IK40GK-U	MBC90GN-DC24V	40	3ø380	60	4	1350/1600	連續Continuous	9.25/6.68	2.85/2.45	0.16/0.15	-



60W

60W機型MODEL		出力(W)	電壓(V)	頻率(HZ)	極數(P)	額定轉數(rpm)	額定時間	起動轉矩(Kg.cm)	額定轉矩(Kg.cm)	額定電流(A)	電容量(μF)
馬達MOTOR	離合剎車器CLUTCH BRAKE	OUTPUT	VOLTAGE	FREQ.	POLE	RATED SPEED	RATED TIME	STARTING TORQUE	RATED TORQUE	RATED CURRENT	CAPACITY
5IK60GS-AF	MBC90GX-DC24V	60	1ø100/110	50/60	4	1200/1650	連續Continuous	2.6/2.94	5.0/3.5	1.8/1.12	16/300V
5IK60GS-CF	MBC90GX-DC24V	60	1ø200/220	50/60	4	1250/1600	連續Continuous	3.62/4.41	4.64/3.63	0.64/0.54	4/450V
5IK60GS-CEF	MBC90GX-DC24V	60	1ø230/240	50	4	1300/1350	連續Continuous	4.14/5.22	4.56/4.40	0.56/0.55	4/450V
5IK60GS-SF	MBC90GX-DC24V	60	3ø220	60	4	1300/1550	連續Continuous	13.72/10.70	4.47/3.77	0.41/0.39	-
5IK60GS-UF	MBC90GX-DC24V	60	3ø380	60	4	1400/1550	連續Continuous	14.33/10.15	4.2/3.79	0.21/0.22	-



90W

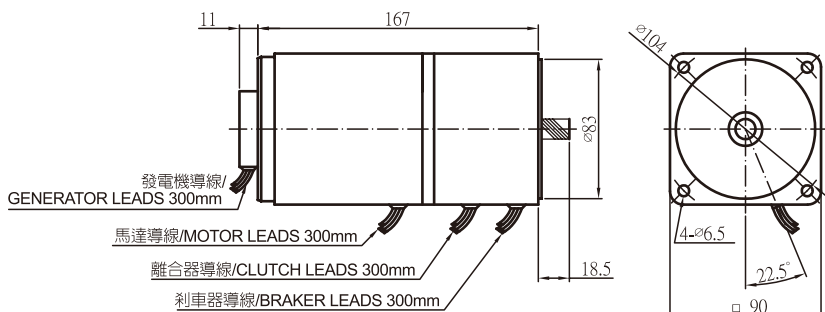
90W機型MODEL		出力(W)	電壓(V)	頻率(HZ)	極數(P)	額定轉數(rpm)	額定時間	起動轉矩(Kg.cm)	額定轉矩(Kg.cm)	額定電流(A)	電容量(μF)
馬達MOTOR	離合剎車器CLUTCH BRAKE	OUTPUT	VOLTAGE	FREQ.	POLE	RATED SPEED	RATED TIME	STARTING TORQUE	RATED TORQUE	RATED CURRENT	CAPACITY
5IK90GS-AF	MBC90GX-DC24V	90	1ø100/110	50/60	4	1300/1650	連續Continuous	4.76/5.86	6.68/5.33	1.5/1.41	22/250V
5IK90GS-CF	MBC90GX-DC24V	90	1ø200/220	50/60	4	1300/1650	連續Continuous	4.3/4.21	6.89/5.34	0.76/0.72	5/450V
5IK90GS-CEF	MBC90GX-DC24V	90	1ø230/240	50	4	1350/1350	連續Continuous	4.93/5.08	6.44/6.42	0.66/0.68	5/450V
5IK90GS-SF	MBC90GX-DC24V	90	3ø220	60	4	1400/1650	連續Continuous	23.3/18.25	6.4/5.3	0.7/0.6	-
5IK90GS-UF	MBC90GX-DC24V	90	3ø380	60	4	1400/1650	連續Continuous	23.3/18.14	6.3/5.3	0.4/0.3	-

Products due to human error, natural disasters or other factors lead to poor or damaged, will not be covered under warranty. 產品因人為原因或天災等因素導致不良或損壞，不在保固範圍內。

VARIABLE SPEED CLUTCH BRAKE MOTOR

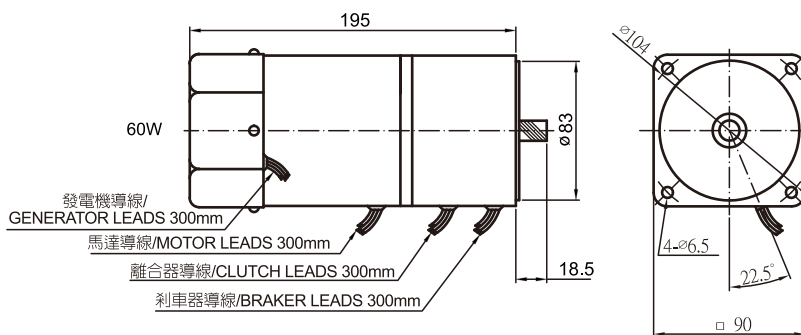
離合剎車 無段變速型

■ 外形圖與規格表
■ OUTLINE & SPECIFICATION
■ 單位/UNIT : mm



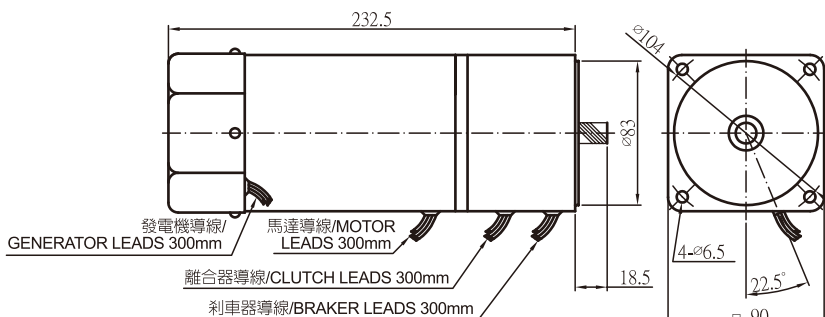
40W

40W機型MODEL		額定出力(W)	電壓(V)	頻率(HZ)	極數(P)	電流(A)	調速範圍(rpm)	起動轉矩(Kg.cm)	容許轉矩(Kg.cm)/ 設定迴轉數		電容器CAPACITOR	
馬達MOTOR	離合剎車器CLUTCH BRAKE	RATED OUTPUT	VOLTAGE	FREQ.	POLE	CURRENT	ADJUSTABLE RANGE	STARTING TORQUE	MAXIMUM TORQUE/ PRE-SET TURNINGS	90rpm	容量(μF)CAPACITY	耐電壓(VAC)WITHSTAND VOLTAGE
5IK40RGK-A	MBC90GN-DC24V	40	100/110	50/60	4	0.87/0.76	90~1400/90~1700	2.14/2.66	3.18/4.2	2.2/2.8	10	300
5IK40RGK-C	MBC90GN-DC24V	40	200/220	50/60	4	0.4/0.34	90~1400/90~1700	1.75/2.17	3.6/4.2	1.8/2.1	2.5	450
5IK40RGK-CE	MBC90GN-DC24V	40	230/240	50	4	0.32/0.32	90~1400	2.3/2.58	4.4/4.6	2.4/2.6	2.5	450



60W

60W機型MODEL		額定出力(W)	電壓(V)	頻率(HZ)	極數(P)	電流(A)	調速範圍(rpm)	起動轉矩(Kg.cm)	容許轉矩(Kg.cm)/ 設定迴轉數		電容器CAPACITOR	
馬達MOTOR	離合剎車器CLUTCH BRAKE	RATED OUTPUT	VOLTAGE	FREQ.	POLE	CURRENT	ADJUSTABLE RANGE	STARTING TORQUE	MAXIMUM TORQUE/ PRE-SET TURNINGS	90rpm	容量(μF)CAPACITY	耐電壓(VAC)WITHSTAND VOLTAGE
5IK60RGK-AF	MBC90GN-DC24V	60	100/110	50/60	4	1.8/1.12	90~1400/90~1700	2.6/2.94	5.6/6.9	3.5/4.0	16	300
5IK60RGK-CF	MBC90GN-DC24V	60	200/220	50/60	4	0.64/0.54	90~1400/90~1700	3.62/4.41	5.9/6.9	4.6/4.4	4	450
5IK60RGK-CEF	MBC90GN-DC24V	60	230/240	50	4	0.56/0.55	90~1400	4.14/5.22	7.2	5.2	4	450



90W

90W機型MODEL		額定出力(W)	電壓(V)	頻率(HZ)	極數(P)	電流(A)	調速範圍(rpm)	起動轉矩(Kg.cm)	容許轉矩(Kg.cm)/ 設定迴轉數		電容器CAPACITOR	
馬達MOTOR	離合剎車器CLUTCH BRAKE	RATED OUTPUT	VOLTAGE	FREQ.	POLE	CURRENT	ADJUSTABLE RANGE	STARTING TORQUE	MAXIMUM TORQUE/ PRE-SET TURNINGS	90rpm	容量(μF)CAPACITY	耐電壓(VAC)WITHSTAND VOLTAGE
5IK90RGS-AF	MBC90GX-DC24V	90	100/110	50/60	4	1.5/1.41	90~1400/90~1700	4.76/5.86	8.4/10.2	5/6.1	22	250
5IK90RGS-CF	MBC90GX-DC24V	90	200/220	50/60	4	0.76/0.72	90~1400/90~1700	4.3/4.21	8/8.7	4.4/4.4	5	450
5IK90RGS-CEF	MBC90GX-DC24V	90	230/240	50	4	0.66/0.68	90~1400	4.93/5.08	9.8/10.2	5.2/5.6	5	450

備註：

- 選用離合器的馬達因停動頻率及停動時間會產生很大的慣性矩，因此在選用結合齒箱時，請詳實計算本身機器上的反饋慣性矩，並告知本公司，讓本公司為貴公司提供適用之齒箱。
- 因瞬間啟動及停止會產生很大的電流，致使馬達溫度急速升高，固停動頻率不可大於20次/分，GK離合器剎車之出力軸一律為GN軸，而GS離合器剎車之出力軸一律為GX軸。

NOTES：

- A clutch motor has great inertia according to the stop frequency and interval. When selecting a speed reducer, please calculate the feedback inertia accurately on your machine and advise us, so we can provide you the applicable model of speed reducer.
- Instant start and stop will result in great currents, causing the temperature to rise rapidly, thus the start-stop frequency could not exceed 20 times per minute. GK model clutch brake motors have GN shafts, and GS model clutch brake motors have GX shafts.

泛用型馬達
GENERAL PURPOSE MOTOR

速度控制型馬達
SPEED CONTROLLED MOTOR

控制器
CONTROLLER

煞車馬達
BRAKE MOTOR

離合煞車馬達
CLUTCH BRAKE MOTOR

轉矩馬達
TORQUE MOTOR

減速機
SPEED REDUCER

零組件類
COMPONENTS

SPEED REDUCER

減速機

- 外形圖與規格表
- OUTLINE & SPECIFICATION
- 單位/UNIT : mm

減速機之選定 HOW TO SELECT A SPEED REDUCER

■ 與減速機直結後的回轉數及轉矩 ROTATION AND TORQUE GIVEN FROM CONJUNCTION WITH SPEED REDUCER

與減速機直結後的回轉數及轉矩可由以下公式算出
Following is the calculation formula:

$$\text{回轉速 Rotations: } N_G = \frac{N_M}{i}$$

$$\text{轉矩 Torque: } T_G = T_M \cdot i \cdot \eta$$

N_G : 加減速機後之回轉數 Rotations after conjunction with speed reducer (rpm)

N_M : 馬達本體之回轉數 Rotations of Motor (rpm)

i : 減速機減速比 Speed Reducer's reduce ratio

T_G : 加減速機後之轉矩 Torque after conjunction with speed reducer (kg·m)

T_M : 馬達本體之轉矩 Torque of Motor (kg·m)

η : 減速機之傳動效率 The transmission efficiency of the Speed Reducer

■ 最大容許轉矩 MAXIMUM TORQUE ALLOWED

限於材料或其他條件的限制，減速機能承受的轉矩是有極限的，當減速比變大時，請參考後面各章節。

The maximum torque a speed reducer can tolerate is limited due to materials or other specs. Please see the specification of speed reducer for maximum torque allowed at different ratio.

■ 容許側向負載及容許軸向負載

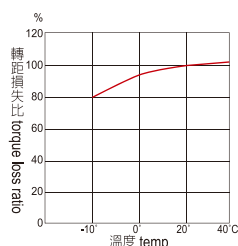
ALLOWABLE RADIAL LOAD AND AXIAL LOAD

所謂側向負載，就是出力軸在1/2處可以承受的彎曲負載，一般使用於以鏈條連結的機構。若是使用的連結器傳動的方式，可以不考慮。因為側向負載與軸向負載會影響減速機的壽命及強度，請勿超負載使用。

Radial load refers to the bending load of output shaft at the 1/2 point, commonly used in units linked by chains. Radial load can be disregarded if a coupling is used. Do not over-load since radial load and axial load may affect service life and strength.

■ 依溫度調整減速比 ADJUSTED THE SPEED REDUCER RATIO VIA ENVIRONMENT TEMPERATURE

環境溫度對於減速機的傳動效率有明顯的影響。上表的傳動效率是在室溫20°C時的量測值。當機台使用在寒帶地區時，請用右表的轉矩損失比來乘標示的轉矩。例如：若機台使用在-10°C的環境，其轉矩將減少20%。(僅供參考用)



Transmission efficiency of a speed reducer apparently does affected by the environment temperature. The graphic display the torque loss percentage at different ambient temperature (for reference only).

■ 馬達有圓軸及齒輪軸兩種，只有齒輪軸才能夠與減速機直結。 MOTOR EQUIP WITH ROUND SHAFT AND GEAR SHAFT, ONLY GEAR SHAFT CAN CONJUNCT WITH SPEED REDUCER.

減速機 Speed Reducer

4GN15K



馬達(齒輪軸) Motor (Gear shaft)

4IK25GN-A



馬達(圓軸) Motor (Round shaft)

4IK25A-A



減速機
Speed Reducer
4GN15K



中間減速機
Intermediate
Speed Reducer
4GN10X



馬達(齒輪軸)
Motor (Gear shaft)
4IK25GN-A



■ 負載形態與減速機壽命 LOAD PATTERNS VS. LIFESPAN OF SPEED REDUCER

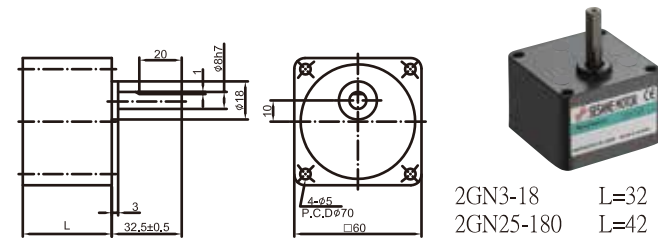
減速機的壽命會因負載方式，每日運轉時間及軸承種類之不同而改變。下表是假設減速機的負載低於最大容許轉矩。(僅供設計人員參考用)

Speed Reducer lifespan will be vary by ways of loading including but not limit to operation time frame, different type of bearing. The following table assumes that the load gear is under the maximum permissible torque. (Reference for engineers)

單位：小時 hrs

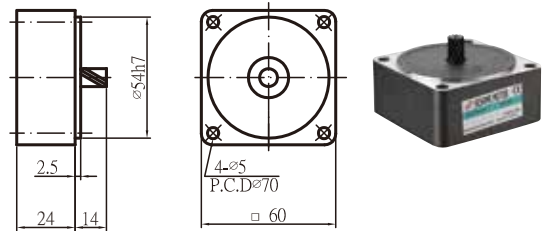
負載形態 LOAD PATTERN	含油軸承 BEARING			滾珠軸承 BALL BEARING			應用說明 Application Instructions.
	5 hrs/day	8 hrs/day	24 hrs/day	5 hrs/day	8 hrs/day	24 hrs/day	
固定負載 FIXED LOAD	2000	1500	1000	6250	5000	3400	單方向運轉，如：輸送機。 Operated in one direction, such as conveyors.
輕微衝擊 SLIGHT IMPACT	1500	1250	800	4200	3400	2500	經常起動/停止的機構，凸輪運轉。 Frequent start/stop, ex. cam operation.
強烈衝擊 STRONG IMPACT	800 ~1000	700 ~1000	600 ~700	2000 ~2500	1700 ~2500	1400 ~1700	可逆馬達的瞬間正逆轉，用 車器瞬間制動。 Reversible motors, instant moment reversed, with brake system in an instant brake.

2 GN KE . 2 GN 減速機/ SPEED REDUCER

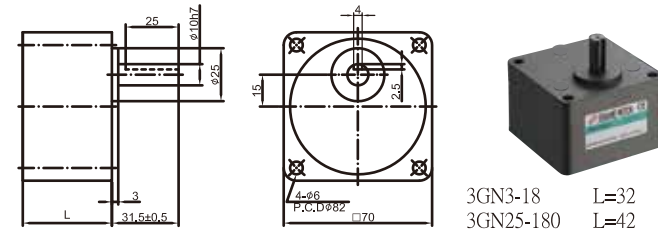


迴轉速/ SPEED(rpm)	500	300	200	180	150	120	100	60	50	30	20	15	10
減速比/ SPEED REDUCTION RATIO 50HZ	3	5	7.5	-	10	12.5	15	25	30	50	75	100	150
減速比/ SPEED REDUCTION RATIO 60HZ	3.6	6	9	10	-	15	18	30	36	60	90	120	180
最大容許轉矩/ (kgf.cm) MAX. TORQUE	1.1	1.8	2.7	3.0	3.9	4.5	5.4	8.1	9.7	15	23	25	25

2GN10X . 2GN10XK 中間減速機/ INTERMEDIATE SPEED REDUCER

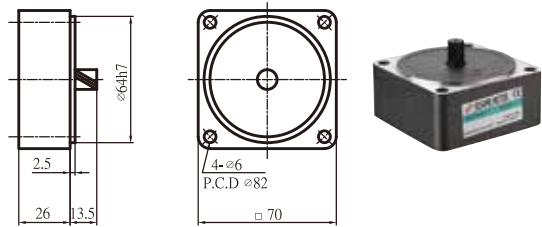


3 GN KE . 3 GN 減速機/ SPEED REDUCER

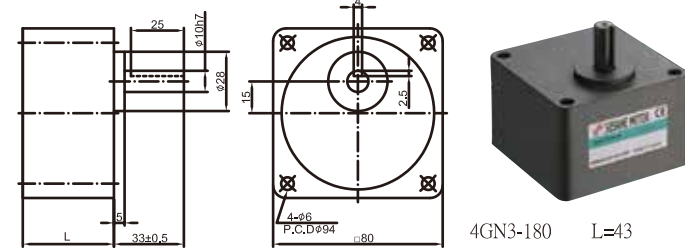


迴轉速/ SPEED(rpm)	500	300	200	180	150	120	100	60	50	45	37.5	30	20	15	10
減速比/ SPEED REDUCTION RATIO 50HZ	3	5	7.5	-	10	12.5	15	25	30	-	40	50	75	100	150
減速比/ SPEED REDUCTION RATIO 60HZ	3.6	6	9	10	-	15	18	30	36	40	-	60	90	120	180
最大容許轉矩/ (kgf.cm) MAX. TORQUE	2.6	4.4	6.6	7.4	9.8	11	13	20	24	24	32	36	50	50	50

3GN10X . 3GN10XK 中間減速機/ INTERMEDIATE SPEED REDUCER

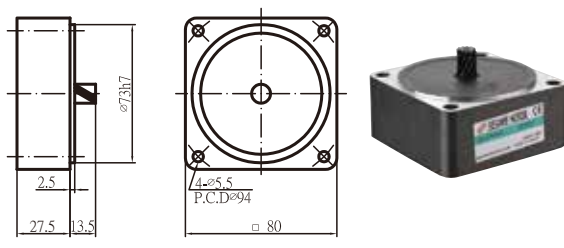


4 GN KE . 4 GN 減速機/ SPEED REDUCER

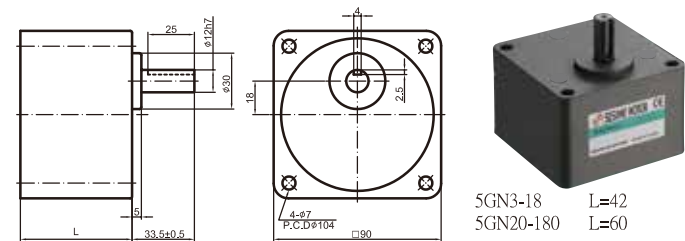


迴轉速/ SPEED(rpm)	500	300	200	180	150	120	100	60	50	45	37.5	30	20	15	10
減速比/ SPEED REDUCTION RATIO 50HZ	3	5	7.5	-	10	12.5	15	25	30	-	40	50	75	100	150
減速比/ SPEED REDUCTION RATIO 60HZ	3.6	6	9	10	-	15	18	30	36	40	-	60	90	120	180
最大容許轉矩/ (kgf.cm) MAX. TORQUE	4.4	7.4	11	12	15	11	22	33	40	40	50	60	80	80	80

4GN10X . 4GN10XK 中間減速機/ INTERMEDIATE SPEED REDUCER

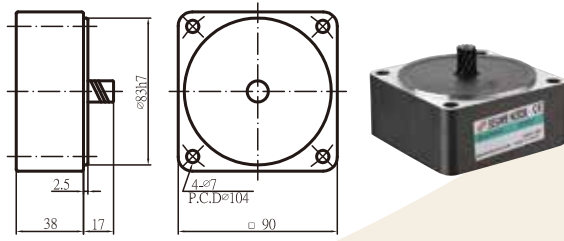


5 GN KE . 5 GN 減速機/ SPEED REDUCER



迴轉速/ SPEED(rpm)	500	300	200	180	150	120	100	90	75	60	50	45	37.5	30	20	15	10
減速比/ SPEED REDUCTION RATIO 50HZ	3	5	7.5	-	10	12.5	15	-	20	25	30	-	40	50	75	100	150
減速比/ SPEED REDUCTION RATIO 60HZ	3.6	6	9	10	-	15	18	20	-	30	36	40	-	60	90	120	180
最大容許轉矩/ (kgf.cm) MAX. TORQUE	10	17	26	29	36	43	52	52	65	78	93	93	100	100	100	100	100

5GN10X . 5GN10XK 中間減速機/ INTERMEDIATE SPEED REDUCER



泛用型馬達
GENERAL PURPOSE MOTOR

速度控制型馬達
SPEED CONTROLLED MOTOR

控制器
CONTROLLER

煞車馬達
BRAKE MOTOR

離合煞車馬達
CLUTCH BRAKE MOTOR

轉矩馬達
TORQUE MOTOR

減速機
SPEED REDUCER

零組件類
COMPONENTS

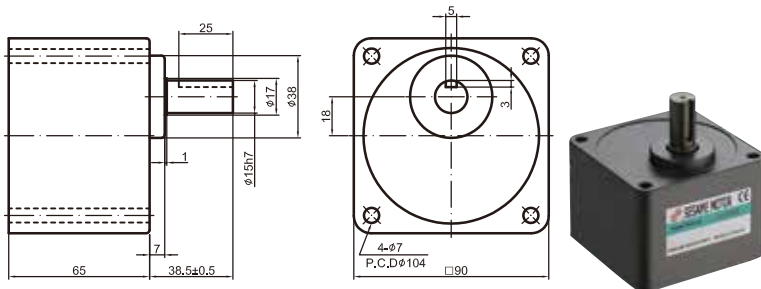
SPEED REDUCER

減速機

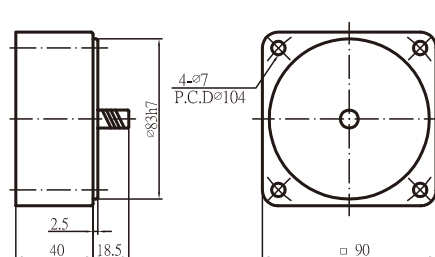
- 外形圖與規格表
- OUTLINE & SPECIFICATION
- 單位/UNIT : mm



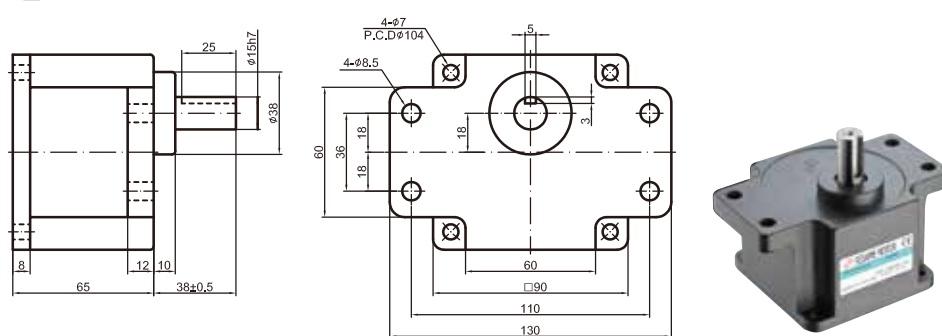
■ 5 GX□KB 減速機/ SPEED REDUCER



■ 5GX10XK 中間減速機/ INTERMEDIATE SPEED REDUCER

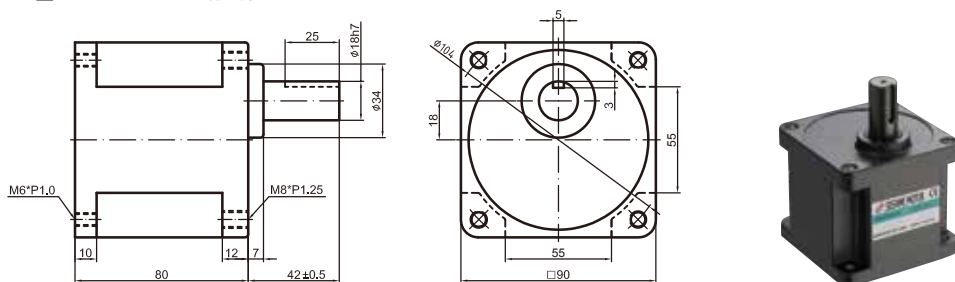


■ 5 GX□K 減速機/ SPEED REDUCER



迴轉速/ SPEED(rpm)	500	300	200	120	100	90	75	60	50	30	20	15	10	9	7.5
減速比/ SPEED REDUCTION RATIO 50HZ	3	5	7.5	12.5	15	-	20	25	30	50	75	100	150	-	200
減速比/ SPEED REDUCTION RATIO 60HZ	3.6	6	9	15	18	20	-	30	36	60	90	120	180	200	-
最大容許轉矩/ (kgf.cm) MAX. TORQUE	15	26	38	57	69	69	86	103	124	200	200	200	200	200	200

■ 5 GX□KBH 重力減速機/ GRAVITY FORCE TYPE REDUCER



迴轉速/ SPEED(rpm)	30	20	15	10	9	7.5
減速比/ SPEED REDUCTION RATIO 50HZ	50	75	150	150	-	200
減速比/ SPEED REDUCTION RATIO 60HZ	60	90	180	120	200	-
最大容許轉矩/ (kgf.cm) MAX. TORQUE	350	350	350	350	350	350

說明：

- 減速機品名中□放入減速比。
- 迴轉速是以馬達的同步轉速為基準(50 HZ : 1500rpm , 60Hz : 1800rpm)除以減速比；實際迴轉速應依負載之大小減少2%~20%。
- 標示■的減速機旋轉方向與馬達方向相反，其他則與馬達同方向。
- 齒箱使用注意事項及說明：減速機中若有金屬或異物仍勉強與馬達組合，將會使齒輪受傷而產生異常音，及減少減速機使用壽命，也可能發生意外，請特別注意。
- 齒箱與馬達結合一定要核對編碼是否正確，否則無法組裝。

NOTES：

- Please fill in the required speed reduction ratio in the □ (square) after the speed reducer model no.
- Rotational speed is calculated by dividing the synchronous speed of the motor (50Hz: 1500rpm; 60Hz: 1800rpm) with the reduction ratio. Depending on total load, actual rotational speed is 2%~20% less.
- Speed reducers marked in the highlighted areas have opposite rotational direction to the motor. Others unmarked have the same rotational direction as the motor.
- Attention: metal chips or objects in speed reducer will result in gear damage, noise and shorten service-life when assembling with motor.
- Please make sure that the shaft size of the motor matches to that of the accompanying reducer model before assembly, otherwise inconformity will occur.

Products due to human error, natural disasters or other factors lead to poor or damaged, will not be covered under warranty. 產品因人為原因或天災等因素導致不良或損壞，不在保固範圍內。

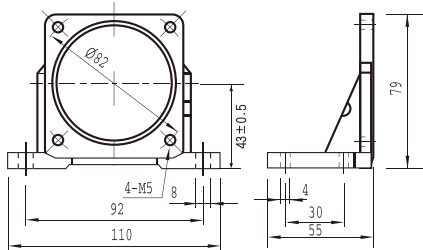
COMPONENTS

零組件類

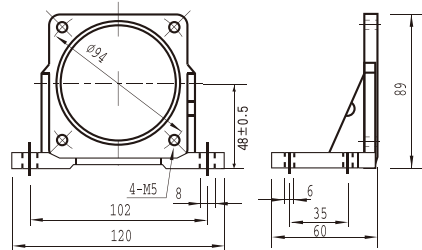
馬達安裝用L型腳座/ L TYPE BASE BRACKET FOR MOTOR INSTALLATION



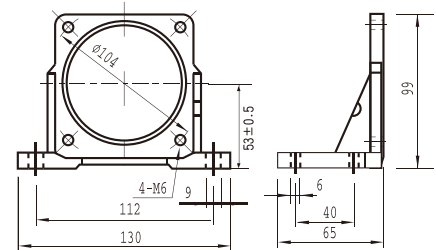
PAL-3N (□70mm用)



PAL-4N (□80mm用)

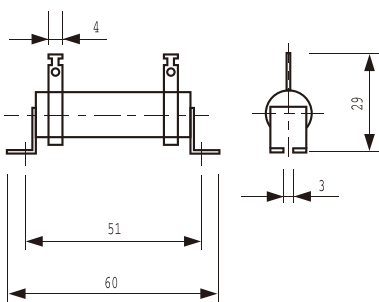


PAL-5N (□90mm用)

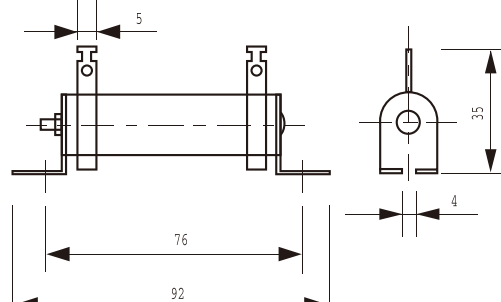


電子式剎車回路用外部電阻器/ EXTERNAL RESISTOR FOR ELECTRONIC BRAKE CIRCUITS

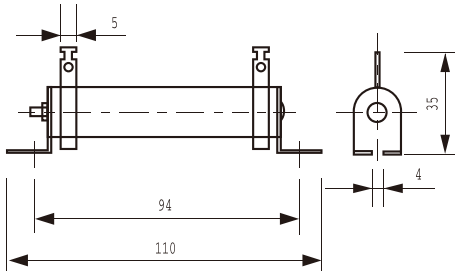
DDR10W10Ω J (10瓦/10歐姆)



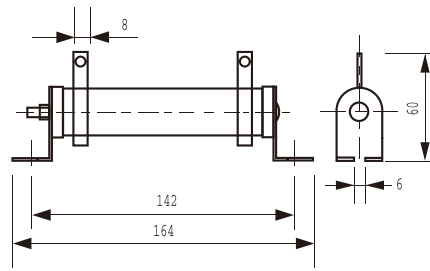
DDR20W20Ω J (20瓦/20歐姆)



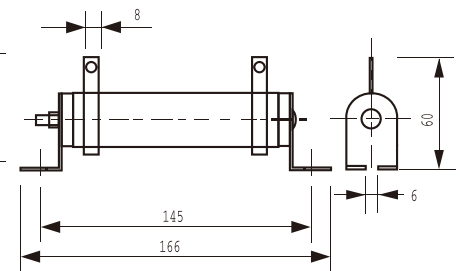
DDR30W20Ω J (30瓦/20歐姆)



DDR50W50Ω J (50瓦/50歐姆)

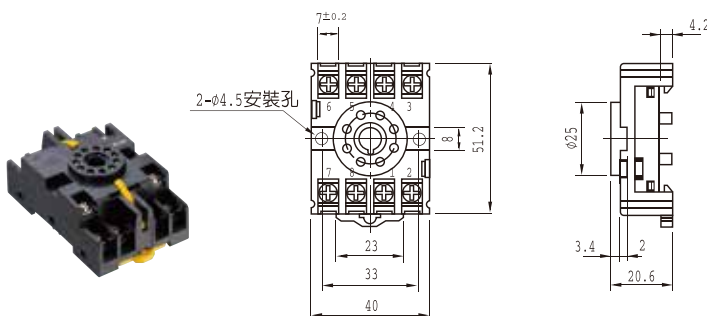


DDR80W50Ω J (80瓦/50歐姆)

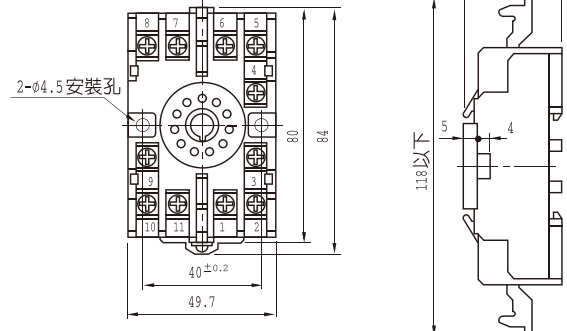


露出型腳座/ EXTENDED BASE BRACKET

PF-083A腳座 (8腳用)



11-PFA腳座 (11腳用)



泛用型馬達
GENERAL PURPOSE MOTOR

速度控制型馬達
SPEED CONTROLLED MOTOR

控制器
CONTROLLER

煞車馬達
BRAKE MOTOR

離合煞車馬達
CLUTCH BRAKE MOTOR

轉矩馬達
TORQUE MOTOR

減速機
SPEED REDUCER

零組件類
COMPONENTS