

TPG[®]

MOTORS & DRIVES

TECHNOLOGY
PERFECTION
GUARANTEE

- 信賴性ある製品
- 卓越したの性能
- 保証したの品質



阪神伝動系列

POWER TRANSMISSION

www.tpg.com.tw

阪神電機

TPG MOTORS & DRIVES

BLDC BRUSHLESS DC MOTOR

馬達：

TPG阪神高壓永磁無刷直流電動機為組合定子鐵心結構，集中式繞組，轉子磁極採用稀土永磁材料釹鐵硼製成，內置霍爾位置感測器。電機具有調速和控制性能好、功率密度和效率高、無耗損材料免維修、等一系列優點。

控制器：

高壓永磁無刷直流電動機控制器由交流電源供電，採用三相全波橋式逆變主電路，控制晶片為無刷電機專用晶片，驅動晶片為高壓控制器專門開發晶片，控制器擁有軟起動和過流保護電路，具有自主知識產權。本控制器能夠實現電機的起停、平滑調速、制動、正反轉、過流保護、過熱保護、軟起動等功能，並設具有外部訊號接口接受編程運行可靠、數位化集成度高、操作簡便、控制性能好、保護功能完善等優點。



傳
TRA



直流無刷馬達系列

TPG brand brushless motor consists of an wind wound stator, surrounding with one rotor made of magnetic Nd-Fe-B and installed one hall sensor in. Motor speed can be adjusted flexible and precise. Compact design, high efficient, non-replacement carbon brush, non maintenance cost.

Brushless motor control in 3 phase full wave bridge reverse circuit board must be supplied by AC power, with soft start, over- current/over heat protection, forward/reverse running, quick stop-start, smooth speed adjustment functions., meanwhile, this control also can be connected external signal which used for edit perfect electronic program.



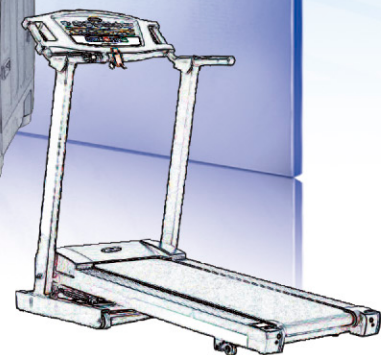
輸
NSPORT



專業代工 OEM



家庭
HOME SUPPLY



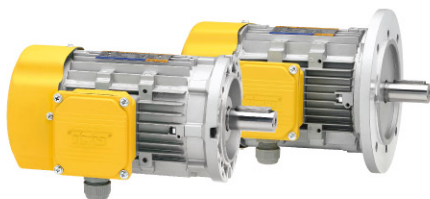
阪神電機 與您開創未來更美好生活 For the better life

IEC

IEC Series: B5, B14, B34, B35 available.

NEMA

NEMA Series: 56C / 145C.



BVM TYPE

BVM (IEC) / BHM (NEMA) TYPE

電壓 Voltage: 130V/260V
馬力 Horse Power: 1/2 ~ 3 HP
轉速 No-Load Speed: 2000, 3000 r.p.m.



BHM TYPE

■ 電動車專用無刷馬達與控制器 BRUSHLESS DC MOTOR & CONTROLLER



EVB TYPE

馬力 Horse Power: 3 KW~15 KW
轉速 No-Load Speed: 1800~8000 r.p.m.
電壓 Voltage: 48V/60V/72V



BCBA TYPE

輸入電壓 Input Voltage: 48, 60, 72 Vdc
輸出電流 Output Current: 120, 240, 360A

■ 無刷馬達 BRUSHLESS MOTOR

電壓 Voltage: 130, 260 V
功率 Power: 120W~500W
轉速 No-Load Speed: 2000, 3000 rpm



B30 TYPE

■ 低壓控制器 LOW VOLTAGE CONTROL



BCBA TYPE

輸入電壓 Input Voltage: 48 Vdc $\pm$ 10%
輸出電壓 Output Voltage: 0~48 Vac 3 ϕ
額定電流 Rated Current: 25 Adc Rated / 60 Adc max

■ 高效鼓風機 HIGH EFFICIENCY BLOWER

馬力 Horse Power: 1/2~2 HP
驅動電機 Drive Motor: BLDC Motor
輸入電壓 Input Voltage: 48Vdc / 220Vac



BH-204AS



BH-207AS

■ 高壓無刷馬達控制器 HIGH VOLTAGE BRUSHLESS DC CONTROLLER

輸入電壓 Input Voltage: 1 ϕ 220 $\pm$ 10% Vac
額定電流 Rated Current: 4.2 / 8A
適用電機 Applicable Motor: 1, 2 HP
產品特色:

- 1.HALL 閉迴路控制
- 2.內建煞車電阻
- 3.PID控制
- 4.Modbus(RS-485)通訊
- 5.自動轉矩補償
- 6.自動穩壓輸出調整

FEATURES:

- 1.HALL sensor feedback
- 2.Built-in dynamic braking unit
- 3.PID control
- 4.Modbus(RS-485) communication
- 5.Auto-torque compensation
- 6.Auto-adjustment for output voltage stability



BCBB TYPE

BRUSHLESS GEAR MOTOR

無刷平行軸齒輪減速機 มอเตอร์เกียร์เฟลาตรงแบบไม่ใช้แปรงถ่าน

阪神電機
TPG MOTORS & DRIVES

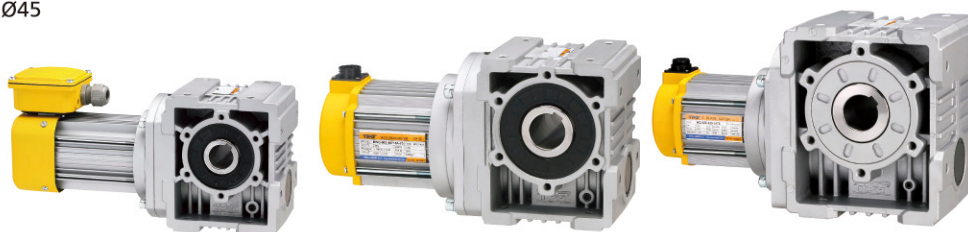
■ 直流無刷中空齒蝸減速機 BRUSHLESS-HELICAL-WORM GEAR UNITS

出力軸孔 Output Shaft: $\varnothing 30$, $\varnothing 35$, $\varnothing 45$

減速比 Ratio: 1:44.3~465

馬力 Horse Power: 1/8 ~ 2 HP

電壓 Voltage: 130V/260V



BWG TYPE

■ 直流無刷齒輪減速馬達 BRUSHLESS GEAR MOTOR



BGH TYPE

出力軸 Output Shaft: $\varnothing 18 \sim \varnothing 50$

減速比 Ratio: 1:3~200

馬力 Horse Power: 1/8 ~ 2 HP

電壓 Voltage: 130V/260V



BGV TYPE

出力軸 Output Shaft: $\varnothing 18 \sim \varnothing 50$

減速比 Ratio: 1:5~200

馬力 Horse Power: 1 ~ 2 HP

電壓 Voltage: 130V/260V



BGV-15 TYPE

出力軸 Output Shaft: $\varnothing 15$

減速比 Ratio: 1:3~180

馬力 Horse Power: 45W~500W

電壓 Voltage: 130V/260V

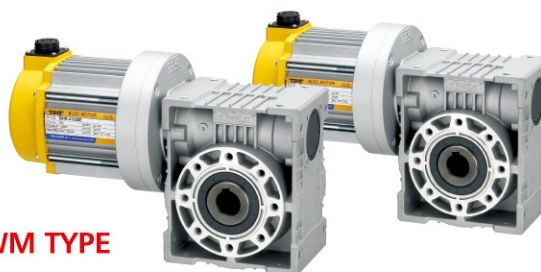
■ 直流無刷中空蝸輪減速機 BRUSHLESS-HOLLOW SHAFT WORM GEAR MOTOR

中心距 Central Distance: $\varnothing 40$, $\varnothing 50$, $\varnothing 63$, $\varnothing 75$, $\varnothing 90$

減速比 Ratio: 1:7~100

馬力 Horse Power: 1/8 ~ 2 HP

電壓 Voltage: 130V/260V



BWM TYPE

■ 直流無刷准雙曲面傘齒輪減速機 BRUSHLESS HYPOID GEAR MOTOR



BF TYPE

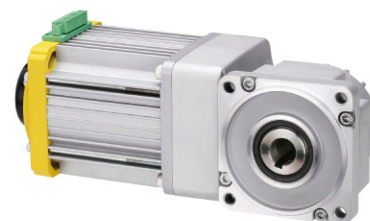
馬力 Horse Power: 1/8, 2 HP

馬達額定轉速 Rated Speed : 2500rpm

減速比 Ratio: 1 : 5~240

電壓 Voltage: 130V/260V

■ 直流無刷直交軸傘齒輪減速機 BRUSHLESS RIGHT ANGLE SPIRAL BEVEL GEAR MOTOR



BF-17 TYPE

馬力 Horse Power: 1/8, 1/4 HP

馬達額定轉速 Rated Speed : 2500rpm

減速比 Ratio: 1 : 7~200

電壓 Voltage: 130V/260V

平行軸

PARALLEL GEAR TYPE

■ 減速齒輪馬達

GEAR MOTORS

Horse Power: 0.1KW—7.5KW

Gear Ratio: 1:5~1:1200

Voltage:

1Ø, 100-120V, 200-240V

3Ø, 220/380V, 220/440V

200/400V, 208/415V



GH TYPE



GV TYPE

■ 煞車減速馬達

GEAR MOTORS
WITH BRAKE

ADOPT DC POWER OFF SAFETY BRAKE

Horse Power: 0.1KW—2.2KW

Gear Ratio: 1 : 5~1:1200

Voltage:

1Ø, 100-120V, 200-240V

3Ø, 220/380V, 220/440V

200/400V, 208/415V



GHM TYPE WITH BRAKE



GVM TYPE WITH BRAKE

■ 雙軸減速箱

TWO-SHAFT GEAR BOX

Horse Power: 0.1KW-7.5KW

Gear Ratio: 1 : 5~1 : 1200



GHS TYPE SINGLE-SHAFT

-IEC 63B5~132B5 Flange

-NEMA 42C~256TC Frame



GVS TYPE SINGLE-SHAFT

-IEC 63B5~132B5 Flange

-NEMA 42C~256TC Frame

■ 單軸減速箱

SINGLE-SHAFT GEAR
BOX -IEC B5 FLANGE

Horse Power: 0.1KW-7.5KW

Gear Ratio: 1 : 5~1 : 1200



GHD TYPE TWO-SHAFT



GVD TYPE TWO-SHAFT



免加油 Oil Free

■ 停車專用減速機



手釋放刹車

Manual release brake

Pat. No. : M275320 / M275626



GHMH TYPE

平行軸

PARALLEL GEAR TYPE

- ◆ **AS** 系列同軸型減速機，擁有較傳統設計更高的懸掛力，入力軸與出力軸同軸型設計，出力軸兩端以強力軸承承載，擁有較大負載能力。
- ◆ 出力法蘭為可拆式安裝，方便使用不增加庫存。
- ◆ 單軸型與雙軸型搭配簡單彈性。
- ◆ **#AS16**及**20**型機殼採用ADC12。**#AS25**型機殼採用FCD材質，體型精簡、堅固耐用。
- ◆ 內部齒輪採用鉻組合金鋼，材料經滲碳處理，堅固耐用。
- ◆ **TPG AS** series helical in-line reducer is the new design as European style, with the aim of allowing higher overhung and trust loads on low speed shaft. More average and stable gear torque load to make reducer stronger than the traditional ones, durable, low noise, more compact shape.
- ◆ **SF>1**, gear ratio from 5.53 to 187.5, size 16/20/25, flexible flange & foot option available, Single shaft/double shaft available, wider range motor economic efficiency.
- ◆ **AS16/20** with die-cast aluminium ADC12 housing, which is reliable & lighter weight & fashion outlet appearance. Internal components can be exchanged between two different size makes the buyer low down the spare parts cost & stock.
- ◆ **AS25** with cast steel FC25 housing, with more torque loads. Reinforced bearing are used in above reducers. Special heat treatment is applied to accurate enough hardness, temper process to make gear durable, stable.
- ◆ Application to circular weaving machine, agitator, food machine, milling machine, textiling machine....etc.



AHM TYPE



AVM TYPE



AHMH TYPE WITH BRAKE



AVMH TYPE WITH BRAKE



AHD TYPE



AVD TYPE



AHS TYPE



AVS TYPE

- **組合系列** ※雙軸型減速機可適用安裝IEC 63B5, 71B5, 80B5, 90B5框號之馬達，無段變速機煞車離合器等產品。
Input flange suitable IEC series 63B5, 71B5, 80B5, 90B5, or disco, clutch, Brake joint.



AS GEAR BOX+DISCO



AS GEAR BOX+AC MOTOR



AS GEAR BOX+MAGNETIC CLUTCH

■ 小金鋼系列 SUBFRACTIONAL HORSE POWER SERIES

Ratio 1:3-1:180
45W~120W



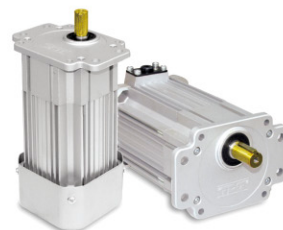
免加油 Oil Free

出線盒-選購品
Conduit Box-Option



GV TYPE

平行軸
PARALLEL GEAR TYPE

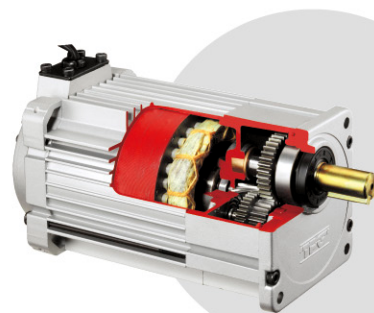


新製品 GP TYPE
小型ギヤモータ

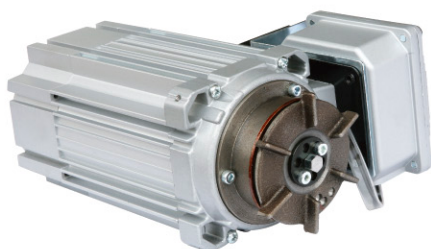
■ 小金鋼齒輪減速機調速器 SPEED CONTROL มินิเกียร์

SPEED CONTROL

CA201: AC 230V, 1A
CA102: AC 115V, 2A



■ SBV-042 小金鋼煞車 BRAKE



The brake SBV-042 for mighty tiny AC motor series

產品特色：體積小,溫升低,安裝方式同SBV-042 (有需要需電詢)。

規格：適用小金鋼系列所有產品。

適用場所：各式場合皆適用。

Features: small compact size, low temperature, same installation as SBV-042.

Spec. : application for all mighty tiny AC motor from 45W-120W.

■ CA-202A 小型變頻器 VARIABLE SPEED AC DRIVE



CA-202A

頻率 Freq.: 50/60HZ

額定輸出電流 Current: 1A

過電流能力 Max Current: 4.5A

額定輸出容量 Max HP: 1/4 HP

最大輸出電壓 Max. Output Voltage: 三相 240V

適用電機容量 Suitable Motor: 1/4HP 以下 25~200W

額定電源電壓 Single Input Voltage: 單相 200~240V

重量 Weight: 450 g

RIGHT ANGLE HYPOID BEVEL GEAR MOTOR

直交軸戟齒輪(准雙曲面)減速機 เกียร์ทดรอบแบบ HYPOID

阪神電機

TPG MOTORS & DRIVES

產品特色:

F TYPE與蝸輪減速機同為直交軸減速機，且F TYPE實現高效率及剛性，傘齒及斜齒採精密研磨加工技術，有效降低運轉噪音。

Features:

F type is right angle type gear reducer same as traditional worm gear, but F type is with more better efficiency & rigidity. Meanwhile the hypoid gear is through precision grinding procedure to increase the matching between gear & shaft, then the operation noise will be low down much.

馬力 Horse Power : 45W ~ 5.5KW 。

減速比 Ratio : 1:5 ~ 1200 。

直交軸

RIGHT ANGLE TYPE



F TYPE

■ 直交軸—中空式傘齒減速機

RIGHT ANGLE HOLLOW SHAFT HYPOID GEAR MOTOR (AC)

產品特色：直交軸、體積小、效率高，耐衝擊、負荷大，適用各式場合

馬 力：0.2KW ~ 1.5KW 。

減 速 比：1:5 ~ 240 。

Features: Inline-right angle gear joint, compact size, high efficient, durable, heavy load, wider application.

Horse Power: 0.2KW ~ 1.5KW 。

Ratio: 1:5 ~ 240 。



RHG TYPE



RHGM TYPE



RHGS TYPE

* 可搭配伺服馬達。

* Also available
servo motor selection.

直交軸

RIGHT ANGLE TYPE



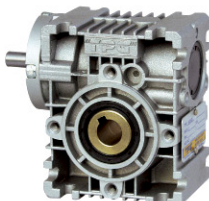
WS TYPE

030#-110#

IEC:56~132 B5/B14 法蘭面

NEMA : 48C~215TC

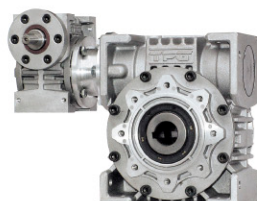
Motor Flame Size



WD TYPE

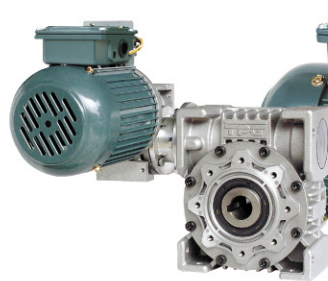
030#-110#

TWO SHAFT



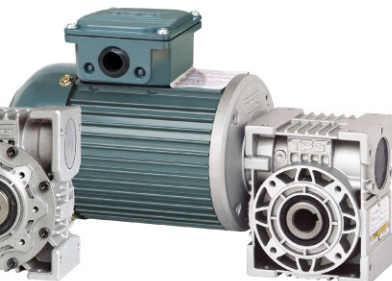
WDT TYPE

TWO SHAFT



WMT TYPE

WITH BRAKE



WM TYPE

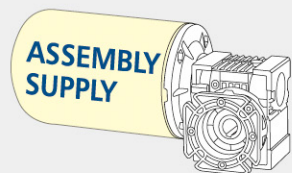
0.1-3.7 KW 3Ø AC MOTOR

0.1-0.75KW 1Ø AC MOTOR

Gear Ratio:7.5,10,15,20,25,30,40,50,60,80,100,120~18000

應用範例

Application Example



組合供應

COMBINATION SUPPLY (ASSEMBLY SUPPLY)

+DC MOTOR
+HIGH REDUCING RATIO MOTOR
+高減速比馬達

RATIO減速比:120-18000

+AC MOTOR+WITH BRAKE

ORDER-MADE PRODUCTS AS

SPECIFIED 指定特殊製品

●HIGH EFFICIENCY

●LONG LIFE

●LOW NOISE

●高效率

●長壽命

●低噪音



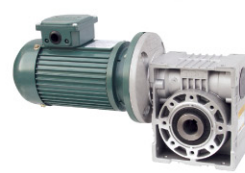
WST TYPE

雙生中空蝸輪減速箱
Twin Worm Gear
Reducers Combination
馬力HP : 0.1KW~1.5KW



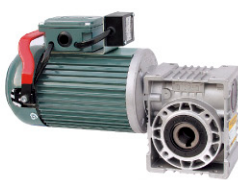
WDC TYPE

中空軸蝸輪減速機+直流馬達
Worm Gear Reducer + DC Motor
馬力HP : 0.1KW~2.2KW



WSM TYPE

中空軸蝸輪減速機+交流馬達
Worm Gear Reducer + AC Motor
馬力HP : 0.1KW~3.7 KW



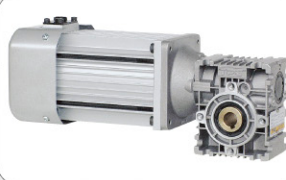
WMMH TYPE

中空軸蝸輪減速機+手釋放利車
Worm Gear Motor +
Manual Release Brake
馬力HP : 0.1KW~2.2KW



WSD TYPE

中空軸蝸輪減速機+無段變速機
Worm Gear Reducer + Disco
馬力HP : 0.2KW / 0.4KW /
0.75KW IECB5



WFM TYPE

中空軸蝸輪減速機+小金剛馬達
Worm Gear Reducer
+ Mighty Tiny Motor
馬力HP : 45W~150W



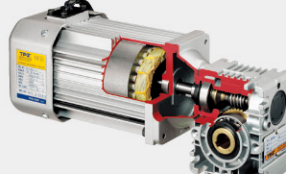
WGV TYPE

中空軸齒輪蝸輪減速馬達
High Reducing Ratio Motor
馬力HP : 0.1KW~0.75KW



WSS TYPE

中空軸蝸輪減速機+伺服馬達
Worm Gear Reducer + Servo Motor
接受特殊定製品



免加油 Oil Free

WORM GEAR SPEED REDUCER

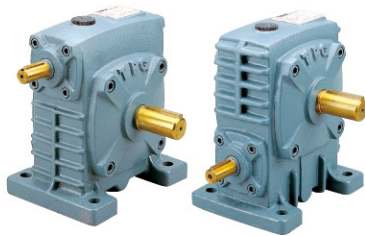
蝸輪減速機 เกียร์ทดรอบแบบเพิก์หล่อ

阪神電機
TPG MOTORS & DRIVES

直交軸

RIGHT ANGLE TYPE

● HORIZONTAL TYPE



WH-A

WH-B

● IEC B5 FLANGE TYPE



WHAS

● VERTICAL TYPE



WV-A

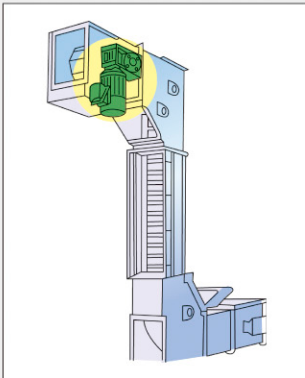
WV-B

WVAS

SIZE:50#-175# GEAR RATIO10,20,30,40,50,60

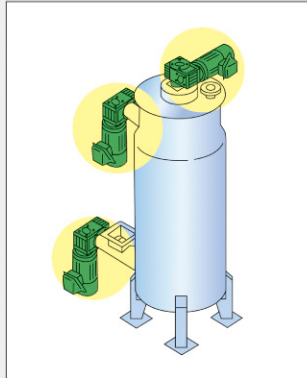
使用實例 Example

■ 粉粒狀升降輸送機



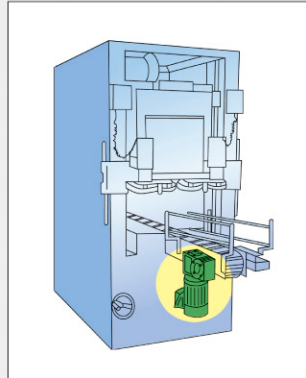
POWER CONVEYOR
ELEVATOR

■ 垃圾處理乾燥機



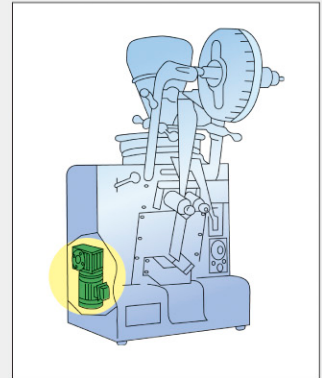
GARBAGE PROCESSING
DRYER

■ 一般包裝機



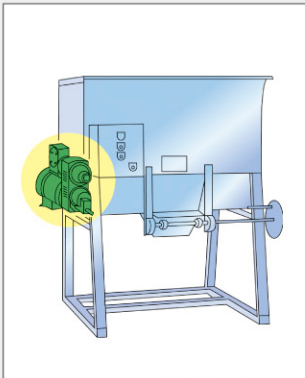
PACKING MACHINERY

■ 自動充填包裝機



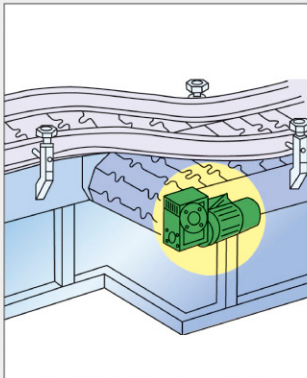
AUTO FILLING
PACKING MACHINERY

■ 混合攪拌機



MIXER

■ 輸送機



CONVEYOR

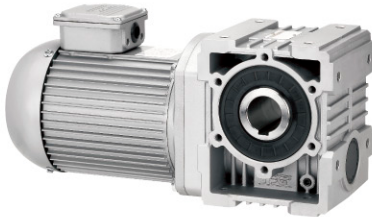


• TECHNOLOGY
• PERFECTION
• GUARANTEE

● 信賴性ある製品
● 卓越したの性能
● 保證したの品質

直交軸

RIGHT ANGLE TYPE



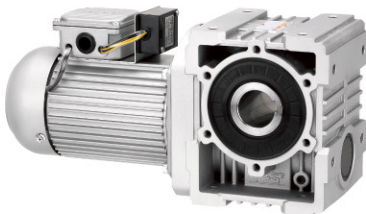
WG TYPE

出力孔徑 Output Dia.: Ø30, Ø40, Ø45

馬力 Horse Power : 1/8 ~ 2 HP

減速比 Ratio: 1:44.3 ~ 465

※中空軸減速齒輪馬達



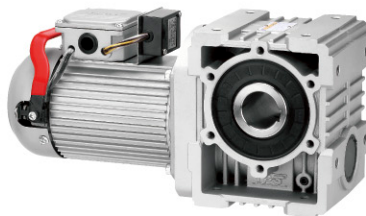
WGM TYPE

出力孔徑 Output Dia.: Ø30, Ø40, Ø45

馬力 Horse Power : 1/8 ~ 2 HP

減速比 Ratio: 1:44.3 ~ 465

煞車 Brake: DC90



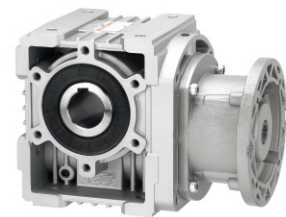
WGMH TYPE

出力孔徑 Output Dia.: Ø30, Ø40, Ø45

馬力 Horse Power : 1/8 ~ 2 HP

減速比 Ratio: 1:44.3 ~ 465

煞車 Brake: DC90加手煞車



WGS TYPE

出力孔徑 Output Dia.: Ø30, Ø40, Ø45

馬力 Horse Power : 1/4 ~ 2 HP

減速比 Ratio: 1:44.3 ~ 465

法蘭面框號 : 63B5, 71B5, 80B5, 90B5



WGD TYPE

出力孔徑 Output Dia.: Ø30, Ø40, Ø45

馬力 Horse Power : 1/8 ~ 2 HP

減速比 Ratio: 1:44.3 ~ 465

特性說明

- ◆ 本系列產品設計採用螺旋齒輪搭配蝸輪蝸桿組合，達到高減速比、高強度的使用。
- ◆ 出力軸採用中空式設計，可得到較大的傳動效率。
- ◆ 減速比規格齊全，由1:44.3~465。
- ◆ 馬力1/8 HP~ 2HP。雙軸式適用IEC框號立式馬達。
- ◆ 出力軸孔徑Ø30, Ø40, Ø45。
- ◆ 選擇配件：掛板、出力軸。

FEATURES

- ◆ Inline gear plus right angle gear joint together more strong constructure.
- ◆ Alloy die-cast house, nice looking, light weight.
- ◆ Hollow shaft bore, flexible joint choices.
- ◆ High gear ratio 1:44.3~465, large choice rang.
- ◆ Power 1/8 HP ~ 2 HP; IEC flange type available.
- ◆ Output shaft dia.: Ø30, Ø40, Ø45mm.
- ◆ Option Accessory: Output shaft, Torque are dimensuins.



MVA TYPE 馬力 : 2P/4P/6P Horse Power: 0.2KW - 2.2KW



B5



B14



B3



B34



B35

IEC框號AC感應式馬達 IEC SERIES AC INDUCTION MOTOR

特色：體積小，外型散熱片設計，溫度散熱快，溫度低，外型漂亮，可搭配任何符合IEC框號法蘭之傳動體，可拆式腳架設計，方便使用，前法蘭皆可互換，可互換B3, B5或B14，可降低庫存量。

馬力：1/4HP, 1/2HP, 1HP, 2HP, 3HP。

FEATURES:

- Application: Pumps, compressors, fans, conveyors, machine tools and other general purpose three phase applications.
- Totally enclosed three phase motor with cooling fan
- IEC B5, B14 standard flange available, IEC 63-112
- Alum. housing, durable, light weight motor

- Interior installed DC brake available
- Power : 0.2KW-2.2KW
- Gasketed conduit box
- Removable foot B3
- 2P/4P/6P available
- Brake available

煞車馬達 BRAKE MOTOR

特色：煞車體積小，可隨意加裝煞車，不須修改任何尺寸，只需將後蓋換為煞車，心軸為共用，方便使用，長度、外型皆不會有太大的改變。

馬力：1/4HP, 1/2HP, 1HP。

煞車：停電煞車 DC90V, SBV-063, SBV-071, SBV-090.

Feature: Brake type available; and can be installed enclosed the original motor body.

Power: 1/4HP, 1/2HP, 1HP.

Alum body: DC90V shaft brake, SBV-063, SBV-071, SBV-090.



MVAM TYPE



MVAH TYPE

高頻馬達 HIGH FREQUENCY MOTOR

POLI	Type	rpm			Power			Couple			In 400 Volt 50Hz Pn	Frequency			J kgm²
		base	max	limite	base kW	max kW	limite kW	base Nm	max Nm	limite Nm		base Hz	max Hz	limite Hz	
2	IN63A	3000	4800	6000	0.18	0.18	0.09	0.57	0.36	0.14	0.6	50	80	100	0.00025
	IN63B	3000	4800	6000	0.25	0.25	0.13	0.80	0.50	0.20	0.8	50	80	100	0.00030
	IN63C	3000	4800	6000	0.37	0.37	0.19	1.18	0.74	0.29	1.0	50	80	100	0.00035
	IN71B	3000	6000	7200	0.55	0.55	0.28	1.75	0.88	0.36	1.6	50	100	120	0.00046
	IN71C	3000	6000	7200	0.75	0.75	0.38	2.39	1.19	0.50	1.9	50	100	120	0.00057
	IN80B	3000	6000	7200	1.10	1.10	0.55	3.50	1.75	0.73	2.6	50	100	120	0.00097
	IN80C	3000	6000	7200	1.50	1.50	0.75	4.78	2.39	1.00	3.0	50	100	120	0.00120
4	IN63A	1500	2400	3000	0.13	0.13	0.06	0.83	0.52	0.19	0.7	50	80	100	0.00028
	IN63B	1500	2400	3000	0.18	0.18	0.06	1.15	0.72	0.19	0.8	50	80	100	0.00040
	IN71A	1500	2700	3300	0.25	0.25	0.12	1.59	0.88	0.35	0.9	50	90	110	0.00050
	IN71B	1500	2700	3300	0.37	0.37	0.18	2.36	1.31	0.52	1.2	50	90	110	0.00090
	IN80A	1500	2700	3300	0.55	0.55	0.27	3.50	1.95	0.78	1.6	50	90	110	0.00140
	IN80B	1500	2700	3300	0.75	0.75	0.38	4.78	2.65	1.10	2.0	50	90	110	0.00170
	IN80C	1500	2700	3300	0.88	0.88	0.44	5.61	3.11	1.27	2.6	50	90	110	0.00230
6	IN63B	1000	1400	1800	0.09	0.09	0.05	0.86	0.61	0.24	0.6	50	70	90	0.00040
	IN71A	1000	1600	2000	0.18	0.18	0.09	1.72	1.07	0.43	0.9	50	80	100	0.00080
	IN71B	1000	1600	2000	0.25	0.25	0.13	2.39	1.49	0.60	1.1	50	80	100	0.00100
	IN80A	1000	1600	2000	0.37	0.37	0.19	3.54	2.21	0.88	1.3	50	80	100	0.00250
	IN80B	1000	1600	2000	0.55	0.55	0.28	5.25	3.28	1.31	1.9	50	80	100	0.00260

TPG 阪神電機持續進步開創各式減速機，以滿足不同產業之期望，推出行星式齒輪減速機，可依產業需求連結各式伺服馬達，主軸馬達等。

行星式齒輪減速機可分為三大系列，**PA/PD/PG** 系列。

- **PA** 系列為平行軸齒輪減速機，比數從3-81，提供一段式或二段式齒輪箱結構。
- **PD** 系列為直角軸齒輪減速機，設計為中空軸樣式，比數從9-135。
- **PG** 系列為直角軸齒輪減速機，設計為實心軸樣式，比數從9-135。

TPG made planetary gear box contains one or two planet sets, which is great selection for servo motor, automation motor...etc.

- **PA** type is parallel axis gear box, ratio from 3 to 81, 1 & 2 stage available.
- **PD** type is parallel axis gear box, ratio from 9 to 135, 2 & 3 stage available.
- **PG** type is parallel axis gear box, ratio from 9 to 135, 2 & 3 stage available.

特性：

1. 提供更精細的齒輪準確性。
2. 壓鑄鋁合金機體，密度堅實且美觀大方，耐用長壽。
3. 在有限的空間裡可提供與一般傳統減速機相當的比數。
4. 負載可被平均分攤，因而增加齒輪的剛度。
5. 提供複合多功能的選配。
6. 出力軸安裝軸承，有效減小馬達運轉時所產生的振動。
7. 可選用多款連接法蘭，以搭配不同廠家的伺服馬達。
8. 高品質合金鋼齒輪材質經熱處理加工後，扭力值更為加強。
9. 一段、二段齒輪箱的組合，加大減速比範圍。



Advantages:

- Offer more accuracies than traditional gear box.
- Supply high power density, durable and long lifetime.
- Larger reduction in small space.
- 3% mechanical loss only, save energy and create more efficiency.
- Average load distribution increase more rotational stiffness.
- Multiple assortment combinations can be added in.
- Special bearing installed in the end of output shaft to reduce the vibration occurred while motor running.
- Alum. Die cast house offer impact size and nice shape design.
- Flexible flange or frame can be jointed with different brand servo motors.
- High quality Chrome alloy material gear with special treatment to enforce the torque ability.
- Wide range gear ratio applies to more different operations in the same gear box body.



■ 平行軸齒輪減速機 PARALLEL AXIS GEAR BOX

PA TYPE

平行軸
PARALLEL GEAR TYPE



PA TYPE - 1 Stage



PA TYPE - 2 Stage

■ 直交軸齒輪減速機 PARALLEL AXIS GEAR BOX

PD TYPE

直交軸
RIGHT ANGLE TYPE



PD TYPE - 2 Stage



PD TYPE - 3 Stage

■ 直交軸齒輪減速機 PARALLEL AXIS GEAR BOX

PG TYPE

直交軸
RIGHT ANGLE TYPE



PG TYPE - 2 Stage



PG TYPE - 3 Stage

- 變速比 Ratio 1:6
- Horse Power: 0.2 KW~1.5 KW
- 165~1000 rpm (50 Hz), 200~1200 rpm (60 Hz)
- DAS Type: 02 for 1/4HP, 04 for 1/2HP, 07 for 1HP Available.

適用：食品機械、印刷機器、工作母機輸送帶...
Application : Food Processing Machinery,
Printing Machinery, CNC Machinery,
Conveying System.

◆ FOOT MOUNT TYPE



DHM TYPE



DVM TYPE



DHS TYPE



DHD TYPE



◆ FLANGE MOUNT TYPE



DVS TYPE



DVD TYPE



GDS FLAME TYPE

Available: GDM with motor type
GDD with two shaft type



DAS TYPE
(ALUM, CASE)



WSD TYPE
Worm Gear Reducer
+ Disco

■ VARIABLE SPEED PULLEY 皮帶變速輪

1. Flexible & wide range speed ratio available 1:4.
2. Simple rotating handle to adjust the speed freely.
3. Easy read handle scale

馬力 Horse Power: 1/4HP~5HP
減速比 Ratio: 1:3.5~1:4



MP (主動輪 Main pulley)	SP (被動輪 Subsidiary pulley)	DP (MP+SP)	BELT

RIGHT ANGLE SPIRAL BEVEL GEAR MOTOR

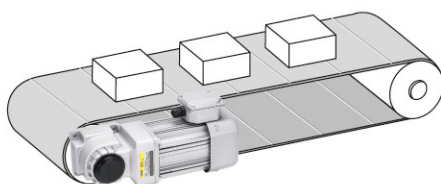
直交軸傘齒輪減速馬達 เกียร์ทดรอบแบบ SPIRAL BEVEL

阪神電機
TPG MOTORS & DRIVES

1. 提供7.5-200寬幅的比數範圍選擇。
2. 於80-200的高減速比下，能提供較強的扭力值。
3. 安全系數至少保持1.0，物超所值。
4. 齒輪傳動效率高達90%
5. 交流馬達可選用三相60-120W，單相45-90W
6. 馬達F絕緣等級，IP54，防護等級。
7. 可加裝剎車或配合變頻器與控制器，改變轉速。
8. 應用產業：包裝機，輸送帶，食品處理機，攪拌機、低溫食品機械等。

AF-17 series

1. Wider gear ratio available from 7.5 to 200.
2. Higher torque ability for those high gear ratios over 80 to 200 comparisons with might tiny series.
3. Safe factor 1.0 with reasonable purchase cost.
4. Gear efficiency reach 90%.
5. For AC power 3phase motor 60W-120W, single phase 45W-90W.
6. TEFC or TENV available, IP54, F insulation level.
7. Brake function available, as well as many necessary accessories options, such as AC inverter, DC control, and brushless motor control supply.
8. Application: Packing machine, Conveyor, Food processing machine, Frozen food machines...etc.



For Conveyor
輸送帶應用



- 3 Phase : 60W, 100W, 120W
- 1 Phase : 45W, 60W, 90W
- 減速比Ratio: 1:7~200



AFV TYPE



AFVM TYPE



AFH TYPE



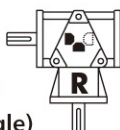
AFHM TYPE

SPIRAL BEVEL GEAR BOX 十字轉向器 เกียร์ทดรอบแบบ 3 ทาง

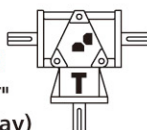
TPG spiral Bevel gear use high torque steel material under special heat treatment to enforce tooth hardness. The direction of drive from the drive shaft must be turned 90° to drive the wheel, which such design produce less vibration & noise. By the way the output can be one way or two ways, supply more flexible application.



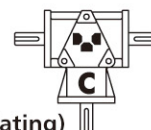
GR TYPE
MODEL"R"
(Right Angle)



GT TYPE
MODEL"T"
(Three Way)



GC TYPE
MODEL"C"
(Counter-Rotating)



- 減速比 Ratio : 1:1 / 1:2
- 轉速/最大容許扭力：100/2.9 ~ 3600/2
- NEMA TYPE: 312/500/625/750/1000
- IEC TYPE: Ø9, Ø11, Ø14, Ø19, Ø24mm

1:1		1:2		Matching motor HP
100-3600rpm	TQ(N.M)	Input TQ	Output TQ	
9mm/0.375"	2.94-2.16	1.05-0.83	2.11-1.66	1/8
11mm/0.5"	5.74-3.71	2.5-1.97	5.02-3.94	1/4
14mm/0.625"	9.58-6.2	3.55-2.6	7.12-5.22	1/2
19mm/0.75"	21.19-13.71	8.41-6.17	16.88-12.38	1
24mm/1"	37.1-24.01	20.03-12.96	40.14-25.93	2



BH-101 TYPE



BH-307 TYPE



BH-737 TYPE



Optional Accessory

AIR FILTER 過濾器

□徑 Orifice: 1"~4"

- Strong wind-force -- maximum 870m³/hr
- High vacuum -- maximum 4300mmAq
- High pressure -- maximum 5500mmAq
- Stable flow volume
- Low energy loss

單相 Single - Phase

- 50Hz IP54 100~110/200~220V
額定出力 Max Power: 0.09~1.75KW
- 60Hz IP54 100~110/200~220V
額定出力 Max Power: 0.13~1.90KW

三相 Three - Phase

- 50Hz IP54 200~240/380~415V
額定出力 Max Power: 0.09~11KW
- 60Hz IP54 200~230/380~460V
額定出力 Max Power: 0.13~11KW

- 特點：**
1. 高效率、低耗能
 2. 安裝容易
 3. 結構堅固
 4. 可靠性高
 5. 無油氣、無污染
 6. 低震動
 7. 低噪音
 8. 適用範圍廣
 9. 最高品質

- Features:**
1. High Efficiency, Low Energy Loss
 2. Easy Assembly
 3. Use in Various Field
 4. Good Reliability

5. No Oil, No Pollution
6. Low Shocking Motion
7. Low Noise
8. Highest Quality
9. Solid Structure

送風實用例子

1. 焚燒爐
2. 煤氣爐
3. 粉粒體之輸送
4. 壓鑄體
5. 電鍍槽
6. 以蓄糞發酵做堆肥
7. 泡麵加工生產線
8. 養殖池之氧氣補給
9. 洗瓶機
10. 穀類之輸送
11. 印刷機之紙乾燥
12. 淨化槽
13. 自動編織機
14. 醫療浴缸
15. 模具、吸塵器
16. 乾燥用空氣刀

For Air Supply Application

1. Incinerator
2. Gas Furnace
3. The Transferring of The Small Particles
4. Die Casting Machine
5. Plating Bath
6. Make Artificial Manure with The Fermentative Animal Muck
7. The Instant Noodle Processing Production Line
8. To Supply The Air To The Farming Pool
9. Bottle Washer
10. Transfer The Rice Hull
11. Dry Up The Paper of The Printer
12. Clean Tanker
13. Automatic Knitter
14. Medical Bathtub
15. Mold, Cleaner
16. Dry Up The Electronic Plate with The Air

吸風實用例子

1. 打孔機
2. 印刷機
3. 工業用縫紉機
4. 製書機
5. 自動包裝機
6. 襪子編織機
7. 織布機
8. 食品加工機
9. 粉立體輸送
10. 薄層壓鑄機
11. 工程現場
12. 無塵室
13. 焊接機
14. 布料壓燙機
15. 洗車時之水滴去除

For Air Suction Application

1. Punching Machine
2. Printing Machine
3. Industrial Use Sewing Machine
4. Stapling Machine
5. Automatic Packing Machine
6. Hose Knitting Machine
7. Loom
8. Food Processed Machine
9. Capable of Transferring The Particles
10. Layer Die Casting Machine
11. Using in The Constructive Site
12. Dust free Room
13. Welding Machine
14. Cloth Press
15. Capable of Drying Up The Water Drop When Clean The Car

TURBO BLOWER 透浦式鼓風機

- Specification:**
- Horsepower : 3 Phase Motor, 0.18KW~7.5KW
 - Voltage : 220V/380V/415V/460V
 - Max. Air Flow : 2.5 ~ 39 m³/min
 - Current : 2.0A ~ 10A

BX TYPE



適用：砂石廠、粉塵原料輸送(麵粉廠、塑膠廠)、零件輸送等...

Application : Available for Various Kinds of Powder Material Conveying Industries as Concrete Plants, Powder Plants, Plastic Plants, and Parts Conveyors.



V2-0045



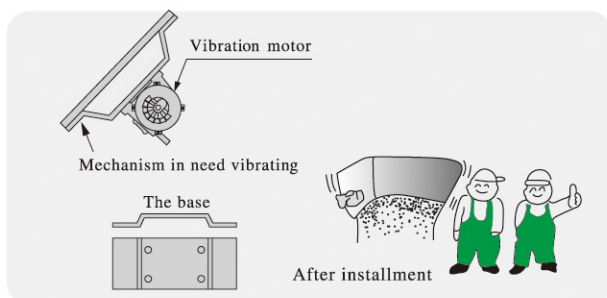
V2-0075



V2-0090



V4-0180



• 2 POLE

Horse Power: 1/30HP—2HP
Vibrating Force: 25-2000 KG

• 6 POLE

Horse Power: 1/2HP—7.5HP
Vibrating Force: 795-7995 KG

• 4 POLE

Horse Power: 1/4HP—7.5HP
Vibrating Force: 530-8500 KG

• 8 POLE

Horse Power: 1HP—10HP
Vibrating Force: 980-7480 KG

● 振動輸送篩選機 Vibration Transportation Sieving Machine

- ※功能：適合輸送、篩選、烘乾、冷卻、清洗...等多種用途。
- ※適用：電子產品、螺絲產品、針車零件、鈕扣加工品、電鍍產品及各類零件。
- ※特點：噪音低，適用各種產業環境。
- ※處理量：100KG/H ~ 100T/H。
- ※可依客戶產品需求設計訂製。



- **Function** : Can be applied on transferring, Sifting, cooling, washing ... etc.
- **Application** : Electronic products screw products, knitting machine parts, button processing, electroplating, products and other products.
- **Features** : Low noise, can be applied on different industrial environment.
- **Capacity** : 100KG/H ~ 100T/H.
- The product can be design and manufactured customer's request.

● 氣壓式振動平台 The barometric pressure type vibrates the platform

- ※適用：
- 1. 電子、電腦業零件測試。
- 2. 物料填充。
- 3. 地震模擬。
- 4. 食品、化工產品測試。
- 5. 各種產品非破壞性振動測試。

- ※特點：
- 1. 檯面振動均勻度佳、且側向運動小。
- 2. 可無段調整振幅。
- 3. 機台不會搖晃且運轉噪音低。
- 4. 24小時連續運轉達30000小時以上。
- 5. 檯面大小可依需求設計。

- Application** :
- 1. Electronic computer parts test.
- 2. Material stuffing.
- 3. Earthquake mimicry.
- 4. Food, chemistry product test.
- 5. Products non-damage vibration test.

- Features** :
- 1. Table vibration even-degree is good and side movement is small.
- 2. The vibration rang can be adjusted sleeplessly.
- 3. The table won't be shaking and little noise in running.
- 4. Can be operated 24 hours continuously for more than 30000 hours.
- 5. The table size can be design upon customers request.



● 立式振動馬達 Vertical Vibration Motor

- ※產品規格：1/2 HP - 25HP
- ※應用機械：三次元振動研磨機、圓形振動篩選機、振動混合攪拌機

- **Product Specification** : 1/2 HP - 25HP
- **Application** : 3 Dimensions vibration grinding machine Round shape vibration sifter Vibration mixing agitator



● 慣性振動平台 Inertial Oscillation Platform

- ※適用：
- 1. 電子、電腦業零件測試。
- 2. 物料填充。
- 3. 地震模擬。
- 4. 食品、化工產品測試。
- 5. 各種產品非破壞性振動測試。

- Application** :
- 1. Electronic computer parts test.
- 2. Material stuffing.
- 3. Earthquake mimicry.
- 4. Food, chemistry product test.
- 5. Products non-damage vibration test.

- ※特點：
- 1. 檯面振動均勻度佳、且側向運動小。
- 2. 可無段調整振幅。
- 3. 機台不會搖晃且運轉噪音低。
- 4. 24小時連續運轉達30000小時以上。
- 5. 檯面大小可依需求設計。

- Features** :
- 1. Table vibration even-degree is good and side movement is small.
- 2. The vibration rang can be adjusted sleeplessly.
- 3. The table won't be shaking and little noise in running.
- 4. Can be operated 24 hours continuously for more than 30000 hours.
- 5. The table size can be design upon customers request.

適用範圍:

電動車、電動椅、電動堆高機、戶外輸送系統、跑步機、升降梯、包裝機械、幫浦、給料機、運動器材與研磨機械...等。

Applications:

Electric Golf Car, Electric Wheelchair, Electric Car, Electric Treadmill, Medical Equipment, Elevator, Outdoor Conveyor System, Mill Machine and Packaging machines, Pump, Feeders, Exercise equipment, Forklift..... etc.

DC 12, 24, 36, 48, 90, 180V
馬力 Horse Power : 45W ~ 2.2KW
轉速 Rpm : 1750/3000
200/300/400/500 Series

DPI: IEC Series
DPN: NEMA Series
DPS: 特殊規格接受訂製
Special Spec. available



WMB



200 TYPE
HP:45W~250W



300 TYPE
HP:0.18KW~0.55KW



400 TYPE
HP:0.18KW~1.1KW



500 TYPE
HP:1.1KW~2.2KW



中空式直流馬達, 中空式直流無刷馬達 Hollow shaft PM DC motor, Hollow shaft brushless DC motor

特色: 馬達心軸中心為貫穿孔, 可裝直流馬達或直流無刷馬達。
規格: 0.4KW直流馬達3000RPM, 0.75KW, 1.1KW, 1.5KW直流無刷馬達。

適用場所: 晶圓清洗機專用馬達。

Features: Motor output shaft position is hollow hole, easily connected with other transmission products

Specification: 0.4KW, 3000RPM for PMDC motor, 0.75KW, 1.1KW, 1.5KW for Brushless DC motor

Application: Wafer cleaning machines.



不鏽鋼直流馬達 Stainless steel PM DC motor

適用規格: NEW POWER #400系列 全機種。

產品特色: 心軸, 馬達筒身, 風蓋為不鏽鋼, 塗裝處為耐酸鹼塗料烤漆。

適用場所: 化學用機械, 食品機械, 潮濕場所, 含酸或鹼等場所。

Specification: for New Power #400 series TEFC motor, 1/4HP-1-1/2HP.

Features: Stainless steel material for output shaft, housing, fan cover, paint for corrosion protection from severe conditions.

Application: Food processing machine, Chemical machine, other applications that regularly expose the motor to high corrosive or humidity environments.



AC GEAR MOTOR

交流齒輪減速馬達



AG6 TYPE

BRUSHLESS GEAR MOTOR

無刷齒輪減速馬達



BG6 TYPE



DC GEAR MOTOR

直流齒輪減速馬達



DG6 TYPE

型號 Model	AG6	BG6	DG6
電壓 Voltage	1P 115/230 Vac, 3P 230/460 Vac	130/260 Vdc	90/180 Vdc
功率 Power	120W~370W, 180W~370W	120W~370W	120W~370W
轉速 No-Load Speed	50HZ/5~300 rpm, 60HZ/6~360 rpm	8~500 rpm	8~500 rpm
減速比 Ratio	5~300	5~300	5~300

▶▶▶ Equivalent Baldor, Leeson, Bodine and Bison similar model.

PWM CONTROL

型 號	輸入電壓	輸出電壓	電流容許
CD202	230VAC	180VDC	1.5A
CD202D	115/230VAC	90/180VDC	1.5A
CD102	115VAC	90VDC	2A



NEW POWER
U.S.A.



DC CONTROL / AC INVERTER 直流馬達控制器

PENTA KB POWER

AC Inverter / DC Motor SCR Drives
HP : 0.15KW ~ 2.2KW

KBVC-24調速器

DC PWM speed switch
220V input voltage
speed from 0~100



VARIABLE SPEED AC DRIVE 小型變頻器

CA-201A: 0.12kW 0.9A

CA-202A: 0.2kW 1.5A

輸入電壓 Input Voltage:
1Ø 220±10% Vac 50/60HZ
輸出頻率 Output Freq.: 0.1~400Hz
重量 Weight: 381g



AC MOTOR INVERTER 交流馬達專用變頻器

輸入電壓 Input Voltage: 3Ø 220, 380Vac

適用電機 Applicable Motor: 1, 2, 3 HP

產品特色:

正弦PWM 方式(V/F控制), 載波頻率: 0.8~15kHz
頻率控制範圍0.1~400.0Hz
Modbus(RS-485)通訊
滑差補償
自動轉矩補償

Features:

- Voltage vector sinusoidal PWM control(V/F control);
- Switching frequency: 800Hz~15kHz
- Range of frequency setting 0.1~400.00Hz
- Modbus(RS-485) communication
- Slip compensation
- Auto-torque compensation
- Auto-adjustment for output voltage stability

TPG
MOTORS & DRIVES



CA TYPE

Clutch : Rated turning distance 1.2(12NM)-40(400NM)

Brake : Rated turning distance from 0.5-32 kgm

ABS 安全剎車器 0.4-24 kgfm

磁粉式剎車
Magnetic Powder Brake



CD-A



CD-M



CD-N



CD-G



CD-J



ABS

特點

- 1.安全、確實的制動力
- 2.安靜的制動音
- 3.可以調整扭力
- 4.附有防塵罩蓋
- 5.可以手動解除
- 6.壽命長
- 7.組裝、調整容易

Features

- 1.Safe and Secure Control
- 2.Quiet Action
- 3.Adjustable Torque
- 4.Dust Cover
- 5.Manual Release
- 6.Long Life
- 7.Easy Assembly and adjust

聯軸器 COUPLINGCA / CS SERIES คัปปลิง

產品特性

- 1.適合精密傳動軸之聯結。
- 2.新設計理念，性能優於傳統聯軸器
- 3.傳動無背隙，兼富緩衝功能。
- 4.聯軸器內置彈性膠體，有效解決兩軸之間不準問題。
- 5.聯軸器內孔依客戶指定尺寸製作（附鍵槽或無鍵槽皆可）。
- 6.聯軸器本體採用高級鋁合金。
- 7.可選擇CS材質，具抗腐蝕、化學藥劑與生鏽，適合在惡劣環境中使用。

FEATURES:

- 1.Designed for high precision shafts coupling.
- 2.New designed concept, better performance than the traditional couplings.
- 3.Backlash free transmission and superior dampening performance.
- 4.Elastomer equipped in the coupling, effectively solves misalignment between shafts.
- 5.Coupling bore is made by customer's specifications, with or without keyway.
- 6.Coupling hubs are manufactured with high quality aluminium alloy.
- 7.Optional material CS type resists chemical corrosive and rust, can be used in very bad environment.

New Design,
High Performance,
Ø 6mm-60mm



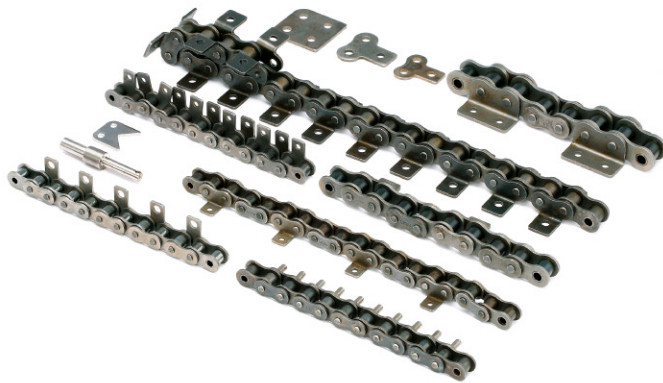
Backlash Free, ●
Maximum Transmission Smoothness, ●
Compensation for Misalignment Between Shafts ●

本產品採用鉻組合金鋼全丸材加工成型，完全滲碳熱處理，內外徑研磨韌性強，耐磨性高，品質穩定，適用各種機器傳動聯結用。

Chrome-alloy steel material, with heat treatment, durable, strong, suitable for all industrial transmission joint.



■ 鍊條 CHAIN



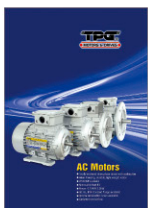
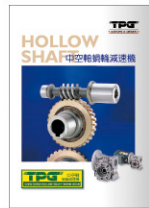
■ 機密齒輪代客加工 GEAR PROCESSING JOB

正齒輪、螺旋齒輪、研磨齒輪、蝸桿、蝸輪、內齒輪、傘齒輪等各式齒輪。

Spur gear, Helical gear, Grinding gear, worm shaft, worm gear, spiral gear, all kinds gear.



POWER TRANSMISSION SERIES





- 製造元
TAIWAN PRECISION GEAR CORP.
TEL: 886-4-25351329 FAX: 886-4-25351467
E-mail: tpgcorp@ms13.hinet.net
- 總代理 美國-USA
TPG MOTORS & DRIVES (U.S.A.) LLC.
E-mail: tpg_motor@yahoo.com
- 泰國-Thailand
TPG MOTORS & DRIVES (THAILAND) CO.,LTD.
TEL:66-2-2778878 FAX:66-2-2779788
E-mail: tpg_th@yahoo.com
- 馬來西亞-Malaysia
TPG MOTORS & DRIVES (MALAYSIA) SDN BHD
TEL:60-3-89616916 FAX:60-3-89616921
E-mail: tpg_ma@yahoo.com
- 新加坡-Singapore
TPG MOTORS & DRIVES (SINGAPORE) PTE LTD
TEL:65-62456007 FAX:65-62456017
E-mail: tpgsin@singnet.com.sg
- 印尼-Indonesia
TPG MOTORS & DRIVES (INDONESIA) CO.,LTD
TEL:62-21-45846725 FAX:62-21-45846726
E-mail: tpg_ind@yahoo.com
- 越南-Vietnam
TPG MOTORS & DRIVES (VIETNAM) COMPANY LIMITED
TEL: 84-8-3-8165878 FAX: 84-8-3-8165876
E-mail: tpg_vn@yahoo.com
- 印度-India / Chennai
TPG MOTORS & DRIVES (INDIA) PRIVATE LIMITED
TEL: 91-44-23634199 FAX: 91-44-23634299
E-mail: tpg_in@yahoo.com

BRANCH:

- 深圳辦事處 TEL: 86-755-27933806
FAX: 86-755-27933807
- 福州辦事處 TEL: 86-591-83302019
FAX: 86-591-83371859
- 武漢辦事處 TEL: 86-27-88912667
FAX: 86-27-88860980

AGENT:

- 華東總代理商 TEL: 86-512-67513733
FAX: 86-512-67513983

