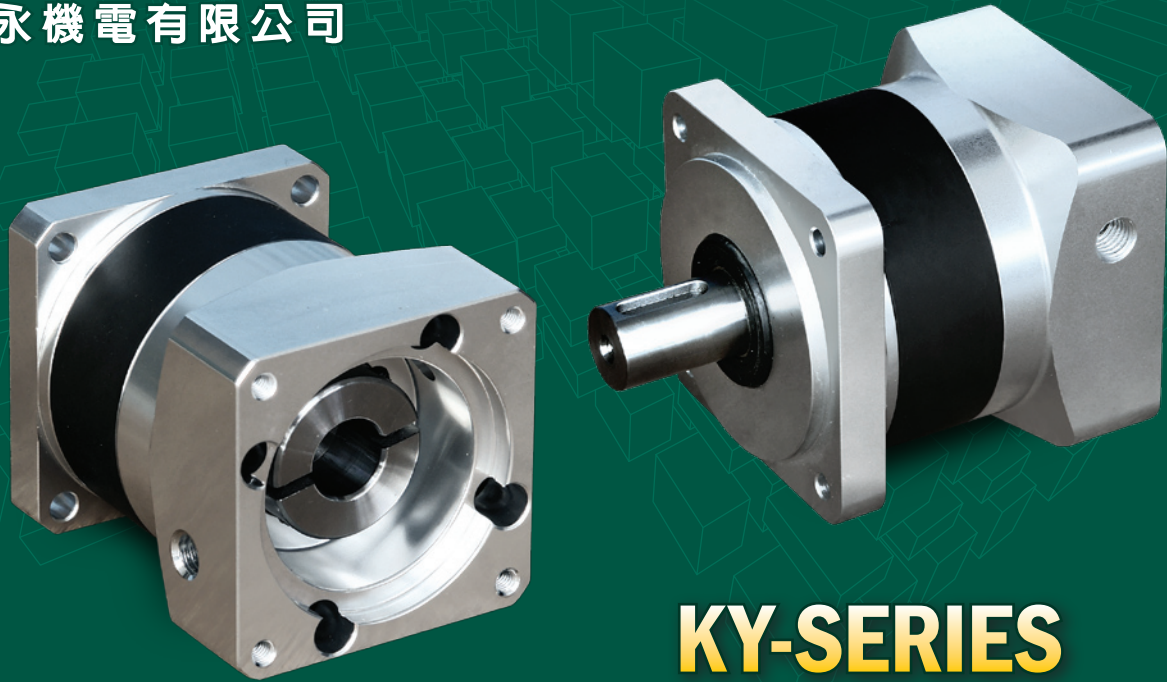




伺服行星減速機

PLANETARY REDUCER

www.bldcmotor.com.tw
金永機電有限公司



KY-SERIES

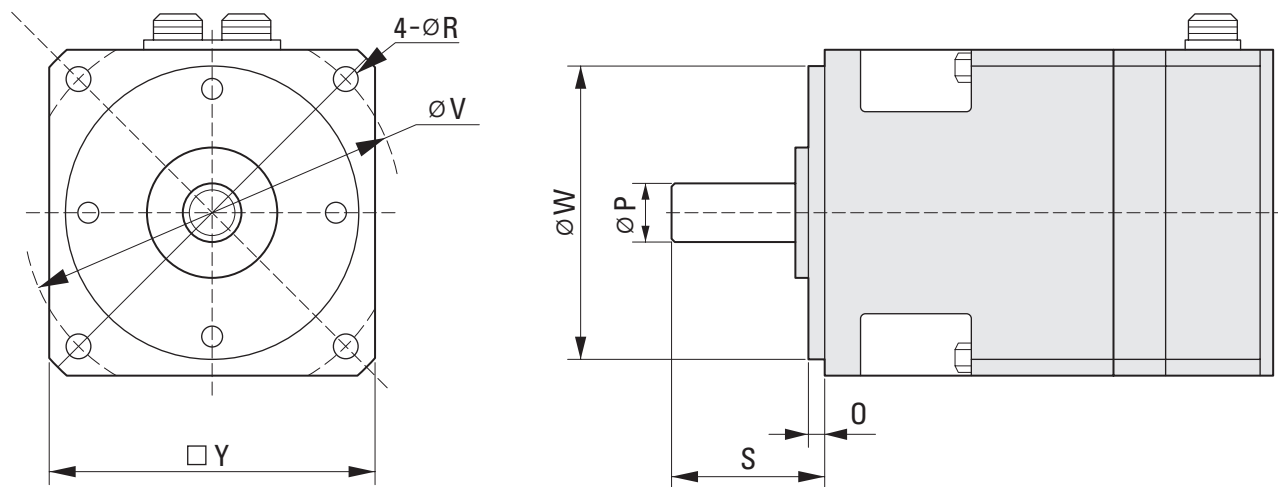
- 獨特多段減速比、高效率輸出扭力之行星齒輪式減速裝置是伺服馬達、步進馬達等精密傳動機構的最佳組合。
 - 適合 NEMA 馬達安裝標準規範，安裝最容易、同級產品中體積最小，最適合有限之設備空間。
 - 低耗損精密齒輪設計傳動效率高達 95%、高精度低背隙3弧分，精準型10弧分皆可供應。
 - 密閉式全油封設計，可用於任何方向，確保潤滑油脂不洩漏。
 - 內部組件採用經熱處理之高強度合金鋼材，足堪應付嚴峻的惡劣工作環境。
 - 廣泛應用於航太、軍火器械、半導體設備、醫療器材、機器人、機械手、通訊設備、製藥設備、印刷設備、包裝機械、紡織機械、自動倉儲、停車設備、量測設備、工作母機、精密監控系統、車輛工業、自動控制系統等行業。
-
- True planetary design extends gear head and motor life also reduces noise and Increases transmission efficiency.
 - NEMA mounting standards for quick installation.
 - Quiet, under 10 arc-minute low backlash design, 3 arc-minute optional.
 - Precision gears made planetary mechanism to raise efficiency above 95%.
 - Integral gear ratio available from 3:1 through 100:1 for wide range selection.
 - High performance and high reduction ratio for transferring high torques in limited space.
 - Hardened high strength steel made components for reliability under severe environment.
 - All grease-filled, the gear head can be used in any orientation without having messy oil leaks.
 - Two types - **S type** as low backlash and **N type** as standard backlash are available for wide range applications of automation and motion control in industries such as Aerospace, Medical, Pharmaceutical, Factory Automation, Printing, Robotics, Auto Control System, Automotive, Textile Equipment, Semiconductor Manufacturing Equipment, X-Y Positioning Systems, Coordinate Measuring, Optical Positioning Equipment, Telecommunications, Packaging, Material Handling, Assembly Line, CCTV System, Machine Tools, Special Machinery, etc.

KIM-YONG MECHATRONIC CO.

台中市太平區德安街85巷6號 TEL:04-2271-1388 FAX:04-2271-1387

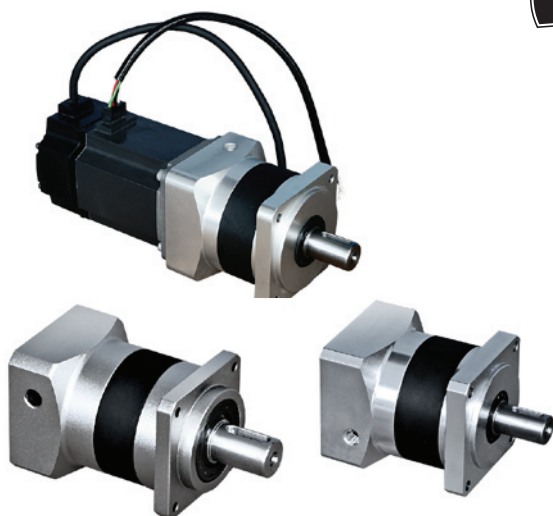
Motor Outlet Dimension for
SAMPLE/ORDER REQUEST FORM

馬達安裝尺寸表



(All dimensions in mm unless specified)

行星減速機型號 Gear Head Model No	Y 連接板尺寸 Flange Size	R 螺絲孔尺寸 Bolt Hole	V 固定孔 Bolt Circle	W 導引直徑 Pilot Dia.	O 導引長度 Pilot Length	P 出力軸徑 Shaft Dia.	S 出力軸長度 Shaft Length



金永機電有限公司

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台灣台中市太平區德安街85巷6號

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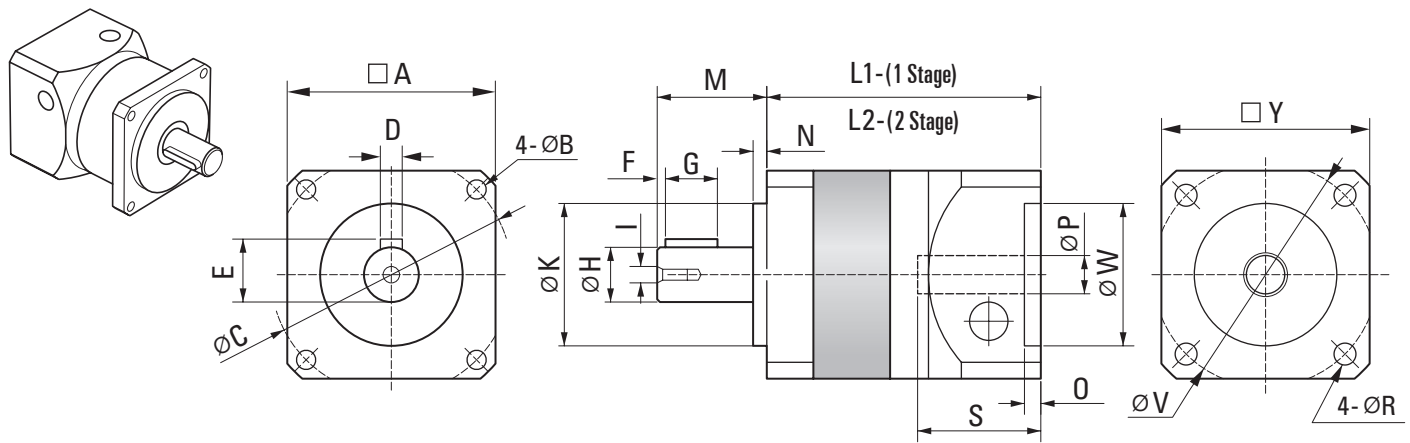
FAX : 886-4-2271-1387

www.blcdmotor.com.tw

天津辦事處 聯絡手機 13752645911

營業項目：純向量型高功能變頻器
 無刷馬達與AC伺服馬達
 步進、伺服行星式減速機
 各式渦輪、齒輪減速機
 空壓機、幫浦用恆壓變頻器

KY-TYPE 方型輸出法蘭
 Denoted as gear head with square output flange.



MODEL 型號	A Square Flange Size 法蘭尺寸	B Bolt Hole Dia. 螺絲孔	C Bolt Circle 固定孔	D Keyway Thickness 方鍵寬度	E Keyway Height 方鍵高度	G Keyway Length 方鍵長度	H Shaft Dia. 出力軸徑	I Spindle thread (opt.) 軸端牙	K Pilot Dia. 導引直徑	L1 Over Flange Length 一段高度	L2 Over Flange Length 二段高度	M Output Shaft Length 出力軸	N Pilot Thickness 導引厚度
KY-042	42	3.2	48	4	13.5	10	12	M3×6	30	56	72	20	3
KY-060	60	5.0	70	4	15.7	15	14	M5×13	50	78	102	23	3
KY-090	90.5	7.0	100	6	22.5	25	22	M6×20	80	95	126	35	5
KY-120	120	9.0	140	8	28.3	30	25	M12×15	110	120	153	57	5

KY 系列減速比選用表

MODEL 型號	比數 容量	1/4	1/5	1/8	1/10	1/15	1/20	1/25	1/35	1/40	1/50	1/60	1/70	1/100
42	100 W	●	●	●	●	●	●	●	●	●	●			
	400 W	●	●	●	●	●	●	●	●					
60	100 W											●	●	●
	400 W	●	●	●	●	●	●	●	●					
	750 W	●	●	●	●	●	●	●						
	1.0 KW	●	●	●	●	●	●	●						
90	400 W									●	●	●	●	●
	750 W	●	●	●	●	●	●	●	●	●	●	●		
	1.0 KW	●	●	●	●	●	●	●						
	1.5 KW	●	●	●	●									
120	750 W												●	●
	1.0 KW	●	●	●	●	●	●	●	●	●	●	●		
	1.5 KW	●	●	●	●	●	●	●	●	●	●			
	2.0 KW	●	●	●	●	●	●	●						

單位轉換表 Conversion Table :

$KgF \cdot M = 7.2Lbf \cdot Ft = 9.8Nm$

$Nm = 10KgF \cdot cm = 0.1KgF \cdot M = 8.6Lbf \cdot inch = 0.72Lbf \cdot Ft$

$Inch = 2.54cm \quad Ft = 30.48cm$

$Kg = 2.2Lb \quad Lb = 0.45Kg$

$KgF(Kp) = 9.8N = 2.2LbF$

$Lbf \cdot Ft = 13.8KgF \cdot cm$

$Kg \cdot cm = 0.07Ft \cdot lb$

$N = 0.2248LbF = 0.1KgF$

TECHNICAL DATA

(All dimensions in mm unless specified)

Descriptions 說明		Stages 段數	Ratio 減速比	42	60	90	120
Nominal Output Torque 額定出力軸轉矩	Nm	1	4, 5	10	16	60	120
			3, 7	8	15	54	100
			9, 10	6	12	40	80
		2	12, 15	14	30	96	185
			20, 25	16	36	104	208
			30, 40, 50, 70	13	28	88	160
		100	8	18	60	120	
Max. Output Torque 最大出力轉矩	Nm	1, 2	3~100	3 times of Nominal output torque 額定出力轉矩值之3倍			
Nominal Input Speed 額定入力端馬達轉速	RPM	1, 2	3~100	4,000	4,000	3,000	3,000
Max. Input Speed 入力端馬達最高轉速	RPM	1, 2	3~100	6,000	6,000	5,000	4,500
Input Shaft Moment of Inertia 入力軸轉動慣量	Kg-cm ²	1	4, 5	0.20	0.09	0.50	1.80
			3, 7	0.30	0.14	0.80	2.50
			10	0.016	0.06	0.40	1.20
		2	15	0.023	0.12	0.75	2.80
			20, 25	0.020	0.08	0.45	1.50
			30, 40, 50, 70	0.016	0.07	0.40	1.40
		100	0.020	0.08	0.45	1.50	
Maximum Radial Load 容許最大徑向負載	N	1	3~10	200	500	1,500	3,000
Maximum Axial Load 容許最大軸向負載		2	12~100	300	600	2,000	4,000
Torsional Stiffness 扭轉剛性	Nm / Arc-min	1, 2	3~100	0.5	1.5	5	14
Efficiency at Full Load 全載傳動效率	%	1, 2	3~100	1 stage(一段) > 95% , 2 stages(二段) > 92%			
Service Life in average 平均工作壽命	Hrs	1, 2	3~100	10,000			
Ratios Available 可選用減速比		1	3~10	3,4,5,7,9,10	3,4,5,6,7,8,9,10		3,4,5,7,10
		2	12~100	12~100	12~100	9, 12~100	12~100
Max. Weight 最大淨重	Kg	1	3~10	0.4	1.1	2.9	6.4
		2	12~100	0.6	1.6	4.1	8.1
Backlash 背隙	Arc-min	1	3~10	Low < 6 (S Type) 低背隙 Standard < 10 (N Type) 標準背隙			
		2	12~100	Low < 10 (S Type) 低背隙 Standard < 15 (N Type) 標準背隙			
Noise Level 噪音值	dB(A)	1, 2	3~100	< 70 Sound Pressure level; distance 1M; at 3000RPM Input Speed 測量值係在距離減速機一公尺及馬達無負載 轉速每分鐘 3,000 轉時測得之噪音值			
Protection Rating 減速機保護等級		1, 2	3~100	IP64			
Operating Temperature 容許操作溫度區間	°C	1, 2	3~100	-20°C ~ +100 °C			
Mounting Position 按裝方向		1, 2	3~100	Any direction 任何方向			

i 以上數據係在單段減速比 5:1 及兩段減速比 25:1 的情況下測得。

額定出力轉矩 · 單段依減速比 4:1 & 5:1 → 3:1 & 7:1 → 10:1

兩段依減速比 20:1 & 25:1 → 49:1 & 70:1 → 100:1 各約以 10% 遞減。

本公司有權針對以上數據規格逕行設計變更不先行告知, All specifications subject to change without prior notice.