



“ MAIN DRIVE, DRIVE YOU TO SUCCESS ”



新竹科學園區 HSINCHU SCI. PARK

300 新竹市東區研發一路11號2樓
2F, No. 11, Yanfa 1st Rd., East Dist., Hsinchu City 300, Taiwan

銅鑼科學園區 TONGLUO SCI. PARK

366 苗栗縣銅鑼科學園區銅科六路20號
No. 20, Tongke 6th Rd., Tongluo Township, Miaoli County 366, Taiwan
Tel: +886-37-983936 Fax: +886-37-983988
Email: maindrive2018@maindrive.com.tw
Website: www.maindrive.com.tw

盟英官網
WEBSITE



型錄規格
E-CATALOG



諧波減速機及
關節模組專業製造
HARMONIC REDUCERS &
ROBOT JOINT MODULES

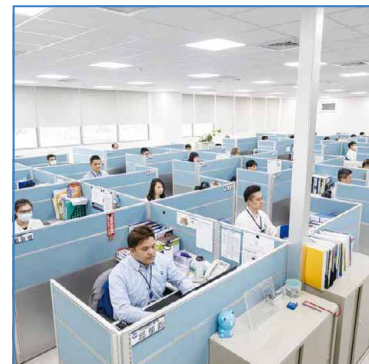




關於盟英科技 About Main Drive

盟英科技股份有限公司成立於2018年10月，專業生產製造機器人關節模組 (Robot Joint Module) 及諧波減速機，具「高精度、高負載、體積小、傳動穩定」等特色，多應用於多關節機器人與中低荷重的協作機器人及各式自動化設備。且透過垂直整合及合作，朝向諧波減速機機電整合、客製化設計及自動化生產等目標，提供客戶最完整的解決方案。

MAIN DRIVE Corporation was established in October 2018, specializing in the production of Robot Joint Module and Harmonic Reducers. With features of "high precision, high load capacity, small size, and stable transmission", the products are mainly used in Multi-Joint Robot Arms, collaborative robots with medium and low loading, and various automatic equipment. Through vertical integration and collaboration, MAIN DRIVE Corporation will march towards fulfilling the goals of mechatronic integration for Harmonic Reducer integration, customized design, and intelligent production for customers with complete solutions.



盟英創立歷程 Main Drive Milestone

- 核准入駐新竹科學園區。
- 工研院技轉團隊正式加入。
- 申請通過符合「高風險新創事業公司」。
- Approved to settle in Hsinchu Science Park.
- Industrial Technology Research Institution (ITRI) technology transfer team joined.
- Application passed and meet "High-risk Innovative Startups."
- 完成機器人關節模組產創計畫。
- 產線移至銅鑼科學園區。
- Accomplished Taiwan Industry Innovation Platform Robot Joint Module Program.
- Production line relocation to Tongluo Science Park.
- 持續擴大年產線，年度產量目標 50,000 組。
- Continuously expanding the annual production line, with an annual production target of 50,000 units.

2018

- 召開成立盟英科技籌備處會議。
- 公司英文名稱登記完成 (Main Drive Corporation).
- Convened and established Main Drive Corporation.
- Registered company English name as Main Drive Corporation.

2019

2020

- 搬遷標準廠房 11 號 2F 辦公室。
- 盟英圖文商標完成註冊。
- 完成 ISO 9001 認證。
- Moved to standard factory located in Hsinchu Science Park.
- Main Drive trade mark registered.
- Obtained ISO 9001 certification.

2021

2022

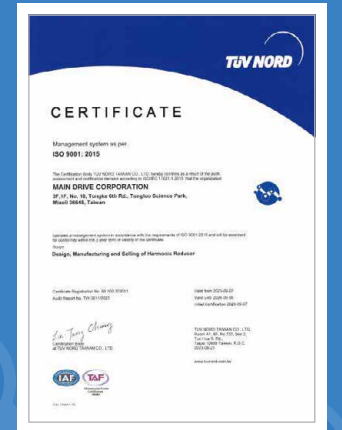
- 開發大陸市場，與機器人公司開始進行合作。
- Developing the Chinese mainland market and starting to cooperate with robot companies.

2023

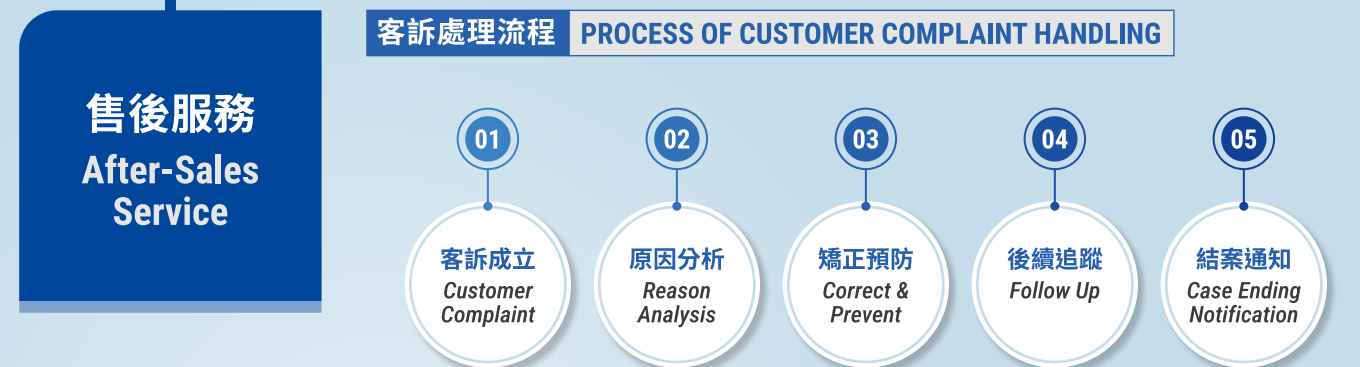
2024

- 開發日本、韓國、印度市場。
- 推展機器人關節模組，佈建組測生產線。
- Developing the Japanese, Korean, and Indian markets.
- Promoting robot joint modules and deploying assembly and testing production lines.

ISO-9001:2015 品質管理系統 ISO-9001 Certified.



品質保證 QUALITY ASSURANCE



測試設備 Testing Equipment



減速機綜合試驗機
Universal Test Machine



壽命測試機
Life Test Machine



啟動扭力測試
Starting Torque Test Machine



重複精度測試機
Repeatability Test Machine



效率測試機
Efficiency Test Machine



傳動誤差測試機
Transmission Error Test Machine



扭轉剛性測試儀
Rigidity Machine

量測儀器 Measuring Equipment



三次元
Coordinate Measuring Machine



齒輪量測儀
Gear Measuring Instrument

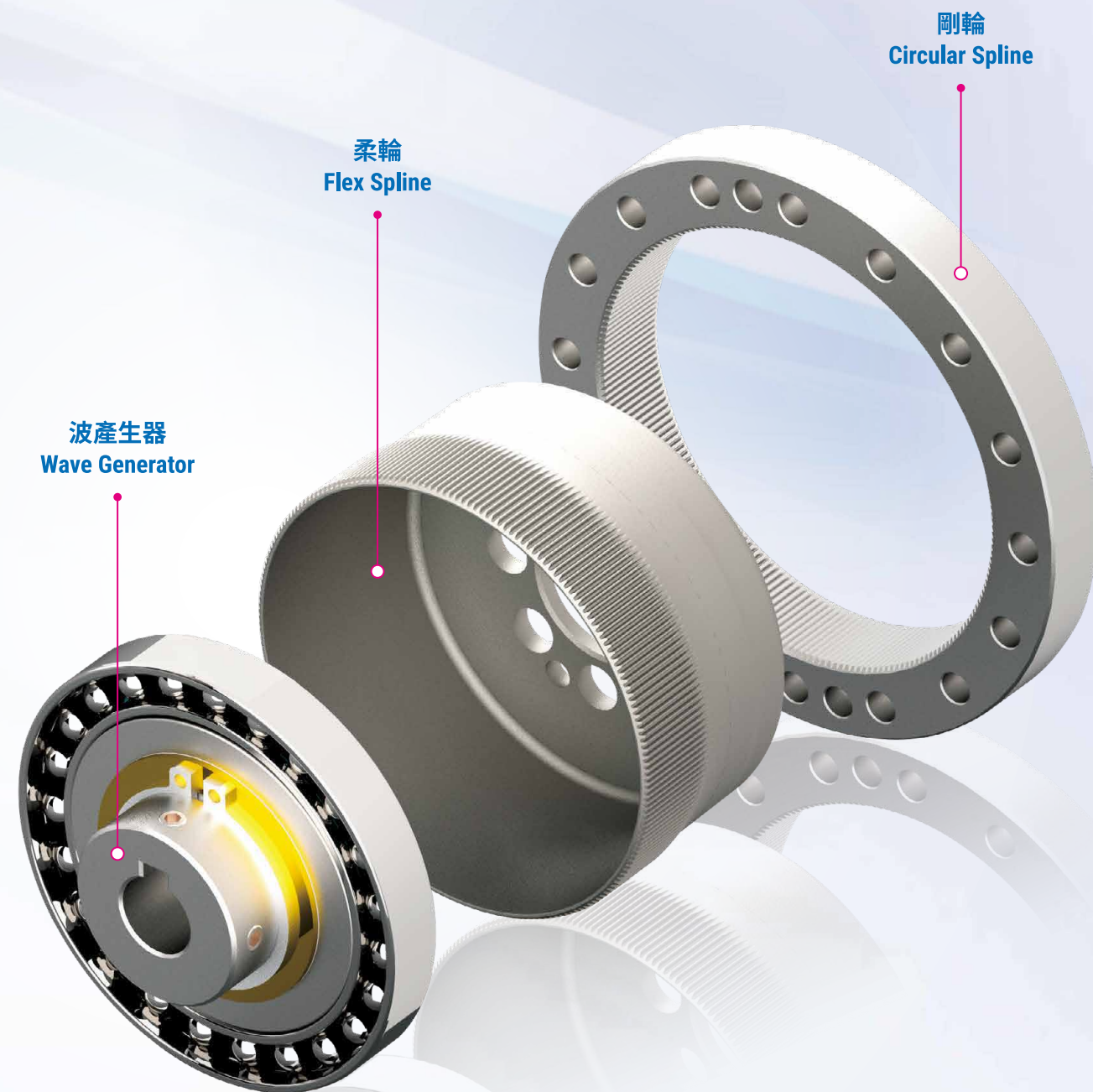


影像光學量測儀
Image Optics Machine

諧波減速機優點

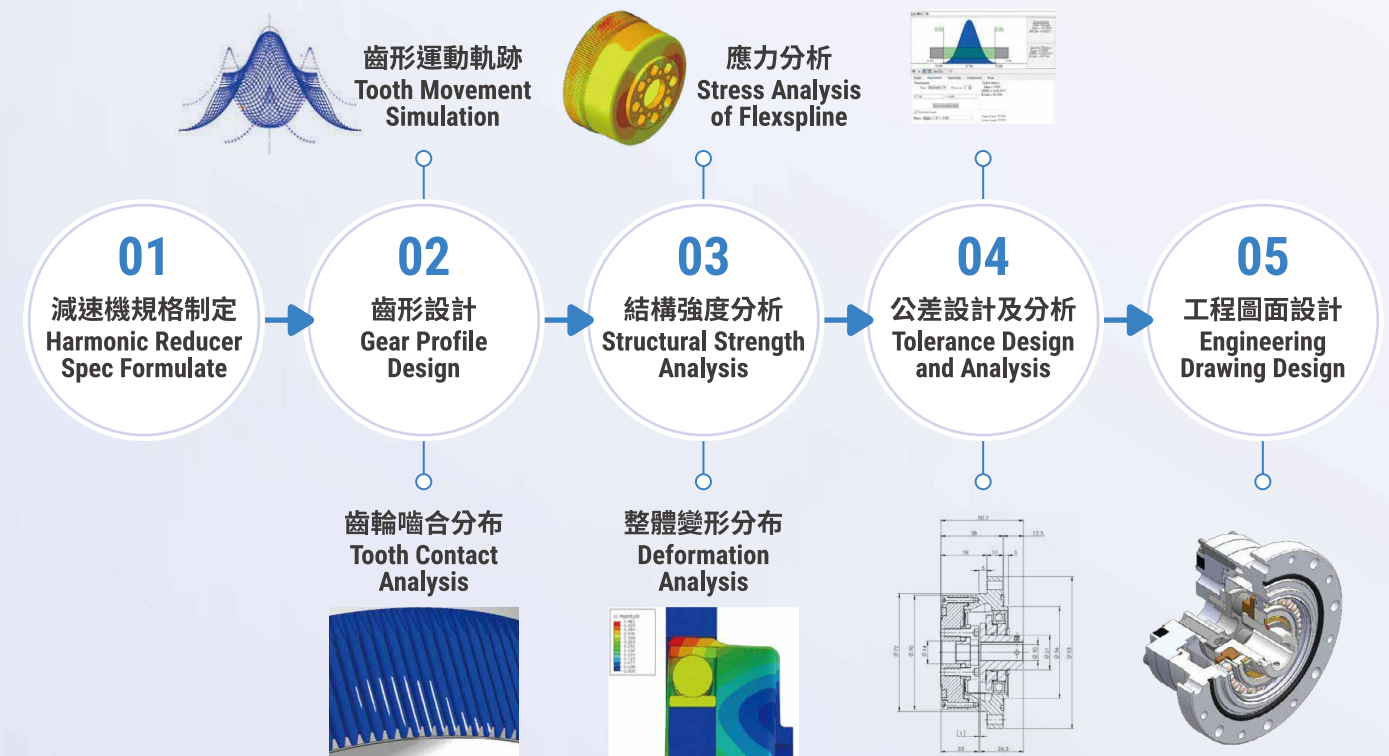
ADVANTAGE OF HARMONIC REDUCER

- 體積小，重量輕。
- 構造簡單，主要由三個組件構成。
- 高減速比，可傳遞大扭力。
- 高傳動精度。
- 高效率、低噪音。
- Compact, light weight.
- Simple structure, with 3 main components.
- High reduction ratio, high torque.
- High transmission accuracy.
- High efficiency, low noise.



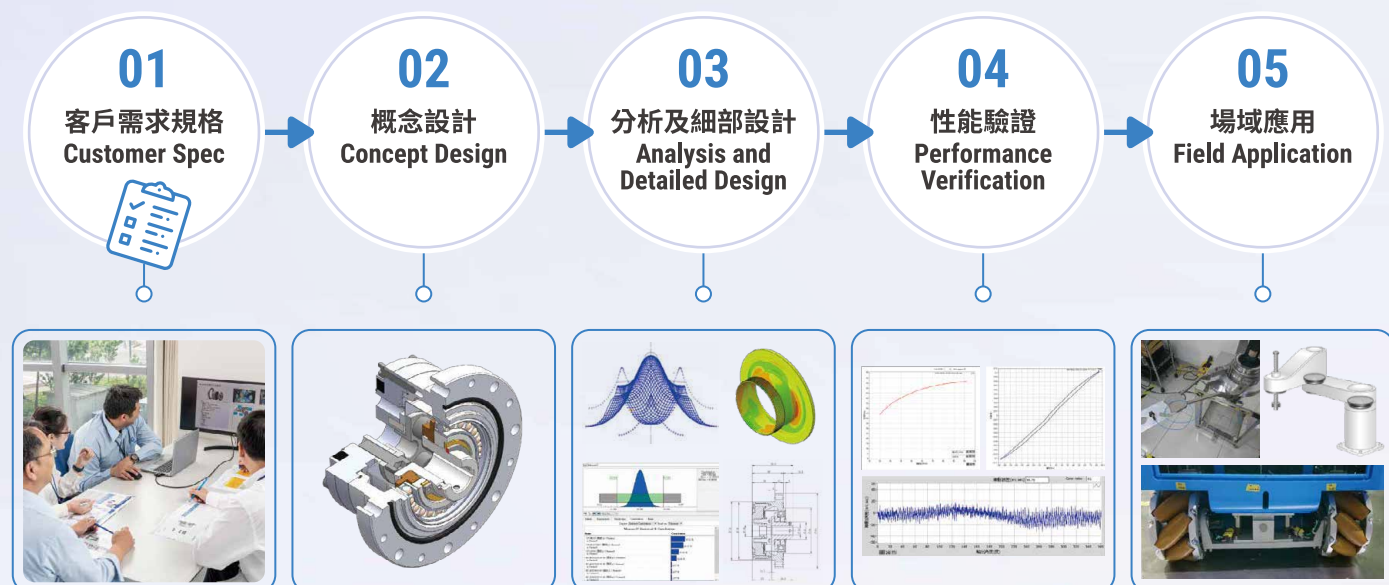
減速機設計開發

Design & Development of Harmonic Reducer



客製化減速機開發能力

Tailor Made Harmonic Reducer Development Abilities



諧波減速機系列 Harmonic Reducer Series

諧波減速機體積小、重量輕。
Harmonic Reducer: Compact, light weight.



產品介紹

- **減速機柔輪形狀：**
柔輪形狀主要分成標準杯狀及帽型兩種。
- **減速機速比：**
減速比一般為50、80、100、120、160。
- **減速機組成方式：**
諧波減速機的結構主要分為三件式、一體式具有交叉軸承或中空軸、一體式具輸入軸、簡易式具帽型柔杯結合十字滑塊聯軸器、簡易式具帽型柔杯結合中空軸等幾種構型。

PRODUCT DESCRIPTION

- **The Shape of Flexspline:** Flexspline shapes are mainly divided into 2 types: standard cup shape, hollow type.
- **Reduction Ratio:** The reduction ratios of harmonic reducer are generally 50, 80, 100, 120 and 160.
- **Composition of Harmonic Reducer:** The structures of harmonic reducers are mainly divided into: component type, unit type with cross roller bearing or hollow shaft, unit type with input shaft, simple type with hollow type flexible cup combined with oldham coupling and simple type with hollow type flexible cup combined with hollow shaft.

尺寸規格代號 Size Specification Code	14	17	20	25	32	40
諧波齒輪節圓直徑 Harmonic Gear Pitch Circle Diameter	35.6 mm	43.2 mm	50.8 mm	63.5 mm	81.3 mm	101.7 mm

產品應用 APPLICATIONS

- 自動化 / 工業4.0 / 機器人技術。
- Automation / Industry 4.0 / Robotics.



工業用多關節機器人
Articulated Robot



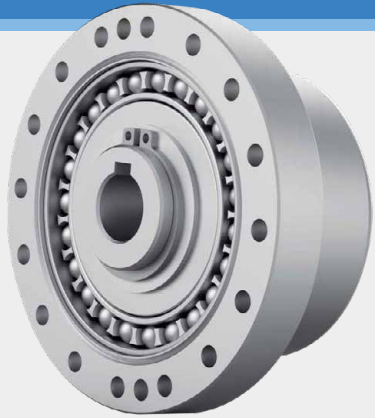
水平移動機器人 (SCARA)
Selective Compliance Assembly
Robot Arm (SCARA)



協作機器人
Collaborative Robot

CGAA 杯型三件式
Component Type

CGAA三件式僅以三項基礎零件組成，可直接組裝至機械、裝置，提升設計自由度。
CGAA component type is composed of only three basic parts. It can be directly assembled to machinery and devices to improve the freedom of design.



型號	減速比	輸入 2000 rpm 時的額定轉矩		起動、停止 時的容許 峰值轉矩		平均負載 轉矩的 容許最大值		瞬間容許 最大轉矩		容許最高 輸入轉速	容許平均 輸入轉速	慣性力矩	
										潤滑脂	潤滑脂		
Model	Reduction Ratio	Rated Torque at 2000 rpm		Limit for Repeated Peak Torque		Limit for Average Torque		Limit for Momentary Peak Torque		Allowable Maximum Input Rotation Speed	Allowable Average Input Rotation Speed	Moment of Inertia	
										Grease	Grease		
單位 Unit		N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	r/min	r/min	l×10 ⁻⁴ kg·m²	J×10 ⁻⁵ kgf·ms²
10	80	4.4	0.45	9.9	1	7.5	0.76	22	2.2	8500	3500	0.012	0.012
	50	7.0	0.7	23	2.3	9.0	0.9	46	4.7				
14	80	10	1.0	30	3.1	14	1.4	58	5.9	8500	3500	0.033	0.034
	100	10	1.0	36	3.7	14	1.4	58	5.9				
17	50	21	2.1	44	4.5	34	3.4	91	9	7300	3500	0.079	0.081
	80	29	2.9	56	5.7	35	3.6	113	12				
	100	31	3.2	70	7.2	51	5.2	143	15				
	120	31	3.2	70	7.2	51	5.2	112	11				
20	50	33	3.3	73	7.4	44	4.5	127	13	6500	3500	0.193	0.197
	80	44	4.5	96	9.8	61	6.2	165	17				
	100	52	5.3	107	10.9	64	6.5	191	20				
	120	87	8.9	217	22	140	14	395	40				
	160	87	8.9	229	23	140	14	408	42				
25	50	51	5.2	127	13	72	7.3	242	25	5600	3500	0.413	0.421
	80	82	8.4	178	18	113	12	332	34				
	100	87	8.9	204	21	140	14	369	38				
	120	87	8.9	217	22	140	14	395	40				
	160	87	8.9	229	23	140	14	408	42				
32	50	99	10	281	29	140	14	497	51	4800	3500	1.69	1.72
	80	153	16	395	40	217	22	738	75				
	100	178	18	433	44	281	29	841	86				
	120	178	18	459	47	281	29	892	91				
	160	178	18	484	49	281	29	892	91				
40	50	178	18	523	53	255	26	892	91	4000	3000	4.5	4.59
	80	268	27	675	69	369	38	1270	130				
	100	345	35	738	75	484	49	1400	143				
	120	382	39	802	82	586	60	1530	156				
	160	382	39	841	86	586	60	1530	156				
45	50	229	23	650	66	345	35	1235	126	3800	3000	8.68	8.86
	80	407	41	918	94	507	52	1651	168				
	100	459	47	982	100	650	66	2041	208				
	120	523	53	1070	109	806	82	2288	233				
	160	523	53	1147	117	819	84	2483	253				

● 40、45型為特規，若有需求請洽盟英業務部。

● Model 40 and 45 are special specification. If there is a demand, please contact us.

諧波減速機系列 Harmonic Reducer Series

CGUH 杯型一體式
Unit Type

整合交叉滾子軸承，輸出端可承受扭力及彎矩。CGUH系列波產生器為歐丹聯軸器，歐丹聯軸器能提供較大的同心度偏移量，機械與減速機可承受較低的組裝精度。
Integrated cross roller bearing, the output end can bear torque and bending torque. CGUH series wave generators are Oldham couplings. Oldham couplings can provide large concentricity offset, and machinery and reducers can withstand low assembly accuracy.



型號	減速比	輸入 2000 rpm 時的額定轉矩		起動、停止 時的容許 峰值轉矩		平均負載 轉矩的 容許最大值		瞬間容許 最大轉矩		容許最高 輸入轉速	容許平均 輸入轉速	慣性力矩	
										潤滑脂	潤滑脂		
Model	Reduction Ratio	Rated Torque at 2000 rpm		Limit for Repeated Peak Torque		Limit for Average Torque		Limit for Momentary Peak Torque		Allowable Maximum Input Rotation Speed	Allowable Average Input Rotation Speed	Moment of Inertia	
		N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	Grease	Grease		
單位 Unit		N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	r/min	r/min	l×10 ⁻⁴ kg·m ²	J×10 ⁻⁵ kgf·ms ²
14	50	7.0	0.7	23	2.3	9	0.9	46	4.7	8500	3500	0.033	0.034
	80	10	1.0	30	3.1	14	1.4	58	5.9				
	100	10	1.0	36	3.7	14	1.4	58	5.9				
17	50	21	2.1	44	4.5	34	3.4	91	9	7300	3500	0.079	0.081
	80	29	2.9	56	5.7	35	3.6	109	11				
	100	31	3.2	70	7.2	51	5.2	109	11				
	120	31	3.2	70	7.2	51	5.2	109	11				
20	50	33	3.3	73	7.4	44	4.5	127	13	6500	3500	0.193	0.197
	80	44	4.5	96	9.8	61	6.2	165	17				
	100	52	5.3	107	10.9	64	6.5	191	20				
	120	52	5.3	113	11.5	64	6.5	191	20				
	160	52	5.3	120	12.2	64	6.5	191	20				
25	50	51	5.2	127	13	72	7.3	242	25	5600	3500	0.413	0.421
	80	82	8.4	178	18	113	12	332	34				
	100	87	8.9	204	21	140	14	369	38				
	120	87	8.9	217	22	140	14	395	40				
	160	87	8.9	229	23	140	14	408	42				
32	50	99	10	281	29	140	14	497	51	4800	3500	1.69	1.72
	80	153	16	395	40	217	22	738	75				
	100	178	18	433	44	281	29	841	86				
	120	178	18	459	47	281	29	842	86				
	160	178	18	484	49	281	29	842	86				
40	50	178	18	523	53	255	26	892	91	4000	3000	4.50	4.59
	80	268	27	675	69	369	38	1270	130				
	100	345	35	738	75	484	49	1400	143				
	120	382	39	802	82	586	60	1510	154				
	160	382	39	841	86	586	60	1510	154				
45	50	229	23	650	66	345	35	1235	126	3800	3000	8.68	8.86
	80	407	41	918	94	507	52	1651	168				
	100	459	47	982	100	650	66	2041	208				
	120	523	53	1070	109	806	82	2288	233				
	160	523	53	1147	117	819	84	2483	253				

HGAA 帽型三件式
Component Type with Hollow Input Shaft

HGAA系列三件式僅以三項基礎零件組成，可直接組裝至機械、裝置，提升設計自由度。
HGAA series component type is composed of only three basic parts. It can be directly assembled to machinery and devices to improve the freedom of design.



型號	減速比	輸入 2000 rpm 時的額定轉矩		起動、停止 時的容許 峰值轉矩		平均負載 轉矩的 容許最大值		瞬間容許 最大轉矩		容許最高 輸入轉速	容許平均 輸入轉速	慣性力矩	
										潤滑脂	潤滑脂		
Model	Reduction Ratio	Rated Torque at 2000 rpm		Limit for Repeated Peak Torque		Limit for Average Torque		Limit for Momentary Peak Torque		Allowable Maximum Input Rotation Speed	Allowable Average Input Rotation Speed	Moment of Inertia	
		N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	Grease	Grease		
單位 Unit		N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	r/min	r/min	l×10 ⁻⁴ kg·m ²	J×10 ⁻⁵ kgf·ms ²
14	50	7.0	0.7	23	2.3	9	0.9	46	4.7	8500	3500	0.033	0.034
	80	10	1.0	30	3.1	14	1.4	61	6.2				
	100	10	1.0	36	3.7	14	1.4	70	7.2				
17	50	21	2.1	44	4.5	34	3.4	91	9	7300	3500	0.079	0.081
	80	29	2.9	56	5.7	35	3.6	113	12				
	100	31	3.2	70	7.2	51	5.2	143	15				
	120	31	3.2	70	7.2	51	5.2	112	11				
20	50	33	3.3	73	7.4	44	4.5	127	13	6500	3500	0.193	0.197
	80	44	4.5	96	9.8	61	6.2	165	17				
	100	52	5.3	107	10.9	64	6.5	191	20				
	120	52	5.3	113	11.5	64	6.5	191	20				
	160	52	5.3	120	12.2	64	6.5	191	20				
25	50	51	5.2	127	13	72	7.3	242	25	5600	3500	0.413	0.421
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	160	178	18	484	49	281	29	892	91				
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	100	345	35	738	75	484	49	1400	143				
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45	50	229	23	650	66	345	35	1235	126	3800	3000	8.68	8.86
	80	407	41	918	94	507	52	1651	168				
	100	459	47	982	100	650	66	2041	208				
	120	523	53	1070	109	806	82	2288	233				
	160	523	53	1147	117	819	84	2483	253				

諧波減速機系列 Harmonic Reducer Series

HGUH 帽型一體式
Unit Type with Hollow Shaft

HGUH採用中空孔結構，可在不偏置電機的情況下將配管和配線佈置在旋轉中心中空結構，有助於裝置佈局的小型化。構型有前後蓋設計並使用軸封和O-ring做密封，防漏效果較好。HGUH adopts a hollow hole structure, which can arrange pipes and wiring in the hollow structure of the rotation center without biasing the motor, which contributes to the miniaturization of the device layout. The configuration has a front and rear cover design. Both front and rear covers are sealed with shaft seals and O-rings. This reducer has a good leak proof effect.



型號 Model	14 型	17 型	20 型	25 型	32 型	40 型
中空型內孔直徑 Hollow Innerhole Diameter	14 mm	19 mm	21 mm	29 mm	36 mm	46 mm

型號	減速比	輸入 2000 rpm 時的額定轉矩		起動、停止時的容許峰值轉矩		平均負載轉矩的容許最大值		瞬間容許最大轉矩		容許最高輸入轉速	容許平均輸入轉速
										潤滑脂	潤滑脂
Model	Reduction Ratio	Rated Torque at 2000 rpm		Limit for Repeated Peak Torque		Limit for Average Torque		Limit for Momentary Peak Torque		Allowable Maximum Input Rotation Speed	Allowable Average Input Rotation Speed
		N-m	kgf-m	N-m	kgf-m	N-m	kgf-m	N-m	kgf-m	Grease	Grease
單位 Unit		N-m	kgf-m	N-m	kgf-m	N-m	kgf-m	N-m	kgf-m	r/min	r/min
14	50	7.0	0.7	23	2.3	9	0.9	46	4.7	8500	3500
	80	10	1.0	30	3.1	14	1.4	61	6.2		
	100	10	1.0	36	3.7	14	1.4	70	7.2		
17	50	21	2.1	44	4.5	34	3.4	91	9	7300	3500
	80	29	2.9	56	5.7	35	3.6	113	12		
	100	31	3.2	70	7.2	51	5.2	143	15		
	120	31	3.2	70	7.2	51	5.2	112	11		
20	50	33	3.3	73	7.4	44	4.5	127	13	6500	3500
	80	44	4.5	96	9.8	61	6.2	165	17		
	100	52	5.3	107	10.9	64	6.5	191	20		
	120	52	5.3	113	11.5	64	6.5	191	20		
	160	52	5.3	120	12.2	64	6.5	191	20		
25	50	51	5.2	127	13	72	7.3	242	25	5600	3500
	80	82	8.4	178	18	113	12	332	34		
	100	87	8.9	204	21	140	14	369	38		
	120	87	8.9	217	22	140	14	395	40		
	160	87	8.9	229	23	140	14	408	42		
32	50	99	10	281	29	140	14	497	51	4800	3500
	80	153	16	395	40	217	22	738	75		
	100	178	18	433	44	281	29	841	86		
	120	178	18	459	47	281	29	892	91		
	160	178	18	484	49	281	29	892	91		
40	50	178	18	523	53	255	26	892	91	4000	3000
	80	268	27	675	69	369	38	1270	130		
	100	345	35	738	75	484	49	1400	143		
	120	382	39	802	82	586	60	1530	156		
	160	382	39	841	86	586	60	1530	156		
45	50	229	23	650	66	345	35	1235	126	3800	3000
	80	407	41	918	94	507	52	1651	168		
	100	459	47	982	100	650	66	2041	208		
	120	523	53	1070	109	806	82	2288	233		
	160	523	53	1147	117	819	84	2483	253		

HGSH 帽型簡易式 - 結合中空軸
Simple Type with Hollow Shaft

HGSH採用中空軸結構，可在不偏置電機的情況下，將配管和配線佈置在旋轉中心中空結構，有助於裝置佈局的小型化。無前後蓋設計方便客戶直接組裝至機械、裝置，提升設計自由度。HGSH series adopts hollow shaft structure. The piping and wiring can be arranged in the hollow structure of the rotation center without biasing the motor, which contributes to the miniaturization of the device layout. The design without front and back cover is convenient for customers to directly assemble to machinery and devices, improving the freedom of design.



型號 Model	14 型	17 型	20 型	25 型	32 型	40 型
中空型內孔直徑 Hollow Innerhole Diameter	14 mm	19 mm	21 mm	29 mm	36 mm	46 mm

型號	減速比	輸入 2000 rpm 時的額定轉矩		起動、停止時的容許峰值轉矩		平均負載轉矩的容許最大值		瞬間容許最大轉矩		容許最高輸入轉速	容許平均輸入轉速
										潤滑脂	潤滑脂
Model	Reduction Ratio	Rated Torque at 2000 rpm		Limit for Repeated Peak Torque		Limit for Average Torque		Limit for Momentary Peak Torque		Allowable Maximum Input Rotation Speed	Allowable Average Input Rotation Speed
		N-m	kgf-m	N-m	kgf-m	N-m	kgf-m	N-m	kgf-m	Grease	Grease
單位 Unit		N-m	kgf-m	N-m	kgf-m	N-m	kgf-m	N-m	kgf-m	r/min	r/min
14	50	7.0	0.7	23	2.3	9	0.9	46	4.7	8500	3500
	80	10	1.0	30	3.1	14	1.4	61	6.2		
	100	10	1.0	36	3.7	14	1.4	70	7.2		
17	50	21	2.1	44	4.5	34	3.4	91	9	7300	3500
	80	29	2.9	56	5.7	35	3.6	113	12		
	100	31	3.2	70	7.2	51	5.2	143	15		
	120	31	3.2	70	7.2	51	5.2	112	11		
20	50	33	3.3	73	7.4	44	4.5	127	13	6500	3500
	80	44	4.5	96	9.8	61	6.2	165	17		
	100	52	5.3	107	10.9	64	6.5	191	20		
	120	52	5.3	113	11.5	64	6.5	191	20		
	160	52	5.3	120	12.2	64	6.5	191	20		
25	50	51	5.2	127	13	72	7.3	242	25	5600	3500
	80	82	8.4	178	18	113	12	332	34		
	100	87	8.9	204	21	140	14	369	38		
	120	87	8.9	217	22	140	14	395	40		
	160	87	8.9	229	23	140	14	408	42		
32	50	99	10	281	29	140	14	497	51	4800	3500
	80	153	16	395	40	217	22	738	75		
	100	178	18	433	44	281	29	841	86		
	120	178	18	459	47	281	29	892	91		
	160	178	18	484	49	281	29	892	91		
40	50	178	18	523	53	255	26	892	91	4000	3000
	80	268	27	675	69	369	38	1270	130		
	100	345	35	738	75	484	49	1400	143		
	120	382	39	802	82	586	60	1530	156		
	160	382	39	841	86	586	60	1530	156		
45	50	229	23	650	66	345	35	1235	126	3800	3000
	80	407	41	918	94	507	52	1651	168		
	100	459	47	982	100	650	66	2041	208		
	120	523	53	1070	109	806	82	2288	233		
	160	523	53	1147	117	819	84	2483	253		

諧波減速機系列 Harmonic Reducer Series

HGSO 帽型簡易式 – 結合十字滑塊
Simple Type with Oldham Coupling

HGSO系列波產生器為歐丹聯軸器。歐丹聯軸器能提供較大的同心度偏移量，機械與減速機可承受較低的組裝精度。此設計方便客戶直接組裝至機械、裝置，提升設計自由度。
HGSO series wave generators are Oldham couplings. Oldham couplings can provide large concentricity offset, and machinery and reducers can withstand low assembly accuracy. This design facilitates customers to assemble directly to machinery and devices, and improves the freedom of design.



型號	減速比	輸入 2000 rpm 時的額定轉矩		起動、停止時的容許峰值轉矩		平均負載轉矩的容許最大值		瞬間容許最大轉矩		容許最高輸入轉速	容許平均輸入轉速
										潤滑脂	潤滑脂
Model	Reduction Ratio	Rated Torque at 2000 rpm		Limit for Repeated Peak Torque		Limit for Average Torque		Limit for Momentary Peak Torque		Allowable Maximum Input Rotation Speed	Allowable Average Input Rotation Speed
		N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	Grease	Grease
單位 Unit		N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	r/min	r/min
14	50	7.0	0.7	23	2.3	9	0.9	46	4.7	8500	3500
	80	10	1.0	30	3.1	14	1.4	61	6.2		
	100	10	1.0	36	3.7	14	1.4	70	7.2		
17	50	21	2.1	44	4.5	34	3.4	91	9	7300	3500
	80	29	2.9	56	5.7	35	3.6	113	12		
	100	31	3.2	70	7.2	51	5.2	143	15		
	120	31	3.2	70	7.2	51	5.2	112	11		
20	50	33	3.3	73	7.4	44	4.5	127	13	6500	3500
	80	44	4.5	96	9.8	61	6.2	165	17		
	100	52	5.3	107	10.9	64	6.5	191	20		
	120	52	5.3	113	11.5	64	6.5	191	20		
	160	52	5.3	120	12.2	64	6.5	191	20		
25	50	51	5.2	127	13	72	7.3	242	25	5600	3500
	80	82	8.4	178	18	113	12	332	34		
	100	87	8.9	204	21	140	14	369	38		
	120	87	8.9	217	22	140	14	395	40		
	160	87	8.9	229	23	140	14	408	42		
32	50	99	10	281	29	140	14	497	51	4800	3500
	80	153	16	395	40	217	22	738	75		
	100	178	18	433	44	281	29	841	86		
	120	178	18	459	47	281	29	892	91		
	160	178	18	484	49	281	29	892	91		
40	50	178	18	523	53	255	26	892	91	4000	3000
	80	268	27	675	69	369	38	1270	130		
	100	345	35	738	75	484	49	1400	143		
	120	382	39	802	82	586	60	1530	156		
	160	382	39	841	86	586	60	1530	156		
45	50	229	23	650	66	345	35	1235	126	3800	3000
	80	407	41	918	94	507	52	1651	168		
	100	459	47	982	100	650	66	2041	208		
	120	523	53	1070	109	806	82	2288	233		
	160	523	53	1147	117	819	84	2483	253		

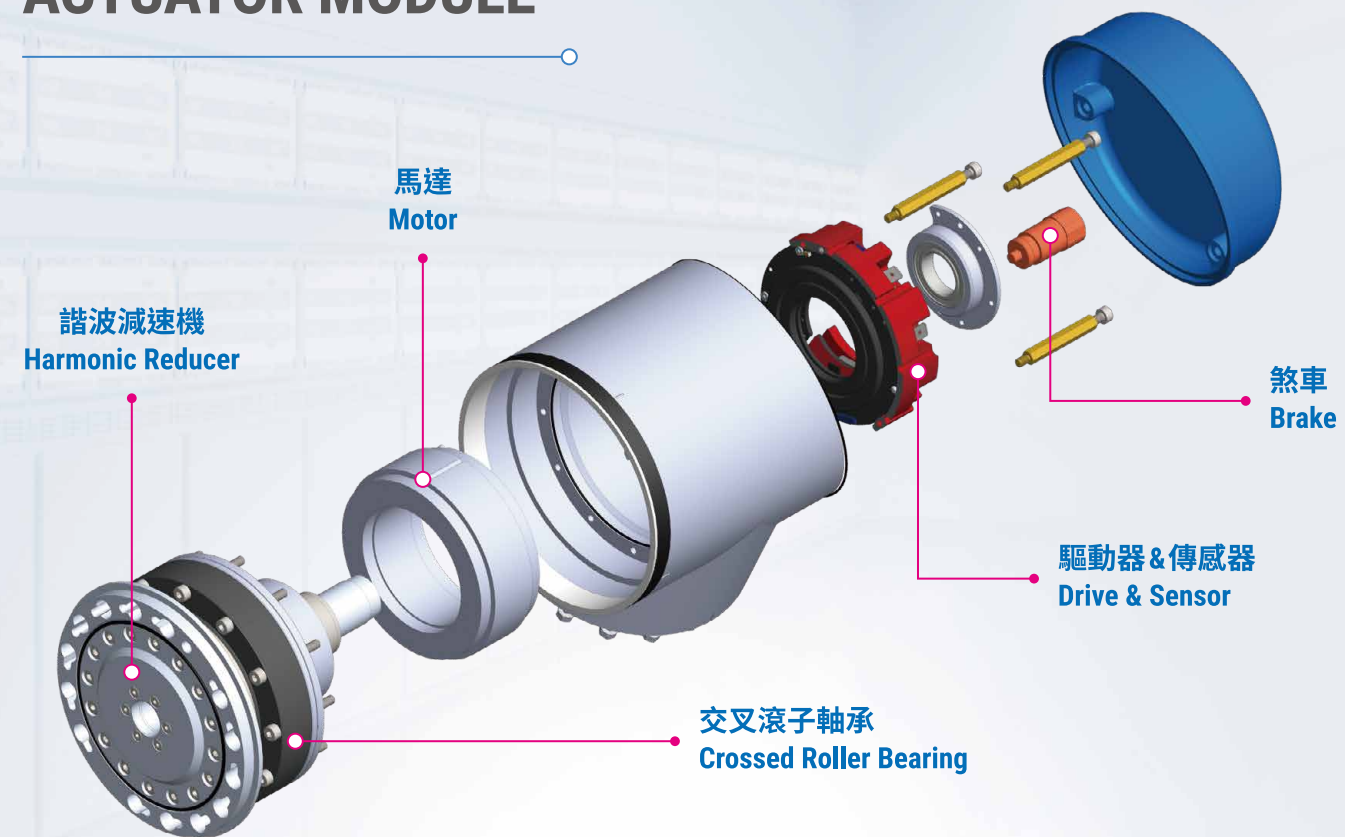
HGUJ 帽型輸入軸式
Hat Type with Input Shaft

HGUJ系列採用輸入軸結構，使用聯軸器與馬達做連接，能對應多種輸入型態，例如：皮帶輪、齒輪、聯軸器輸入等。構型為前後蓋設計並使用軸封和O-ring做密封，防漏效果較好。HGUJ series adopts the input shaft structure and uses a coupling to connect with the motor, which can correspond to a variety of input types, such as pulley, gear, coupling input, etc. The configuration is designed with front and rear covers, and shaft seals and O-rings are used as seals. This reducer configuration has good leak proof effect.

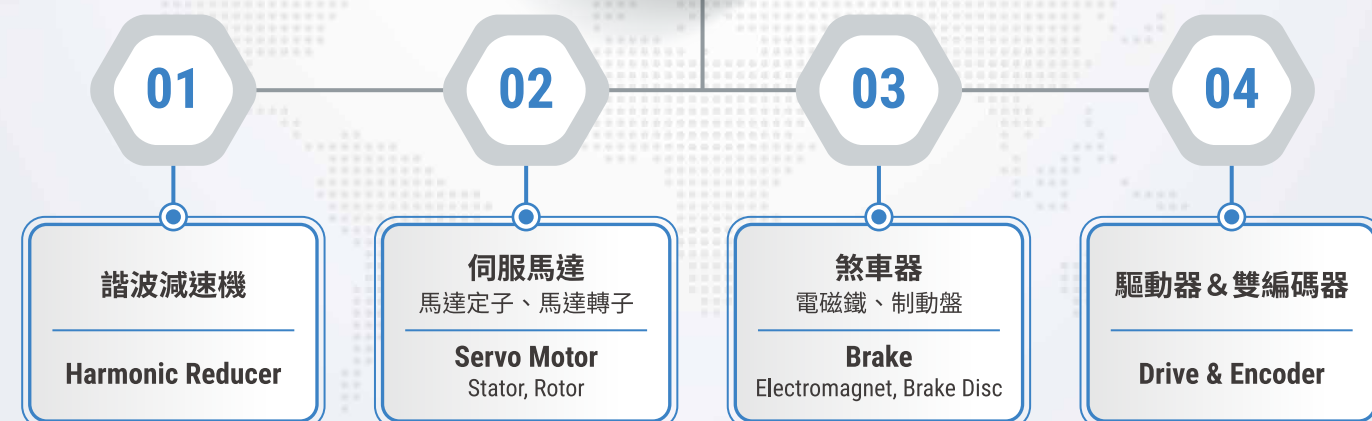


型號	減速比	輸入 2000 rpm 時的額定轉矩		起動、停止時的容許峰值轉矩		平均負載轉矩的容許最大值		瞬間容許最大轉矩		容許最高輸入轉速	容許平均輸入轉速
										潤滑脂	潤滑脂
Model	Reduction Ratio	Rated Torque at 2000 rpm		Limit for Repeated Peak Torque		Limit for Average Torque		Limit for Momentary Peak Torque		Allowable Maximum Input Rotation Speed	Allowable Average Input Rotation Speed
		N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	Grease	Grease
單位 Unit		N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	N·m	kgf·m	r/min	r/min
14	50	7.0	0.7	23	2.3	9	0.9	46	4.7	8500	3500
	80	10	1.0	30	3.1	14	1.4	61	6.2		
	100	10	1.0	36	3.7	14	1.4	70	7.2		
17	50	21	2.1	44	4.5	34	3.4	91	9	7300	3500
	80	29	2.9	56	5.7	35	3.6	113	12		
	100	31	3.2	70	7.2	51	5.2	143	15		
	120	31	3.2	70	7.2	51	5.2	112	11		
20	50	33	3.3	73	7.4	44	4.5	127	13	6500	3500
	80	44	4.5	96	9.8	61	6.2	165	17		
	100	52	5.3	107	10.9	64	6.5	191	20		
	120	52	5.3	113	11.5	64	6.5	191	20		
	160	52	5.3	120	12.2	64	6.5	191	20		
25	50	51	5.2	127	13	72	7.3	242	25	5600	3500
	80	82	8.4	178	18	113	12	332	34		
	100	87	8.9	204	21	140	14	369	38		
	120	87	8.9	217	22	140	14	395	40		
	160	87	8.9	229	23	140	14	408	42		
32	50	99	10	281	29	140	14	497	51	4800	3500
	80	153	16	395	40	217	22	738	75		
	100	178	18	433	44	281	29	841	86		
	120	178	18	459	47	281	29	892	91		
	160	178	18	484	49	281	29	892	91		
40	50	178	18	523	53	255	26	892	91	4000	3000
	80	268	27	675	69	369	38	1270	130		
	100	345	35	738	75	484	49	1400	143		
	120	382	39	802	82	586	60	1530	156		
	160	382	39	841	86	586	60	1530	156		
45	50	229	23	650	66	345	35	1235	126	3800	3000
	80	407	41	918	94	507	52	1651	168		
	100	459	47	982	100	650	66	2041	208		
	120	523	53	1070	109	806	82	2288	233		
	160	523	53	1147	117	819	84	2483	253		

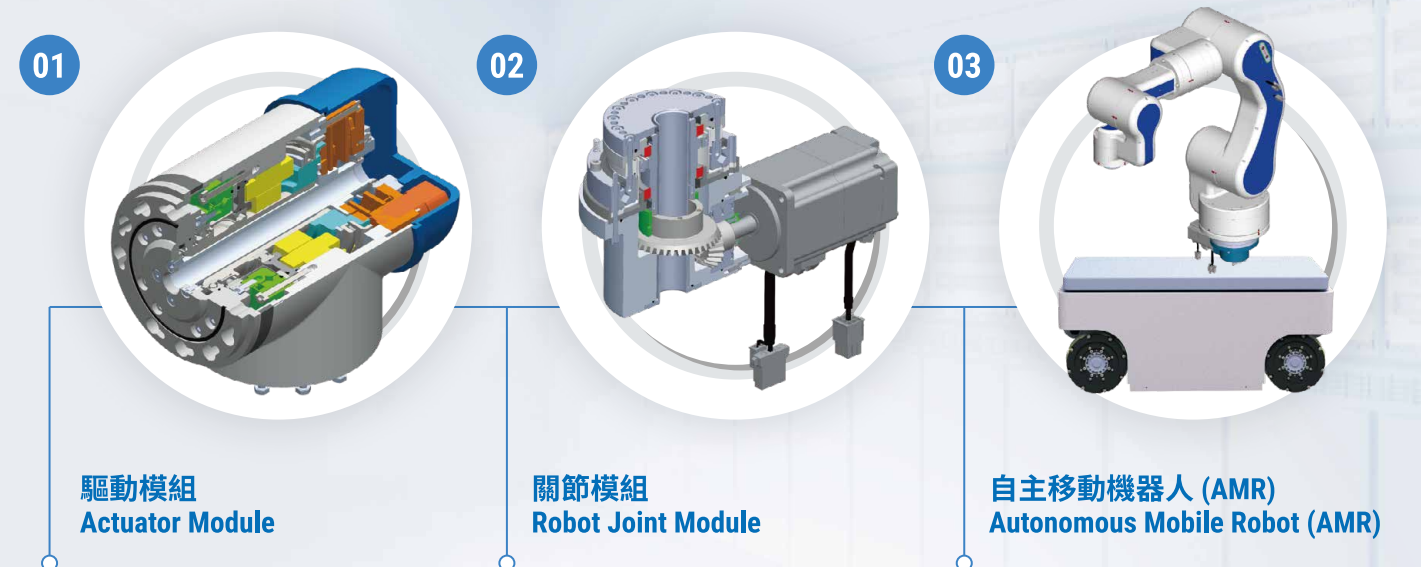
驅動模組 ACTUATOR MODULE



關節模組整合 Joint Module Integration



驅動模組應用在AMR Actuator Module Application in AMR



關節模組系列 Robot Joint Module Series

- JM-14
- JM-17
- JM-20
- JM-25
- JM-32

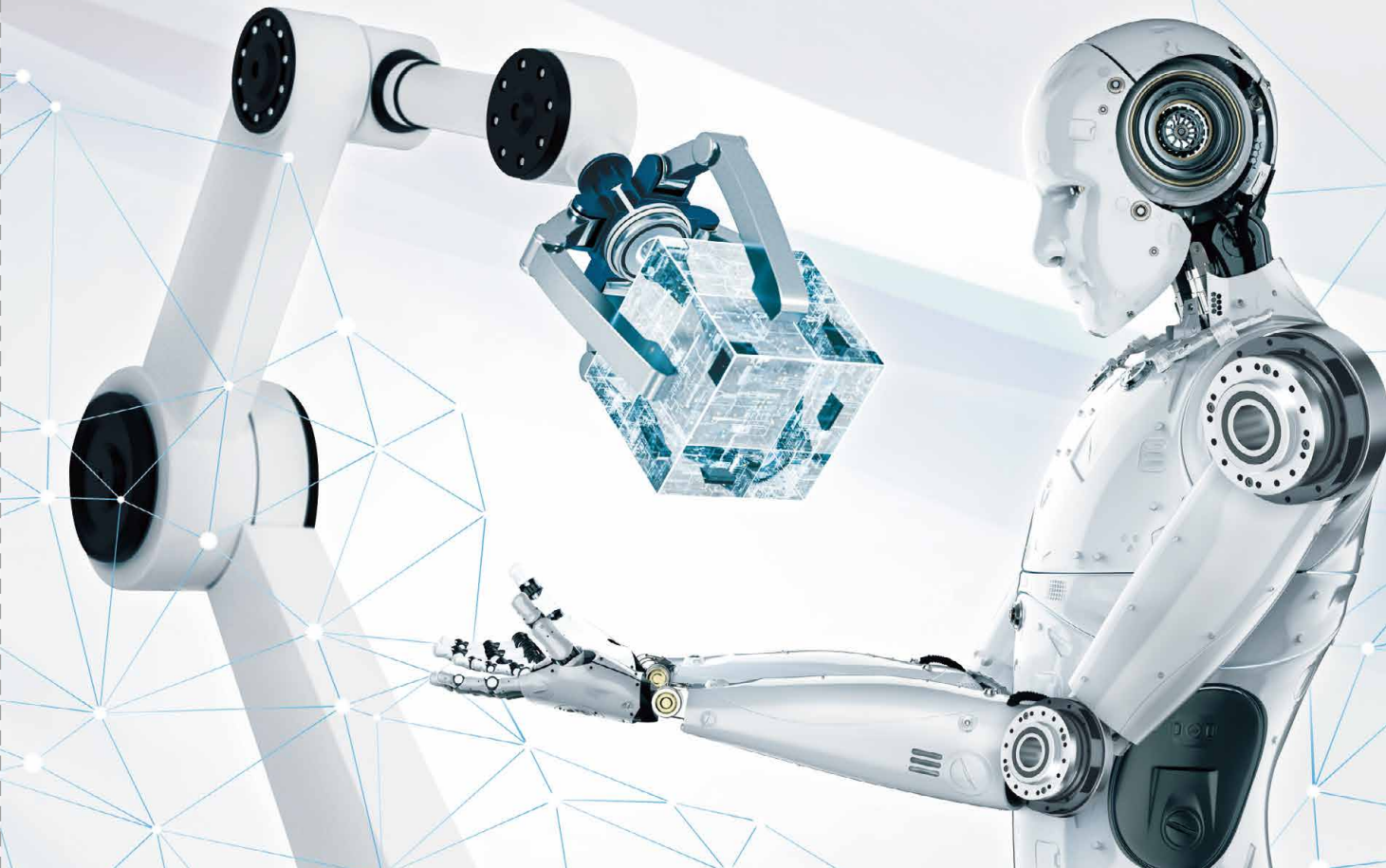


產品規格 PRODUCT SPECIFICATION

系列	型號	減速機		馬達			輸出			精度		基本尺寸與重量			
		尺寸規格	減速比	功率	額定轉速	額定扭矩	額定轉速	額定扭矩	瞬間最大扭矩	編碼器解析度	精確度	外徑	長度	高度	重量
		Harmonic Reducer	Motor	Output			Accuracy		Dimension & Weight						
Series	Model No.	Size	Ratio	Power	Nominal Speed	Nominal Torque	Nominal Speed	Nominal Torque	Max Torque	Encoder Resolution	Accuracy	External Diameter	Length	Height	Weight
單位 Unit		-	-	w	rpm	Nm	rpm	Nm	Nm	Bit	Arc-min	mm	mm	mm	kg
JM-14	JM-1450W150	#14	51	150	5000	0.29	98	8	20	19	1.5	78	126	92	1.5
	JM-1480W150	#14	81	150	5000	0.29	62	13	31	19	1.5	78	126	92	1.5
	JM-14100W150	#14	101	150	5000	0.29	50	16	39	19	1.5	78	126	92	1.5
JM-17	JM-1780W200	#17	81	200	3000	0.64	37	29	71	19	1.5	88	136	101	2.0
	JM-17100W200	#17	101	200	3000	0.64	30	35	88	19	1.5	88	136	101	2.0
	JM-17120W200	#17	121	200	3000	0.64	25	42	110	19	1.5	88	136	101	2.0
JM-20	JM-2080W300	#20	81	300	3000	0.95	37	44	108	19	1.5	98	143	112	3.0
	JM-20100W300	#20	101	300	3000	0.95	30	54	135	19	1.5	98	143	112	3.0
	JM-20120W300	#20	121	300	3000	0.95	25	65	162	19	1.5	98	143	112	3.0
JM-25	JM-2580W450	#25	81	450	3000	1.43	37	67	168	20	1.5	118	166	137	4.5
	JM-25100W450	#25	101	450	3000	1.43	30	87	210	20	1.5	118	166	137	4.5
	JM-25120W450	#25	121	450	3000	1.43	25	101	251	20	1.5	118	166	137	4.5
JM-32	JM-32100W1000	#32	101	1000	3000	3.18	30	196	490	20	1.5	150	180	170	8.0
	JM-32120W1000	#32	121	1000	3000	3.18	25	235	587	20	1.5	150	180	170	8.0
	JM-32160W1000	#32	161	1000	3000	3.18	19	313	782	20	1.5	150	180	170	8.0

適用於機器人和自動化領域
For Robot, AMR & Automation

- 高整合性。
 - 精密設計。
 - 高功率密度。
 - 安全保護。
 - 輕量。
- High integration.
 - Precise design.
 - High power density.
 - Reliable safety function.
 - Light weight.



輕量化模組 LIGHTWEIGHT MODULE

HGUH 標準型減速機 Standard Type Harmonic Reducer

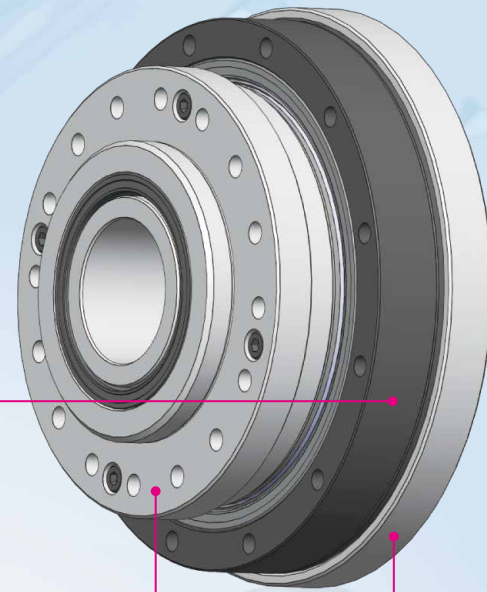
- 總重量2.1 kg。
- Total Weight 2.1 kg.

交叉滾子軸承為軸承鋼材質

Crossed Roller Bearing Material:
Bearing Steel.

前蓋、後蓋皆為鋼材

Front Cover, Rear Cover Material: Steel.



HGUH-LW 輕量化減速機 Lightweight Type Harmonic Reducer

- 總重量1.26 kg。
- Total Weight 1.26 kg.

透過鋁合金材質的應用，減速機重量減少40%。鋁合金良好的熱傳導特性，可減少減速機內部熱量累積，降低運轉溫升。

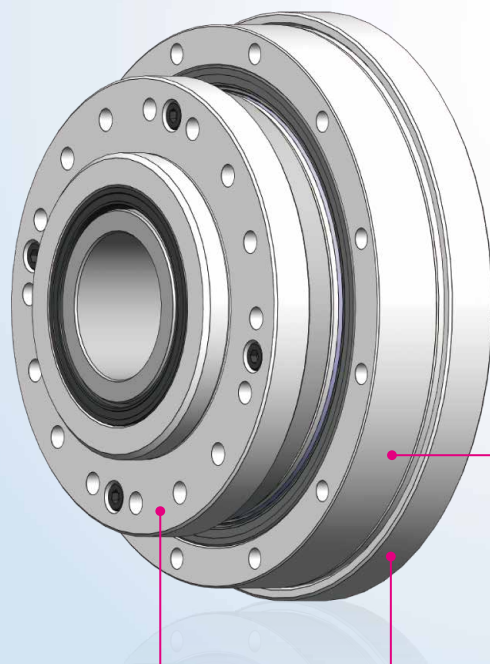
Applying aluminum alloy reduces the weight of the gearbox by 40%. The excellent thermal conductivity of aluminum alloy helps to lower the temperature rise during operation of the gearbox.

交叉滾子軸承採用鋼材及鋁合金複合材質設計

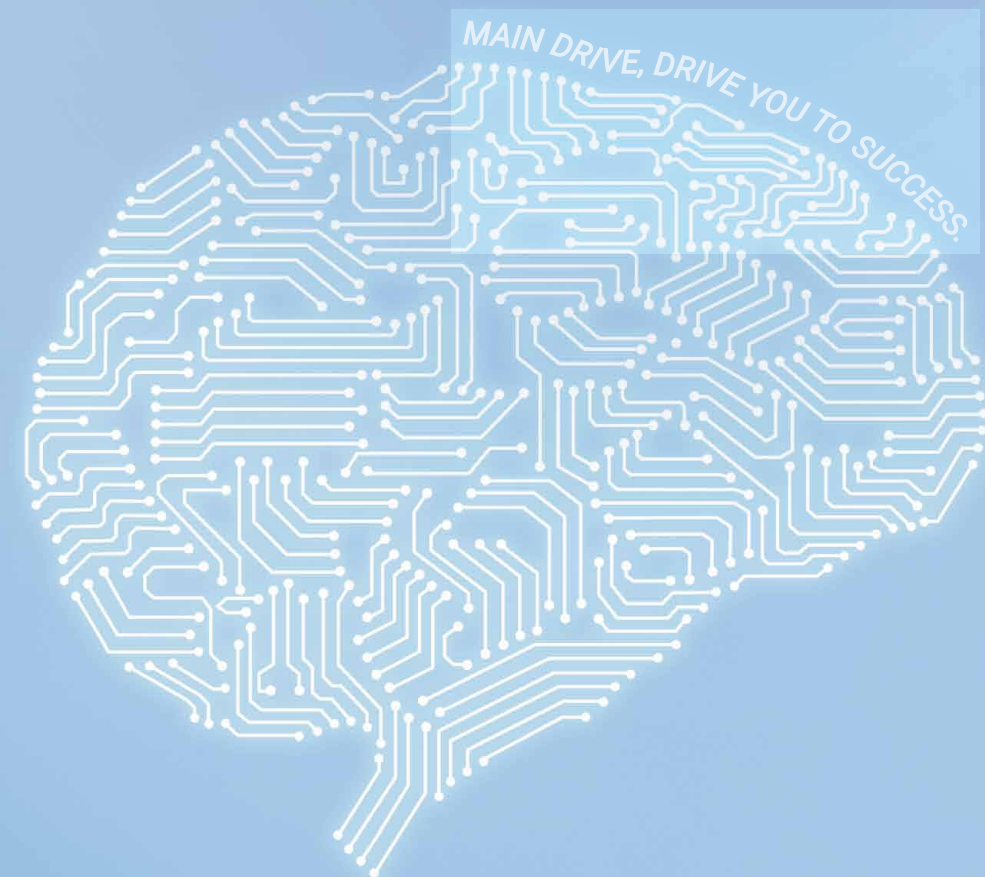
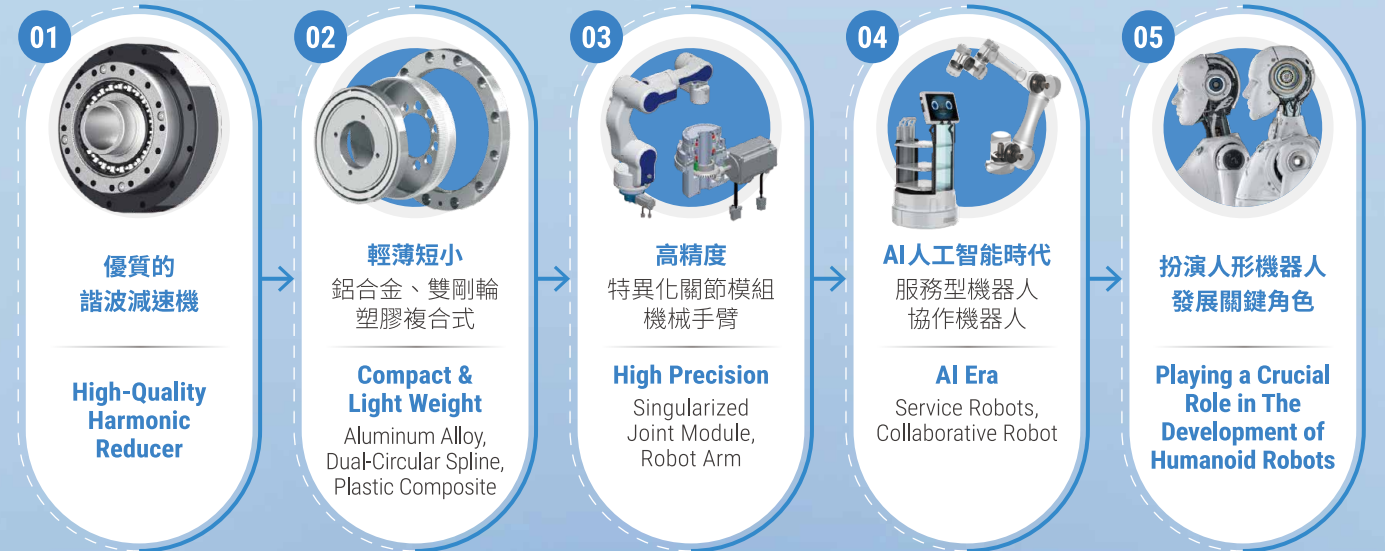
Crossed Roller Bearing Material:
Composite Material (Steel and Aluminum Alloy).

前蓋、後蓋皆為鋁合金

Front Cover, Rear Cover Material: Aluminum Alloy.



人形機器人發展的關鍵零組件 THE KEY COMPONENTS FOR THE DEVELOPMENT OF HUMANOID ROBOTS



MAIN DRIVE, DRIVE YOU TO SUCCESS.

MAIN DRIVE, DRIVE YOU TO SUCCESS.