

YOUR TRUSTWORTHY CHOICE

您可信赖的選擇

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STRIVE FOR PRECISION

► 為精密而努力！

Since its inception, TECHMECH has been dedicated to the overall solution of automation transmission products and services. The company has many years of production experience and has been serving the mid- to high-end market of the automation industry.

We not only have more than 20 years of experience in multinational company management, but also a team of engineers with rich experience in mechanical, electromechanical and process design.



PRECISION PLANET REDUCER

精密行星減速機

High Precision / High Rigidity / High Power

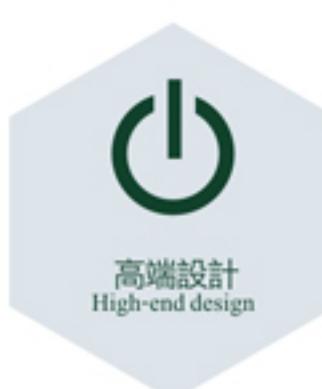
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先進技術
Advanced Technology



高端設計
High-end design



高效團隊
Efficient Team



進口核心材料
Imported core material

“ 我們為客戶定制高精度、高剛性、高扭矩的精密行星減速器
We customize high precision, high rigidity, high torque precision planetary reducers for our customers. ”



輸出功率高
High output power



輕小安全
Light and safe



安裝簡易
Easy to install



精密性
Precision





致客戶詞
TO CUSTOMER

鉄科瑪格品牌中心

TECHMECH
QUALITY CENTER

在這裏，您能享受的是
工廠的直銷價格和專業的解決方案。

鉄科瑪格自成立以來致力於自動化傳動產品及服務的整體解決方案，公司擁有多年的生產經驗，壹直服務於自動化配套各行業的中高端市場。

鉄科瑪格采用美外先進技術，專業制造精密行星減速機，擁有先進的滾齒機、高精度齒輪磨床、臥式加工中心、三坐標測量機、齒形齒向測試儀、以及電腦型萬能工具顯微鏡等近60多套的生產加工設備。

多年來我們以品質產品為主軸，精心服務為後盾，以及快捷及時的交貨，構建完整的支援網絡服務廣大客戶群，全面滿足客戶需求，以良好的信譽贏得了廣大客戶的點贊和認可。

Here, what you can enjoy is
Factory direct prices and professional solutions.

Since its inception, TECHMECH has been dedicated to the overall solution of automation transmission products and services. The company has many years of production experience and has been serving the mid- to high-end market of the automation industry.

We not only have more than 20 years of experience in multinational company management, but also a team of engineers with rich experience in mechanical, electromechanical and process design.

Over the years, we have taken quality products as the main mission, meticulous service as the guideline, and fast and timely delivery, built a complete support network serve our customers, fully meet customer needs, and won the praise and recognition of our customers with good reputation.

高強度、高精度。
良好的合作夥伴關係。

我們始終致力於能夠以有限的零件系列組合出近乎無窮多的減速機類型，
並希望這壹過程能夠足夠簡便。

可通過我們對應用需求的理解、發揮減速機模塊的智能性並借助個性化研
發在短期內制定專業的可信賴的解決方案來實現。

我們的減速機不斷完善。
堅實可靠！始終如壹！信守承諾！

High strength and high precision.
Good partnership.

We are always committed to combining nearly unlimited types of gearboxes with a limited range of parts and hope that this process will be simple enough.

This can be achieved through our understanding of the application requirements, the intelligence of the reducer module and the development of a professional solution in a short period of time with individual research and development.

Our reducers are constantly improving.

Solid and reliable! Always the same! Keep your promise!



卓越與專業相結合使我們成為傳動裝置領域的先鋒和技術領導者,快速交付滿足不同地區的需求並保證供貨時間和貨物調度的靈活性。

The combination of excellence and professionalism has made us a pioneer and technology leader in the field of transmissions, delivering fast delivery to meet the needs of different regions and ensuring flexibility in delivery time and cargo dispatch.

選擇我們，精密減速機中的優先選擇！
CHOOSE US, THE PREFERRED CHOICE OF REDUCERS!



可信賴的選擇

目前我們的產品已經應用於工業領域的各個行業，適用於機床、機械手、印刷設備、紡織機械、包裝機械、非標自動化、醫療設備，檢查設備、激光切割、焊接、汽車制造、衛星通訊、金屬加工、制藥行業等工業領域。

Trustworthy Choice

At present, our products have been applied to various areas in the industrial field, suitable for machine tools, robots, printing equipment, textile machinery, packaging machinery, non-standard automation, medical equipment, inspection equipment, laser cutting, welding, automobile manufacturing, satellite communication, metal. Industrial fields such as processing and pharmaceutical industries.

我們的承諾 OUR COMMITMENT



品牌優勢

長期專註開發及生產高精密的行星減速機，憑借出色的產品、服務品質及深厚的品牌底蘊，贏得了業界和市場的廣泛認同，擁有眾多榮譽。

Branded advantages

Long-term focus on the development and production of high-precision planetary reducers, with outstanding products, service quality and deep brand heritage, has won widespread recognition in the industry and the market, with many honors.



行業優勢

依托企業內外優勢資源，聚焦國內外行業先進技術和創新理念，保持對市場卓越的前著性。培育和孵化新的產品、業務模式，為客戶創造持續的投資回報。

Industry advantage

Relying on the superior and internal resources of the company, focusing on the advanced technology and innovative ideas of domestic and foreign industries, and maintaining the pre-existence of market excellence. Cultivate and incubate new products and business models to create sustainable and excellent return on investment for customers.



資源優勢

鈦科瑪格是國內較早傳動技術領域的企業之壹，擁有臺企背景和資本市場良好的融資渠道，可以為項目建設、運營提供有力的支持。

Resource advantage

TECHMECH is one of the earliest companies in the field of transmission technology in China. It has a good financing channel for the background of Taiwan enterprises and the capital market, and can provide strong support for project construction and operation.



我們的能力 Our ability



憑借擁有高科技和創new技術，持續研發以及精密的制造技術，高效良好的客戶服務，使得鈦科瑪能確保穩定的品質。

With high-tech and innovative technology, continuous research and development, and sophisticated manufacturing technology, high-quality and efficient customer service enables TECHMECH to ensure stable quality.

服務眾多
客戶遍布全球

從最初的摸索嘗試，到如今“開發”“生產”“銷售”“服務”全方位業務網絡覆蓋全球大部分地區。為滿足客戶所邁出的每壹步，無不體現著精密機械的不斷發展。我們努力運用特有的智慧方案，為更多的城市帶去服務。

Numerous services
Customers all over the world

From the initial exploration, to the "development", "production", "sales" and "support" all-round business network covering most of the world. In order to meet every step taken by customers, it reflects the continuous development of precision machinery. We strive to use our unique smart solutions to bring services to more cities.



自開展業務以來，我們壹直致力於將細心、周到、壹切為顧客著想的基本銷售理念與中國的本土需求相結合，根據客戶的分布和市場需求，為客戶提供壹系列環保、安全、舒適、便利的產品。

Since the launch of our business, we have been committed to combining the basic sales philosophy of being careful, thoughtful and customer-oriented with the local needs of China. We provide customers with a series of environmental protection, safety, comfort and convenience according to the distribution of customers and market demand. The product.

歐洲

白俄羅斯、烏克蘭、摩爾多瓦

亞洲

印度、巴基斯坦、塔吉克斯坦

非洲

加納、肯尼亞



精密的產品 源於先進的加工設備

SOPHISTICATED PRODUCT COME FROM ADVANCED PROCESSING EQUIPMENT



性能卓越

鈦科瑪格傳動裝置

鈦科瑪格斥巨資引進壹批先進的加工設備，產品制程全部自主完成，保障精實制造。

減速機核心零部件均采用精品化生產，“實現專業人做專業事，專業企業做專業零件”，外齒采用硬刮削，內齒采用多次拉削，所有零件經品質管理體系全檢，分類組裝。

Excellent Performance Techmech Drive

TECHMECH has invested heavily in the introduction of a number of advanced processing equipment, and the product process has been completed independently, ensuring lean manufacturing.

The core components of the reducer are all produced in a high-quality manner, which enables professional people to do professional things, professional enterprises to do professional parts, the external teeth are hard scraped, the internal teeth are used for multiple pulling, and all parts are fully inspected by quality management system..

鈦科瑪格在行星減速機研發和生產方面不斷探索新的領域，憑借客戶至上的理念、穩定的高品質和強大的全球創新能力為許多行業和應用場合開發定制系統解決方案。

TECHMECH continues to explore new areas in the development and production of planetary reducers, developing custom system solutions for many industries and applications with a customer-first philosophy, consistently high quality and strong global innovation.



資源優勢

卓越與專業相結合——使我們成為傳動裝置領域的先鋒和技術領導者

快速交付——滿足不同地區的需求並保證供貨時間和貨物調度的靈活性

創新啟發——高科技和創新技術，持續研發以及精密的制造技術

可靠性、精度和質量——提升零件精度，確保穩定的品質

永遠可靠的合作伙伴——我們與客戶共同開發合適的解決方案

暢銷國際——鈦科瑪格無所不在

Resource advantage

Excellence and professionalism----making us a pioneer and technology leader in the field of transmissions

Fast delivery----to meet the needs of different regions and guarantee the flexibility of delivery time and cargo dispatching

Inspiration for innovation----high-tech and innovative technology, continuous research and development and sophisticated manufacturing technology

Reliability, precision and quality----improve part accuracy and ensure stable quality

Always reliable partner----We work with our customers to develop the right solution

Bestselling international----TECHMECH is omnipresent

全員參與

事無巨細

精益求精

持續改進

高效保障

高度靈活

行業應用

APPLICATION

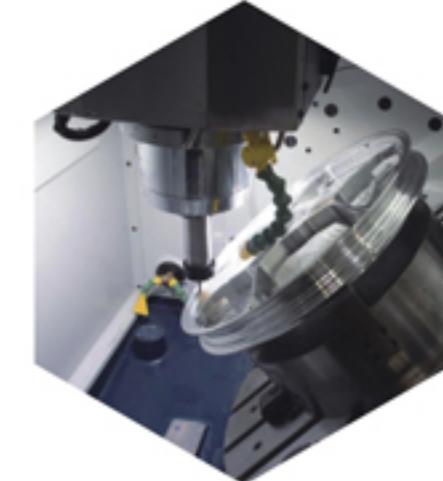
我們通過完整的銷售和服務網絡，在全球各地提供快速出貨和強大的支持。憑借多年的豐富經驗，我們的技術專家為各行業提供市場可靠的諮詢服務。

The combination of excellence and professionalism has made us a pioneer and technology leader in the field of transmissions, delivering fast delivery to meet the needs of different regions and guarantee delivery time and cargo scheduling flexibility.



包裝印刷行業

設計了壹系列運用於包裝技術中的各個軸上的齒輪箱，適用於較大工作效率、復雜工況和高速連續運轉。



機床設備

機械傳動系統，例如齒輪箱帶小齒輪齒條，鈦科瑪格可現場諮詢和豐富的工程專業知識可保證高強度、高品質的最終產品。



食品行業

經過認證的衛生設計，全面的應用知識，包含防水型，適用於較大工作效率和連續高速運轉。



藥劑行業

減速機靈活耐用，是高品質的技術流程及其他連續工作制應用的專業解決方案。



自動化/機器人

經濟型減速機解決方案，在驅動領域積累了豐富的經驗，多樣的伺服齒輪箱和機械傳動系統可應用於各種機器人及其輔助軸上。



農產品行業

減速機運行可靠且使用壽命極長，適用於惡劣環境。高精度、運行穩定和高效率都源於穩定、零背隙和高剛度的機械系統解決方案。

Packing & Tooling

A range of gearboxes for each of the shafts used in packaging technology are designed for maximum efficiency, complex conditions and high speed continuous operation.

Machine Tooling

Mechanical transmission systems, such as gearboxes with pinion racks, On-site consultation and extensive engineering expertise ensure a quality and efficient end product.

Food Industry

Certified hygienic design, comprehensive application knowledge, including waterproof, for maximum productivity and high speed continuous operation.

Pharmaceutical industry

The flexible and durable reducer is the perfect solution for high-quality technical processes and other continuous work applications.

Automation / robot

The economical reducer solution has accumulated rich experience in the field of drive. Various servo gearboxes and mechanical drive systems can be applied to various robots and their auxiliary shafts.

Agricultural product industry

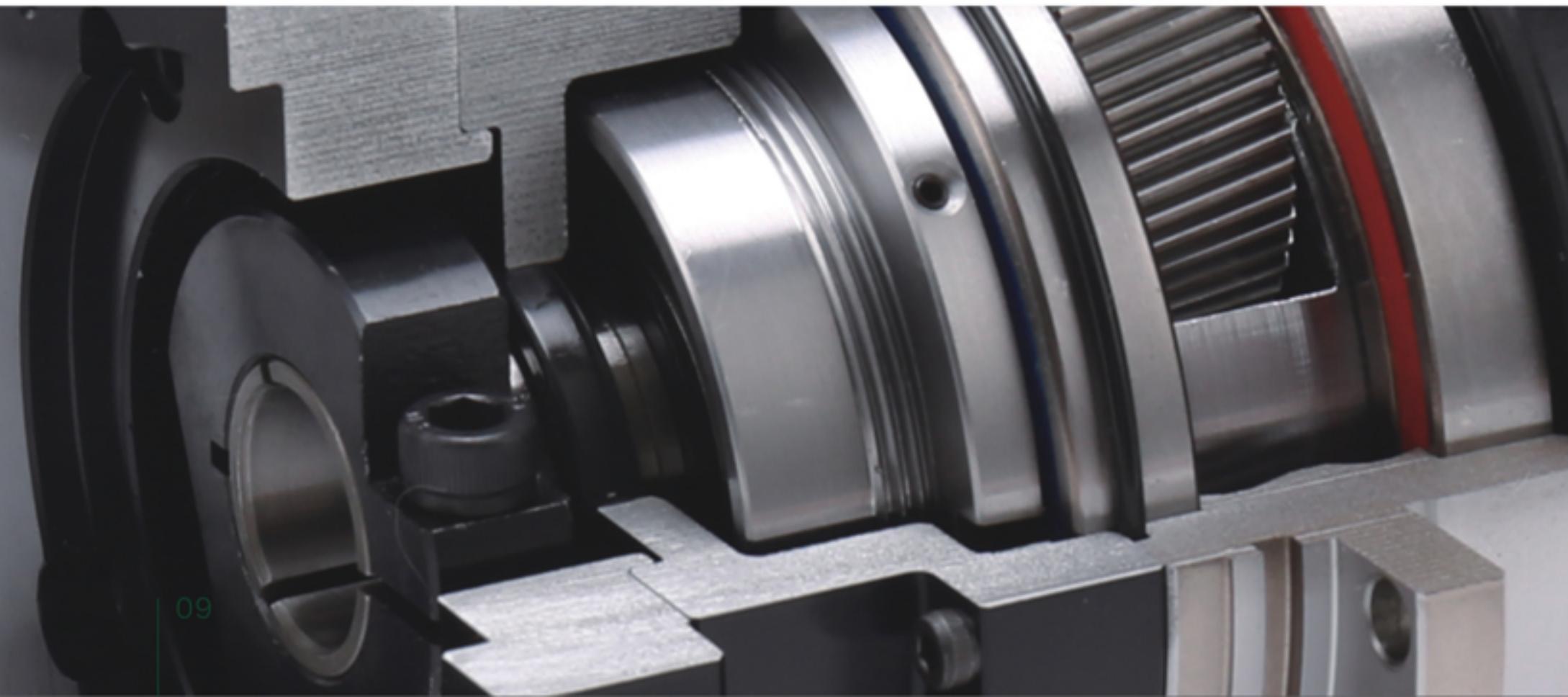
The gearbox operates reliably and has a very long service life for harsh environments. High precision, stable operation and high efficiency are all derived from stable, zero backlash and high stiffness mechanical system solutions.

我們的優勢 Our Advantage



我們壹直以堅持為客戶提供高效的產品作為企業的核心理念，我們始終堅信品質是企業生存的根本。

We have always insisted on providing our customers with the best quality products. The core concept of the company, we always believe that quality is the foundation of the company's survival.





精密
Precision



The core components of the reducer are produced by professional companies in Japan and Taiwan. The external teeth are hard shaped, the internal teeth are broached several times, and all parts are fully inspected and assembled by the new system.



高效
Efficient



The input end is connected to the motor by a double-opening, double-screw collet type locking mechanism to ensure dynamic balance at high input speed, concentricity of the joint surface and power transmission of zero backlash;



創新
Innovation



The large motor can be equipped with a small reducer. When the deceleration is relatively small and the torque requirement is sufficient, a small type reducer can be used, which is economical and economical. The external gear and the internal ring gear are produced by professional companies in Taiwan and Japan. Classified assembly



簡潔
Concise



Appearance modeling adopts curved and straight combination to meet the aesthetic requirements; the outer surface treatment adopts a specific process, and the salt spray test is used to achieve absolute anti-corrosion and anti-rust.



穩定
Stable



In order to better achieve the coaxiality requirement and meet the low noise requirement; the adjustment ring is added inside the reducer, the internal axial clearance can be adjusted to minimize the turbulence; the output end of the reducer is supported by a tapered roller bearing to meet the larger force demand and absolute stability after loading.



國際
International



The full range of output and installation dimensions of the products are based on European standards; all reducer models are equipped with a skeleton oil seal to prevent oil leakage when the reducer runs at high speed; standard parts such as bearings and oil seals use international and domestic famous brand products;

行業基準 Industry benchmark



以品質的理念為客戶提供各類非標減速機及傳動機構定制方案。

創新的成熟技術和可信赖的減速機解決方案。

Provide customers with quality concept Various types of non-standard reducer and transmission mechanism customized solution
Innovative proven technology and reliable reducer solutions.

我們的產品 傳承著精密結構的基因

精度高，剛性高，高效能，低噪音，低背隙，低溫升，耐久使用幾萬小時不停歇等優點。產品多樣，規格齊全。

Our Products
Genes With Precise Structure

High precision, high rigidity, high efficiency, low noise, low backlash, low temperature rise, endurance use for thousands of hours without stopping. The products are diversified and the specifications are complete.



客戶服務 CUSTOMER SERVICE



在客戶支持方面，您可以信賴我們。
您的要求就是我們的動力

目前，我們還在通過鈦科瑪格服務理念在客戶支持領域樹立新的標準。從最初您的構想到整個應用的生命周期，我們隨時為您提供服務。

憑借我們豐富的經驗、多種設計工具及個性化的工程設計服務，通過我們的全球資訊網絡可為您提供支持，幫助您應對復雜的挑戰。



In terms of customer support, you can rely on us.
Your request is our motivation

At present, we are still setting new standards in the field of customer support through the TECHMECH service concept. From the initial idea to the life cycle of the entire application, we are always at your service.

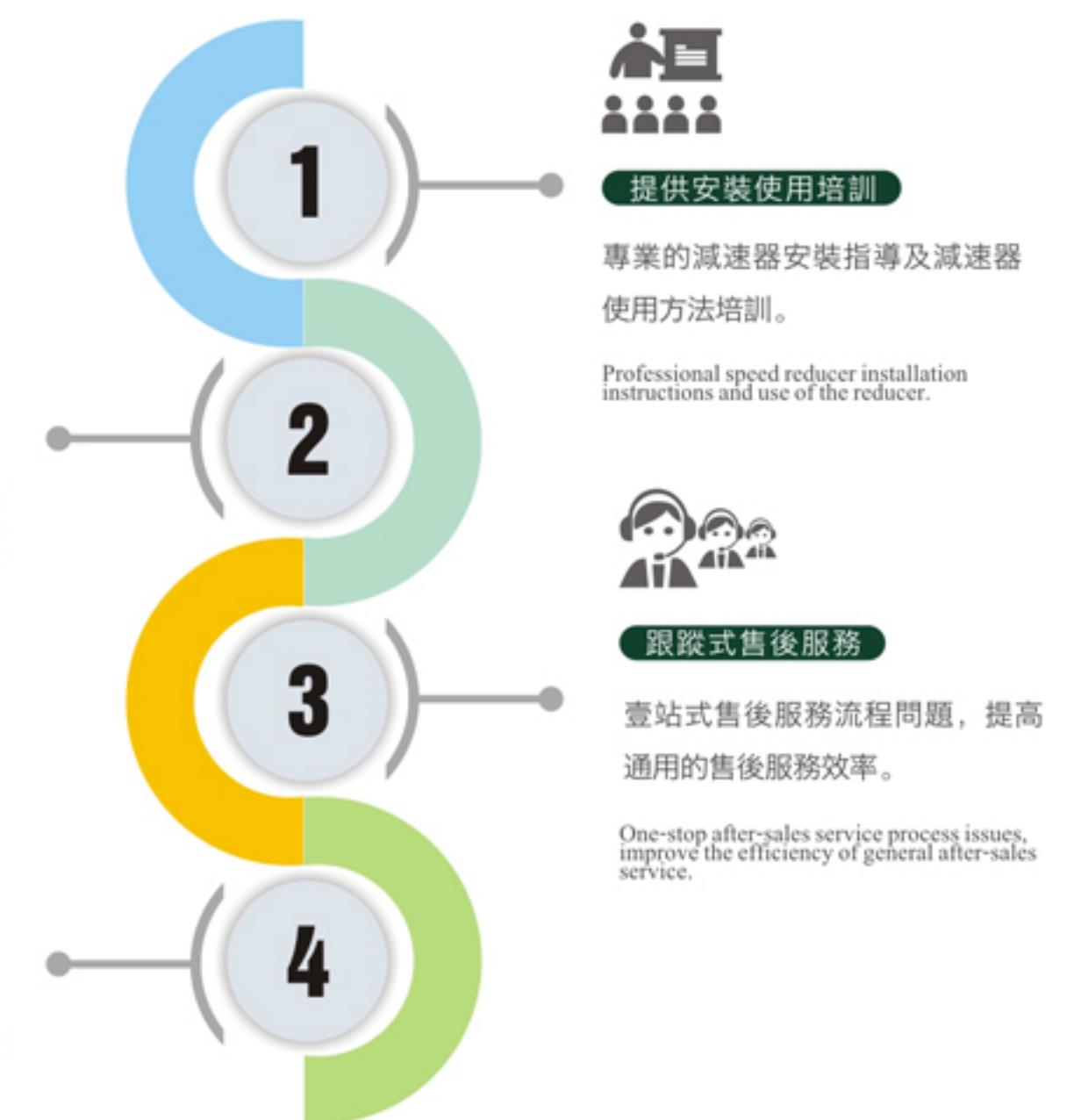
With our extensive experience, multiple design tools and personalized engineering services, we can support you through our global information network to help you meet complex challenges.



技術服務 TECHNICAL SUPPORT

複雜的多軸分析，提高性能和生產效率，可使您從我們在機械製造領域多年的工程經驗中獲得收益，突破技術和工藝難點對標國際性能標準，專業服務團隊，超越客戶期望。

Complex multi-axis analysis, improved performance and productivity, allows you to benefit from our many years of engineering experience in the mechanical manufacturing industry, breaking through the technical and technical difficulties to benchmark international leading performance standards, and professional service teams to exceed customer expectations.





團隊優勢 Team Advantage

我們的團隊富有激情，講究效率，職責明確，銜接有序
在性價比、可追溯性、壹致性和卓越性方面為客戶創造附加值
OUR TEAM IS PASSIONATE, EFFICIENT, WITH CLEAR RESPONSIBILITIES
AND ORDERLY CONNECTIONS. CREATE ADDED VALUE FOR CUSTOMERS IN TERMS OF
PRICE/PERFORMANCE, TRACEABILITY, CONSISTENCY AND EXCELLENCE

多年來，鈦科瑪格匯聚了壹支在減速機技術行業服務多年，薈萃了生產研發、質量保障、
售後服務、管理和運營各方面的專業人士，堅持做“企業動力，行業專家” 持續為社會
創造價值。

Over the years, TECHMECH has gathered a group of professionals who have been serving in the speed reducer technology industry for many years, and have gathered all aspects of production R&D, quality assurance, after-sales service, management and operation, and insisted on “enterprise power, industry experts”. Society creates value.



管理團隊 MANAGEMENT TEAM

鈦科瑪格企業戰略的制定者和領導者，秉持“公平公正，嚴格有序”的理念，堅持以全球視野帶領企業發展，充滿進取心和激情。

The founders and leaders of TECHMECH's corporate strategy adhere to the concept of "fairness, justice, strict order" and insist on leading the development of the company with a global vision, full of enterprising spirit and passion.

質量團隊 QUALITY TEAM

以科技創新驅動企業和產業的進步。他們精益求精，求真務實，是
鈦科瑪格前進的原動力。

Drive technological and innovation to drive the progress of enterprises and industries. Their
excellence, truth-seeking and pragmatism are the driving force behind TECHMECH.

服務團隊 SERVICE TEAM

鈦科瑪格質量體系的建立者和執行者，以專註的精神，始終如壹的
責任感，確保每壹件產品的安全和質量。

The founder and executor of the TECHMECH Quality System, with a focused spirit and
consistent responsibility, ensures the safety and quality of every product.

技術團隊 TECHNICAL TEAM

鈦科瑪格的工程師及技術服務專員，註重細節，強調無微不至的服
務精神。組建了售前至售後全面壹體化的服務體系。

TECHMECH's engineers and technical service specialists pay attention to detail and emphasize
the service spirit of "in every possible way". A comprehensive service system from pre-sales to
after-sales has been established.



研發創新

RESEARCH & DEVELOPMENT

本公司將長期的專業經驗以及不斷的研發成果運用到客戶解決辦法中。

The company applies long-term professional experience and continuous research and development results to customer solutions.



創新並且獨特
定制減速機

研發感觸

傳承著精密結構的基因，減速機中的優先選擇，鈦科瑪格采用現代化的生產技術和質量管理方法，在性價比、可靠性、可追溯性、壹致性和卓越性方面為客戶創造附加值。



Innovative and unique
Customized reducer

Research and development

Genes with precise structure. Priority in the reducer, TECHMECH uses modern production techniques and quality management methods to create added value for customers in terms of price/performance, reliability, traceability, consistency and excellence.



堅固的結構設計及高性能、特殊的結構需求。食品級的認證和獨特的設計，可滿足客戶在機械領域中的各種復雜要求。

Rugged structural design and high performance, special structural requirements. Food-grade certification and unique design. The company can meet the complex requirements of customers in the mechanical field.



借助現代工藝及設計工具可實現設備制造(例如打印機、操作系統、壓鑄機或塗裝機械手設備)、醫學技術及模型制造等領域中的各項應用，開創嶄新的未來。

With modern processes and design tools, applications in equipment manufacturing (such as printers, operating systems, die casting machines or coating robots), medical technology and model manufacturing can be used to create a new future.



高素質的技術工程師設計減速機系統並解決減速機各種問題。服務、成本和質量恰到好處。

High-quality technical engineers design the reducer system and solve various problems of the reducer. Service, cost and quality are just right.

超強動力，高精度以及良好的合作夥伴關係是本公司多年來始終貫徹執行的經營理念。我們提供多種高精度、高性能的標準系列行星減速機，它們已都經得到了廣泛的應用。作為您技術上的合作夥伴，我們也會提供定制的解決方案；專業的客戶定制減速機。



我們始終致力於
為每一個新項目設計出實際可行的解決方案。
WE ARE ALWAYS COMMITTED TO DESIGNING PRACTICAL
SOLUTIONS FOR EVERY NEW PROJECT.

無論最終面臨何種應用情況。我們都能夠在許多領域如魚得水，在需要的時間地點帶去我們的專業知識和技能訣竅。其中包括：機械和基礎建設的很多領域、自動化機器人這類專業細分市場、食品和包裝行業、藥品技術和醫藥等敏感領域以及工具或印刷機制造行業。

No matter what application you end up with, we are able to bring our expertise and skills to the needs of the time and place in many areas. These include: many areas of machinery and infrastructure, specialized market segments such as automated robotics, sensitive areas such as food and packaging, pharmaceutical technology and medicine, and tools or press manufacturing.

Super power, high precision and good partnership are the business philosophy that the company has been implementing for many years. We offer a wide range of high precision, high performance standard series planetary reducers, which have been widely used. As a technical partner, we also offer customized solutions; professional custom-made reducers.

直至今日，
我們的產品項目實現了
戰略擴展和延伸

Until today,
Our product project has been implemented
Strategic expansion and extension

解決優勢

鈦科瑪格壹直是行星減速機領域中可靠、強大且創新不斷的研發團隊和制造商。我們的產品負責傳輸力，無論要求有多復雜。因此，我們逐漸成為了名副其實的驅動技術專家。我們的行業實力達到了客戶在需要尋求創新解決方案時總會前來向我們諮詢的程度。

Advantage in Problem Solving

TECHMECH is a reliable, powerful and innovative R&D team and manufacturer in the field of planetary reducers. Our products are responsible for the transmission force, no matter how complicated the requirements are. Therefore, we have gradually become a veritable driving technology expert. Our industry strength has reached the point where customers will always come to us when they need to find innovative solutions.

簡單快捷
Simple and fast



如果您對我們的產品和服務有任何的問題，
請及時與我們聯繫，我們將竭誠為您服務。

If you have any questions about our products and services, please contact us in time, we will be happy to help you.

我們的能力

如今我們已經幾乎能夠為所有應用情況提供解決方案。作為一家所有者領導型企業，保持可靠的形象和站在客戶的角度行事對我們而言至關重要。

Our ability

Today we are able to provide solutions for almost all applications. As an owner-led company, it's important for us to maintain a reliable image and act from the customer's perspective.



先進技術 讓傳動更精密

ADVANCED TECHNOLOGY TO MAKE THE DRIVE MORE PRECISE

高扭矩，運行安靜，單端低於3弧分，可選擇1弧分規格。雙段減速在7弧分以內。

High torque, quiet operation, single-end less than 3 arc minutes, optional 1 arc sub-size. The double-stage deceleration is within 7 arc minutes.

鈦科瑪格

全面實施標準化生產工藝流程

實現更安全、更穩定、更高效的生產效能創造價值。

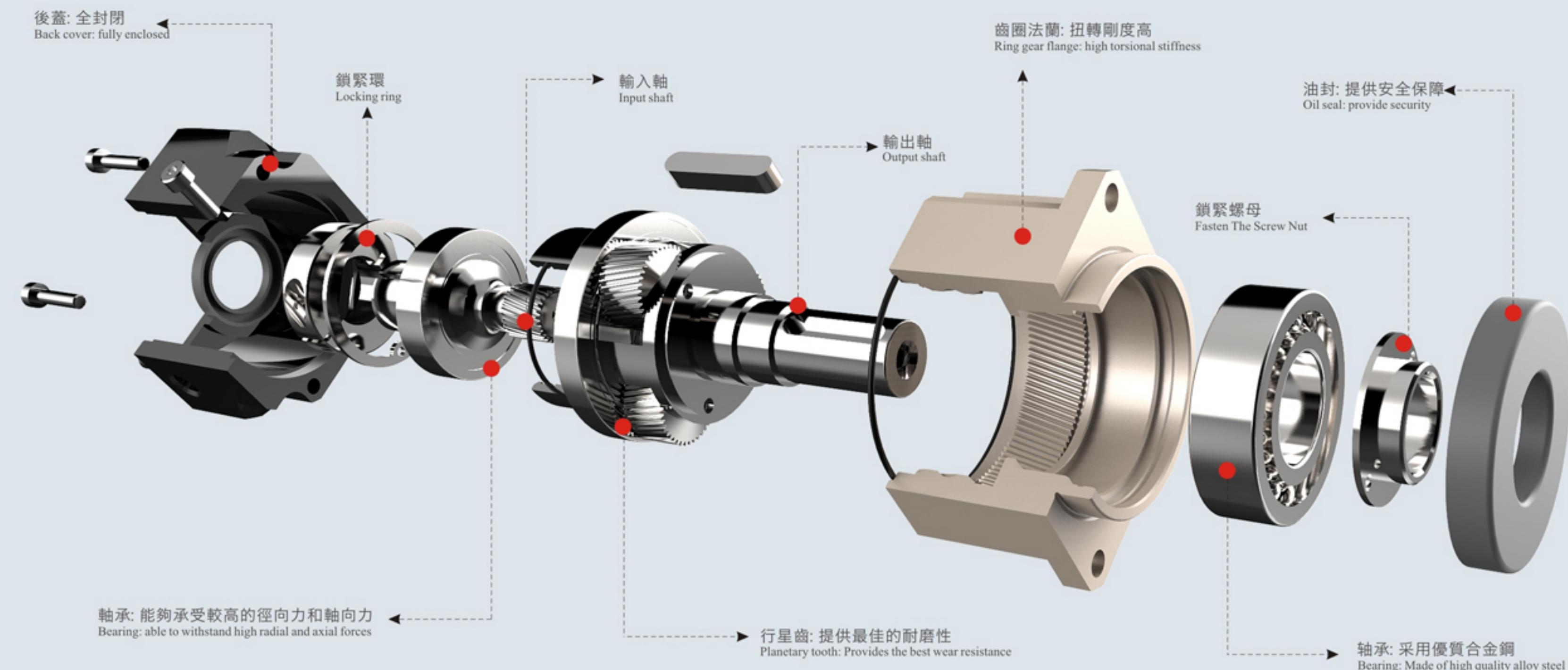
TECHMECH

Full implementation of standardized production processes

Create value by achieving safer, more stable, and more efficient production performance.

鈦科瑪格高精度行星減速機以其體積小、力矩大、傳動效率高、減速範圍寬、精度高，而被廣泛應用於伺服、步進等傳動系統中。在保證精密傳動的前提下，主要被用來降低轉速、增大扭矩和降低負載電機的傳動慣量比。

TECHMECH high-precision planetary reducer is widely used in servo, stepping and other transmission systems because of its small size, large torque, high transmission efficiency, wide deceleration range and high precision. Under the premise of ensuring precision transmission, it is mainly used to reduce the speed, increase the torque and reduce the transmission inertia ratio of the load motor.

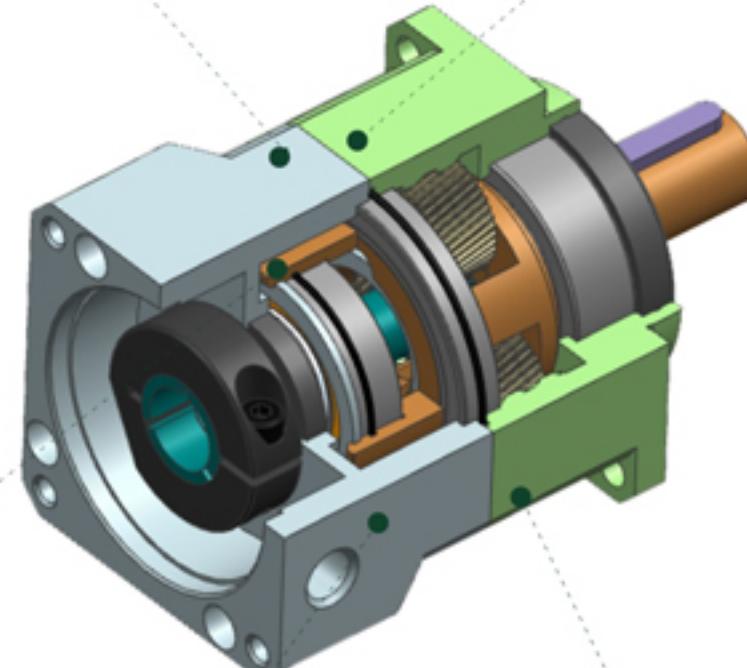


產品特性 PRODUCT FEATURES

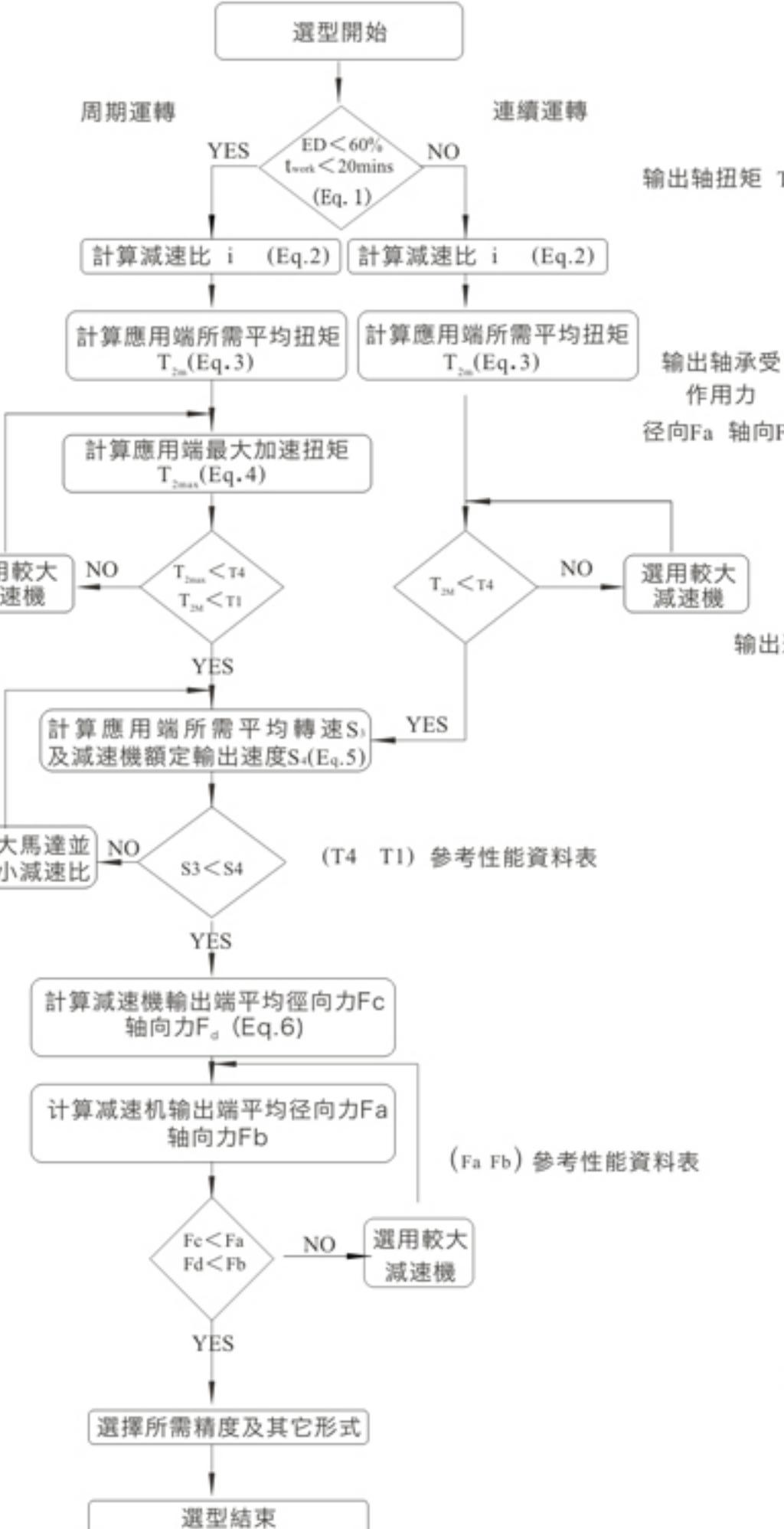
精密行星齒輪減速機是我司自主研發的新一代實用性產品：
 低噪音：低於65db。
 低背隙：單級可達3弧分內，雙級可達5弧分內。
 高扭矩：比一般標準行星減速機扭矩高。
 高穩定性：採用高強度合金鋼材，整顆齒輪經硬化處理，非只有表面硬度。
 高減速比：採用模組化設計，行星齒箱可相互連結。

性能特點 Product Characteristics

- 1. 齒輪：材料採用優質合金鋼，經碳-氮共滲處理，從而獲得最佳的耐磨性和耐衝擊韌性。
 1. Gear: The material is made of high quality alloy steel and carbon-nitrogen co-infiltrated to obtain the best wear resistance and impact toughness.
- 2. 輸出行星架採用壹體式（雙支撐）的結構設計。前後軸承大跨距分布於箱體內，形成穩定的壹體式結構，以確保較高的扭轉剛性和精度。
 2. The output planet carrier adopts an integrated (double support) structure design. The front and rear bearings are distributed in the box body to form a stable integrated structure to ensure high torsional rigidity and precision.
- 3. 齒圈與輸出亮體採用壹體化設計，採用優質鋼材，經熱鍛成形，從而獲得較高的材料密度。壹體化設計能保證所有幾何尺寸壹次性加工完成，與其它內嵌式、夾裝式等結構相比具有更高的精度和強度。
 3. The gear ring and the output bright body adopt an integrated design, which is made of high-quality steel and hot forged to obtain a higher material density. The all-in-one design ensures that all geometries are processed in one shot, with higher precision and strength than other in-line, clip-on and other structures.
- 4. 利用ANSYS技術對齒輪強度進行有限元分析，同時對齒面作齒形及導程修整，以減低齒輪嚙合的衝擊和噪音，增加齒輪系的使用壽命。
 4. Using ANSYS technology to carry out finite element analysis of gear strength, and at the same time make tooth profile and lead trimming on the tooth surface to reduce the impact and noise of gear meshing and increase the service life of the gear train.
- 5. 輸入軸與鎖緊裝置採用壹體化設計，雙螺栓對稱分布，達到動平衡的同時，通過雙螺栓的強力鎖死，有效防止電機軸傳動打滑，實現高精度零背隙的動力傳送。
 5. The input shaft and the locking device adopt the integrated design, and the double bolts are symmetrically distributed. When the dynamic balance is achieved, the strong bolting of the double bolts can effectively prevent the motor shaft drive from slipping and realize the high-precision zero backlash power transmission.



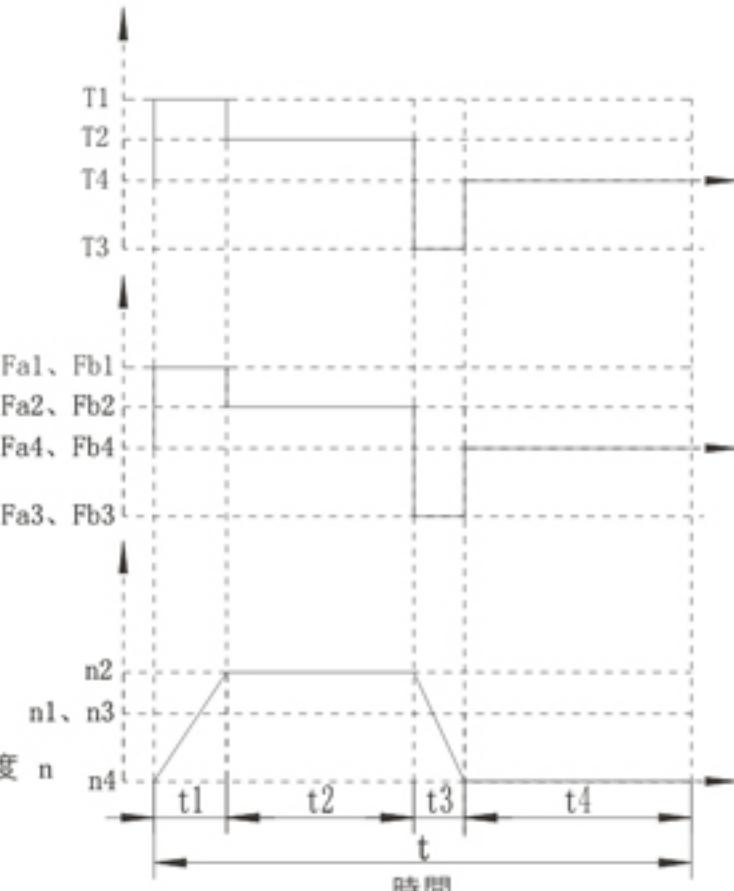
減速機選型 PRODUCT FEATURES



周期運轉建議

壹般應用慣量公式 $\frac{\text{負載慣量}}{\text{減速比的平方}} < 5 \text{倍馬達轉動慣量}$

適用慣量 $\frac{\text{負載慣量}}{\text{減速比的平方}} \leq \text{馬達轉動慣量}$



註釋：1. 加速
3. 減速
4. 停止

$$\text{Eq. 1: } ED = \frac{t_{1+2+t_3}}{t} \times 100\%, \quad t_{work} = t_1+t_2+t_3$$

馬達輸出速度
實際應用速度

$$\text{Eq. 2: } i = \frac{n_1 \times t_1 + n_2 \times t_2 + n_3 \times t_3}{n_1 \times t_1 + n_2 \times t_2 + n_3 \times t_3}$$

$$\text{Eq. 4: } T_{2max} = \text{馬達最大輸出扭矩} \times \text{減速比} \times \text{傳動效率} \times \text{負載系數}$$

負載系數	周期次數/小時
1	0-1000
1.1	1000-1500
1.3	1500-2000
1.6	2000-3000
1.8	3000-5000

$$\text{Eq. 5: } n_1 = n_3 = \frac{1}{2} \times n_2$$

$$S_3 = \frac{n_1 \times t_1 + n_2 \times t_2 + n_3 \times t_3}{t_1 + t_2 + t_3}$$

額定輸入速度
減速比

$$\text{Eq. 6: } F_c = \sqrt[3]{\frac{n_1 \times t_1 \times F_{a1}^3 + n_2 \times t_2 \times F_{a2}^3 + n_3 \times t_3 \times F_{a3}^3}{n_1 \times t_1 + n_2 \times t_2 + n_3 \times t_3}}$$

$$F_d = \sqrt[3]{\frac{n_1 \times t_1 \times F_{b1}^3 + n_2 \times t_2 \times F_{b2}^3 + n_3 \times t_3 \times F_{b3}^3}{n_1 \times t_1 + n_2 \times t_2 + n_3 \times t_3}}$$

精密行星減速機

Precision Planetary Reducer



其優勢在於：此款行星減速機即使在最高轉速時也能達到最高效率，十分適用
於高標準的生產工況，壹款真正強效且價格合理的產品。

The advantage is that this planetary reducer achieves maximum efficiency even at the highest speeds, making it
ideal for high-standard production conditions, a truly powerful and reasonably priced product.

TECHMECH DRIVES THE FUTURE

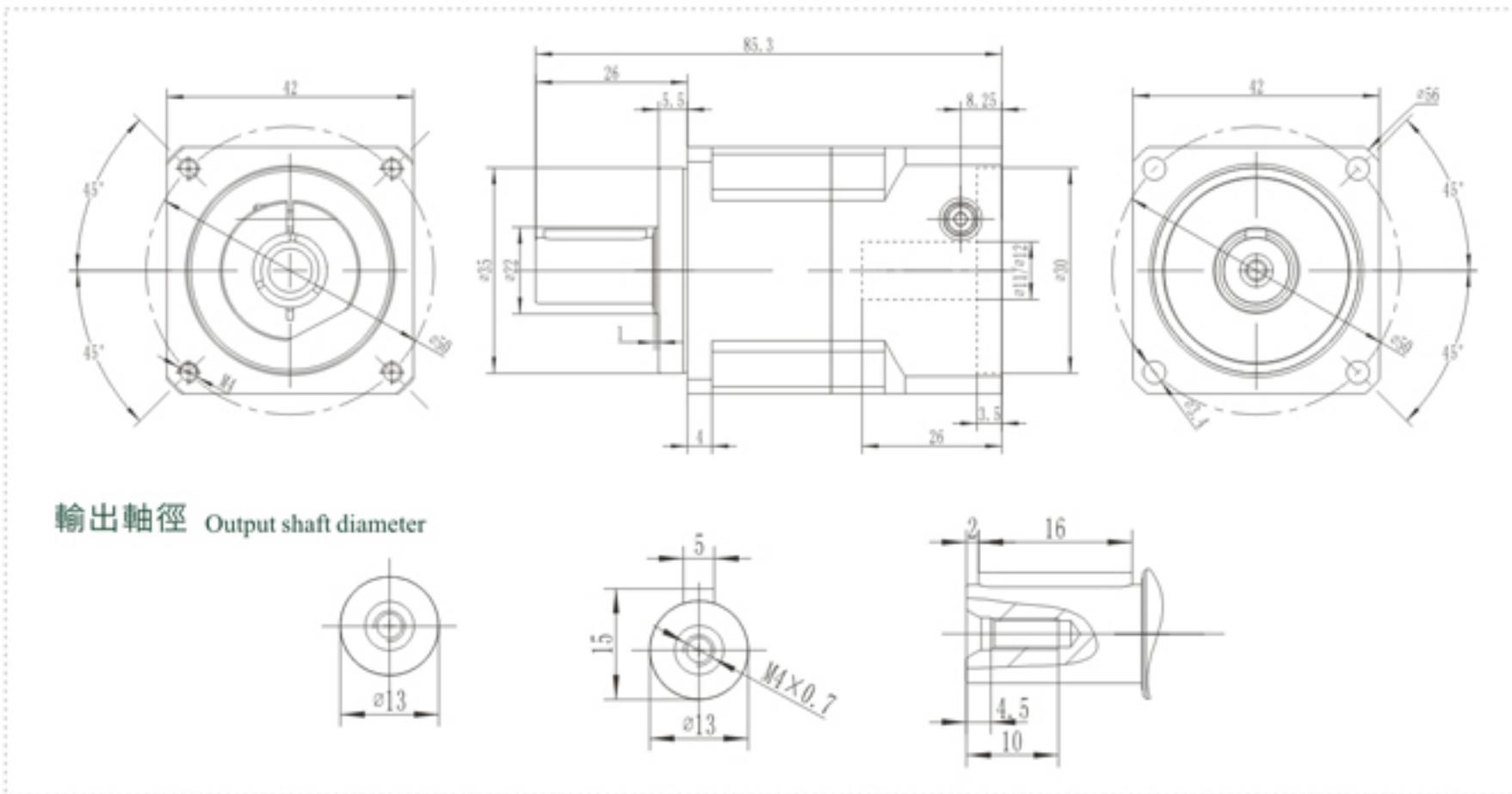
鉢科瑪格 傳動未來



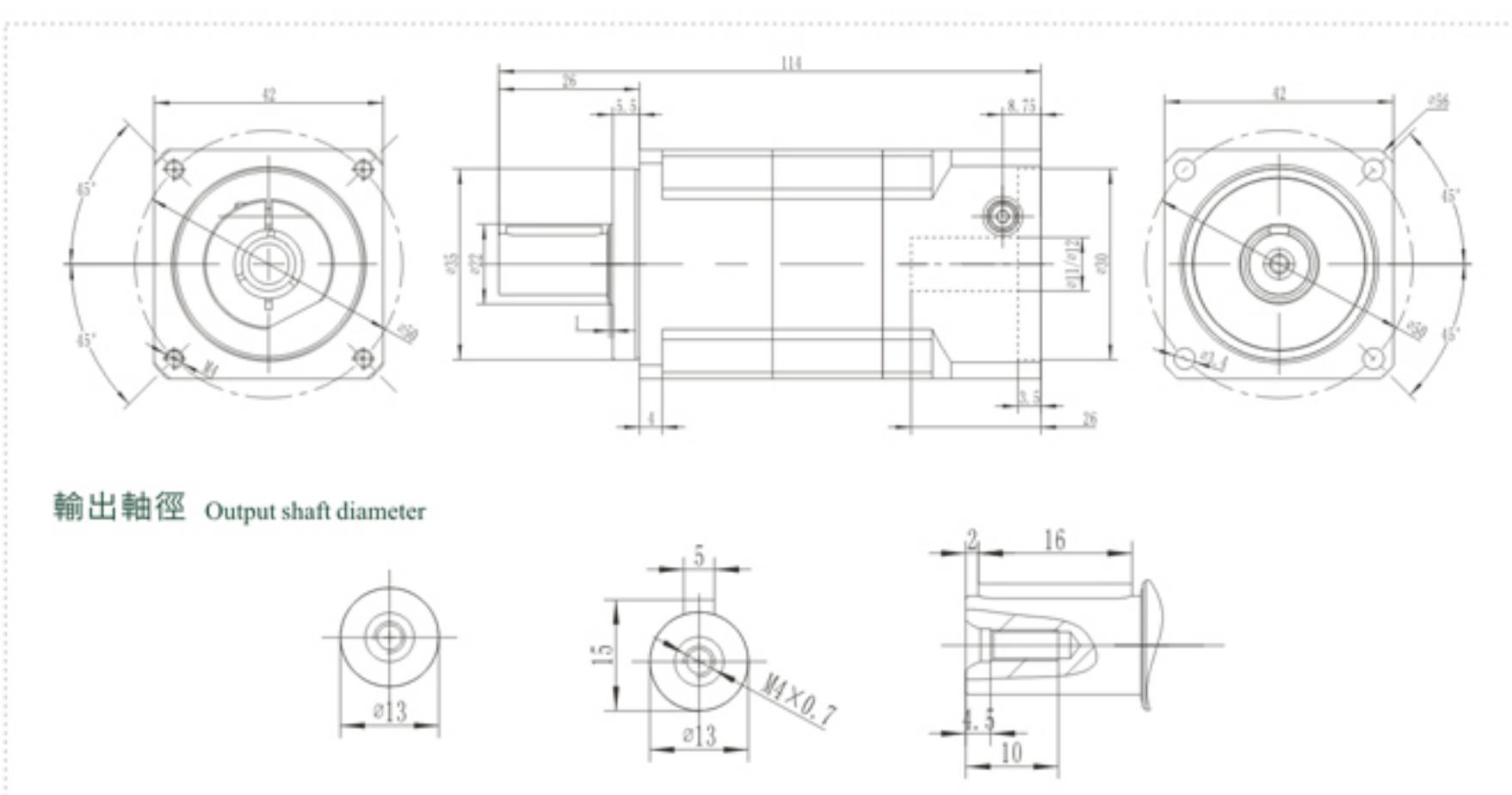
TB042系列* TB042 Series

外形尺寸表

TB042單節* TB042 One Stage



TB042雙節* TB042 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage										
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100		
額定輸出力矩 Rated Output Torque	T_1	Nm	20	19	22	20	19	17	-	14	20	19	22	20	19	17	22	20	19	17	14	
急停扭矩 Emergency Stop Torque	T_2	Nm	$T_1 \times 3$										$T_1 \times 3$									
額定輸入轉速 Rated Input Speed	S_1	rpm	5000										5000									
最大輸入轉速 Maximum Input Speed	S_2	rpm	10000										10000									
最大輸出力矩 Maximum Output Torque	T_4	Nm	$T_1 \times 3 \times 60\%$										$T_1 \times 3 \times 60\%$									
最大徑向力 Maximum Radial Force	F_a	N	780										780									
最大軸向力 Maximum Axial Force	F_b	N	390										390									
扭轉剛性 Torsional Rigidity	-	Nm/arcmin	3										3									
效率 Effectiveness	β	%	≥97%										≥94%									
壽命 Life	-	h	20000h										30000h									
反饋噪音 Feedback Noise	-	dB	≤55dB										≤55dB									
重量 Weight	-	Kg	0.6										0.8									
回程間隙 Return Gap	P0		≤1										≤3									
	P1	arcmin	≤3										≤5									
	P2		≤5										≤7									
使用溫度 Operating Temperature	-	°C	-10°C-90°C										-10°C-90°C									
潤滑 Lubricating	-		合成油脂 Synthetic Grease										合成油脂 Synthetic Grease									
防護等級 Protection Level	-		IP65										IP65									
安裝方向 Installation Direction	-		任意方向 Any Direction										任意方向 Any Direction									
傳動慣量 Transmission Inertia	J	kg.cm²	0.03										0.03									

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

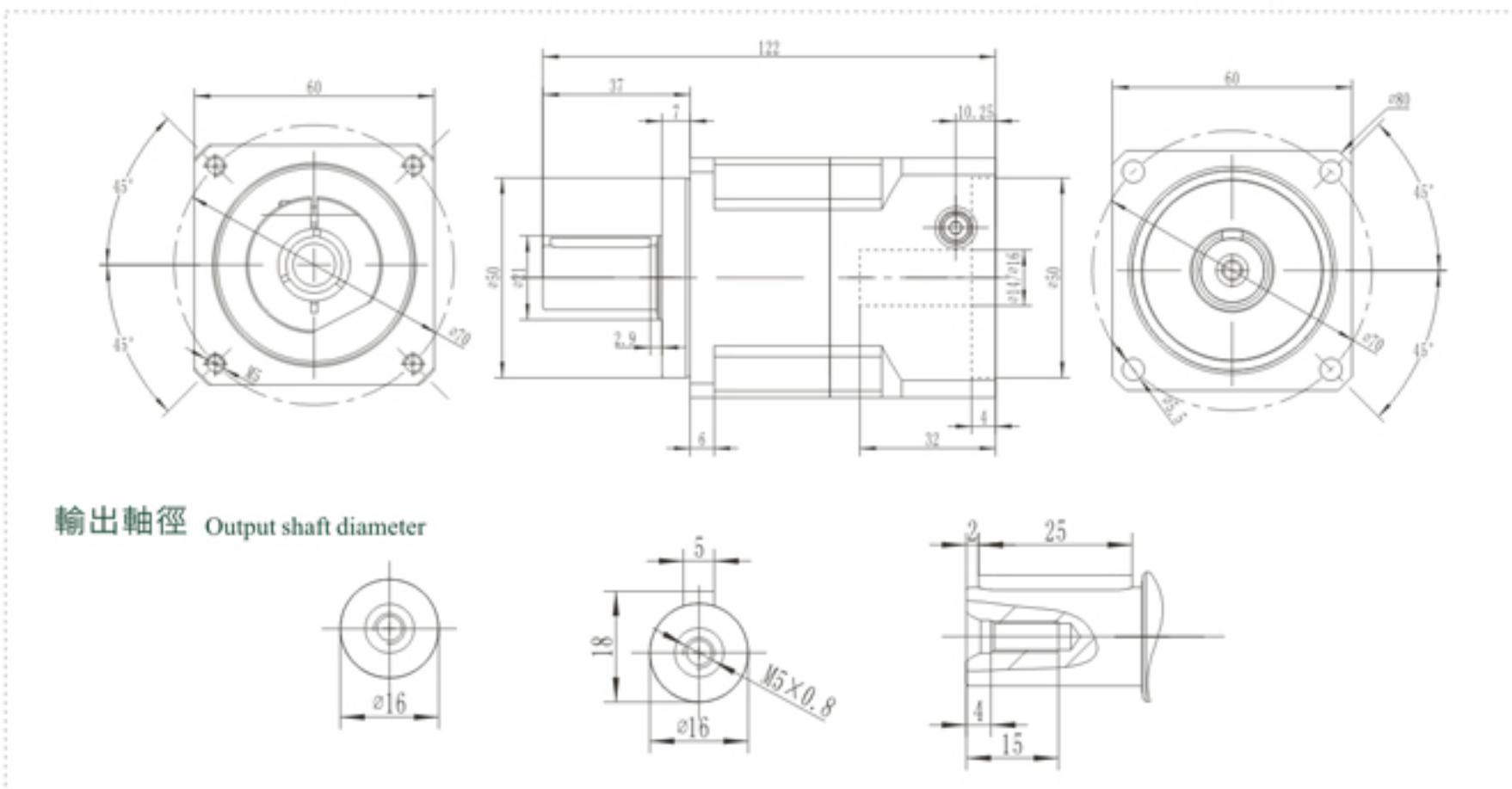
According to the instructions:

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
All product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

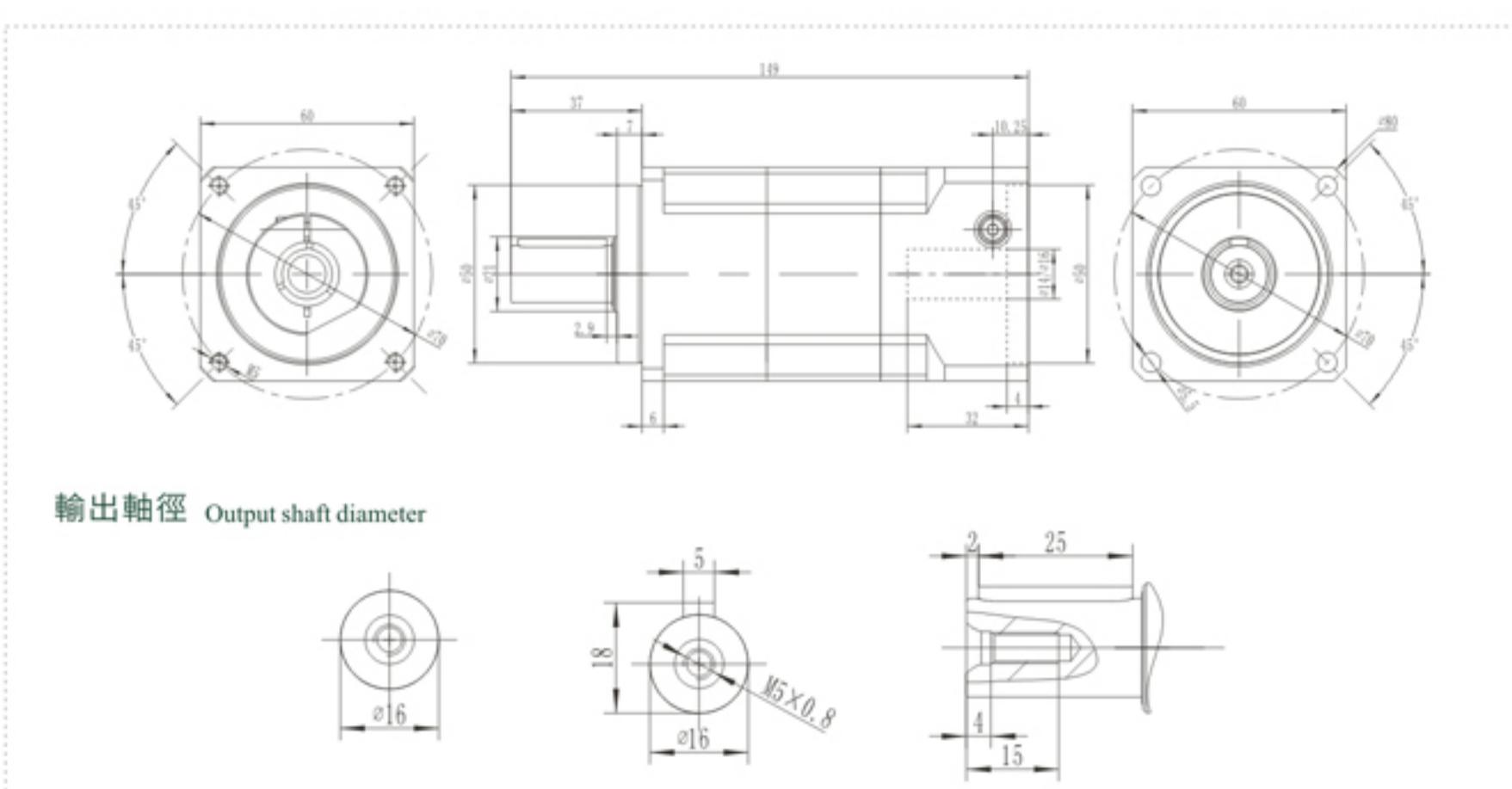
TB060系列* TB060 Series

外形尺寸表

TB060單節* TB060 One Stage



TB060雙節* TB060 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	55	50	60	55	50	45	-	40	55	50	60	55	50	45	60	55	50	45	40
急停扭矩 Emergency Stop Torque	T ₂	Nm																			
額定輸入轉速 Rated Input Speed	S ₁	rpm																			
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			
最大徑向力 Maximum Radial Force	F _a	N																			
最大軸向力 Maximum Axial Force	F _b	N																			
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			
效率 Effectiveness	β	%																			
壽命 Life	-	h																			
反饋噪音 Feedback Noise	-	dB																			
重量 Weight	-	Kg																			
P0			≤1																		
回程間隙 Return Gap	P1	arcmin		≤3																	
	P2			≤5																	
使用溫度 Operating Temperature	-	°C																			
潤滑 Lubricating	-																				
防護等級 Protection Level	-																				
安裝方向 Installation Direction	-																				
傳動慣量 Transmission Inertia	J	kg.cm ²																			

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

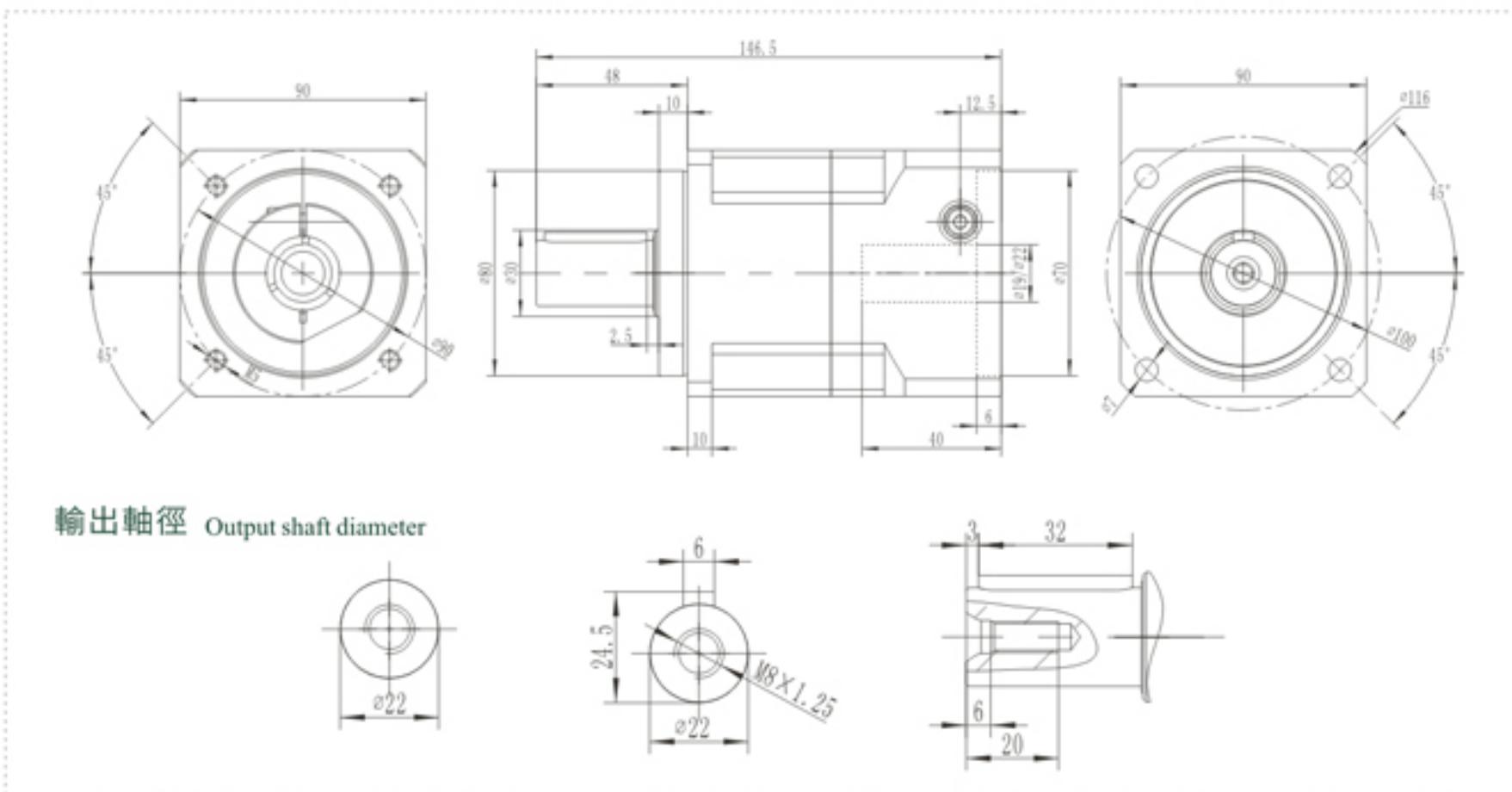
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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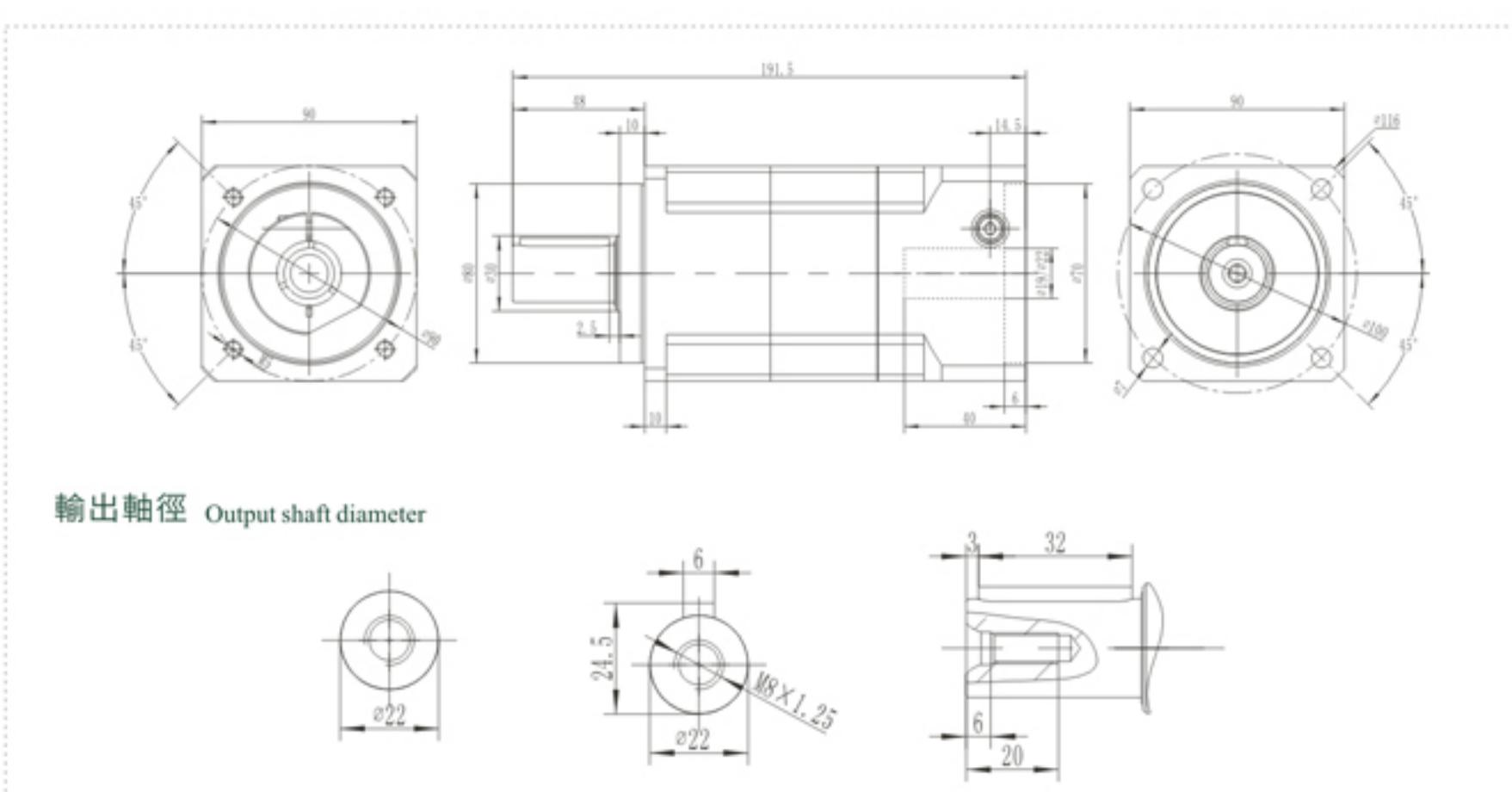
TB090系列* TB090 Series

外形尺寸表

TB090單節* TB090 One Stage



TB090雙節* TB090 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage										
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100		
額定輸出力矩 Rated Output Torque	T ₁	Nm	130	140	160	150	140	120	-	100	55	50	60	55	50	45	60	55	50	45	40	
急停扭矩 Emergency Stop Torque	T ₂	Nm																				
額定輸入轉速 Rated Input Speed	S ₁	rpm																				
最大輸入轉速 Maximum Input Speed	S ₂	rpm																				
最大輸出力矩 Maximum Output Torque	T ₄	Nm																				
最大徑向力 Maximum Radial Force	F _a	N																				
最大軸向力 Maximum Axial Force	F _b	N																				
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																				
效率 Effectiveness	β	%																				
壽命 Life	-	h																				
反饋噪音 Feedback Noise	-	dB																				
重量 Weight	-	Kg																				
P0																						
回程間隙 Return Gap	P1	arcmin																				
P2																						
使用溫度 Operating Temperature	-	°C																				
潤滑 Lubricating	-																					
防護等級 Protection Level	-																					
安裝方向 Installation Direction	-																					
傳動慣量 Transmission Inertia	J	kg.cm ²	0.61	0.48	0.47	0.45	0.45	0.44	-	0.44								0.47			0.44	

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

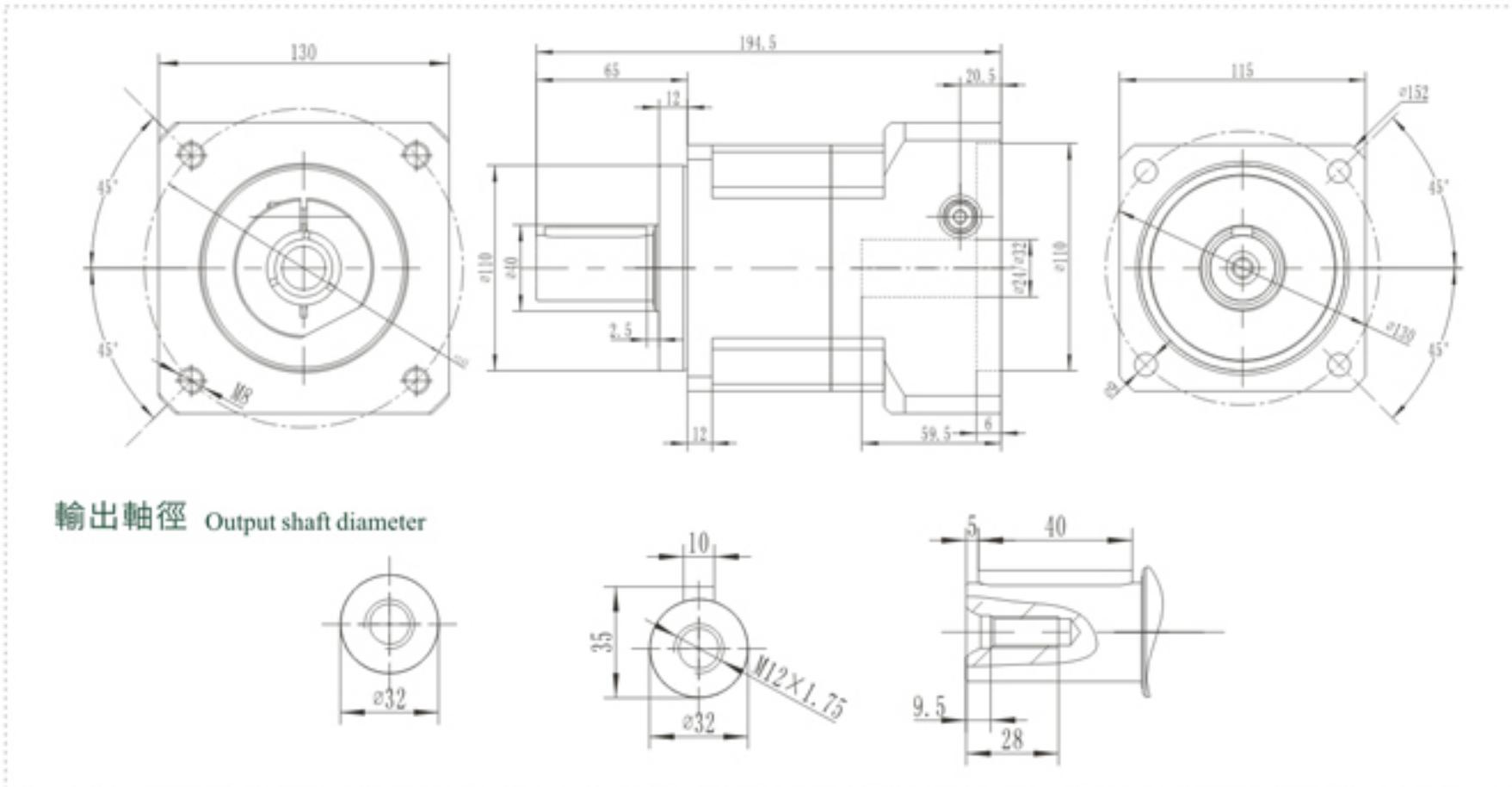
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
All product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

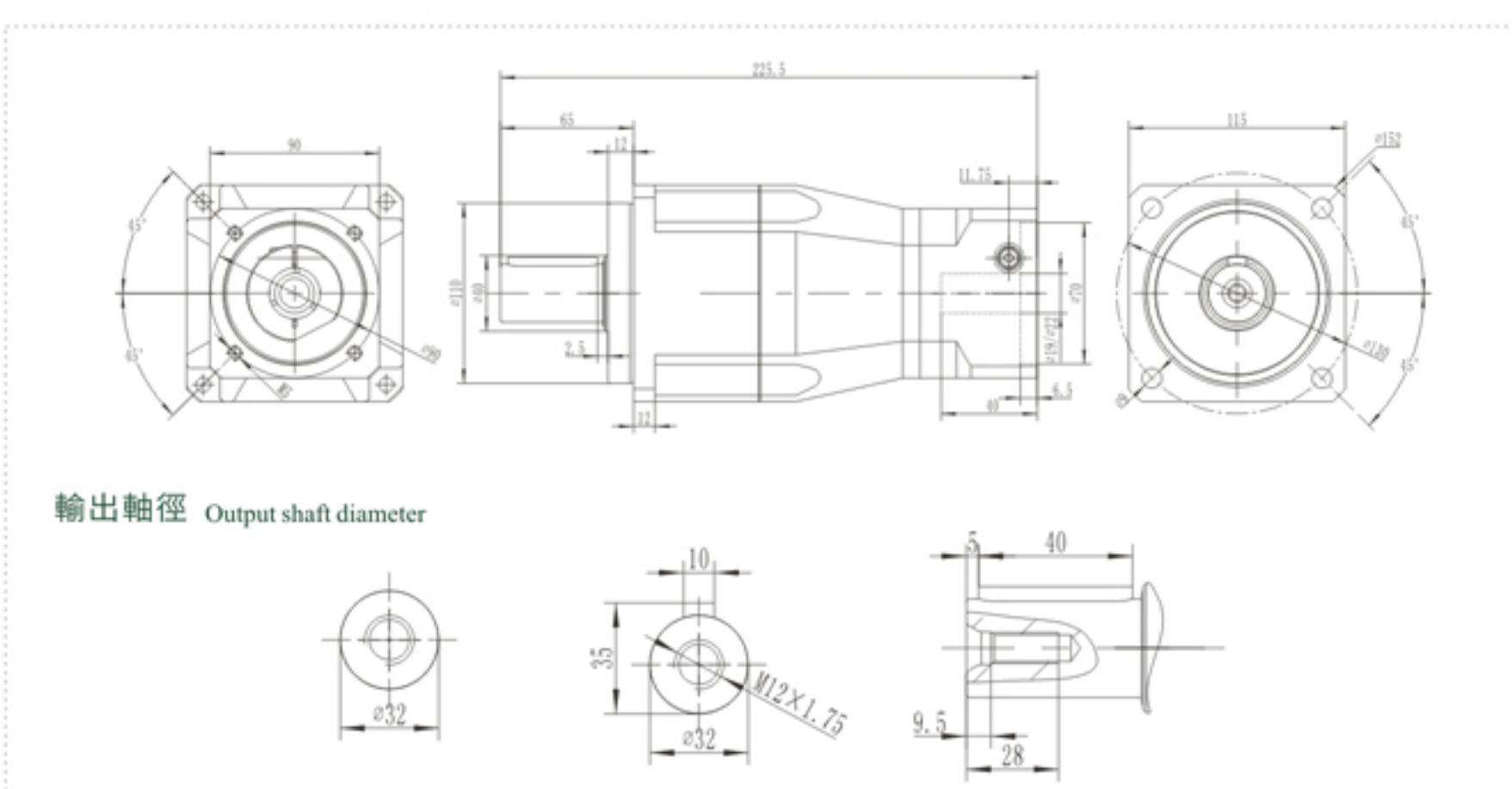
TB115系列* TB115 Series

外形尺寸表

TB115單節* TB115 One Stage



TB115雙節* TB115 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	208	290	330	310	300	260	-	230	208	290	330	310	300	260	330	310	300	260	230
急停扭矩 Emergency Stop Torque	T ₂	Nm																			T ₁ × 3
額定輸入轉速 Rated Input Speed	S ₁	rpm																			4000
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			8000
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			T ₁ × 3 × 60%
最大徑向力 Maximum Radial Force	F _a	N																			6700
最大軸向力 Maximum Axial Force	F _b	N																			3350
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			25
效率 Effectiveness	β	%																			≥94%
壽命 Life	-	h																			20000h
反饋噪音 Feedback Noise	-	dB																			≤60dB
重量 Weight	-	Kg																			9
P0																					≤3
回程間隙 Return Gap	P1	arcmin																			≤5
	P2																				≤7
使用溫度 Operating Temperature	-	°C																			-10°C~90°C
潤滑 Lubricating	-																				合成油脂 Synthetic Grease
防護等級 Protection Level	-																				IP65
安裝方向 Installation Direction	-																				任意方向 Any Direction
傳動慣量 Transmission Inertia	J	kg.cm ²	325	274	271	265	262	258	-	257									0.47		0.44

依據說明:

- 變速比(i=S_{in}/S_{out})
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, i=10所得。

According to the instructions:

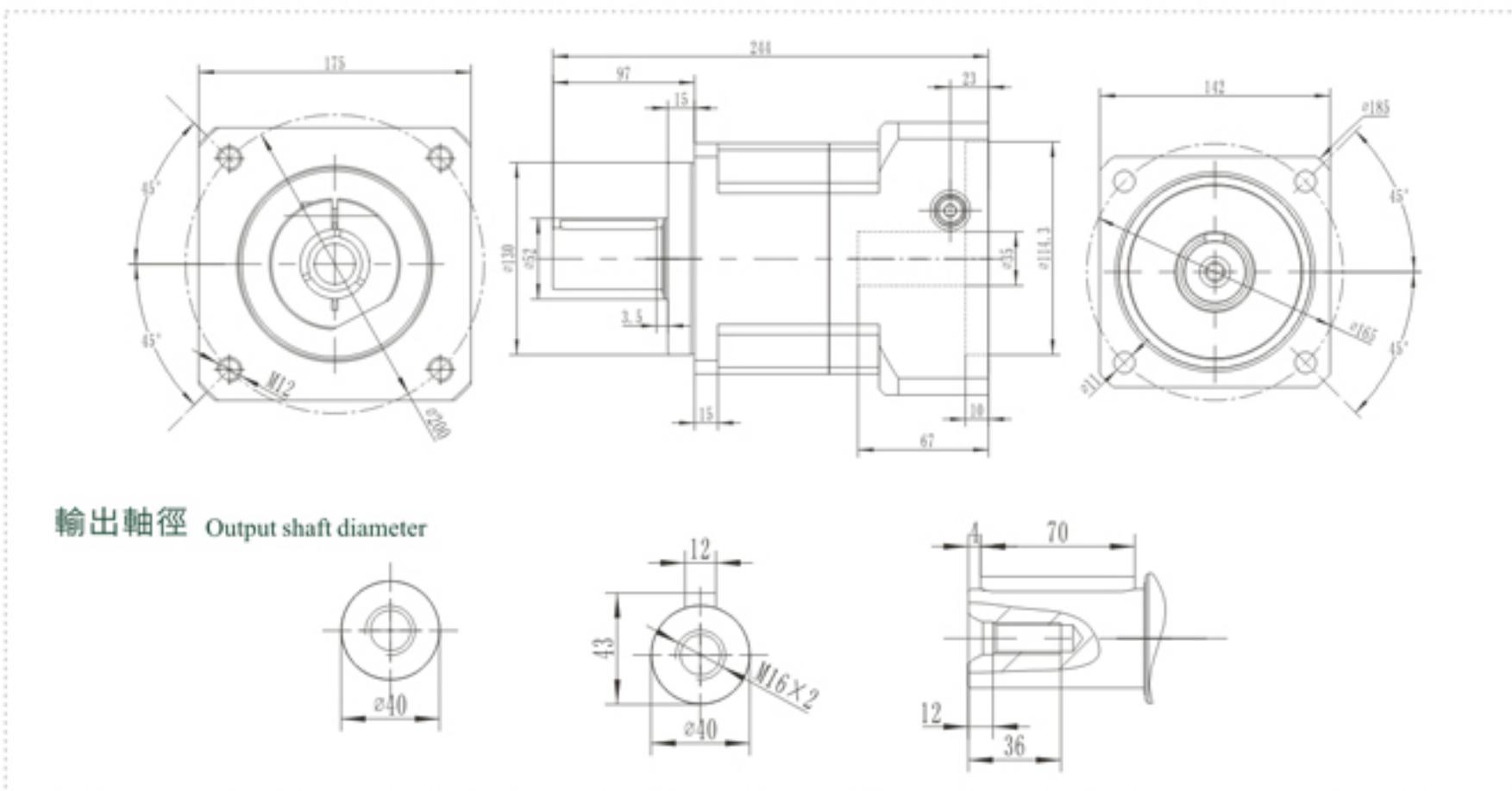
- Speed ratio (i=S_{in}/S_{out})
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, i=10.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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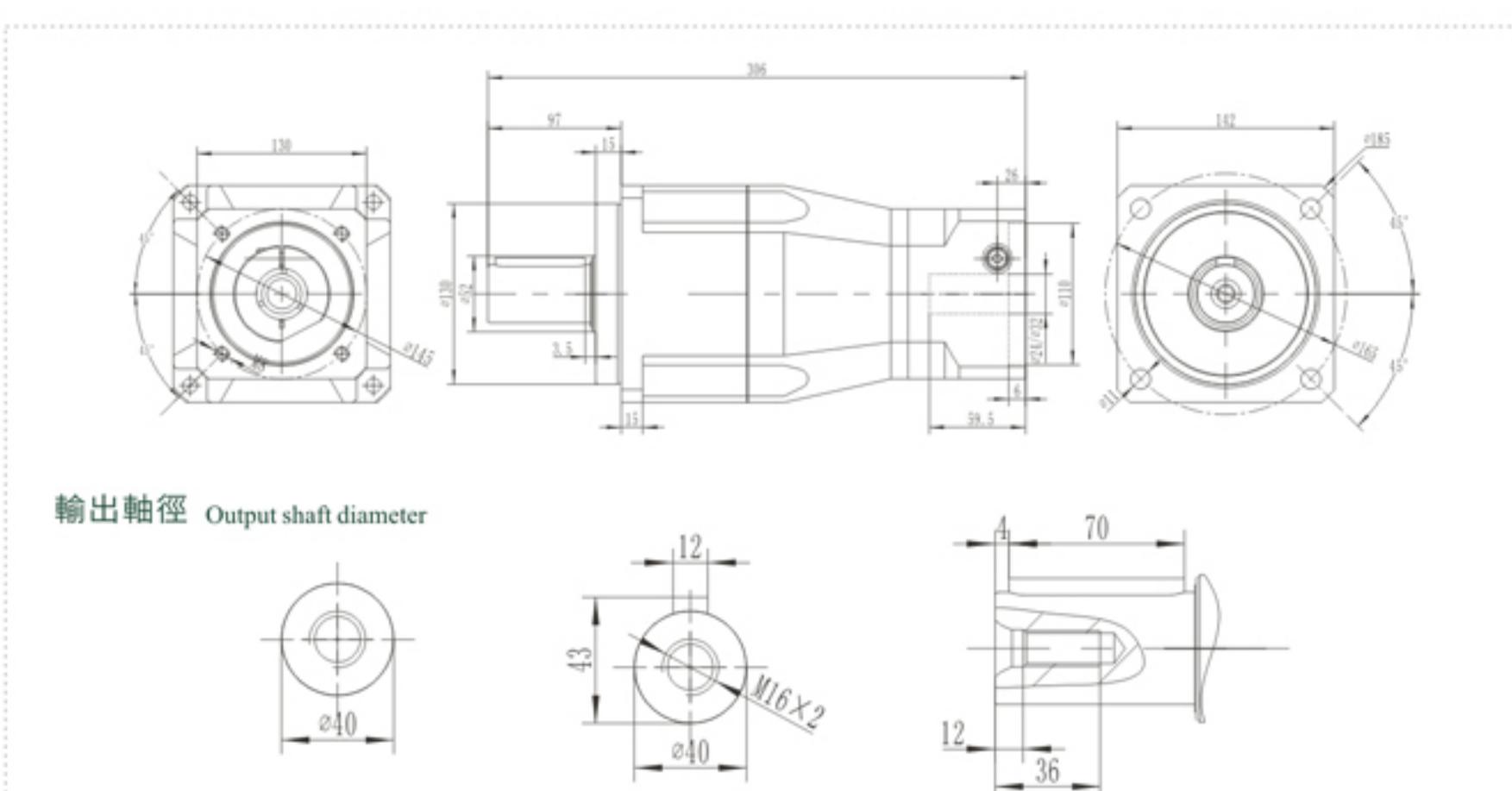
TB142系列* TB142 Series

外形尺寸表

TB142單節* TB142 One Stage



TB142雙節* TB142 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	342	542	650	600	550	500	-	450	342	542	650	600	550	500	650	600	550	500	450
急停扭矩 Emergency Stop Torque	T ₂	Nm																			
額定輸入轉速 Rated Input Speed	S ₁	rpm																			
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			
最大徑向力 Maximum Radial Force	F _a	N																			
最大軸向力 Maximum Axial Force	F _b	N																			
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			
效率 Effectiveness	β	%																			
壽命 Life	-	h																			
反饋噪音 Feedback Noise	-	dB																			
重量 Weight	-	Kg																			
P0																					
回程間隙 Return Gap	P1	arcmin																			
P2																					
使用溫度 Operating Temperature	-	°C																			
潤滑 Lubricating	-																				
防護等級 Protection Level	-																				
安裝方向 Installation Direction	-																				
傳動慣量 Transmission Inertia	J	kg.cm ²	9.21	7.54	7.42	7.25	7.14	7.07	-	7.03								2.71		2.57	

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

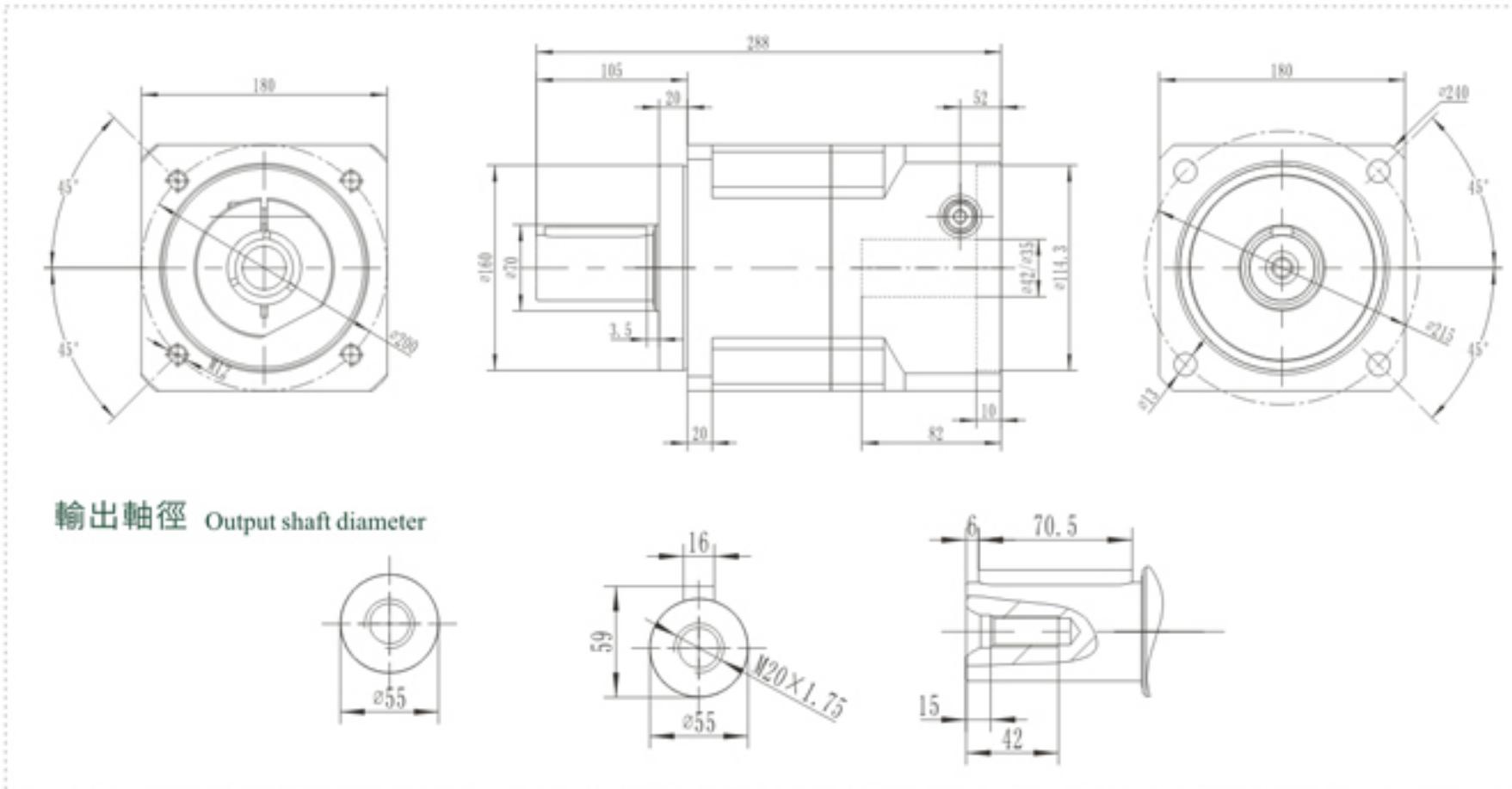
According to the instructions:

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
All product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

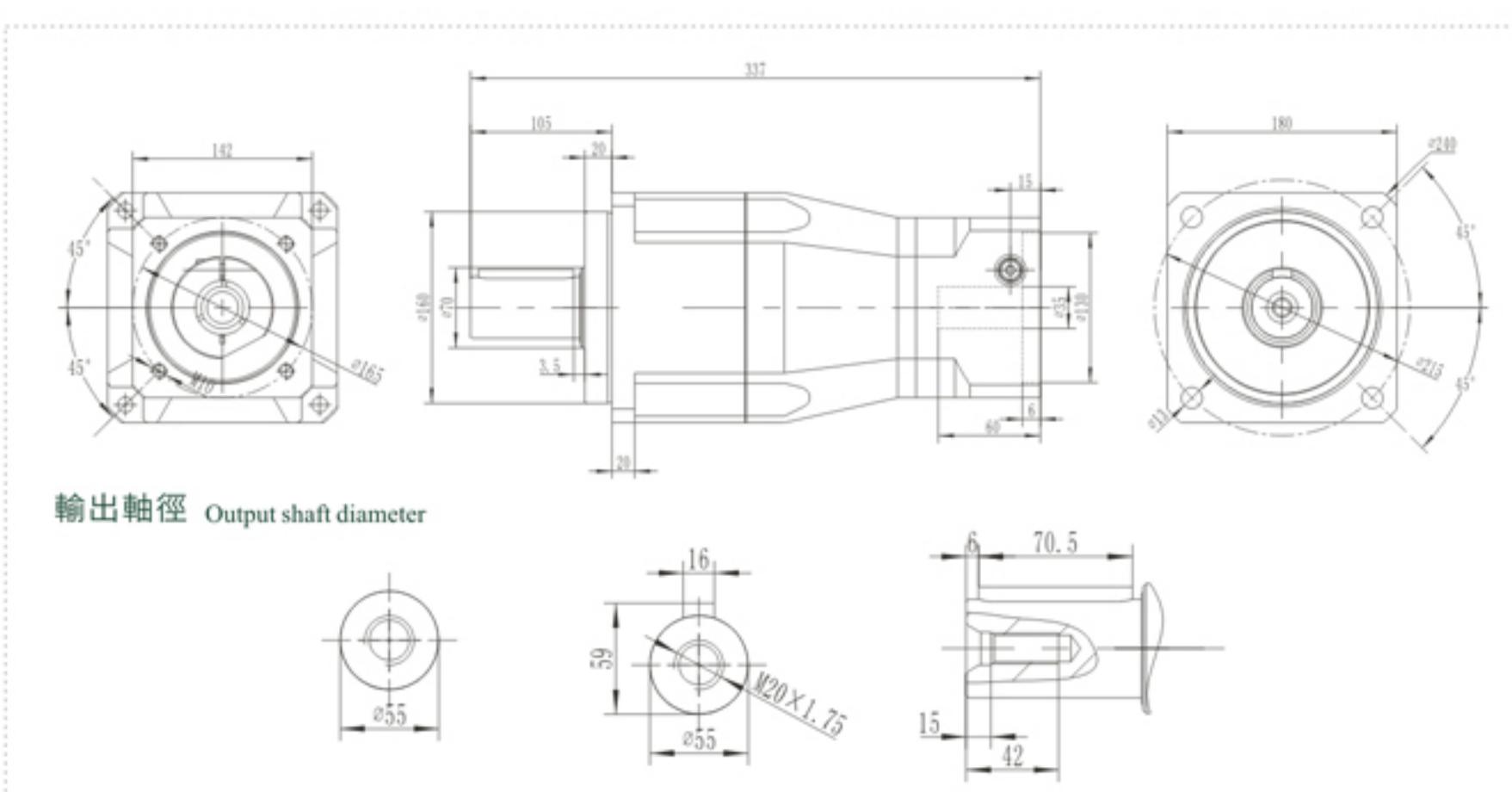
TB180系列* TB180 Series

外形尺寸表

TB180單節* TB180 One Stage



TB180雙節* TB180 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	20	19	22	20	19	17	-	14	20	19	22	20	19	17	22	20	17	14	
急停扭矩 Emergency Stop Torque	T ₂	Nm																			
額定輸入轉速 Rated Input Speed	S ₁	rpm																			
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			
最大徑向力 Maximum Radial Force	F _a	N																			
最大軸向力 Maximum Axial Force	F _b	N																			
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			
效率 Effectiveness	β	%																			
壽命 Life	-	h																			
反饋噪音 Feedback Noise	-	dB																			
重量 Weight	-	Kg																			
P0																					
回程間隙 Return Gap	P1	arcmin																			
P2																					
使用溫度 Operating Temperature	-	°C																			
潤滑 Lubricating	-																				
防護等級 Protection Level	-																				
安裝方向 Installation Direction	-																				
傳動慣量 Transmission Inertia	J	kg.cm ²	2898	2367	2329	2275	2248	2259	-	2251								7.42		7.03	

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

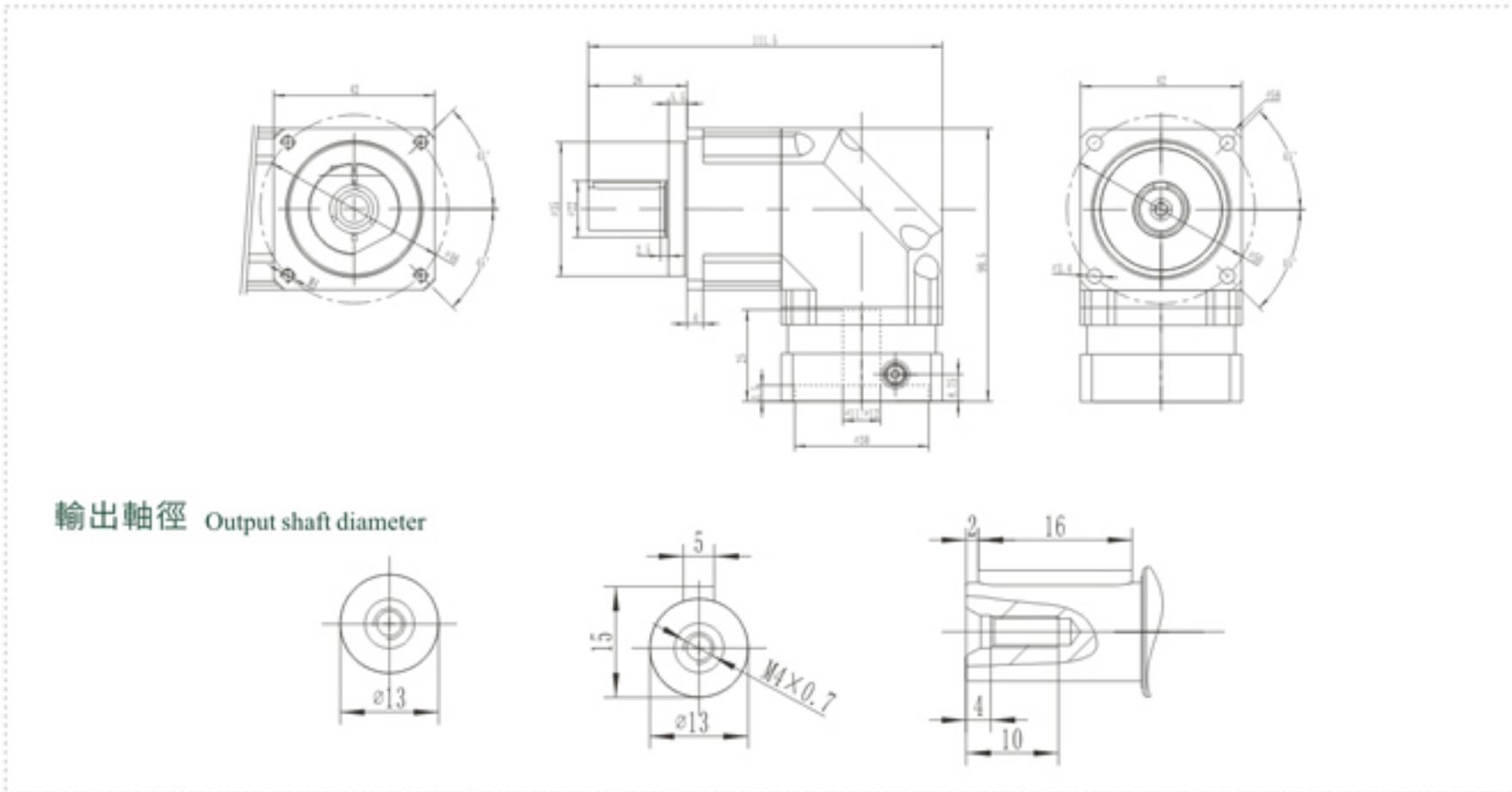
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

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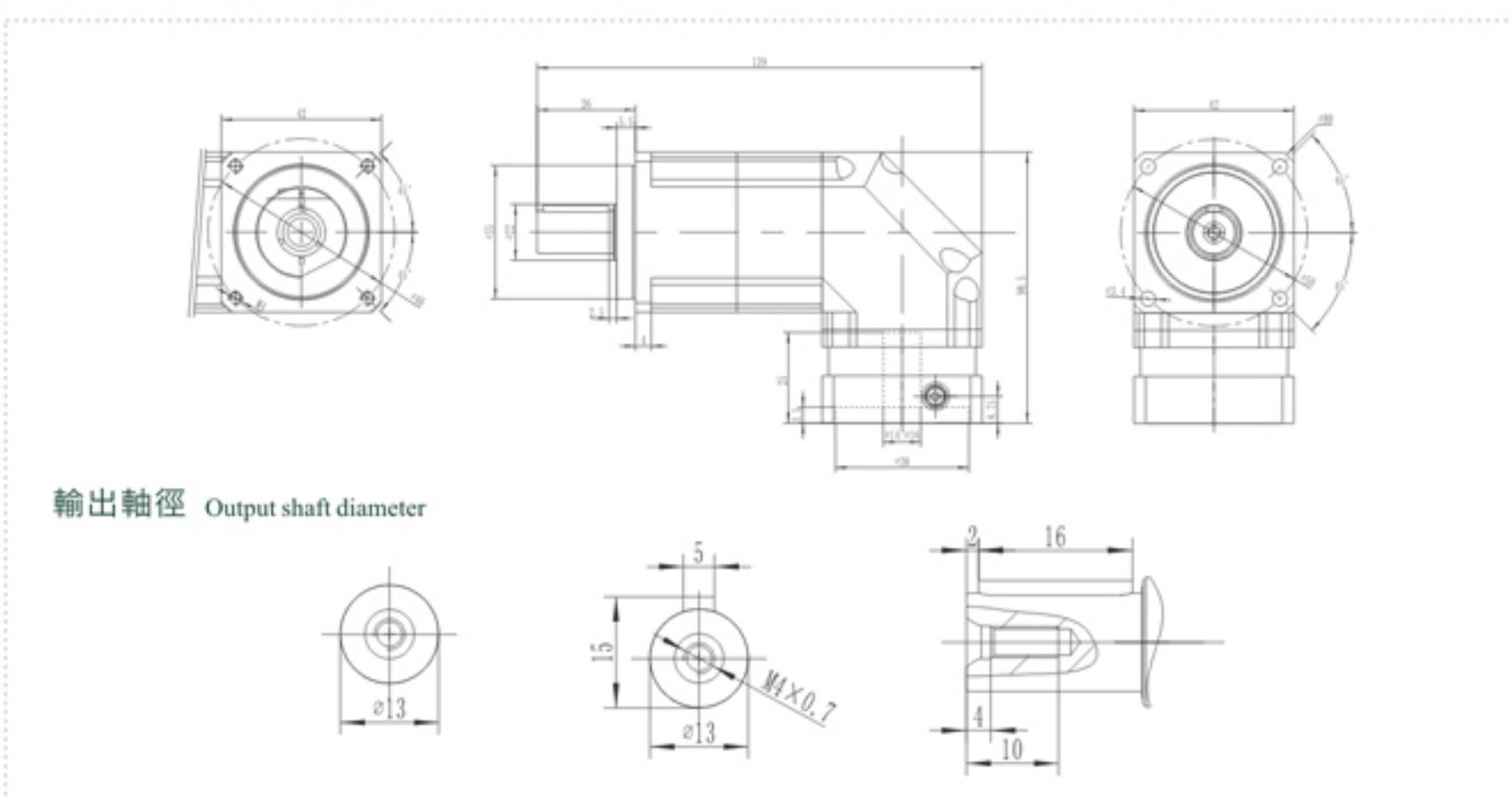
TBR042系列* TBR042 Series

外形尺寸表

TBR042單節* TBR042 One Stage



TBR042雙節* TBR042 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	9	12	15	18	19	17	-	14	14	14	15	20	19	17	14	20	19	17	14
急停扭矩 Emergency Stop Torque	T ₂	Nm																			
額定輸入轉速 Rated Input Speed	S ₁	rpm																			
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			
最大徑向力 Maximum Radial Force	F _a	N																			
最大軸向力 Maximum Axial Force	F _b	N																			
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			
效率 Effectiveness	β	%																			
壽命 Life	-	h																			
反饋噪音 Feedback Noise	-	dB																			
重量 Weight	-	Kg																			
P0																					
回程間隙 Return Gap	P1	arcmin																			
P2																					
使用溫度 Operating Temperature	-	°C																			
潤滑 Lubricating	-																				
防護等級 Protection Level	-																				
安裝方向 Installation Direction	-																				
傳動慣量 Transmission Inertia	J	kg.cm ²																			

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

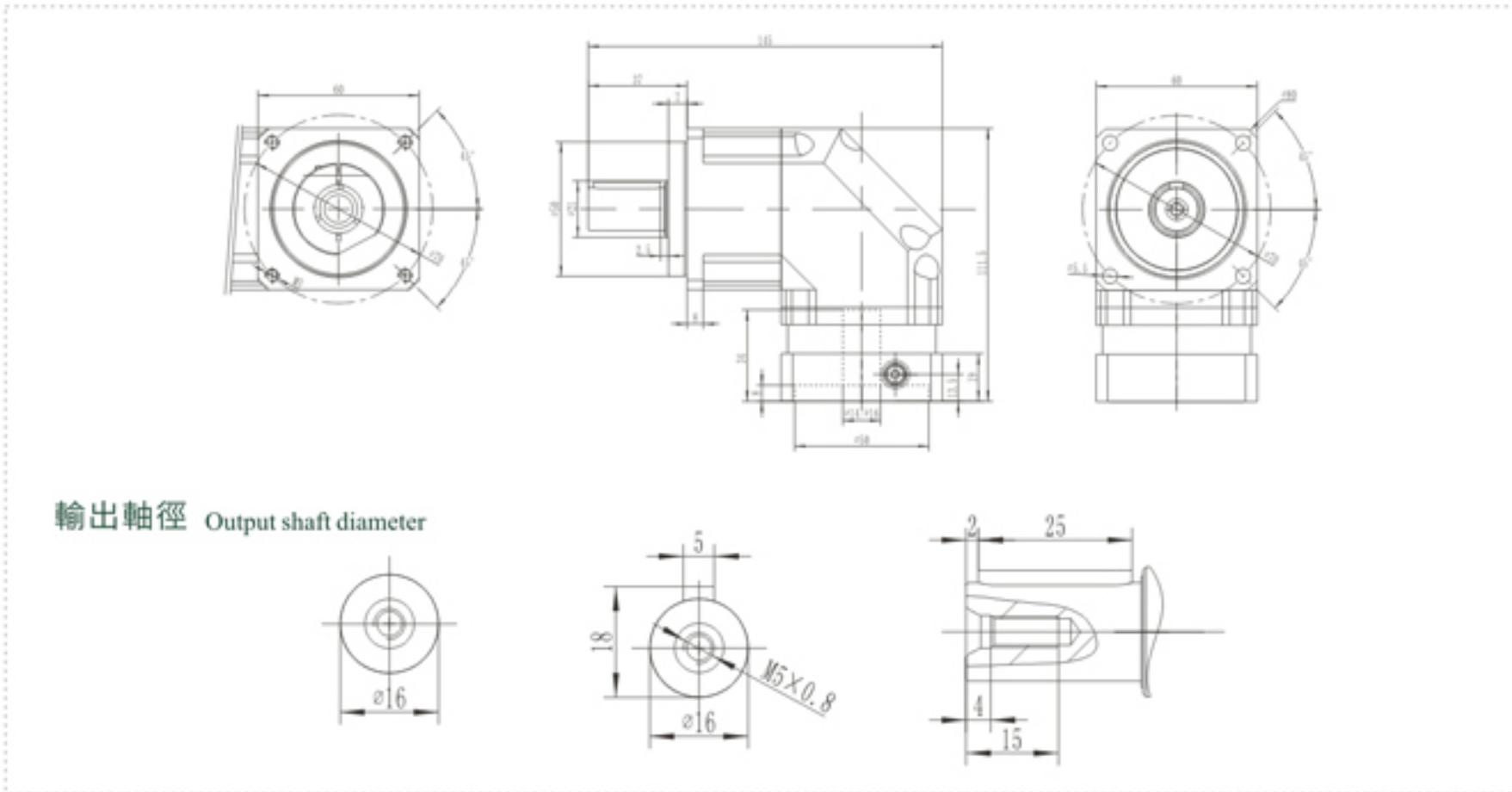
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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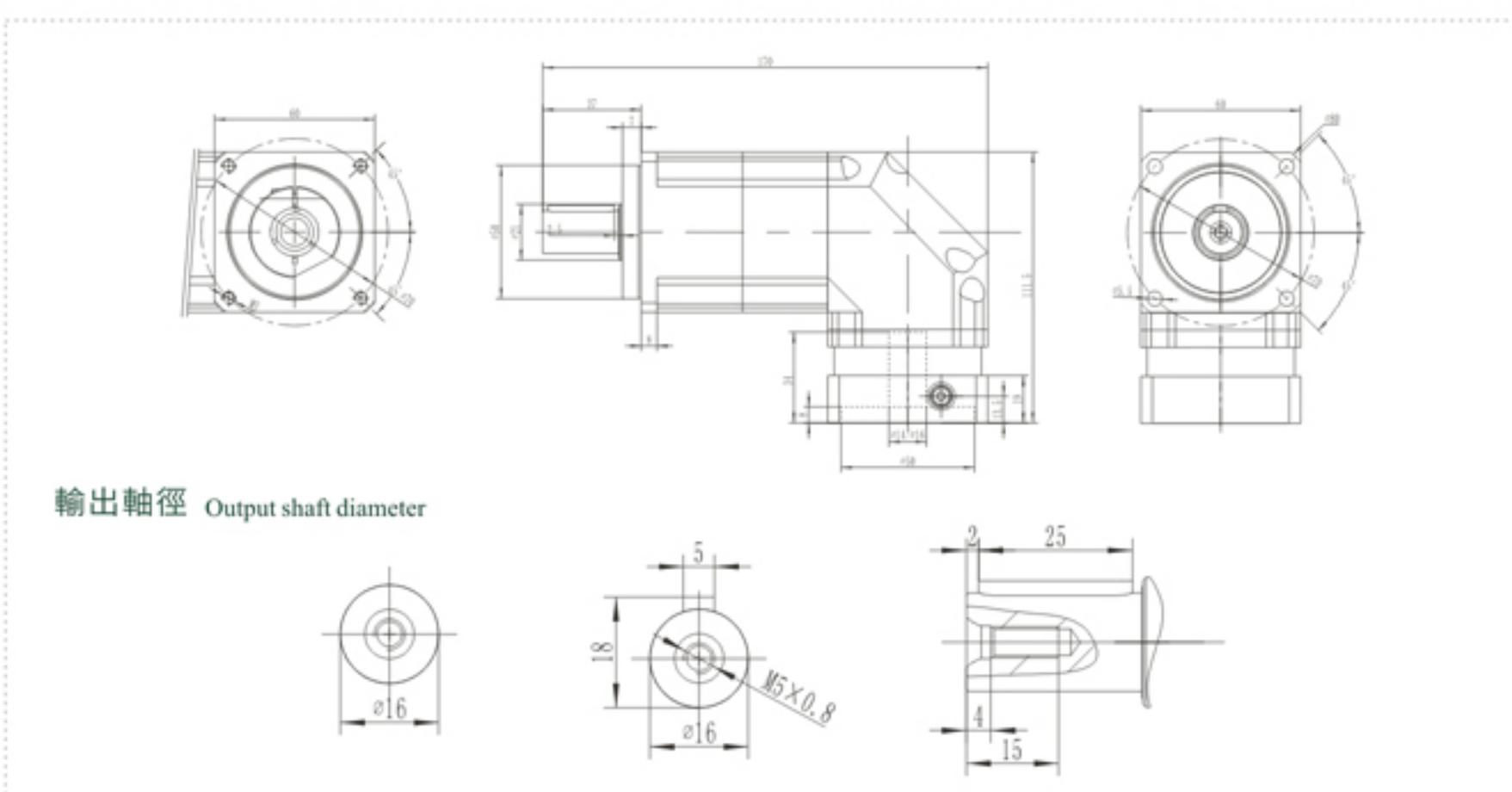
TBR060系列* TBR060 Series

外形尺寸表

TBR060單節* TBR060 One Stage



TBR060雙節* TBR060 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	36	48	60	55	50	45	-	40	-	-	60	55	50	45	60	55	50	45	40
急停扭矩 Emergency Stop Torque	T ₂	Nm																			
額定輸入轉速 Rated Input Speed	S ₁	rpm																			
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			
最大徑向力 Maximum Radial Force	F _a	N																			
最大軸向力 Maximum Axial Force	F _b	N																			
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			
效率 Effectiveness	β	%																			
壽命 Life	-	h																			
反饋噪音 Feedback Noise	-	dB																			
重量 Weight	-	Kg																			
P0																					
回程間隙 Return Gap	P1	arcmin																			
P2																					
使用溫度 Operating Temperature	-	°C																			
潤滑 Lubricating	-	-																			
防護等級 Protection Level	-	-																			
安裝方向 Installation Direction	-	-																			
傳動慣量 Transmission Inertia	J	kg.cm ²																			

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

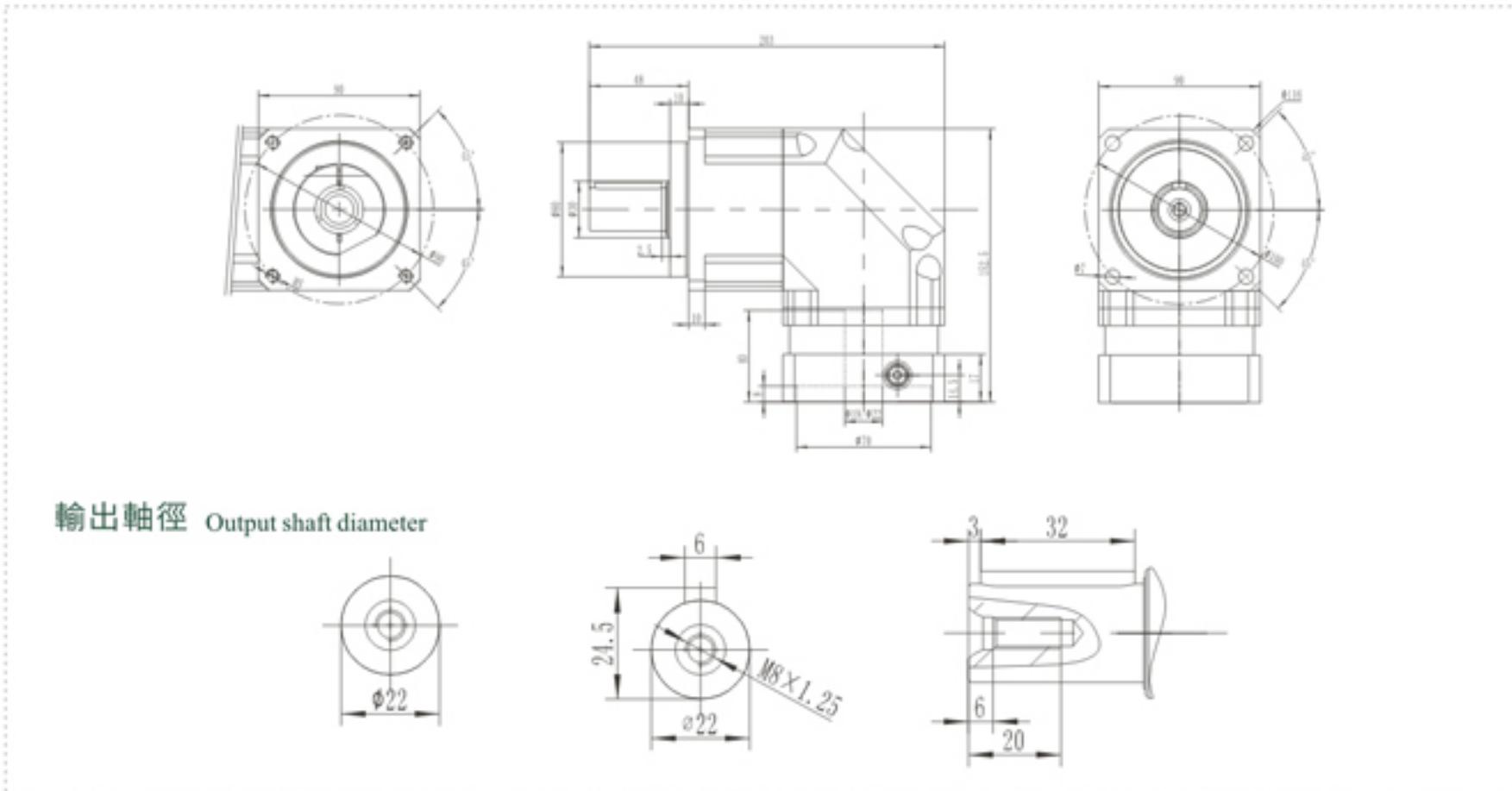
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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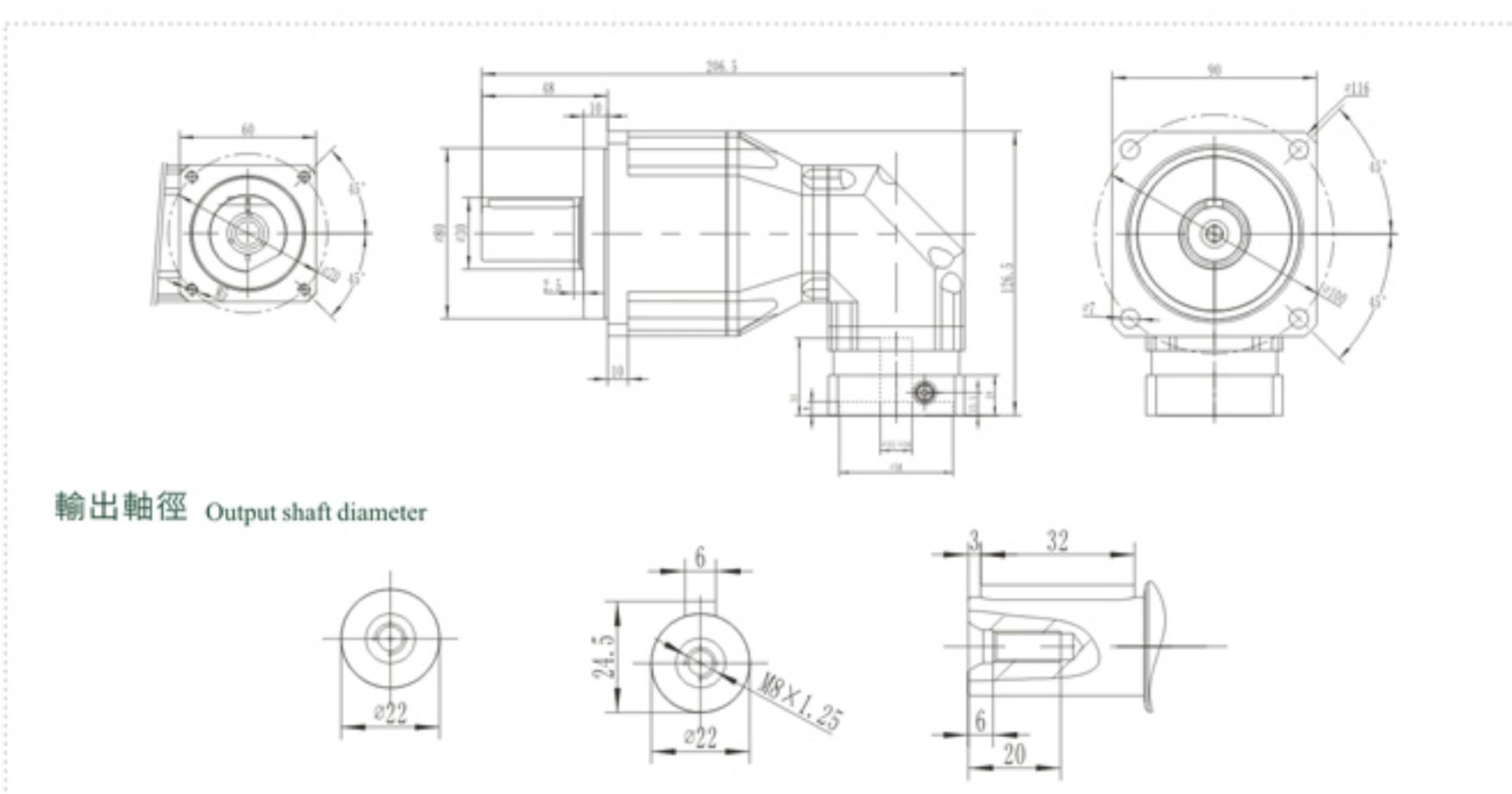
TBR090系列* TBR090 Series

外形尺寸表

TBR090單節* TBR090 One Stage



TBR090雙節* TBR090 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	90	120	150	150	140	120	-	100	-	-	150	150	140	120	100	150	120	100	
急停扭矩 Emergency Stop Torque	T ₂	Nm																			T ₁ × 3
額定輸入轉速 Rated Input Speed	S ₁	rpm																			4000
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			8000
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			T ₁ × 3 × 60%
最大徑向力 Maximum Radial Force	F _a	N																			3250
最大軸向力 Maximum Axial Force	F _b	N																			1625
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			14
效率 Effectiveness	β	%																			≥92%
壽命 Life	-	h																			20000h
反饋噪音 Feedback Noise	-	dB																			≤65dB
重量 Weight	-	Kg																			7.8
P0																					≤4
回程間隙 Return Gap	P1	arcmin																			≤7
	P2																				≤9
使用溫度 Operating Temperature	-	°C																			-10°C~90°C
潤滑 Lubricating	-																				合成油脂 Synthetic Grease
防護等級 Protection Level	-																				IP65
安裝方向 Installation Direction	-																				任意方向 Any Direction
傳動慣量 Transmission Inertia	J	kg.cm ²																			0.35

依據說明:

- 變速比($i = S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

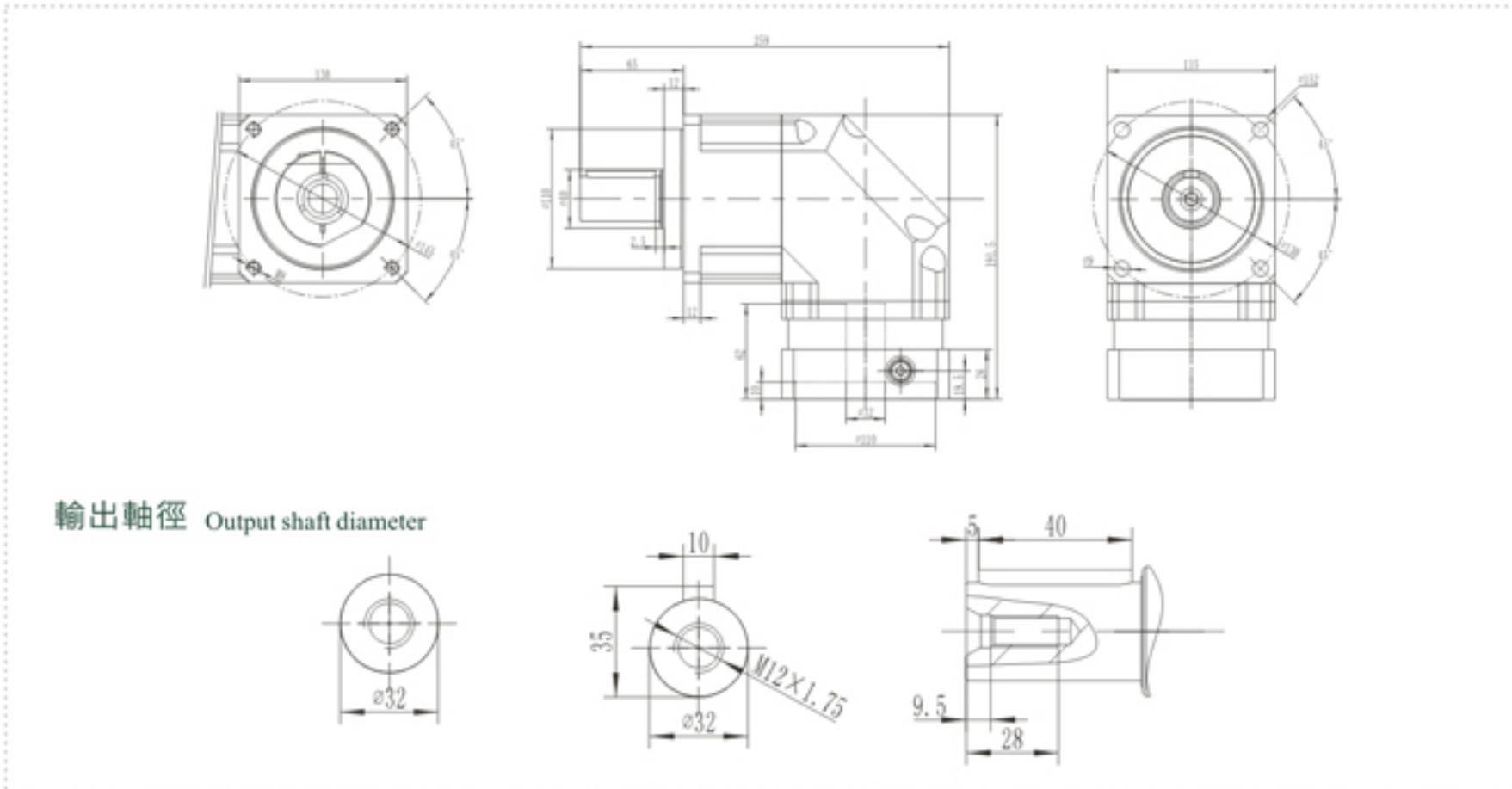
- Speed ratio ($i = S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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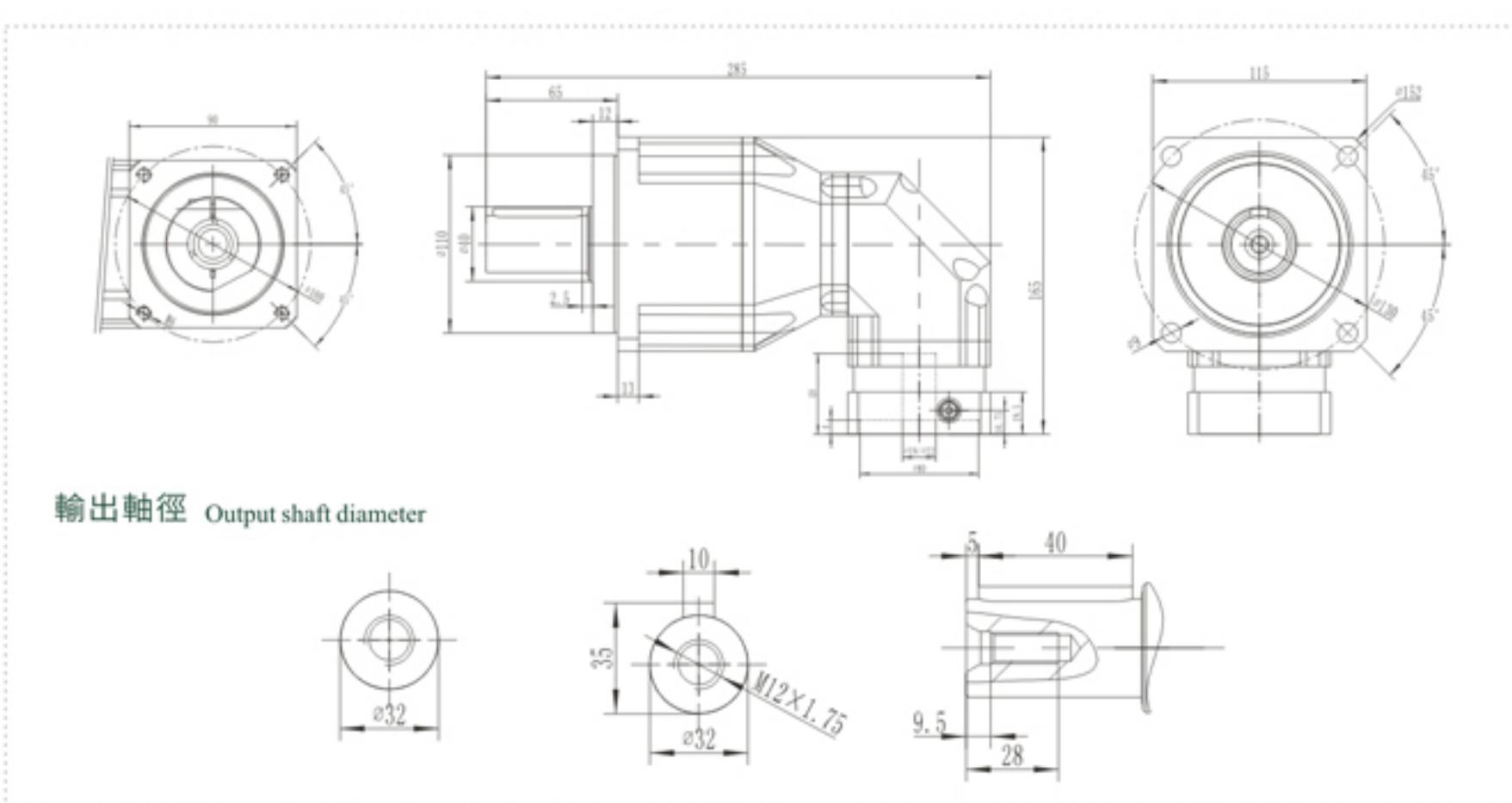
TBR115系列* TBR115 Series

外形尺寸表

TBR115單節* TBR115 One Stage



TBR115雙節* TBR115 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage										
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100		
額定輸出力矩 Rated Output Torque	T ₁	Nm	195	260	325	310	300	260	-	230	-	-	325	310	300	260	230	310	300	260	230	
急停扭矩 Emergency Stop Torque	T ₂	Nm																				
額定輸入轉速 Rated Input Speed	S ₁	rpm																				
最大輸入轉速 Maximum Input Speed	S ₂	rpm																				
最大輸出力矩 Maximum Output Torque	T ₄	Nm																				
最大徑向力 Maximum Radial Force	F _a	N																				
最大軸向力 Maximum Axial Force	F _b	N																				
扭轉剛性 Torsional Rigidity	-	Nm/arcm																				
效率 Effectiveness	β	%																				
壽命 Life	-	h																				
反饋噪音 Feedback Noise	-	dB																				
重量 Weight	-	Kg																				
P0																						
回程間隙 Return Gap	P1	arcmin																				
P2																						
使用溫度 Operating Temperature	-	°C																				
潤滑 Lubricating	-																					
防護等級 Protection Level	-																					
安裝方向 Installation Direction	-																					
傳動慣量 Transmission Inertia	J	kg.cm ²																				

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

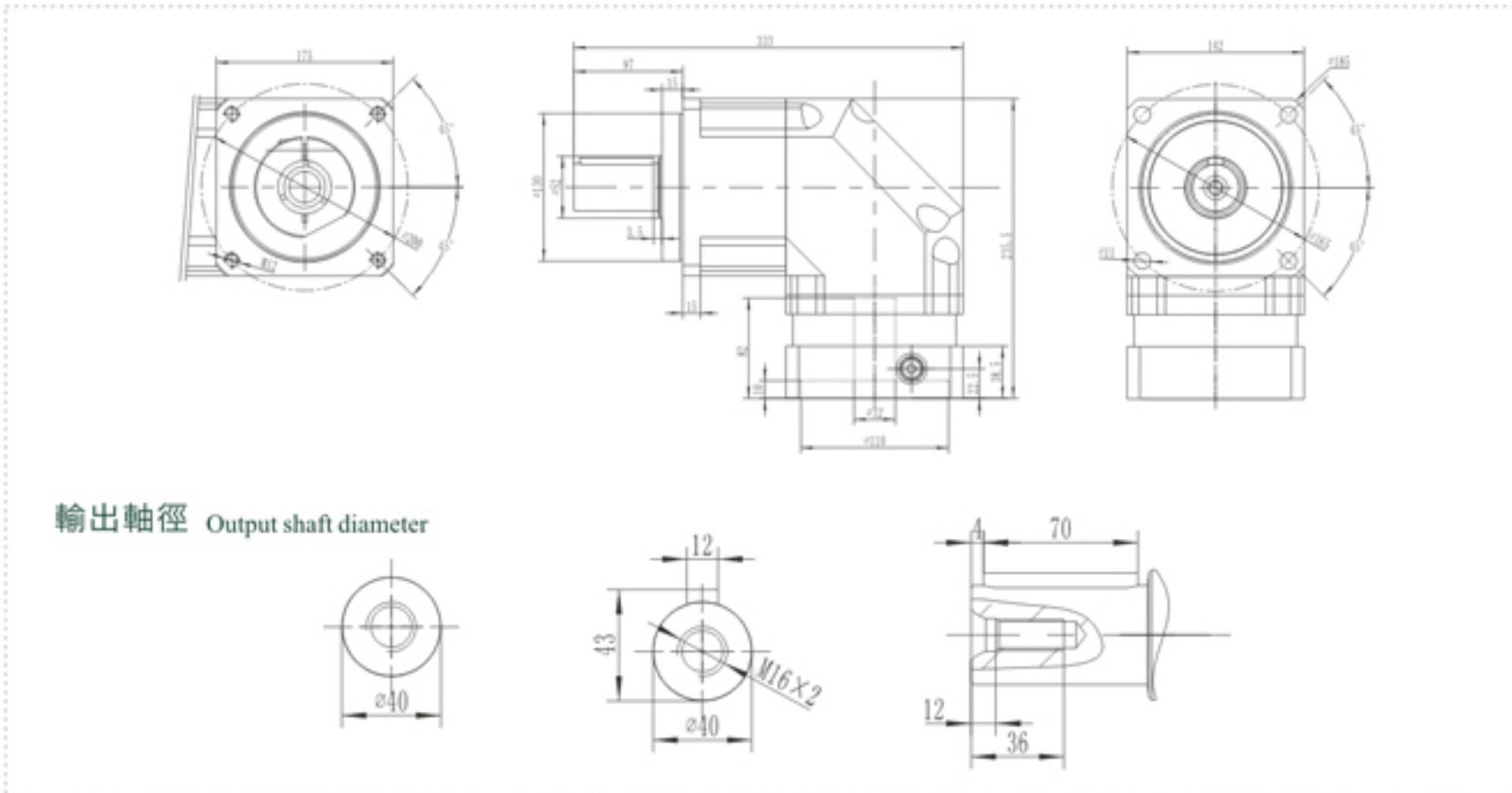
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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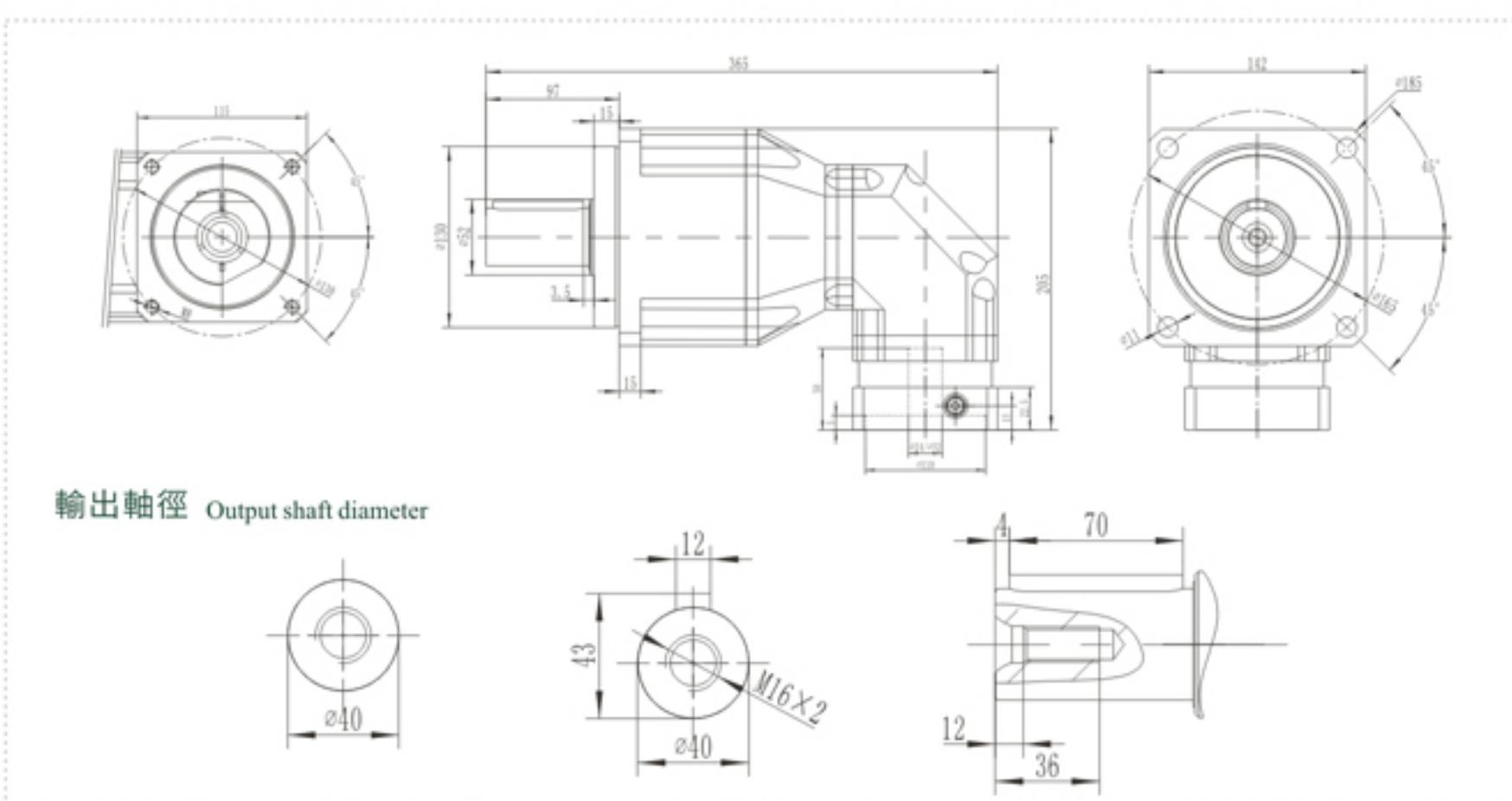
TBR142系列* TBR142 Series

外形尺寸表

TBR142單節* TBR142 One Stage



TBR142雙節* TBR142 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	342	520	650	600	550	500	-	450	-	-	650	600	550	500	650	600	550	500	450
急停扭矩 Emergency Stop Torque	T ₂	Nm																			T ₁ × 3
額定輸入轉速 Rated Input Speed	S ₁	rpm																			3000
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			6000
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			T ₁ × 3 × 60%
最大徑向力 Maximum Radial Force	F _a	N																			9400
最大軸向力 Maximum Axial Force	F _b	N																			4700
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			50
效率 Effectiveness	β	%																			≥92%
壽命 Life	-	h																			20000h
反饋噪音 Feedback Noise	-	dB																			≤70dB
重量 Weight	-	Kg																			27.5
P0																					≤4
回程間隙 Return Gap	P1	arcmin																			≤7
	P2																				≤9
使用溫度 Operating Temperature	-	°C																			-10°C-90°C
潤滑 Lubricating	-																				合成油脂 Synthetic Grease
防護等級 Protection Level	-																				IP65
安裝方向 Installation Direction	-																				任意方向 Any Direction
傳動慣量 Transmission Inertia	J	kg.cm ²																			6.84

依據說明:

- 變速比(i=S_{in}/S_{out})
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, i=10所得。

According to the instructions:

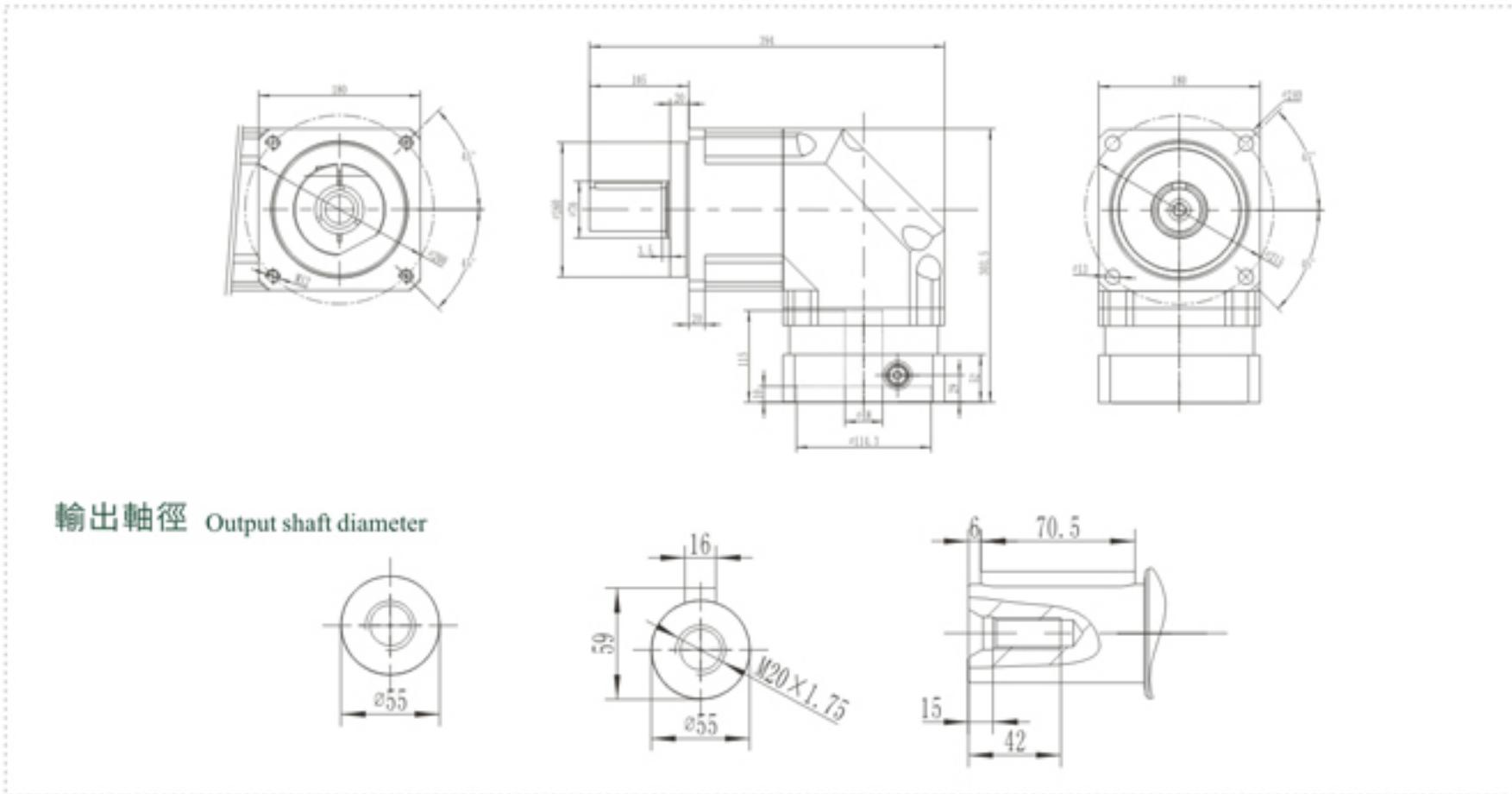
- Speed ratio (i=S_{in}/S_{out})
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, i=10.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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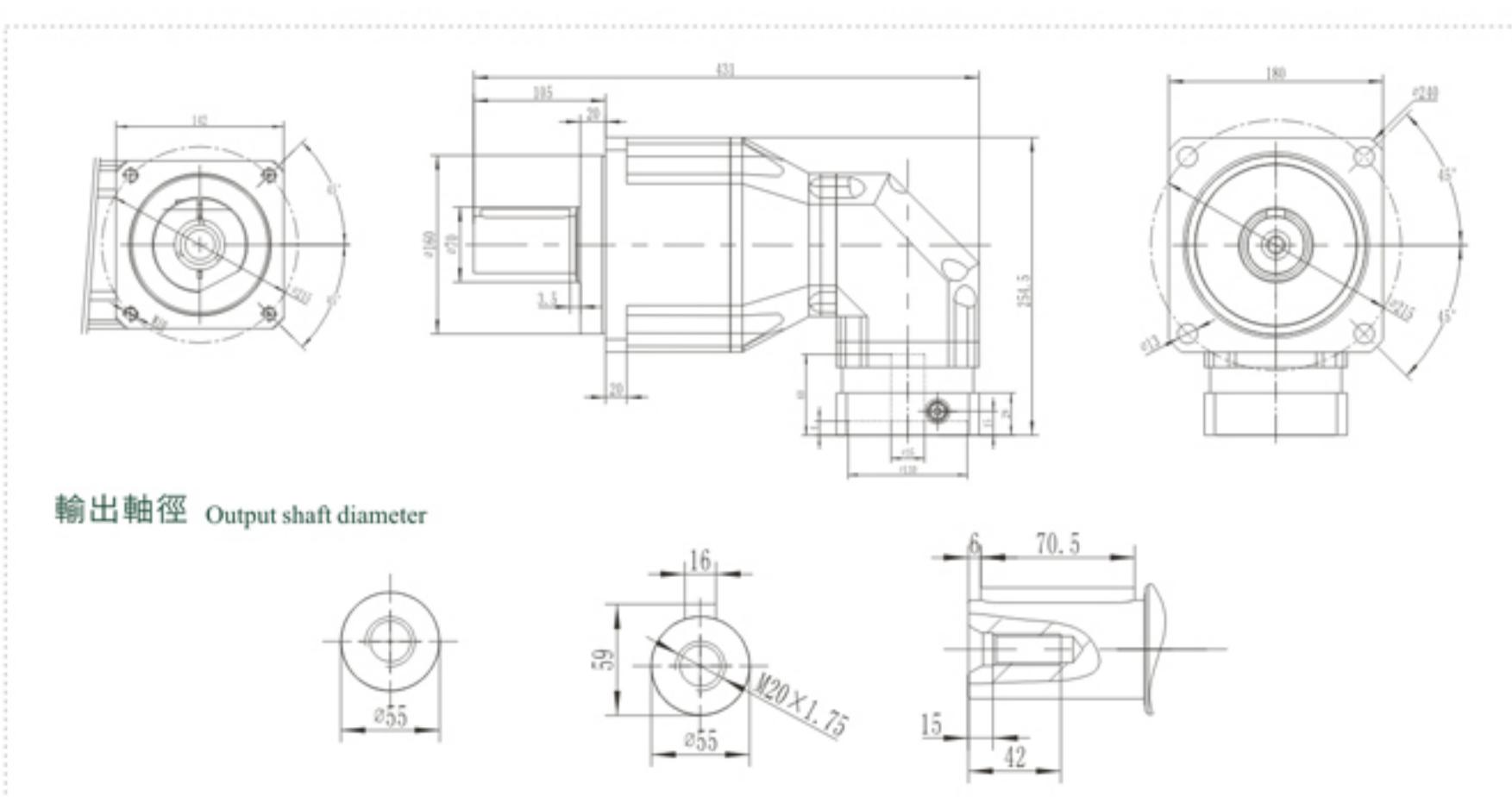
TBR180系列* TBR180 Series

外形尺寸表

TBR180單節* TBR180 One Stage



TBR180雙節* TBR180 Two Stage



性能資料 Performance data

TB系列減速機採用了標準化的法蘭界面，PSFN的安裝便捷安全，由於抗傾斜力矩很高，這款高精度行星減速機可以完成許多高難度任務。

The TB series reducer adopts a standardized flange interface. The installation of PSFN is convenient and safe. Due to the high anti-tilt torque, this high-precision planetary reducer can perform many difficult tasks.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	588	1040	1200	1100	1100	1000	-	900	-	-	1200	1100	1100	1000	1200	1100	1100	1000	900
急停扭矩 Emergency Stop Torque	T ₂	Nm																			T ₁ × 3
額定輸入轉速 Rated Input Speed	S ₁	rpm																			3000
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			6000
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			T ₁ × 3 × 60%
最大徑向力 Maximum Radial Force	F _a	N																			14500
最大軸向力 Maximum Axial Force	F _b	N																			7250
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			145
效率 Effectiveness	β	%																			≥92%
壽命 Life	-	h																			20000h
反饋噪音 Feedback Noise	-	dB																			≤72dB
重量 Weight	-	Kg																			54
回程間隙 Return Gap	P0																				≤2
	P1	arcmin																			≤4
	P2																				≤6
使用溫度 Operating Temperature	-	°C																			-10°C~90°C
潤滑 Lubricating	-																				合成油脂 Synthetic Grease
防護等級 Protection Level	-																				IP65
安裝方向 Installation Direction	-																				任意方向 Any Direction
傳動慣量 Transmission Inertia	J	kg.cm ²																			23.4

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

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精密行星減速機

Precision Planetary Reducer



其優勢在於：此款行星減速機即使在最高轉速時也能達到最高效率，十分適用
於高標準的生產工況，壹款真正強效且價格合理的產品。

The advantage is that this planetary reducer achieves maximum efficiency even at the highest speeds, making it
ideal for high-standard production conditions, a truly powerful and reasonably priced product.

TECHMECH DRIVES THE FUTURE

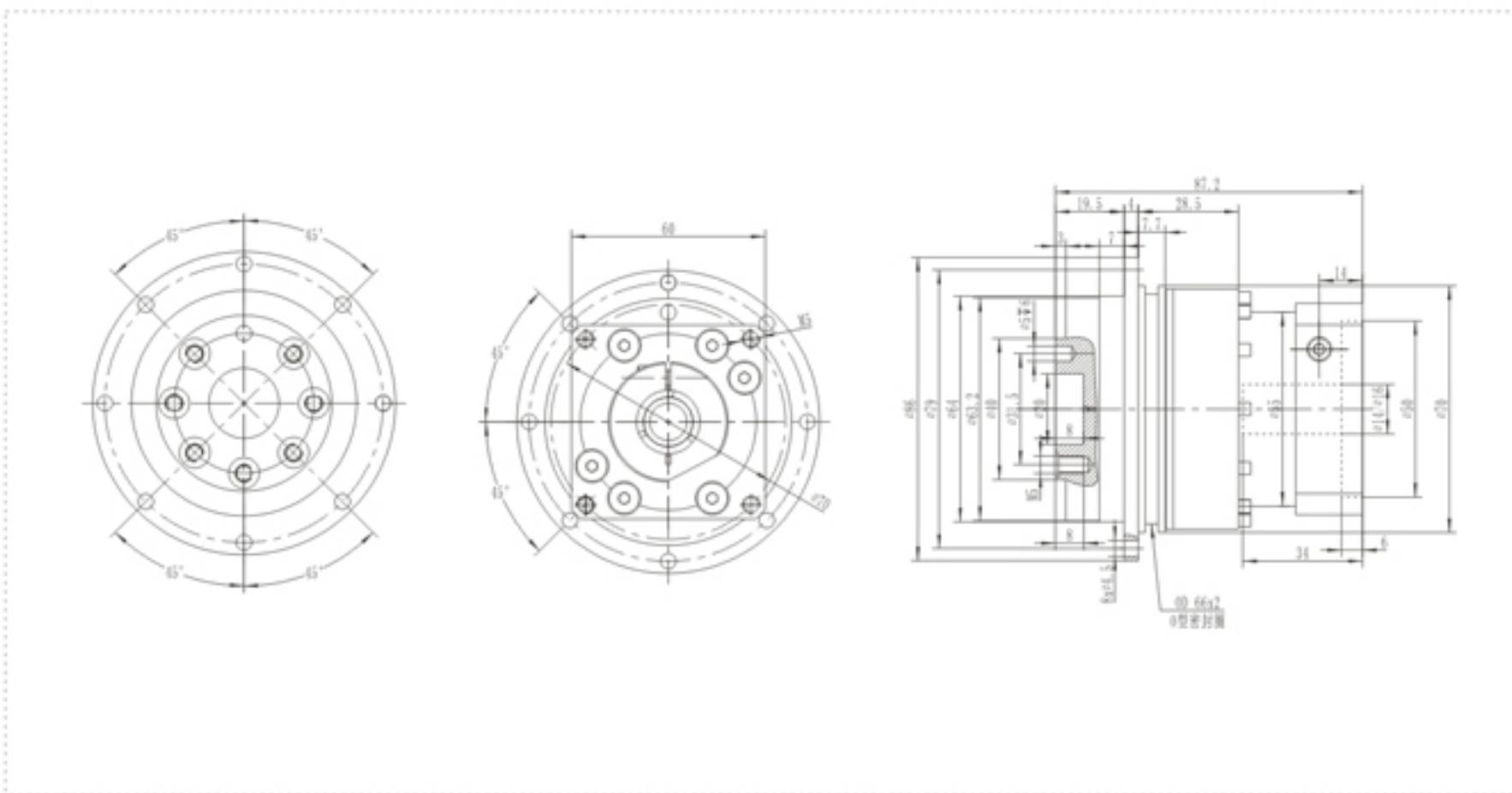
鉢科瑪格 傳動未來



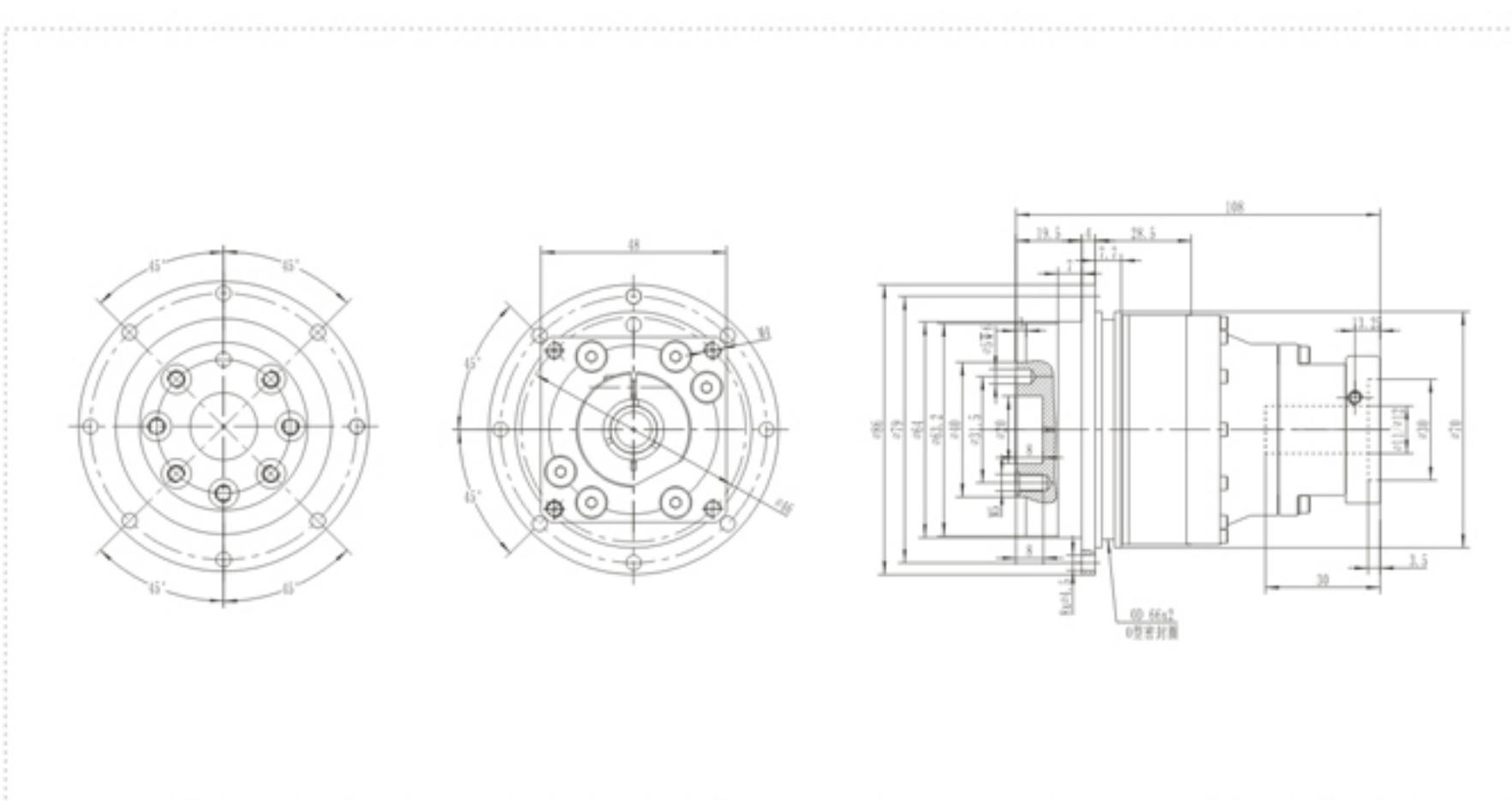
TD064系列* TD064 Single stage

外形尺寸表

TD064單節* TD064 One Stage



TD064雙節* TD064 Two Stage



性能資料 Performance data

TD系列減速機能滿足一些非常特殊的需求，高剛度、高性能和結構緊湊多變性是該產品最主要的特點，可任意搭配。

TD series reducers can meet some very special needs. High rigidity, high performance and compact structure are the most important features of this product.

速比 Speed Ratio	i	單節 One Stage				雙節 Two Stage						
		4	5	7	10	20	25	35	40	50	70	100
額定輸出力矩 Rated Output Torque	T ₁	Nm	48	60	50	40	48	60	50	48	60	40
急停扭矩 Emergency Stop Torque	T ₂	Nm			T ₁ ×3					T ₁ ×3		
額定輸入轉速 Rated Input Speed	S ₁	rpm			5000					5000		
最大輸入轉速 Maximum Input Speed	S ₂	rpm			10000					10000		
最大輸出力矩 Maximum Output Torque	T ₄	Nm			T ₁ ×3×60%					T ₁ ×3×60%		
最大彎曲力 Maximum Bending Force	F _a	N			125					125		
最大軸向力 Maximum Axial Force	F _b	N			1050					1050		
扭轉剛性 Torsional Rigidity	-	Nm/arcmin			13					13		
效率 Effectiveness	β	%			≥97%					≥94%		
壽命 Life	-	h			20000h					20000h		
反饋噪音 Feedback Noise	-	dB			≤58dB					≤58dB		
重量 Weight	-	Kg			1.3					1.9		
回程間隙 Return Gap	P0				≤1					≤3		
	P1	arcmin			≤3					≤5		
	P2				≤5					≤7		
使用溫度 Operating Temperature	-	°C			-10°C~90°C					-10°C~90°C		
潤滑 Lubricating	-				合成油脂 Synthetic Grease					合成油脂 Synthetic Grease		
防護等級 Protection Level	-				IP65					IP65		
安裝方向 Installation Direction	-				任意方向 Any Direction					任意方向 Any Direction		
傳動慣量 Transmission Inertia	J	kg.cm ²	0.14	0.13						0.03		

依據說明:

- 變速比(i=S_{in}/S_{out})
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, i=10所得。
- Speed ratio (i=S_{in}/S_{out})
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, i=10.

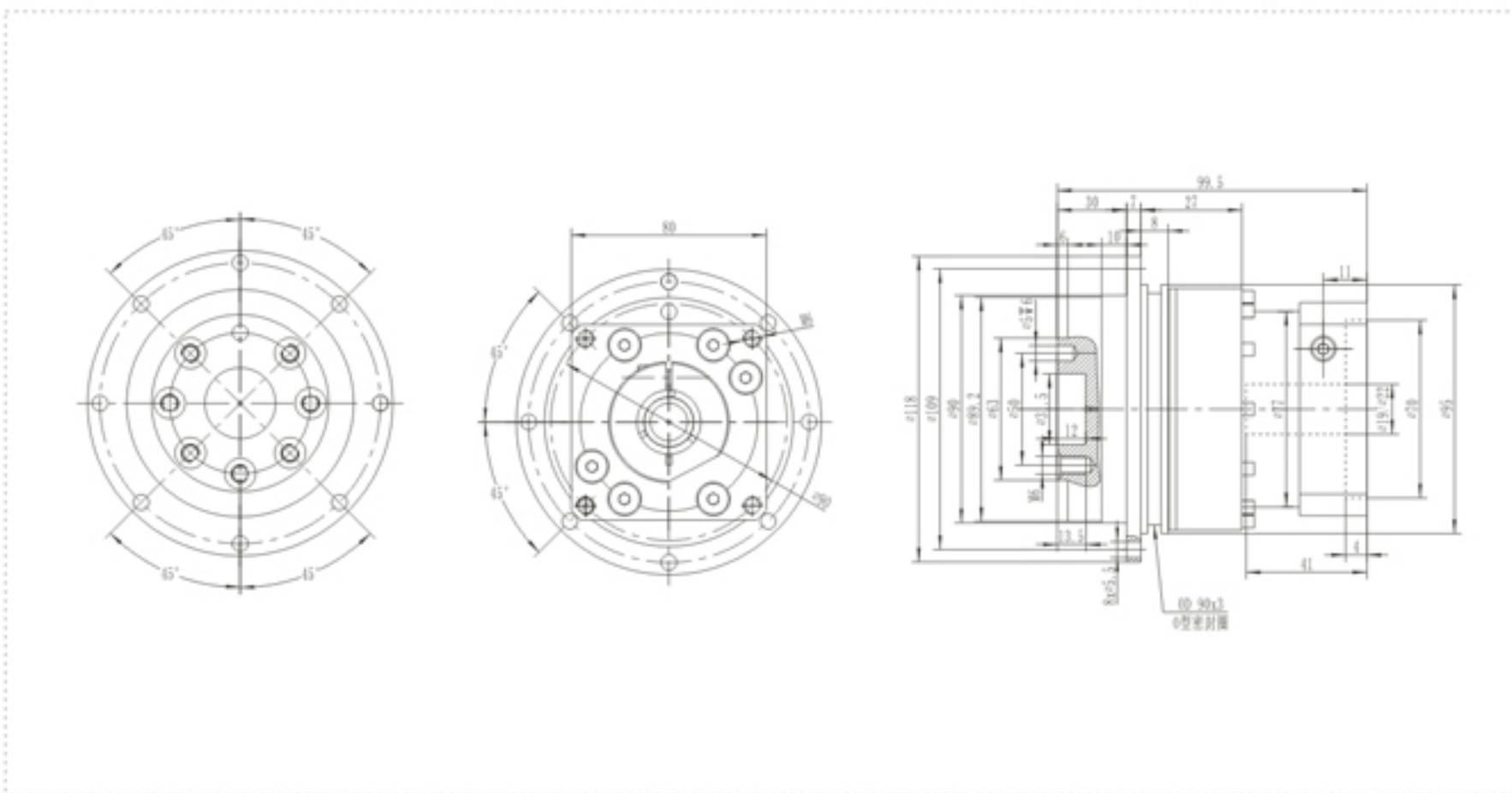
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According to the instructions:

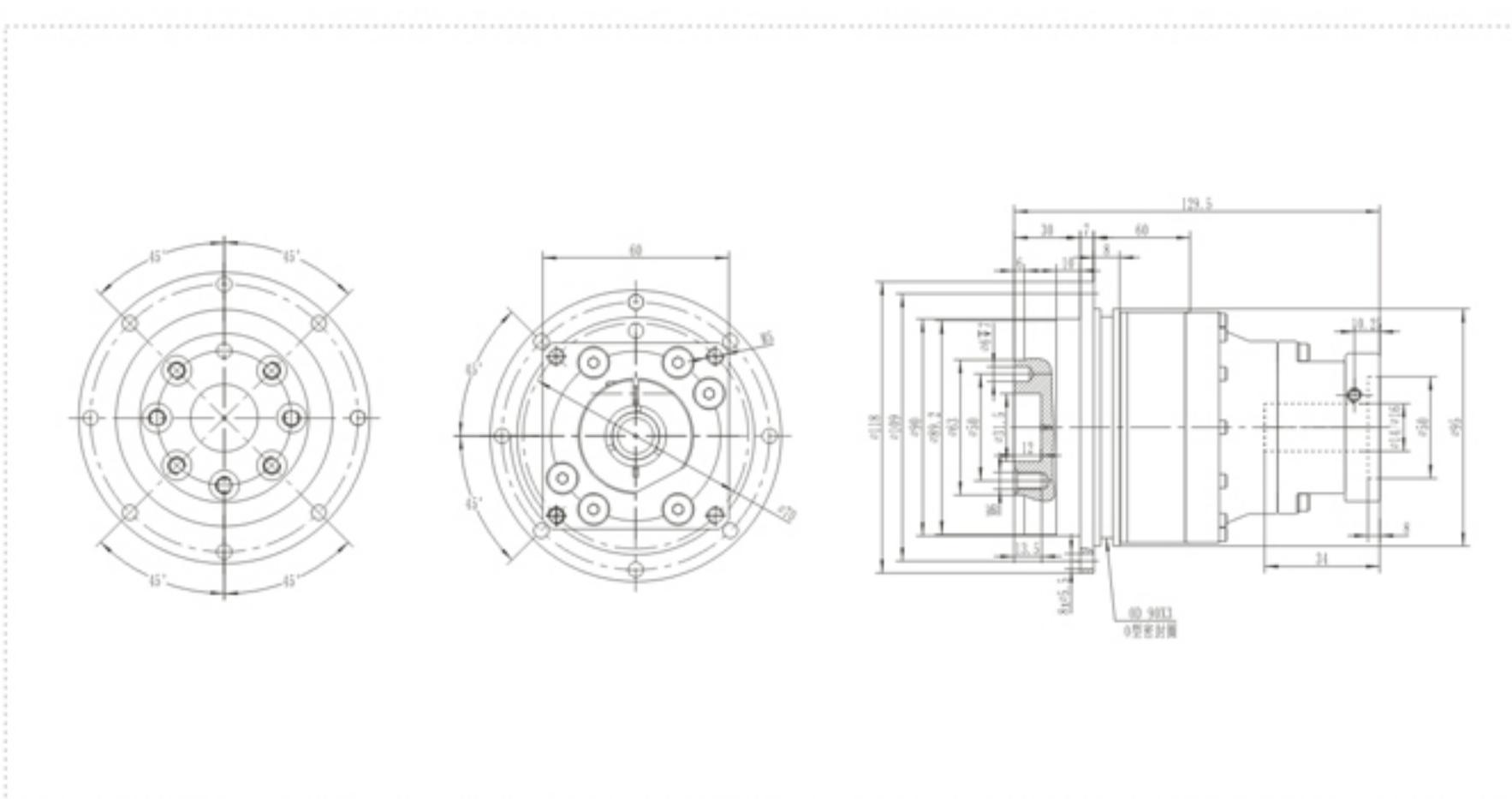
TD090系列* TD090 Single stage

外形尺寸表

TD090單節* TD090 One Stage



TD090雙節* TD090 Two Stage



性能資料 Performance data

TD系列減速機能滿足一些非常特殊的需求，高剛度、高性能和結構緊湊多變性是該產品最主要的特點，可任意搭配。

TD series reducers can meet some very special needs. High rigidity, high performance and compact structure are the most important features of this product.

速比 Speed Ratio	i	單節 One Stage					雙節 Two Stage					
		4	5	7	10	20	25	35	40	50	70	100
額定輸出力矩 Rated Output Torque	T ₁	Nm	130	160	140	100	130	160	140	130	160	100
急停扭矩 Emergency Stop Torque	T ₂	Nm			T ₁ ×3					T ₁ ×3		
額定輸入轉速 Rated Input Speed	S ₁	rpm			4000					4000		
最大輸入轉速 Maximum Input Speed	S ₂	rpm			8000					8000		
最大輸出力矩 Maximum Output Torque	T ₄	Nm			T ₁ ×3×60%					T ₁ ×3×60%		
最大彎曲力 Maximum Bending Force	F _a	N			235					235		
最大軸向力 Maximum Axial Force	F _b	N			2850					2850		
扭轉剛性 Torsional Rigidity	-	Nm/arcmin			31					31		
效率 Effectiveness	β	%			≥97%					≥97%		
壽命 Life	-	h			20000h					20000h		
反饋噪音 Feedback Noise	-	dB			≤63dB					≤63dB		
重量 Weight	-	Kg			3.0					3.7		
回程間隙 Return Gap	P0				≤1					≤3		
	P1	arcmin			≤3					≤5		
	P2				≤5					≤7		
使用溫度 Operating Temperature	-	°C			-10°C-90°C					-10°C-90°C		
潤滑 Lubricating	-				合成油脂 Synthetic Grease					合成油脂 Synthetic Grease		
防護等級 Protection Level	-				IP65					IP65		
安裝方向 Installation Direction	-				任意方向 Any Direction					任意方向 Any Direction		
傳動慣量 Transmission Inertia	J	kg.cm ²	0.51	0.47	0.45	0.44				0.13		

依據說明:

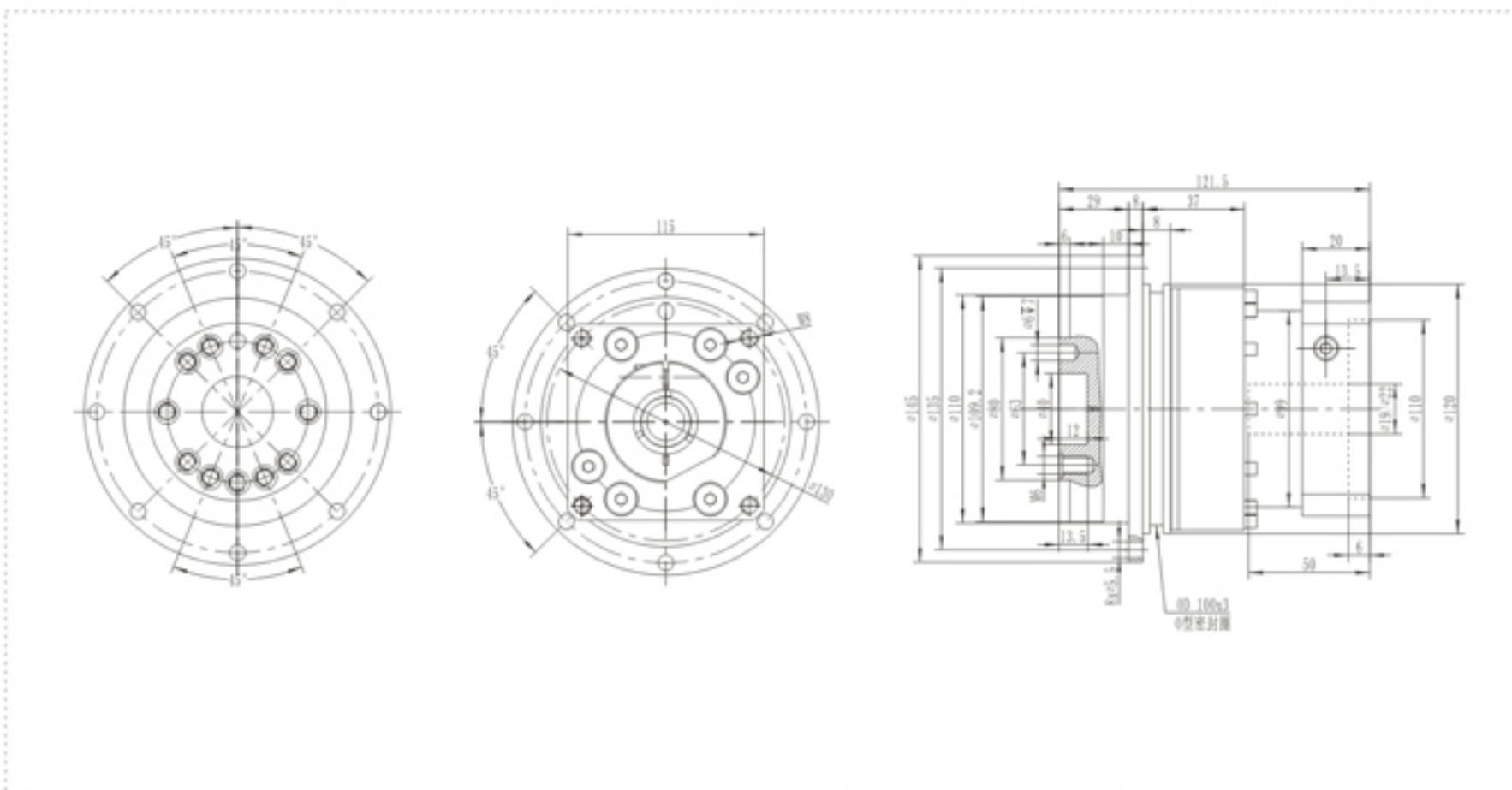
- 變速比(i=S_{in}/S_{out})
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, i=10所得。
- Speed ratio (i=S_{in}/S_{out})
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, i=10.

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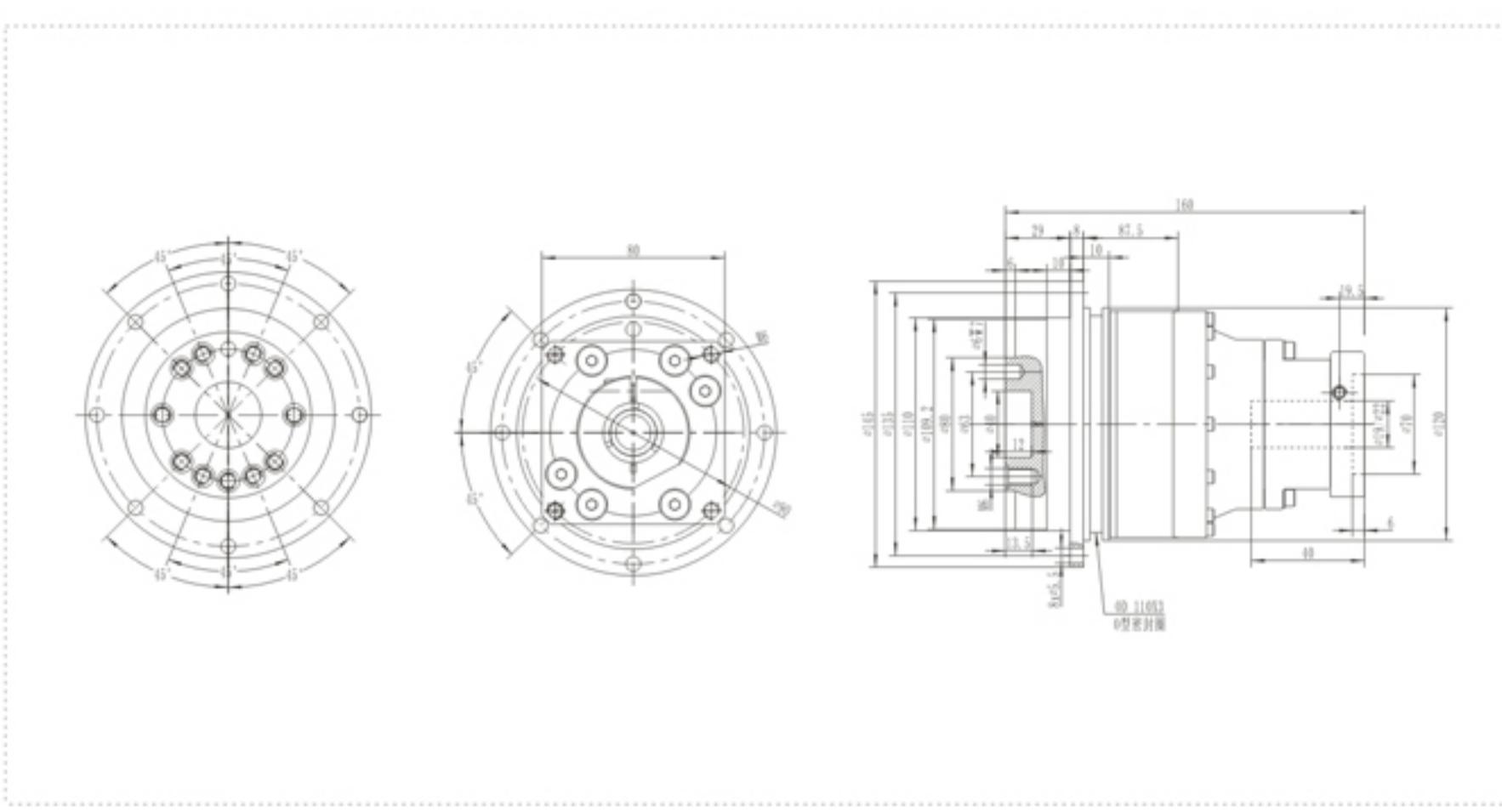
TD110系列* TD110 Single stage

外形尺寸表

TD110單節* TD110 One Stage



TD110雙節* TD110 Two Stage



性能資料 Performance data

TD系列減速機能滿足一些非常特殊的需求，高剛度、高性能和結構緊湊多變性是該產品最主要的特點，可任意搭配。

TD series reducers can meet some very special needs. High rigidity, high performance and compact structure are the most important features of this product.

速比 Speed Ratio	i	單節 One Stage				雙節 Two Stage						
		4	5	7	10	20	25	35	40	50	70	100
額定輸出力矩 Rated Output Torque	T ₁	Nm	270	330	300	230	270	330	300	270	330	300
急停扭矩 Emergency Stop Torque	T ₂	Nm	T ₁ ×3				T ₁ ×3					
額定輸入轉速 Rated Input Speed	S ₁	rpm	4000				4000					
最大輸入轉速 Maximum Input Speed	S ₂	rpm	8000				8000					
最大輸出力矩 Maximum Output Torque	T ₄	Nm	T ₁ ×3×60%				T ₁ ×3×60%					
最大彎曲力 Maximum Bending Force	F _a	N	430				430					
最大軸向力 Maximum Axial Force	F _b	N	2990				2990					
扭轉剛性 Torsional Rigidity	-	Nm/arcmin	82				82					
效率 Effectiveness	β	%	≥97%				≥94%					
壽命 Life	-	h	20000h				20000h					
反饋噪音 Feedback Noise	-	dB	≤60dB				≤60dB					
重量 Weight	-	Kg	7.7				9					
回程間隙 Return Gap	P0		≤1				≤3					
	P1	arcmin	≤3				≤5					
	P2		≤5				≤7					
使用溫度 Operating Temperature	-	°C	-10°C~90°C				-10°C~90°C					
潤滑 Lubricating	-		合成油脂 Synthetic Grease				合成油脂 Synthetic Grease					
防護等級 Protection Level	-		IP65				IP65					
安裝方向 Installation Direction	-		任意方向 Any Direction				任意方向 Any Direction					
傳動慣量 Transmission Inertia	J	kg.cm ²	2.87	2.71	2.62	2.57	0.47					0.44

依據說明:

- 變速比(i=S_{in}/S_{out})
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, i=10所得。

According to the instructions:

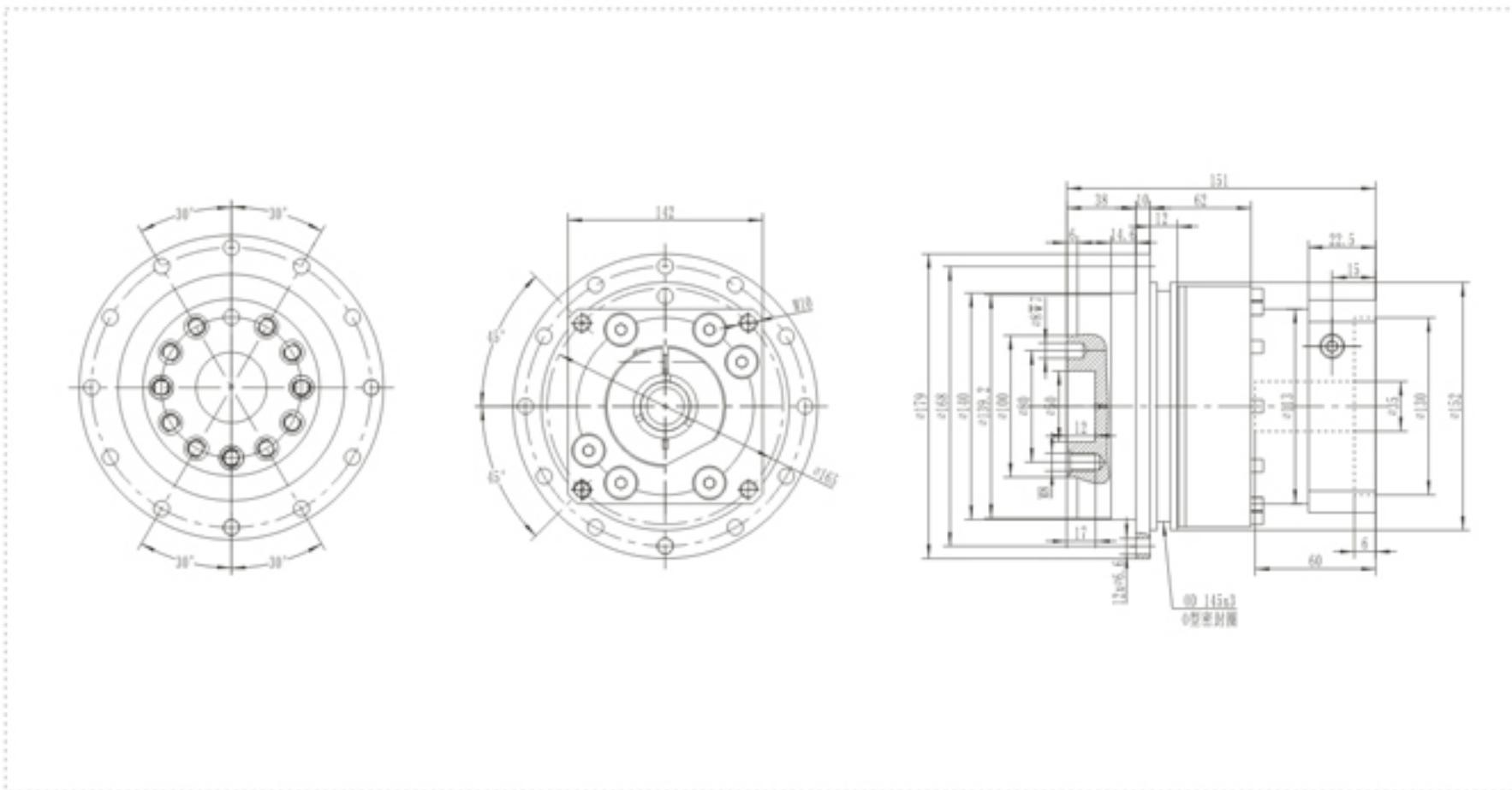
- Speed ratio (i=S_{in}/S_{out})
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, i=10.

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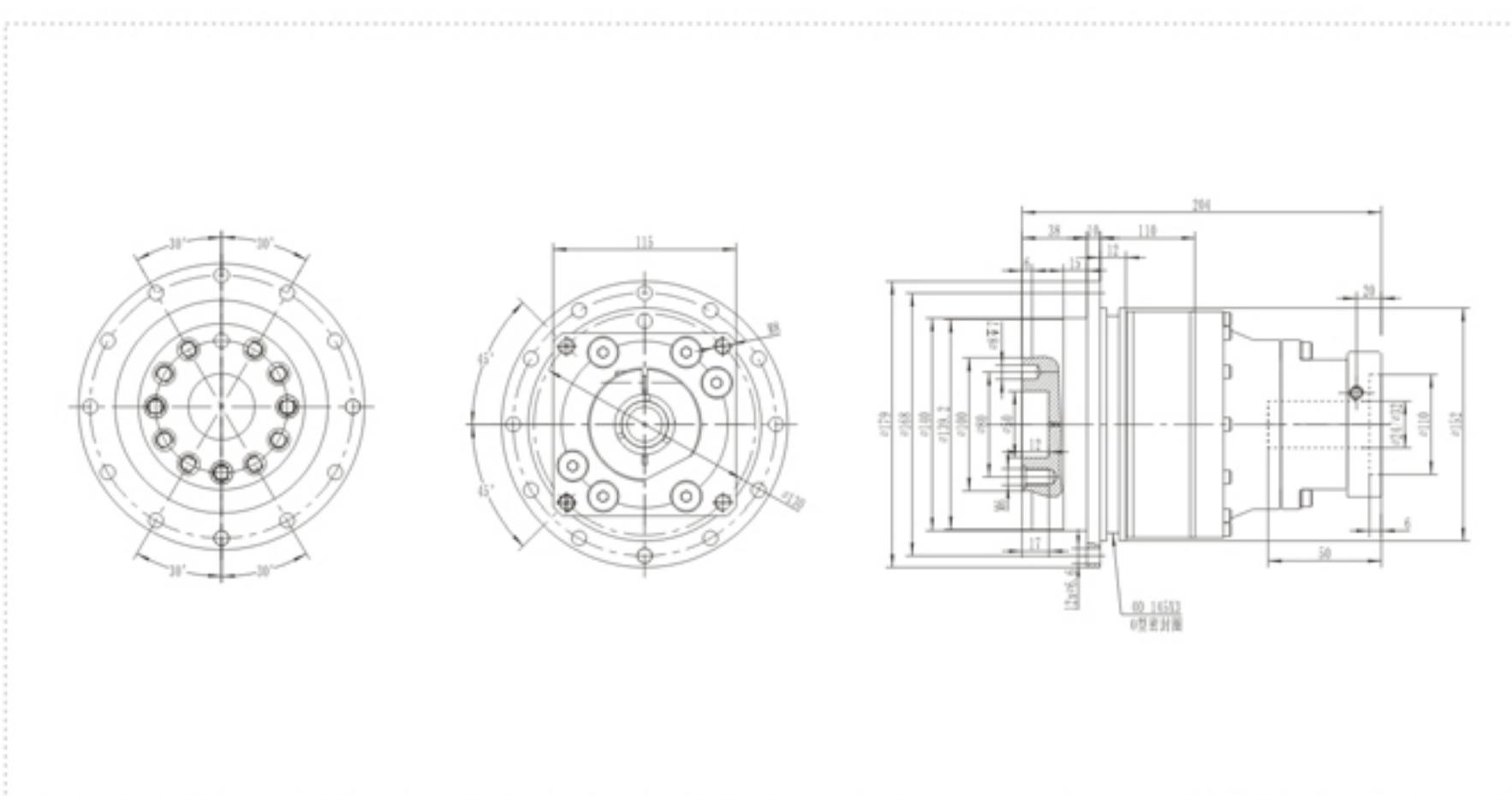
TD140系列* TD140 Single stage

外形尺寸表

TD140單節* TD140 One Stage



TD140雙節* TD140 Two Stage



性能資料 Performance data

TD系列減速機能滿足一些非常特殊的需求，高剛度、高性能和結構緊湊多變性是該產品最主要的特點，可任意搭配。

TD series reducers can meet some very special needs. High rigidity, high performance and compact structure are the most important features of this product.

速比 Speed Ratio	i	單節 One Stage				雙節 Two Stage						
		4	5	7	10	20	25	35	40	50	70	100
額定輸出力矩 Rated Output Torque	T ₁	Nm	560	650	550	450	560	650	550	560	650	450
急停扭矩 Emergency Stop Torque	T ₂	Nm			T ₁ ×3					T ₁ ×3		
額定輸入轉速 Rated Input Speed	S ₁	rpm			3000					3000		
最大輸入轉速 Maximum Input Speed	S ₂	rpm			6000					6000		
最大輸出力矩 Maximum Output Torque	T ₄	Nm			T ₁ ×3×60%					T ₁ ×3×60%		
最大彎曲力 Maximum Bending Force	F _a	N			1300					1300		
最大軸向力 Maximum Axial Force	F _b	N			10590					10590		
扭轉剛性 Torsional Rigidity	-	Nm/arcmin			151					151		
效率 Effectiveness	β	%			≥97%					≥94%		
壽命 Life	-	h			20000h					20000h		
反饋噪音 Feedback Noise	-	dB			≤65dB					≤65dB		
重量 Weight	-	Kg			11.9					15.9		
回程間隙 Return Gap	P0				≤1					≤3		
	P1	arcmin			≤3					≤5		
	P2				≤5					≤7		
使用溫度 Operating Temperature	-	°C			-10°C~90°C					-10°C~90°C		
潤滑 Lubricating	-				合成油脂 Synthetic Grease					合成油脂 Synthetic Grease		
防護等級 Protection Level	-				IP65					IP65		
安裝方向 Installation Direction	-				任意方向 Any Direction					任意方向 Any Direction		
傳動慣量 Transmission Inertia	J	kg.cm ²	7.54	7.42	7.14	7.03	2.71			2.57		

依據說明:

- 變速比(i=S_{in}/S_{out})
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, i=10所得。
- Speed ratio (i=S_{in}/S_{out})
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, i=10.

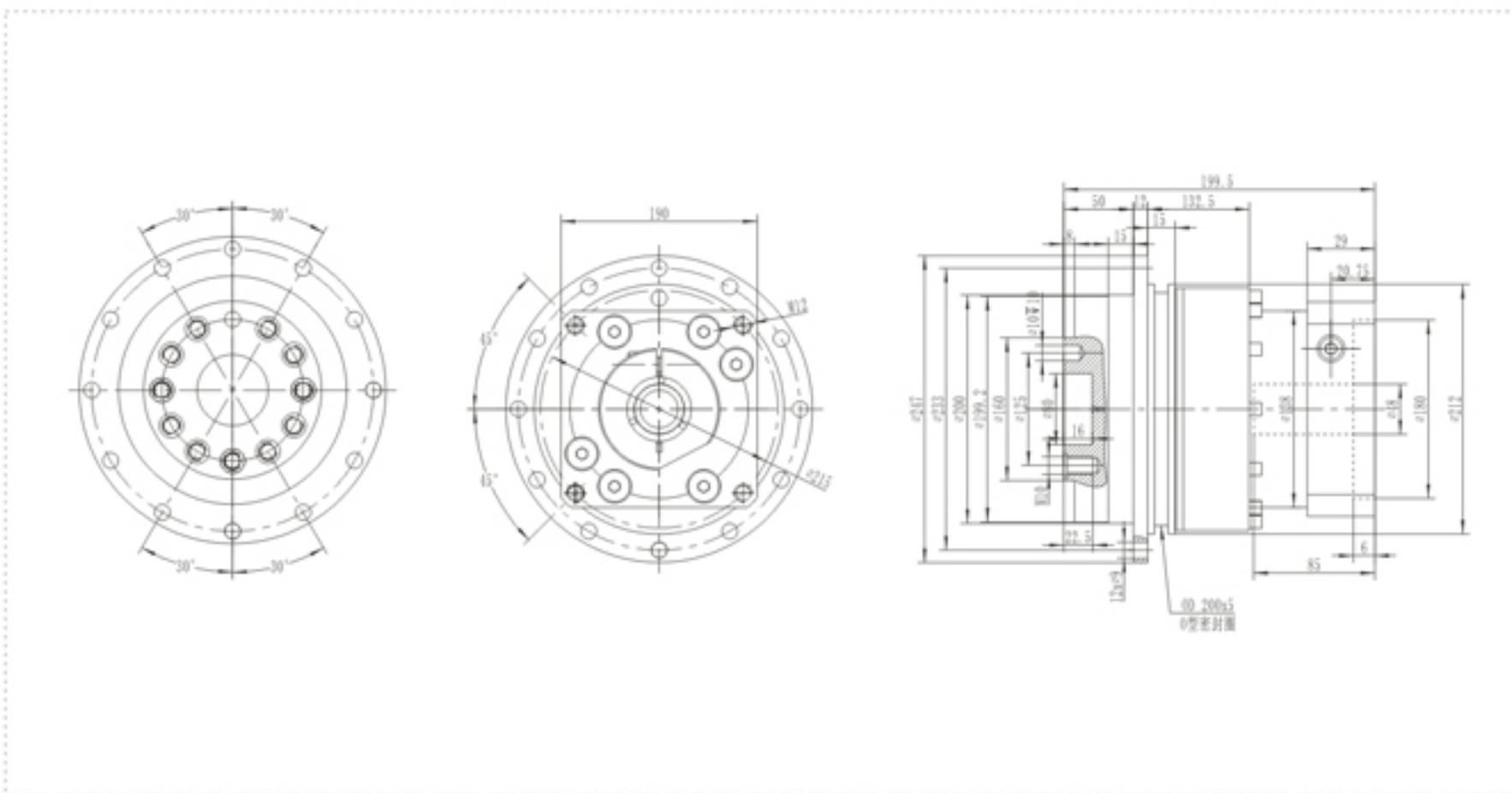
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According to the instructions:

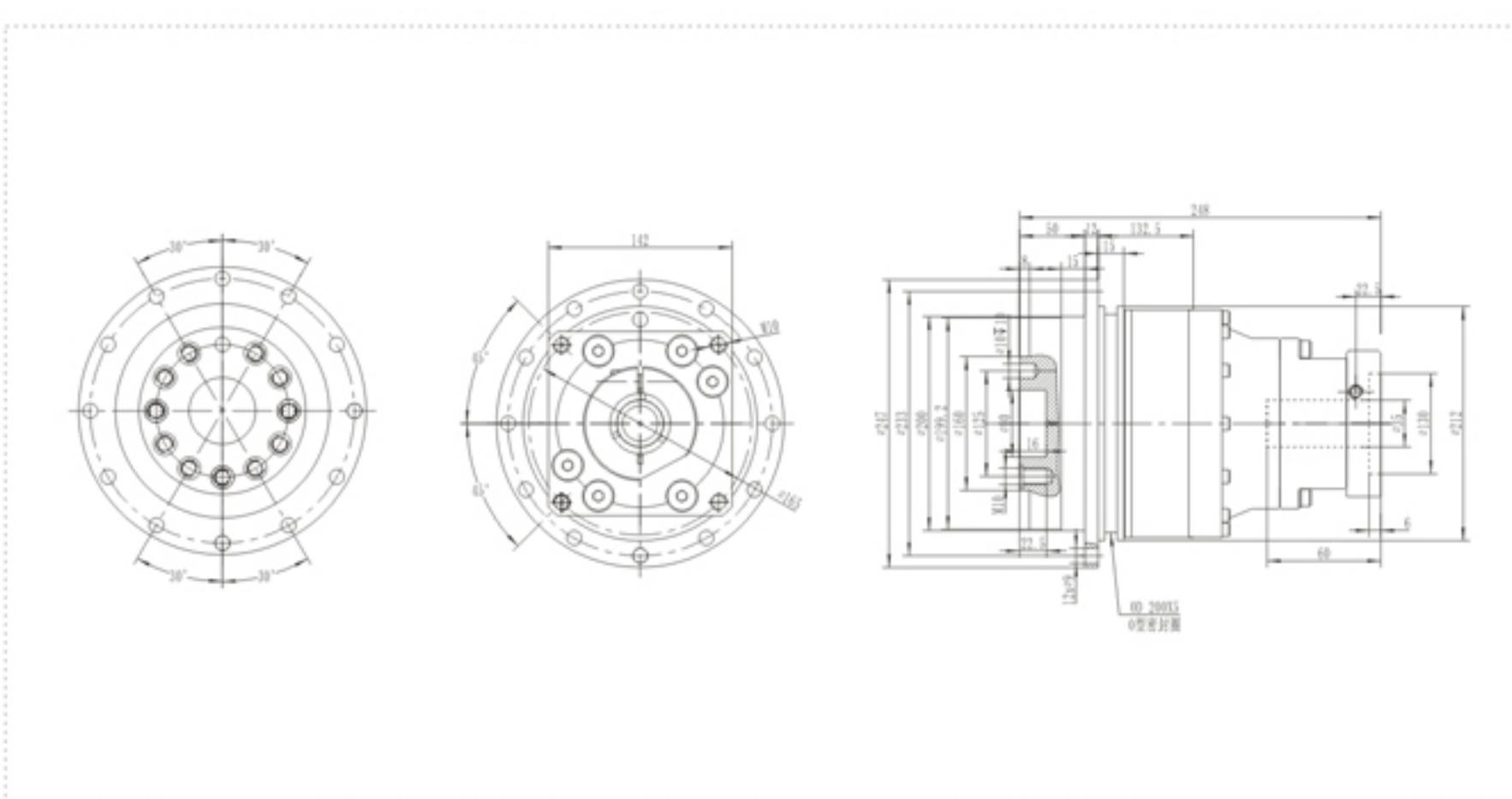
TD200系列* TD200 Single stage

外形尺寸表

TD200單節* TD200 One Stage



TD200雙節* TD200 Two Stage



性能資料 Performance data

TD系列減速機能滿足一些非常特殊的需求，高剛度、高性能和結構緊湊多變性是該產品最主要的特點，可任意搭配。

TD series reducers can meet some very special needs. High rigidity, high performance and compact structure are the most important features of this product.

速比 Speed Ratio	i	單節 One Stage				雙節 Two Stage						
		4	5	7	10	20	25	35	40	50	70	100
額定輸出力矩 Rated Output Torque	T ₁	Nm	1100	1200	1100	900	1100	1200	1100	1100	1200	1100
急停扭矩 Emergency Stop Torque	T ₂	Nm	T ₁ ×3				T ₁ ×3					
額定輸入轉速 Rated Input Speed	S ₁	rpm	3000				3000					
最大輸入轉速 Maximum Input Speed	S ₂	rpm	6000				6000					
最大輸出力矩 Maximum Output Torque	T ₄	Nm	T ₁ ×3×60%				T ₁ ×3×60%					
最大彎曲力 Maximum Bending Force	F _a	N	3064				3064					
最大軸向力 Maximum Axial Force	F _b	N	16660				16660					
扭轉剛性 Torsional Rigidity	-	Nm/arcmin	440				440					
效率 Effectiveness	β	%	≥97%				≥94%					
壽命 Life	-	h	20000h				20000h					
反饋噪音 Feedback Noise	-	dB	≤66dB				≤66dB					
重量 Weight	-	Kg	31.6				36.9					
回程間隙 Return Gap	P0		≤1				≤3					
	P1	arcmin	≤3				≤5					
	P2		≤5				≤7					
使用溫度 Operating Temperature	-	°C	-10°C~90°C				-10°C~90°C					
潤滑 Lubricating	-		合成油脂 Synthetic Grease				合成油脂 Synthetic Grease					
防護等級 Protection Level	-		IP65				IP65					
安裝方向 Installation Direction	-		任意方向 Any Direction				任意方向 Any Direction					
傳動慣量 Transmission Inertia	J	kg.cm ²	25	23.3	22.4	22.5	7.4					7

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

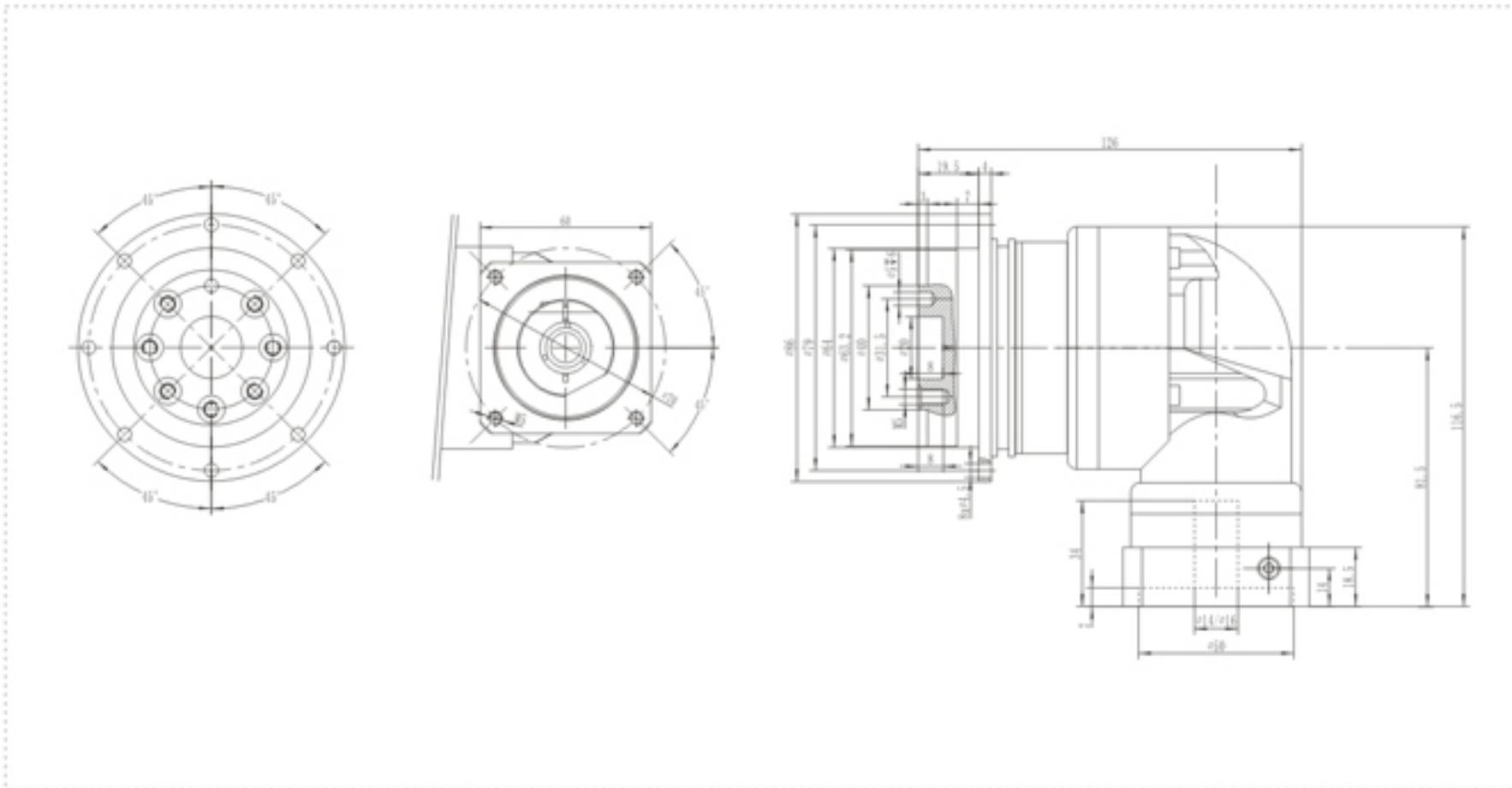
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

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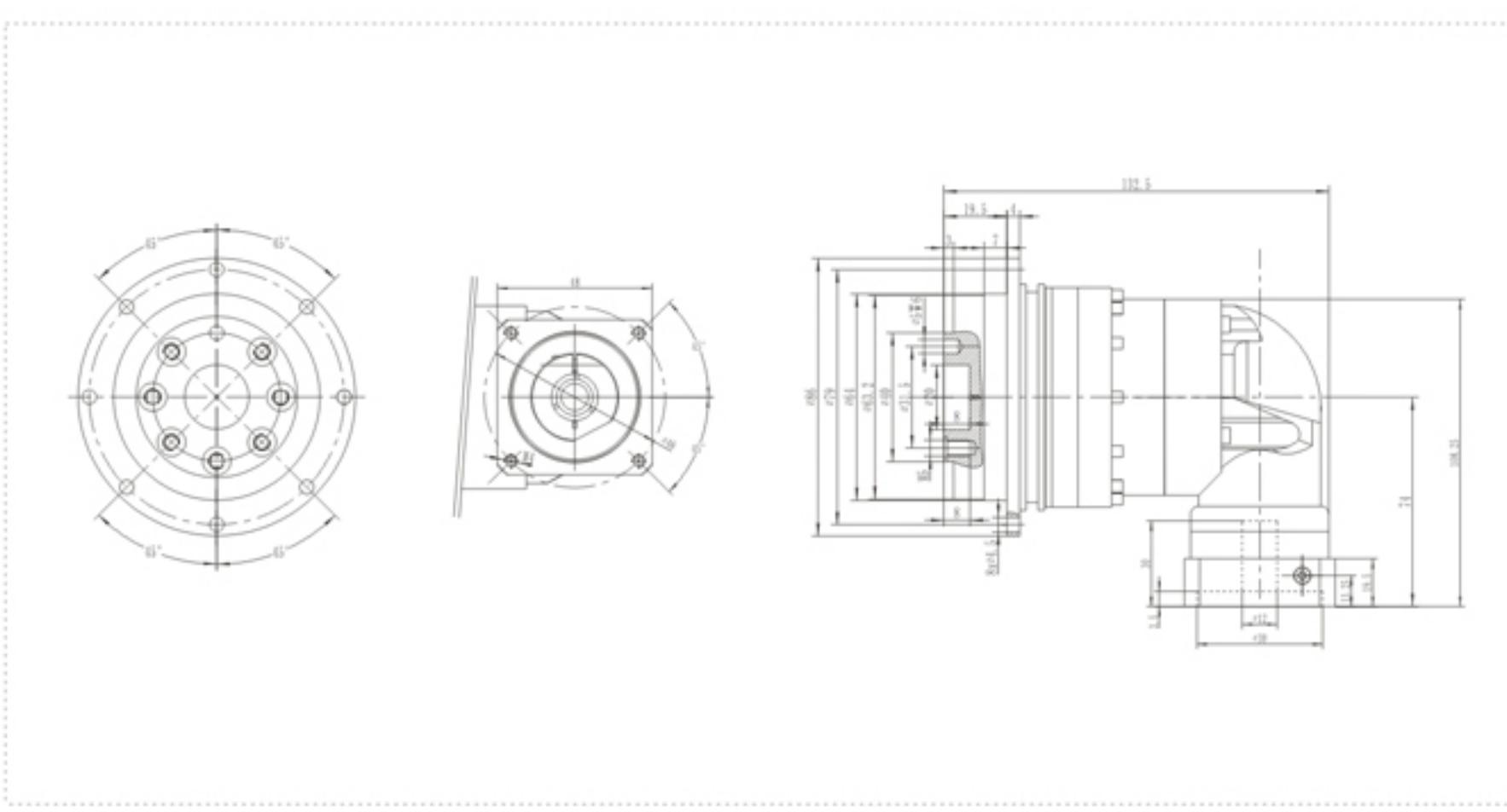
TDR064系列* TDR064 Single stage

外形尺寸表

TDR064單節* TDR064 One Stage



TDR064雙節* TDR064 Two Stage



性能資料 Performance data

TD系列減速機能滿足一些非常特殊的需求，高剛度、高性能和結構緊湊多變性是該產品最主要的特點，可任意搭配。

TD series reducers can meet some very special needs. High rigidity, high performance and compact structure are the most important features of this product.

速比 Speed Ratio	i	單節 One Stage					雙節 Two Stage					
		4	5	7	10	20	25	35	40	50	70	100
額定輸出力矩 Rated Output Torque	T_1	Nm	48	60	50	60	-	60	50	48	60	50
急停扭矩 Emergency Stop Torque	T_2	Nm	$T_1 \times 3$					$T_1 \times 3$				
額定輸入轉速 Rated Input Speed	S_1	rpm	5000					5000				
最大輸入轉速 Maximum Input Speed	S_2	rpm	10000					10000				
最大輸出力矩 Maximum Output Torque	T_4	Nm	$T_1 \times 3 \times 60\%$					$T_1 \times 3 \times 60\%$				
最大彎曲力 Maximum Bending Force	F_a	N	125					125				
最大軸向力 Maximum Axial Force	F_b	N	1050					1050				
扭轉剛性 Torsional Rigidity	-	Nm/arcmin	13					13				
效率 Effectiveness	β	%	≥95%					≥92%				
壽命 Life	-	h	30000h					30000h				
反饋噪音 Feedback Noise	-	dB	≤63dB					≤63dB				
重量 Weight	-	Kg	2.1					1.9				
回程間隙 Return Gap	P_0		-					-				
	P_1	arcmin	≤4					≤7				
	P_2		≤6					≤9				
使用溫度 Operating Temperature	-	°C	-10°C~90°C					-10°C~90°C				
潤滑 Lubricating	-		合成油脂 Synthetic Grease					合成油脂 Synthetic Grease				
防護等級 Protection Level	-		IP65					IP65				
安裝方向 Installation Direction	-		任意方向 Any Direction					任意方向 Any Direction				
傳動慣量 Transmission Inertia	J	kg.cm²	0.09					0.09				

依據說明:

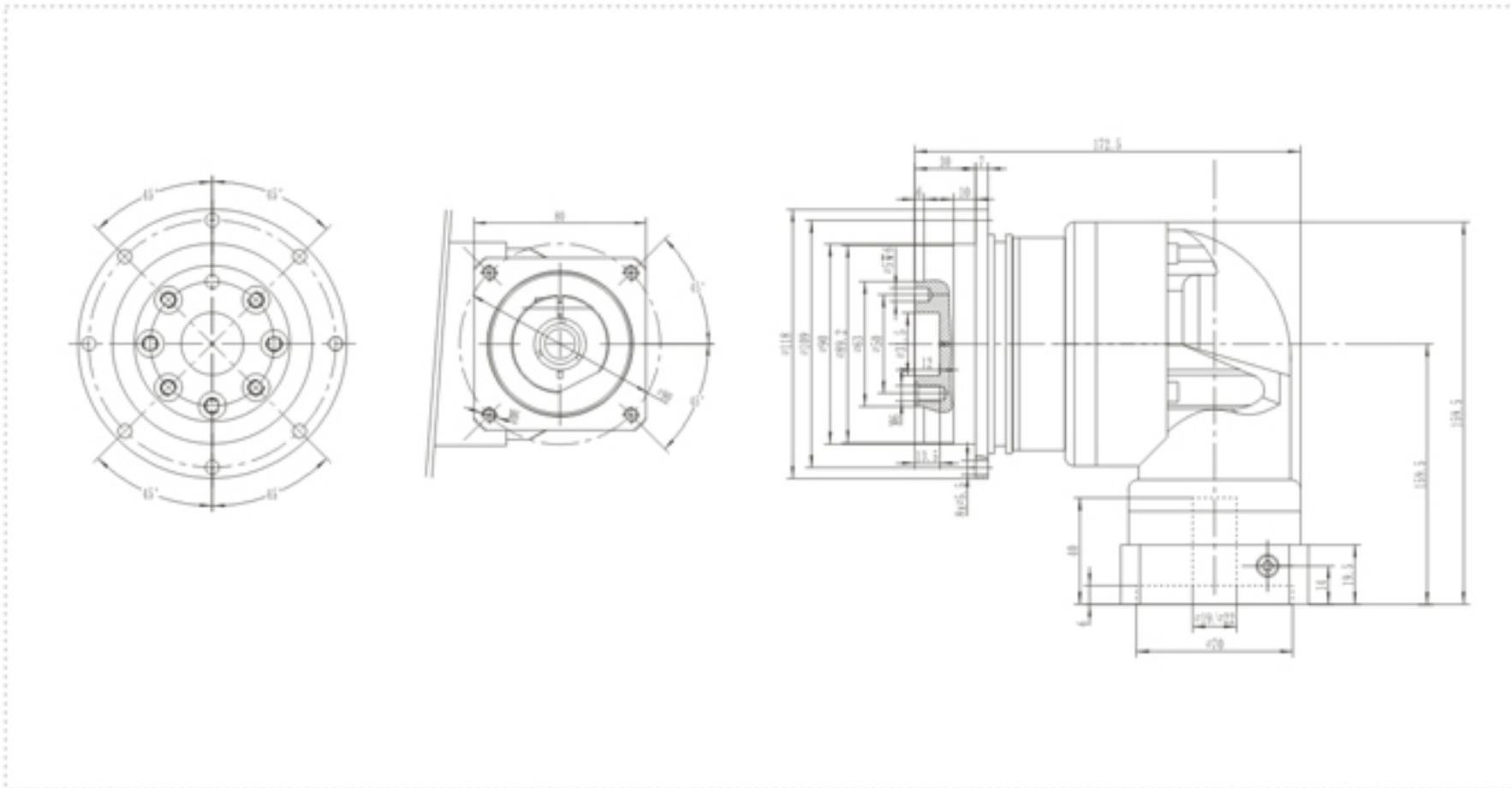
- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

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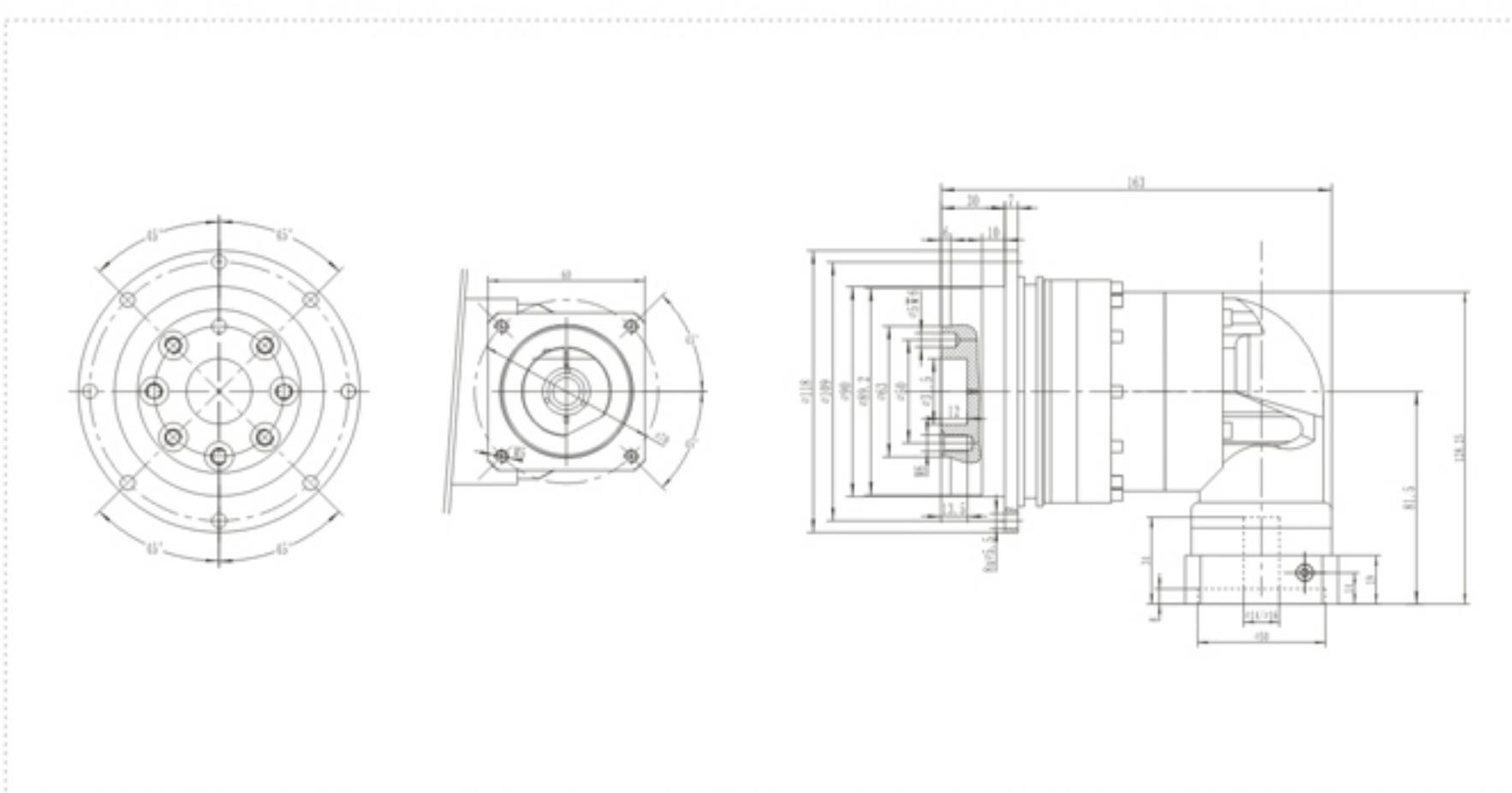
TDR090系列* TDR090 Single stage

外形尺寸表

TDR090單節* TDR090 One Stage



TDR090雙節* TDR090 Two Stage



性能資料 Performance data

TD系列減速機能滿足一些非常特殊的需求，高剛度、高性能和結構緊湊多變性是該產品最主要的特點，可任意搭配。

TD series reducers can meet some very special needs. High rigidity, high performance and compact structure are the most important features of this product.

速比 Speed Ratio	i	單節 One Stage					雙節 Two Stage					
		4	5	7	10	20	25	35	40	50	70	100
額定輸出力矩 Rated Output Torque	T_1	Nm	130	160	140	100	130	160	140	130	160	100
急停扭矩 Emergency Stop Torque	T_2	Nm	$T_1 \times 3$					$T_1 \times 3$				
額定輸入轉速 Rated Input Speed	S_i	rpm	4000					4000				
最大輸入轉速 Maximum Input Speed	S_o	rpm	8000					8000				
最大輸出力矩 Maximum Output Torque	T_o	Nm	$T_1 \times 3 \times 60\%$					$T_1 \times 3 \times 60\%$				
最大彎曲力 Maximum Bending Force	F_a	N	235					235				
最大軸向力 Maximum Axial Force	F_b	N	2850					2850				
扭轉剛性 Torsional Rigidity	-	Nm/arcmin	31					31				
效率 Effectiveness	β	%	≥95%					≥92%				
壽命 Life	-	h	30000h					30000h				
反饋噪音 Feedback Noise	-	dB	≤65dB					≤65dB				
重量 Weight	-	Kg	5.9					4.5				
回程間隙 Return Gap	P_0		≤2					≤4				
	P_1	arcmin	≤4					≤7				
	P_2		≤6					≤9				
使用溫度 Operating Temperature	-	°C	-10°C~90°C					-10°C~90°C				
潤滑 Lubricating	-		合成油脂 Synthetic Grease					合成油脂 Synthetic Grease				
防護等級 Protection Level	-		IP65					IP65				
安裝方向 Installation Direction	-		任意方向 Any Direction					任意方向 Any Direction				
傳動慣量 Transmission Inertia	J	kg.cm²	2.25					2.25				

依據說明:

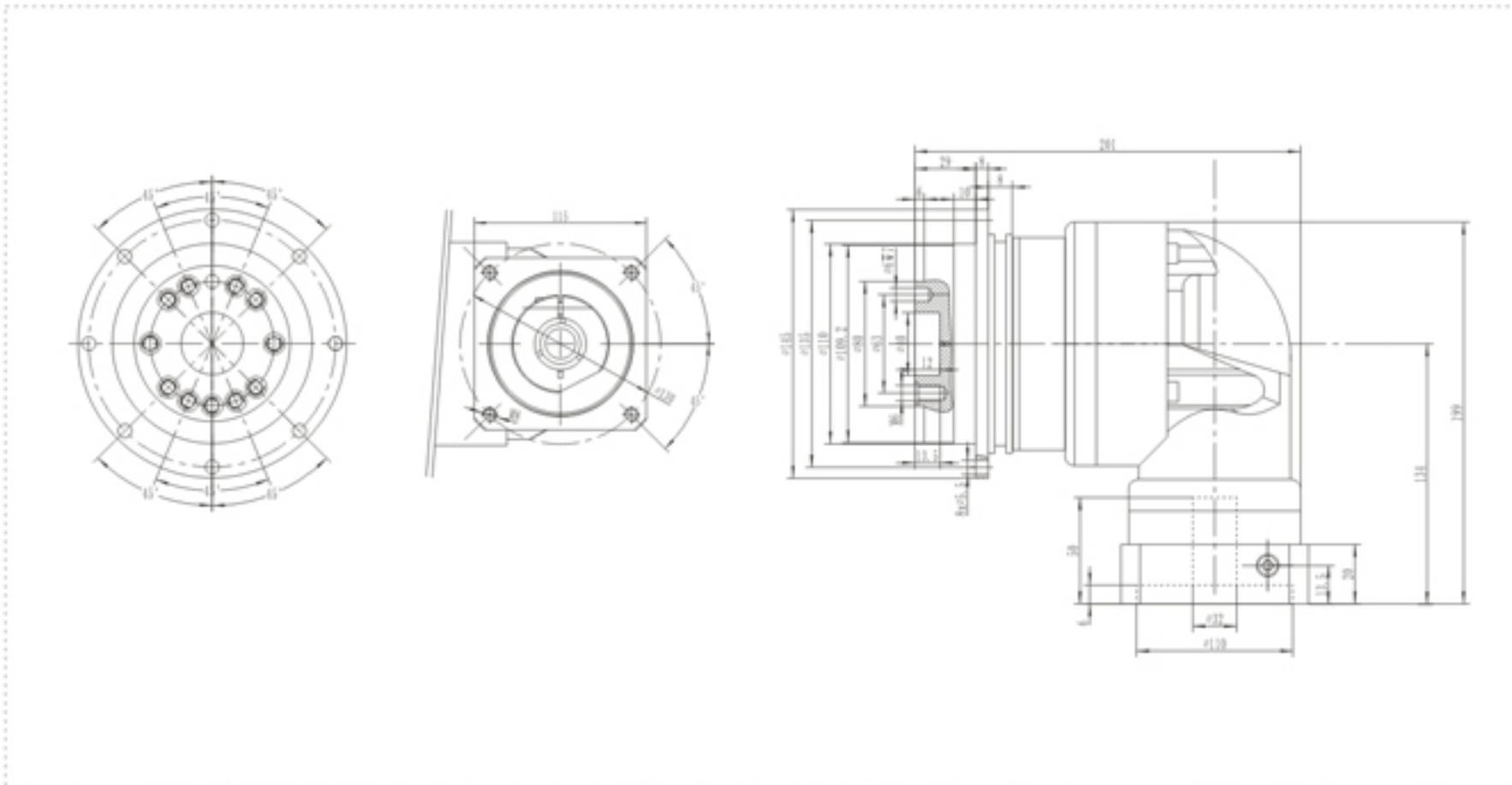
- 變速比($i = S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

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All product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

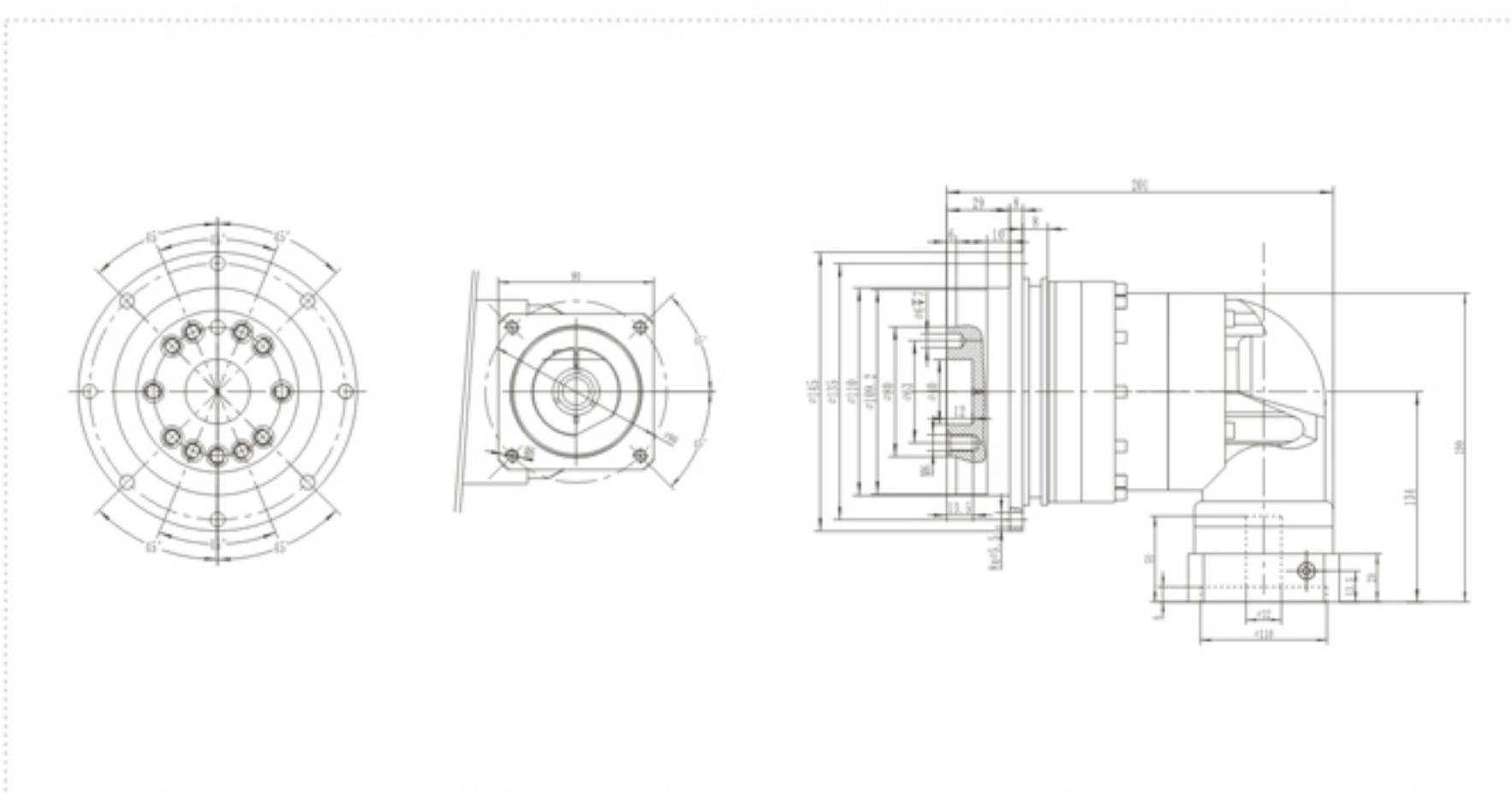
TDR110系列* TDR110 Single stage

外形尺寸表

TDR110單節* TDR110 One Stage



TDR110雙節* TDR110 Two Stage



性能資料 Performance data

TD系列減速機能滿足一些非常特殊的需求，高剛度、高性能和結構緊湊多變性是該產品最主要的特點，可任意搭配。

TD series reducers can meet some very special needs. High rigidity, high performance and compact structure are the most important features of this product.

速比 Speed Ratio	i	單節 One Stage					雙節 Two Stage					
		4	5	7	10	20	25	35	40	50	70	100
額定輸出力矩 Rated Output Torque	T_1	Nm	270	330	300	230	270	330	300	270	330	230
急停扭矩 Emergency Stop Torque	T_2	Nm	$T_1 \times 3$					$T_1 \times 3$				
額定輸入轉速 Rated Input Speed	S_1	rpm	4000					4000				
最大輸入轉速 Maximum Input Speed	S_2	rpm	8000					8000				
最大輸出力矩 Maximum Output Torque	T_4	Nm	$T_1 \times 3 \times 60\%$					$T_1 \times 3 \times 60\%$				
最大彎曲力 Maximum Bending Force	F_a	N	430					430				
最大軸向力 Maximum Axial Force	F_b	N	2990					2990				
扭轉剛性 Torsional Rigidity	-	Nm/arcmin	82					82				
效率 Effectiveness	β	%	≥95%					≥92%				
壽命 Life	-	h	30000h					30000h				
反饋噪音 Feedback Noise	-	dB	≤65dB					≤68dB				
重量 Weight	-	Kg	10.5					9.8				
回程間隙 Return Gap	P_0		≤2					≤4				
	P_1	arcmin	≤4					≤7				
	P_2		≤6					≤9				
使用溫度 Operating Temperature	-	°C	-10°C-90°C					-10°C-90°C				
潤滑 Lubricating	-		合成油脂 Synthetic Grease					合成油脂 Synthetic Grease				
防護等級 Protection Level	-		IP65					IP65				
安裝方向 Installation Direction	-		任意方向 Any Direction					任意方向 Any Direction				
傳動慣量 Transmission Inertia	J	kg.cm²	6.84					2.25				

依據說明:

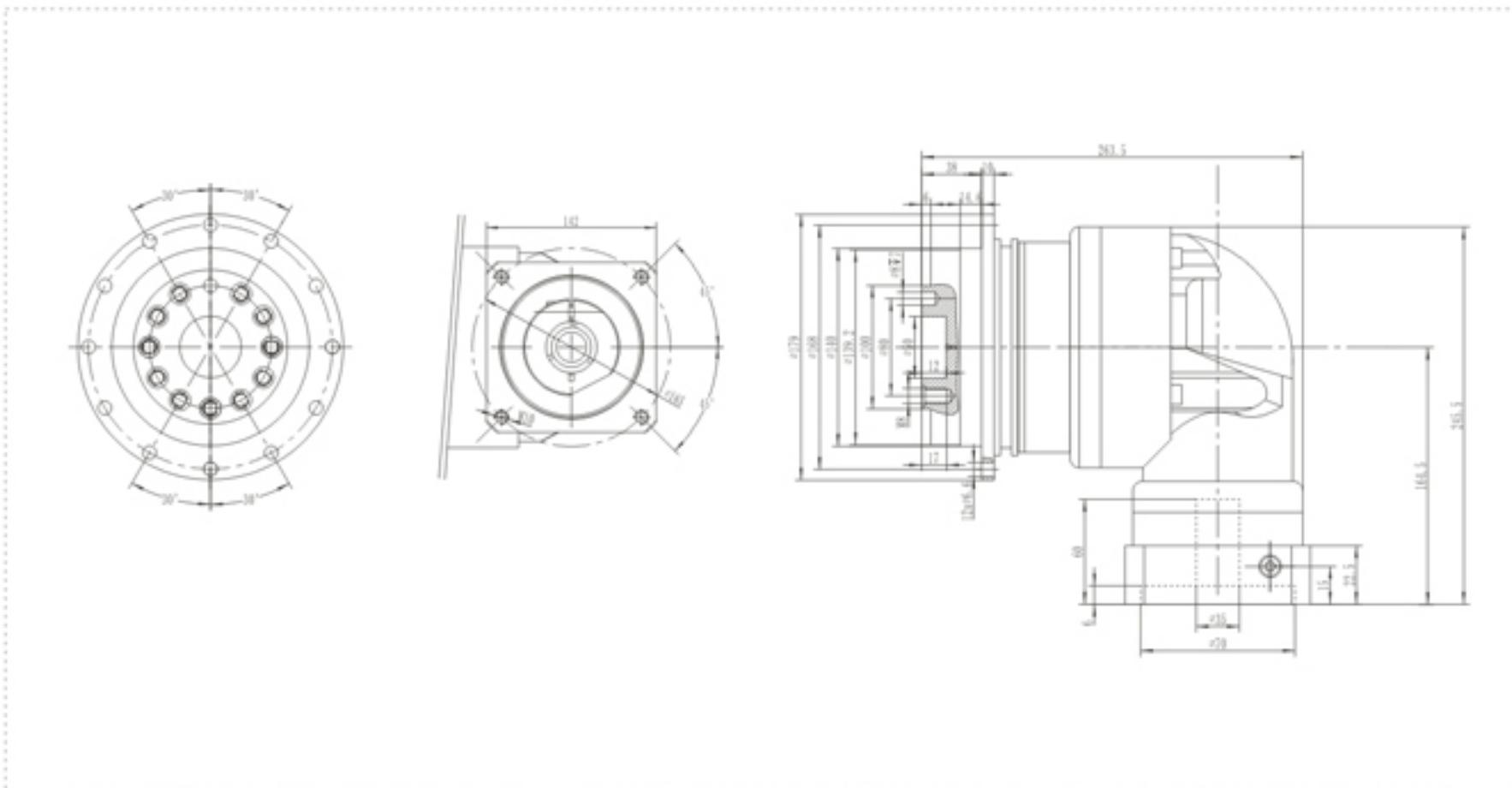
- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

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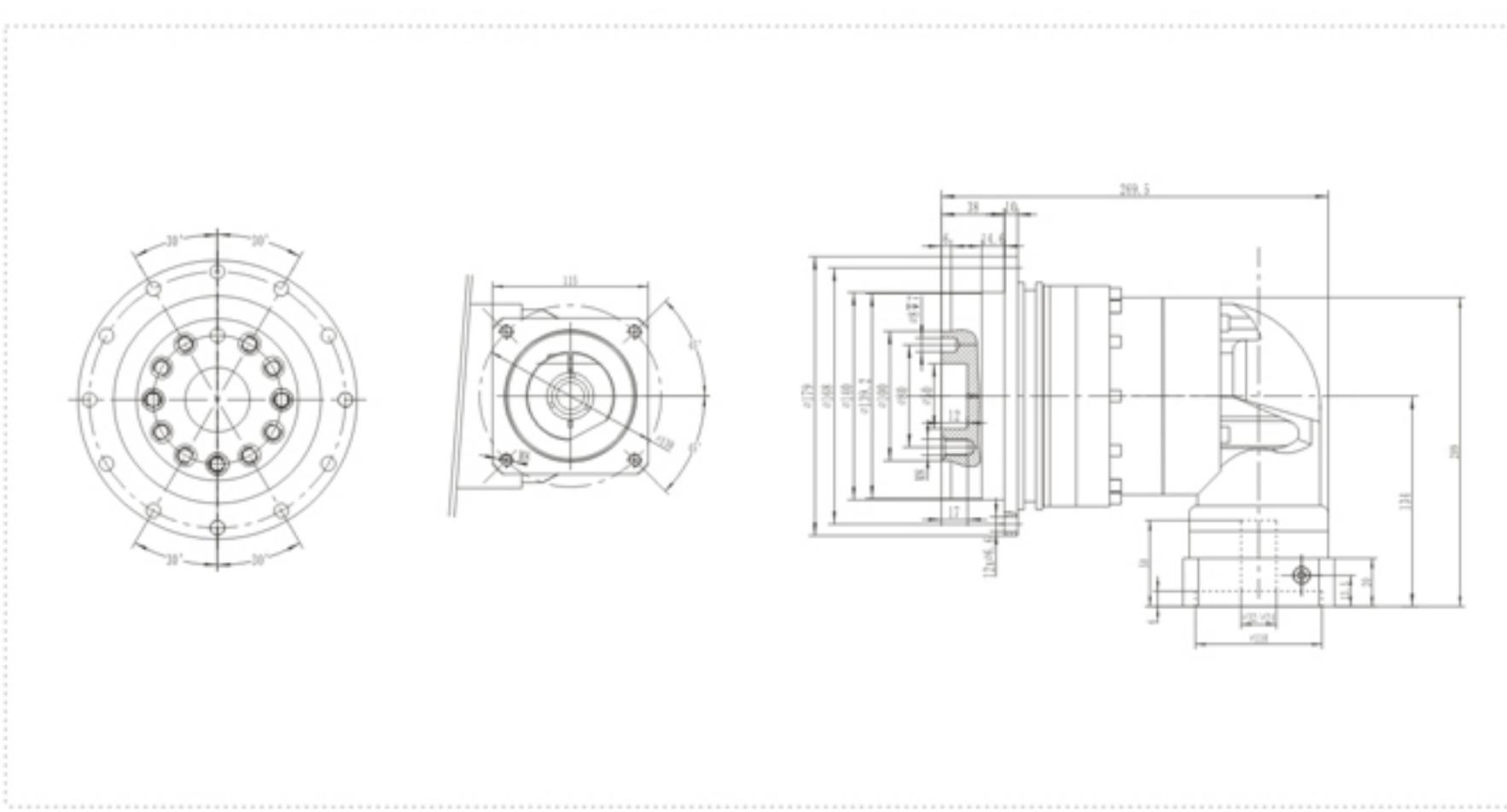
TDR140系列* TDR140 Single stage

外形尺寸表

TDR140單節* TDR140 One Stage



TDR140雙節* TDR140 Two Stage



性能資料 Performance data

TD系列減速機能滿足一些非常特殊的需求，高剛度、高性能和結構緊湊多變性是該產品最主要的特點，可任意搭配。

TD series reducers can meet some very special needs. High rigidity, high performance and compact structure are the most important features of this product.

速比 Speed Ratio	i	單節 One Stage				雙節 Two Stage						
		4	5	7	10	20	25	35	40	50	70	100
額定輸出力矩 Rated Output Torque	T_1	Nm	560	650	550	450	560	650	550	560	650	450
急停扭矩 Emergency Stop Torque	T_2	Nm	$T_1 \times 3$				$T_1 \times 3$					
額定輸入轉速 Rated Input Speed	S_1	rpm	3000				3000					
最大輸入轉速 Maximum Input Speed	S_2	rpm	6000				6000					
最大輸出力矩 Maximum Output Torque	T_4	Nm	$T_1 \times 3 \times 60\%$				$T_1 \times 3 \times 60\%$					
最大彎曲力 Maximum Bending Force	F_a	N	1300				1300					
最大軸向力 Maximum Axial Force	F_b	N	10590				10590					
扭轉剛性 Torsional Rigidity	-	Nm/arcmin	151				151					
效率 Effectiveness	β	%	≥95%				≥92%					
壽命 Life	-	h	30000h				30000h					
反饋噪音 Feedback Noise	-	dB	≤70dB				≤70dB					
重量 Weight	-	Kg	21.9				20.1					
回程間隙 Return Gap	P_0		≤2				≤4					
	P_1	arcmin	≤4				≤7					
	P_2		≤6				≤9					
使用溫度 Operating Temperature	-	°C	-10°C~90°C				-10°C~90°C					
潤滑 Lubricating	-		合成油脂 Synthetic Grease				合成油脂 Synthetic Grease					
防護等級 Protection Level	-		IP65				IP65					
安裝方向 Installation Direction	-		任意方向 Any Direction				任意方向 Any Direction					
傳動慣量 Transmission Inertia	J	kg.cm²	23.4				6.84					

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

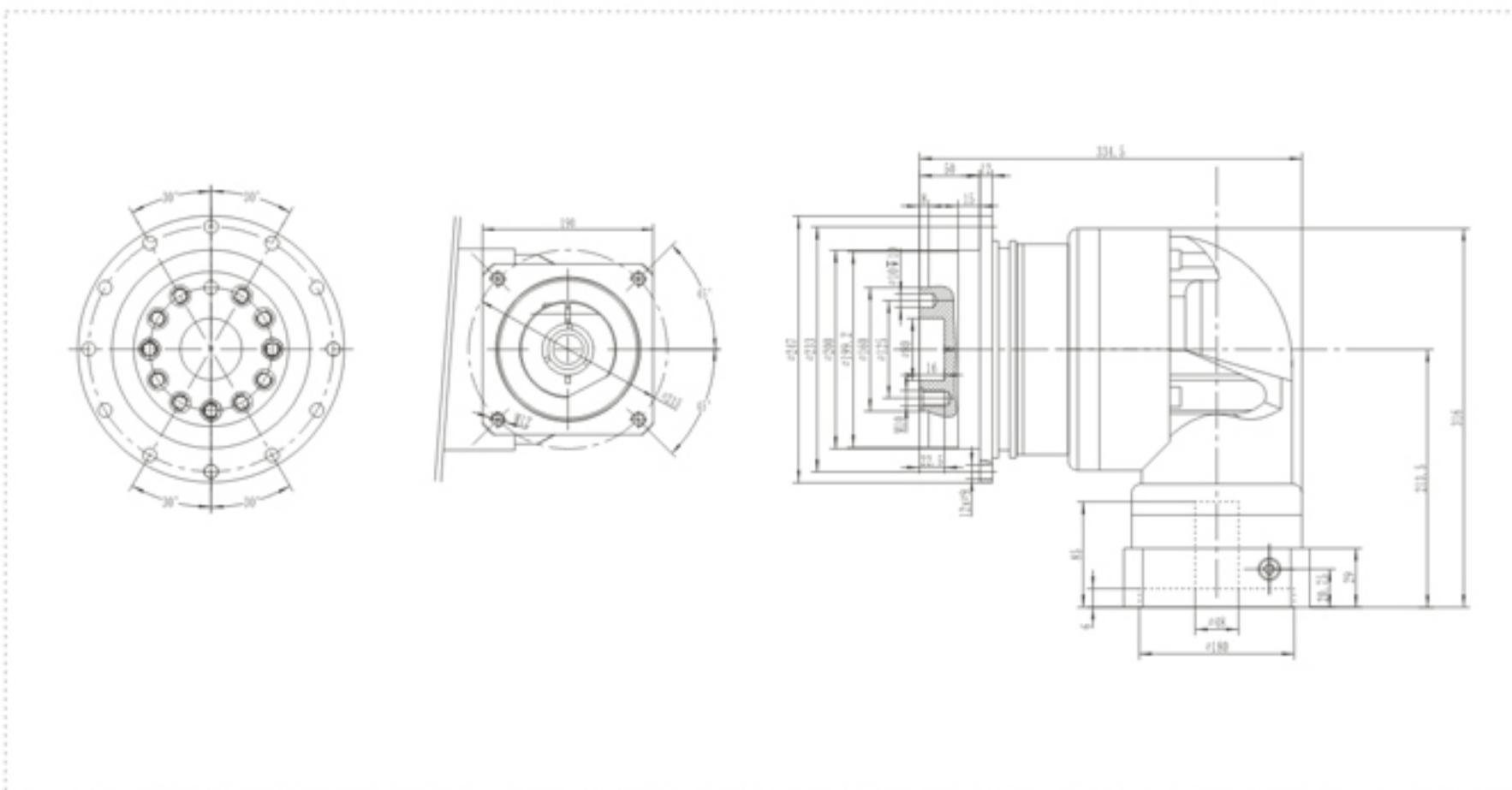
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

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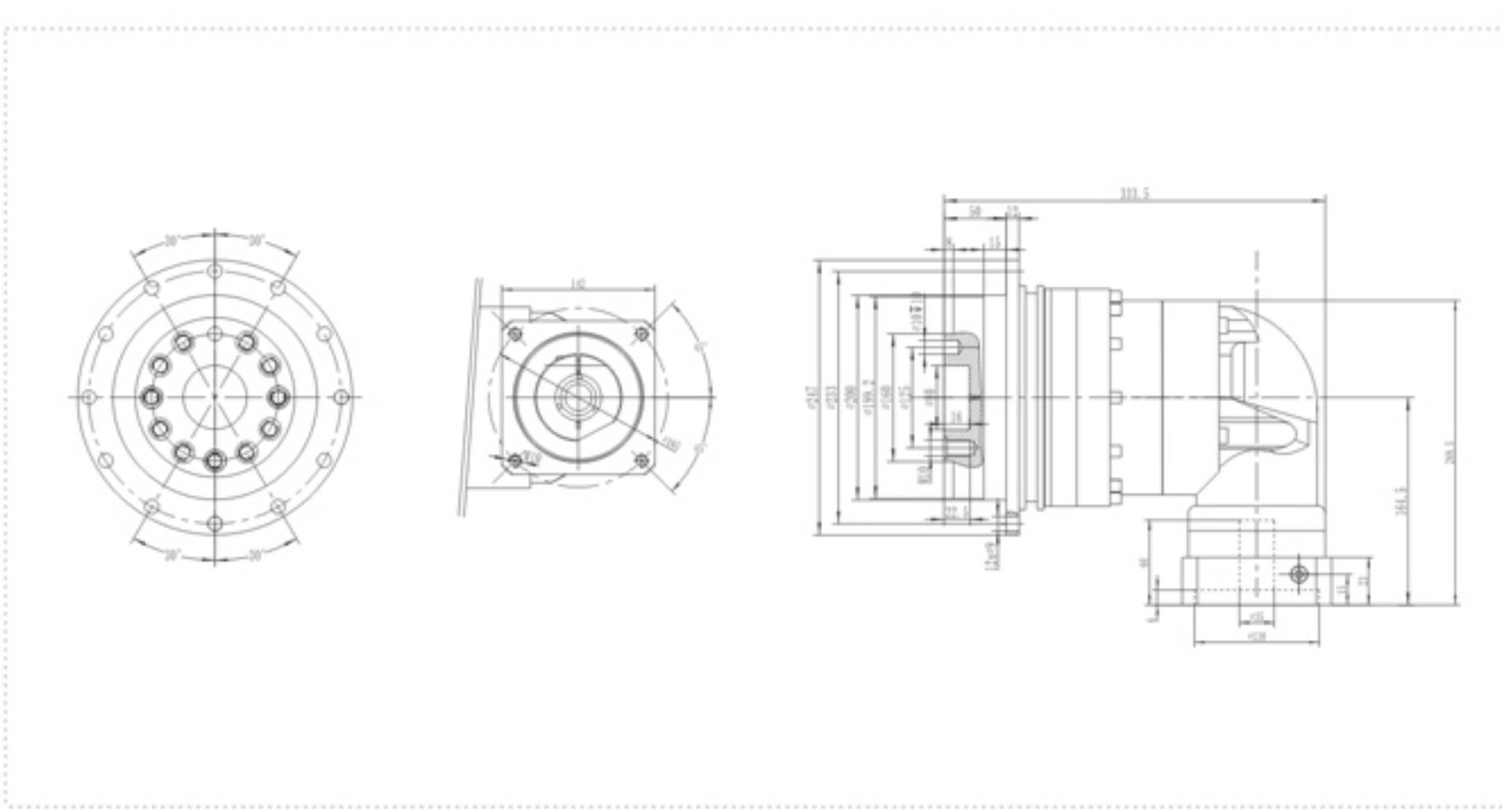
TDR200系列* TDR200 Single stage

外形尺寸表

TDR200單節* TDR200 One Stage



TDR200雙節* TDR200 Two Stage



性能資料 Performance data

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TD series reducers can meet some very special needs. High rigidity, high performance and compact structure are the most important features of this product.

速比 Speed Ratio	i	單節 One Stage					雙節 Two Stage					
		4	5	7	10	20	25	35	40	50	70	100
額定輸出力矩 Rated Output Torque	T ₁	Nm	1100	1200	1100	900	1100	1200	1100	1100	1200	1100
急停扭矩 Emergency Stop Torque	T ₂	Nm			T ₁ ×3						T ₁ ×3	
額定輸入轉速 Rated Input Speed	S ₁	rpm			3000						3000	
最大輸入轉速 Maximum Input Speed	S ₂	rpm			6000						6000	
最大輸出力矩 Maximum Output Torque	T ₄	Nm			T ₁ ×3×60%						T ₁ ×3×60%	
最大彎曲力 Maximum Bending Force	F _a	N			3064						3064	
最大軸向力 Maximum Axial Force	F _b	N			16660						16660	
扭轉剛性 Torsional Rigidity	-	Nm/arcmin			440						440	
效率 Effectiveness	β	%			≥95%						≥92%	
壽命 Life	-	h			30000h						30000h	
反饋噪音 Feedback Noise	-	dB			≤72dB						≤72dB	
重量 Weight	-	Kg			50.9						45.4	
回程間隙 Return Gap	P0				≤2						≤4	
	P1	arcmin			≤4						≤7	
	P2				≤6						≤9	
使用溫度 Operating Temperature	-	°C			−10°C~90°C						−10°C~90°C	
潤滑 Lubricating	-				合成油脂 Synthetic Grease						合成油脂 Synthetic Grease	
防護等級 Protection Level	-				IP65						IP65	
安裝方向 Installation Direction	-				任意方向 Any Direction						任意方向 Any Direction	
傳動慣量 Transmission Inertia	J	kg.cm ²			68.9						23.4	

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

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精密行星減速機

Precision Planetary Reducer



其優勢在於：此款行星減速機即使在最高轉速時也能達到最高效率，十分適用
於高標準的生產工況，壹款真正強效且價格合理的產品。

The advantage is that this planetary reducer achieves maximum efficiency even at the highest speeds, making it
ideal for high-standard production conditions, a truly powerful and reasonably priced product.

TECHMECH DRIVES THE FUTURE

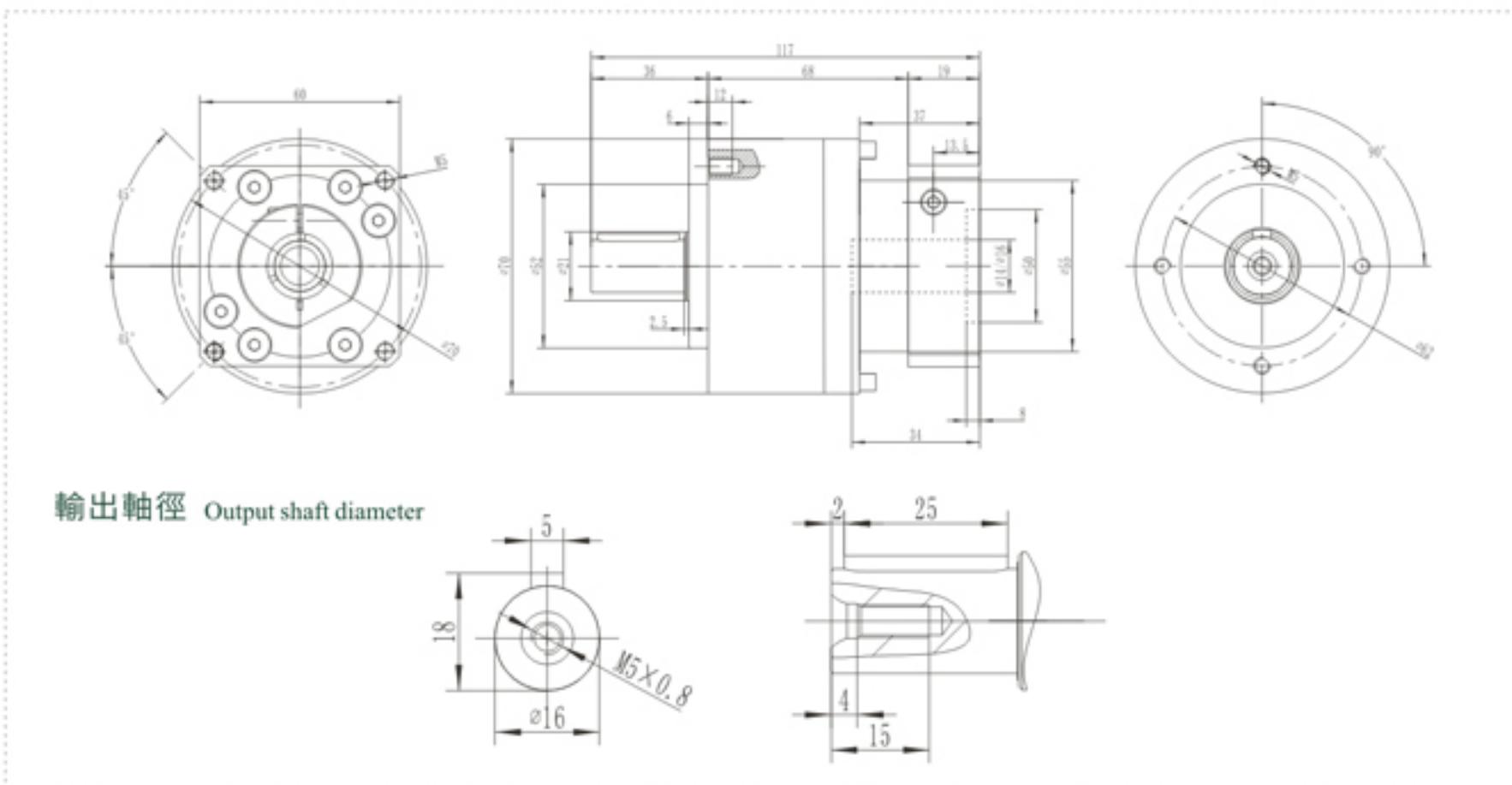
鉢科瑪格 傳動未來



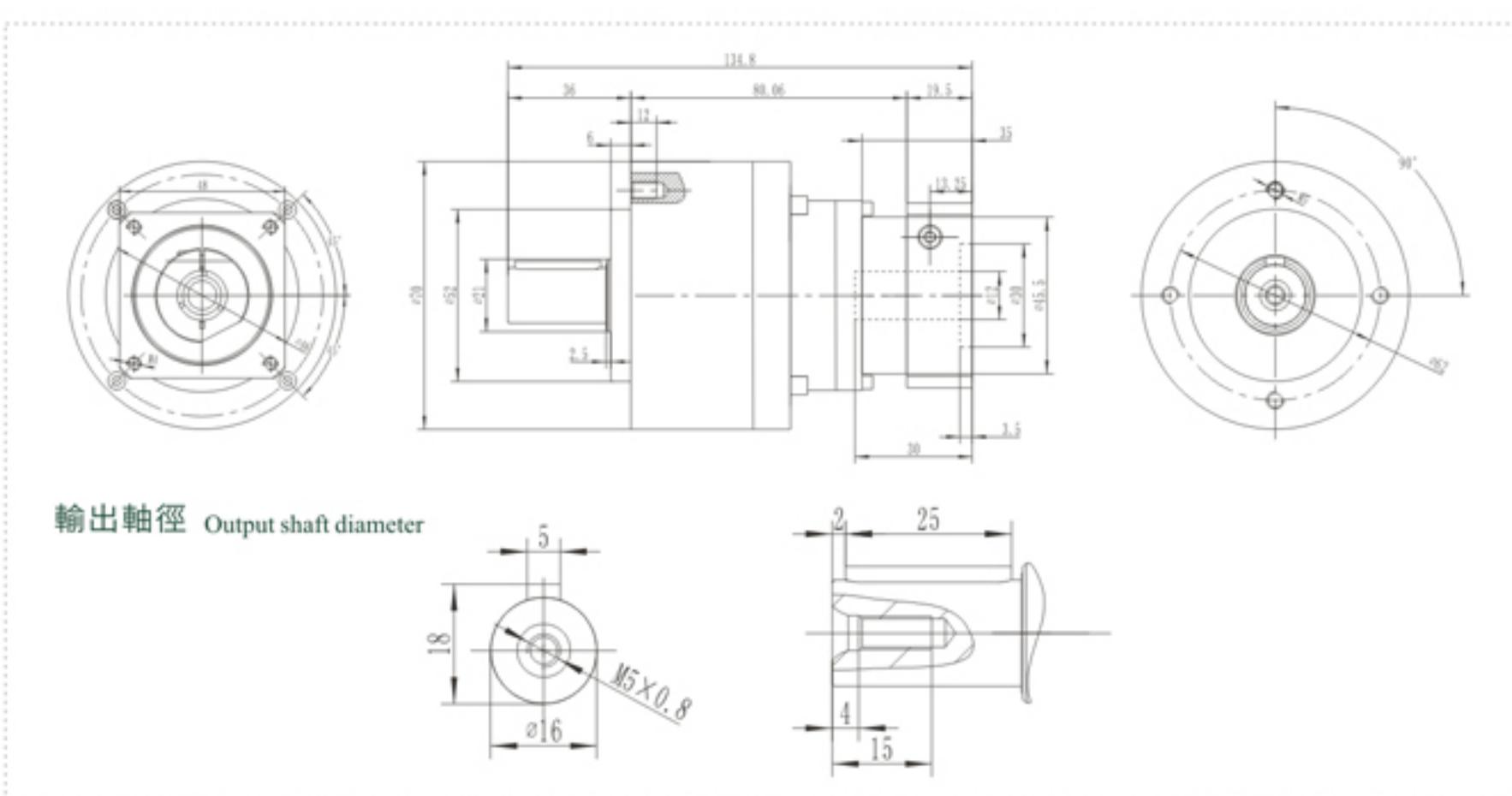
TE070系列* TE070 Single stage

外形尺寸表

TE070單節* TE070 One Stage



TE070雙節* TE070 Two Stage



性能資料 Performance data

TE系列減速機憑借標準化的法蘭接口，該行星減速機的安裝極其簡便，在性能上有所提升，它經濟實用，而且產生的熱量極少。

TE series Thanks to the standardized flange connection, the planetary reducer is extremely easy to install and has an improved performance. It is economical and produces very little heat.

依據說明:

- 變速比($i=S_{in}/S_{out}$)
 - 結果輸出轉速100rpm時，作用於輸出軸中心。
 - 連續運轉壽命10000h。
 - 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

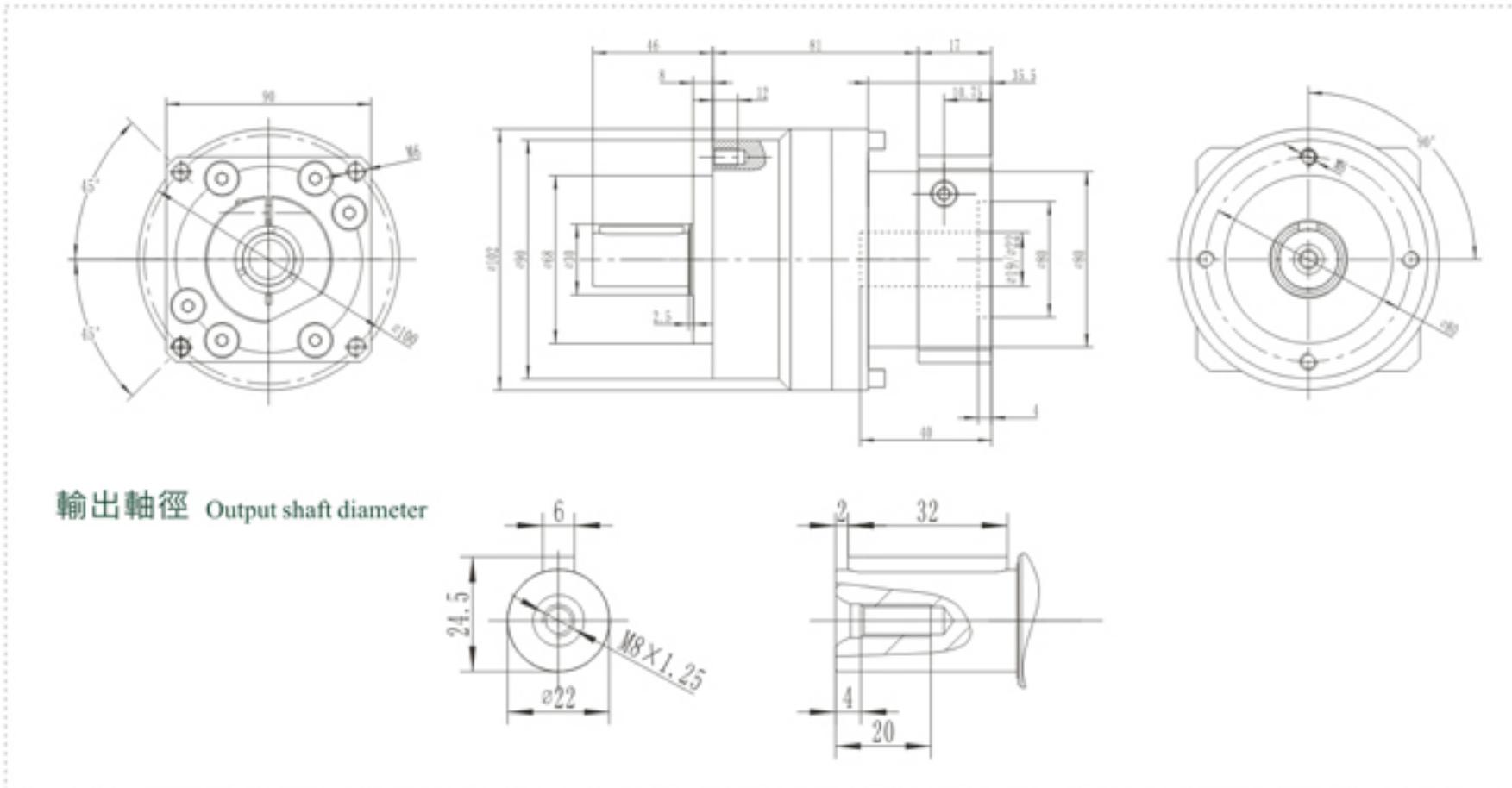
- ⊕ Speed ratio ($i=$ Sin/Sout)
 - ⊕ As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
 - ⊕ Continuous operation life of 10000h.
 - ⊕ The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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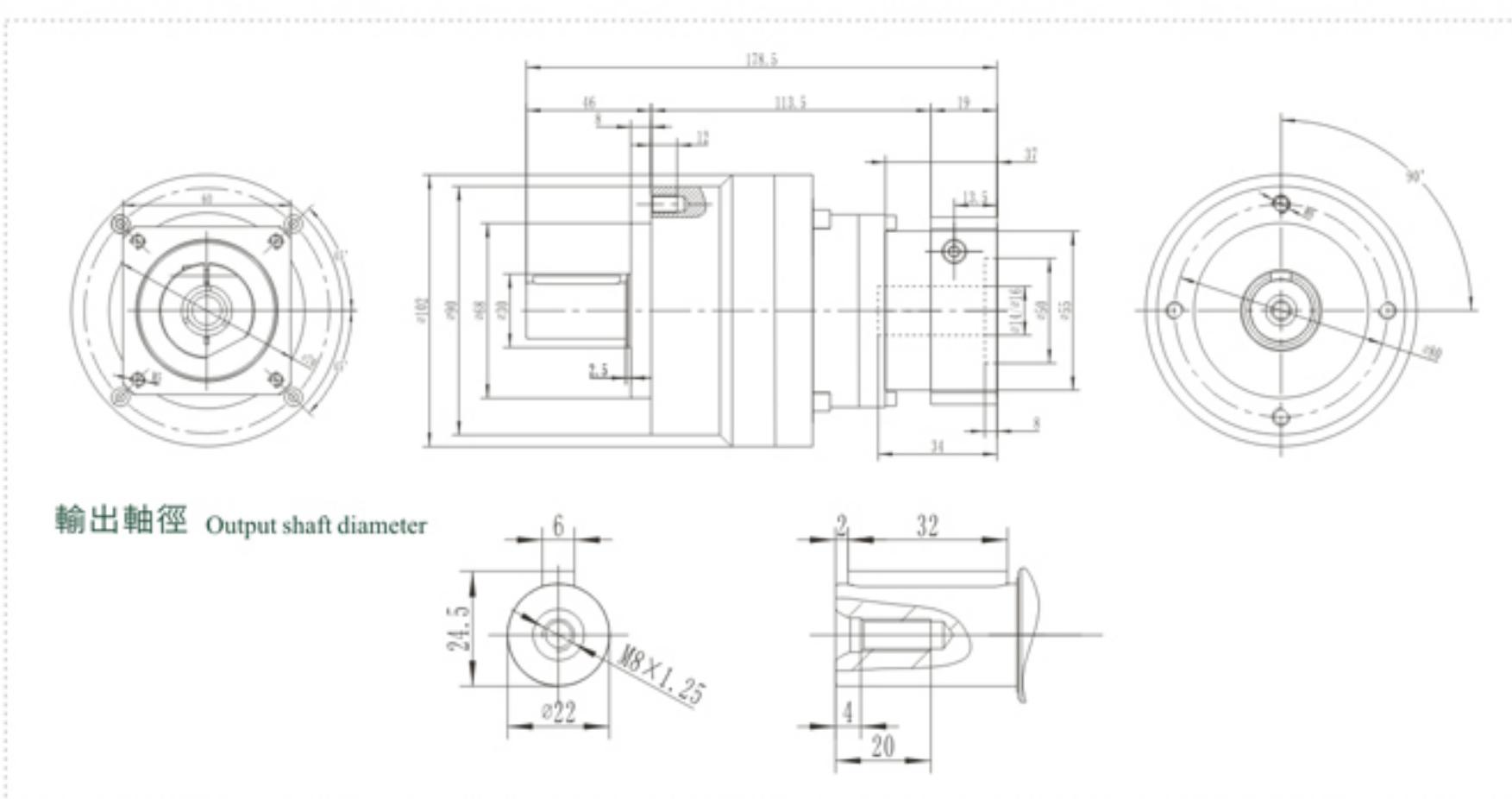
TE090系列* TE090 Single stage

外形尺寸表

TE090單節* TE090 One Stage



TE090雙節* TE090 Two Stage



性能資料 Performance data

TE系列減速機憑借標準化的法蘭接口，該行星減速機的安裝極其簡便，在性能上有所提升，它經濟實用，而且產生的熱量極少。

TE series Thanks to the standardized flange connection, the planetary reducer is extremely easy to install and has an improved performance. It is economical and produces very little heat.

TE090		單節 One Stage										雙節 Two Stage																		
速比 Speed Ratio	i	3	4	5	6	7	8	10	15	20	25	30	35	40	50	60	70	80	100											
額定輸出力矩 Rated Output Torque	T ₁	Nm	130	140	160	150	140	120	100	130	140	160	150	140	120	160	150	140	120	100										
急停扭矩 Emergency Stop Torque	T ₂	Nm	T ₁ × 3								T ₁ × 3																			
額定輸入轉速 Rated Input Speed	S ₁	rpm	4000								4000																			
最大輸入轉速 Maximum Input Speed	S ₂	rpm	8000								8000																			
最大輸出力矩 Maximum Output Torque	T ₄	Nm	T ₁ × 3 × 60%								T ₁ × 3 × 60%																			
最大徑向力 Maximum Radial Force	F _a	N	1625								1625																			
最大軸向力 Maximum Axial Force	F _b	N	2985								2985																			
扭轉剛性 Torsional Rigidity	-	Nm/arcmin	14								14																			
效率 Effectiveness	β	%	≥97%								≥94%																			
壽命 Life	-	h	20000h								20000h																			
反饋噪音 Feedback Noise	-	dB	≤60dB								≤60dB																			
重量 Weight	-	Kg	3.3								4.7																			
回程間隙 Return Gap	P0	arcmin	-								-																			
	P1		≤3								≤3																			
	P2		≤5								≤5																			
使用溫度 Operating Temperature	-	°C	-10°C~90°C								-10°C~90°C																			
潤滑 Lubricating	-	合成油脂 Synthetic Grease								合成油脂 Synthetic Grease																				
防護等級 Protection Level	-	IP65								IP65																				
安裝方向 Installation Direction	-	任意方向 Any Direction								任意方向 Any Direction																				
傳動慣量 Transmission Inertia	J	kg.cm ²	0.61	0.48	0.47	0.45	0.44									0.13														

依據說明：

- 變速比($i=S_{in}/S_{out}$)
 - 結果輸出轉速100rpm時，作用於輸出軸中心
 - 連續運轉壽命10000h。
 - 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

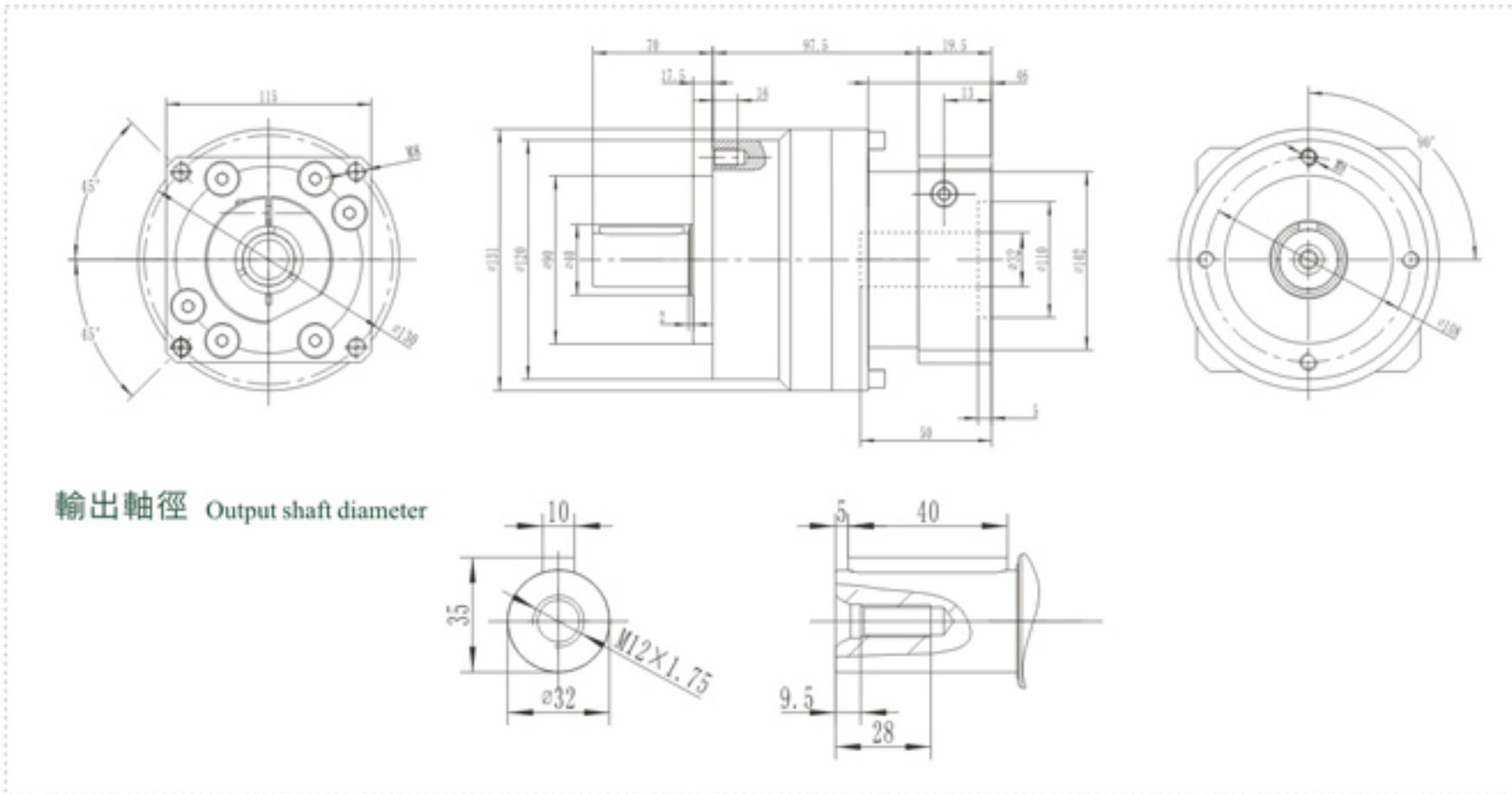
- ⊕ Speed ratio ($i = S_{in}/S_{out}$)
 - ⊕ As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
 - ⊕ Continuous operation life of 10000h.
 - ⊕ The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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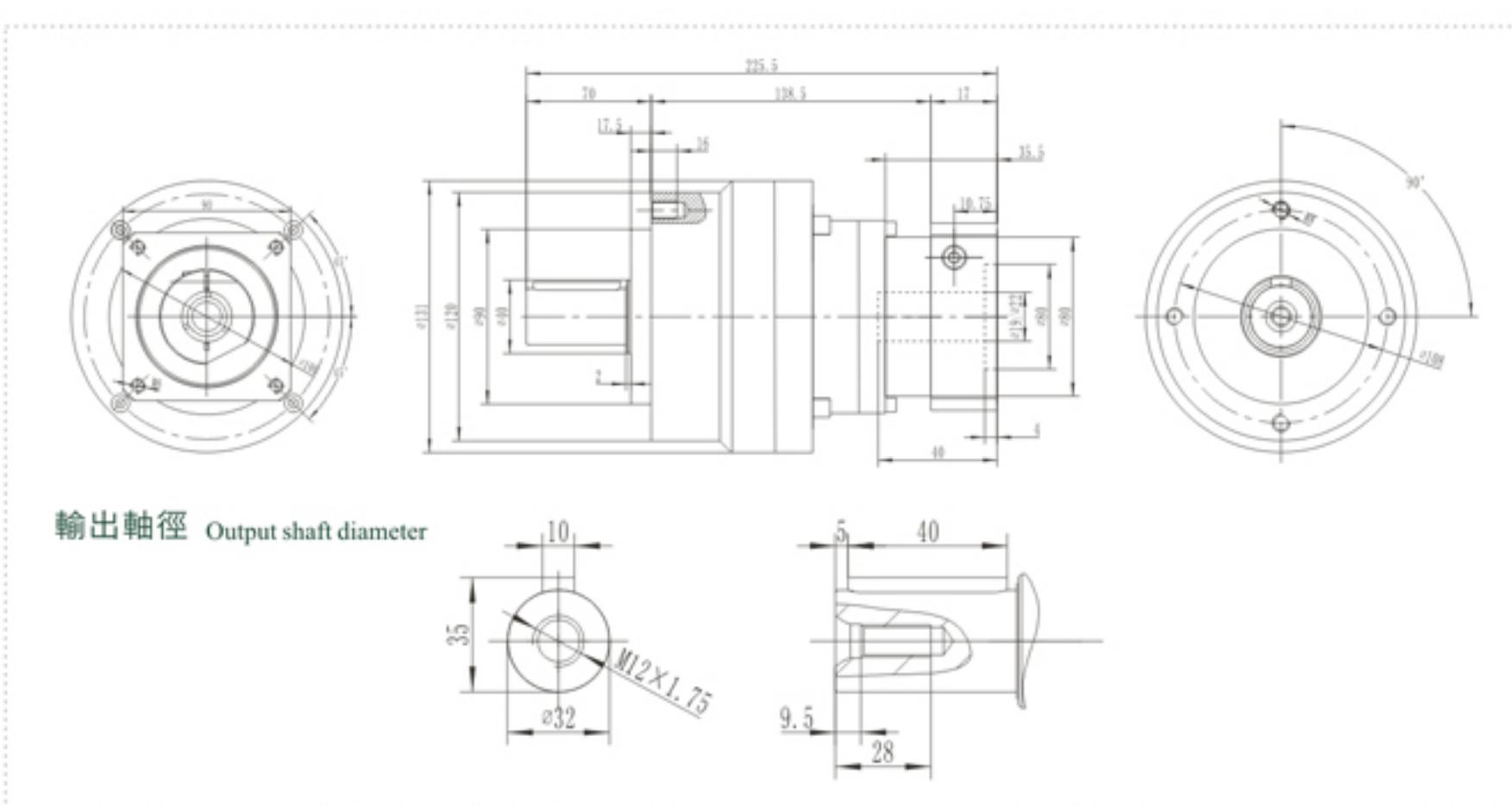
TE120系列* TE120 Single stage

外形尺寸表

TE120單節* TE120 One Stage



TE120雙節* TE120 Two Stage



性能資料 Performance data

TE系列減速機憑借標準化的法蘭接口，該行星減速機的安裝極其簡便，在性能上有所提升，它經濟實用，而且產生的熱量極少。

TE series Thanks to the standardized flange connection, the planetary reducer is extremely easy to install and has an improved performance. It is economical and produces very little heat.

速比 Speed Ratio	i	單節 One Stage						雙節 Two Stage												
		3	4	5	6	7	8	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	208	290	330	310	300	260	230	208	290	330	310	300	260	330	310	300	260	230
急停扭矩 Emergency Stop Torque	T ₂	Nm																	T ₁ × 3	T ₁ × 3
額定輸入轉速 Rated Input Speed	S ₁	rpm																	4000	4000
最大輸入轉速 Maximum Input Speed	S ₂	rpm																	8000	8000
最大輸出力矩 Maximum Output Torque	T ₄	Nm																	T ₁ × 3 × 60%	T ₁ × 3 × 60%
最大徑向力 Maximum Radial Force	F _a	N																	3350	3350
最大軸向力 Maximum Axial Force	F _b	N																	6100	6100
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																	25	25
效率 Effectiveness	β	%																	≥97%	≥94%
壽命 Life	-	h																	20000h	20000h
反饋噪音 Feedback Noise	-	dB																	≤63dB	≤63dB
重量 Weight	-	Kg																	6.9	8.7
P0																			-	-
回程間隙 Return Gap	P1	arcmin																	≤3	≤3
	P2																		≤5	≤5
使用溫度 Operating Temperature	-	°C																	-10°C-90°C	-10°C-90°C
潤滑 Lubricating	-																		合成油脂 Synthetic Grease	合成油脂 Synthetic Grease
防護等級 Protection Level	-																		IP65	IP65
安裝方向 Installation Direction	-																		任意方向 Any Direction	任意方向 Any Direction
傳動慣量 Transmission Inertia	J	kg.cm ²	3.25	2.74	2.71	2.65	2.62	2.58	2.57									0.47		0.44

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

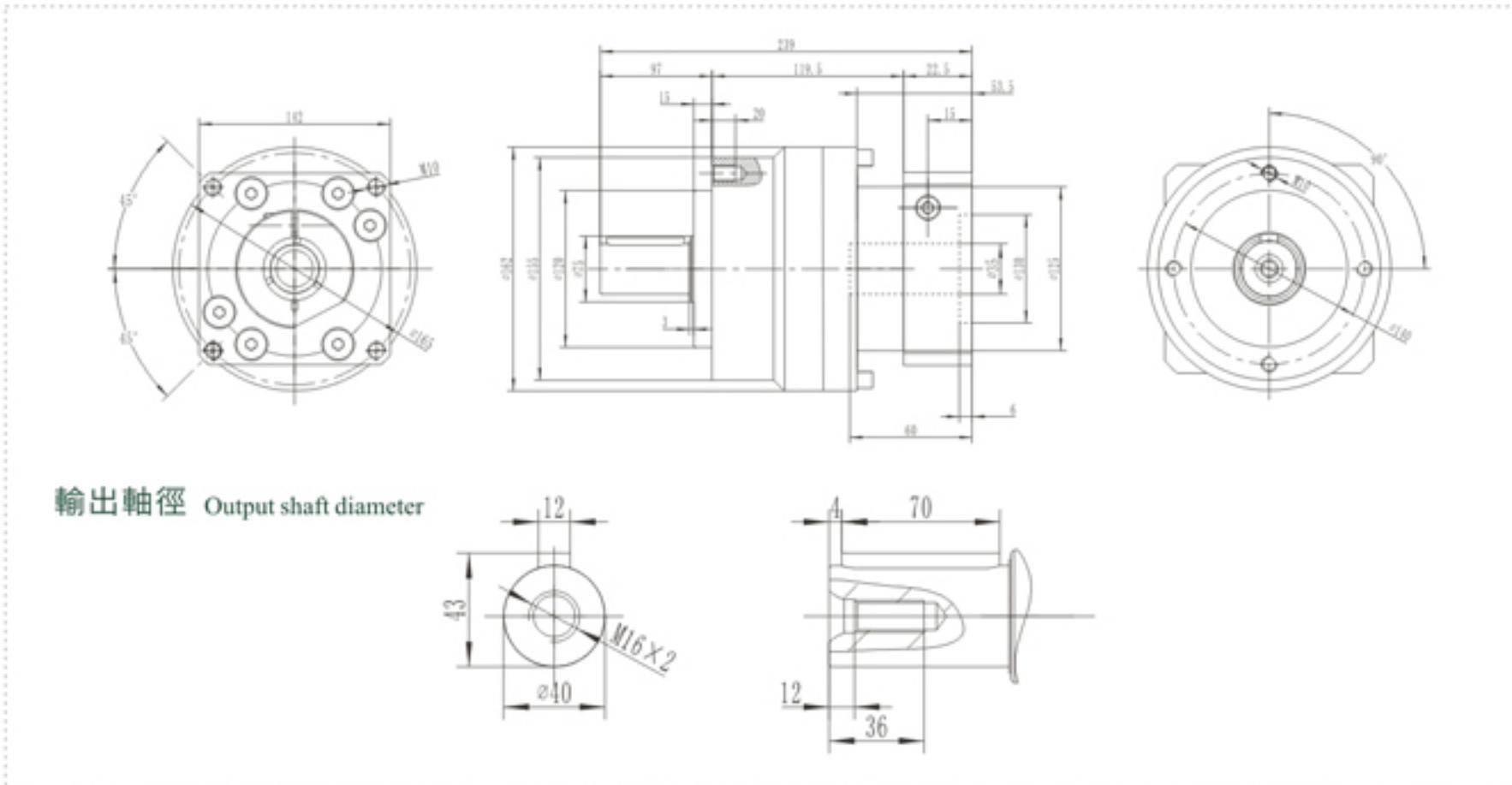
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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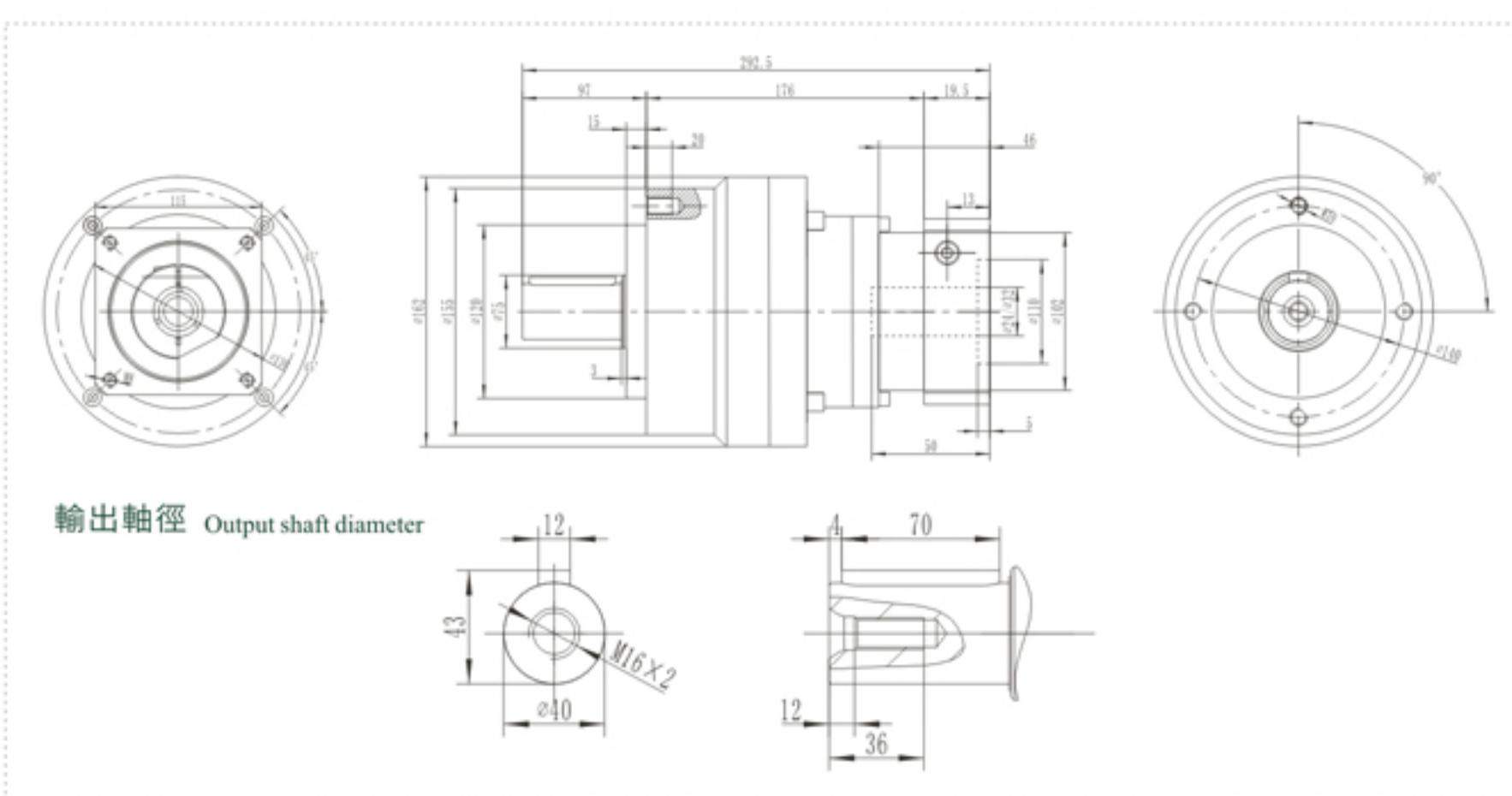
TE155系列* TE155 Single stage

外形尺寸表

TE155單節* TE155 One Stage



TE155雙節* TE155 Two Stage



性能資料 Performance data

TE系列減速機憑借標準化的法蘭接口，該行星減速機的安裝極其簡便，在性能上有所提升，它經濟實用，而且產生的熱量極少。

TE series Thanks to the standardized flange connection, the planetary reducer is extremely easy to install and has an improved performance. It is economical and produces very little heat.

依據說明：

- 變速比($i=S_{in}/S_{out}$)
 - 結果輸出轉速100rpm時，作用於輸出軸中心
 - 連續運轉壽命10000h。
 - 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

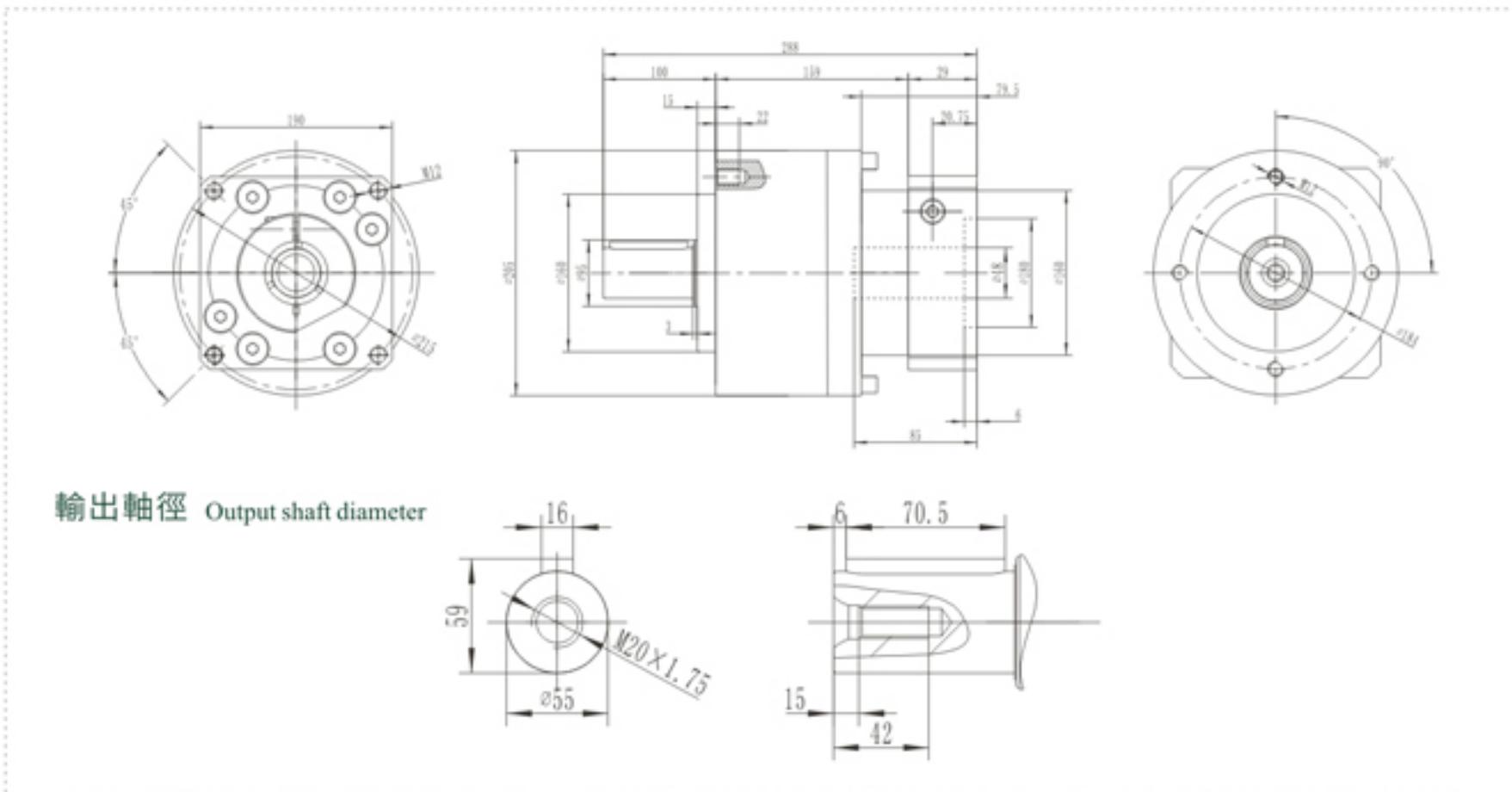
- ⊕ Speed ratio ($i=$ Sin/Sout)
 - ⊕ As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
 - ⊕ Continuous operation life of 10000h.
 - ⊕ The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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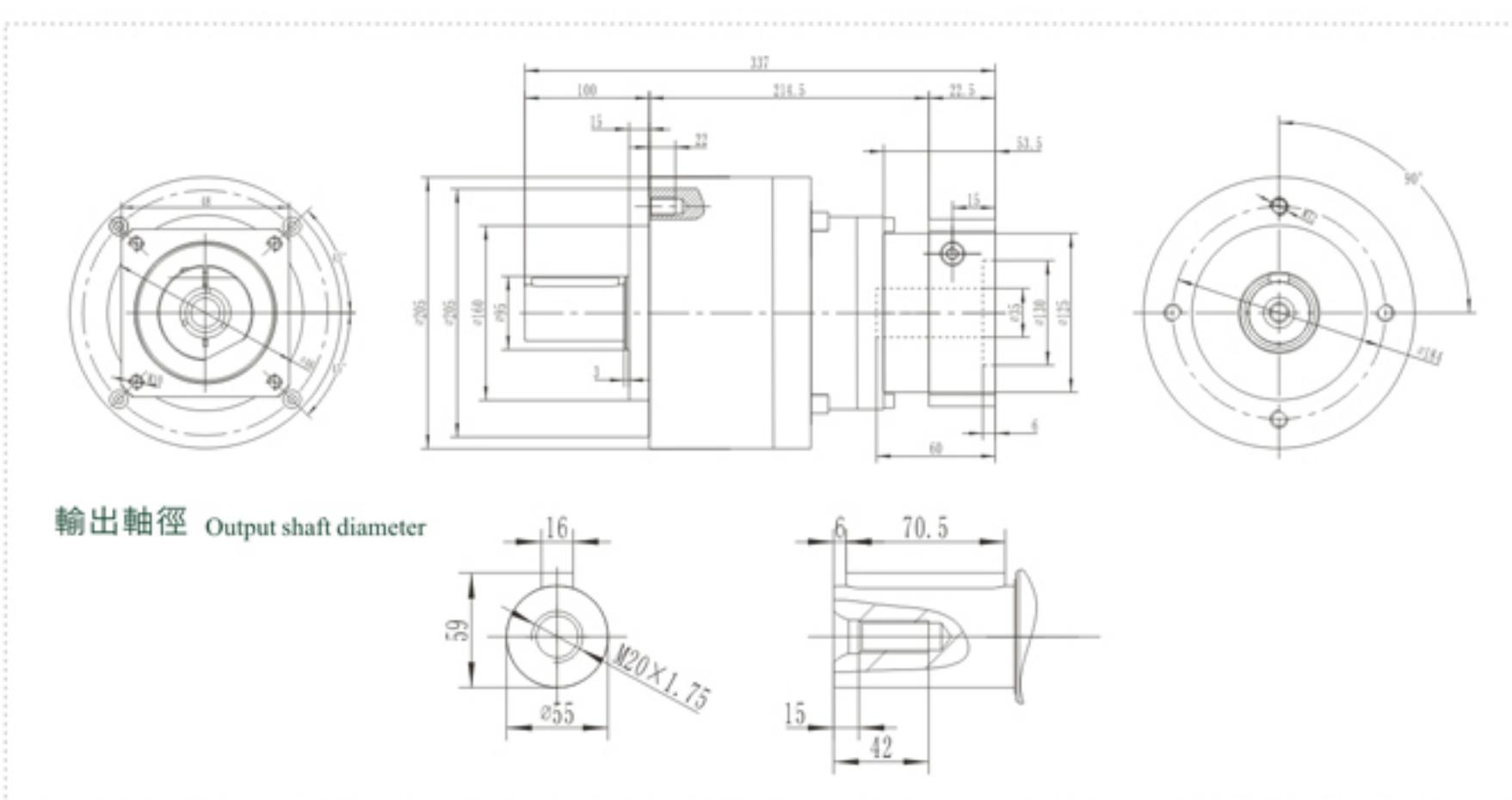
TE205系列* TE205 Single stage

外形尺寸表

TE205單節* TE205 One Stage



TE205雙節* TE205 Two Stage



性能資料 Performance data

TE系列減速機憑借標準化的法蘭接口，該行星減速機的安裝極其簡便，在性能上有所提升，它經濟實用，而且產生的熱量極少。

TE series Thanks to the standardized flange connection, the planetary reducer is extremely easy to install and has an improved performance. It is economical and produces very little heat.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	10	15	20	25	30	35	40	50	60	70	80	100		
額定輸出力矩 Rated Output Torque	T ₁	Nm	588	1050	1200	1100	1100	1000	900	588	1050	1200	1100	1100	1000	1200	1100	1100	1000	900	
急停扭矩 Emergency Stop Torque	T ₂	Nm																			
額定輸入轉速 Rated Input Speed	S ₁	rpm																			
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			
最大徑向力 Maximum Radial Force	F _a	N																			
最大軸向力 Maximum Axial Force	F _b	N																			
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			
效率 Effectiveness	β	%																			
壽命 Life	-	h																			
反饋噪音 Feedback Noise	-	dB																			
重量 Weight	-	Kg																			
P0																					
回程間隙 Return Gap	P1	arcmin																			
P2																					
使用溫度 Operating Temperature	-	°C																			
潤滑 Lubricating	-																				
防護等級 Protection Level	-																				
安裝方向 Installation Direction	-																				
傳動慣量 Transmission Inertia	J	kg.cm ²	28.98	23.67	23.29	22.75	22.48	22.59	22.51									7.42			7.03

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

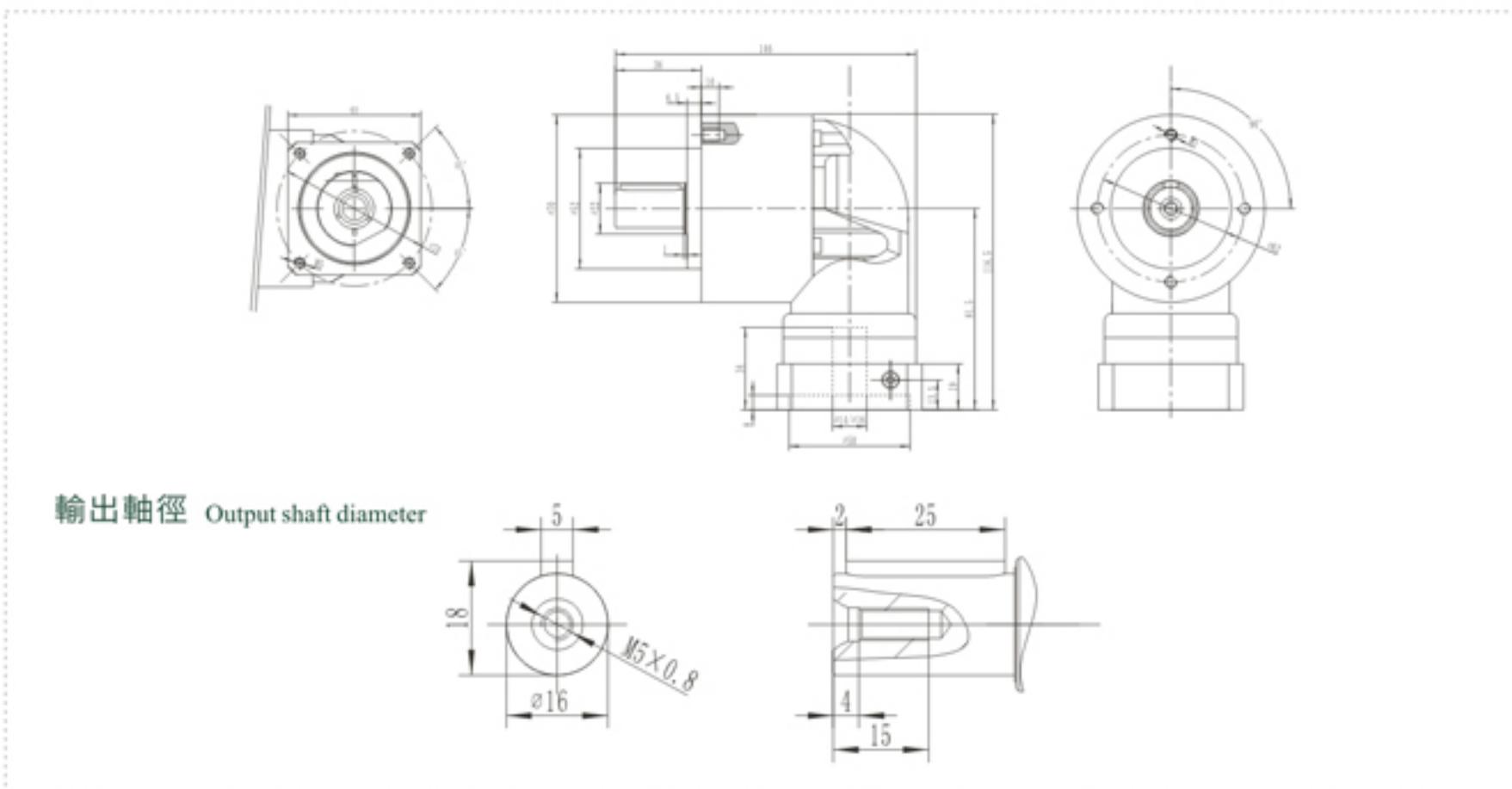
According to the instructions:

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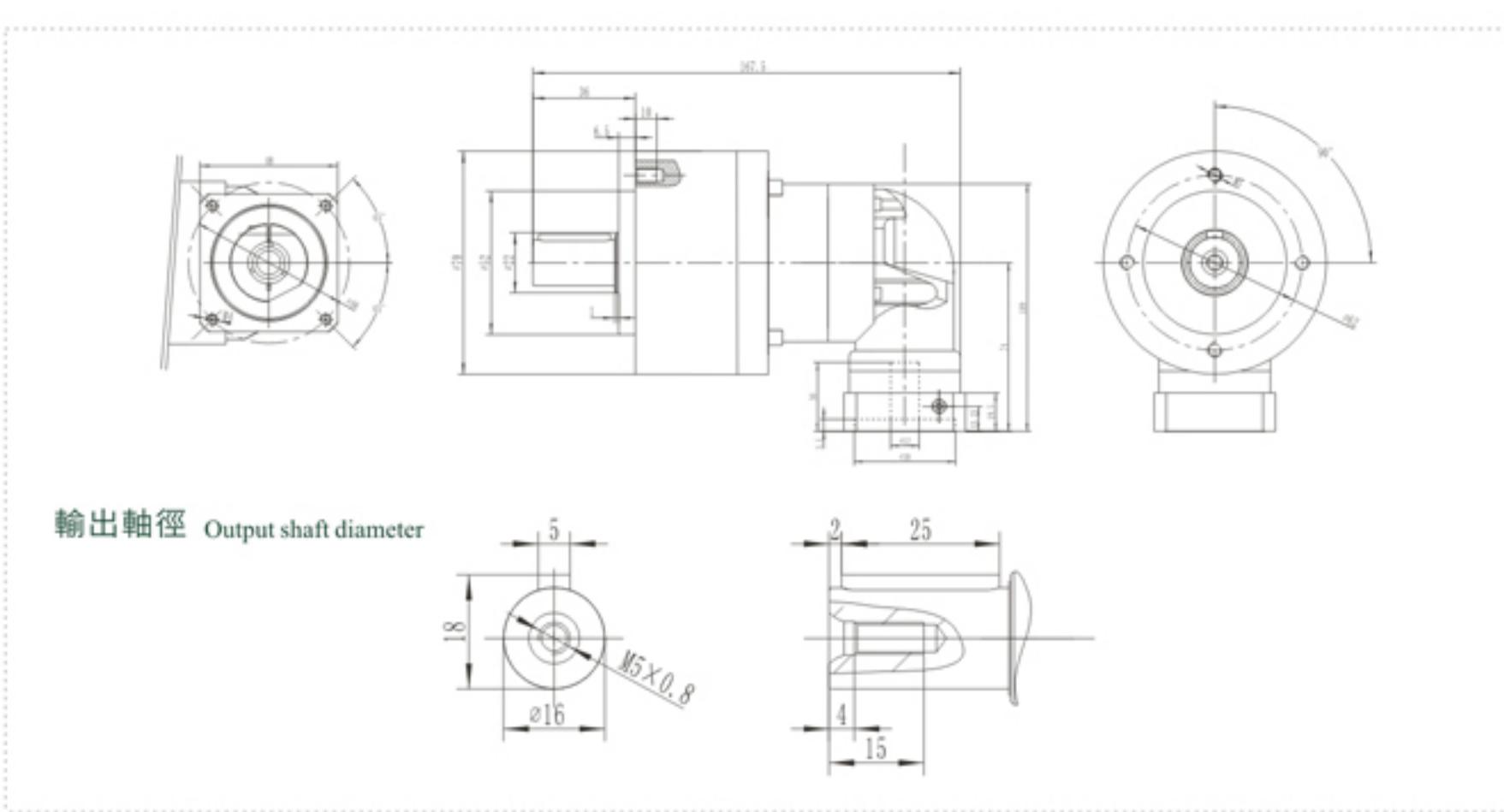
TER070系列* TER070 Single stage

外形尺寸表

TER070單節* TER070 One Stage



TER070雙節* TER070 Two Stage



性能資料 Performance data

TE系列減速機憑借標準化的法蘭接口，該行星減速機的安裝極其簡便，在性能上有所提升，它經濟實用，而且產生的熱量極少。

TE series Thanks to the standardized flange connection, the planetary reducer is extremely easy to install and has an improved performance. It is economical and produces very little heat.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	36	48	60	55	50	45	-	40	-	-	60	55	50	45	60	55	50	45	40
急停扭矩 Emergency Stop Torque	T ₂	Nm																			
額定輸入轉速 Rated Input Speed	S ₁	rpm																			
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			
最大徑向力 Maximum Radial Force	F _a	N																			
最大軸向力 Maximum Axial Force	F _b	N																			
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			
效率 Effectiveness	β	%																			
壽命 Life	-	h																			
反饋噪音 Feedback Noise	-	dB																			
重量 Weight	-	Kg																			
P0																					
回程間隙 Return Gap	P1	arcmin																			
P2																					
使用溫度 Operating Temperature	-	°C																			
潤滑 Lubricating	-																				
防護等級 Protection Level	-																				
安裝方向 Installation Direction	-																				
傳動慣量 Transmission Inertia	J	kg.cm ²																			

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

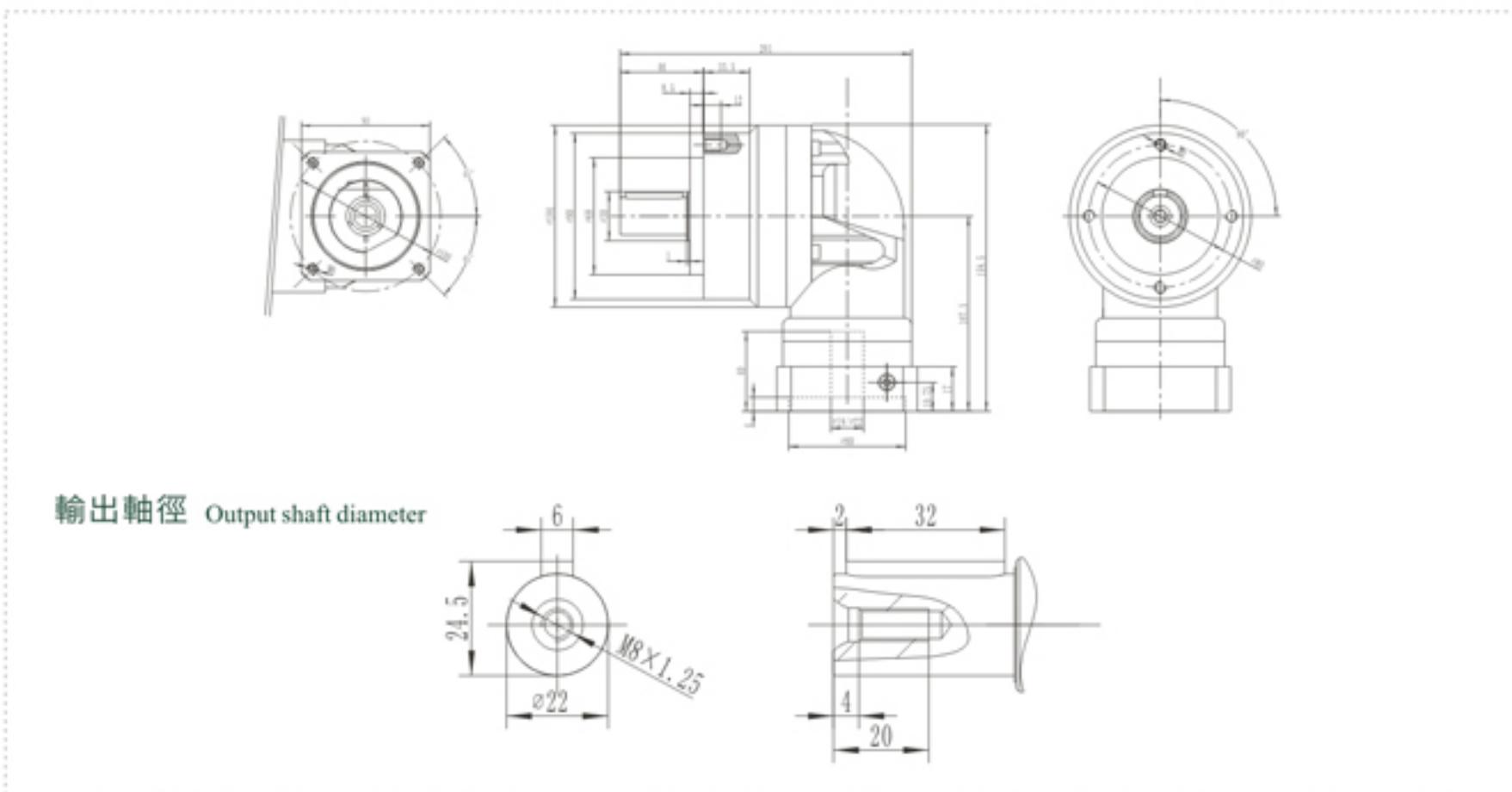
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

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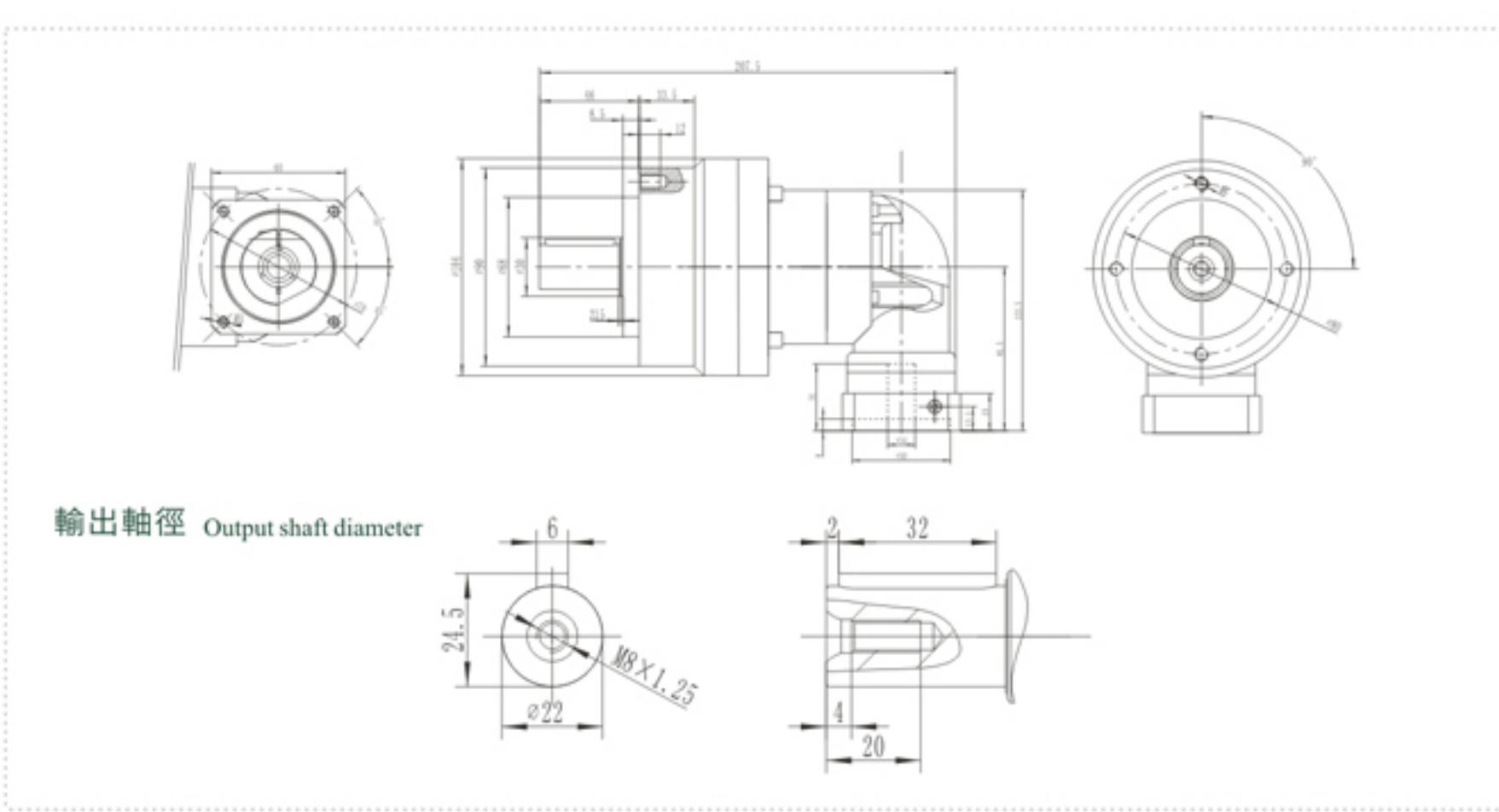
TER090系列* TER090 Single stage

外形尺寸表

TER090單節* TER090 One Stage



TER090雙節* TER090 Two Stage



性能資料 Performance data

TE系列減速機憑借標準化的法蘭接口，該行星減速機的安裝極其簡便，在性能上有所提升，它經濟實用，而且產生的熱量極少。

TE series Thanks to the standardized flange connection, the planetary reducer is extremely easy to install and has an improved performance. It is economical and produces very little heat.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage										
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100		
額定輸出力矩 Rated Output Torque	T ₁	Nm	90	120	150	150	140	120	-	100	-	-	150	150	140	120	100	150	140	120	100	
急停扭矩 Emergency Stop Torque	T ₂	Nm																			T ₁ ×3	T ₁ ×3
額定輸入轉速 Rated Input Speed	S ₁	rpm																				4000
最大輸入轉速 Maximum Input Speed	S ₂	rpm																				8000
最大輸出力矩 Maximum Output Torque	T ₄	Nm																				T ₁ ×3×60%
最大徑向力 Maximum Radial Force	F _a	N																				2985
最大軸向力 Maximum Axial Force	F _b	N																				1625
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																				14
效率 Effectiveness	β	%																				≥92%
壽命 Life	-	h																				20000h
反饋噪音 Feedback Noise	-	dB																				≤65dB
重量 Weight	-	Kg																				4.6
P0																						-
回程間隙 Return Gap	P1	arcmin																				≤6
	P2																					≤8
使用溫度 Operating Temperature	-	°C																				-10°C-90°C
潤滑 Lubricating	-																					合成油脂 Synthetic Grease
防護等級 Protection Level	-																					IP65
安裝方向 Installation Direction	-																					任意方向 Any Direction
傳動慣量 Transmission Inertia	J	kg.cm ²																				0.35

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

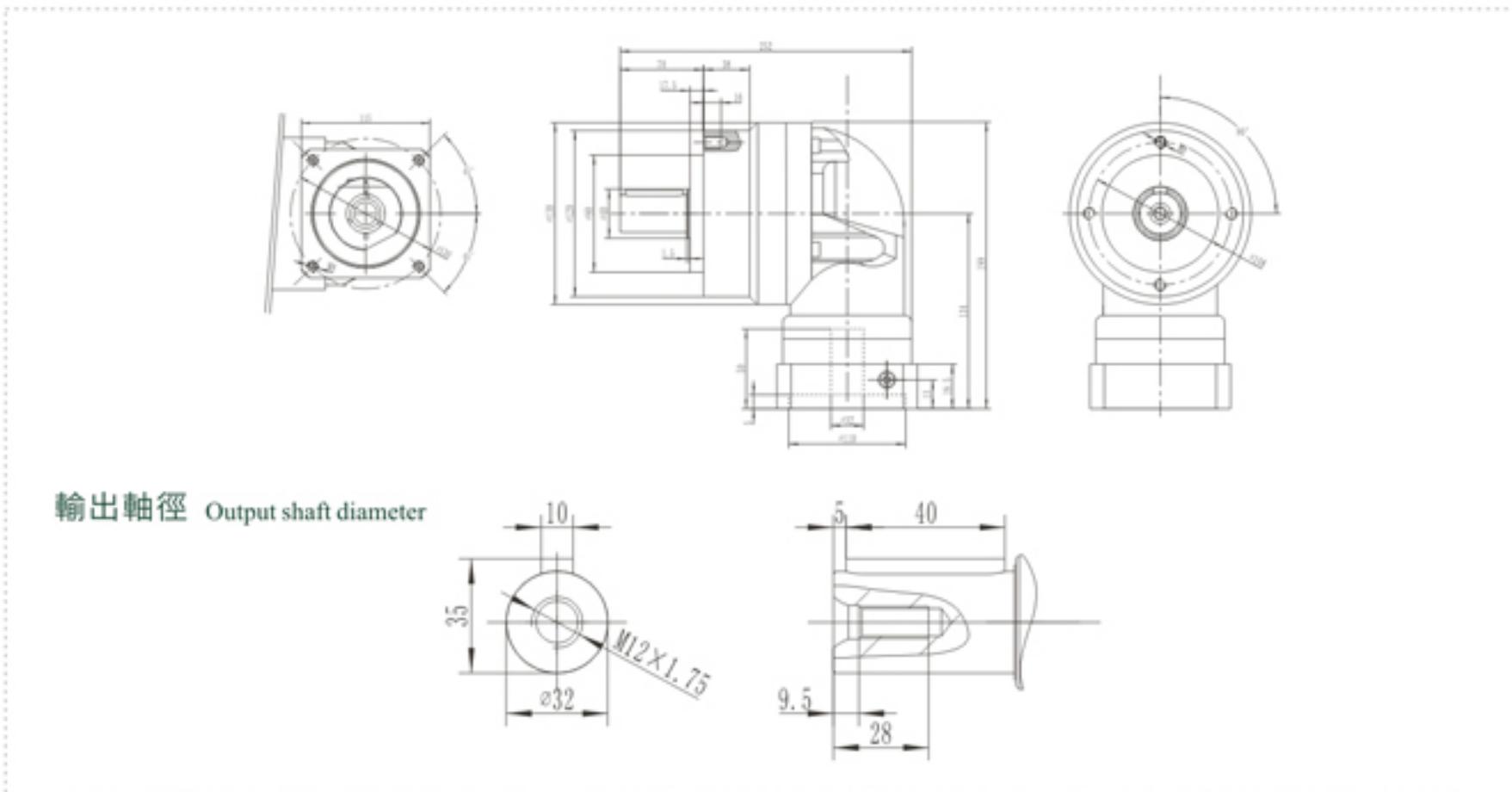
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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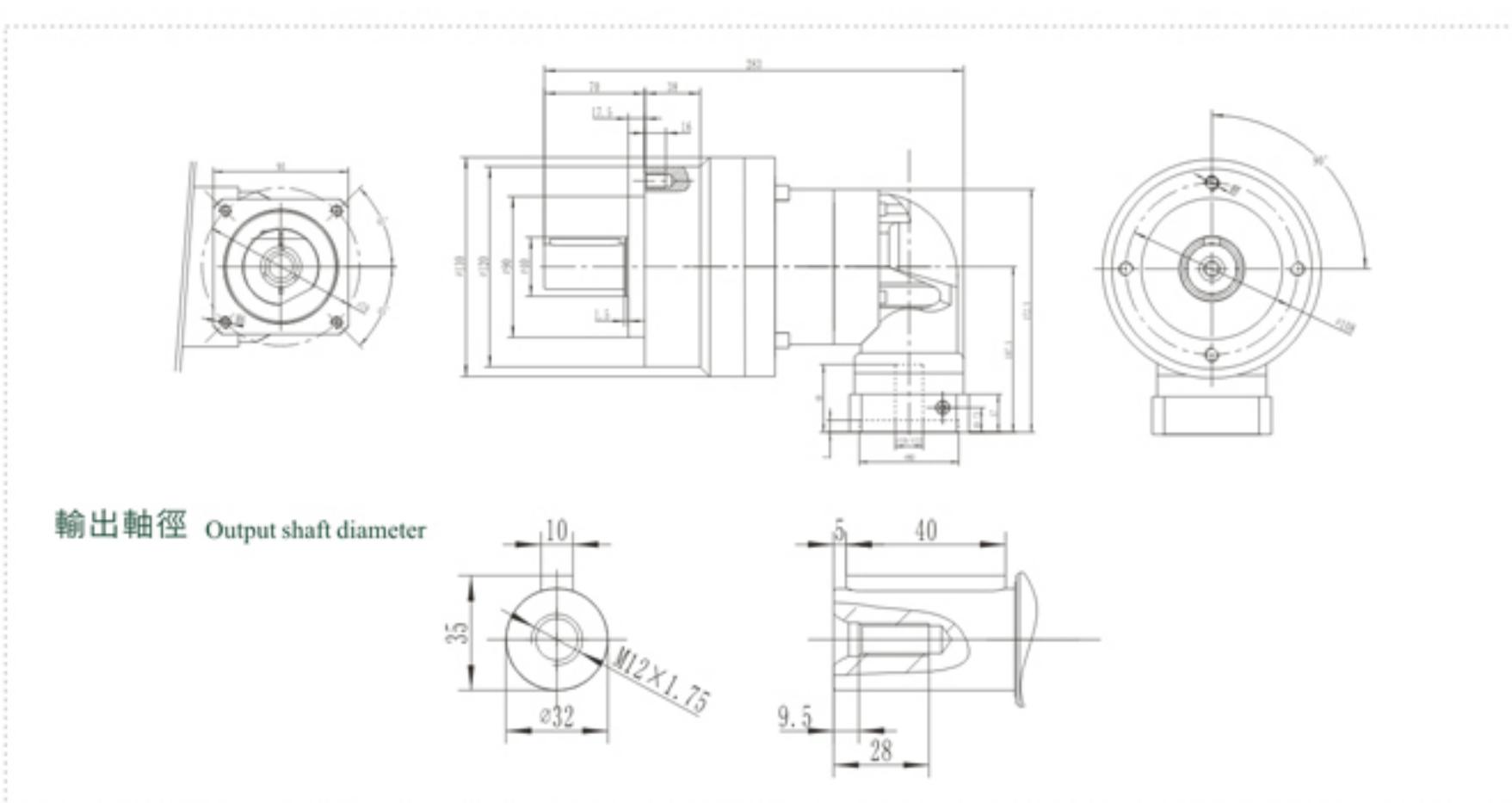
TER120系列* TER120 Single stage

外形尺寸表

TER120單節* TER120 One Stage



TER120雙節* TER120 Two Stage



性能資料 Performance data

TE系列減速機憑借標準化的法蘭接口，該行星減速機的安裝極其簡便，在性能上有所提升，它經濟實用，而且產生的熱量極少。

TE series Thanks to the standardized flange connection, the planetary reducer is extremely easy to install and has an improved performance. It is economical and produces very little heat.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	195	260	325	310	300	260	-	230	-	-	325	310	300	260	230	310	300	260	230
急停扭矩 Emergency Stop Torque	T ₂	Nm																			T ₁ ×3
額定輸入轉速 Rated Input Speed	S ₁	rpm																			4000
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			8000
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			T ₁ ×3×60%
最大徑向力 Maximum Radial Force	F _a	N																			6100
最大軸向力 Maximum Axial Force	F _b	N																			3350
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			25
效率 Effectiveness	β	%																			≥92%
壽命 Life	-	h																			20000h
反饋噪音 Feedback Noise	-	dB																			≤68dB
重量 Weight	-	Kg																			11.1
P0																					-
回程間隙 Return Gap	P1	arcmin																			≤6
																					≤8
使用溫度 Operating Temperature	-	°C																			-10°C-90°C
潤滑 Lubricating	-																				合成油脂 Synthetic Grease
防護等級 Protection Level	-																				IP65
安裝方向 Installation Direction	-																				任意方向 Any Direction
傳動慣量 Transmission Inertia	J	kg.cm ²																			2.25

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, i=10所得。

According to the instructions:

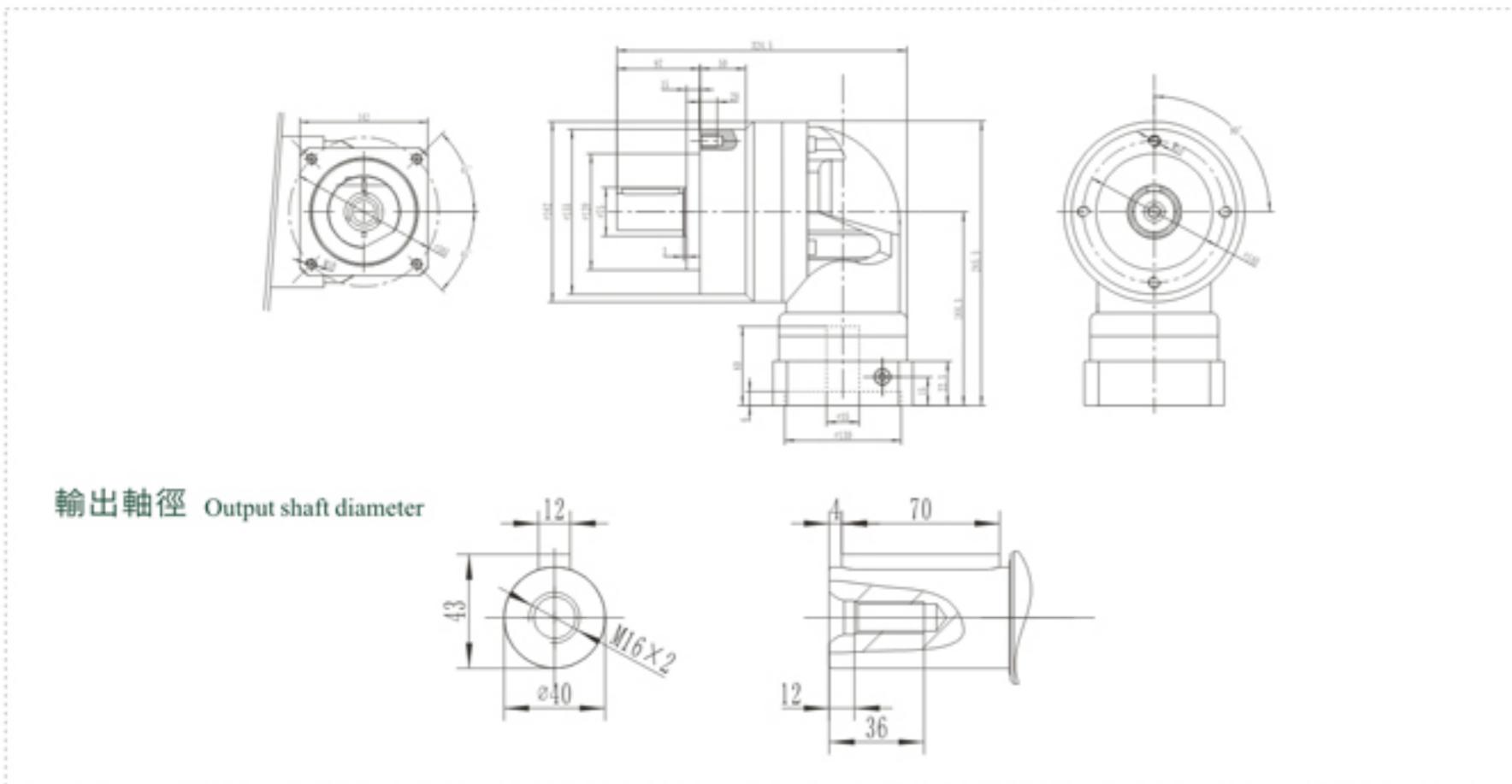
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告，訂貨前請與本公司確認。
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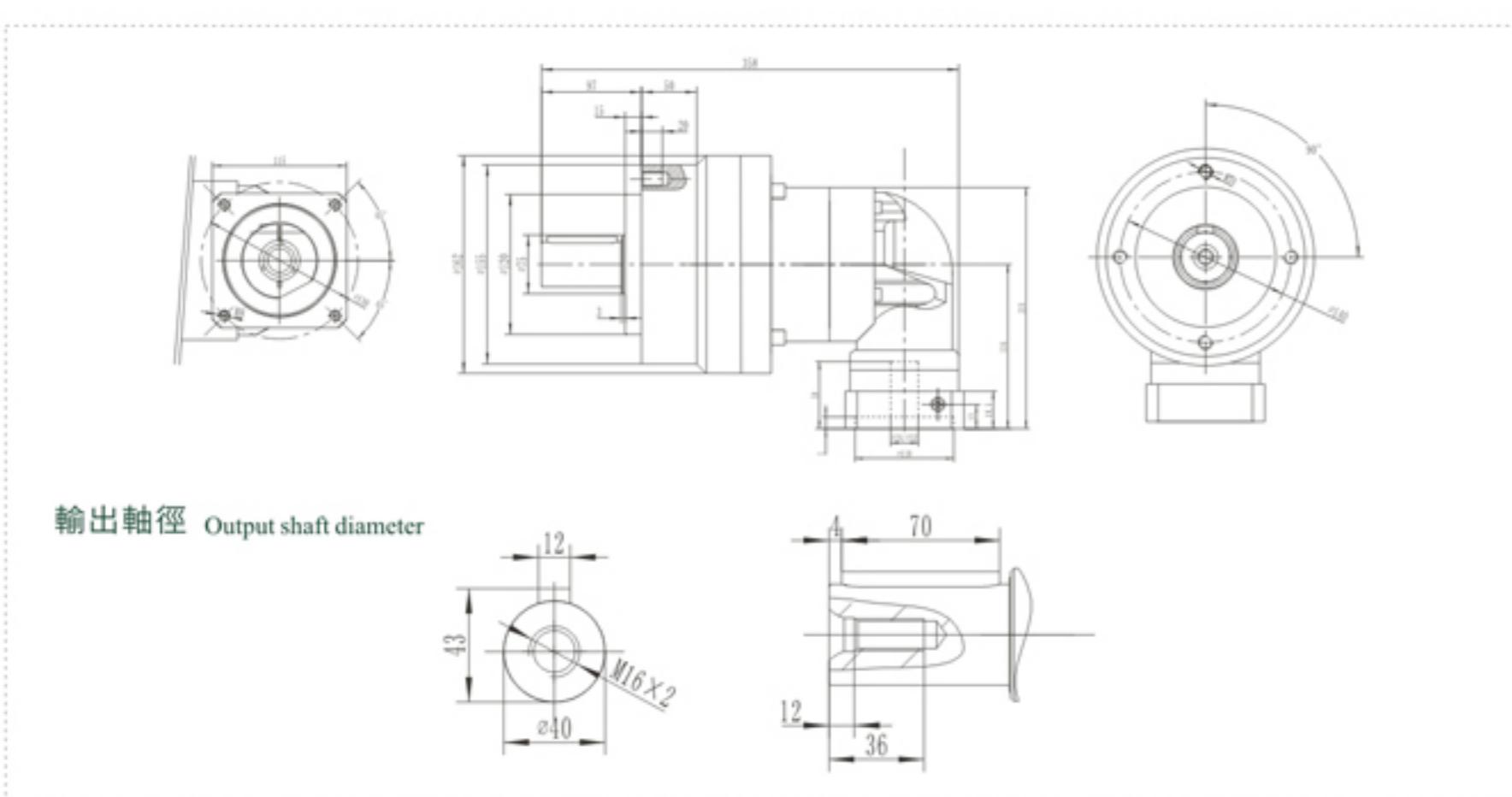
TER155系列* TER155 Single stage

外形尺寸表

TER155單節* TER155 One Stage



TER155雙節* TER155 Two Stage



性能資料 Performance data

TE系列減速機憑借標準化的法蘭接口，該行星減速機的安裝極其簡便，在性能上有所提升，它經濟實用，而且產生的熱量極少。

TE series Thanks to the standardized flange connection, the planetary reducer is extremely easy to install and has an improved performance. It is economical and produces very little heat.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	342	520	650	600	550	500	-	450	-	-	650	600	550	500	650	600	550	500	450
急停扭矩 Emergency Stop Torque	T ₂	Nm																			T ₁ ×3
額定輸入轉速 Rated Input Speed	S ₁	rpm																			3000
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			6000
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			T ₁ ×3×60%
最大徑向力 Maximum Radial Force	F _a	N																			8460
最大軸向力 Maximum Axial Force	F _b	N																			4700
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			50
效率 Effectiveness	β	%																			≥92%
壽命 Life	-	h																			20000h
反饋噪音 Feedback Noise	-	dB																			≤70dB
重量 Weight	-	Kg																			27.5
回程間隙 Return Gap	P0																				-
	P1	arcmin																			≤6
	P2																				≤8
使用溫度 Operating Temperature	-	°C																			-10°C~90°C
潤滑 Lubricating	-																				合成油脂 Synthetic Grease
防護等級 Protection Level	-																				IP65
安裝方向 Installation Direction	-																				任意方向 Any Direction
傳動慣量 Transmission Inertia	J	kg.cm ²																			6.84

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。

According to the instructions:

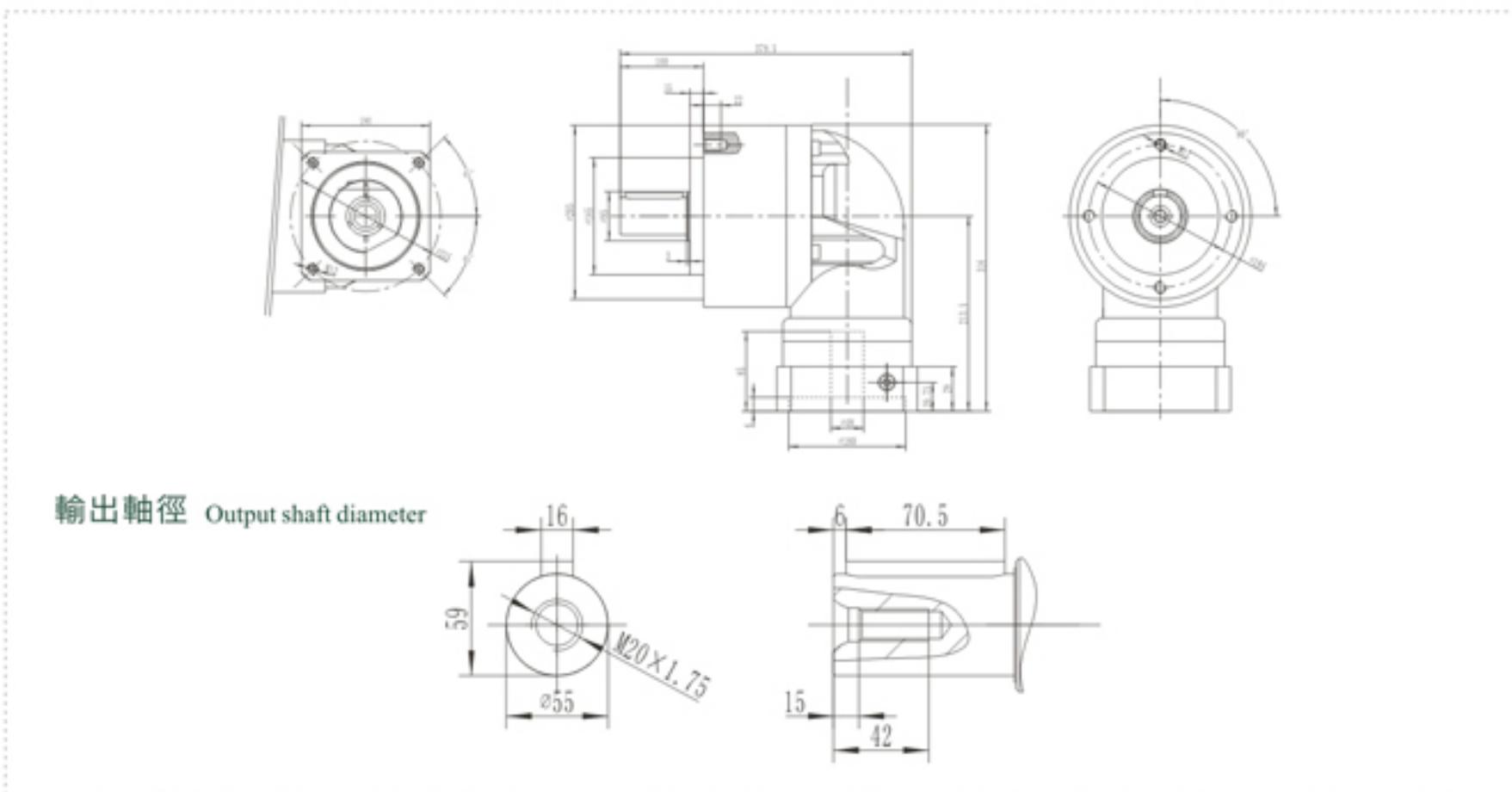
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

此樣本中的所有產品型號及參數如有變更恕不另行通告。訂貨前請與本公司確認。
All product models and parameters in this sample are subject to change without prior notice. Please confirm with the company before ordering.

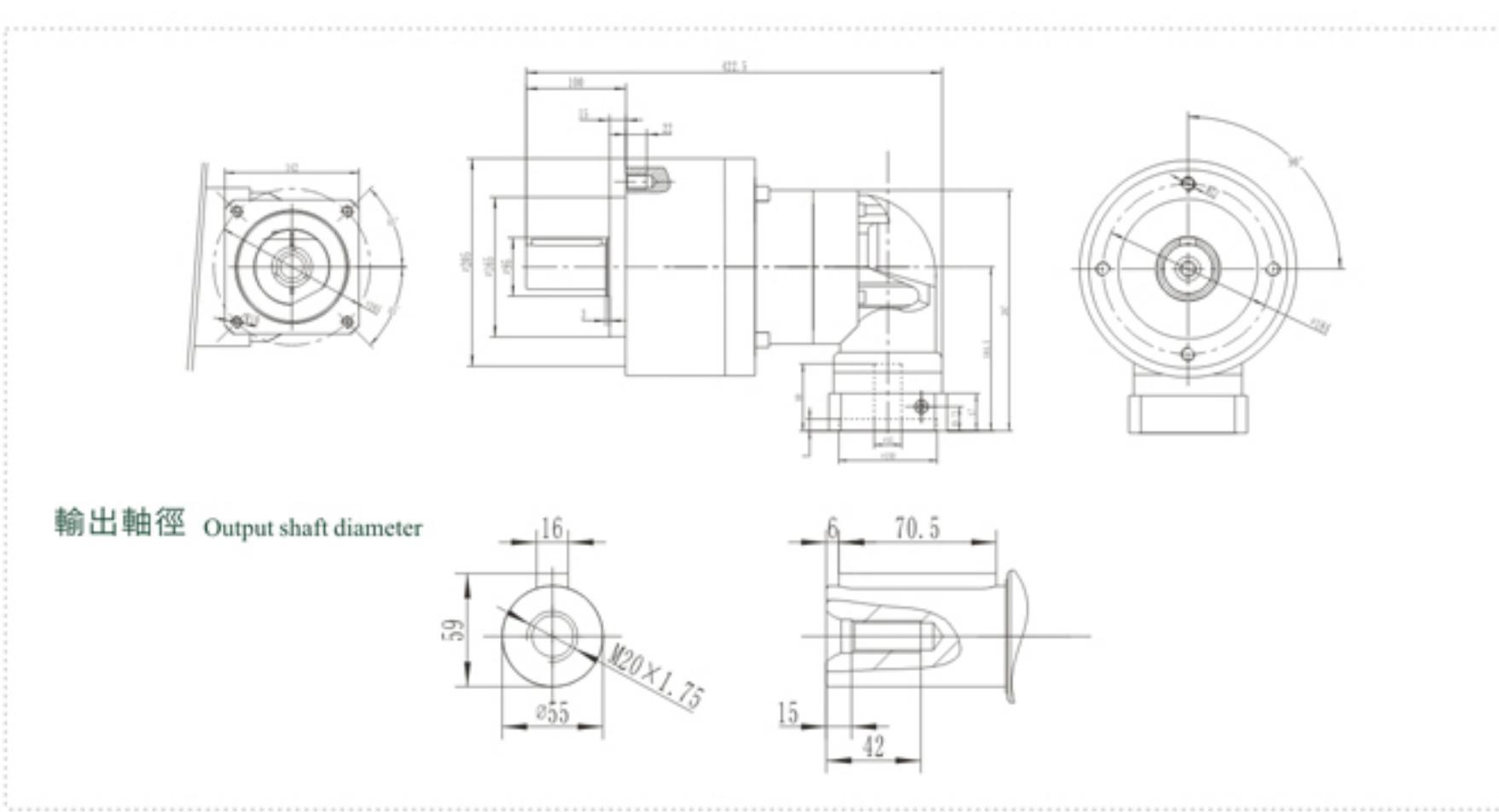
TER205系列* TER205 Single stage

外形尺寸表

TER205單節* TER205 One Stage



TER205雙節* TER205 Two Stage



性能資料 Performance data

TE系列減速機憑借標準化的法蘭接口，該行星減速機的安裝極其簡便，在性能上有所提升，它經濟實用，而且產生的熱量極少。

TE series Thanks to the standardized flange connection, the planetary reducer is extremely easy to install and has an improved performance. It is economical and produces very little heat.

速比 Speed Ratio	i	單節 One Stage										雙節 Two Stage									
		3	4	5	6	7	8	9	10	15	20	25	30	35	40	50	60	70	80	100	
額定輸出力矩 Rated Output Torque	T ₁	Nm	588	1040	1200	1100	1100	1000	-	900	-	-	1200	1100	1100	1000	1200	1100	1100	1000	900
急停扭矩 Emergency Stop Torque	T ₂	Nm																			T ₁ ×3
額定輸入轉速 Rated Input Speed	S ₁	rpm																			3000
最大輸入轉速 Maximum Input Speed	S ₂	rpm																			6000
最大輸出力矩 Maximum Output Torque	T ₄	Nm																			T ₁ ×3×60%
最大徑向力 Maximum Radial Force	F _a	N																			14500
最大軸向力 Maximum Axial Force	F _b	N																			7250
扭轉剛性 Torsional Rigidity	-	Nm/arcmin																			145
效率 Effectiveness	β	%																			≥92%
壽命 Life	-	h																			20000h
反饋噪音 Feedback Noise	-	dB																			≤72dB
重量 Weight	-	Kg																			54
回程間隙 Return Gap	P0																				-
	P1	arcmin																			≤6
	P2																				≤8
使用溫度 Operating Temperature	-	°C																			-10°C-90°C
潤滑 Lubricating	-																				合成油脂 Synthetic Grease
防護等級 Protection Level	-																				IP65
安裝方向 Installation Direction	-																				任意方向 Any Direction
傳動慣量 Transmission Inertia	J	kg.cm ²																			23.4

依據說明:

- 變速比($i=S_{in}/S_{out}$)
- 結果輸出轉速100rpm時，作用於輸出軸中心。
- 連續運轉壽命10000h。
- 噪音值基於輸入轉速3000rpm, $i=10$ 所得。
- Speed ratio ($i=S_{in}/S_{out}$)
- As a result, when the output speed is 100 rpm, it acts on the center of the output shaft.
- Continuous operation life of 10000h.
- The noise value was obtained based on the input rotational speed of 3000 rpm, $i=10$.

According to the instructions:

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