

公司简介

泰隆集团地处扬子江畔的泰兴市区，是泰兴人引以为豪的国家大型企业。泰隆集团东临沪宁高速，西靠南京禄口机场，南有江阴大桥，交通便捷，物流畅通，具有得天独厚的区位优势。

集团在全国优秀企业家、江苏省劳动模范董事长殷根章的领导下，经过20多年的悉心经营，昂首迈进了中国机械工业500强，成为全国减变行业排头兵企业。集团现拥有总资产12.06亿元，固定资产6.92亿元，占地面积80万平方米，员工3162人，专业工程技术人员991人。拥有美国、德国、日本、俄罗斯、奥地利等国家引进的大型数控磨齿机、大型数控镗铣床、蜗杆磨床、加工中心、碳氮共渗炉等一批高精尖的生产设备和检测设备达48%。建立了全国同行业中检测功能最全、仪器最先进的2000kW测试中心，创建了江苏省技术中心、江苏省传动机械与控制工程技术研究中心、泰隆集团-哈工大工程技术研究中心、博士后科研工作站。公司的主导产品减速机在原有十几个系列，几十万种规格的基础上，采用先进的模块化、点线啮合等技术开发出了TL模块化齿轮减速电机、TXP行星模块化减速器、重载模块化齿轮减速器、点线啮合减速器、立式磨机及边缘传动磨机齿轮箱、铝冶行业的联合开卷卷取齿轮箱、三环减速器、星轮减速器、风电齿轮箱、水力发电变速装置、核电循环水泵驱动变速装置等高新技术产品，以及各类特殊非标齿轮箱。泰隆工业园区已经成为国内最大的钢帘线设备生产基地，双叶、三叶罗茨风机及高温风机批量出口东南亚及欧美。

我们的产品成功应用于中华世纪坛、三峡大坝、嫦娥一号发射、杭州湾跨海大桥、北京奥体馆、上海世博会等国家重点工程。重点客户有宝钢集团、首钢集团、上海振华港机、燕山石化、葛州坝集团、北京水工、中国铝业、伊拉克泵站、桂林橡塑、乐山成发、三一重工等。

公司现为全国减速机标准化技术委员会秘书处单位，荣获“全国首批守合同重信用企业”，“国家重点高新技术企业”、“全国机械工业质量效益型先进企业”、“全国机械工业质量管理奖”、“全国用户满意服务”、“全国机械工业质量管理小组活动优秀企业”等殊荣。在同行业中率先通过了国家AAAA标准化良好行为企业认证、一级安全质量标准化机械制造企业认证、GB/T19022-2003完善计量检测体系认证、ISO9001-2008质量体系认证、ISO14001-2004环境体系认证、OHSAS18001-1999职业健康安全认证。产品通过矿用产品安全标志认证、起重行业型式试验认可认证，泰隆牌商标被国家工商总局认定为中国驰名商标，泰隆牌减速机被评为中国名牌产品。

泰隆人将遵循自己一贯的质量承诺、服务承诺和信誉承诺，把顾客满意当作我们的最高追求！

Company Brief

Tailong Group, located in Taixing city along riverside of the Yangzi River, is a national giant enterprise which Taixing people are proud of. Tailong Group is east to Highway of Shanghai-Nanjing, west to Nanjing Lukou airport and south to the Jiangyin Bridge. Convenient transportation and smooth physical distribution build the unparalleled location advantages for Tailong Group.

With effortful operation for over 20 years, Tailong Group, under leadership of national outstanding entrepreneur, chairman Mr. Yin genzhang, a model worker of Jiangsu Province, has developed in one of top 500 machinery industrial enterprises in China, playing a leading role in domestic reducer/transmission industry.

At present, the group has total assets of RMB1206million, and fixed assets of RMB 692 million, and it covers an area of 800,000 square meters and more than 3000 employees, where professional technicians account for 99.1. 48% of our equipments are sophisticated and advanced manufacturing equipments and testing equipments such as large CNS gear grinding machine, large CNC boring and milling machine, worm grinder, machining centre, and carbonitriding furnace that are imported from USA, Germany, Japan, Russia, Australia and so on. Diameter of machining work piece reaches 5m to the maximum. Single reducer we produced reaches 120 tons to the maximum. We have established a 2000kW testing center with most complete testing function and most advanced instruments of the industry national wide, and established a provincial engineering technical center, mechanical transmission and control Engineering Research Center of Jiangsu Province, Tailong Group - Harbin Technology Engineering Research Center and a post-doctoral research station. The dominant product, the reducer is available in decades of series and several hundred thousand specifications. Equipped with advanced modular and dot line engagement technology, we have additionally developed series of high tech products such as TL modular gear retarded machine, TXP modular planet reducer, heavy load modular gear retarded machine, dot line engaged reducer, vertical grinder and edge drive grinder gearbox, joint, open-book, take-up gearbox used for aluminum metallurgy industry, three ring gear reducer, planetary wheel speed reducer, wind driven gearbox, transmission for hydro-power generation, nuclear circling pump driven gearbox, and various special non-standard gearboxes. Tailong Industrial Park has become the largest steel cord production base of national wide. Our two-vane and three-vane Roots blowers and high temperature blower are exported to South East Asia, Europe and America in batches.

Our products are successfully used in the China Millennium Monument, the Three Gorges Dam, the Chang'e launch, Hangzhou Bay Bridge, Beijing Olympic Gymnasium, the Shanghai World Expo and other national key projects. Key customers include Baosteel Group, Shougang Group, Shanghai Zhenhua Port Machinery, Yanshan Petrochemical, Gezhouba Group, Beijing hydraulic, China aluminium, Iraqi pump station, Guilin Rubber, Leshan Chengfa, Sany Heavy Industry and so on.

The company is now a secretariat unit for national technical committee for standardization of reducer. We are ever granted as "national first contract respecting and credit-keeping enterprise", "national key high-tech enterprise", "national high quality and efficiency unit in machinery industry", "quality management award of national machinery industry", "national custom satisfied service", "excellent enterprise of quality management team activity of national machinery industry" and so on. We are certified as the good enterprise with better standardization with national AAAA certification and the first grade safety quality standardized machinery manufacturing enterprise and have passed such certifications as GB/T 19022-2003 perfect measurement test system, ISO 9001-2008 quality system, ISO 14001-2004 environment system, and OHSAS 18001-1999 occupational health and safety. Our products are certified with safety marks for mining products and recognized pass lifting industry type test. Tailong brand is recognized as the Chinese famous brand by national industrial and commercial bureau and Tailong reducer is awarded as the Chinese famous brand product.

Tailong people will keep to its persistent quality guarantee, service guarantee and credit, satisfying customer as our topmost pursuit.

TLHX行星减速机 Planetary drives

综述

本样本介绍的行星减速机产品符合ISO国际规范标准扭矩，范围从1000N.m~200000N.m不等，减速比能够做得很大，安装尺寸符合ISO国际标准。该系列减速机是各种大中型设备动力驱动的理想选择，行星齿轮传动是现今最紧凑和最先进的齿轮传动机构，其不仅适用于高速大功率，而且可用于低速、大扭矩的机械传动机械上，凡在具有旋转运动的各种主机上得到广泛应用，如：摊铺机、挖局机、掘进机、高效浓缩机、轧钢机大型船用机械等各种机械设备有广泛的应用，该系列减速器，在设计时就考虑到以最小的体积传递最大的功率，所以它适合于安装在需要节省空间和简单维护的设备上。行星齿轮减速机的齿轮，内齿圈采用氮化工艺，并经珩磨齿工艺，保证有良好的承载能力的同时，运行可靠并且低噪音。我们公司经过优化配比，保证整个传动装置的液压马达和齿轮传动比可以达到最佳的运动状态和最佳的总体效率。

整体结构特点：

- 1.采用国际通用标准模块化设计，互换性强；
- 2.多达3级的行星齿轮结构；高传递效率，低噪音运行节能效果明显；
- 3.采用高强度轴承组合来承受外部传递过来的轴向或者径向力；
- 4.根据不同的工矿选用不同形式的液压马达，达到最佳的实用效能，降低用户的实用成本；
- 5.装拆维护方便，采用人性化设计，降低后期维护成本；
- 6.良好的润滑散热效果，换油方便；
- 7.该样本的产品结构外型参数在不断地更新改进，请及时致电本公司获取最新的产品信息。

general

Today,planetary drives are the most compact and advanced gear-drive components in the world,applied all types of equipment where slewing operations have to be performed,such as pavers,excavator tunnel machines,etc. Ningbo intermot planetary drives are in compliance with ISO in standard torque and in stallation dimensions of ISO in standard,and because the torque range covers from 1000N. m to 200000 N.m,its reduction ratio reaches quite high. Thus,it is an ideal driving componenets for large-and-median equipments.Moreover,because this series of reduction gear is designed to transmit the biggest power and is easy to mount and maintain,In addition, the nitrated annulus gears and honed gears guarantee excellent load carrying ability,outstanding operational reliability,and lownoise running characteristics.About the entire transmission system,after optimiazation,we guarentee choosing the best combination system,after optimiazation,we guarentee choosing the best combination of hydraulic motors and gear transmsion rate,so as to reach a perfect working situation and total efficiency.

Construction features

- 1.International standard modular construction,higher interchangeability;
- 2.Three-stage planetary gear design,high efficiency,low noise;
- 3.Robust bearing system,absorbing axial or radial force;
- 4.For economy consideration,different types of hydraulic motors are available according to different working situation;
- 5.Simple mounting and maintenance,helps to save after-cost;
- 6.Good lubricating and heat-radiating characteristics,easy oil change;
- 7.The external data of product construction keep on improving,please contact us to get the latest information.

选型指南及安装使用注意事项:

1.在选用我公司的行星减速机前,用户可以简单了解一下有关减速机的相关参数:

●功率P(kW)

行星减速机只起传递功率的作用,功率和扭矩与转速相关,所以,用户必须了解这三个参数中其中两个,就可以选择合适的减速机类型:

●减速比i

①输入速度 = $n_1(\text{rpm})$ ②输出速度 = $n_2(\text{rpm})$

③输入扭矩 = $T_1(\text{N.m})$ ④输出扭矩 = $T_2(\text{N.m})$

i: 齿轮箱减速比包括有效减速比和公称减速比有效减速比是齿轮箱输入速度和输出速度的比值,公称减速比为圆整后接近有效减速比的比值。

$$i = n_1/n_2 = T_2/T_1$$

●输出扭矩T₂

已知输入功率P'(kW)和输入转速 $n_1(\text{min}^{-1})$

减速机的输出扭矩 $T_2(\text{N.m})$ 由以下公式求得:

$$T_2 = \frac{9550 \times P'}{n_2} \eta$$

■按国际惯例,该类型减速机按照最大扭矩 T_{max} 来区分系列号,减速机的持续扭矩 T_{cont} :表示在连续运转中,齿轮箱可以传递的扭矩;

■减速机的最大扭矩 T_{max} 表示齿轮箱在短时间或者偶尔以峰值速度工作时输出轴能传递扭矩的最大值。该值通常不会对最易受力的零件造成永久性的损坏。

$$T_{\text{max}} = 1.5 \times T_{\text{cont}}$$

■当减速机在应用中频繁启动,长时间接近 T_{max} 运转时,必须考虑合适的安全系数,或者选择规格更大的减速机。

●效率 η

因为液力传动适应性比较强,简单起见该公式我们不考虑减速机的效率(一般单级行星齿轮传动的效率可以取0.97~0.98,仅限于在平均速度合转矩条件下)。它取决于多种因素,如速度、扭矩、减速比、工作位置、润滑效果等。

2.使用条件:

该系列行星减速机按环境温度 $-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$ 设计的,工作温度在 $-20^{\circ}\text{C} \sim +90^{\circ}\text{C}$ 之间;比如海水、盐雾、风沙、震动、环境温度变化、冲击负荷、不合格油液等因素都会影响减速机的正常使用,这些影响用户尽可能提供我们的设计人员,以保证安全可靠设计。

3.液压马达选择:

选型时客户可以根据不同的工况选择不同排量的液压马达与不同减速比的齿轮箱组合得到不同的输出扭矩合转速,但不得超过液压马达的最高转速,和齿轮可以承受的最大输出扭矩。

考虑到要发挥整个系统的高效能和经济性,可以根据不同压力级和效率,可以参考下表给出的指标来选择液压马达:

Guide of selection

1.Before selection,please have a look at the following data

●power-P

Planetary drives only function to transmit power;power and torque correlate with rotation speed,thus,users must know two of these three data,so as to choose a correct type:

●Ratio-i

1)input speed 2)output speed

3)input torque 4)output torque

i:ratio of a gearbox includes valid ratio and nominal ratio, valid ratio is the rate of input speed and output speed,while the nominal ratio is the rate after rounding off,most closest to valid ratio.

$$i = n_1/n_2 = T_2/T_1$$

●Output torque- T_2

The output power is obtained through the formula below

$$T_2 = \frac{9550 \times P'}{n_2} \eta$$

■According to international practice,this type of reduction gear is distinguished into different series codes by its maximum torque- T_{max} ;Tcont means,the torque that gearbox is able to transmit while operating continuously.

■ T_{max} means the maximum torque that output shaft is able to transmit,when gearbox works at peak value in short time.usually this value won't make permanent damage to the most fragile components.

$$T_{\text{max}} = 1.5 \times T_{\text{cont}}$$

In application,if the reduction gear is frequently started,making its speed fall at T_{max} for a long time,then it is strongly suggested to choose a certain safety coefficient,or change to a larger reduction gear.

●Efficiency- η

As hydraulic transmission has good adaptation,here the efficiency of reduction gears were of no consideration (usually the efficiency of one-stage planetary reduction gears is 0.97~0.98).It is due to many factors,such as speed,torque,ratio,work position,and lubrication effect,etc.

2.Application conditions

This series of planetary drives are designed to work at ambient temperature between $-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$ Environmental influences such as salt water,salty air,dust,shocks,temperature change,overpressure,unqualified oil and the like will impede the function of the products.To enable a safe and reliable design,such conditions must be reported to us.

3.Hydraulic motors selection

In order to suit different working condition,customers could choose different displacement of hydraulic motor to pair with different reduction rate of gearboxes,but must avoid to over pass the maximum speed of the motors and maximum output torque of the gearwheels.

To make the who system work more efficient and economical, the following table is for your reference.

压力等级	≤17.5(Mpa)		≤17.5~20(Mpa)		≤20~40(Mpa)	
马达类型	摆线马达	齿轮马达	径向塞马达	斜盘马达	内曲线马达	斜轴柱塞马达
转速 (rpm)	< 700	< 3000	< 500	< 4000	< 200	< 4000
机械效率 (η_m)	0.80	0.85	0.90	0.92	0.90	0.92
容积效率 (η_v)	0.90	0.87	0.96	0.96	0.95	0.96
径向尺寸	小	小	大	小	大	小
价格	低		中		高	

4.停车制动器

部分要求精确定位或者有驻车制动要求行星齿轮箱可带内置式或者螺栓附加式多片式停车制动器,制动器上留有用于控制制动器开启的“c”口,该口可以从控制阀上引出油液或者气体,马达运转时,控制管的压力达到弹簧释放的开启值时候打开制动器,当控制管压力为0时,制动器处于关闭状态,当液压回路有背压时,有效的制动扭矩会减少,一般推荐使用Y型或者H型换向阀,避免液压回路产生背压,湿式制动器的润滑油与齿轮箱的油不一致,一般要单独向制动片部分注入大约1升粘度为ISOVG32的矿物润滑油,或者其它适合的替代油品。

对于用在有精确定位或者停车制动要求的回转减速机 T_{Br} (最小静态制动力矩) = $1.3 \times T_1$ (液压马达输入扭矩)

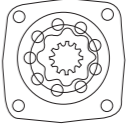
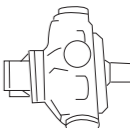

⚠ 多片式停车制动器不允许当作动态制动器使用

5.安装位置

因安装形式的多样性,用户安装时候需要确定安装位置,常见的有水平,垂直朝下,垂直朝上三种形式,根据安装位置的不同在设计时候就需要考虑到内部运动机构的支撑,进出口以及油位和油塞等位置都会有区别。

6.润滑油:

正确使用润滑油可以保证减速机运行良好,使用寿命更长。齿轮箱对外供货时包括液压马达,制动器,齿轮箱不带润滑油,用户使用时,需要按推荐的润滑油加注到所示位置,注意加油时要把气塞处于打开状态,使用机器加油时更要注意,加油压力不能超过0.5Mpa,这样可以防止液压马达或者制动器的油封被润滑油冲坏!运行几分钟后,再次检查油位,确保润滑油充分进入齿轮箱各部位。润滑油的使用会根据齿轮箱的形式(速比和输入速度),工作状态,环境温度变化而不同。用于机械传动的带有EP(极压)添加剂,粘度为ISOVG的工业齿轮润滑油均可使用,取决于工作温度,参照表格齿轮箱润滑油牌号参照表(推荐长城润滑油)

Pressure	≤17.5(Mpa)	≤17.5~20(Mpa)	≤20~40(Mpa)
Type	Orbit motor	Radial piston motor	Axial piston motor
			
Price	Low	Middle	High

4.Park brake

Some planetary gearbox is required to position smartly,or park with brake,the multiplate-disk park either integrated or boltattached is available.There is an "C"port on the brake,by changing the pressrue of the controlling pipe,this pipe is able to turn on or off the brake. when there is back-pressure in the hydraulic loop,the valid torque reduces,then it is suggested to use Y-type of H-type reverse valve,In addition,as the lubrication for wet brake is different from te oil separately for gearbox,nornally input one liter of ISOVg 32 mineral oil,or other likely oil.

Slew gear which have to position smartly or park with brake $T_{Br}(\text{minium static brake torque}) = 1.3 \times T_1$ (hydraulic motor in put torque)

Note:Multiplate-disk park brake is not granted to work as a dynamic brake

5.Mounting position

Various mounting position is available,horizontal,vertical upward,vertical downward are usually applied.According to the user's decision,before design take into consideration of many factors,such as the support of the internal running system,input and output oil port,oil level,oil plug,etc.

6.Lubrication

Use lubrcation correctly ensures a good running situation of the reduction gear,thus a longer life.our gearbox is supplied with hydraulic motors,brake,and gearbox,all without lubrication,therefore,the users are suggested to input lubricate,keep the gas pulg open,even more attentions should be paid if lubricate by machine:lubricating pressure should not exceed 0.5Mpa,so as to avoild damaging the hydraulic motor or the brake seal.After starting the reduction gears for several minutes,recheck the oil level,ensuring all parts are fully lubricated.In addition,lubrication selection depends on the type of gearbox(ratio and input speed),working condition,ambient temperature,etc.The industrial gear lubrcation is commonly used,of which the viscosity is ISO VG,and EP additive is contained.Please refer to the below table for detailed information.(The great wall brand lubrication is recommedtd)

环境温度 Ambient temperature	-20°C~+5°C	-5°C~+40°C	+30°C~+65°C	+40°C~+90°C
齿轮箱用润滑油 Lubrication for Gearbox	ISO VG100	ISO VG150	ISO VG220	ISO VG320
液压马达在常温下推荐ISO VG 46 抗磨液压油 Normal temperature,ISO VG 46 for motor				
液压制动器在常温下推荐ISO VG 32 抗磨液压油 Normal temperature,ISO VG 32 for brake				

● 液压马达、液压制动器、齿轮箱使用的油液各不相同，用户避免混用，润滑油粘度必须根据齿轮箱的环境已经工作温度来选择。对于垂直安装而且连续运转的齿轮箱，由于油液通常加得比较满，温度高得时候由于油得热膨胀，需要安装外置油箱或者加冷却油泵进行强制冷却。

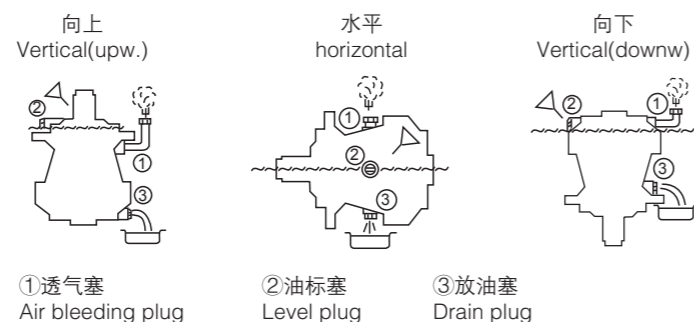
● 在输出轴转速 > 5r/min时，建议使用高粘度得润滑油

● 整套齿轮箱在出厂时候不能够充分跑合，所以减速箱在初始运转时，金属表面得接触会让铁屑掉入油里，被污染得润滑油会缩短零件得使用寿命。所以在运转100~150小时内将齿轮箱和制动器里得润滑油更换一遍，以后每12个月或者工作1500~2000小时后再更换。更换时，最好是让减速机在运转一段时间热机时更换，这样油污容易排出。拧开通气塞和放油塞并且要使用合适得容器来盛装润滑油，注意不让油溢出，污染地面。放完后，清除磁性放油塞上的铁屑，重新加注润滑油。运行一段时间后，要定期检查润滑油位。必要时再添加。

● 水平安装时，润滑油必须加到减速器的轴线的一半，注意观察油位塞的位置。

● 垂直安装时，减速机必须完全注满润滑油，并将最高处的塞子拧松一个，令空气排走。

7.油塞示意图 Plug position



8.服务

本公司产品质量保证期从出厂发货日起一年内，属于减速机自身引起的质量问题，我公司实行三包，但不承担连带赔偿责任。

● As the oil for hydraulic motor,brake,and gearbox are quite different,be sure not to mix up.Viscosity selection must accord with ambient and working temperature of gearbox.For those gearboxes which are vertically mounted and continuously running,normally the oil is quite full,and when temperature increases,oil is easy to expand,thus an outlaid tank or coolant pump is quite necessary.

● When the output shaft running speed exceeds 5 r/min, high viscosity lubrication is suggested.

● It is suggested to change the lubrication for the gearbox and brake after first 100~150 hours,running after that,make oil change every12 mouths or 1500~2000 working hours. Before oul change,it is better to run the whole machine for some time,in order to let out waste oul.After release all the waste oil,also clean the scrap iron on the magnet plug,and then refuel.check the lubrication level regularly.

● When mount horizontally,fuel to the middle of its axis,and pay attention to the position of the oil-level plug;

When mount vertically,fully fuel the reduction gears,and loose one of the highest plug to let air out.

Service

We guarantee the product for one year,from the date it leaveds our factory.If it is the reduction gear that causes the problem, we will provide you with three choices either return,change or repair,upon different condition,but won't pay for any other damage that related.

本产品的执行标准 Planetary drives exclusive standard of this product:

行星齿轮减速机: JB/T6502-1993

工业用闭式齿轮传动装置: GB/Z 19414-2003/ISO/TR 13593:1999

Closed-type gear drives for industrial use.

TLHX大扭矩系列行星减速机 TLHX large torque series planetary

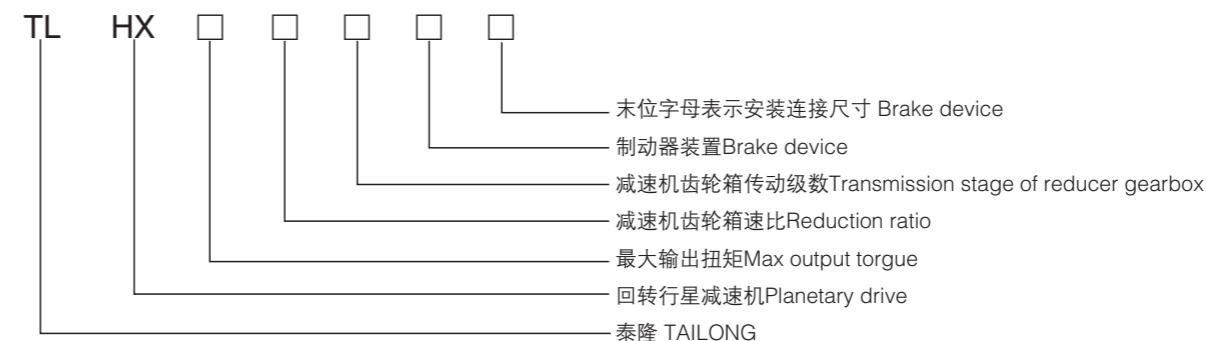
产品简介

该系列行星减速机是我公司专门为矿山选矿，环保处理，煤炭洗选，浓缩设备设计速比相对较大的系列新产品，该系列减速机扭矩大，速度低，特别适合中心和周边传动的浓缩机使用，还可以在港口吊车，建筑塔吊使用。负载启动性能比原有的电动机加摆线真轮减速机的方案提高很多，长时间运转齿轮不发热，噪音非常低并且可以替代国外相同类型的行星减速机。该类型减速机为适应客户要求设计了几种法兰形式，以供用户选择。

Brief introduction

THZ large-torque planetary drive is designed for mining mineral,environment protect processing,coal washing, concenreation equipment,with large ratio relatively,it is our new product,with larger reducer torque,low speed, especially for thickenner via central and peripheral driving,it is also using for harbor crane,construction crane.with better load motor start-up performance than the original cycloid reducer,long running gear and not heat,the noise is very low and can replace the same type of planet gear from oversea.to meet customers' requirements,we have designed several forms flanges for users to choose.

大扭矩行星减速机选型代号说明 Order code of large-torque planetary drives



注 Note:

- 1)行星齿轮减速比经圆整 Gear ratio after a number of round;
- 2)“-”单级传动；“D”双级传动；“T”三级传动；“-” single-stage transmission；“D” Two-stage transmission；“T”three-stage transmission；
- 3)“-”不带制动装置；“B”液压制动器；“-” Without control devices；“B” hydraulic brakes；
- 4)其它差异详见外形图及级数参数。For more informations,please refer drawings and technical specification.

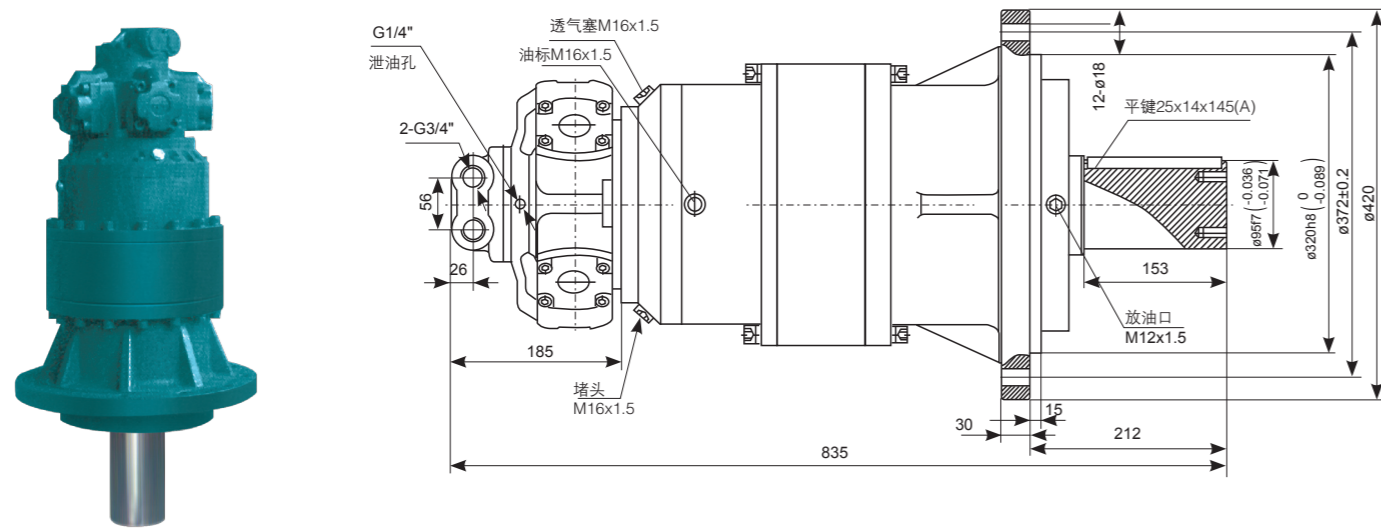
示例: TLHX010069T-A表示最大输出扭矩为10000N.m传动比为69、三级传动，不带制动器、安装尺寸为“A”型的行星减速机。

Example:TLHX010069T-A,the maximum output torque is 10000N.m,the transmission ratio is 69,three-stage transmission,planetary drive without brake,mounting date style"A".

技术参数 Technical specification

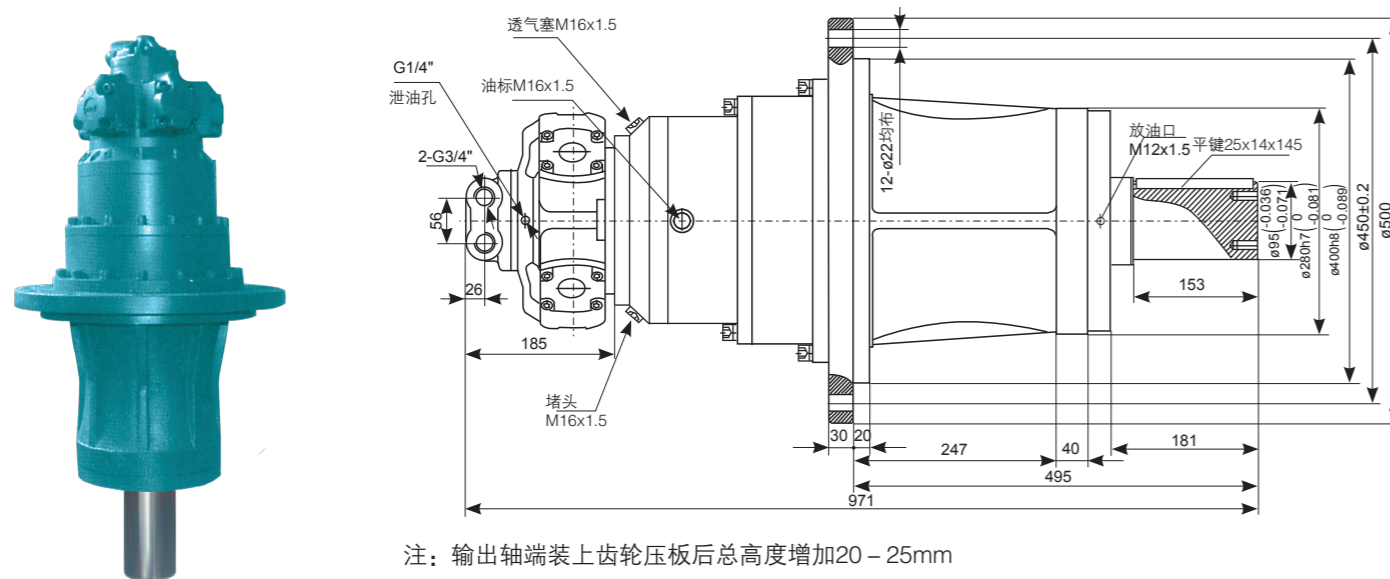
型号 Type	减速比 RAatios(i)	最大扭矩 Max.Torque N.m	最大输出速度 Max.speed N.m	液压马达型号 Hydraulic motors	总排量 ml/r	达到最大扭矩理论 压力 Mpa	重量 Weight (kg)
TLHX010099T-A/B	99	10000	< 7	NHM2-100 I	11187	6	300/330
				NHM2-150 I	15741	5	
				NHM2-175 I	17820	4	
TLHX010069T-A/B	69	10000	< 7	NHM2-100 I	7797	8.5	300/330
				NHM2-150 I	10971	6.5	
				NHM2-175 I	12420	6	

TLHX010069T-A/010099T-A安装联接尺寸 Mounting data



注：输出轴端装上齿轮压板后总高度增加20-25mm
 Note: The total height will increase 20-25mm, when the output shaft mounted on the plate

TLHX010069T-B/010099T-B安装联接尺寸 Mounting data

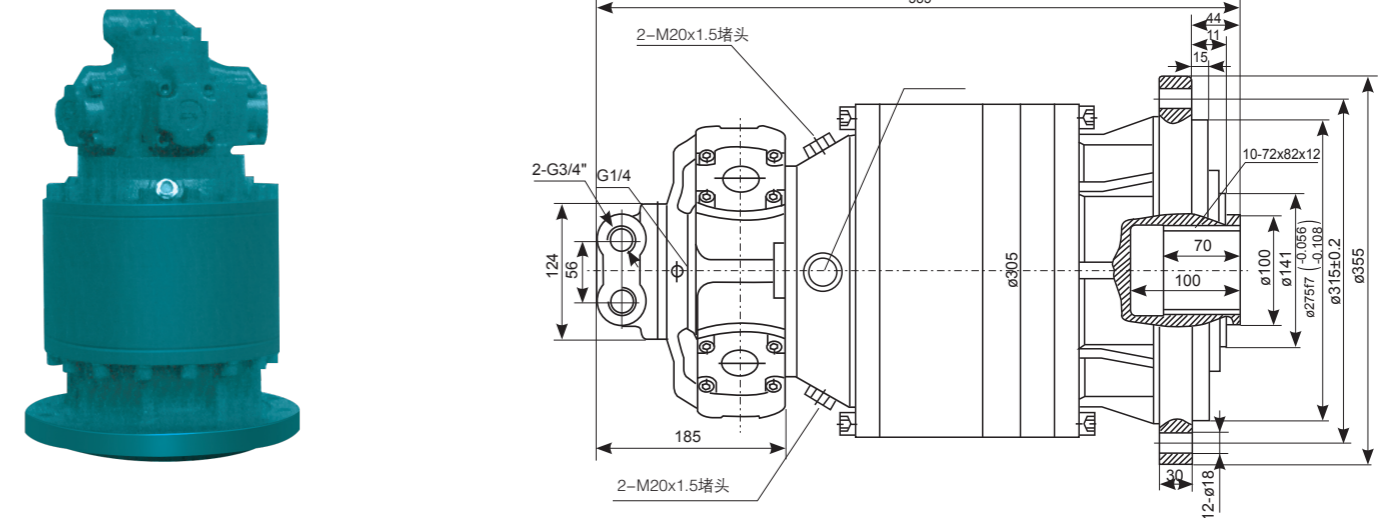


注：输出轴端装上齿轮压板后总高度增加20-25mm
 Note: The total height will increase 20-25mm, when the output shaft mounted on the plate

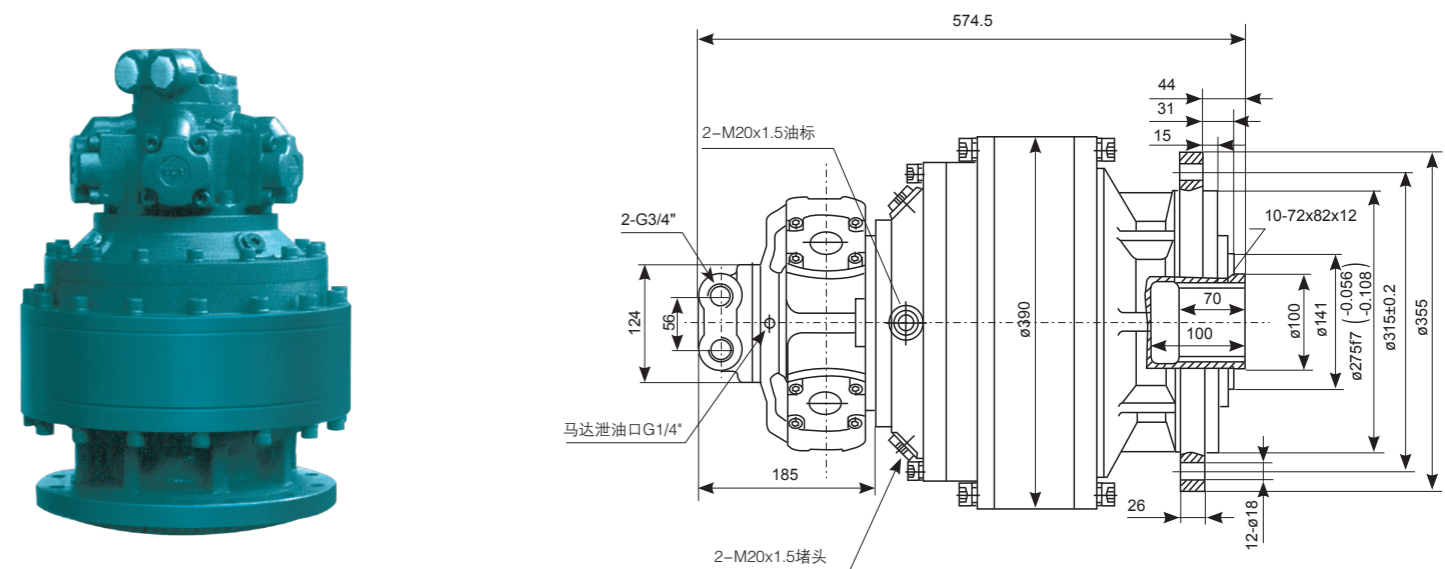
技术参数 Technical specification

型号 Type	减速比 RAatios(i)	最大扭矩 Max.Torque N.m	最大输出速度 Max.speed N.m	液压马达型号 Hydraulic motors	总排量 ml/r	达到最大扭矩理论 压力 Mpa	重量 Weight (kg)
TLHX010030D-E	30.23	10000	< 8	NHM2-150 I	4806.57	14.5	300/330
				NHM2-175 I	5441.4	13	
				NHM2-200 I	6257.61	11	
				NHM2-250 I	7104.05	10	
				NHM2-280 I	8343.48	8.5	
TLHX012030D-E	30.23	12000	< 8	NHM2-150 I	4806.57	17.5	300/330
				NHM2-175 I	5441.4	15.5	
				NHM2-200 I	6257.61	13.5	
				NHM2-250 I	7104.05	12	
				NHM2-280 I	8343.48	10	

TLHX010030D-E安装联接尺寸 Mounting data



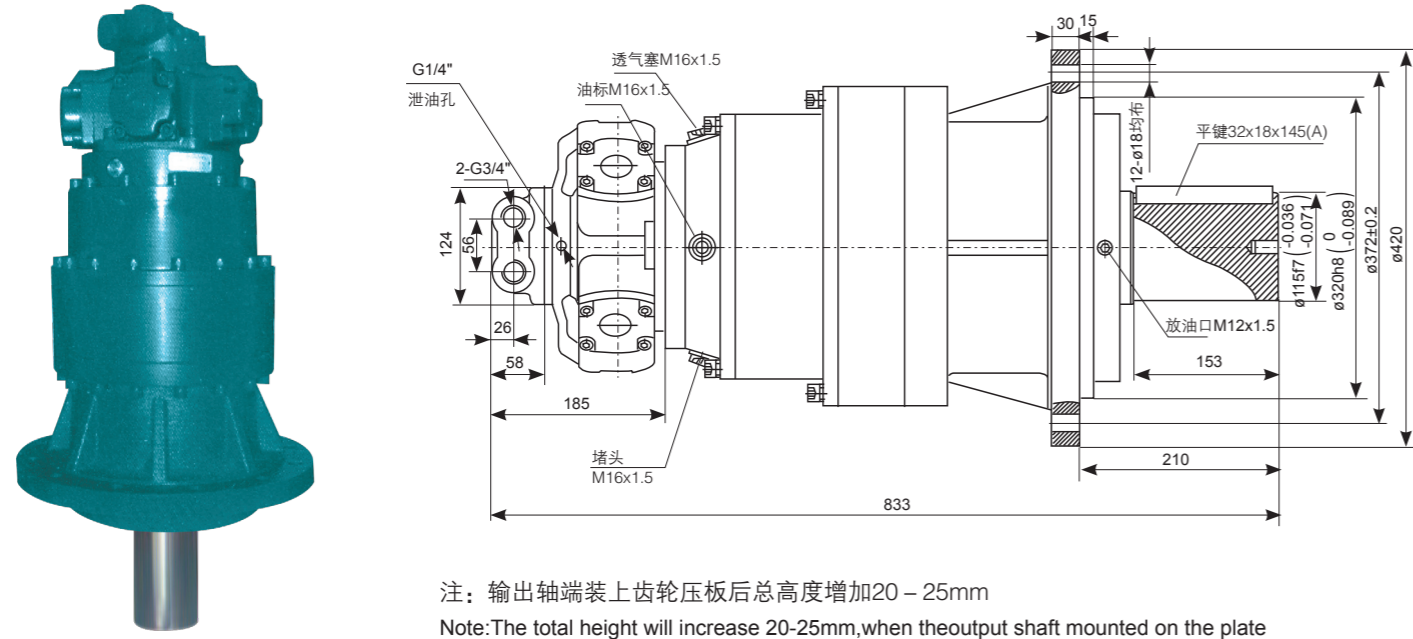
TLHX012030D-E安装联接尺寸 Mounting data



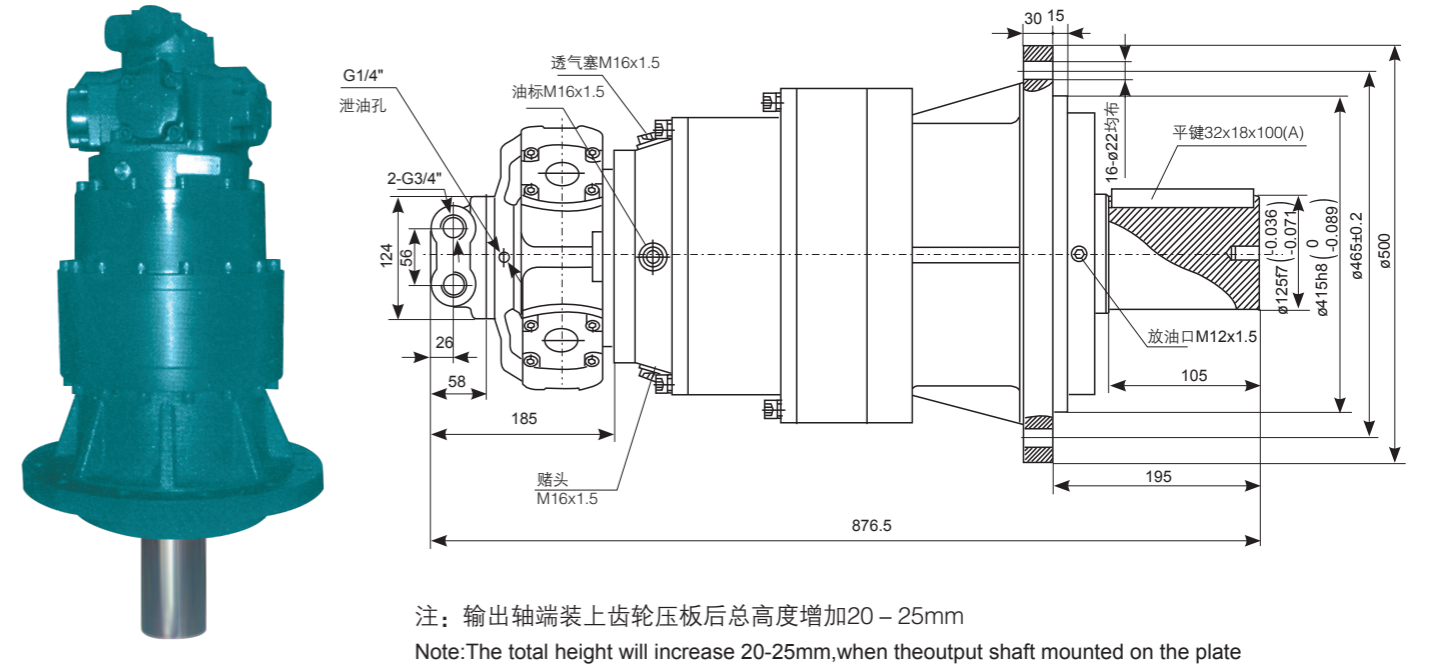
技术参数 Technical specification

型号 Type	减速比 RAatios(i)	最大扭矩 Max.Torque N.m	最大输出速度 Max.speed N.m	液压马达型号 Hydraulic motors	总排量 ml/r	达到最大扭矩理论 压力 Mpa	重量 Weight (kg)
TLHX015103T-A	103	15000	<6	NHM2-100 I	11663.86	9	320
TLHX018103T-A	103	18000	<6	NHM2-175 I	18579.6	8	
TLHX024095T-A	95	24000	<6	NHM2-100 I	11663.86	9	

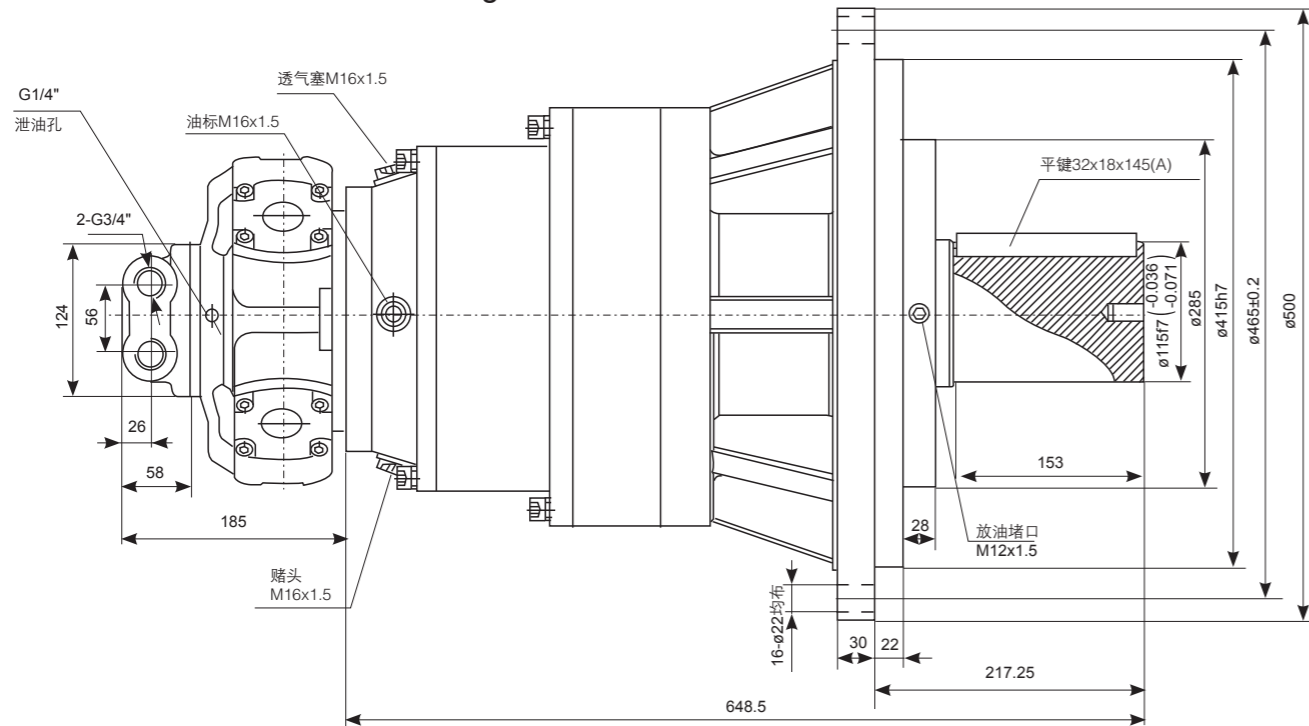
TLHX015103T-A安装联接尺寸 Mounting data



TLHX024095T-A安装联接尺寸 Mounting data



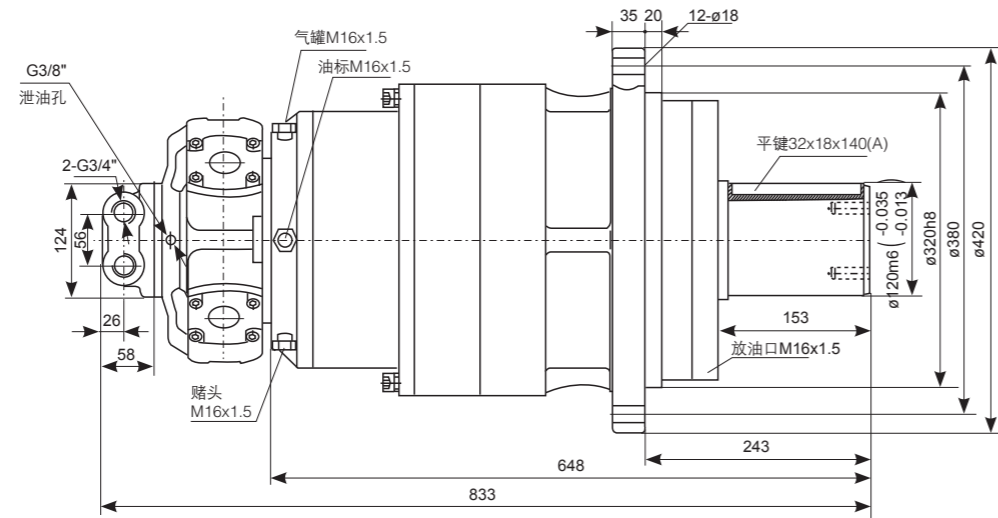
TLHX018103T-A安装联接尺寸 Mounting data



技术参数 Technical specification

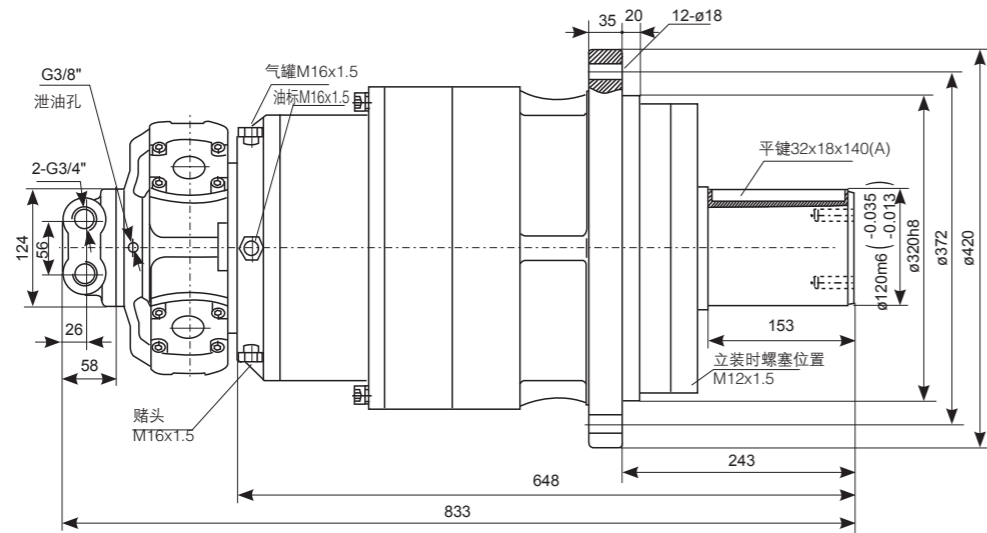
型号 Type	减速比 RAatios(i)	最大扭矩 Max.Torque N.m	最大输出速度 Max.speed N.m	液压马达型号 Hydraulic motors	总排量 ml/r	达到最大扭矩理论 压力 Mpa	重量 Weight (kg)
TLHX020052T-A/C	52.3	20000	<6	NHM3-300	15114.7	9.5	333
				NHM3-350	17782	8	
				NHM3-400	19874	7	
TLHX025125T-A	125.68	25000	<6	NHM2-100 I	14201.8	14.5	400
				NHM2-150 I	19983.21	10.5	
				NHM2-175 I	22622.3	9.3	
TLHX030104T-A	104.53	30000	<6	NHM2-200 I	21639.5	9.6	450
				NHM2-250 I	24566.6	8.5	
				NHM2-280 I	28852.6	7.5	

TLHX020052T-C安装联接尺寸 Mounting data



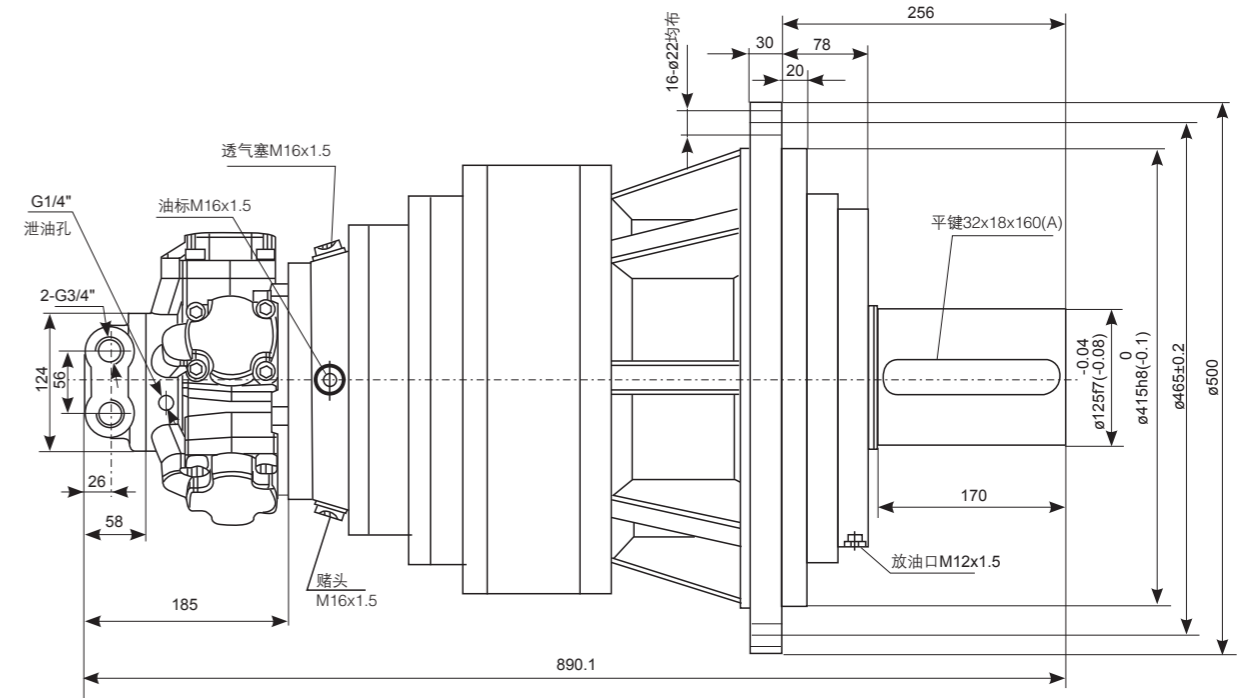
注：输出轴端装上齿轮压板后总高度增加20-25mm
 Note: The total height will increase 20-25mm, when the output shaft mounted on the plate

TLHX020052T-A安装联接尺寸 Mounting data



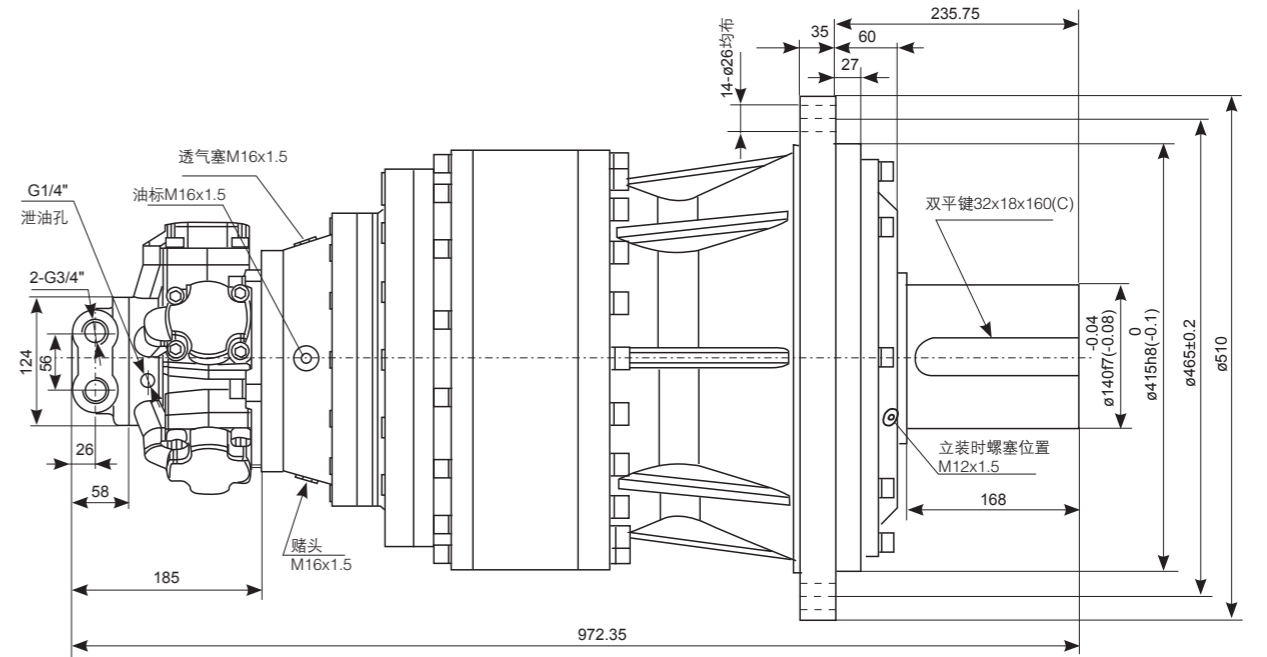
注：输出轴端装上齿轮压板后总高度增加20-25mm
 Note: The total height will increase 20-25mm, when the output shaft mounted on the plate

TLHX025125T-A安装联接尺寸 Mounting data



注：输出轴端装上齿轮压板后总高度增加20-25mm
 Note: The total height will increase 20-25mm, when the output shaft mounted on the plate

TLHX030104T-A安装联接尺寸 Mounting data



NHM2系列马达工作参数 Working specification of TMD2 motors

型号 Type	排量 Displacement (ml/r)	压力Pressure(Mpa)		扭矩Torque(N.m)		转速范围 Speed range (r/min)	重量 Weight (kg)
		额定压力 Rated pressure	最高压力 Max pressure	额定扭矩 Rated torque	单位理论扭矩 Theoric specific torque(N.m/Mpa)		
NHM2-100	113	25	32	419	17	15-1250	27
NHM2-125	138	25	32	512	20	15-1250	
NHM2-150	159	25	32	588	24	15-1000	
NHM2-175	180	20	25	532	27	15-1000	
NHM2-200	207	20	25	611	31	8-800	
NHM2-250	235	16	20	556	35	8-630	
NHM2-280	276	16	20	653	41	8-500	

NHM3系列马达工作参数 Working specification of TMD3 motors

型号 Type	排量 Displacement (ml/r)	压力Pressure(Mpa)		扭矩Torque(N.m)		转速范围 Speed range (r/min)	重量 Weight (kg)
		额定压力 Rated pressure	最高压力 Max pressure	额定扭矩 Rated torque	单位理论扭矩 Theoric specific torque(N.m/Mpa)		
NHM3-175	181	25	32	670	27	8-1000	35
NHM3-200	201	25	32	743	30	8-800	
NHM3-220	222	25	32	819	33	8-800	
NHM3-250	254	20	25	752	38	8-630	
NHM3-300	289	20	25	856	43	8-500	
NHM3-350	340	20	25	1000	50	8-400	
NHM3-400	380	18	22.5	1008	56	8-350	

输出齿轮参数表 Parameters of output gears

TLHX010069/010099输出齿轮Output gears

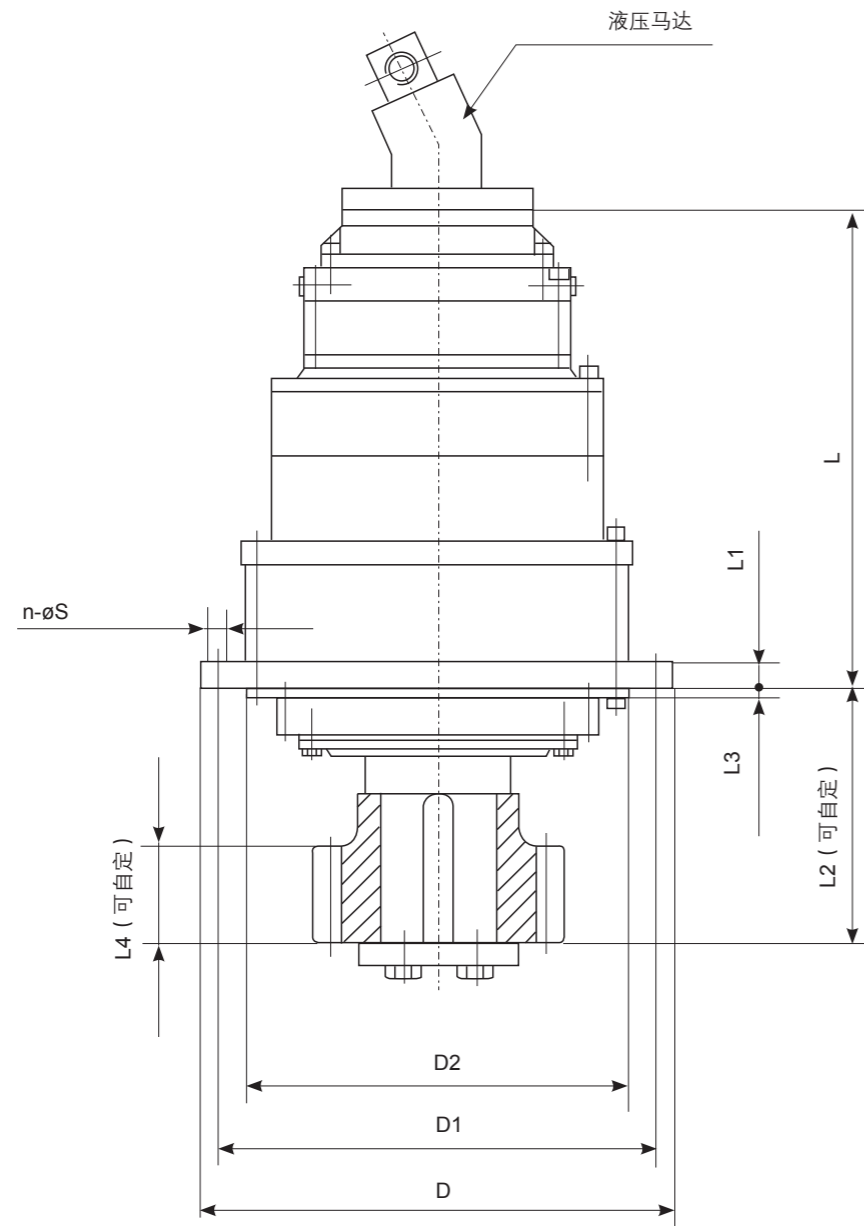
型号 Type	图号 Drawing No.	齿数 Number of teeth	模数 Module	压力角 Pressure angle	变位系数 Modification coefficient	齿轮大径 Large diamele of gear	总长 Total length	齿轮长 length of gear	内孔直径 Diameter of innerhde
01	TLHX1069-26B1(修改)	z=17	m=10	20°	0	190	175	100	95
02	TLHX010069-26B1	z=17	m=10	20°	0	190	190	100	95
03	TLHX010069-26B2	z=20	m=12	20°	0	264	175	145	95
04	TLHX010069-26B3	z=17	m=14	20°	0.5	280	175	145	95
05	TLHX010069-26B4	z=20	m=14	20°	0	308	168	100	95
06	TLHX010069-26B5	z=17	m=12	20°	0	228	170	90	95
07	TLHX010069-26B6	z=20	m=8	20°	0	176	170	60	95
08	TLHX010069-26B7	z=17	m=12	20°	0.1	229.92	190	100	95
09	TLHX010069-26B8	z=18	m=10	20°	0	200	175	145	95
10	TLHX010069-26B9	z=17	m=10	20°	0	190	170	100	95

TLHX015103A输出齿轮Output gears

型号 Type	图号 Drawing No.	齿数 Number of teeth	模数 Module	压力角 Pressure angle	变位系数 Modification coefficient	齿轮大径 Large diamele of gear	总长 Total length	齿轮长 length of gear	内孔直径 Diameter of innerhde
01	TLHX015103A-26B1	z=17	m=14	20°	0.5	227.2	143	110	115
02	TLHX015103A-26B2	z=20	m=14	20°	0	308	168	100	115
03	TLHX015103A-26B3	z=17	m=14	20°	0.5	280	175	145	115

TLHX020052T输出齿轮Output gears

型号 Type	图号 Drawing No.	齿数 Number of teeth	模数 Module	压力角 Pressure angle	变位系数 Modification coefficient	齿轮大径 Large diamele of gear	总长 Total length	齿轮长 length of gear	内孔直径 Diameter of innerhde
01	TLHX020052T-27B	z=17	m=16	20°	0	304	186	140	120
02	TLHX020052T-27B1	z=19	m=16	20°	0	336	172	127	120
03	TLHX020052T-27B2	z=20	m=16	20°	0	308	171	135	120



型号	最大扭矩 (N.m)	速比范围	D	D1	D2h7	L	L1	L2	L3	L4	n	s
TPB3N09	22000	140~280	428	388	350	496	24	305	8	110	24	18
TPB3N10	31000	140~280	472	436	394	516	28	305	8	110	28	18
TPB3N11	42000	140~280	525	485	425	540	32	318	8	130	20	22
TPB3N12	60000	140~280	605	555	495	560	34	418	9	119	20	26
TPB3N13	83000	140~280	645	595	535	612	39	440	11	130	20	26
TPB3N14	110000	140~280	720	665	610	635	42	465	9	130	32	26