DLP 行星齿轮减速器 Planetary Gear Units



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Planetary Gear Untis

Product Description

1.1 概述

为了准确地选择出合适的行星齿轮箱,请注意本产品样本中所提供的各种技术资料。

行星齿轮箱是应用于不同工业领域的、可靠的传动部件,其合理 而经济的设计方案在各种应用条件下已得到证实。

划分较细的系列化产品可以覆盖从21700到2550000Nm的额定扭矩范围。

模块化设计使得许多基本零部件标准化,其中不仅包括行星齿轮级,而且也包括箱体以及输入、输出侧的各种零部件。这样,就能保证高质量标准的前提下减小复杂程度,并且在批量生产中更加经济。

同样,标准系列不能满足客户的需要时,我公司的工程技术人员 和设计人员完全可以保证在技术上和经济上迅速提供量体定制的最佳 方案。

1.2 说明

型号和传动比

我们能够提供的标准型号及相应传动比范围见第5页的附表。

实际传动比, 见第36~38页

齿轮

齿轮是根据给定的额定扭矩按持久寿命设计的。

这样只要应用系数正确及合理的使用与维护, 轮齿在理论 上就可以持久承载。

在可变载荷、恒定转速应用的情况下,齿轮箱的设计按当量扭矩进行。

对某些特定的应用,按有限抗疲劳寿命选择的齿轮箱可以满足要求,如偶尔动作或慢速输出(N2<4min-1)

只要已知精确的使用系数,我们可以帮助您校核您的选型是否合 理。

输入端

轴的结构适用于与联轴器或皮带轮等相连接。

输出端

除标准的输出型式外,空心轴和实心轴均可以采用渐开线花键连接,见第39~42页

输出轴旋转方向

旋转方向是指面向输出轴d2端面的旋转方向。

密封

输入和输出轴端的标准密封方式为径向油封。对于特殊的应用情况,我们采用可重复注入油脂的迷宫式密封方式,其原理见第33页

中心孔

在两侧轴伸上的中心孔尺寸详见第33页

1.1 General information

For careful selection of suitable planetary gear units please observe the details given in this brochure.

Planetary gear units are reliable drive component for the use in different industry sectors, appropriate economical design solutions proved themselves under different operating conditions.

A fine-progression series covers a nominal torque range between 21700 and 2550000Nm.

The modular design permits standardization of many basic components, including both planetary gear stages and housing parts as well as input side and output side components. Thus, complexity is reduced and manufacture in economical lot sizes is made possible at high quality standards.

A team of planning and design engineers makes sure that optimum solutions with regard to technology and efficiency are quickly realized for customer requirement which cannot be met with the standard product range.

1.2 Description

Types and transmission ratios

The representation on page 5 illustrate possible standard types and the respective transmission ratio ranges.

For actual ratios, see page 36~38

Gear teeth

The gear teeth are designed to be long-life fatigue-resistant for the stated nominal torques.

The teeth can thus, if the application factors are correct ,appropriate application and maintenance the oretically be placed under load as often as required.

In case of applications, where the torque is variable but the speed constant the gear unit can be designed on the basis of the so-called equivalent torque.

A gear unit design which is finite-life fatigue-resistant can be sufficient for certain applications, for example, sporadic operation or low output speeds $(n2 < 4 min^{-1}) \ .$

We would be pleased to help you check whether your selection is correct, in so far as the precise application factors are known.

Input side

The shafts are designed for taking up, for example, couplings or pulleys.

Output side

In addition to standard designs it is possible to design hollow and solid shafts also with involute splines, see page 39~42

Direction rotation of output shaft

The specified directions of rotation refer to output shaft d2 viewing on the shaft end face.

Seals

Input and output shafts have radical shaft seal as standard.

For special applications we provide seals with refillable labyrinth. For function, see page33

Central holes

For details on the centre holes in the shaft ends, see page33