

1. DC系列卷筒用联轴器的性能与结构形式

1.Application and Characteristics Coupling Model DC

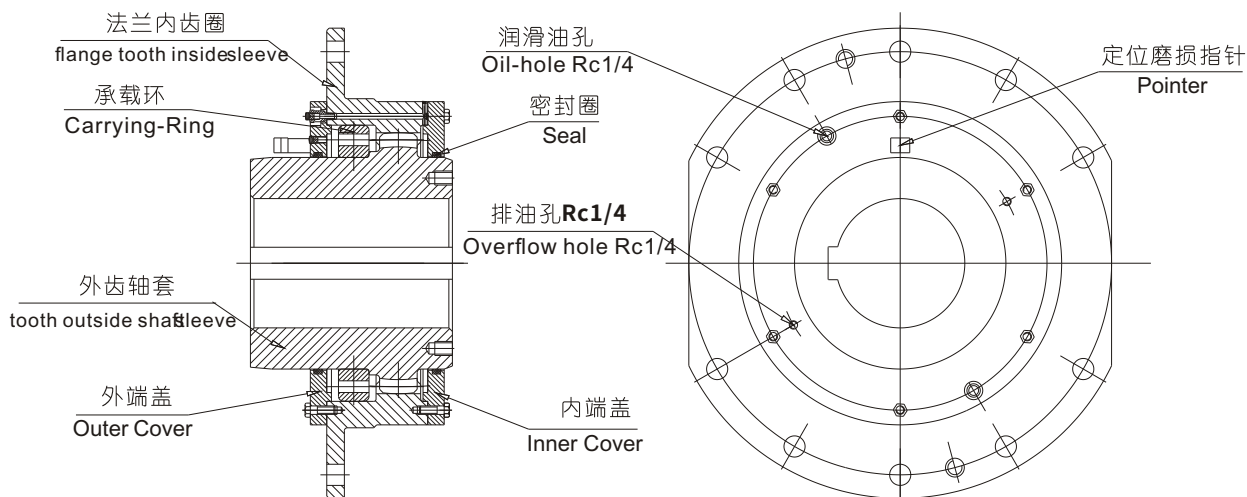


图1 联轴器的结构图

Figure1 Configuration of the coupling

- 1.1 卷筒用鼓形齿式联轴器（图1）是一种新型挠性联轴器，主要用于起重设备中起升机构的减速器输出轴与钢丝绳卷筒的联接，也适用于其它类似的既传递转矩又承受径向载荷的机械设备，但不能用作需承受轴向载荷的传动。
- 1.2 卷筒用鼓形齿式联轴器由带鼓形齿的外齿轴套、带联接法兰的法兰内齿圈、带外球面的承载环、内外端盖和密封圈等组成，并设有定位磨损指针、润滑油孔和排油孔等（见图1）。外齿轴套和法兰内齿圈构成的鼓形齿式联轴器传递驱动功率，而由承载环的外球面和法兰内齿圈的内承载面形成的接触副构成自动调位的球面轴承，承受径向载荷。
- 1.3 与其他卷筒用联轴器比较，卷筒用鼓形齿式联轴器具有如下特点：
 - 1.3.1 工作稳定可靠，能承受很大径向载荷和传递较大的转矩，过载能力大。
 - 1.3.2 结构紧凑牢固，系列化设计，可简化整机结构，减轻设备重量。
 - 1.3.3 调位性能好，安装、调整方便，维护简单。
 - 1.3.4 设有定位磨损指示，安全可靠。
 - 1.3.5 可配有普通轴伸式减速机，降低设备成本。

- 1.1 The drum coupling, model DC, see Fig.1 is a novel flexible gear coupling and is especially recommended for installation in drum drives in cranes. The coupling is also suitable for that similar mechanical equipment which is able to transmit torque and subject to radial load but cannot withstand axial load.
- 1.2 The drum coupling comprises the hub with crowned spur gear teeth, the flanged housing with internal gear teeth, the load carrying ring with outer sphere, the end covers and seals, also pointer, lubrication hole and breath hole etc. (see Fig.1). Power is transmitted positively by the flexible gear coupling comprised of the hub and housing, but the self-aligning bearing comprised of the load carrying ring and housing bears the radial load.
- 1.3 The drum coupling has the following advantages:
 - 1.3.1 High performance, reliable, capable of high torque transmission and radial load, high capability of overloading.
 - 1.3.2 Compactness, robust and series design, simplifying construction and light-weight of the main set.
 - 1.3.3 Alignment, easy installation and adjustment, easy maintenance.
 - 1.3.4 Wear indicator to ensure safety.
 - 1.3.5 Suitable for gearbox reducer with extension shaft. Reducing the cost.