

## 额定功率表 HORSEPOWER RATINGS TABLE

本样本的额定功率表依据下列条件制定：

- (1) 正常环境条件下。
- (2) 单排链功率传输。
- (3) 工作系数为表4中的1.0。
- (4) 润滑良好。
- (5) 两轴水平方向传输功率，放置、安装合理。
- (6) 载荷变化小。

利用功率输出型式和从动设备型式以补偿作用于链条上的载荷，需要选择适当的工作系数。

对于多排链，采用表5的多排链系数。

表4工作系数 Table 4 Service Factor

工作系数依据 Basis for service factor	从动设备 Driven equipment	工作系数 Service Factor		
		电机或 涡轮机 Electric motor or turbine	液压传动 内燃机 Internal combustion Engine with hydraulic drive	无液压传动 内燃机 Internal combustion Engine without hydraulic drive
载荷 平稳 Uniform load	搅拌机，储液离心鼓风机，发生器，离心泵，载荷平稳的输送机或升降机，载荷平稳且无反转的机械设备 Agitators, liquid stock centrifugal blowers, generators, centrifugal pumps, conveyor or elevator uniformly loaded, machinery uniform load and non-reversing.	1.0	1.0	1.2
中等 (中度)冲击 载荷 Mild (Moderate) shock load	离心压缩机，窑，干燥机，带中度冲击载荷的输送机和升降机，有适度振动的机械设备 Centrifugal compressor, kilns and dryers, conveyor and elevator with mild shock load, machinery with moderate pulsating.	1.3	1.2	1.4
较大冲击 载荷 Heavy shock load	往复压缩机，破碎机，往复进给机，有重载或反转的机械设备 Reciprocating compressor, crushers, reciprocating feeder, machinery with severe load or reversing.	1.5	1.4	1.7

注：1. 采用适合的润滑油进行润滑处理。见19页。

正常环境温度范围为 -10℃~60℃。

2. 当环境温度低于-40℃，使用冷冻机油，用上述工作系数乘以2.0。

Note: 1. Appropriate lubricant and lubrication should be used. See page 19. The surrounding temperature of -10°C to 60°C is considered normal.

2. When the surrounding temperature is less than -40°C, use refrigerating machine oil and multiply the service factor above by 2.0.

### 链节距

使用可满足要求的最小节距链条。如果单排链不能满足要求，使用小节距多排链。如果因间距的限制，造成中心距短和链轮外径小，使用多排链和多齿链轮。

### 小链轮齿数

为达到低噪音、低撞击的传动效果，推荐小链轮齿数不低于17。但低速运行时可使用11齿链轮，高速时推荐使用齿数不低于25的链轮。

Horsepower ratings tables on the catalog are based on the following:

- (1) Under normal atmosphere conditions
- (2) Power transmission by single strand chain
- (3) Service factor of Table 4 is 1.0
- (4) Lubrication is appropriate.
- (5) Two shafts to transmit power is horizontal, properly located and installed.
- (6) Load variation is small.

To compensate for the loads imposed on the chain by the type of input power and the type of equipment to be driven, the selection of an appropriate service factor is required.

For multiple strand chains, apply a factor of multiple strand factor Table 5.

表5 多排链系数 Table 5 Multiple Strand Factors

链排数 Number of strands	多排链系数 Multiple strand factors
2	1.7
3	2.5
4	3.3
5	3.9
6	4.6

### Chain Pitch

Use the smallest pitch chain that will meet requirements. If single strand chains can not satisfy requirements, use small pitch multiple strand chains. If the center distance should be short and the outside diameter of sprockets be small because of space restrictions, use multiple strand chains and sprockets with large number of teeth.

### Number of Teeth for Small Sprockets

The recommended number of teeth for small sprockets is not less than 17 for a quieter drive with less impact. However, a sprocket with number of around 11 teeth can be used at a slow speed while at a high speed, the recommended number of teeth is not less than 25.

### Hardened Teeth

It is a advisable to harden sprockets under the following operating conditions:

- SLOW SPEED AND HEAVILY LOADED DRIVES
- HIGH SPEED DRIVES
- LARGE RATIO DRIVES
- ABRASIVE OR CORROSIVE CONDITIONS

OCM ANSI 35 to 100 B type sprockets are induction hardened.

### Teeth of Large Sprockets

As the joint-wear of a roller chain progresses, it tends to jump or ride over the teeth of a sprocket. Chain life based on the joint-wear varies according to the number of teeth in large sprockets as shown in chart below.