

技术说明 Technical Specification



影响软管总成使用情况的因素很多。只有按照工况正确选用软管及接头，才能保证使用软管的可靠性和经济性。这些因素有：

There are many factor to influence the hose usage. You must use the correct hose and fittings according to the working condition, this way can ensure the reliability and economy of the hose assembly.

1、软管尺寸 Hose size

软管内径要适当。管径过小会加大管路内介质的流速，使系统发热，降低效率，而且会产生过大的压力降，影响整个系统的性能。若软管采用管夹固定或软管穿过钢板间隔物时，也要注意软管的外径尺寸。

The diameter of hose should be suitable. If the hose diameter is too small, it will increase the flow rate of the hose and make the system give out heat and make lower efficiency. And make oversize pressure drop to influence the performance of the total system. You must pay attention to the hose diameter size when the hose use the pipe clamp fixed or through steel spacer.

2、工作压力 Working pressure

资料中有关软管的动态工作压力是指软管在连续工作时允许的最高压力。按照有关国际标准规定的液压软管的安全系数，我们推荐的工作压力通常为软管最低爆破压力值的四分之一。

The dynamic working pressure of the hose in the technical data means the maximum pressure which allows the hose for continuous working. According to the international standard of the hydraulic hose safety factor, the working pressure we recommend is 1/4 of the minimum burst pressure values

3、冲击压力和疲劳寿命 Surge pressure and fatigue life

软管的选择是根据液压系统设计的最高压力值来确定的。由于液压系统的压力值通常是动态的，有时会出现冲击压力，冲击压力峰值会大大高于系统的最高压力值。但系统上一般都有节流阀，故冲击压力不会严重影响软管的疲劳寿命。对于冲击压力特别频繁的液压系统，建议选用特别耐脉冲冲击的软管产品。

The selection of the hose is according to the maximum pressure value of the designed hydraulic system. Usually the hydraulic system's pressure is dynamic, sometimes the impact pressure happens, and the impact pressure is much higher than the maximum system pressure. But normally there's a capital flow valve in the hydraulic system, so the surge pressure will not seriously affect the fatigue life. We suggest the user to use special impulse resistant hose for the hydraulic system which surge pressure is frequent.



4、温度范围 Temperature range

用户应该在软管质量规范允许的温度范围内使用软管。如果工作环境温度超过这一范围，将会影响到软管的寿命，其承压能力也会大大降低。工作环境温度长期过高或过低的系统，建议采用软管护套。

User should use the hose in the temperature range according to the quality specification. If the working environment of temperature exceeds this range, it will affect the hose life, its bearing capacity will be greatly reduced. If working environment temperature of the system is too high or too low for long term, we suggest to use hose jacketing.

5、化学相容性 Chemical compatibility

若使用特殊的液压介质，用户应确保所选用的软管总成胶管内，外层，接头以及O形密封圈与介质相容。

If you use the special hydraulic medium, the user should ensure the medium is compatible with the hose assembly inner, outer layer, fitting and O sealing ring.

6、弯曲半径 Bending radius

安装软管总成时应注意到软管的最小弯曲半径。若弯曲半径过小，将降低软管的承压能力并影响其使用寿命。

When you install hose assembly, you should pay attention to the minimum bending radius. If the bending radius is too small, it will reduce the hose pressure bearing ability and also it's use life.

7、摩擦 Friction

软管在使用时如常与硬物接触或摩擦，建议在软管外部加弹簧护套。

When you use the hose, if the hose contact with hard objects or friction frequently, we suggest adding one spring sheathed outside of the hose.

