

HYY 系列伺服油源

HYY series servo oil sources

产品简介

Product overview

伺服油源主要由伺服电机、液压泵、控制阀、冷却系统、加热系统、降脉装置、消音装置、传感器、电气控制柜及液压附件等组成，是液压传动与伺服控制系统中的重要组成部分。伺服油源可以实现对流量的变量控制，能够有效供给系统执行元件所需的流量和压力。伺服油源具有结构紧凑，布局合理，集成度高，易维护等特点，同时具备超压报警、污染报警、液位报警、油温自动控制、进程控制、远程控制等功能。伺服油源既可以配备常规先试仪表，也可根据要求选用压力、流量、温度、液位等传感器，输出模拟量或数字量控制信号，实现高精度控制。

The servo oil source, which is mainly composed of a servo motor, a hydraulic pump, a control valve, a cooling system, a heating system, a pulse drop device, a silencer, a sensor, an electric control cabinet and hydraulic accessories, is an important part of the hydraulic transmission and servo control system. The servo oil source can realize the variable control over flow and effectively supply the flow and pressure necessary for system actuating elements. The servo oil source is characterized by compact structure, reasonable layout, high integration and easy maintenance, and has the functions of overpressure alarm, pollution alarm, liquid level alarm, automatic oil temperature control, process control, remote control, etc. The servo oil source can be equipped with conventional display instruments or, as required, pressure, flow, temperature, liquid level and other sensors to output analog quantity or digital quantity control signals, so as to achieve high-precision control.



产品特点

Product features

- 结构紧凑、集成度高
- Compact structure, high integration
- 具备超压报警、污染报警功能
- Overpressure alarm, pollution alarm
- 布局合理、易维护
- Reasonable layout, easy maintenance
- 噪音低、振动小、压力脉动小
- Low noise, small vibration, small pressure pulsation

使用环境要求

Requirements for service environment

- 油液温度：30°C~55°C
- Oil temperature: 30°C~55°C
- 相对湿度：≤80%
- Relative humidity: ≤80%
- 环境温度：-10°C~40°C
- Ambient temperature: -10°C~40°C
- 系统清洁度：按 ISO440615/12 或 NAS16386 级要求进行清洗
- System cleanliness: class 15/12 as per ISO 4406 or class 6 as per NAS 1638
- 无线电干扰和磁场干扰：无线电干扰环境场强和磁场干扰环境场强低
- Radio interference and magnetic field interference: low environmental field strength of radio interference and magnetic field interference
- 接地：要求配装电机、电磁阀与传感器良好接地，接地电阻≤4Ω
- Grounding: good grounding with sensors when the motor and the solenoid valve are equipped, with an earth resistance not more than 4Ω Ω

性能指标

Performance indicators

- 1、 机构型式分为：上置立式、上置卧式、下置式、旁置式。
 1. Mechanism types: upper vertical, upper horizontal, underneath and side.
- 2、 泵的类型分为：轴向柱塞泵、径向柱塞泵。
 2. Pump types: axial piston pump and radial piston pump.
- 3、 冷却方式分为：水冷却式、风冷却式、制冷式。
 3. Cooling methods: water cooling, air cooling and refrigerating.
- 4、 油箱类型分为：开式油箱、闭式油箱。
 4. Oil tank types: open tank and closed tank.
- 5、 额定工作压力：油源的工作压力为（2~31.5）MPa。
 5. Rated working pressure: The working pressure of oil source is (2~31.5) MPa.
- 6、 油箱容量：油箱容量与系统的流量有关，一般容量可取最大流量的 3~5 倍。
 6. Oil tank capacity: The tank capacity is related to the system flow. In general, the tank capacity can be 3~5 times of the maximum flow.
- 7、 过滤精度
 7. Filter precision

根据用户执行元件的过滤精度确定，它直接关系到输入执行元件的油液所能达到的清洁度水平。通常液压伺服系统要求采用 10 μ m 的过滤器，对要求比较高的系统，则应采用 5 μ m、3 μ m 的过滤器。

It is determined by the filter precision of the user's actuating element and is directly related to the cleanliness of the oil input to the actuating element. The hydraulic servo system requires a filter with a precision of 10 μ m in general and a filter with a precision of 5 μ m or 3 μ m in the case of higher requirements.

- 8、 泵组噪音
 8. Noise of pump unit
- 系统压力 \leq 7MPa 时，噪音不超过 75db。（2m 内）
Noise \leq 75 db at a system pressure \leq 7 MPa. (within 2m)
- 系统压力 $>$ 7MPa 时，噪音不超过 90db。（2m 内）
Noise \leq 90 db at a system pressure $>$ 7 MPa. (within 2m)

- 9、 系统密封性
 9. System tightness

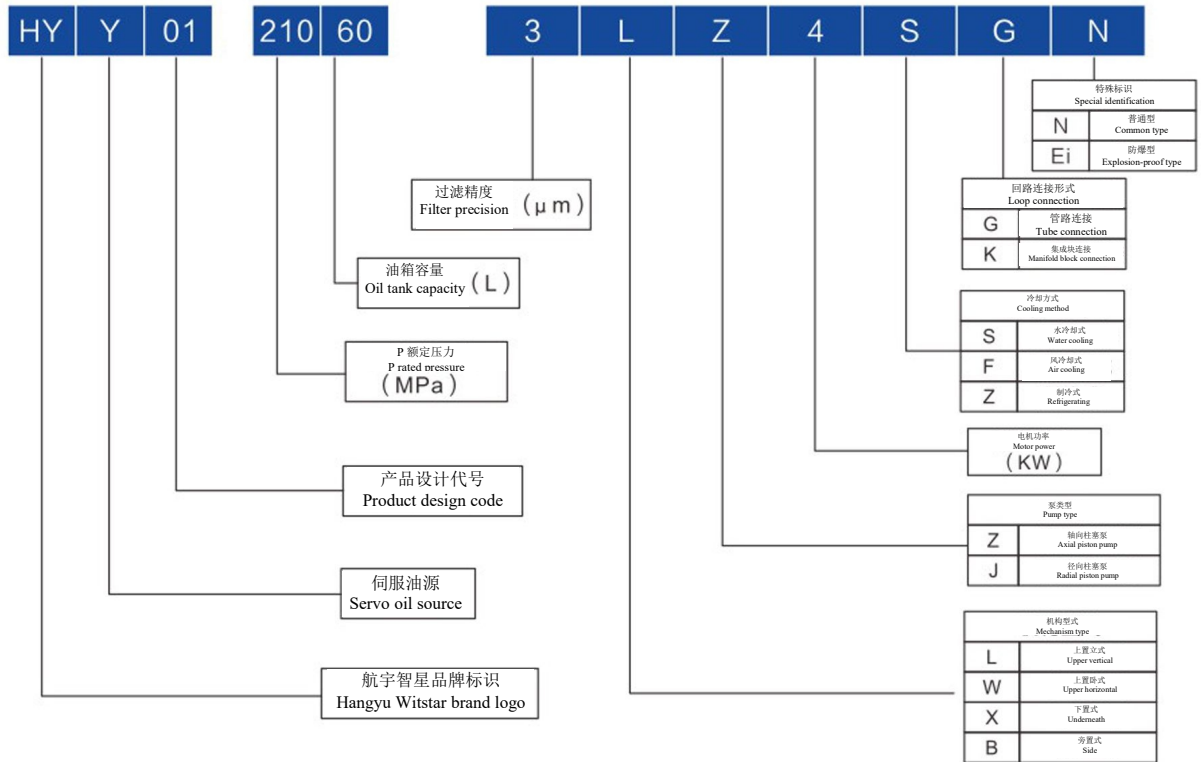
工作压力 \leq 16MPa,在 1.5 倍压力下保压 10min,不得出现明显的外部泄漏。工作压力 $>$ 16MPa,在 1.25 倍压力下保压 10min,不得出现明显的外部泄漏（允许湿润，不允许滴下）。

When the working pressure is not more than 16 MPa, there shall be no obvious external leakage after the 1.5 times of pressure is maintained for 10min. When the working pressure is greater than 16 MPa, there shall be no obvious external leakage (wetting is allowed, but dripping is not

allowed) after the 1.25 times of pressure is maintained for 10min.

HYY 系列伺服油源系列号

Serial No. of HYY series servo oil sources



注：航宇智星可按用户的特殊要求定制各种伺服油源

Note: Hangyu WitStar can customize servo oil sources as required by users.