

## 滑动电阻器(Slide Wirewound Variable Resistors) DST/DSY 100W-20KW

**管式可调电阻系列高端产品，外形美观，调节精度高，使用非常方便！**

High-end Slide Resistors with beautiful appearance, high accuracy adjustment, convenient to be used.



### ■ 结构 (Structure)

1. DS系列电阻是根据阻值的不同采用优质合金丝通过专业的绕线设备缠绕在耐高温的陶瓷管上，表面加绝缘散热油漆防护，经自然阴干高温烧烤而成。

DS Series resistor, high temperature resistance ceramic tube used as the resistance matrix, is wound with chromium alloy wire, then coated with high temperature & non-flammable resin for protection to let resistors with better appearance and heat dissipation effect, after natural drying, baking at different temperatures before assembly.

2. DS系列电阻是实现连续可调的方式，步进值可依客户要求适当进行调整。

DS series resistor, realize continuous adjustment, step values can be adjusted according to customer requirements.

3. 单个电阻可以做成电阻箱形式，也可多个电阻进行串并联方式组合成可调电阻箱，实现高功率可调，满足电压电流参数，灵活方便。

Single resistor can be made into load bank, or multiple resistors can be combined in series and parallel to an adjustable load bank, so as to realize high-power adjustment and meet the voltage and current parameters, which is also flexible and convenient.

### ■ 特点 (Features)

1. DS系列大功率可调电阻/大功率可调电阻箱是在DR系列大功率绕线电阻的基础上升级而来，其电阻值的大小可以人为调节，以满足电路的需要。因客户使用场合的不同，大功率可调电阻又称为滑杆电阻，滑线电阻，滑线变阻器，手推式可调电阻，手摇式可调电阻等等。

DS Series high-power adjustable resistor is upgraded from DR series high-power wirewound resistor, and its resistance value can be adjusted manually to meet the needs of the circuit. Due to different application occasions, high-power adjustable resistor is also known as sliding rod resistor, sliding wire resistor, sliding wire rheostat, hand-push adjustable resistor, hand-swing adjustable resistor and so on.

2. 在可调电阻里面，DS系列电阻不论是选择用材，还是做工方面，都是最为高档和高端式的，故深得用户的认可。根据用户的需要可将电阻加装温控装置，数字刻度尺。

DS series resistors are the most high-end in terms of material selection and workmanship compared to other adjustable resistors, so they are deeply recognized by users. According to the needs of users, the resistor can be equipped with temperature control device and digital scale.

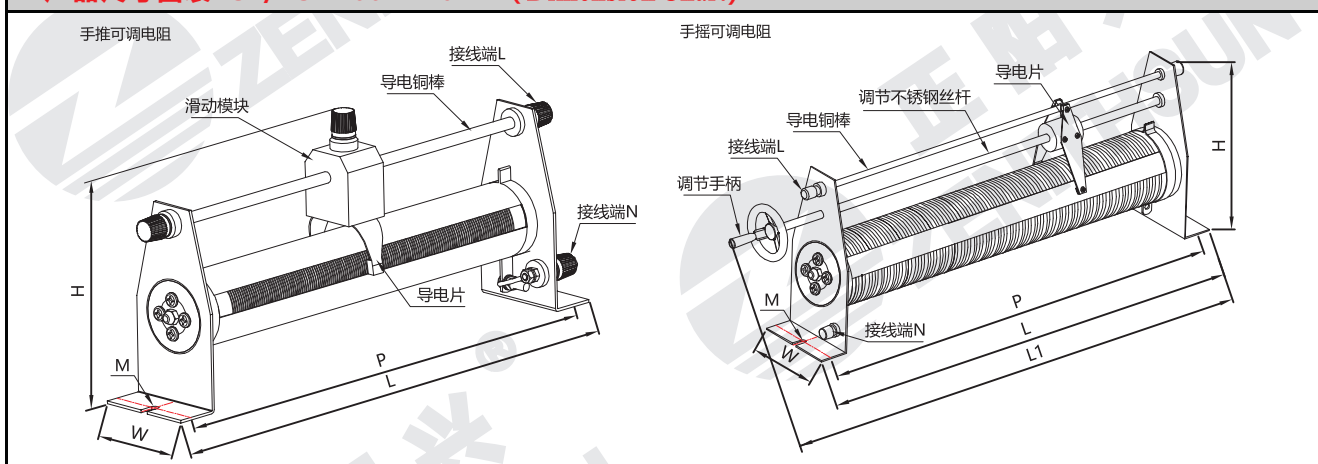
### ■ 适用范围 (Application)

深圳市正阳兴电子的系列滑动电阻生产周期为2-3周，多用于仪器设备的特殊调节，各大高校和各科研所试验演示、校验的理想选择。

Production Time: 2-3 weeks.

Widely used for special adjustment of instruments and equipment, and an ideal choice for experimental demonstration and calibration in major universities and scientific research institutes.

### ■ 产品尺寸图表DST/DSY 100W-20KW (Dimension Chart)



型号 Type	功率 Power	阻值范围 Resistance Range	精度 Tolerance	尺寸 Dimensions(mm)						净重(kg) N.W	温度系数 T.C.R	
				L1±5	L±2	W±1	H±2	M±1	P±2			
DST	100W	1Ω-2KΩ	K(±10%) J(±5%)	/	243	50	142	6	225	0.30	±200PPM ~	
DST	150W	1Ω-2.2KΩ		/	290	50	142	6	270	0.40		
DST	200W-250W	1Ω-3.3KΩ		/	340	50	142	6	322	0.45		
DST	300W	2.2Ω-4.7KΩ		/	341	70	166	6	320	0.80		
DST	400W	2.2Ω-5.1KΩ		/	405	70	166	6	383	0.90		
DST	500W-600W	3.3Ω-6.8KΩ		/	410	70	166	6	388	1.20		
DST	750W	3.3Ω-10KΩ		/	480	70	166	6	458	1.50		
DST/Y	800W-1KW	3.3Ω-12KΩ		456	344	100	226/200	6	326	2.00		
DST/Y	1500W	3.3Ω-15KΩ		571	460	100	226/200	6	440	2.40		
DST/Y	2000W	3.3Ω-15KΩ		666	554	100	226/200	6	535	3.20		
DSY	2.5KW-3KW	4.7Ω-15KΩ		756	644	100	200	6	625	3.60		±400PPM
DSY	4KW	4.7Ω-15KΩ		600	510	120	250	8	482	4.70		
DSY	5KW	4.7Ω-15KΩ		670	580	120	250	8	552	5.40		
DSY	6KW	4.7Ω-15KΩ		770	680	120	250	8	652	6.40		
DSY	10KW	5.1Ω-5.1KΩ		768	676	178	320	8	635	14.50		
DSY	12KW-15KW	5.1Ω-5.1KΩ		828	736	178	320	8	708	16.00		
DSY	20KW	5.1Ω-4.7KΩ		1168	1080	178	320	8	1048	23.00		

■ 绕线电阻性能实验参数 (Performance Characteristics)		
项目 Test	试验条件 Conditions of Test	性能要求 Testing Results
电阻值容许误差 Resistance Tolerance	测试电压≤3V,环境温度25°C Testing Voltage ≤3V, Ambient Temperature 25°C	F--G--J--K
温度系数 T.C.R	$\frac{R1-R0}{R0(T1-T0)} \times 10^6$ (PPM/°C) R0:常温(T0)下阻值 R0:Room Temperature(T0)Resistance R1:常温T0+100°C(T1)下阻值 R1:Room Temperature T0+100°C(T1)Resistance	±200PPM~ ±400PPM
额定负荷 Rated Load	40°C额定电压, 1小时 40°C, rated voltage, 1 hour	$\Delta R \leq \pm(3\%R + 0.1\Omega)$
短时间过负荷 Short Time Overload	5倍额定功率, 10秒钟; 10倍额定功率 5秒; 25倍额定功率 1秒 5 times rated power for 10s; 10 times rated power for 5s; 25 times rated power for 1s	$\Delta R \leq \pm(2\%R + 0.1\Omega)$
引出端对地绝缘耐压 Dielectric Withstand Voltage	1KV-10KV Vac 60秒,漏电流2.5mA 1KV-10KV Vac 60s, leakage current 2.5mA	$\Delta R \leq \pm(0.1\%R + 0.05\Omega)$
绝缘电阻值 Insulation Resistance	1000Vdc	50~1000MΩ, 1Min
引出端强度 Terminal Tensile Strength	40N	无脱落 No off
耐振性 Vibration resistance	1.5mm, 10-55-10Hz, 分别2小时 1.5mm, 10-55-10Hz, each 2hours	无破损, 无脱落 No damage, No off
室温耐久性 Load Life	额定电压, 通电90分钟, 停30分钟, 共500小时 At rated voltage, 90 min "On", 30 min "Off", total 500hours	$\Delta R \leq \pm(3\%R + 0.1\Omega)$
耐低温试验 Low Temp. Resistance	产品在-55°C±2°C环境条件下储存16H Store at -55°C±2°C for 16h	$\Delta R \leq \pm(1\%R + 0.1\Omega)$
耐高温试验 High Temp. Resistance	产品在70°C±2°C环境条件下储存16H Store at 70°C±2°C for 16h	$\Delta R \leq \pm(1\%R + 0.1\Omega)$
不燃性 Non-flammability	10倍额定功率, 通电5分钟 10 times rated power, power on for 5Min	允许开路, 但不燃烧 Without combustion

■ 绕线电阻降功耗曲线图 (Derating Curve)

