

**WS19 Carbon Composition Potentiometer**



**Feature**

- Hot Molded / Industrial / Sealed
- Locking-Bushing/ Standard-Bushing
- Meet MIL-R-94

**Electrical Characteristics**

**Standard Resistance Range**

- ..... A: 100ohm~4M7ohm
- ..... B/C: 1KΩ~470KΩ

Resistance tolerance ..... ±10%;±20%

Absolute Minimum Resistance..... 15ohms  
 (for total resistance value of 100 to 820 ohms inclusive)  
 ..... ≤15%  
 (for total resistance value of 1K to 4700K ohms inclusive)

..... 5%

Contact Resistance Variation ..... ≤5%

Insulation resistance (100VDC) ..... 1000Mohm (min)

**Power Rating**

- 70℃..... A: 1Watt
- ..... B/C: 0.5Watt
- 125℃..... .0Watt

Limit voltage..... A:350V  
 ..... B、C: 250V

Withstand Voltage..... 1300Vdc

**Environmental Characteristics**

- Temperature Range..... - 55℃ to +125℃
- Vibration..... 15G
- Shock..... 100G
- Load Life at 70℃..... 1000 hours
- ..... ΔR/R≤±10%

**Rotational Life**

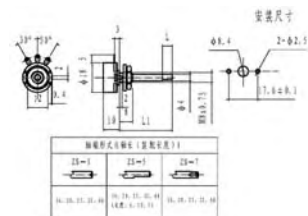
- Standard---Bushing Type..... 25000cycles
- Locking ----Bushing Type..... 500cycles

**Mechanical Characteristics**

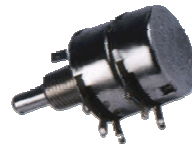
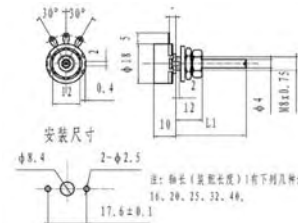
- Total mechanical travel ..... ≥290°
- Starting torque ..... 4~25mN·m



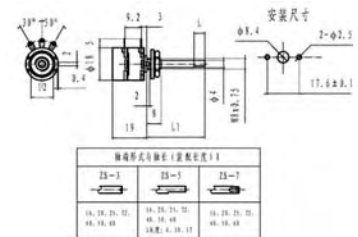
WS19-1



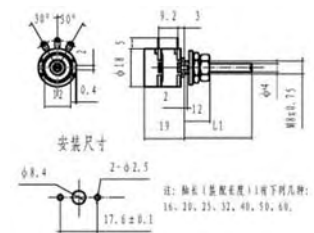
WS19-2



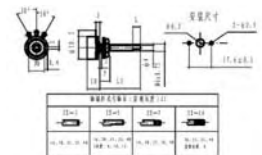
WS19-3



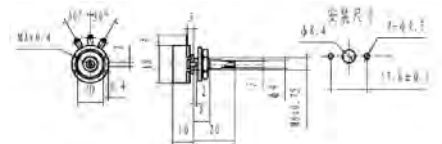
WS19-4



WS19-1A



WS19-1F



**WS19 - K1/K2 Carbon Composition Potentiometer**

**Feature**



- Hot-Molded / Industrial / Sealed / Switch
- Locking-Bushing / Standard-Bushing
- Meet MIL-R-94

**Electrical Characteristics**

Withstand Voltage..... 750Vdc  
 Switch insulation Voltage..... 500V  
 Switch capacity..... 250V 1A  
 Operating Noise..... ≤68mV

**Environmental Characteristics**

Load Life at 70°C.....,1W 240 hours,  
 ..... ΔR/R≤±10%  
 Rotational Life..... 10000cycles

**Mechanical Characteristics**

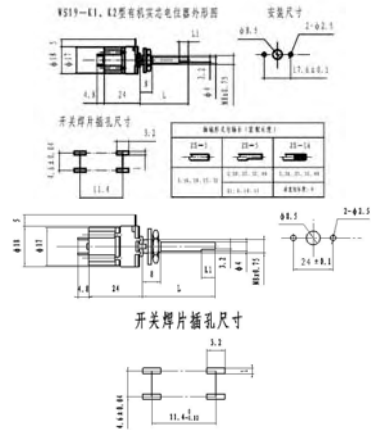
Total mechanical travel ..... 270°



WS19-K1

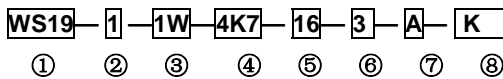


WS19-K2



Note: Above characteristics is exclusive for WS19-K1/K2, other characteristics is the same as WS19 series.

**How to Order**



① Model----WS19 Carbon composition Potentiometer

② Bushing Style

1	2	3	4	1A	1F	K1/K2
Standard bushing	Lock Bushing	Standard bushing & dual resistive elements.	Lock bushing & dual resistive elements.	Standard bushing with 6mm diameter (Others: 8mm)	Standard bushing & waterproofing	Switch style (difference dimension for K1 & K2)

③ Power Rating

1W----linear taper; 0.5W----log taper & anti-log taper

Power rating of resistor body far away from bushing will be cut half for WS19-3/4.

④ Standard Resistance ---- standard resistance table is available in WS series datasheet

⑤ Length of Operating shaft (from mounting surface) 16/20/25/40/50/60mm are available. Custom lengths upon request.

⑥ Shaft Style: 3----Slotted shaft; 5----Flatted shaft; 1-----Knurled

⑦ Taper

A----Linear Taper; B----Log Taper; C----Anti-Log Taper;

⑧ Resistance Tolerance

K = 10 % ; M = 20 %