

## WS Carbon Composition Potentiometer



### Features

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

**Electrical Characteristics**  
 Standard Resistance Range..... A: 100 to 4M7 ohms  
 ..... B/C: 1K to 1M ohms  
 Resistance Tolerance.....  $\pm 5\%$ ,  $\pm 10\%$ ,  $\pm 20\%$   
 Absolute Minimum Resistance..... 15 ohms  
 (for total resistance values of 100 to 820 ohms inclusive)  
 ..... 1%  
 (for total resistance values of 1K to 4700K ohms inclusive)  
 Contact Resistance Variation..... 5%  
 Insulation Resistance (100 VDC)....1,000 M ohms minimum  
 Power Rating: at 70°C  
 ..... A: 0.5 watt  
 ..... B/C: 0.25 watt  
 at 125°C ..... 0 watt

**Environmental Characteristics**  
 Temperature Range.....-55°C to +125°C  
 Vibration..... 15G  
 Shock..... 100G  
 Load Life: 1,000 hours, 70°C  
 ..... A: 0.5 watt  
 ..... B/C: 0.25 watt  
 Total Resistance Shift.....  $\pm 10\%$   
**Rotational Life**  
 WS-1/1A (Standard-Bushing Type)..... 10,000 cycles  
 Total Resistance Shift.....  $\pm 10\%$   
 WS-2/2A(Locking-Bushing Type)..... 500 cycles  
 Total Resistance Shift.....  $\pm 10\%$

**Mechanical Characteristics**  
 Total Mechanical Angle..... 270° minimum  
 Torque  
 Starting Torque..... 0.8 to 5 N•cm  
 Lock Torque(Locking-Bushing Type)..... 8 N•cm  
 Weight..... Approximately 8 gram

### How To Order

WS- 1 - 0.5 - 4K7 - 16 - 3 - A - M

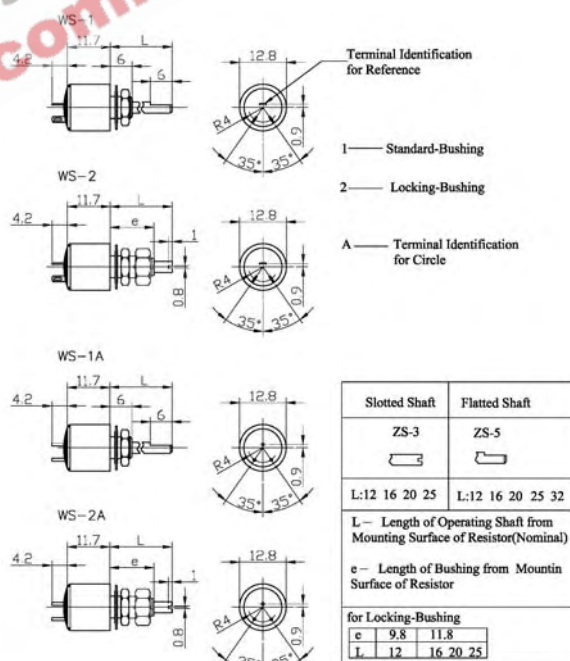
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Model
- ② Bushing Style:  
1-- Standard bushing; 2--Lock Bushing
- ③ Power Rating  
0.5W--linear taper; 0.25W--log taper & anti-log taper
- ④ Standard Resistance: see standard resistance table
- ⑤ Length of Operating shaft (from mounting surface)
- ⑥ Shaft Style: 3--Slotted shaft; 5--Flatted shaft
- ⑦ Taper: Blank--Linear; B--Log; C--Anti-Log
- ⑧ Resistance Tolerance J = 5%, K = 10%, M = 20%

### Standard Resistance Table (ohms)

|     |     |     |      |     |
|-----|-----|-----|------|-----|
| 100 | 1K  | 10K | 100K | 1M  |
| 120 | 1K2 | 12K | 120K | 1M2 |
| 150 | 1K5 | 15K | 150K | 1M5 |
| 180 | 1K8 | 18K | 180K | 1M8 |
| 220 | 2K2 | 22K | 220K | 2M2 |
| 270 | 2K7 | 27K | 270K | 2M7 |
| 330 | 3K3 | 33K | 330K | 3M3 |
| 390 | 3K9 | 39K | 390K | 3M9 |
| 470 | 4K7 | 47K | 470K | 4M7 |
| 560 | 5K6 | 56K | 560K |     |
| 680 | 6K8 | 68K | 680K |     |
| 820 | 8K2 | 82K | 820K |     |

Special resistance available.



### Derating Curve P.

