WX25 Power Wirewound Potentiometer

Product overview

WX25 power wirewound potentiometer with nominal resistance from 2.2 Ω to 8.2 kΩ and a 25 W rating at 85°C. Three terminals, with terminal 2 as the wiper; total mechanical travel 280°±10°. Available with ZS-3 slotted and ZS-5 flat shaft ends.



Electrical characteristics

Item	Specification
Nominal resistance range	2.2 Ω-8.2 kΩ
Resistance tolerance	±10%
End resistance	R<51 Ω: ≤0.1 Ω; R≥51 Ω: ≤0.2%R
Dielectric withstand voltage	1000 VAC at normal atmospheric pressure
Insulation resistance	≥1 GΩ (500 VDC)
Maximum heating temperature	≤300°C

Physical characteristics

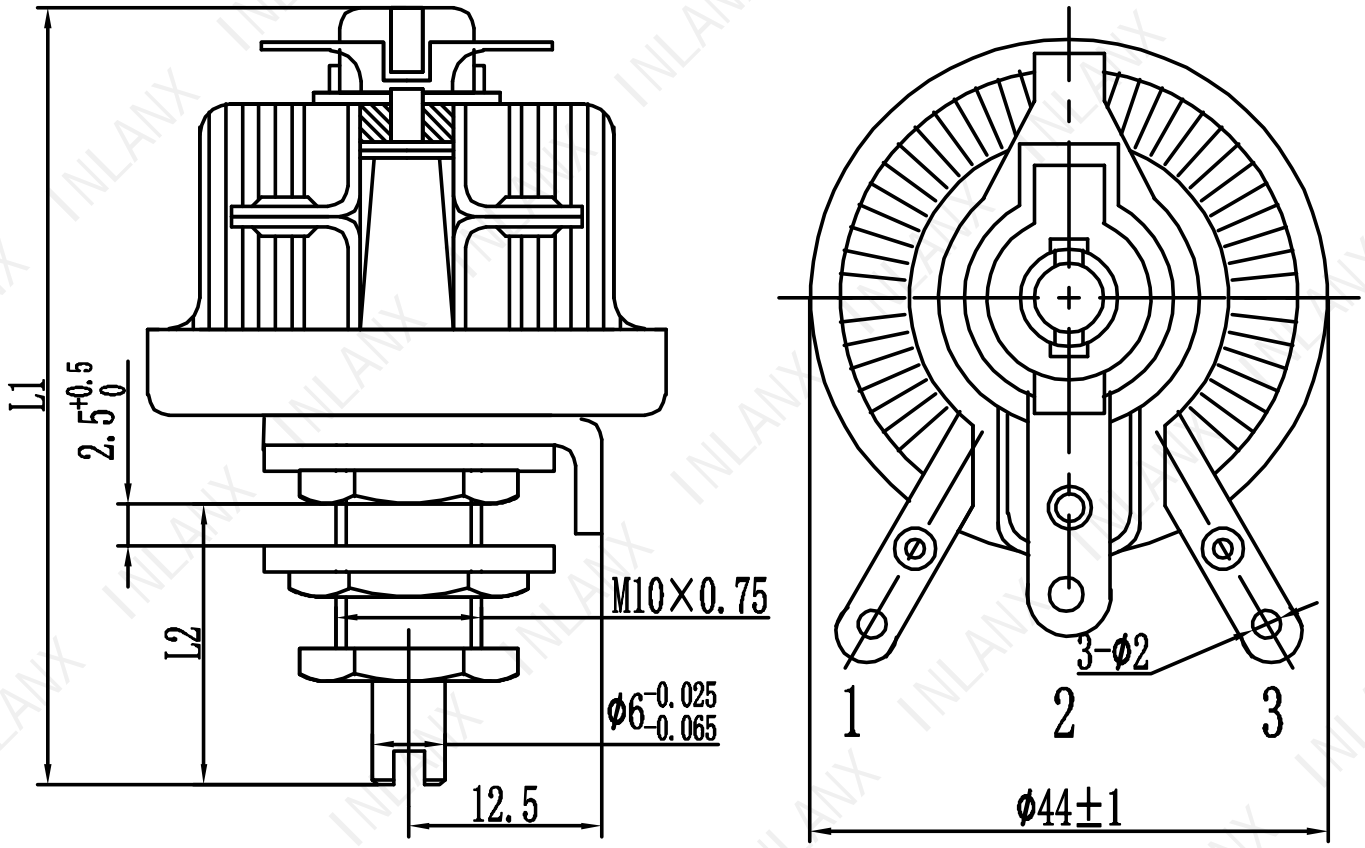
Item	Specification
Starting torque	≤150 mN·m
End-stop torque	≤300 mN·m
Total mechanical travel	280° ±10°
Marking	Trademark, model, nominal resistance, date code and tolerance

Specifications listed in source

Quality-grade marking	Detail specification	Generic specification
G	Q/RU 141-1995; QZJ 84061	GB/T 15298-1994
J	Q/RU 141-1995	

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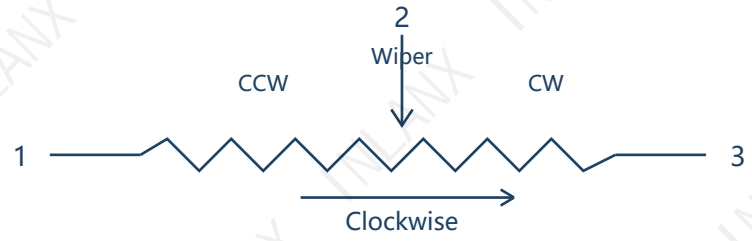
Overall dimensions • mm



Shaft-end form	L1 (mm)	L2 (mm)
ZS-3 · Slotted	59	20
ZS-5 · Flat	63	25

Unspecified tolerances per source drawing: GB 1804-79, ±½IT13. Original linework retained, preserving structure and dimension annotations.

Circuit diagram



Terminals 1 and 3 are the resistance ends; terminal 2 is the wiper. Rotation directions follow the source diagram.

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Environmental characteristics

Item	Specification
Rated power	25 W @ 85°C; 0 W @ 300°C
Temperature range	-55 to +300°C
Temperature cycling	-55°C / 85°C, 30 min, 3 cycles; RI≥500 MΩ; ΔR≤±(3%R+0.05 Ω)
Shock	60-100 impacts/min, 150 m/s², 4000 impacts; no electrical discontinuity or mechanical damage
Vibration	10-200 Hz, 40 m/s², 20 min; no electrical discontinuity; ΔR≤±(3%R+0.1 Ω)
Centrifugal force	150 m/s², 5 min each, 3 times; reliable electrical contact, no mechanical damage
Electrical endurance	2 W, 70°C, 1000 h; ΔR≤±(2%R+0.1 Ω)
Mechanical endurance	R≤1 kΩ: 10000 revolutions; R>1 kΩ: 1000 revolutions; ΔR≤±(5%R+0.05 Ω)
Damp heat, steady state	40±2°C, 95-98% RH, 48 h; ΔR≤±(3%R+0.08 Ω); RI≥100 MΩ

R = nominal resistance; RI = insulation resistance; ΔR = resistance change after testing.

Nominal resistance values • Ω

Nominal resistance (Ω)					
2.2	10	47	220	1k	4.7k
2.7	12	56	270	1.2k	5.6k
3.3	15	68	330	1.5k	6.8k
3.9	18	82	390	1.8k	8.2k
4.7	22	100	470	2.2k	
5.6	27	120	560	2.7k	
6.8	33	150	680	3.3k	
8.2	39	180	820	3.9k	

k denotes ×1000.

Ordering information

WX25	150R	K	20	ZS-3
Model	Nominal resistance	Tolerance	Shaft length	Shaft end
WX25	150 Ω	±10%	20 mm	ZS-3 slotted / ZS-5 flat

Ordering example: WX25-150R-K-20ZS-3