



FEATURES

- 10K cycles mechanical life version available
- Endless rotation upon request
- RoHS compliant materials ready
- Carbon resistive element
- Plastic substrate
- Over-moulding manufacturing technique
- SMD mounting
- RoHS reflow soldering capable
- Wiper positioned at 50%
- Both sides cross slot easy adjustment
- Accidental rotor movement protected
- Traceability insured through date code marking
- IP54 protection according to IEC 60529

MECHANICAL SPECIFICATIONS

- Mechanical rotation angle: $280^\circ \pm 10^\circ$
- Electrical rotation angle: $245^\circ \pm 25^\circ$
- Torque: 0.2 to 3 Ncm. (0.28 to 4.2 in-oz)
- Stop torque: > 7.5 Ncm. (10.5 in-oz)
- Mechanical life*: up to 10K cycles

* depending on application

ELECTRICAL SPECIFICATIONS

- Range of values*

"E" version: $1K\Omega \leq R_n \leq 500K\Omega$ (1.0 - 2.0 - 2.2 - 2.5 - 4.7 - 5.0)

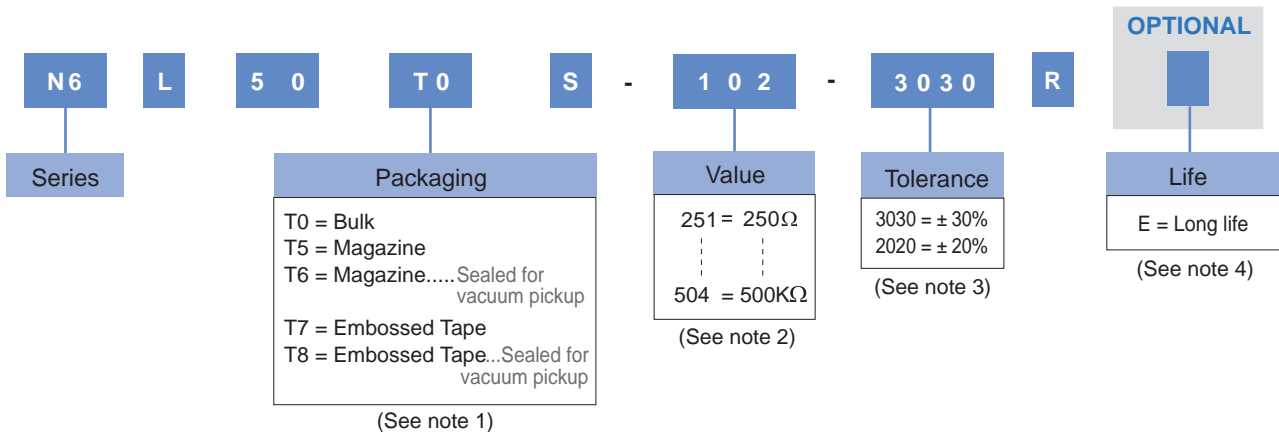
Std version: $250\Omega \leq R_n \leq 500K\Omega$ (1.0 - 2.0 - 2.2 - 2.5 - 4.7 - 5.0)

- Tolerance: $250\Omega \leq R_n \leq 500K\Omega$ $\pm 30\%$
- Max. Voltage: 100 VDC
- Nominal Power 50°C (122°F) (see power rating curve): 0.1W
- Taper: linear
- End resistance: $\leq 2\%$ R_n (10 Ω min.)
- Equivalent noise resistance: $\leq 5\%$
- Operating temperature**: $-25^\circ\text{C} + 70^\circ\text{C}$ ($-13^\circ\text{F} + 158^\circ\text{F}$)

* Others: check availability.

** Up to 85°C depending on application.

HOW TO ORDER



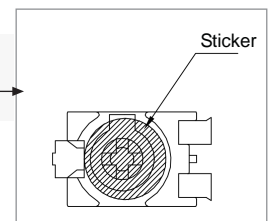
NOTES:

- (1) - "T7", "T8" Embossed Tape 750 Units per Reel. Diameter: 330 mm, aprox. thickness: 30 mm.
 - "T6" and "T8" are sealed for vacuum pickup (sticker at the bottom side)

- (2) Value: Example: Code: 10 2 = 1 K
 Number of zeros
 First two digits of the value.

- (3) Standard is 30%. For 20% and below tolerances, please check availability.

- (4) Life: • Standard = 100 cycles • Long = 10K cycles



* Version with sticker on TOP side is available under request

NOTE: The information contained here should be used for reference purposes only.
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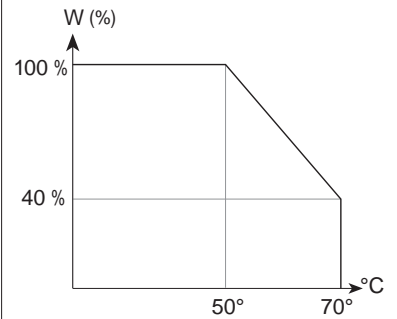
Download STEP files here:
<https://piher.net/piher/?p=900>

TESTS

TYPICAL VARIATIONS

POWER RATING CURVE

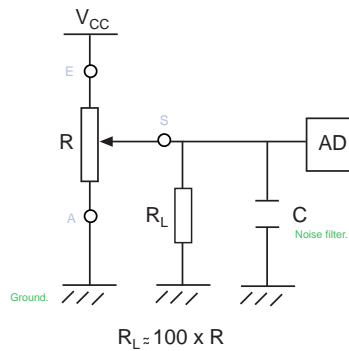
ELECTRICAL LIFE	1.000 h. @ 50°C: 0.1 W	±10 %
MECHANICAL LIFE (CYCLES)	"E" version: 10K @ 30 CPM	± 4% (Rn < 1 M.Ω)
	Std version: 100 @ 10 CPM ...15 CPM	±3 % (Rn < 1 M.Ω)
TEMPERATURE COEFFICIENT	-25°C; +70°C	±300 ppm (1K ≤ Rn ≤ 100K)
THERMAL CYCLING	16 h. @ 85°C; 2h. @ -25°C	±5 %
DAMP HEAT	500 h. @ 40°C @ 95% HR	±5 %
VIBRATION (for each plane X,Y,Z)	2 h. @ 10 Hz. ... 55 Hz.	±2 %



NOTE: Out of range values may not comply with these results.

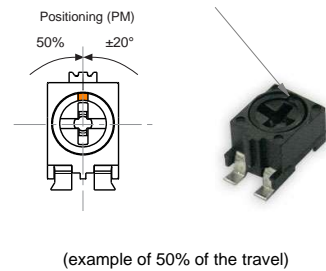
RECOMMENDED CONNECTIONS

Piher potentiometer's recommended connection circuit for a position sensor or control application. (voltage divider circuit electronic design).



POSITIONING

This mark in the rotor shows the wiper's position.



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