

Automotive / Appliance control - sensor

10 mm carbon potentiometer PT10



Mechanical specifications

Mechanical rotation angle		235° ± 10°
Torque	rotational stop	10~80gf.cm 400gf.cm min
Life		up to 10K cycles

Electrical specifications

Range of values ¹		1KΩ ≤ Rn ≤ 2MΩ
Standard tolerance*:		± 20%
Max. voltage		200 VDC
Rating power 70°C		0.15 W
Taper		Reverse log , Linear , Log
Residual resistance		≤ 10 Ω
Slider noise		≤ 68mV
Operating temperature ²		-10°C to +70°C

¹ Others: check availability. ² Up to 85°C depending on application.

Materials

Driving plate&Housing		PA6 (Fammability rating: HB)
Terminals		Tinned steel strip
Reed		Tin bronze

Features

- Carbon resistive element.
- Dust proof enclosure.
- Nnloy substrate
- Wiper positioned at initial, 50% or fully clockwise.
- * ROHS compliant

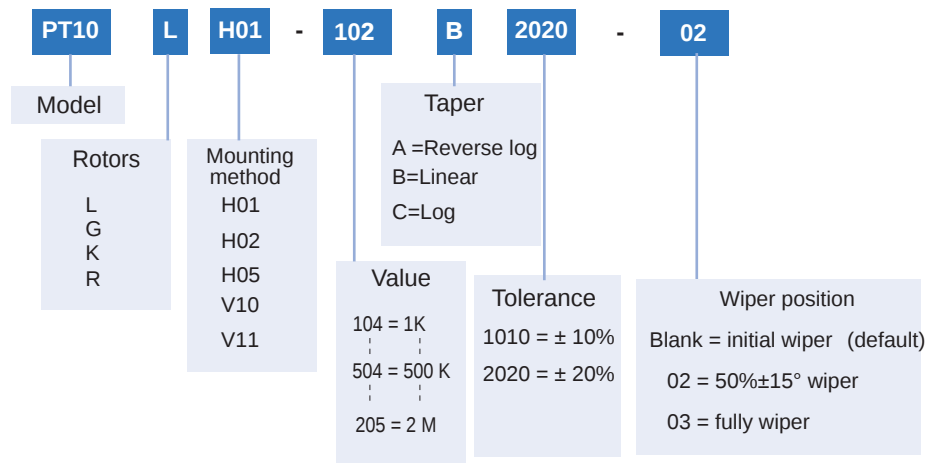
Applications

Typical applications include test and measurement equipment, consumer electronics, appliances, small engines, robotics, motion controllers, and medical equipment control panels.

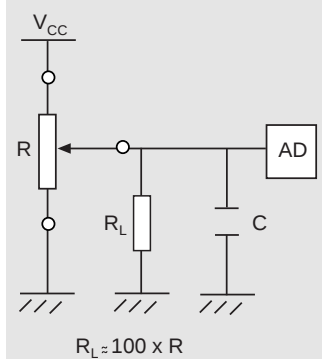
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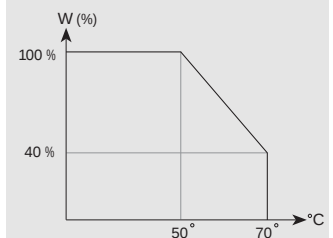
How to order



Recommended connections



Power rating curve



How to order examples

PT10LH01-103B20

10mm potentiometer with rotor "L" (arrow shape), "H01" Mounting method (horizontal adjustment), 10K value and 20% resistive tolerance, initial wiper.

Standard values - tolerances

Resistance Ω	1K	2K	5K	10K	20K	25K	50K	100K	200K	250K	500K	1M	2M
How to order code	102	202	502	103	203	253	503	104	204	254	504	105	205
Standard tolerance	20%												

Tests

Mechanical life (cycles)	1000 @ 10 CPM ...15 CPM
Temperature coefficient	-10°C to +70°C
Heat resistance	16 h. @ 85°C
Moisture resistance	96 h. @ 40°C @ 95% HR

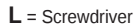
Soldering condition

Wave soldering	260±5°C, 5±1second
Manual soldering	Max 350°C, within 3 second

10 mm carbon potentiometer
PT10



Without shaft or knob.



G = Hexagonal

K = Cross slot

R

All rotors are thru-hole.

Dimension:
 $X < 10 \pm 0.3\text{mm}$
 $10 \leq X < 30 \pm 0.5\text{mm}$
 $30 \leq X \leq 100 \pm 1\text{mm}$
 Angle: $\pm 5^\circ$

V = horizontal mounting – vertical adjustment

[illegible]

H01

Technical drawing of the H01 probe head showing three views: front, side, and top. Dimensions are in mm.

Front View Dimensions:

- Total height: $12.1^{+0.2}$
- Base width: 2.5

Side View Dimensions:

- Total width: $4.8^{+0.2}$
- Base width: 2.5

Top View Dimensions:

- Total width: $10.3^{+0.1}$
- Distance between wiper and final contacts: $7^{+0.2}$
- Base width: 3.5
- Wiper contact (S) diameter: $1^{+0.1}$
- Final contact (E) diameter: $1.3^{+0.1}$

Legend:

- A** = Initial
- S** = Wiper
- E** = Final

Technical drawing of the H05 connector showing front, side, and detail views with dimensions:

- Front View (Left):** Shows a circular connector with two pins. Dimensions include a total height of 12.1 ± 0.2 and a pin diameter of $\varnothing 1.3 \pm 0.1$.
- Side View (Middle):** Shows the profile of the connector. Dimensions include a total width of 4.8 ± 0.2 and a base width of 5 .
- Detail View (Right):** Shows a close-up of the connector's internal structure. Dimensions include a total width of 10.3 ± 0.1 , a pin diameter of $\varnothing 1.3 \pm 0.1$, and a base width of 3.5 .

V10

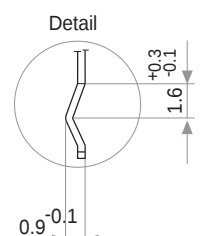
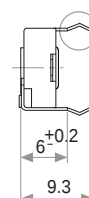
Technical drawing of the V10 nozzle showing four views: top, side, front, and detail. Dimensions are in mm.

- Top View:** Square body with rounded corners, 5mm wide and 5mm high.
- Side View:** Total height of 10mm. The top section is 4.8mm ± 0.2. The bottom section is 6mm ± 0.2. The total width is 10.3mm ± 0.1.
- Front View:** Total width of 10.3mm ± 0.1. The bottom section is 1mm ± 0.1. The total height is 3.5mm.
- Detail View:** Circular feature with a 4mm diameter and a 1.3mm ± 0.1 hole.

A = Initial S = Wiper E = Final

[illegible]

V11, H02 models feature “crimped” terminals that provide greater stability during the soldering process.



Tapers

