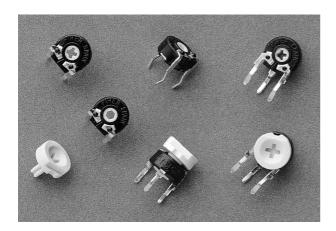
## PIHER



# PT-6 6 mm Carbon Potentiometer

#### **FEATURES**

- Carbon resistive element.
- Dust proof enclosure.
- Polyester substrate.
- SMD version available (see PS-6 datasheet).
- Also upon request:
  - Wiper positioned at 50% or fully clockwise
  - Supplied in magazines for automatic insertion
  - Long life model PT-6...E (10,000 cycles)
  - · Without crimping model. PT-6...SC
  - · Housing available in self extinguishable plastic (VL94V0)

#### **MECHANICAL SPECIFICATIONS**

235° ± 5° - Mechanical Rotation angle: - Electrical Rotation angle: 200° ± 20° - Torque: 0.2 to 2 Ncm. (0.3 to 2.7 in-oz)

> 4 Ncm. (> 5.6 in-oz) - Stop torque:

## **ELECTRICAL SPECIFICATIONS**

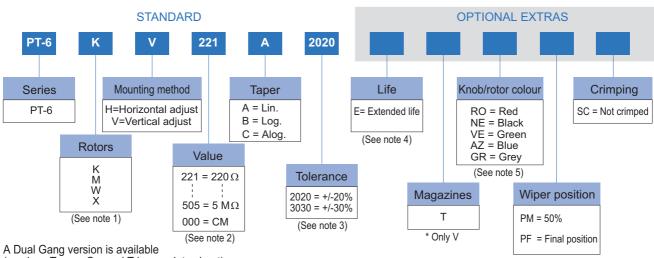
- Range of values (\*)

 $220\Omega \le Rn \le 5M$  (Decad. 1.0 - 2.0 - 2.2 - 2.5 - 4.7 - 5.0)

– Tolerance (\*): 220  $\Omega \le Rn \le 1M \Omega \longrightarrow \pm 20\%$  $1M \Omega < Rn \le 5M \Omega = \pm 30\%$ 

- Max. Voltage: 100 VDC (lin), 50 VDC (no lin)
- Nominal Power 50°C (122°F) (see power rating curve) 0.1 W (lin) 0.05 W (no lin)
- Taper (\*) (Log & Alog. only Rn≥1K) Lin; Log; Alog.
- Residual resistance(\*):  $\leq 0.5 \%$  Rn (5 $\Omega$  min)
- Equivalent Noise Resistance:  $\leq$  3% Rn (3 $\Omega$ min)
- Operating Temperature\*\*: -25°C +70°C (-13°F +158°F)
- (\*) Others upon request. \*\* Up to 85°C depending on application

## **HOW TO ORDER**



(see Low Torque Ganged Trimmer data sheet).

NOTES: (1) Adjust. type: «X» is only available with horizontal adjusting method.

> (2) Value: - Code:  $\underline{22}$   $\underline{1}$  =  $220 \Omega$ Number of zeros First two digits. - 000 = CM = Switch (see diagram)

- Code eg.:  $\begin{array}{c} +7 \\ -5 \end{array}$  = (3) Tolerance (non standard): Upon request: Negative tolerance
- Positive tolerance Life: • Normal = 500 cycles • Long = 10,000 cycles Potentiometer without knob, only the rotor. Potentiometer with knob, only the knob (5)

NOTE: The information contained here should be used for reference purposes only.



## HOW TO ORDER CUSTOM DRAWING

## STANDARD OPTIONS

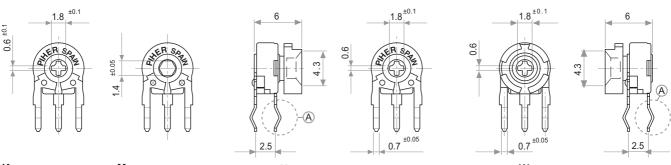
PT-6 KV + DRAWING NUMBER

(Max. 16 characters)

This way of ordering should be used for options which are not included in the "How to order" standard and optional extras.

Mechanical life500 cyclesPackingBulkRotor colourWhiteWiper positionInitialCrimpingWith crimping

#### **ROTORS**



K= Cross slot thru hole

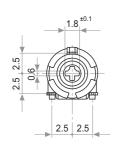
M= Hexagonal thru hole

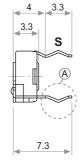
X = Adjustable from collector side

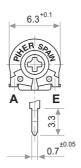
W= Adjustable from terminal side

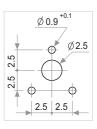
## MOUNTING METHODS. VARIATIONS

v = Horizontal mount / Vertical adjust

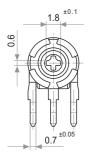


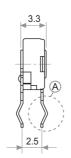


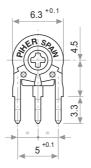


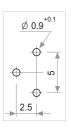


**h** = Vertical mount / Horizontal adjust



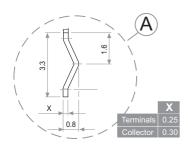


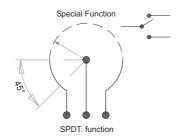


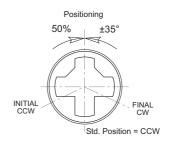


## **DETAIL A**

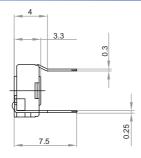
## **OPTIONS**







#### **NOT-CRIMPED TERMINALS DIMENSIONS**





#### **PACKAGING**

#### **BOXES**

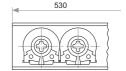
Model	Units
All	1.000

#### **AUTOMATIC INSERTION**

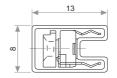
Magazines	Units per magazine
PT-6 V & PT-6 WV	80 Pieces

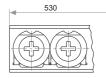
#### Magazines for PT-6 V with or without crimp.





Magazines for PT-6 WV with or without crimp.



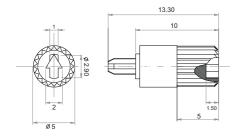


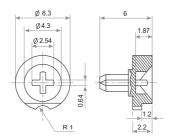
#### **SHAFT**

#### **KNOB**

If you wish to use your own custom plastic shaft/knob/actuator please contact Piher for advice about compatible materials.

#### Ref.: 6132

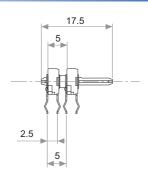




Ref.: 5155

#### PT-6 DUAL GANG VERSION

For PT-6 dual gang version contact your nearest PIHER supplier



Please order Shaft Separately

## **TESTS**

ELECTRICAL LIFE	
MECHANICAL LIFE (CYCLES)	
TEMPERATURE COEFFICIENT	
THERMAL CYCLING	
DAMP HEAT	
VIBRATION (for each plane X,Y,Z)	

1.000 h. @ 50°C: 0.1 W 500 @ 10 CPM ...15 CPM

-25°C; +70°C

16 h. @ 85°C; 2h. @ -25°C 500 h. @ 40°C @ 95% HR

2 h. @ 10 Hz. ... 55 Hz.

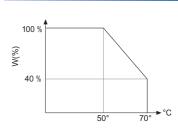
±2.5 % ±5 % ±2 %

TYPICAL VARIATIONS

±300 ppm (Rn < 100 K)

 $\pm 3\%$  (Rn < 1 M $\Omega$ )

#### **POWER RATING CURVE**



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

#### Disclaimer

The product information in this catalogue is for reference purposes. Please consult for the most up to date and accurate design

Piher Sensors & Controls S.A., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Piler"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product described herein.

relating to any product described herein. Piher disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Piher's terms and conditions of sale, including but not limited to the warranty expressed therein, which apply to these products. No licence, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Piher.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Piher products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Piher for any damages arising or resulting from such use or sale. Please contact authorised Piher personnel to obtain written terms and conditions regarding products designed for such applications. Product names and markings noted herein may be trademarks of their respective owners.

Information contained in and/or attached to this catalogue may be subject to export control regulations of the European Community, USA, or other countries. Each recipient of this document is responsible to ensure that usage and/or transfer of any information contained in this document complies with all relevant export control regulations. If you are in any doubt about the export control restrictions that apply to this information, please contact the sender immediately. For any Piher International Corp. Exports, Note: All products / technologies are EAR99 Classified commodities. Exports from the United States are in accordance with the Export Administration Regulations. Diversion contrary to US law is prohibited.











PIHER www.piher.net -38-