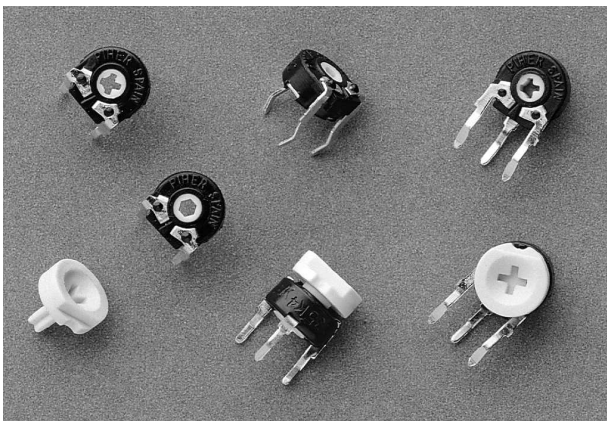
PIHER

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)
  - Housing available in self extinguishable plastic (VL94V0)

MECHANICAL SPECIFICATIONS

– Mechanical Rotation angle:	235° ± 5°
– Electrical Rotation angle:	200° ± 20°
– Torque:	0.2 to 2 Ncm. (0.3 to 2.7 in-oz)
– Stop torque:	> 4 Ncm. (> 5.6 in-oz)

ELECTRICAL SPECIFICATIONS

– Range of values*
220Ω ≤ Rn ≤ 5M (Decad. 1.0 - 2.0 - 2.2 - 2.5 - 4.7 - 5.0)

– Tolerance*: 220 Ω ≤ Rn ≤ 1M Ω ------ ± 20%
1M Ω < Rn ≤ 5M Ω ------ ± 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*: Lin; Log; Alog (Log & Alog. only Rn≥ 1K)

– Residual resistance*: ≤ 0.5 % Rn (5Ω min)

– Equivalent Noise Resistance: ≤ 3% Rn (3Ωmin)

– Operating Temperature**: -25°C +70°C (-13°F +158°F)

* Others upon request.

** Up to 85°C depending on application

HOW TO ORDER

PT-6	K	V	221	A	2020							
Series	Rotors	Mounting method	Value	Taper	Tolerance	Life	Magazines	Shaft/knob	Knob/shaft/rotor colour	Wiper position	Crimping	
PT-6	K M W X	H=Horizontal adjust V=Vertical adjust	221 = 220 Ω 505 = 5 MΩ 000 = CM	A = Lin. B = Log. C = Alog.	2020 = +/-20% 3030 = +/-30%	E= Extended life	T	- = Fig. 1 02 = Fig. 2	RO = Red NE = Black VE = Green AZ = Blue GR = Grey	PM = 50% PF = Final position	SC = Not crimped	
	(See note 1)		(See note 2)		(See note 3)	(See note 4)	(See note 5)		(See note 6)			

OPTIONAL EXTRAS

NOTES:

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

(2) Value: – Code: 22 1 = 220 Ω
Number of zeros
First two digits.
– 000 = CM = Switch version (contact us)

(3) Tolerance (non standard): Upon request: Code eg.: +7 / –5 = 07 05
Negative tolerance
Positive tolerance

(4) Life: • Normal = 500 cycles • Long = 10,000 cycles

(5) Only for "V" mounting method. "W" rotor with shaft Fig. 2 is not available in maganizes .

(6) Potentiometer without knob or shaft, only the rotor. Potentiometer with knob or shaft, only the knob/shaft. Default colour for knob/shaft is cream. Shaft only available in cream or black colour.

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

HOW TO ORDER CUSTOM DRAWING

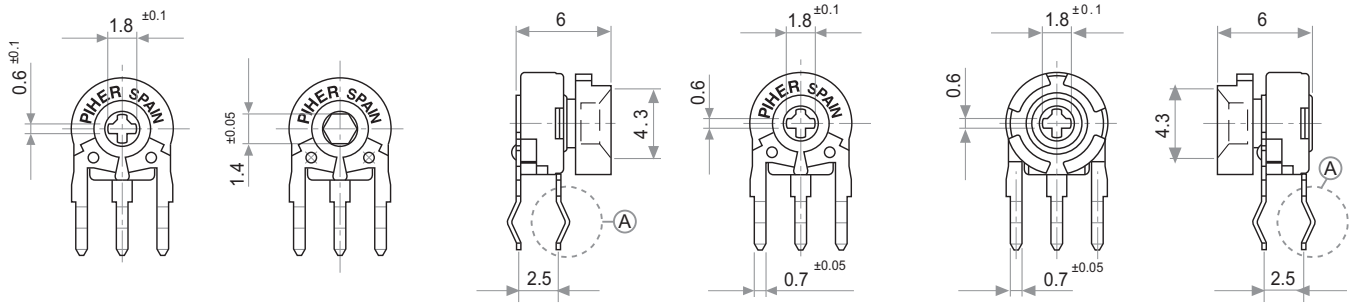
PT-6 KV + DRAWING NUMBER (Max. 16 characters)

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

STANDARD OPTIONS

Mechanical life	500 cycles
Packing	Bulk
Rotor colour	White
Wiper position	Initial
Crimping	Yes
Knob/Shaft colour	Cream

ROTORS



K= Cross slot thru hole

M= Hexagonal thru hole

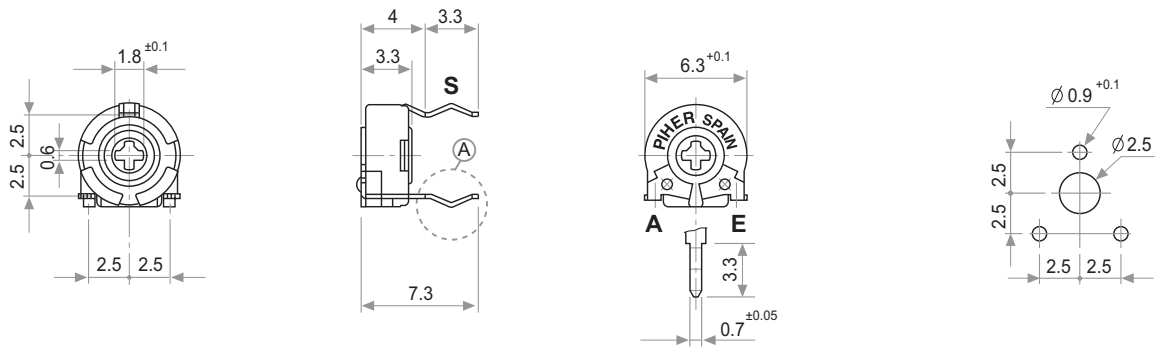
X = Adjustable from collector side

W = Adjustable from terminal side

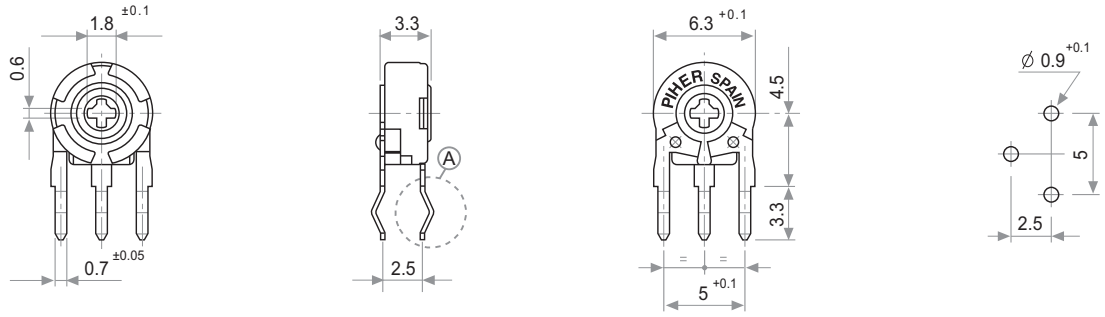
mounted knob / shaft

MOUNTING METHODS. VARIATIONS

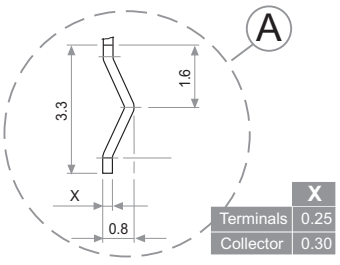
v = Horizontal mount / Vertical adjust



h = Vertical mount / Horizontal adjust

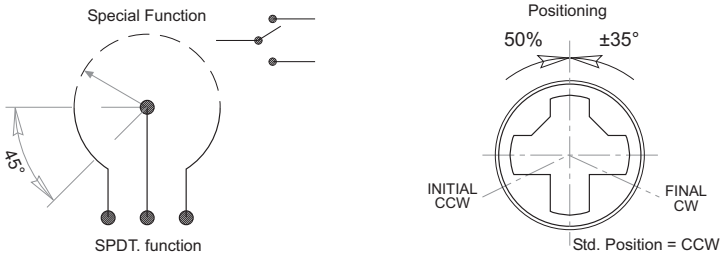


DETAIL A

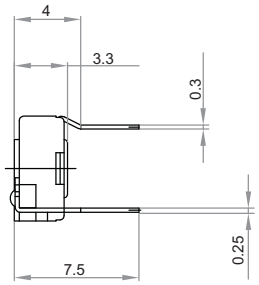


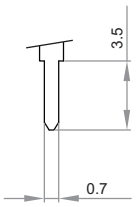
X	
Terminals	0.25
Collector	0.30

OPTIONS



NOT-CRIMPED TERMINALS DIMENSIONS





PACKAGING

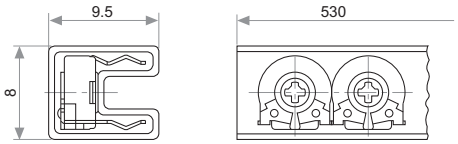
BOXES

Model	Units
All	1.000

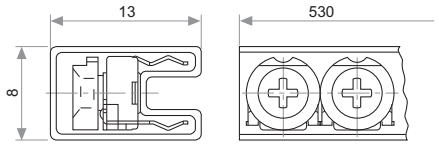
AUTOMATIC INSERTION

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

Magazines for PT-6 V with or without crimp.



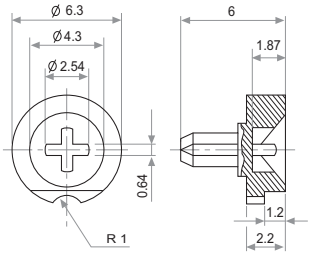
Magazines for PT-6 WV with or without crimp.



SHAFT / KNOB

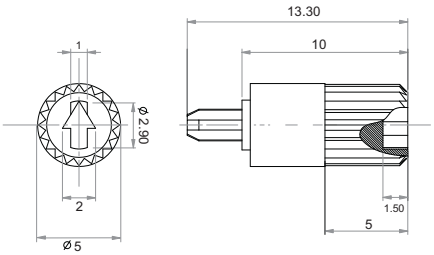
If you wish to use your own custom plastic shaft/knob/actuator please contact Piher for advice about compatible materials.

Ref.: 5155 / Fig. 1



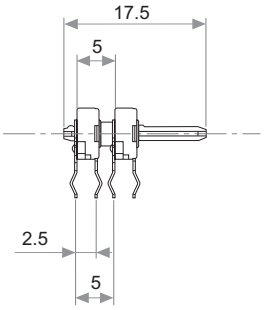
Shaft not suitable for magazine packaging

Ref.: 6132 / Fig. 2



PT-6 DUAL GANG VERSION

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



TESTS

TYPICAL VARIATIONS

ELECTRICAL LIFE	1.000 h. @ 50°C: 0.1 W	±5 %
MECHANICAL LIFE (CYCLES)	500 @ 10 CPM ...15 CPM	±3 % (Rn < 1 MΩ)
TEMPERATURE COEFFICIENT	–25°C; +70°C	±300 ppm (Rn < 100 K)
THERMAL CYCLING	16 h. @ 85°C; 2h. @ –25°C	±2.5 %
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.

POWER RATING CURVE