

### FEATURES

- Specifically designed for leadfree reflow soldering processes (excellent performance)
- 10k cycles mechanical life.
- Dust proof enclosure.
- Carbon resistive element.
- Self extinguishable plastic UL 94V-0.
- Also upon request:
  - Wiper positioned at 50% or fully clockwise.
  - Mechanical detents
  - Centering pins

### MECHANICAL SPECIFICATIONS

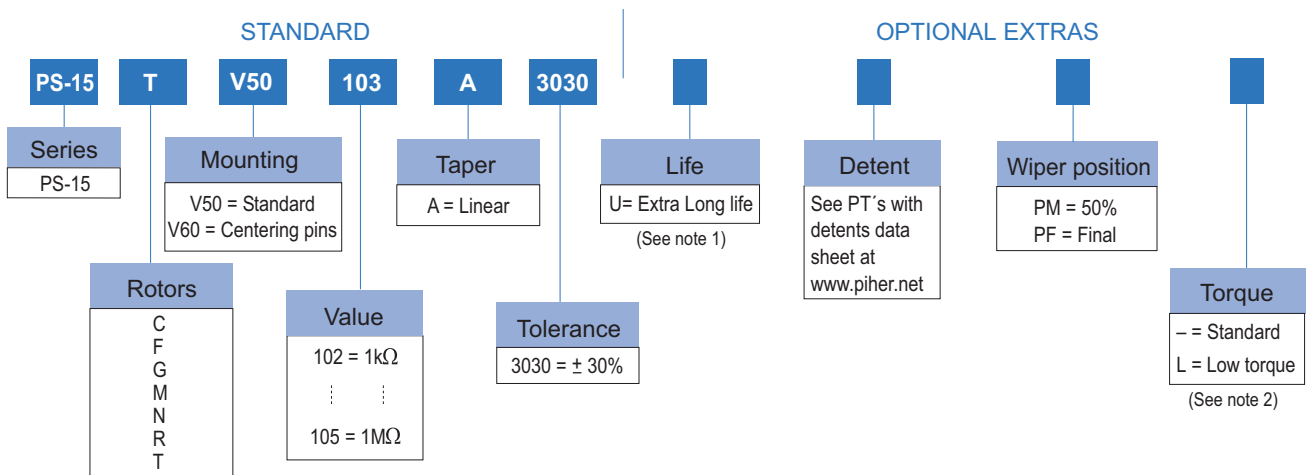
- Mechanical life: 10k cycles
- Mechanical rotation angle:  $265^\circ \pm 5^\circ$
- Electrical rotation angle:  $240^\circ \pm 20^\circ$
- Torque: 0.5 to 2.5 Ncm. (0.7 to 3.4 in-oz)
- Stop torque: > 10 Ncm. (>14 in-oz)

### ELECTRICAL SPECIFICATIONS

- Value (\*): 1k $\Omega$  to 1M $\Omega$
- Tolerance (\*):  $\pm 30\%$
- Taper (\*): Linear
- Nominal Power: 0.25W @ 50°C (122°F)
- Operating temperature: -40°C + 85°C
- Residual resistance:  $\leq 0.5\% R_n$
- Equivalent Noise Resistance:  $\leq 3\% R_n$

\* Others upon request

### HOW TO ORDER



#### NOTES:

- (1) Extra long life: 100k cycles (to be studied case by case)
- (2) Low Torque:  $\leq 1.5\text{Ncm}$ . No detent option available for low torque models

Shafts are not available mounted to the potentiometer and should be ordered separately

## HOW TO ORDER CUSTOM DRAWING

PS-15 TV50 + DRAWING NUMBER (Max. 16 digits)

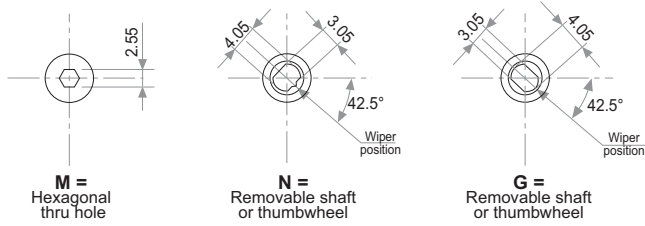
This way of ordering should be used for options which are not included in the "How to order" standard and optional extras.

## STANDARD OPTIONS

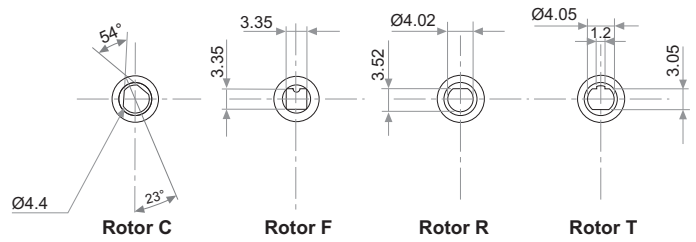
|                      |           |
|----------------------|-----------|
| Mechanical Life..... | 10k       |
| Detents .....        | None      |
| Rotor colour .....   | Dark grey |
| Housing colour ..... | Dark grey |
| Wiper position ..... | Initial   |
| Torque .....         | Standard  |

## ROTORS (collector side view)

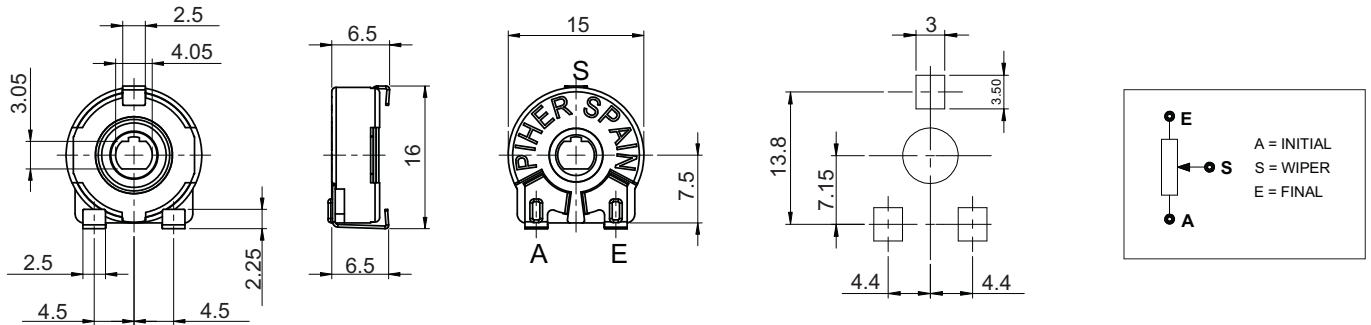
Wipers positioned at initial



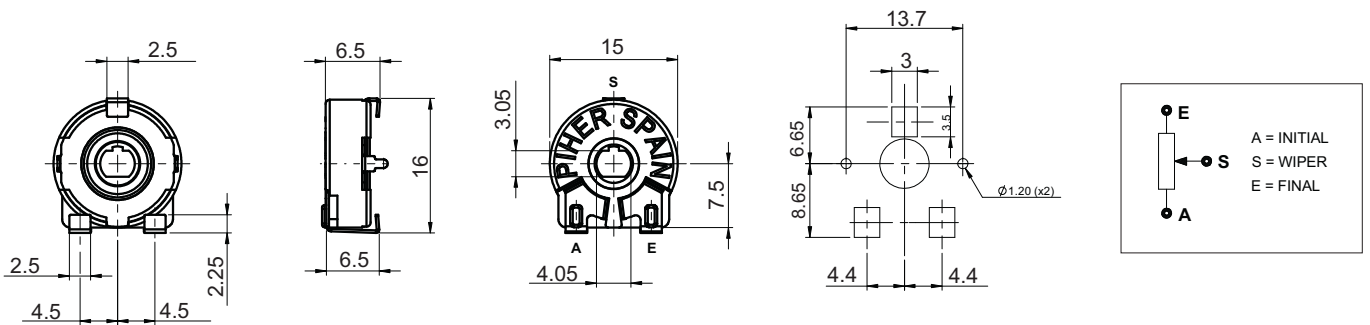
Wipers positioned at 50%



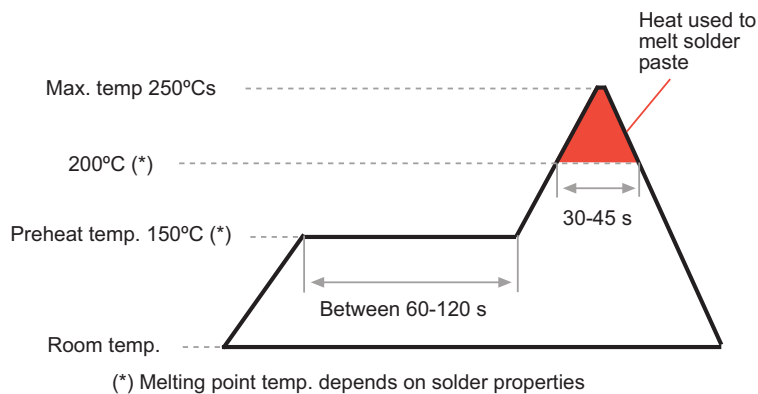
## DIMENSIONS



## DIMENSIONS (V60 version - with centering pins)



## RECOMMENDED REFLOW PROFILE



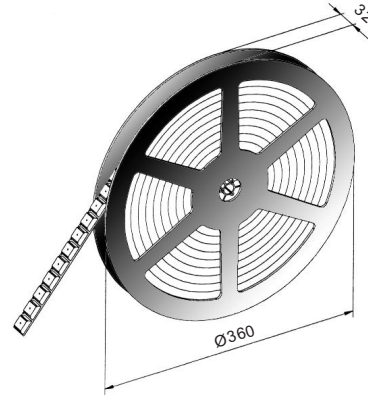
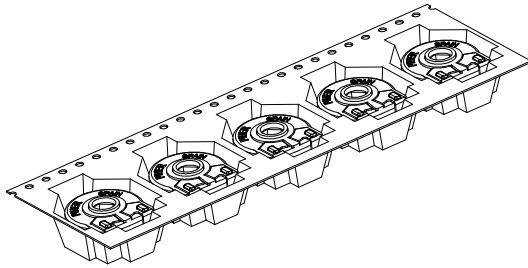
## TESTS

## TYPICAL VARIATIONS

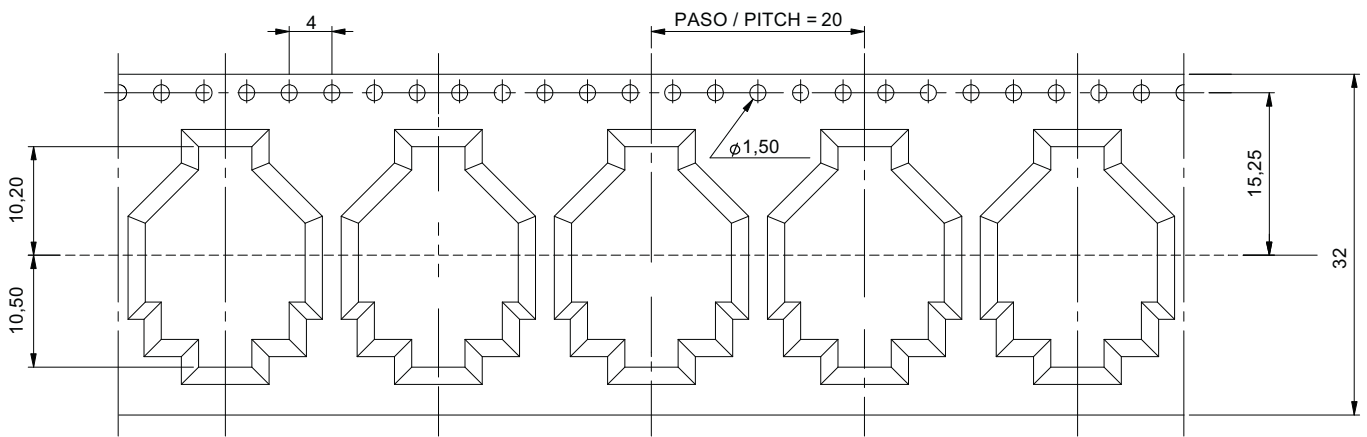
|                                  |                           |           |
|----------------------------------|---------------------------|-----------|
| ELECTRICAL LIFE                  | 1k h. @ 50°C; 0.25 W      | ±10 %     |
| MECHANICAL LIFE                  | 10k @ 10 CPM ...15 CPM    | ±10 %     |
| TEMPERATURE COEFFICIENT          | -40°C; +85°C              | ±1000 ppm |
| THERMAL CYCLING                  | 16 h. @ 90°C; 2h. @ -40°C | ±5 %      |
| DAMP HEAT                        | 500 h. @ 40°C @ 95% HR    | ±10 %     |
| VIBRATION (for each plane X,Y,Z) | 2 h. @ 10 Hz. ... 55 Hz.  | ±2 %      |

## PACKAGING

**Bulk:** 200pcs / per Box (40 x 85 x 185 mm.)



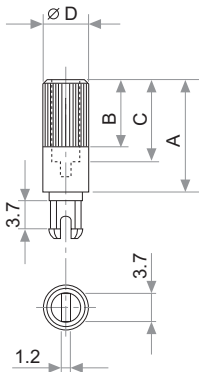
**EMBOSSED TAPE**  
400 Units per Reel



## SHAFTS

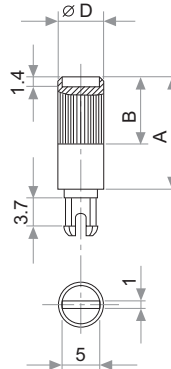
Hollow model shafts

Solid model shafts



| FIG. | A    | B   | C    | D | Ref. |
|------|------|-----|------|---|------|
| 1    | 12   | 9   | 8    | 6 | 5272 |
| 2    | 19   | 9   | 15   | 6 | 5214 |
| 5    | 9.5  | 6.5 | 5.5  | 6 | 5208 |
| 9    | 35   | 9   | 31   | 6 | 5216 |
| 10   | 37.8 | 9   | 33.8 | 6 | 5218 |
| 11   | 35   | 25  | 15   | 6 | 5209 |
| 13   | 7.8  | 4.8 | 3.8  | 6 | 5265 |

A = Length (FRS)  
B = Knurling length  
C = Hollow depth  
D = Shaft diameter  
FRS = From rotor surface



| FIG. | A    | B | D | Ref. |
|------|------|---|---|------|
| 6    | 15   | 9 | 6 | 5219 |
| 7    | 16.8 | 9 | 6 | 5220 |
| 8    | 25.3 | 9 | 6 | 5207 |
| 12   | 46   | 5 | 6 | 5227 |

Slot (1 x 1.4) perpendicular to wiper position. Fig. 12 slot is in line with wiper position.

## SHAFTS

\* Not available in self extinguishable plastic

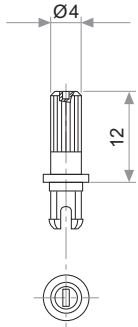


Fig. 3 / Ref. 5372

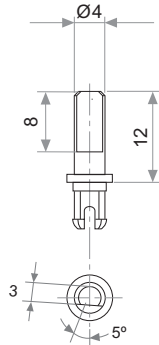


Fig. 15 / Ref. 5217

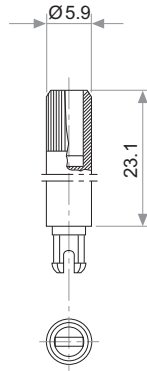


Fig. 17 / Ref. 5210

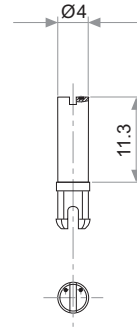


Fig. 18 / Ref. 5271

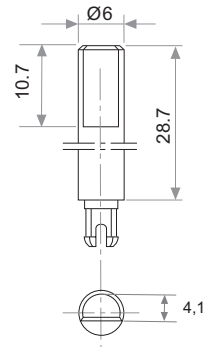


Fig. 19 / Ref. 6032\*

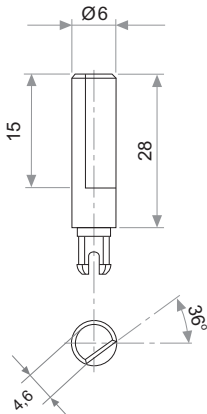


Fig. 20 / Ref. 5369\*

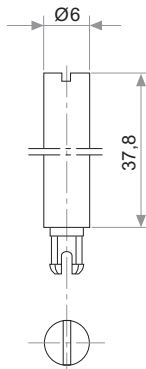


Fig. 21 / Ref. 6031\*

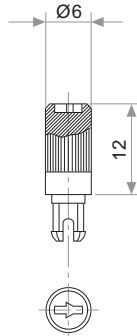


Fig. 22 / Ref. 6029

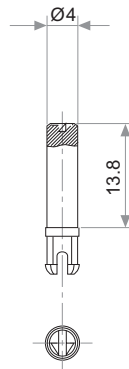


Fig. 23 / Ref. 6022

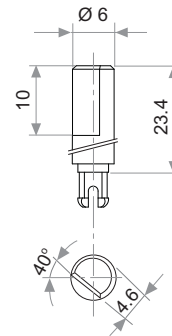


Fig. 29 / Ref. 6162

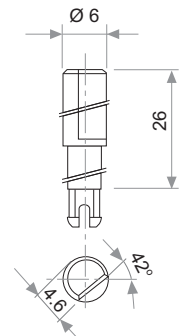


Fig. 25 / Ref. 6059

\* Not available in self extinguishable plastic

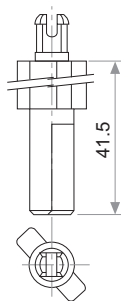


Fig. 27 / Ref. 5268\*

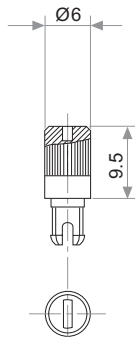


Fig. 28 / Ref. 6055

## THUMBWHEEL

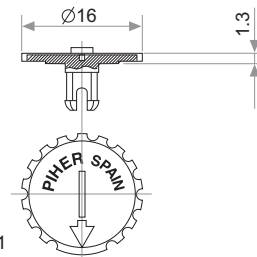


Fig. 4 / Ref. 5371