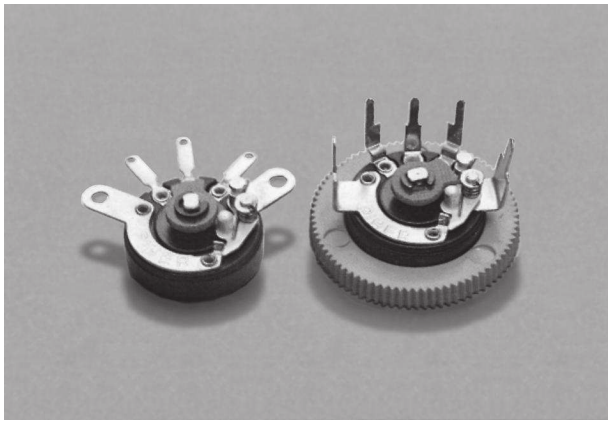
PIHER

T-18 18 mm Carbon Potentiometer



FEATURES

- Carbon resistive element.
- Dust proof enclosure.
- With or without actuating knob
- Optional SPST switch

MECHANICAL SPECIFICATIONS

- Mechanical rotation angle: 255° ± 5°
- Electrical rotation angle: 220° ± 20°
- Torque: 0.5 to 1.5 Ncm. (0.7 to 2.1 in-oz)
- Stop torque: > 40 Ncm. (> 56 in-oz)

ELECTRICAL SPECIFICATIONS

- Range of values (*)
  100Ω ≤ Rn ≤5 M (Decad. 1.0 - 2.0 - 2.2 - 2.5 - 4.7 - 5.0)
- Tolerance (*): 100Ω ≤ Rn ≤ 1M Ω ------ ± 20%
  1MΩ < Rn ≤ 5M Ω ------ ± 30%
- Max. Voltage: 200 VDC (lin) 100 VDC (no lin)
- Nominal Power 50°C (122°F) (see power rating curve)
  0.25 W (lin) 0.12 W (no lin)
- Taper (*) (Log. & Alog. only Rn > 1K) Lin ; Log; Alog.
- Residual resistance(*): ≤ 0.5% Rn (5 Ω min.)
- Equivalent Noise Resistance: ≤ 3% Rn (3 Ω min.)
- Operating temperature**: –25°C + 70°C (–13°F + 158°F)

* Others upon request

** Up to 85°C depending on application

HOW TO ORDER

STANDARD

T-18	A	I	1	473	B	2020
Series	Terminals	Switch	Thumbwheel	Value	Taper	Tolerance
T-18	A = PCB B = Solder Lugs	I = with S = without	S = sb/st T = sb/ct 1 = Fig. 1 2 = Fig. 2 3 = Fig. 3 4 = Fig. 4 (See note 1)	101 = 100Ω 203 = 20K 504 = 500K 505 = 5M (See note 2)	A = Linear B = Log. C = Alog. (See note 4) Others tapers on request	2020 = +/-20% 3030 = +/-30% (See note 3)

NOTES:

(1) Thumbwheel: S = without knob, without screw
T = without knob, with screw
Fig. 1, 2 y 3: countersunk knob
Fig. 4: knob with screw
knob colour: Black

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

(2) Value: • Code: 10 1 100Ω
10 → 2 first digits of the value.
1 → Number of zeros

Others values upon request.

(3) Tolerance (non standard), upon request.
Rotary switch with Alog. curve is not available.

Example code: +7 / -5 = 07 05
07 → negative tolerance
05 → positive tolerance

(4) Switch option not available with antilog taper.

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

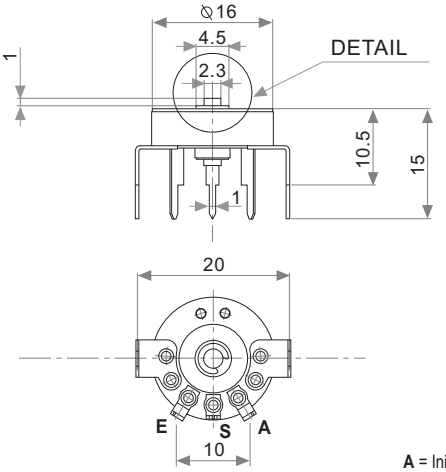
HOW TO ORDER CUSTOM DRAWING

T-18 A I + DRAWING NUMBER (Max. 16 digits)

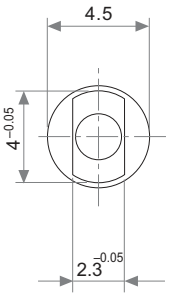
This way of ordering should be used for options which are not included in the "How to order" standard and optional extras.

TERMINALS

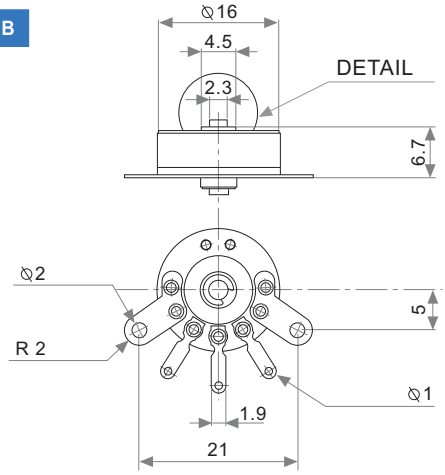
T-18 A



DETAIL

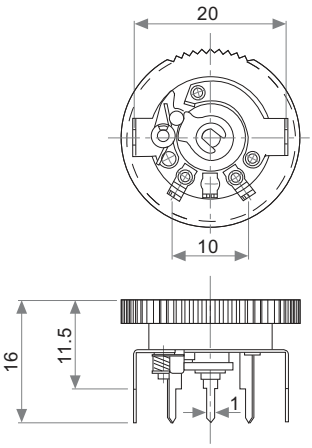


T-18 B

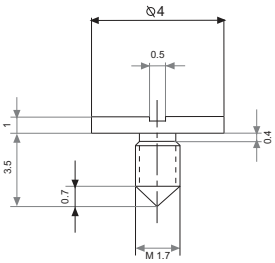


A = Initial **S** = Wiper **E** = Final

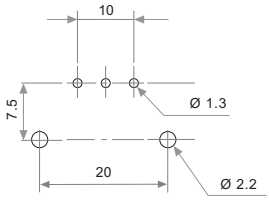
SWITCH



ELECTRICAL AND MECHANICAL	
SWITCH RATING	0.5 A; 12V DC
SWITCH OPERATING ANGLE	25°±10°
MECHANICAL LIFE (CYCLES)	10.000

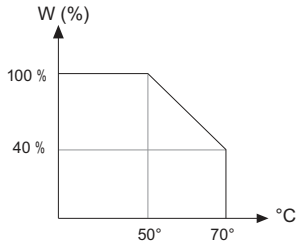


SCREW



FOOTPRINT

POWER RATING CURVE



THUMBWHEEL

Fig. 1 / Ref. 5950

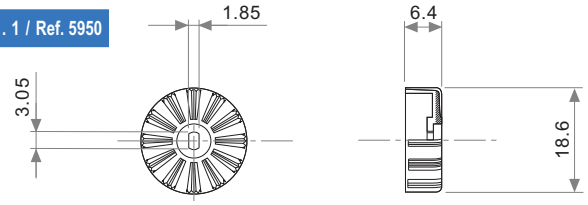


Fig. 2 / REF. 5951

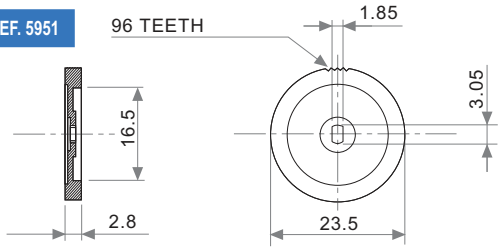


Fig. 3 / Ref. 5952

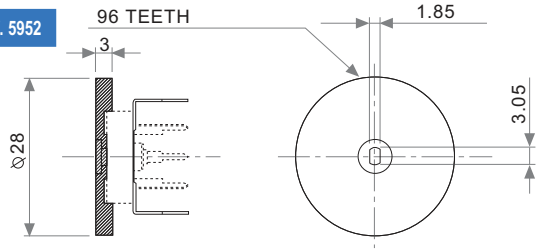
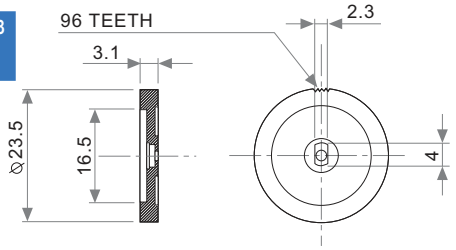


Fig. 4 / Ref. 5953
(Screw Ref. 5342 is required)



TESTS — TYPICAL VARIATIONS

ELECTRICAL LIFE	1.000 h. @ 50°C; 0.25 W	±5 %
MECHANICAL LIFE : POT.	25.000 (10-15 CPM)	±3 % (Rn < 1 M)
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 these results.