



FEATURES

- Carbon resistive element
- IP54 protection according to IEC 60529
- Polyester substrate
- Also upon request:
 - Wiper positioned at 50% or fully clockwise.
 - Supplied in magazines for automatic insertion.
 - Special tapers

MECHANICAL SPECIFICATIONS

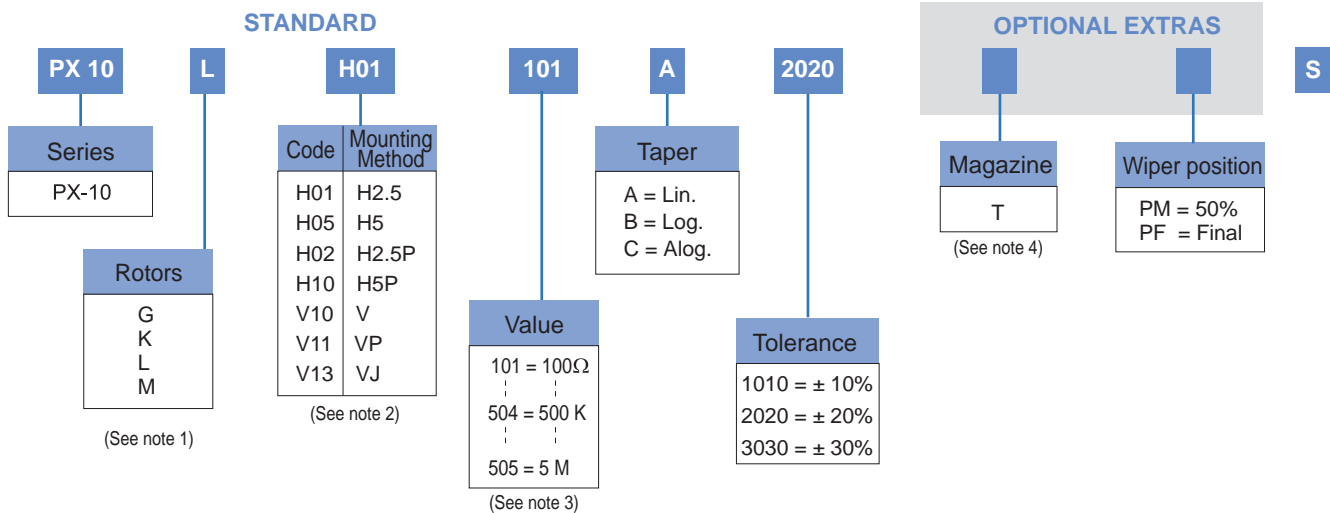
- Mechanical rotation angle: $235^\circ \pm 5^\circ$
- Electrical rotation angle: $220^\circ \pm 20^\circ$
- Torque: 0.4 to 2 Ncm. (0.6 to 2.7 in-oz)
- Stop torque: > 5 Ncm. (>7 in-oz)
- Mechanical life: 1000 cycles

ELECTRICAL SPECIFICATIONS

- Range of values $100\Omega \leq R_n \leq 5\text{ M}$ (Decad. 1.0 - 2.0 - 2.2 - 2.5 - 4.7 - 5.0)
- Std. Tolerance: $100\Omega \leq R_n \leq 1\text{M}\Omega$ $\pm 20\%$
 $1\text{M}\Omega < R_n \leq 5\text{M}\Omega$ $\pm 30\%$
- Max. Voltage: 200 VDC (lin) 100 VDC (no lin)
- Nominal Power 50°C (122°F) (see power rating curve) 0.15 W (lin) 0.07 W (no lin)
- Taper (Log. & Alog. only $R_n \geq 1\text{K}$) Lin ; Log; Alog.
- Residual resistance: $\leq 5 \cdot 10^{-3} R_n$ (5Ω min.)
- Equivalent Noise Resistance: $\leq 3\% R_n$ (3Ω min.)
- Operating temperature*: $-25^\circ\text{C} + 70^\circ\text{C}$ ($-13^\circ\text{F} + 158^\circ\text{F}$)

* Up to 85°C depending on application

HOW TO ORDER



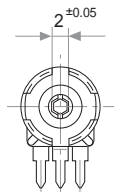
NOTES:

- (1) Rotor's "G" colour: purple. L and M rotors' colour: white
- (2) Terminals styles: "P" & "J" are crimped terminals. V=Vertical adjust; H=Horizontal Adjust
- (3) Value Example: Code: $\begin{matrix} 10 & 1 & 100\Omega \\ \vdots & \vdots & \vdots \\ 504 & & 500\text{ K} \\ \vdots & & \vdots \\ 505 & & 5\text{ M} \end{matrix}$
 Numb of zeros
 First two digits of the value.
- (4) Magazines: not available with the H10 and V13 models.

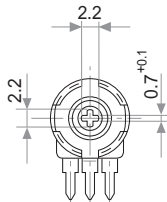
NOTE: The information contained here should be used for reference purposes only.

ROTORS

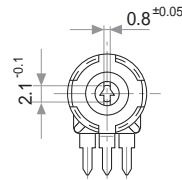
Wipers positioned at 50%



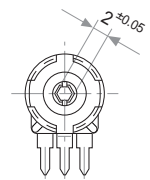
G = Hexagonal thru hole



K = Cross slot thru hole



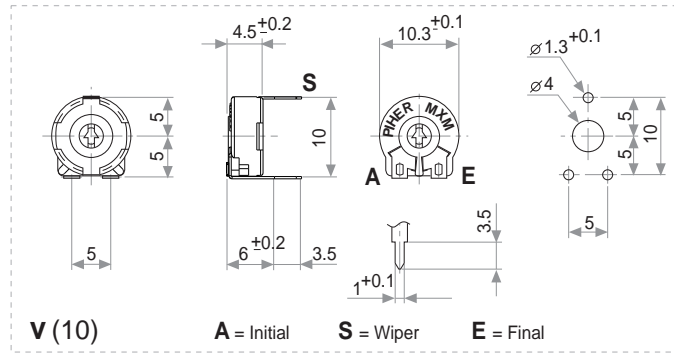
L = Screwdriver thru hole



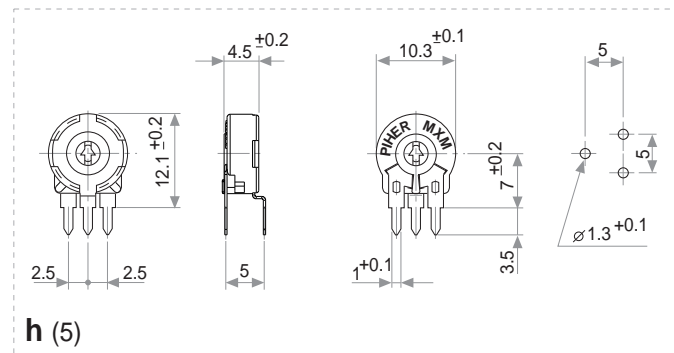
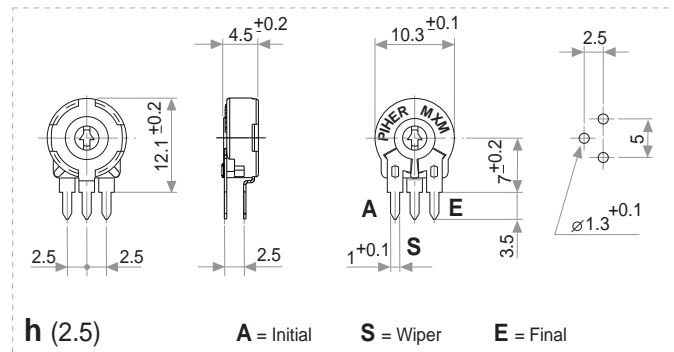
M = Hexagonal thru hole

MOUNTING METHODS

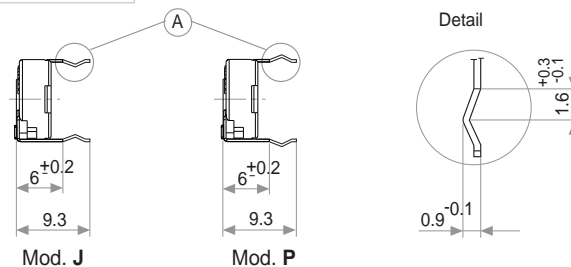
v = horizontal mount – vertical adjust



h = vertical mount – horizontal adjust



Crimped terminals

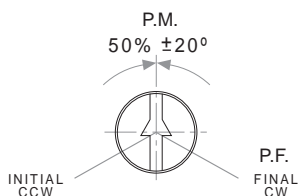


NOTE = Please note relative terminal positions when ordering non linear tapers.

OPTIONS

Wiper's standard position: Initial

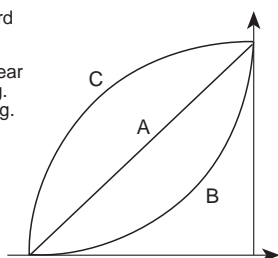
Positioning (Std. Position = CCW)



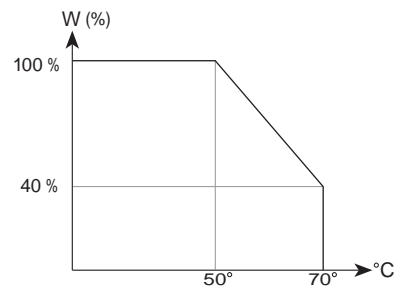
TAPERS

Standard

A = Linear
B = Log.
C = Alog.



POWER RATING CURVE



NOTE = Please note relative terminal positions when ordering non linear tapers.

TESTS

TYPICAL VARIATIONS

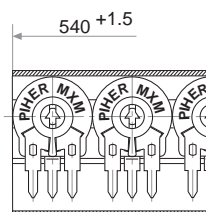
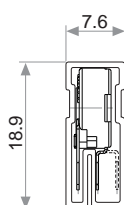
ELECTRICAL LIFE	1.000 h. @ 50°C; 0.15 W	±5 %
MECHANICAL LIFE (CYCLES)	1000 @ 10 CPM ...15 CPM	±3 % (Rn < 1 MΩ)
TEMPERATURE COEFFICIENT	-25°C; +70°C	±300 ppm (Rn <100 K)
THERMAL CYCLING	16 h. @ 85°C; 2h. @ -25°C	±2.5 %
DAMP HEAT	500 h. @ 40°C @ 95% HR	±5 %
VIBRATION (for each plane X,Y,Z)	2 h. @ 10 Hz. ... 55 Hz.	±2 %

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

PACKAGING

BOXES (Standard option)

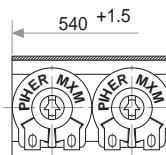
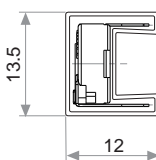
Model	Units
Without shaft	500 (40 x 85 x 185 mm.)
With thumbwheel	400 (40 x 85 x 185 mm.)
With shaft	200 (40 x 85 x 185 mm.)



Magazines for PT-10 h 2.5; h 5
Also crimped term. h 2.5 P

AUTOMATIC INSERTION

Magazines	Units per magazine
PT-10H & PT-10V	50 Pieces



Magazines for PT-10 V
Also crimped term. VP

SHAFTS

Standard Shaft colour: Natural

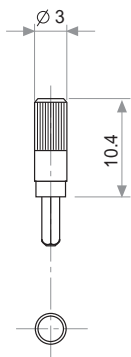


Fig. 1 / Ref. 5016

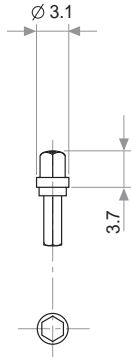


Fig. 2 / Ref. 5053

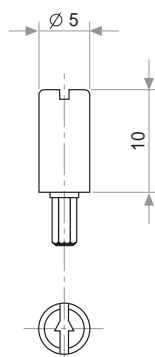


Fig. 3 / Ref. 5012

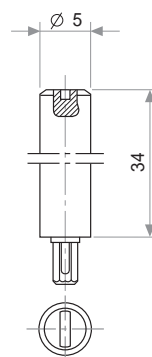


Fig. 4 / Ref. 6053

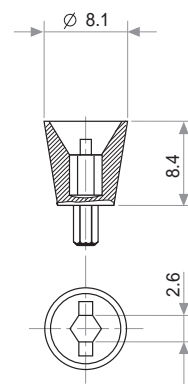


Fig. 6 / Ref. 5035

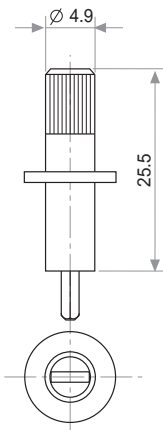


Fig. 7 / Ref. 5115

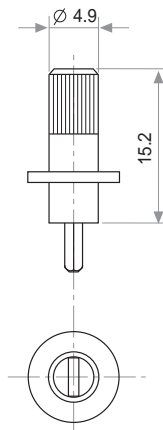


Fig. 8 / Ref. 5116

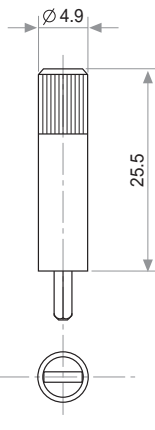


Fig. 9 / Ref. 5119

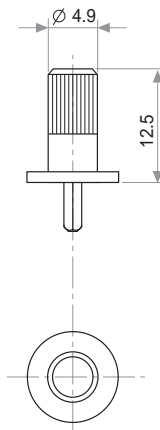


Fig. 10 / Ref. 5120

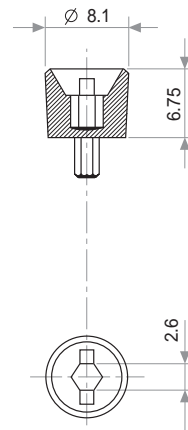


Fig. 11 / Ref. 5027

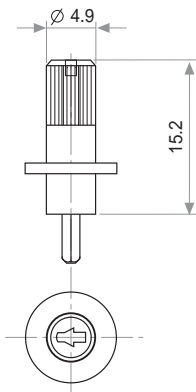


Fig. 12 / Ref. 6052

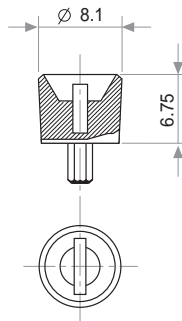


Fig. 13 / Ref. 5121

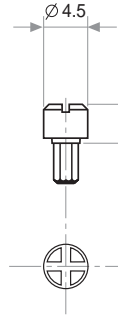
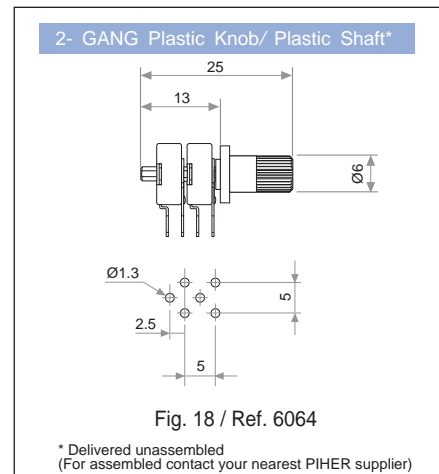


Fig. 14 / Ref. 5055



THUMBWHEELS

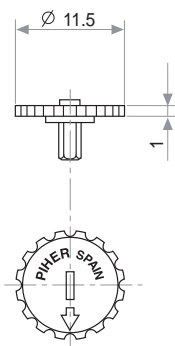


Fig. 5 / Ref. 5034

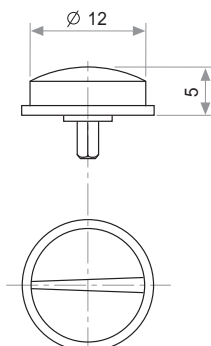


Fig. 15 / Ref. 6008

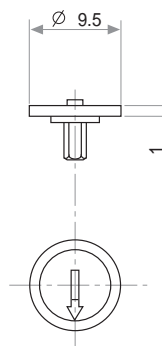


Fig. 16 / Ref. 5039

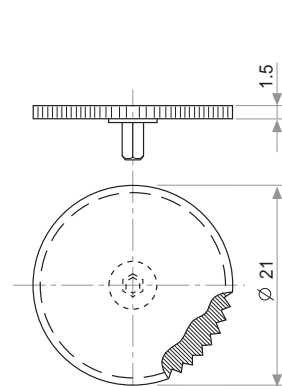
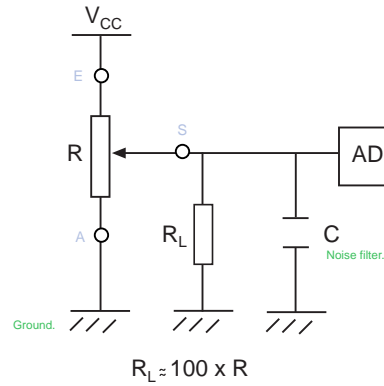


Fig. 17 / Ref. 5062

RECOMMENDED CONNECTIONS

Piher potentiometer's recommended connection circuit for a position sensor or control application. (voltage divider circuit electronic design).



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