

FEATURES

- Excellent low price control potentiometer.
- Available in Carbon (SM-10) and Cermet (SMC-10)
- Based on the PT-10 / PTC-10 series.
- Enclosed in plastic housing.

MECHANICAL SPECIFICATIONS

- Mechanical angle: $235^\circ \pm 20^\circ$
- Electrical angle: $220^\circ \pm 20^\circ$
- Torque: 0.5 to 2.5 Ncm.
(0.71 to 3.5 in-oz)
- Stop torque: > 25 Ncm. (> 35.5 in-oz)
- Nut Torque: > 80 Ncm. (113.6 in-oz)

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)
- 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 :
 - Carbon SM-10 (50°C-122°F): 0.15W (lin), 0.07W (no lin)
 - Cermet SMC-10 (70°C-158°F): 0.33W(lin), 0.17 W (no lin)
- Taper (*) (Log. & Alog. only $R_n > 1\text{K}$) Lin ; Log; Alog.
- Residual resistance: $\leq 5 \times 10^{-3} R_n$ (2 Ω min.)
- Equivalent noise resistance: $\leq 3\%$ R_n (3 Ω min.)
- Operating temperature:
 - Carbon SM-10 : -25°C + 70°C** (-13°F + 158°F)
 - Cermet SMC-10 : -40°C + 90°C (-40°F + 194°F)
- Mechanical life: ≥ 10.000 cycles

* Others tapers on request. No linear tapers; values higher than 1 K Ω .

** Up to 85°C depending on application

HOW TO ORDER

STANDARD

OPTIONAL EXTRAS

SM-10	H04	102	A	2020	
Series	Code	Mounting Method	Value	Taper	Tolerance
SM-10 SMC-10	H04 H14 H12 H20 V10 V11 H03 H13 H22 H30	H 2.5A H 5A H 2.5PA H 5PA V V P H 2.5B H 5B H 2.5PB H 5PB	101 = 100 Ω 102 = 1 K 504 = 500 K 505 = 5 M 000 = C M (See note 2)	A = Linear B = Log. C = Alog. (Other tapers on request)	2020 = $\pm 20\%$ 3030 = $\pm 30\%$ (See note 3)
					Nut and Washer
					-TA = Loose nut and washer MTA= Assembled nut and washer -T= Loose nut MT-= Assembled nut

NOTES:

- Mount. Method: • Position with "P" will be with crimped terminals.
• Denominations (a), (b) (see Mounting Methods)
- Value: Code: 10 1 100 Ω
Number of zeros
2 first digits of the value.
• Standard values: Decades of 10, 20, 22, 25, 47, 50. Other values as specials.
• 000 = CM = Switch 45° (only SMC-10)
- Tolerance (non standard). Upon request. Code eg.: +7 -5 = 07 05
negative tolerance
positive tolerance
- Shaft: The standard option is E4 L30 black colour.

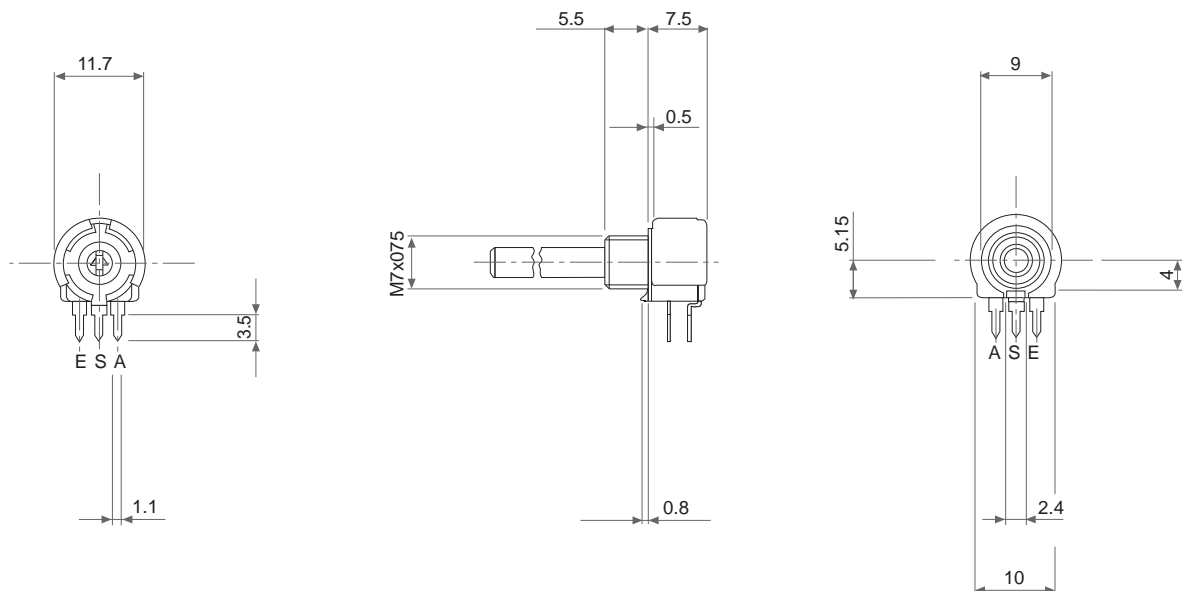
NOTE: The information contained here in may be changed without prior notice.

SM-10 H04 + DRAWING NUMBER (Max. 16 digits)

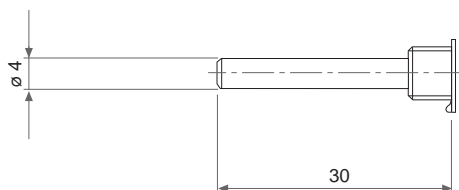
This way of ordering should be used for options which are not included in the "How to order" standard and optional extras.

NUT AND WASHER = Without nut and washer

COMMON DIMENSIONS



STANDARD SHAFT

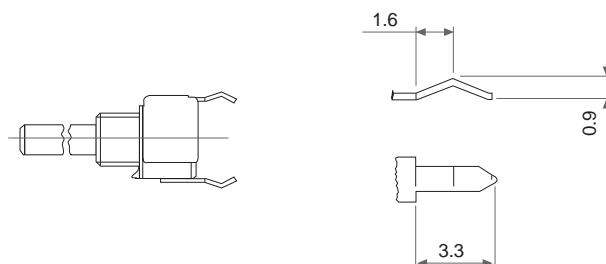


TERMINALS

NOT CRIMPED



CRIMPED



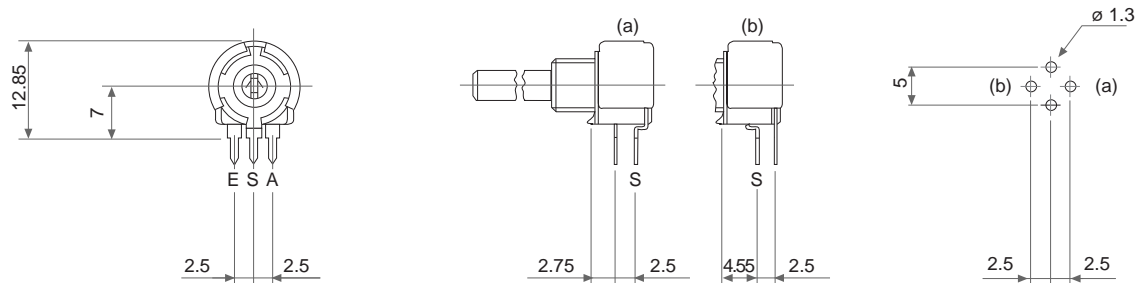
PACKAGING

QUANTITY: 100 units

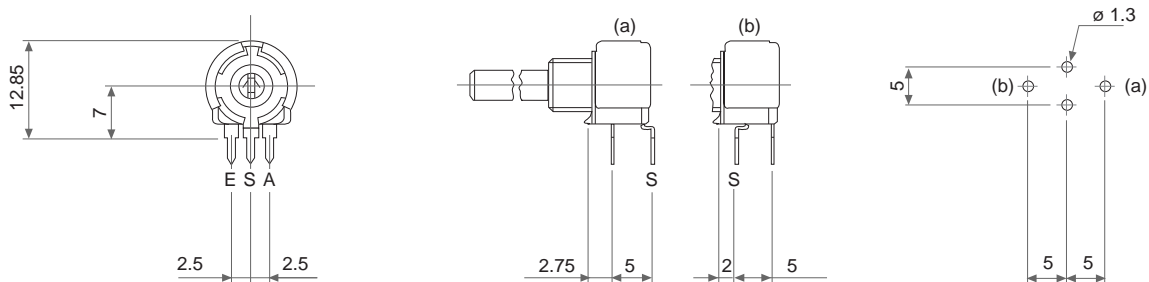
TESTS

See PT-10 or PTC-10 data sheets.

h 2.5



h 5



v 10

