

## FEATURES

- Excellent low price control potentiometer.
- Based on the PT-15 / PTC-15 series.
- Available in carbon (SM-15) and cermet (SMC-15).
- Enclosed in plastic housing.

## MECHANICAL SPECIFICATIONS

- Mechanical rotation angle:  $265^\circ \pm 5^\circ$
- Electrical rotation angle:  $250^\circ \pm 20^\circ$
- Torque: 0.5 to 2.5 Ncm.  
(0.7 to 3.4 in-oz)
- Stop torque: > 10 Ncm. (14 in-oz)

## ELECTRICAL SPECIFICATIONS

- 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 (\*):  $100\Omega \leq R_n \leq 1\text{M}\Omega$  .....  $\pm 20\%$   
 $1\text{M}\Omega < R_n \leq 5\text{M}$  .....  $\pm 30\%$
- Max. Voltage: 250 VDC (lin) 125 VDC (no lin)
- Nominal Power: •  $50^\circ\text{C}$  ( $122^\circ\text{F}$ ) 0.25W (lin), 0.12W (no lin) carbon  
•  $70^\circ\text{C}$  ( $158^\circ\text{F}$ ) 0.5W (lin) 0.25W (no lin) cermet
- Power derating: 0 Watt a  $100^\circ\text{C}$
- Taper (\*\*): Lin., Log., Alog.
- Residual resistance:  $\leq 5 \cdot 10^{-3} R_n$  ( $2\Omega$  min.)
- Operating temperature:  $-25^\circ\text{C} + 70^\circ\text{C}$  (\*\*\*) ( $-13^\circ\text{F} + 158^\circ\text{F}$ ) carbon  
 $-40^\circ\text{C} + 90^\circ\text{C}$  ( $-40 + 194^\circ\text{F}$ ) cermet
- Mechanical life:  $\geq 10.000$  (\*\*\*)

(\*) Others upon request.

(\*\*\*) Up to  $85^\circ\text{C}$  depending on application

(\*\*) Others tapers on request. No linear tapers; values higher than  $1\text{ K}\Omega$ .

(\*\*\*) For Ohmic values  $\geq 1\text{ K}\Omega$ . Lower values upon request

## HOW TO ORDER SM-15

STANDARD				OPTIONAL EXTRAS					
Series	Code	Mounting Method	Value	Taper	Cut track	Shafts	Shaft Colour	Nut and Washer	Terminals base material
SM-15	H04	H 2.5A	101 = $100\Omega$	A = Linear	PCI = Initial	02 = Fig.2	RO = Red	-TA = Loose nut and washer	S = steel
	H14	H 5A	102 = 1 K	B = Log.	PCF = Final	06 = Fig.6	VE = Green	MTA = Assembled nut and washer	
	H12	H 2.5PA	504 = 500 K	C = Alog.		07 = Fig.7	AM = Yellow	-T = Loose nut	
	H20	H 5 PA	505 = 5 M	(Other tapers on request)		08 = Fig.8	IN = Natural	MT- = Assembled nut	
	H24	HC 5A	(See note 2)			10 = Fig.10	MA = Brown		
	V02	V 12.5				11 = Fig.11	GR = Grey		
	V21	V 12.5P				12 = Fig.12	NA = Orange		
	V12	VA				17 = Fig.17	CR = Cream		
	V22	VA P				21 = Fig.21			
	V15	V 15							
	V17	V17.5							
	H16	BA							
	H26	BB							
	H03	H 2.5B							
	H13	H 5B							
	H22	H 2.5PB							
	H30	H 5PB							
	H23	HC 5B							
	V23	V 15P							

## HOW TO ORDER CUSTOM DRAWING

SM-15 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.

## STANDARD OPTIONS

Cut track ..... Non cut track  
 Shaft ..... Fig. 9  
 Shaft colour ..... Black  
 Nut and washer ..... Without nut & washer  
 Terminals base material ..... Brass

## NOTES:

- (1) Mounting Method: Positions with "P" will be with crimped terminals.
- (2) Value: Code:  $\begin{matrix} 10 & 1 & 100\Omega \\ \downarrow & \downarrow & \downarrow \\ \text{Number of zeros} & \text{2 first digits of the value.} & \end{matrix}$   
 • Standard values: Decades of 10, 20, 22, 25, 47, 50. Other values upon request.
- (3) Tolerance (non standard). Upon request. Code eg.:  $\begin{matrix} +7 & 05 \\ -5 & \end{matrix}$  → negative tolerance  
 positive tolerance
- (4) Shafts: These figures coincide with the PT15 references (Standard material).
- (5) Colour: Only applicable to the shaft.

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

# HOW TO ORDER SMC-15

SMC-15	H04	102	A	2020				
Series	Code	Mounting Method	Value	Taper	Shafts	Shaft Colour	Nut and Washer	Terminals base material
SMC-15	H04 H14 H12 H20 H34 V02 V21 V12 V22 V15 V17 H16 H26 H03 H13 H22 H30 H33 V23	H 2.5A H 5A H 2.5PA H 5PA HA 5A V 12.5 V 12.5P VA VA P V 15 V 17.5 BA BB H 2.5B H 5B H 2.5PB H 5PB HA 5B V 15P	101 = 100Ω 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)  <b>Tolerance</b> 1010 = ± 10% 2020 = ± 20% 3030 = ± 30%  (See note 3)	02 = Fig.2 06 = Fig.6 07 = Fig.7 08 = Fig.8 10 = Fig.10 11 = Fig.11 12 = Fig.12 17 = Fig.17 21 = Fig.21  (See note 4)	RO = Red VE = Green AM = Yellow AZ = Blue IN = Natural MA = Brown GR = Grey NA = Orange CR = Cream  (See note 5)	-TA = Loose nut and washer MTA = Assembled nut and washer -T = Loose nut MT = Assembled nut	S = steel

## HOW TO ORDER CUSTOM DRAWING

SMC-15 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.

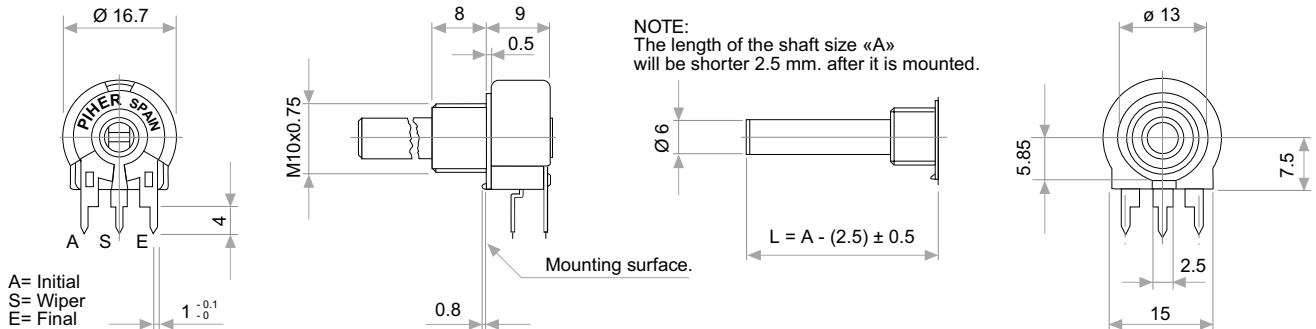
### STANDARD OPTIONS

Shaft ..... Fig. 9  
Shaft colour ..... Black  
Nut and washer ..... Without nut  
Terminals base ..... and washer  
material ..... Brass

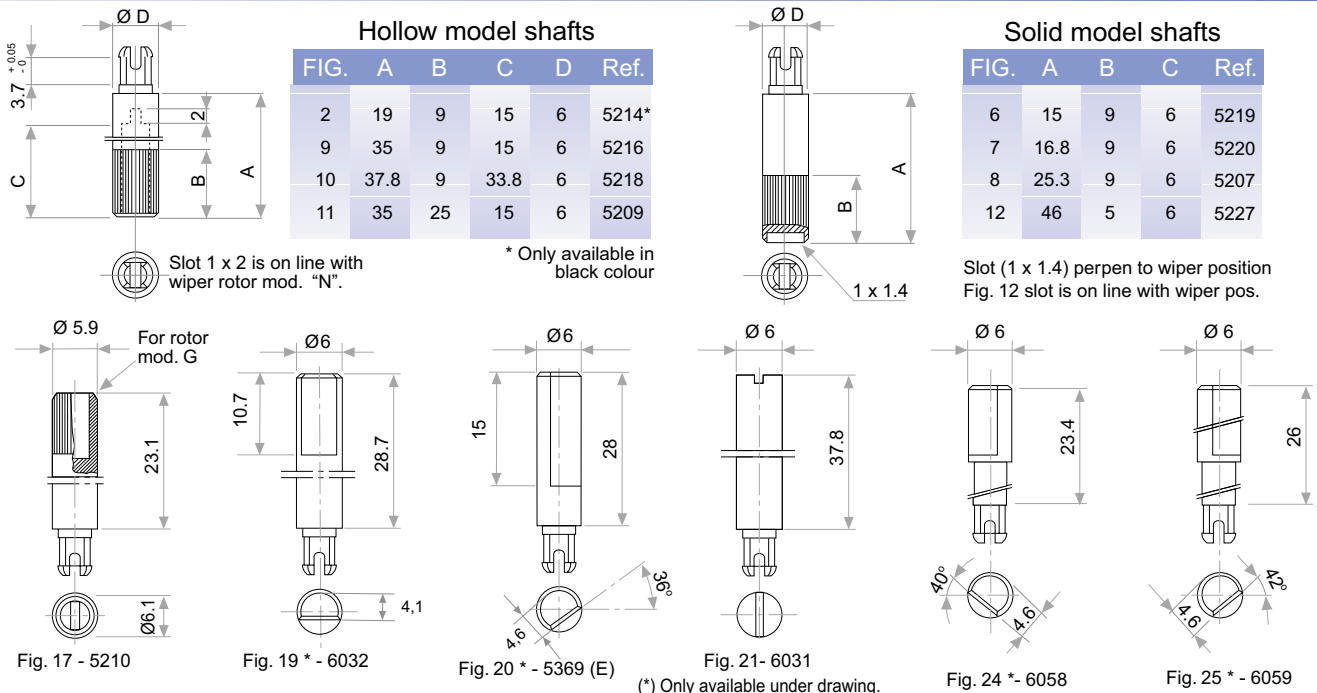
### NOTES:

- Mounting Method: Positions with "P" are with crimped terminals.
- 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 upon request.  
 • 000 = CM = Switch 45° (see PTC-15).
- Tolerance (non standard). Upon request. Code eg.: +7 = 07 05  
 -5 → negative tolerance  
 positive tolerance
- Shafts: The figures coincide with the numbers for PT15. (Standard material).
- Colour: Only applicable to the shaft.

### COMMON DIMENSIONS

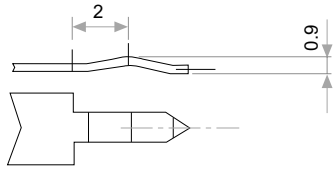


### SHAFTS



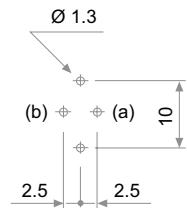
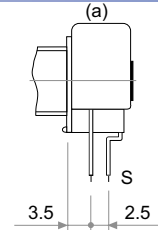
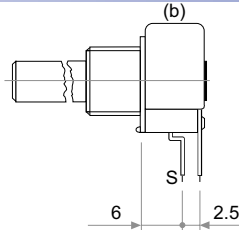
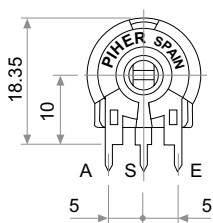
# SNAP IN TERMINAL

P

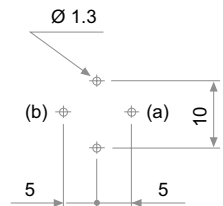
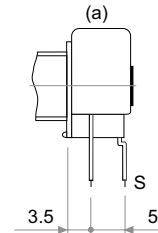
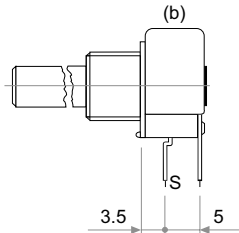
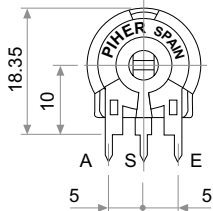


## TERMINAL STYLES

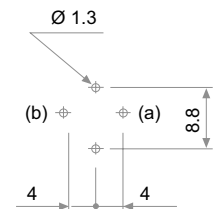
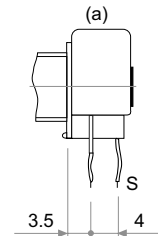
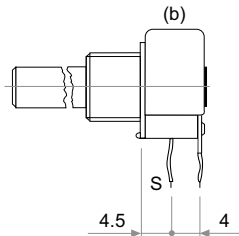
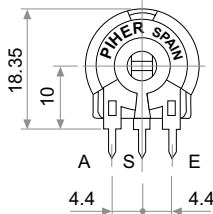
**h 2.5**



**h 5**

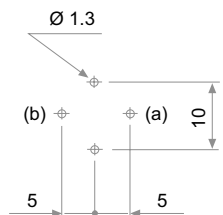
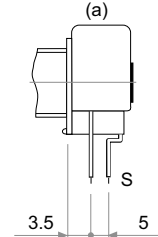
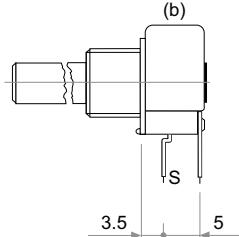
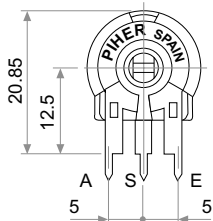


**B**



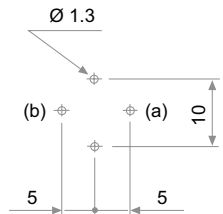
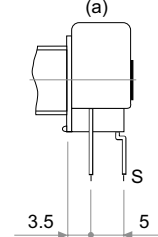
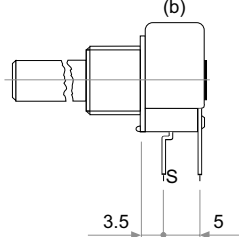
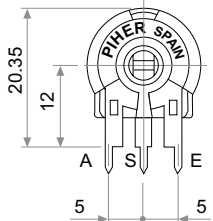
**h C 5**

Only SM-15

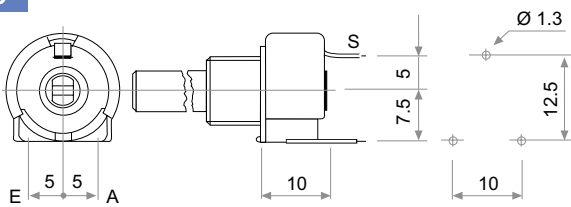


**h A 5**

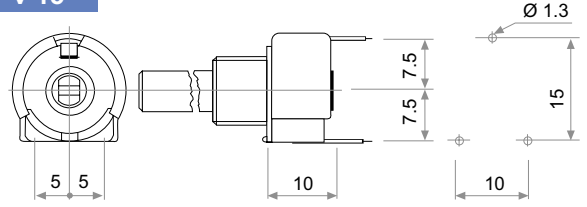
Only SMC-15



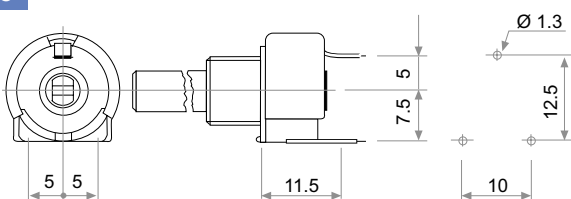
**v 12.5**



**v 15**



**va 12.5**



**v 17.5**

