

FEATURES

- Cermet resistive element.
- Available in all series T-21 models (except detent option).
- High power dissipation.
- More than 50.000 operations.
- Series I-21 switches adaptable.

MECHANICAL SPECIFICATIONS

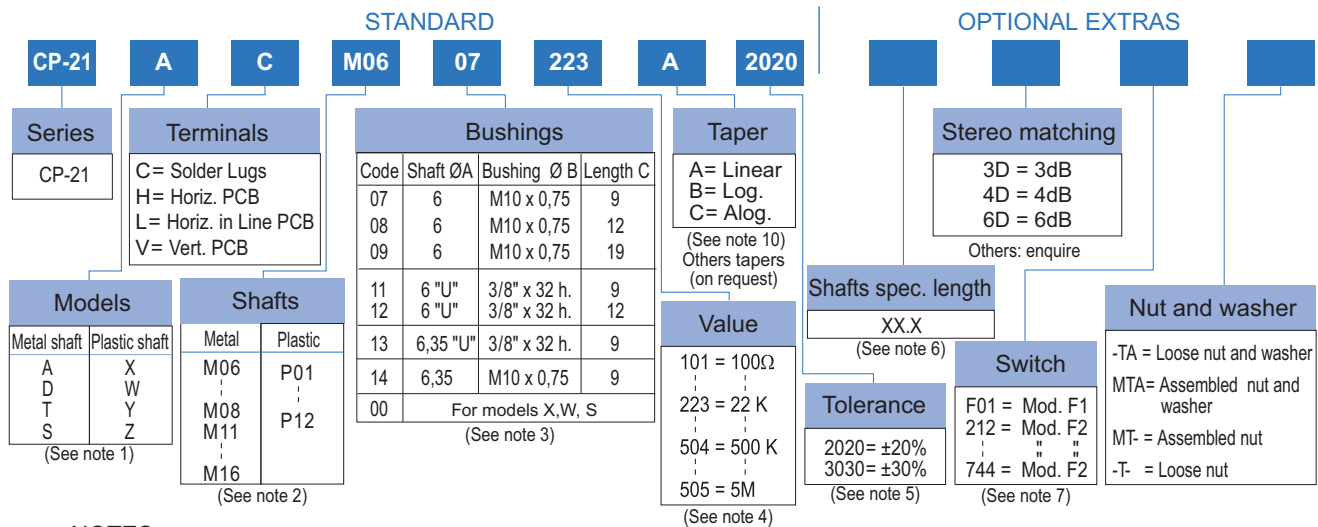
- Mechanical rotation angle: $310^\circ \pm 5^\circ$
- Electrical rotation angle: $290^\circ \pm 20^\circ$
- Operating torque: 0.5 to 1.5 Ncm.
(0.7 to 2.1 in-oz)
- Max. stop torque: > 80 Ncm (> 112 in-oz)

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: 500 VDC (lin); 250 VDC (no lin)
- Nominal Power 70°C (158°F) (see power rating curve)
2 W (lin); 0.5 W (no lin)
- Taper (**): Lin.; Log.; Alog.
- Residual resistance(*): $\leq 0.5\% R_n$ (5 Ω min.)
- Equivalent noise resistance: $\leq 3\% R_n$ (3 Ω min.)
- Breakdown voltage: > 750 VAC.
- Operating temperature: -40°C ; $+90^\circ\text{C}$ (-40°F ; 194°F)

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

HOW TO ORDER



NOTES:

- (1) MODELS : Models "D" and "T" are not available with terminals "V".
- (2) SHAFTS : The codes indicate diameter and length. Shaft M08 for double potentiometer.
- (3) BUSHINGS : The codes types 11, 12 and 13 have an antirotation lug (at 90° CW). Plastic shafts and tandem model, are only available with Ø6 bushing.
- (4) VALUE :
 - Code: $\overset{1}{\underset{0}{10}}$ 100 Ω
 Number of zeros
2 first digits of the value.
 - Standard values: - Decades of 10, 20, 22, 25, 47, 50.
 - Other values will be special.
 - In models "D" and "T" with different values, ask by drawing.
- (5) Tolerance (special), upon request. Code eg.: $\overset{05}{-5}$ 07 05
 negative tolerance
positive tolerance
- (6) Shafts special length:
 - Only for special length and plain shafts (not knurled). Example: EØ6 L= 24.5
 - Flatted and slotted shafts, etc. will need drawing.
 - Shaft M08 (T21D) with other length, ask by drawing.
 Recommendation : Eje L>60 ... bushing C=19
- (7) SWITCHES : Two types of switches are offered: F1 and F2.
 - F1 = The code is "F01".
 - F2 = We can put in its place any of the I-21 switch codes (only with metal shaft).
 SWITCH WITH PLASTIC SHAFT : F 1= Available in shafts with code P10, P11 and P12.
- (10) Switch option not available with antilog taper.

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

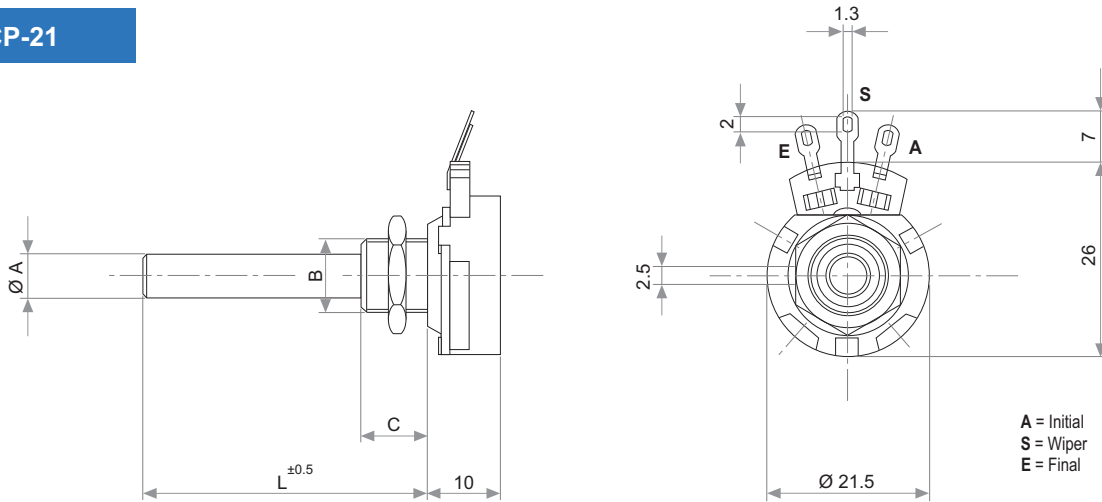
CP-21 A C + DRAWING NUMBER (Max. 16 digits)

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

- Shaft special length 0; standard length
- Stereo matching Only in model "T" and upon request
- Switch No switch
- Nut & washer Without nut and washer

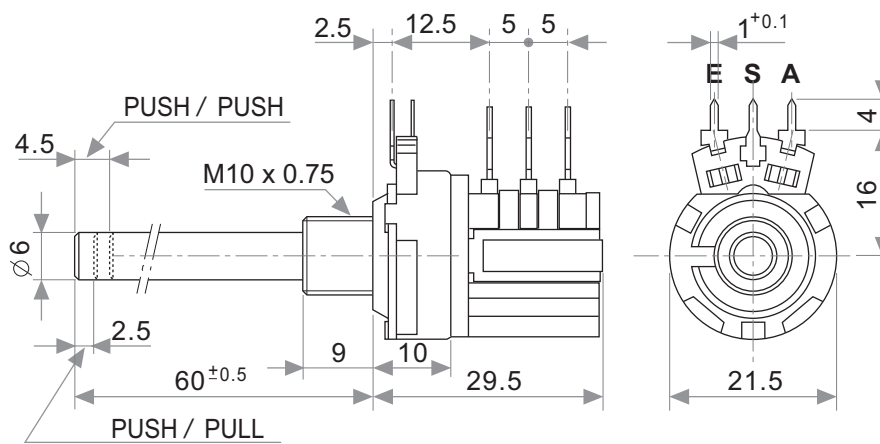
DIMENSIONS *

CP-21



A = Initial
S = Wiper
E = Final

CP-21 with switch



(*) For more detailed information see T-21 data sheet.

TESTS

TYPICAL VARIATIONS

ELECTRICAL LIFE	1.000 h. @ 70°C	± 5 %
MECHANICAL LIFE: POT.	50.000 CYCLES	± 5 %
TCR	-40°C; +90°C (-40°F; +194°F)	±350 ppm /°C
THERMAL CYCLING	16 h. @ 85°C; 2h. @ -25°C	± 5 %
DAMP HEAT	500 h. @ 40°C @ 95% HR	± 5 %
VIBRATION (for each plane X,Y,Z)	2 h. @ 10 Hz ... 55 Hz.	± 3 %

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

PACKAGING

Boxes of 260 x 170 x 110: 150 Singl. Pots.