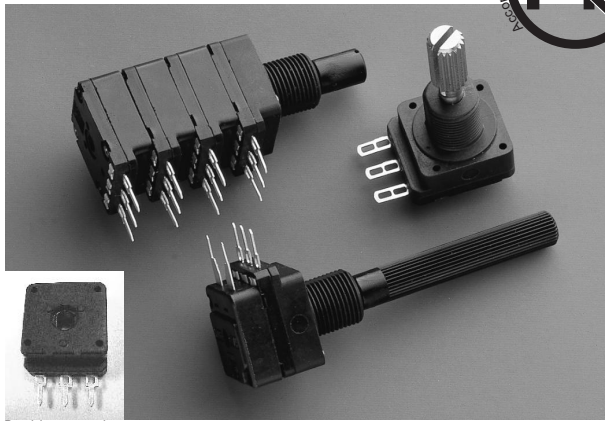




PC-16 16 mm Carbon Potentiometer



Bushless version

FEATURES

- Carbon resistive element
- Dust proof enclosure
- Polyester substrate
- Modular gang type (up to 4)
- Self extinguishable material UL 94-V0
- Upon request:
 - Metallic support
 - Stereo matching
 - Switch
 - Nut & washer
 - Bushless option available

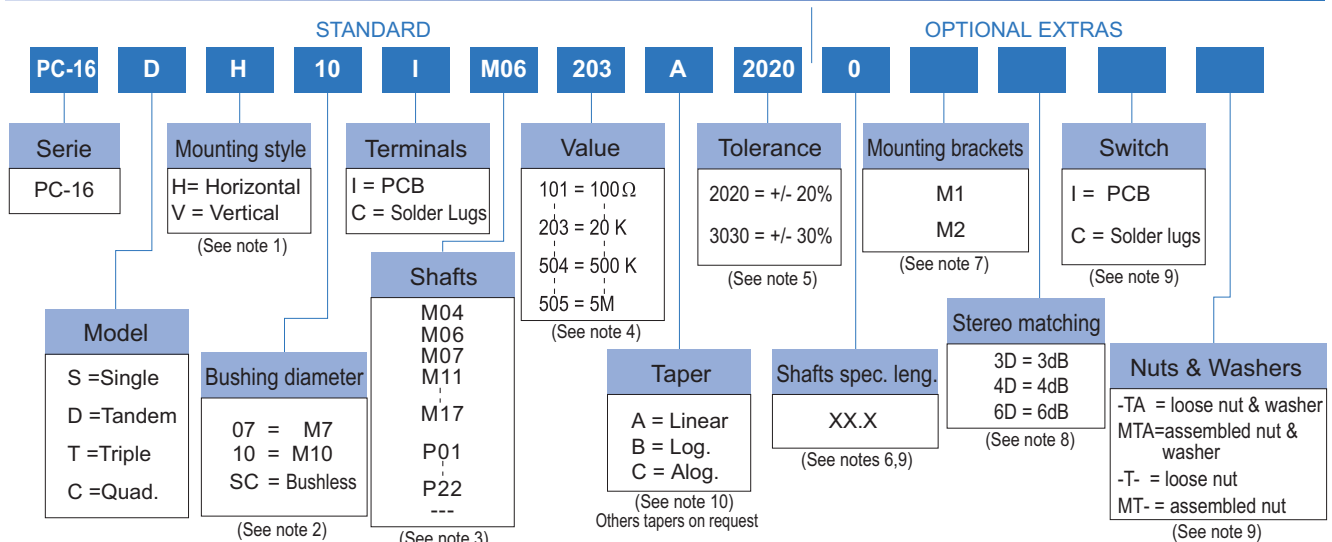
MECHANICAL SPECIFICATIONS

- Mechanical rotation angle: $300^\circ \pm 5^\circ$
- Electrical rotation angle: $280^\circ \pm 20^\circ$
- Torque: 0.5 to 1.5 Ncm.
(0.7 to 2.1 in-oz)
- Stop torque: > 40 Ncm. (>56 in-oz)
- Max. torque nut (binding out): < 80 Ncm. (112 in-oz)
- Thrust and pull in the shaft: > 25 N

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: 250 VDC (lin) 125 VDC (no lin)
 - Nominal Power 50°C (122°F) (see power rating curve)
0.2 W (lin) 0.1 W (no lin)
 - Taper (*) (Log. & Alog. only $R_n > 1\text{K}$) Lin ; Log; Alog.
 - Residual resistance(*): $\leq 0.5\% R_n$ (5 Ω min.)
 - Equivalent Noise Resistance: $\leq 3\% R_n$ (3 Ω min.)
 - Operating temperature**: $-25^\circ\text{C} + 70^\circ\text{C}$ ($-13^\circ\text{F} + 158^\circ\text{F}$)
- * Others upon request ** Up to 85°C depending on application

HOW TO ORDER

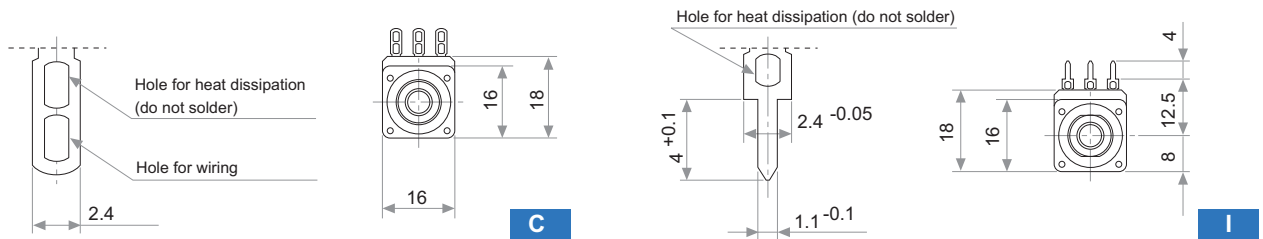


NOTES:

- (1) Mounting style: Type "V" is only available in model "S" potentiometer and with printed circuit terminals.
- (2) Bushings: Type "10" has two parallel flat surfaces for avoiding rotation. Bushless option only available for single model.
- (3) M07 shaft is only available with M10 bushing. --- = no shaft
- (4) Value: • Code: 10 1 100 Ω
 → Number of zeros
 → 2 first digits of the value.
 • In models "D", "T", "C", with different values, they will be asked by drawings.
- (5) Tolerance (non standard), upon request. Example: +7% Code: 07 05
 -5% → negative tolerance
 positive tolerance
- (6) Shaft special length:
 - Only for special length and plain shafts (not knurled). Example: Shaft $\varnothing 6.35$ L = 24.5 M07 24.5
 - NOTE: Maximum length recommended: L = 45
 - special length shafts
- (7) Mounting brackets: Only applicable for model "S", mounting "H" and without switch.
- (8) Stereo matching: not available for single models. Maximum will be: • 3dB for model "D" • 4dB for model "T" • 6dB for model "C"
- (9) Not available for Bushless version.
- (10) Switch option not available with antilog taper.

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

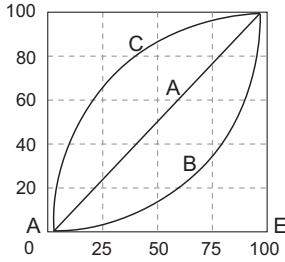
TERMINALS



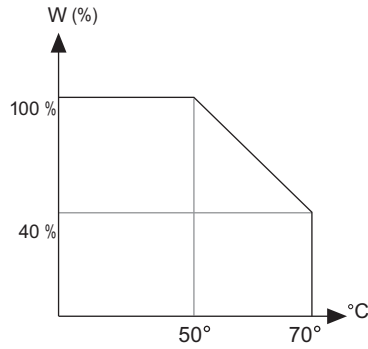
TAPERS

Standard

A = Linear
B = Log.
C = Alog.



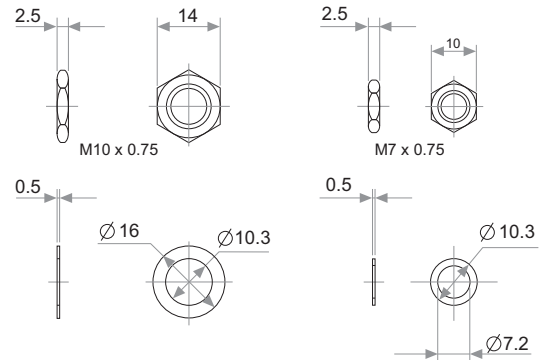
POWER RATING CURVE



NUTS & WASHERS

Bushing 10

Bushing 07



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

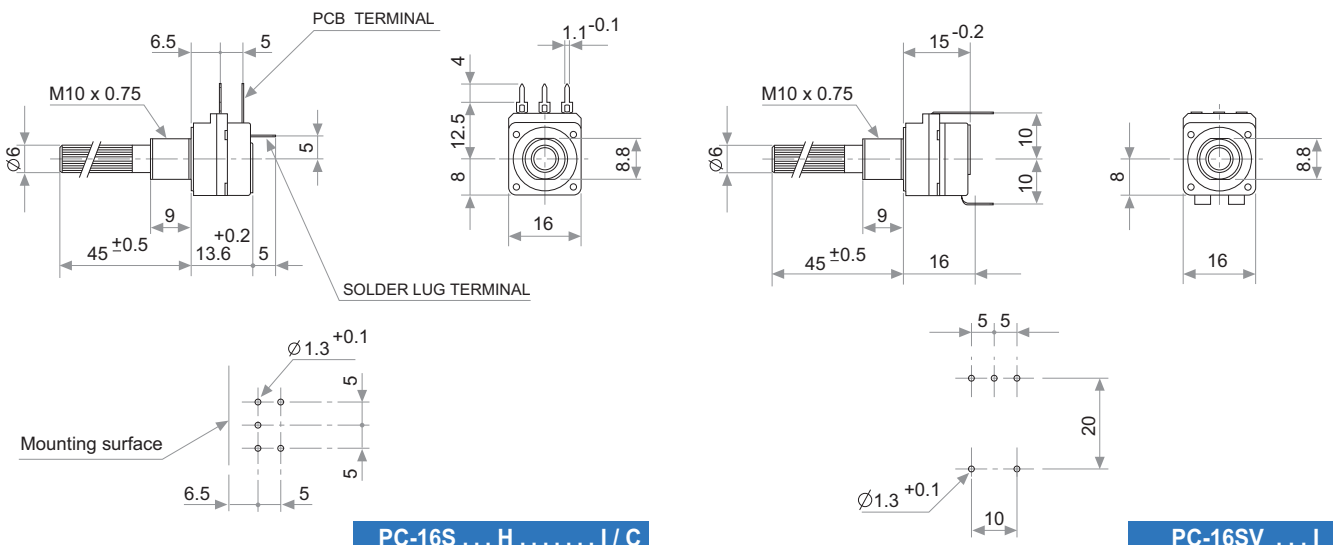
TESTS

TYPICAL VARIATIONS

| | | |
|----------------------------------|--|---------------------------|
| ELECTRICAL LIFE | 1.000 h. @ 50°C; 0.2 W | ±5 % |
| MECHANICAL LIFE : POT.* SWITCH | 25.000 (10-15 CPM) 10.000 (1 A, 50 VAC) | ±3 % (Rn < 1 MΩ) |
| TEMPERATURE COEFFICIENT | -25°C; +70°C | ±300 ppm/°C (Rn < 100 KΩ) |
| 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 % |

(*) only applicable to values ≥1K. For lower values please consult.

SWITCH



PC-16S ... H I / C

PC-16SV ... I

SWITCH SPECIFICATIONS

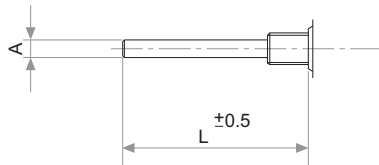
| | |
|------------------------------|-------------------------------|
| NOMINAL CURRENT | 1A, 50 VAC |
| CONTACT RESISTANCE (initial) | 10 m Ω |
| OPERATING TORQUE | 1 to 3 Ncm (1.4 to 4.2 in oz) |
| OPERATING ANGLE | 30° \pm 5° |
| TEST VOLTAGE | 500 V |

PACKAGING

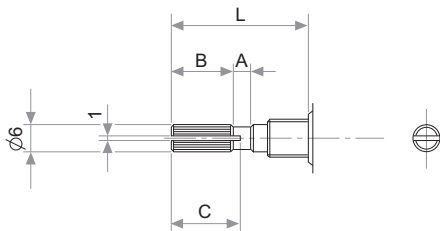
Boxes of 100 pieces (single body model): Inner dimensions 250 x 160 x 95 mm

METALIC SHAFTS

STANDARD

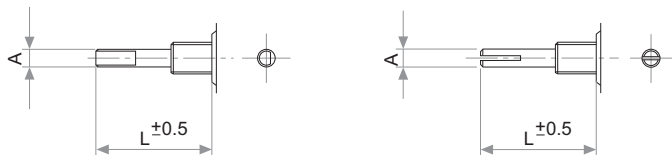


| A | L | CODE |
|------|----|------|
| 4 | 45 | M04 |
| 6 | 45 | M06 |
| 6.35 | 45 | M07 |



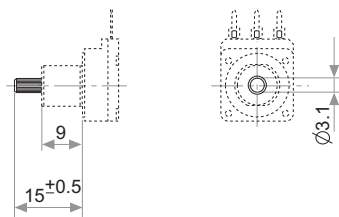
| A | B | C | L | CODE |
|---|----|----|----|------|
| 2 | 5 | 7 | 15 | M11 |
| 2 | 10 | 11 | 20 | M12 |
| 4 | 12 | 14 | 25 | M13 |
| 4 | 12 | 14 | 30 | M14 |
| 4 | 12 | 14 | 35 | M15 |
| 4 | 12 | 14 | 40 | M16 |
| 4 | 12 | 14 | 45 | M17 |

SPECIAL



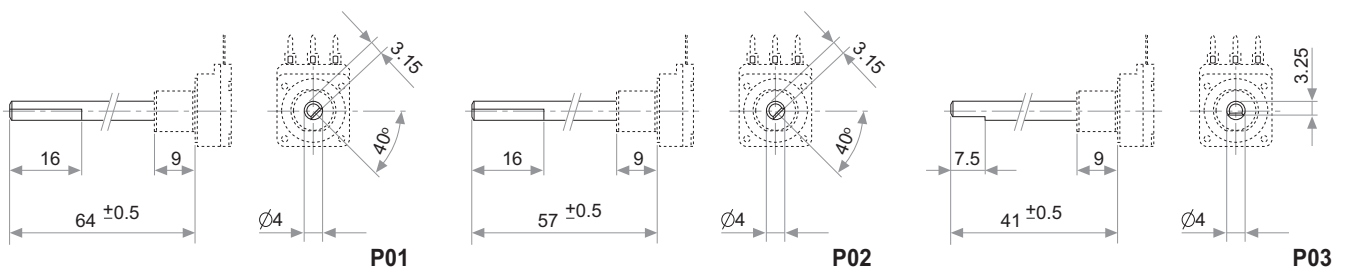
| A |
|------|
| 4 |
| 6 |
| 6.35 |

PLASTIC SHAFTS Ø3.1

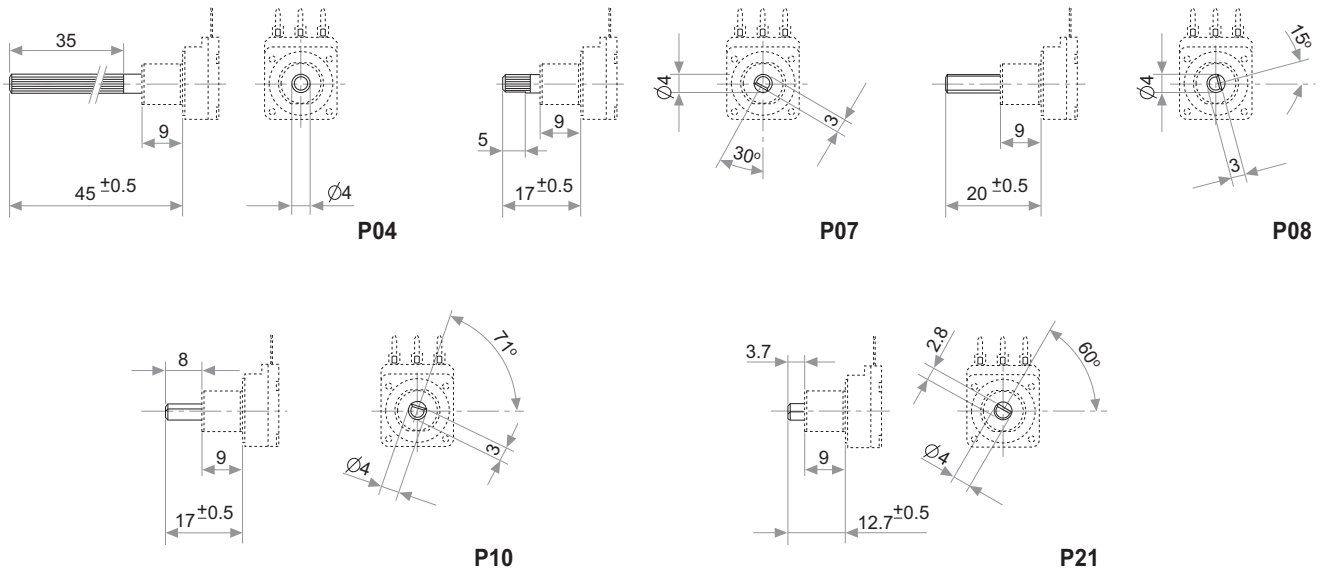


P09

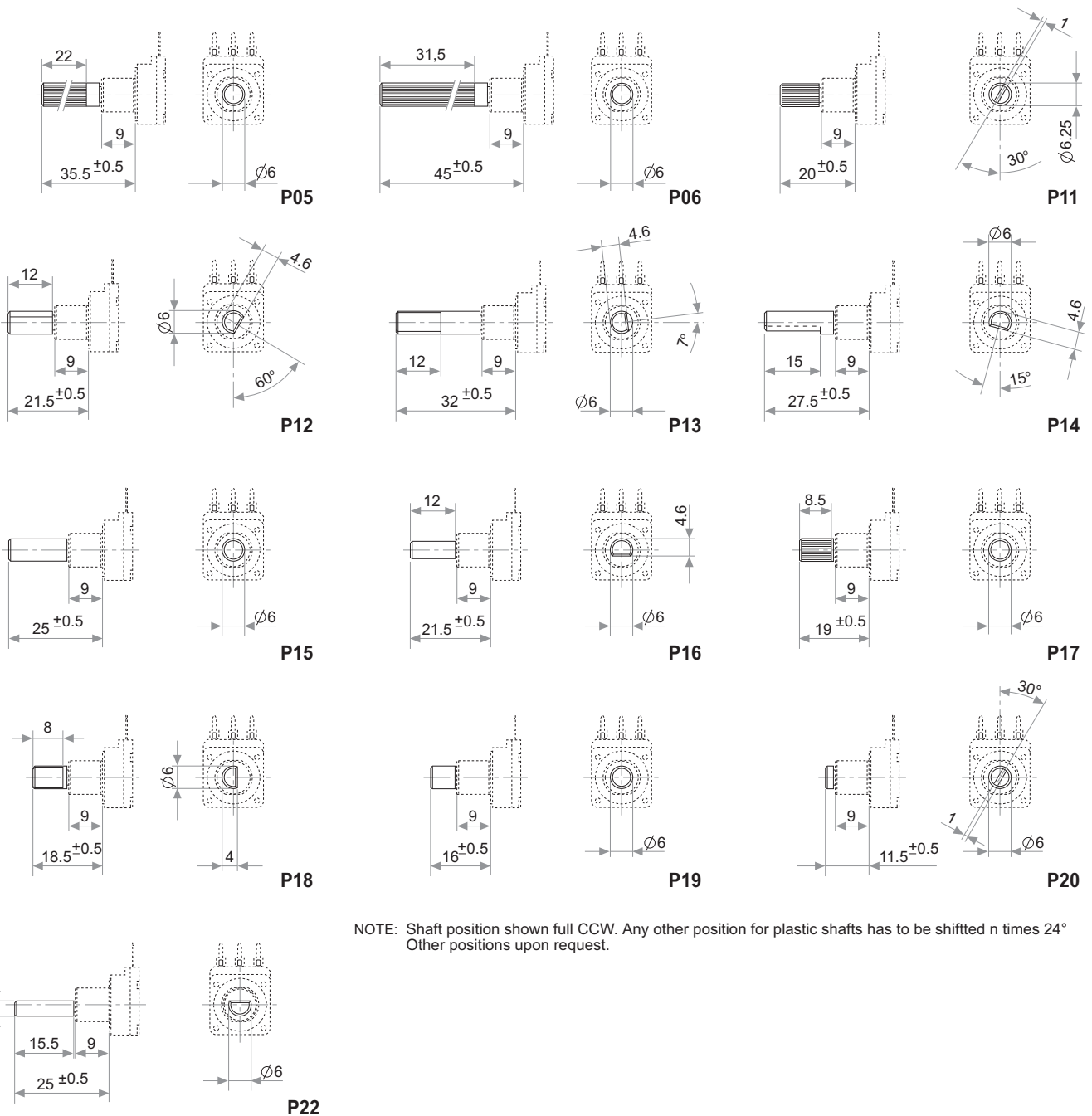
PLASTIC SHAFTS Ø4



PLASTIC SHAFTS Ø4



PLASTIC SHAFTS Ø6



NOTE: Shaft position shown full CCW. Any other position for plastic shafts has to be shifted n times 24°
Other positions upon request.