



FEATURES

- Carbon resistive element.
- Dust proof enclosure.
- High mechanical endurance.
- Upon request:
 - Detents
 - Stereo matching
 - Switch
 - Nut & washer

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)

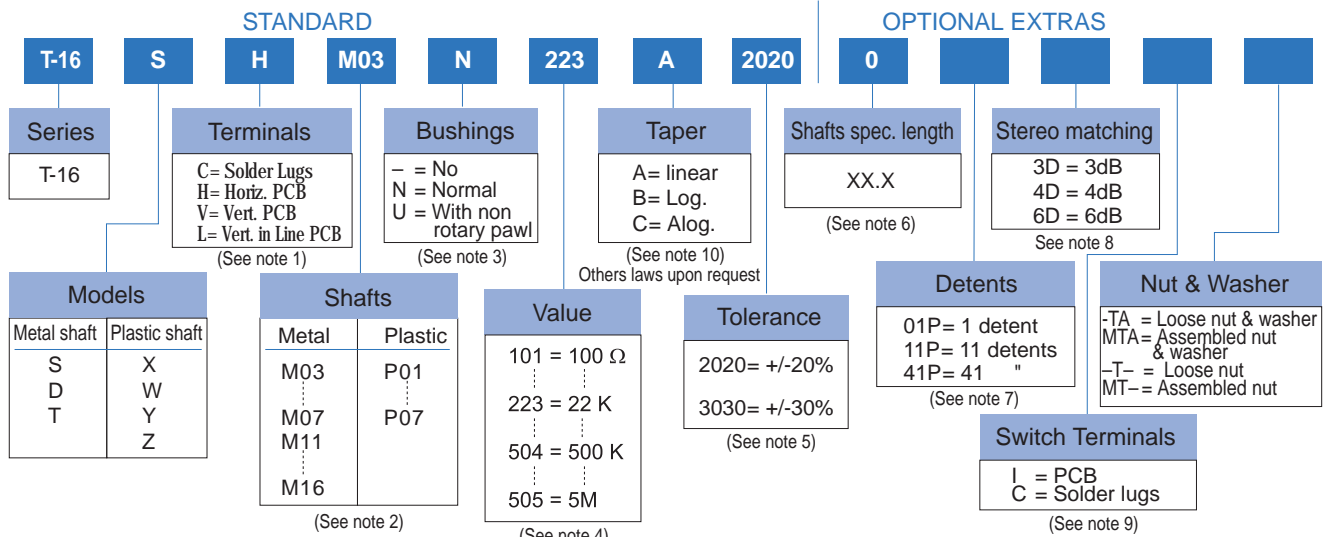
ELECTRICAL SPECIFICATIONS

- 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: $\leq 0.1\%$ R_n (2 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:

- Terminals: Models D y T are not available with terminals "V" or "L" .
- Shafts: The codes indicate diameter and length. Shaft M05 only for double potentiometer.
- Bushings: - = Only for potentiometer model X, W.
U = Standard antirotation lugs (at 90° CW).
- Value:
 - Code: $\frac{10}{1} \frac{1}{100} \Omega$ → Number of zeros, 2 first digits of the value.
 - In models "D" and "T" with different values, ask by drawing.
- Tolerance (non standard), upon request. Example code: $\frac{+15}{-20}$ → negative tolerance, positive tolerance
- Shafts length:
 - Only for special length and plain shafts (not knurled). Example: Shaft $\varnothing 6,25$ L= 24.5 M07 24.5 → Shafts length shafts
 - Flatted and slotted shafts, etc. will need drawings.
 - Shaft M05 (T-16D) with other lengths, ask by drawing. NOTE: Max. length 40 mm. (shafts 4, 6, 6.25)
- Detents: - Not available for models with plastic shaft X, W, Y, Z.
- Detents and switch are not compatible.
- Stereo matching: Only available in tandem models and upon request.
- Switch: Not available for models X, W, Y, Z, T, D.
- Switch option not available with antilog taper.

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

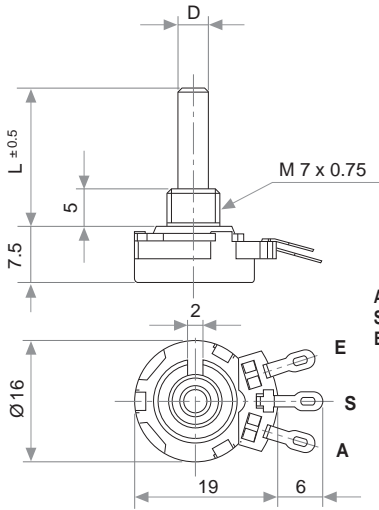
T-16 SH + DRAWING NUMBER (Max. 16 digits)

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

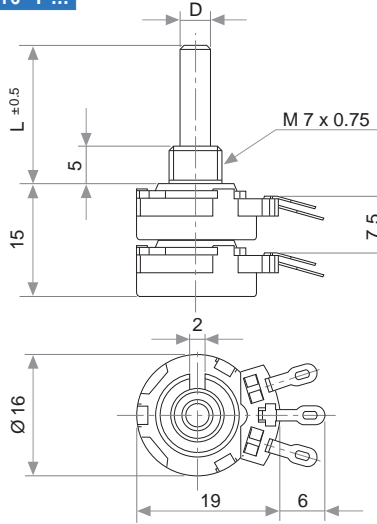
Shaft length 0 standard length
 Detents Not included
 Stereo matching Only for model "T" and upon request
 Switch No switch
 Nut & washer Without nut and washer

MODELS WITH METALIC SHAFTS

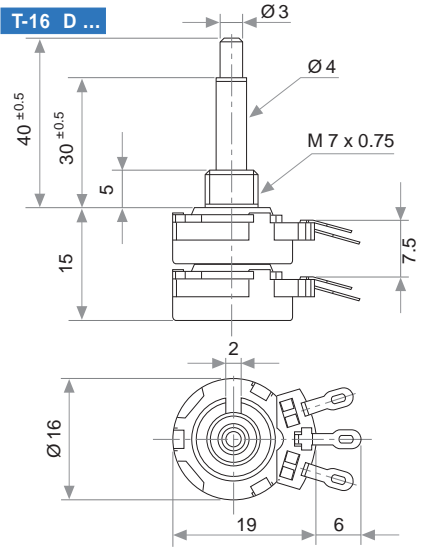
T-16 S ...



T-16 T ...



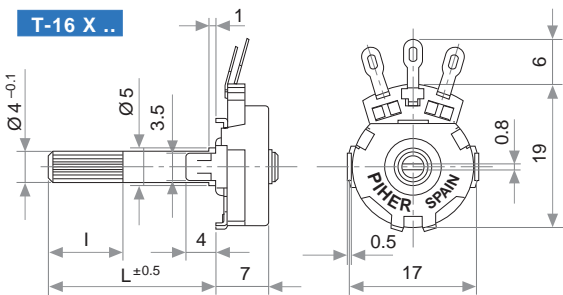
T-16 D ...



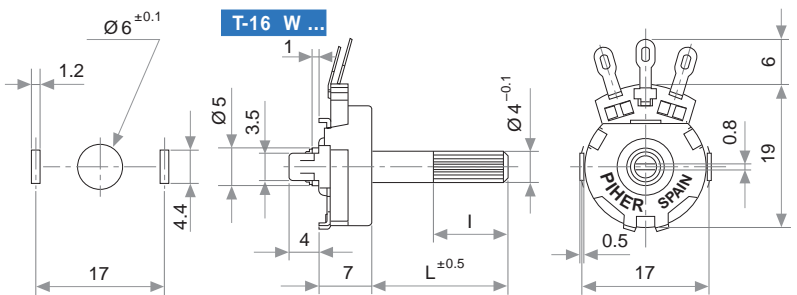
A = Initial
 S = Wiper
 E = Final

MODELS WITH PLASTIC SHAFTS

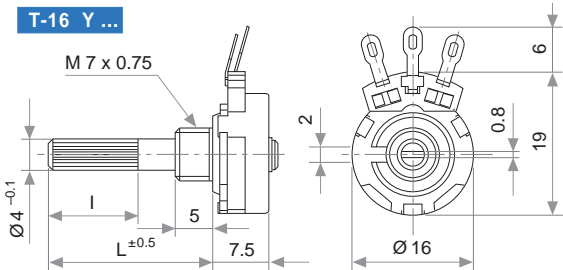
T-16 X ..



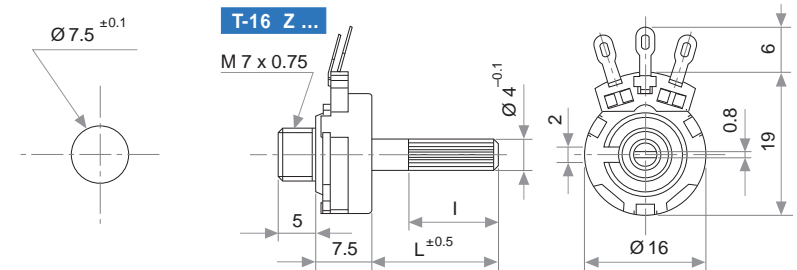
T-16 W ...



T-16 Y ...

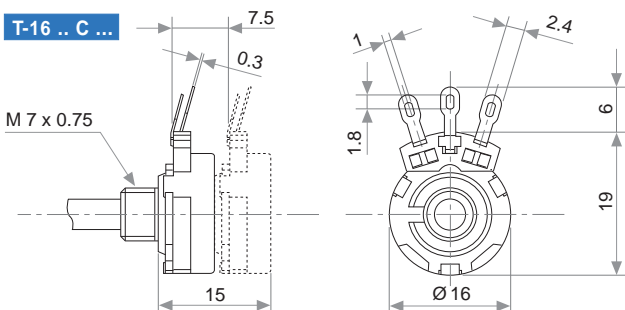


T-16 Z ...

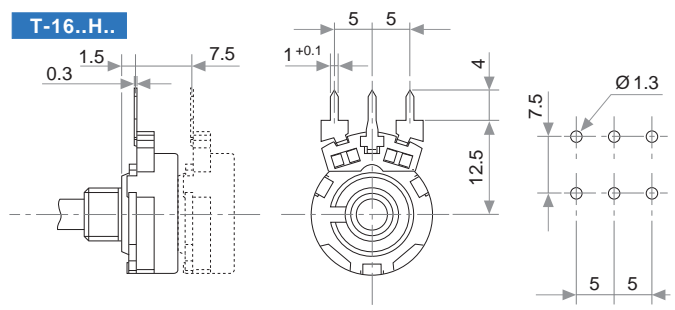


TERMINALS

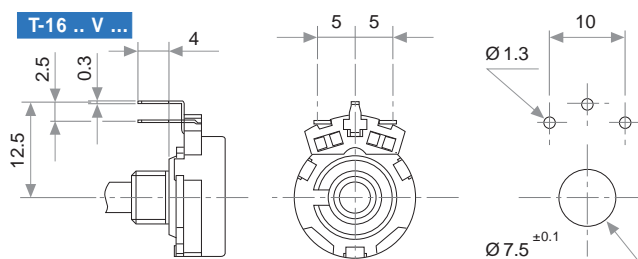
T-16 .. C ...



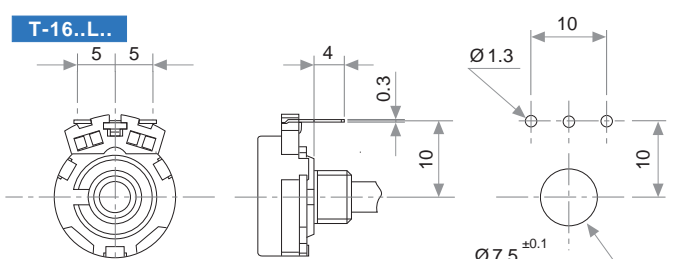
T-16..H..



T-16 .. V ...



T-16..L..



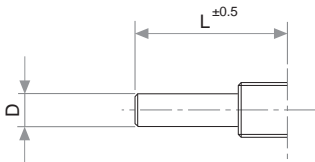
PLASTIC SHAFTS

| T-16 X / Y | | Without Switch | | CODE |
|------------|----|----------------|----|------|
| T-16 X | | T-16 Y | | |
| L | I | L | I | |
| 2 | — | — | — | P01 |
| 21 | 12 | 20.5 | 12 | P02 |
| 24.5 | 15 | 24 | 15 | P03 |
| 40 | 31 | 39.5 | 31 | P04 |

| T-16 W / Z | | Without Switch | | CODE |
|------------|--|----------------|--|------|
| T-16 W | | T-16 Z | | |
| L | | I | | |
| 9.5 | | 5 | | P05 |
| 23.5 | | 19 | | P06 |
| 40 | | 35 | | P07 |

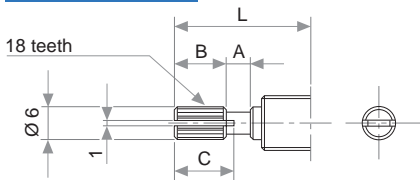
METALIC SHAFTS

PLAIN SHAFT



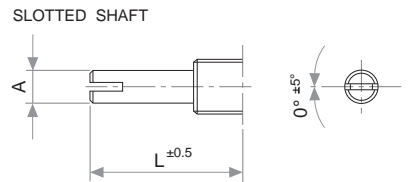
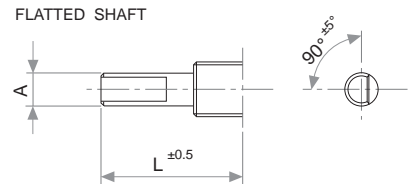
| D | L | CODE |
|------|-------|------|
| 3 | 30 | M03 |
| 4 | 40 | M04 |
| 6 | 40 | M06 |
| 6.25 | 40 | M07 |
| 3/4 | 40/30 | M05 |

KNURLED SHAFT



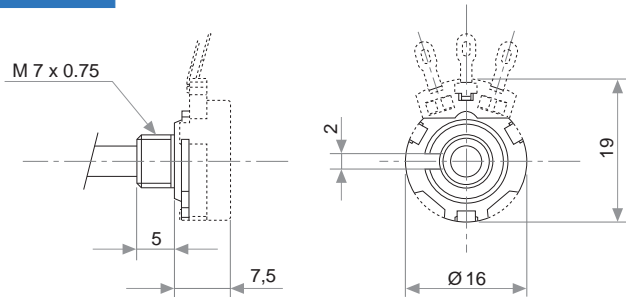
| L | A | B | C | CODE |
|----|---|----|----|------|
| 15 | 2 | 6 | 7 | M11 |
| 20 | 2 | 10 | 11 | M12 |
| 25 | 4 | 12 | 14 | M13 |
| 30 | 4 | 12 | 14 | M14 |
| 35 | 4 | 12 | 14 | M15 |
| 40 | 4 | 12 | 14 | M16 |

UNDER DRAWING

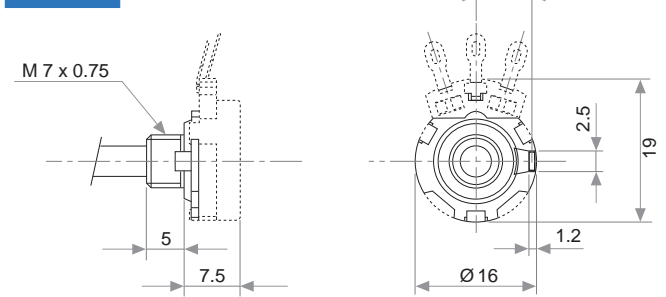


BUSHINGS

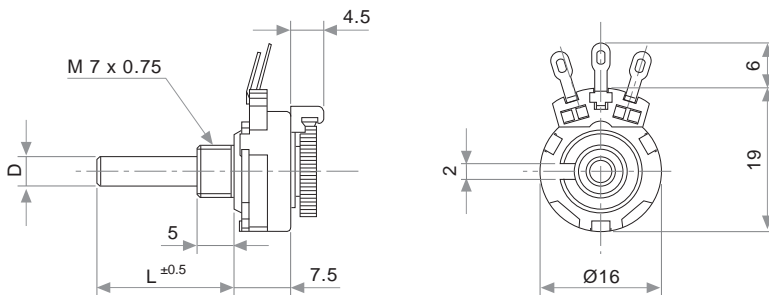
T-16 .. N ...



T-16 .. U ...



DETENTS



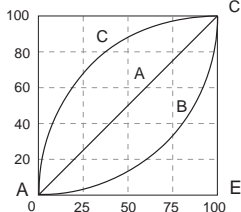
| CODE | DETENTS |
|-------|-------------------|
| 01 P. | 1 detent (at 50%) |
| 11 P. | 11 detents |
| 41 P. | 41 detents |

Only models with metallic shaft.

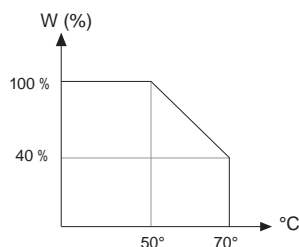
TAPERS

Standard

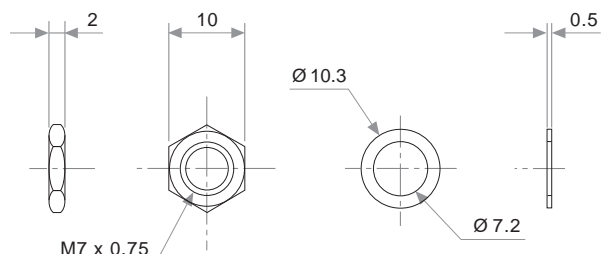
A: Lin.
B: Log.
C: Alog.



POWER RATING CURVE



NUT & WASHER

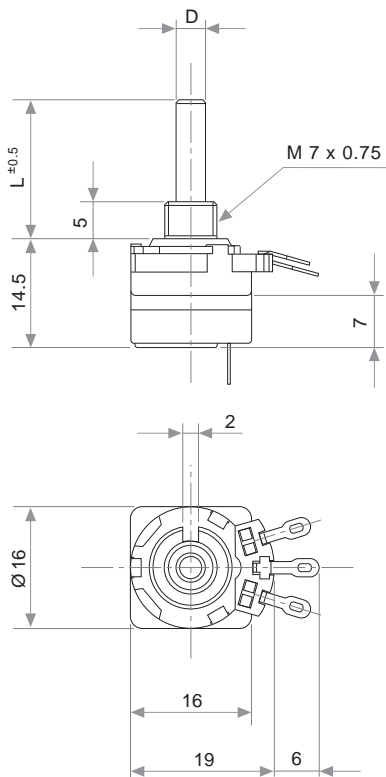


| TESTS | | TYPICAL VARIATIONS |
|-------------------------------|---|------------------------|
| ELECTRICAL LIFE | 1.000 h. @ 50°C; 0.20 W | ± 5 % |
| MECHANICAL LIFE : POT. SWITCH | 25.000 (10–15 CPM) 10.000 (1A, 50 VAC) | ± 3 % (Rn < 1 MΩ) |
| TEMPERATURE COEFFICIENT | –25°C; +70°C | ± 300 ppm (Rn < 100 K) |
| THERMAL CYCLING | 16 h. @ 85°C; 2h. @ –25°C | ± 2.5 % |
| DAMP HEAT | 500 h. @ 40°C @ 95% HR | ± 5 % |
| VIBRATION (each plane X,Y,Z) | 2 h. @ 20 g. 10 Hz ... 55 Hz. | ± 2 % |

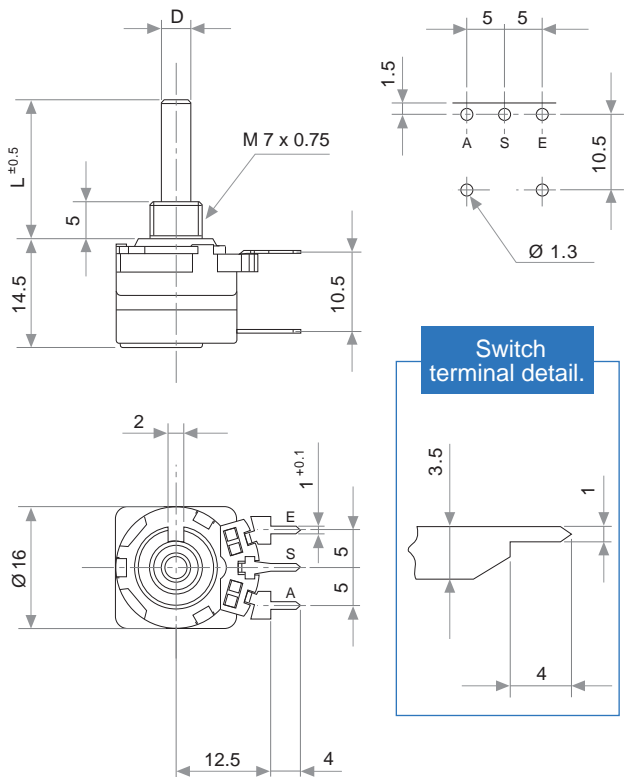
NOTE: Out of range values may not comply these results.

SWITCH

T-16..C..C



T-16..H..I



SWITCH SPECIFICATIONS

| | |
|------------------------------|-------------------------------|
| NOMINAL CURRENT | 1A, 250 VAC |
| CONTACT RESISTANCE (Initial) | 10 mΩ |
| OPERATING TORQUE | 1 to 3 Ncm (1.4 to 4.2 in-oz) |
| OPERATING ANGLE | 30° ± 5° |
| TEST VOLTAGE | 500 V |

PACKAGING

| MODEL | PACKAGING |
|---------------------|------------------|
| T 16 – L = 40 mm. | 400 UNITS IN BOX |
| T 16 – L = 20 mm. | 600 UNITS IN BOX |
| T 16 – c/i – Tandem | 200 UNITS IN BOX |