

## Type 17P Series

### Key Features

- Polymer thick film element
- Switch versions available
- Dual gang version available
- High reliability
- Small versatile size
- All plastic body
- Plastic spindle
- Flame retardant

### Applications

- Audio
- Industrial controls
- Lighting
- Appliances



Specify the type 17P for applications where high insulation resistance and voltage proof are key requirements. The materials used in the all plastic body and spindle construction are UL approved making it a suitable component for domestic appliances and control systems where safety is of prime importance. This popular low cost potentiometer is suitable for industrial and professional applications. A range of approved switches can be added to the rear of the potentiometer, to produce rotary or push-push action mains switches.

### Characteristics - Electrical

|                            |                                              |
|----------------------------|----------------------------------------------|
| Resistance Range:          | 1K to 1M (linear), 4K7 to 470K (non linear)  |
| Resistance Value:          | 1, 2.2 and 4.7 in each decade                |
| Resistance Tolerance:      | ± 20% (10% by selection)                     |
| Rated Dissipation at 20°C: | 0.25W (linear), 0.125W (non linear)          |
| Limiting Element Voltage:  | 350V DC or AC (rms)                          |
| Electrical Rotation:       | 267° without switch, 232° with switch        |
| Terminal Resistance:       | 5Ω, maximum                                  |
| Noise (ENR):               | 2% maximum (linear), 3% maximum (non linear) |
| Insulation Resistance:     | 4GΩ, minimum                                 |
| Voltage Proof:             | 1kV AC peak                                  |

### Characteristics - Environmental

|                                            |                                           |
|--------------------------------------------|-------------------------------------------|
| Limits of Resistance Change:               | 15% (after 1000hrs. endurance)            |
| Temperature Characteristics of Resistance: | 5% (20°C to 70°C)                         |
| Bump Severity:                             | 390m/s <sup>2</sup> , 4000 bumps          |
| Vibration Severity:                        | 10 - 500Hz, 0.75 mm or 98M/s <sup>2</sup> |
| Climatic Category:                         | 25/70/04                                  |
| Mechanical Endurance:                      | 20000 operations (minimum)                |

### Characteristics - Mechanical

|                      |                |
|----------------------|----------------|
| Operating Torque:    | 15mNm maximum  |
| Mechanical Rotation: | 300° nominal   |
| End Stop Torque:     | 350mNm maximum |

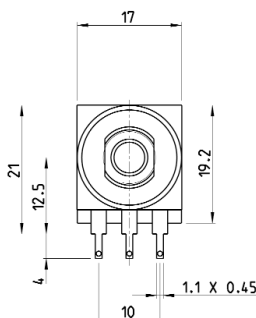
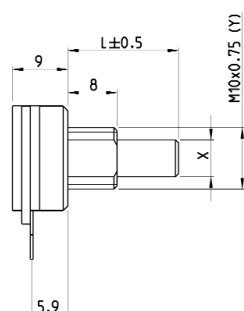
### Characteristics - Switch

|                             | B & D                           | A & E                        | P                            |
|-----------------------------|---------------------------------|------------------------------|------------------------------|
| Switch Type:                | 1A                              | 4A                           | 10A                          |
| Current/Voltage Rating:     | 1.0A - 24V DC<br>0.3A - 250V AC | 10A - 12V DC<br>4A - 250V AC | 10A - 250V AC                |
| On/Off Torque:              | 40mNm maximum                   | 40mNm maximum                | Life - 25,000 cycles minimum |
| Initial Contact Resistance: | 20mΩ                            | 20mΩ                         | Proof Voltage - 3kV minimum  |
| Contact Gap:                | 3mm                             | 3mm                          |                              |

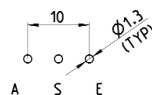
## Type 17P Series

### Dimensions

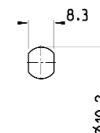
#### Single Potentiometer



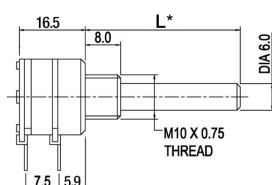
#### PCB Layout



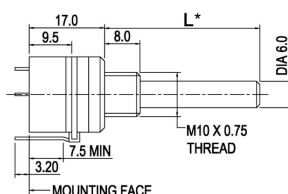
#### Bush Mounting Panel Cutout



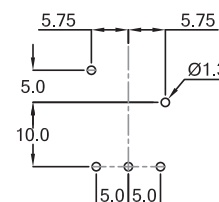
#### Dual Potentiometer



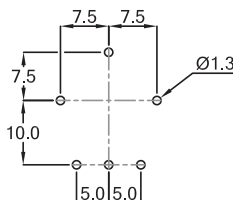
#### Single Switched Potentiometer



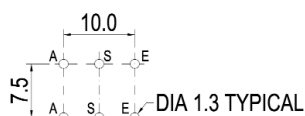
#### Rotary Switch PCB Layout



#### Push-Push Switch PCB Layout



#### Dual Potentiometer PCB Layout



L\* - Standard shaft length 35mm  
All dimensions given from component side

### How to Order

| 17PE                                                             | S                                                                                                                                                                                   | A                                                                                                                                     | 102                                                                                                                                                             | M                 | B | 25 | N | C |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---|----|---|---|
| Common Part                                                      | Resistor Law                                                                                                                                                                        | Tolerance                                                                                                                             | Shaft Length                                                                                                                                                    | Detent            |   |    |   |   |
| 17PC - P.C.<br>17PE - Eyelet                                     | A - Linear<br>B - Log<br>C - Inv. Log                                                                                                                                               | M - 20%<br>K - 10%                                                                                                                    | FMF in mm<br>25mm standard<br>minimum shaft length<br>with P style switch is<br>19mm                                                                            | C - Centre detent |   |    |   |   |
| Product Identification                                           | Resistance Value                                                                                                                                                                    | Shaft Style                                                                                                                           | Switch Details                                                                                                                                                  |                   |   |    |   |   |
| S - Standard single<br>X - Customer special<br>D - Standard dual | The first two digits are<br>significant figures of the<br>resistance value and the<br>third one denotes the<br>number of zeros following.<br>e.g. 4K7: 472<br>47K: 473<br>470K: 474 | A - Plain 6mm<br>B - Slotted 6mm<br>C - Flatted (5mm A/F)<br>D - Flatted (4mm A/F)<br>E - Plain 4mm<br>F - Flatted 6mm<br>(4.6mm A/F) | A - DPST 4A/250V AC<br>B - SPST 1A<br>D - DPST 1A<br>E - SPST 4A<br>N - No Switch<br>P - Push push SPDT 10A<br>P switch only available<br>on single gang styles |                   |   |    |   |   |

TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks.

Other logos, product and Company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this datasheet, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this datasheet are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)

[www.lifeelectronics.ru](http://www.lifeelectronics.ru)