

## Type 17P Series



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 an ideal 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.

### 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

### Characteristics - Electrical

<b>Resistance Range:</b>	1K to 1M (Linear), 4K7 to 470K (Non-Linear)
<b>Resistance Value:</b>	1, 2.2 and 4.7 in each decade
<b>Resistance Tolerance:</b>	± 20% (10% by selection)
<b>Rated Dissipation at 20°C:</b>	0.25W (Linear), 0.125W (Non Linear)
<b>Limiting Element Voltage:</b>	350 V dc or ac RMS
<b>Electrical Rotation:</b>	267° without switch, 232° with switch
<b>Terminal Resistance:</b>	5 ohms, maximum
<b>Noise (ENR):</b>	2% maximum (Linear), 3% maximum (Non Linear)
<b>Insulation Resistance:</b>	4G Ohms, minimum
<b>Voltage Proof:</b>	1KV ac Peak

### Characteristics - Mechanical

<b>Operating Torque:</b>	15 mNm maximum
<b>Mechanical Rotation:</b>	300° nominal
<b>End Stop Torque:</b>	350 mNm maximum

### Characteristics - Environmental

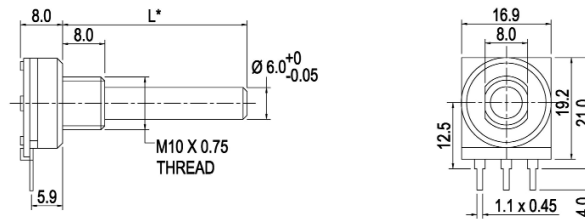
<b>Limits of Resistance Change:</b>	15% (after 1000Hrs. Endurance)
<b>Temperature Characteristics of Resistance:</b>	5% (20°C to 70°C)
<b>Bump Severity:</b>	390m/s <sup>2</sup> , 4000 Bumps
<b>Vibration Severity:</b>	10 - 500Hz, 0.75 mm or 98M/s <sup>2</sup>
<b>Climatic Category:</b>	25/70/04
<b>Mechanical Endurance:</b>	10000 Operations (minimum)

### Characteristics - Switch

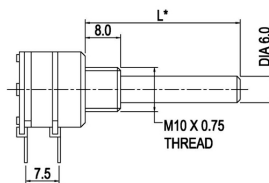
	<b>B &amp; D</b>	<b>A &amp; E</b>	<b>P</b>
<b>Switch Type:</b>	1 Amp	4 Amps	10 Amps
<b>Current/Voltage Rating:</b>	1.0A - 24 Volts DC 0.3A - 250 Volts AC	10A - 12 Volts DC 4A - 250 Volts AC	10A - 250 Volts AC
<b>On/Off Torque:</b>	40 mNm maximum	40mNm maximum	Life - 25,000 cycles minimum
<b>Initial Contact Resistance:</b>	20 milliohms	20 milliohms	Proof Voltage - 3KV minimum
<b>Contact Gap:</b>	3mm	3mm	

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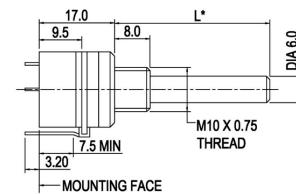
Dimensions  
Single Potentiometer



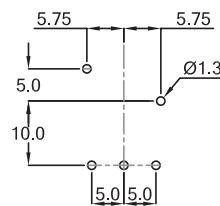
Dual Potentiometer



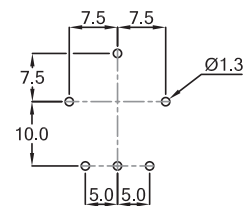
Single Switched Potentiometer



Rotary Switch PCB Layout



Push-Push Switch PCB Layout



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
<b>Common Part</b>		<b>Resistor Law</b>		<b>Tolerance</b>		<b>Shaft Length</b>	
17PC - P.C. 17PE - Eyelet		A - Linear B - Log C - Inv. Log		M - 20% K - 10%		FMF in mm 25mm Standard Minimum Shaft Length with P Style Switch is 19mm	
	<b>Product Identification</b>		<b>Resistance Value</b>		<b>Shaft Style</b>		<b>Switch Details</b>
	S - Standard Single X - Customer Special D - Standard Dual		The first two digits are significant figures of the resistance value and the third one denotes the number of zeros following. e.g. 4K7: 472 47K: 473 470K: 474		A - Plain 6mm B - Slotted 6mm C - Flatted (5mm A/F) D - Flatted (4mm A/F) E - Plain 4mm F - Flatted 6mm (4.6mm A/F)		A - DPST 4A/250V AC B - SPST 1A D - DPST 1A E - SPST 4A N - No Switch P - Push Push SPDT 10A P Switch only available on Single Gang Styles