

# Panel Potentiometers

160

20mm carbon element

[查询"23ESA102MMF50NF"供应商](#)

## Key features

- spst, dpst, changeover switches available
- diecast or plastic bush available
- dual gang and dual concentric styles
- custom design available
- audio and linear laws
- mounting bracket
- eyelet or pc terminations
- plastic shafts up to 50mm



## type 23 series

A very popular range of 20mm diameter potentiometers, the 23 Series can be tailored to suit more specific requirements. The potentiometers are available with a printed carbon resistance element, a choice of bush lengths in metal or plastic and insulated shafts up to 50mm in length.

Potentiometers

## Specification

### Electrical

Resistance Range:	1K to 1M (Linear) - 4K7 to 470K (Non-Linear)
Resistance Values:	1, 2.2 and 4.7 in each decade
Resistance Tolerance:	± 20% (±10% by selection)
Power Rating at 20°C:	0.4 Watts (Linear) - 0.2 Watts (Non-Linear)
Limiting Element Voltage:	500V DC or AC RMS
Electrical Rotation:	267° without switch, 232° with switch
Terminal Resistance:	5 ohms maximum
Noise (ENR):	2% maximum (Linear) - 3% maximum (Non-Linear)
Insulation Resistance:	4G ohms minimum
Voltage Proof:	1000V AC Peak

### Mechanical

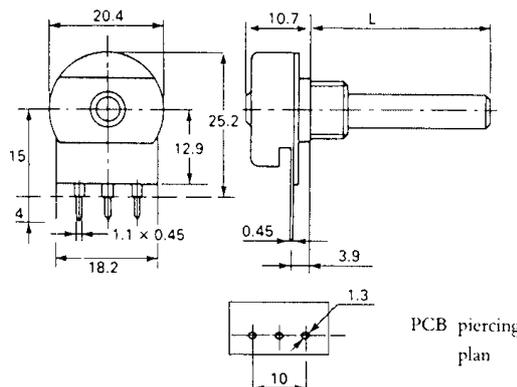
End Stop Torque:	800mNm
Staring Torque:	15mNm maximum
Mechanical Adjustment:	300° nominal

### Environmental

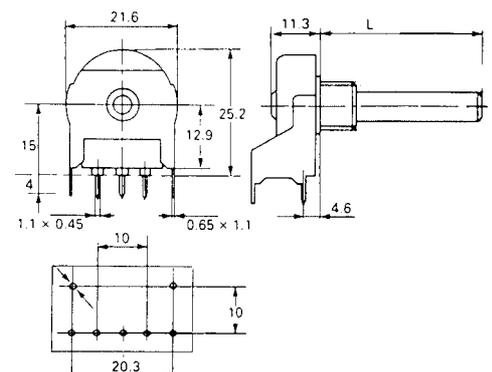
Climatic Category:	25/70/04
Rotational Life:	15,000 cycles
Load Life:	ΔR <15% after 8 days @ 32°C RH 82%

## Dimensions

### Type 23



### Type 24



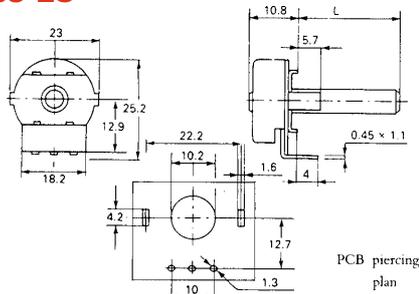
sales action desk (01793) 611666  
sales fax line (01793) 611777

20mm carbon element

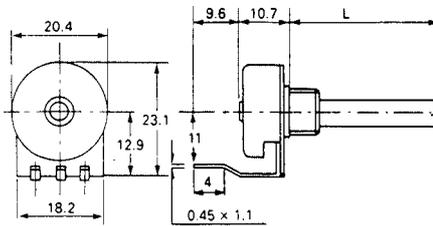
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Dimensions (Cont...)

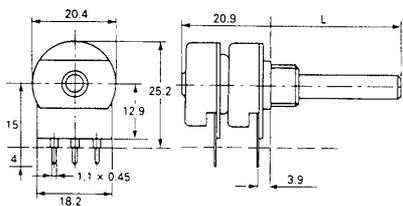
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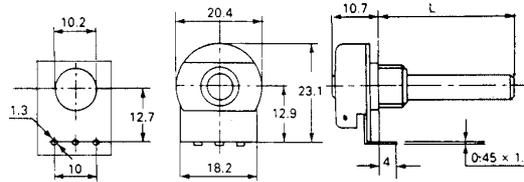
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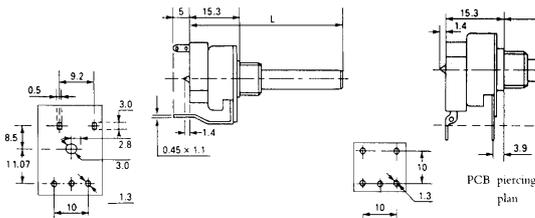
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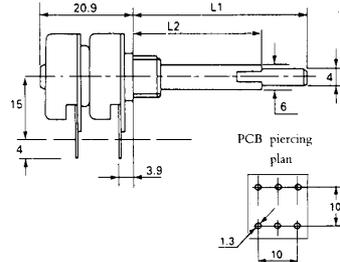
Type 28



Switched Types



Type 29



type 23 series

In addition, the 23 Series includes a range of switches which are BS415 approved for both mains and low current, which can be offered as a standard feature. We can also supply "changeover" switches for specific applications. The 23, is truly your flexible friend.

How To Order

23 E S A 103 M W A 22 B

Common Part	Customer Identity	Resistance Value	Bush Style	Shaft Style	Switch Details
23 - Std Spindle Style	S - Standard X - Customer Special (see Drawing) D - Special cut & mounted track	The first two digits are significant figures of resistance value and the third one denotes the number of zeros following.  Example 1K :102 10K :103 100K:104	E - Diecast 3/8" x 8mm 6mm hole F - Diecast 3/8" x 12mm - no lug 6.35mm hole G - Diecast 3/8" x 8mm - no lug 6mm hole K - Diecast 3/8" x 8mm - no lug 6.35mm hole L - Diecast M10 x 9mm no location lug 6mm hole M - Diecast 3/8" x 8mm 6.35mm hole P - Diecast M7 x 6mm - no lug 4mm hole R - Diecast 3/8" x 9mm - no lug 6.35mm hole S - Insulated M10 x 7mm 6mm hole T - Insulated M10 x 10mm 6mm hole U - No bush W - Diecast M10 x 9mm 6.35mm hole Y - Diecast M10 x 9mm no location lug 4mm hole	A - Plain 6mm B - Slotted 6mm C - Flatted 6mm 5mm A/F D - Flatted 6mm deep flat 4mm A/F E - Plain 4mm F - Full 6.35mm flat - special angle G - Flatted 4mm H - Plain 6.35mm J - Flatted 4.6mm L - Flatted 6mm 4.6mm A/F	A - DPST BS Approved 4A/250V AC B - SPST Eyelet termination on rear. C - DPDT Changeover. D - DPST 4 Eyelet terminations on rear. N - No switch
24 - Std with Mounting Bracket					
25 - No bush Mtg Bracket swept back.	Termination Style E - Std Eyelet 15mm MH P - Std PC R - Long PC S - PC Bent forward at 90° X - Extra Long PC for rear Mounting				
26 - PC terminals swept down to board for rear mounting.					
27 - Dual Gang style single shaft same value/tolerance on each section.					
28 - PC terminations swept forward parallel to shaft.					
29 - Dual Concentric style.					

Potentiometers

Please Request Full Data Sheet F0151

DIY Design

Where volumes are appropriate, the 23 Series can be customised to suit your individual requirements with features such as detent action, track centre tap etc.... Please call our technical sales team to discuss variations on these 20mm diameter devices.