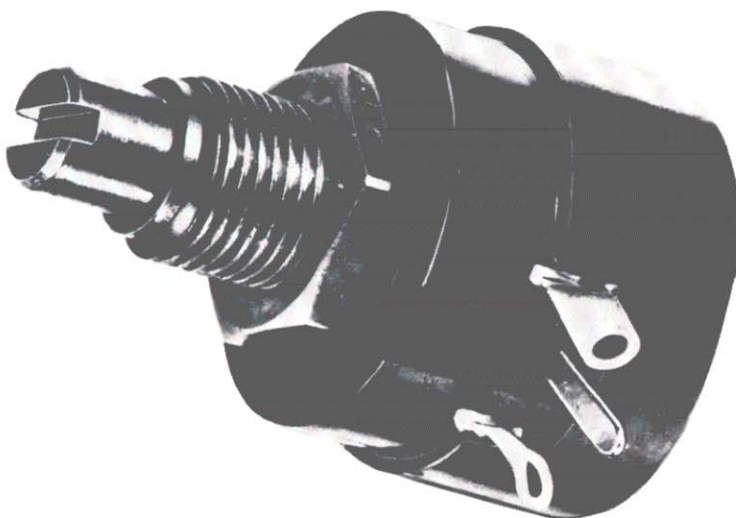


FEATURES

- Small, general purpose, wirewound panel control
- Available with linear or non-linear resistance law
- Two gang unit available with either a common spindle or independent (concentric) control
- Terminations are cemented to body for greater reliability
- Phenolic body moulding; beryllium copper contact; nickel plated, brass spindle and bush



ELECTRICAL CHARACTERISTICS

Standard Resistance Range

Linear law	10 Ω to 50 k Ω
Non-linear laws	100 Ω to 10 k Ω

(Resistance values outside this range also available)

Selection Tolerance

$\pm 10\%$ ($\pm 5\%$ also available)

Terminal Resistance

Maximum of 0.2 Ω or 0.01% of nominal resistance, whichever is the greater

Angle of Effective Rotation

$265^\circ \pm 15^\circ$

Power Rating

Linear law	1 W at 70°C
Non-linear laws	$\frac{1}{2}$ W at 70°C

(For ganged units section A must be derated to 75% and section B to 50% of the above ratings)

Rotational Noise

100 Ω E.N.R. maximum

Insulation Resistance

1000 M Ω minimum at 500 V d.c.

Limiting Element Voltage

250 V d.c. or a.c. r.m.s.

Isolation Voltage

1000 V a.c. peak

Standard Resistance Laws

Linear	Law A
Log	Law B
Reverse Log	Law C

(See *Standard Resistance Law graph*)

Linearity

1% typical, 2% maximum

Alignment (Ganged Units)

Sections are aligned to within $\pm 1\%$ at reference point of 50% effective rotation

MECHANICAL CHARACTERISTICS

Total Mechanical Rotation

$290^\circ \pm 10^\circ$

(Version with 360° mechanical rotation also available; wiper goes o.c. for approximately 45° of rotation between end terminations)

Starting Torque

7 to 35 mNm

End Stop Torque

800 mNm

Rotational Life

20,000 cycles; $\Delta R_{ac} \leq 2\%$

ENVIRONMENTAL CHARACTERISTICS

Environmental Category

25/70/-

Vibration

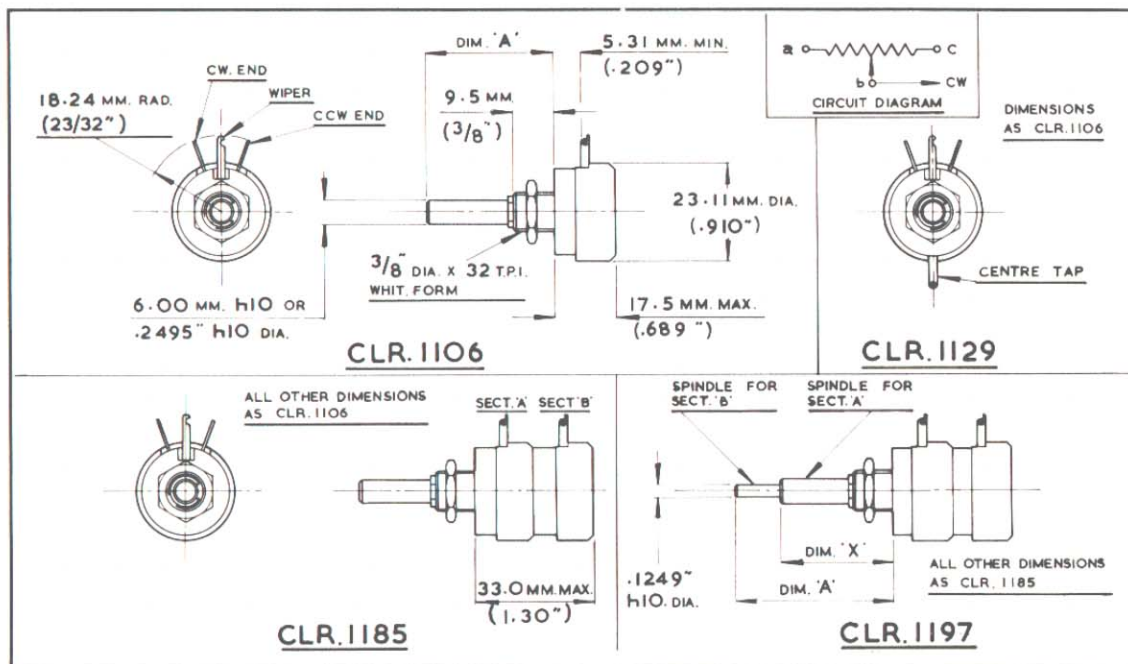
10 to 500 Hz; 10 g; $\Delta R_{ac} \leq 1\%$

Bump

4000 bumps; 390 m/s, 40 g; $\Delta R_{ac} \leq 1\%$

Load Life

1000 h at rated dissipation $\Delta R_{ac} \leq 2\%$



STANDARD RESISTANCE VALUES

Ohmic Value	Resolution	Ohmic Value	Resolution
10 Ω	1.25%	1 k Ω	0.38%
20 Ω	1.00%	2 k Ω	0.28%
25 Ω	0.91%	2.5 k Ω	0.26%
50 Ω	0.77%	5 k Ω	0.22%
100 Ω	0.62%	10 k Ω	0.19%
250 Ω	0.49%	25 k Ω	0.14%
500 Ω	0.38%	50 k Ω	0.13%

(Resolution figures relate only to linear resistance law)
(Other resistance values also available)

STANDARD SPINDLE LENGTHS (Dimension 'A')

9S	$\frac{1}{8}$ in. long, $\frac{1}{8}$ in. dia., slotted
11S	$\frac{3}{16}$ in. long, $\frac{1}{8}$ in. dia., slotted
15S	1 in. long, $\frac{1}{8}$ in. dia., slotted
22	$1\frac{1}{2}$ in. long, $\frac{1}{8}$ in. dia., plain
M16S	16 mm long, 6 mm dia., slotted
M25S	25 mm long, 6 mm dia., slotted
M50	50 mm long, 6 mm dia., plain
2409*	Inner spindle: $1\frac{1}{2}$ in. long (dim. A), $\frac{1}{8}$ in. dia. Outer spindle: $\frac{11}{16}$ in. long (dim. X), $\frac{1}{8}$ in. dia.
2420*	Inner spindle: $1\frac{1}{2}$ in. long (dim. A), $\frac{1}{8}$ in. dia. Outer spindle: 1 in. long (dim. X), $\frac{1}{8}$ in. dia.

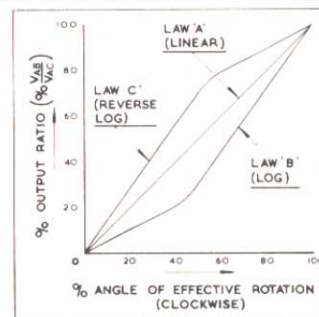
* Used only on type CLR 1197

(Other spindle lengths also available)

STANDARD TYPES AVAILABLE

CLR 1106	Basic panel mount potentiometer
CLT 1116	As CLR 1106, but 360° mechanical rotation
CLR 1129	As CLR 1106, plus centre tap
CLR 1185	Two gang, panel mount potentiometer
CLR 1197	Two gang potentiometer with concentric spindles for independent control of each section

STANDARD RESISTANCE LAWS



APPROVALS

Post Office approval has been granted for the following types of potentiometer within the CLR 1100 series:

CLR 1132 approved to type 26 in the resistance range 5 to 10 k Ω

CLR 11/138 approved to type 32A, 32B and 32C in the resistance range 10 Ω to 22 k Ω

MARKING

The marking on the potentiometer of resistance value and tolerance is in accordance with BS 1852, clauses 3 and 4

ORDERING INFORMATION

Specify type number, spindle code, ohmic value, tolerance and resistance law (for both sections in the case of ganged units)

Example:

CLR 1106/9S, 10k, 10%, linear law A

Model CLR 1106, basic panel mount potentiometer with $\frac{1}{8}$ in. long, $\frac{1}{8}$ in. dia. slotted spindle, 10 k Ω \pm 10%, linear law A

CLR 1185/22, Section A: 10k, 10%, linear law A;
Section B: 2k, 10%, log law B

Model CLR 1185, two gang panel mount potentiometer with $1\frac{1}{2}$ in. long, $\frac{1}{8}$ in. dia. plain spindle; Section A, 10 k Ω \pm 10%, linear law A; Section B, 2 k Ω \pm 10%, log law B