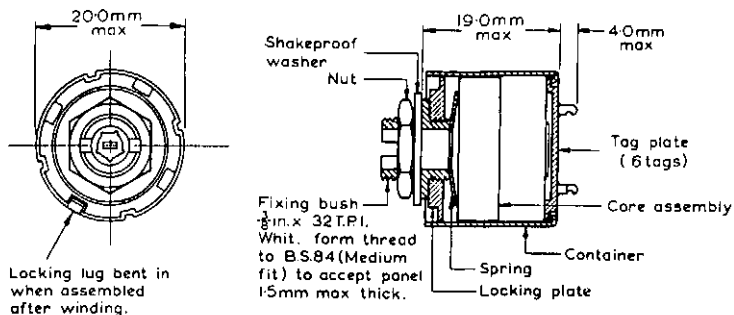


VINKOR ADJUSTABLE POT CORE

LA2504

18mm adjustable pot core specially designed for high quality inductors operating at frequencies up to approximately 100kc/s.

6699



ELECTRICAL AND MAGNETIC PROPERTIES OF CORE ASSEMBLY

with adjuster at nominal mid-range position.

| | | |
|---|-------------------------------------|-----------------------|
| Effective permeability | μ_e | *100 |
| Turns for 1mH | α | 66.4 |
| Initial permeability of material | μ_i | |
| Minimum | | 1000 |
| Typical | | 1350 |
| Residual plus eddy current dissipation factor measured at: | $\tan \delta_{r+u}$ | |
| B max. < 0.5 gauss, f = 30kc/s | | |
| Typical | | 0.36×10^{-3} |
| Maximum | | 0.5×10^{-3} |
| B max. < 0.5 gauss, f = 100kc/s | | |
| Typical | | 0.7×10^{-3} |
| Maximum | | 0.9×10^{-3} |
| Hysteresis factor measured at 4kc/s $F_h = \frac{R}{L} \cdot \frac{1}{1.f\sqrt{L}}$ | | |
| Typical | | 13.3 |
| Maximum | | 17.7 |
| Temperature coefficient over the range 20 to 50°C | $\frac{\Delta L}{L \cdot \Delta T}$ | 0 to +200 p.p.m./°C |

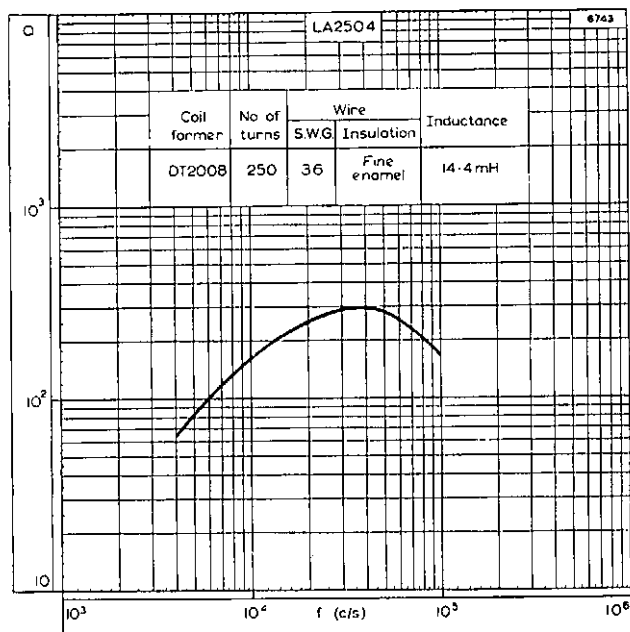
*Without the adjuster, the effective permeability of the core is $90.0 \pm 3\%$.

GENERAL NOTES

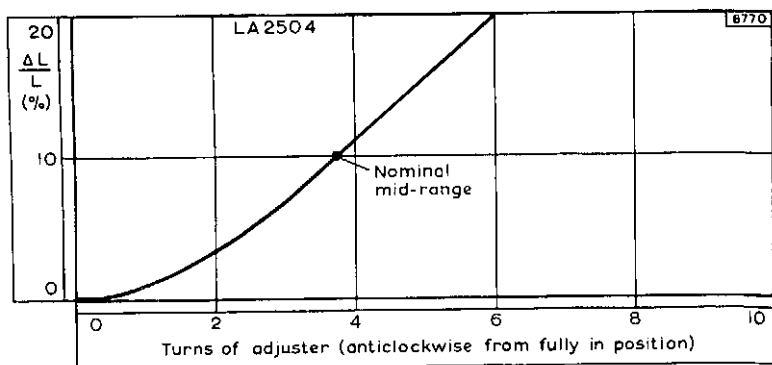
Coil formers are not supplied with the Vinkor but should be ordered separately. For details see page 3.

For correct assembly and adjustment of piece parts use aligning plug type DT2032. See separate data sheet.

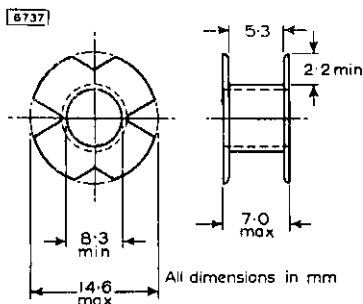
Non-magnetic screwdriver type DT2047 should be used for precise adjustment of inductance.



TYPICAL Q CURVE



ADJUSTMENT CURVE



Single section coil former

DT2008—nylon, maximum working temperature = 130°C.

DT2081—polystyrene, maximum working temperature = 80°C.

The nylon is a low water absorbent grade.

Nominal winding area = 13.6mm².

**WINDING DATA FOR FULLY WOUND FORMER
ENAMELLED COPPER WIRE TO B.S.1844 (FINE COVERING)**

| S.W.G. | Cu. dia. (in.) | Turns | Resistance (Ω) |
|--------|-------------------|-------|-------------------|
| 20 | 0.036 | 10 | 0.009 |
| 21 | 0.032 | 12 | 0.014 |
| 22 | 0.028 | 21 | 0.033 |
| 23 | 0.024 | 24 | 0.050 |
| 24 | 0.022 | 27 | 0.066 |
| 25 | 0.020 | 38 | 0.115 |
| 26 | 0.018 | 44 | 0.165 |
| 27 | 0.0164 | 60 | 0.28 |
| 28 | 0.0148 | 78 | 0.45 |
| 29 | 0.0136 | 87 | 0.58 |
| 30 | 0.0124 | 98 | 0.80 |
| 31 | 0.0116 | 113 | 1.05 |
| 32 | 0.0108 | 128 | 1.35 |
| 33 | 0.0100 | 149 | 1.85 |
| 34 | 0.0092 | 177 | 2.6 |
| 35 | 0.0084 | 208 | 3.7 |
| 36 | 0.0076 | 252 | 5.5 |
| 37 | 0.0068 | 305 | 8.3 |
| 38 | 0.0060 | 405 | 14.5 |
| 39 | 0.0052 | 520 | 24 |
| 40 | 0.0048 | 610 | 33 |
| 41 | 0.0044 | 710 | 46 |
| 42 | 0.0040 | 860 | 67 |
| 43 | 0.0036 | 1090 | 105 |
| 44 | 0.0032 | 1340 | 165 |
| 45 | 0.0028 | 1740 | 280 |
| 46 | 0.0024 | 2300 | 500 |
| 47 | 0.0020 | 3350 | 1050 |

WINDING DATA FOR FULLY WOUND FORMER

SILK COVERED BUNCHED ENAMELLED COPPER CONDUCTORS
TO B.S.1258

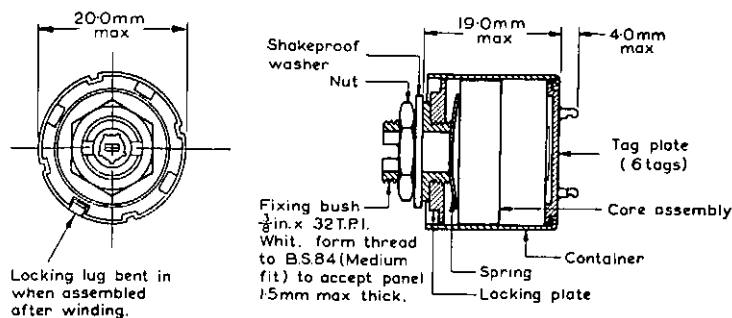
| Strands | S.W.G. | Strand dia. (in.) | Insulation | Turns | Resistance (Ω) |
|---------|--------|----------------------|------------|-------|----------------------------|
| 315 | 48 | 0.0016 | D.S.C. | 9 | 0.014 |
| 81 | 44 | 0.0032 | D.S.C. | 9 | 0.014 |
| 280 | 48 | 0.0016 | D.S.C. | 9 | 0.016 |
| 252 | 48 | 0.0016 | D.S.C. | 9 | 0.017 |
| 81 | 45 | 0.0028 | D.S.C. | 10 | 0.020 |
| 224 | 48 | 0.0016 | D.S.C. | 10 | 0.022 |
| 200 | 48 | 0.0016 | D.S.C. | 11 | 0.027 |
| 180 | 48 | 0.0016 | D.S.C. | 11 | 0.030 |
| 48 | 44 | 0.0032 | D.S.C. | 12 | 0.030 |
| 160 | 48 | 0.0016 | D.S.C. | 12 | 0.036 |
| 140 | 48 | 0.0016 | D.S.C. | 19 | 0.066 |
| 30 | 43 | 0.0036 | S.S.C. | 21 | 0.067 |
| 81 | 47 | 0.0020 | D.S.C. | 22 | 0.084 |
| 30 | 44 | 0.0032 | S.S.C. | 24 | 0.097 |
| 100 | 48 | 0.0016 | D.S.C. | 24 | 0.115 |
| 30 | 45 | 0.0028 | S.S.C. | 36 | 0.19 |
| 81 | 48 | 0.0016 | D.S.C. | 36 | 0.22 |
| 30 | 46 | 0.0024 | S.S.C. | 40 | 0.29 |
| 19 | 45 | 0.0028 | S.S.C. | 55 | 0.46 |
| 30 | 47 | 0.0020 | S.S.C. | 62 | 0.64 |
| 7 | 42 | 0.0040 | S.S.C. | 81 | 0.9 |
| 10 | 45 | 0.0028 | S.S.C. | 87 | 1.4 |
| 9 | 45 | 0.0028 | S.S.C. | 108 | 1.9 |
| 7 | 45 | 0.0028 | S.S.C. | 148 | 3.3 |
| 3 | 44 | 0.0032 | S.S.C. | 220 | 8.9 |
| 3 | 46 | 0.0024 | S.S.C. | 297 | 21 |

VINKOR ADJUSTABLE POT CORE

LA2505

18mm adjustable pot core specially designed for high quality inductors operating at frequencies up to approximately 200kc/s.

6699



ELECTRICAL AND MAGNETIC PROPERTIES OF CORE ASSEMBLY

with adjuster at nominal mid-range position.

| | | |
|--|--|-----------------------|
| Effective permeability | μ_e | *63 |
| Turns for 1mH | α | 83.6 |
| Initial permeability of material | μ_i | |
| Minimum | | 1000 |
| Typical | | 1350 |
| Residual plus eddy current dissipation factor measured at: | $\tan \delta_{r+e}$ | |
| B max. < 0.5 gauss, f = 30kc/s | | |
| Typical | | 0.23×10^{-3} |
| Maximum | | 0.32×10^{-3} |
| B max. < 0.5 gauss, f = 100kc/s | | |
| Typical | | 0.44×10^{-3} |
| Maximum | | 0.58×10^{-3} |
| Hysteresis factor measured at 4kc/s | $F_h = \frac{R}{L} \cdot \frac{1}{l.f.\sqrt{L}}$ | |
| Typical | | 6.6 |
| Maximum | | 8.84 |
| Temperature coefficient over the range 20 to 50°C | $\frac{\Delta L}{L \cdot \Delta T}$ | 0 to +126 p.p.m./°C |

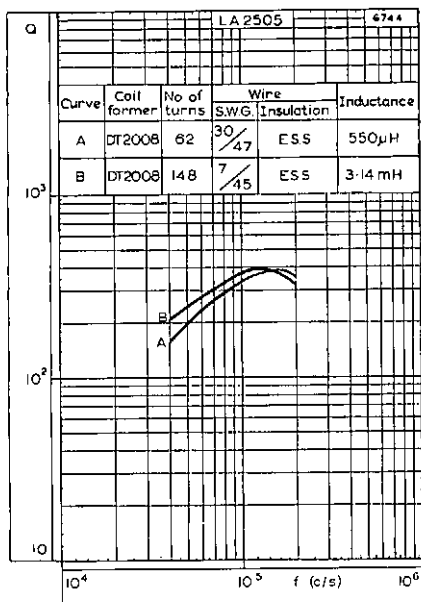
*Without the adjuster, the effective permeability of the core is $58.0 \pm 2\%$.

GENERAL NOTES

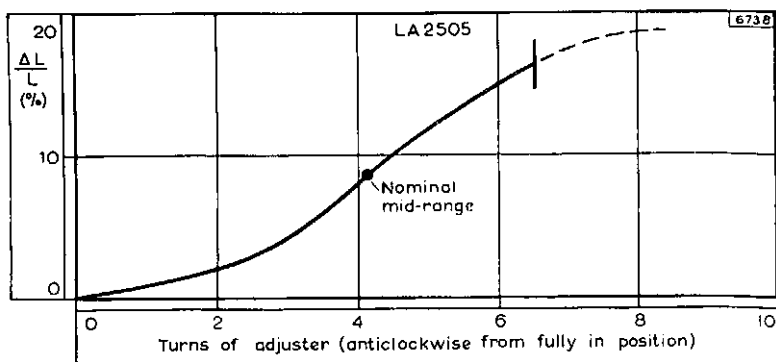
Coil formers are not supplied with the Vinkor but should be ordered separately. For details see page 3.

For correct assembly and adjustment of piece parts use aligning plug type DT2032. See separate data sheets.

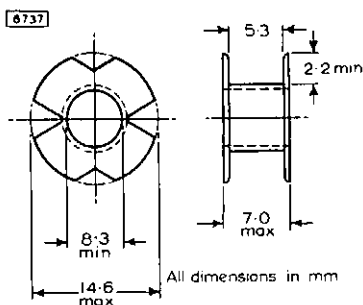
Non-magnetic screwdriver type DT2047 should be used for precise adjustment of inductance.



TYPICAL Q CURVES



ADJUSTMENT CURVE



Single section coil former

DT2008—nylon, maximum working temperature = 130°C.

DT2081—polystyrene, maximum working temperature = 80°C.

The nylon is a low water absorbent grade.

Nominal winding area = 13.6mm².

**WINDING DATA FOR FULLY WOUND FORMER
ENAMELLED COPPER WIRE TO B.S.1844 (FINE COVERING)**

| S.W.G. | Cu. dia. (in.) | Turns | Resistance (Ω) |
|--------|-------------------|-------|-------------------|
| 20 | 0.036 | 10 | 0.009 |
| 21 | 0.032 | 12 | 0.014 |
| 22 | 0.028 | 21 | 0.033 |
| 23 | 0.024 | 24 | 0.050 |
| 24 | 0.022 | 27 | 0.066 |
| 25 | 0.020 | 38 | 0.115 |
| 26 | 0.018 | 44 | 0.165 |
| 27 | 0.0164 | 60 | 0.28 |
| 28 | 0.0148 | 78 | 0.45 |
| 29 | 0.0136 | 87 | 0.58 |
| 30 | 0.0124 | 98 | 0.80 |
| 31 | 0.0116 | 113 | 1.05 |
| 32 | 0.0108 | 128 | 1.35 |
| 33 | 0.0100 | 149 | 1.85 |
| 34 | 0.0092 | 177 | 2.6 |
| 35 | 0.0084 | 208 | 3.7 |
| 36 | 0.0076 | 252 | 5.5 |
| 37 | 0.0068 | 305 | 8.3 |
| 38 | 0.0060 | 405 | 14.5 |
| 39 | 0.0052 | 520 | 24 |
| 40 | 0.0048 | 610 | 33 |
| 41 | 0.0044 | 710 | 46 |
| 42 | 0.0040 | 860 | 67 |
| 43 | 0.0036 | 1090 | 105 |
| 44 | 0.0032 | 1340 | 165 |
| 45 | 0.0028 | 1740 | 280 |
| 46 | 0.0024 | 2300 | 500 |
| 47 | 0.0020 | 3350 | 1050 |

WINDING DATA FOR FULLY WOUND FORMER

SILK COVERED BUNCHED ENAMELLED COPPER CONDUCTORS
TO B.S.1258

| Strands | S.W.G. | Strand dia. (in.) | Insulation | Turns | Resistance (Ω) |
|---------|--------|----------------------|------------|-------|----------------------------|
| 315 | 48 | 0.0016 | D.S.C. | 9 | 0.014 |
| 81 | 44 | 0.0032 | D.S.C. | 9 | 0.014 |
| 280 | 48 | 0.0016 | D.S.C. | 9 | 0.016 |
| 252 | 48 | 0.0016 | D.S.C. | 9 | 0.017 |
| 81 | 45 | 0.0028 | D.S.C. | 10 | 0.020 |
| 224 | 48 | 0.0016 | D.S.C. | 10 | 0.022 |
| 200 | 48 | 0.0016 | D.S.C. | 11 | 0.027 |
| 180 | 48 | 0.0016 | D.S.C. | 11 | 0.030 |
| 48 | 44 | 0.0032 | D.S.C. | 12 | 0.030 |
| 160 | 48 | 0.0016 | D.S.C. | 12 | 0.036 |
| 140 | 48 | 0.0016 | D.S.C. | 19 | 0.066 |
| 30 | 43 | 0.0036 | S.S.C. | 21 | 0.067 |
| 81 | 47 | 0.0020 | D.S.C. | 22 | 0.084 |
| 30 | 44 | 0.0032 | S.S.C. | 24 | 0.097 |
| 100 | 48 | 0.0016 | D.S.C. | 24 | 0.115 |
| 30 | 45 | 0.0028 | S.S.C. | 36 | 0.19 |
| 81 | 48 | 0.0016 | D.S.C. | 36 | 0.22 |
| 30 | 46 | 0.0024 | S.S.C. | 40 | 0.29 |
| 19 | 45 | 0.0028 | S.S.C. | 55 | 0.46 |
| 30 | 47 | 0.0020 | S.S.C. | 62 | 0.64 |
| 7 | 42 | 0.0040 | S.S.C. | 81 | 0.9 |
| 10 | 45 | 0.0028 | S.S.C. | 87 | 1.4 |
| 9 | 45 | 0.0028 | S.S.C. | 108 | 1.9 |
| 7 | 45 | 0.0028 | S.S.C. | 148 | 3.3 |
| 3 | 44 | 0.0032 | S.S.C. | 220 | 8.9 |
| 3 | 46 | 0.0024 | S.S.C. | 297 | 21 |

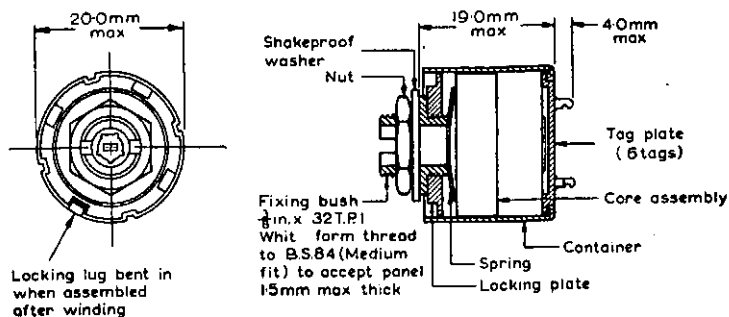
VINKOR ADJUSTABLE POT CORE

LA2509

18mm adjustable pot core specially designed for high quality inductors operating at frequencies up to approximately 700kc/s.

PRELIMINARY DATA

6699



Dimensions of hexagonal nut are 0.5in. max. across the flats, 0.1in. max. thickness.

ELECTRICAL AND MAGNETIC PROPERTIES OF CORE ASSEMBLY

with adjuster at nominal mid-range position.

| | | |
|---|---------------------|-----------------------|
| Effective permeability | μ_e | *63 |
| Turns for 1mH | α | 83.6 |
| Initial permeability of material | μ_i | |
| Minimum | | 600 |
| Residual plus eddy current dissipation factor | $\tan \delta_{r+c}$ | |
| Typical values measured at: | | |
| B max. < 0.5 gauss, f = 100kc/s | | 0.55×10^{-3} |
| B max. < 0.5 gauss, f = 1Mc/s | | 1.75×10^{-3} |

$$\text{Hysteresis factor measured at } 100\text{kc/s } F_h = \frac{R}{L} \cdot \frac{1}{I.f.\sqrt{L}}$$

| | | |
|---|-------------------------------------|------------------|
| Maximum | | 8.9 |
| Temperature coefficient over the range 20 to 50°C | $\frac{\Delta L}{L \cdot \Delta T}$ | 0 to +158 ppm/°C |

*Without the adjuster, the effective permeability of the core is $58.0 \pm 2\%$.

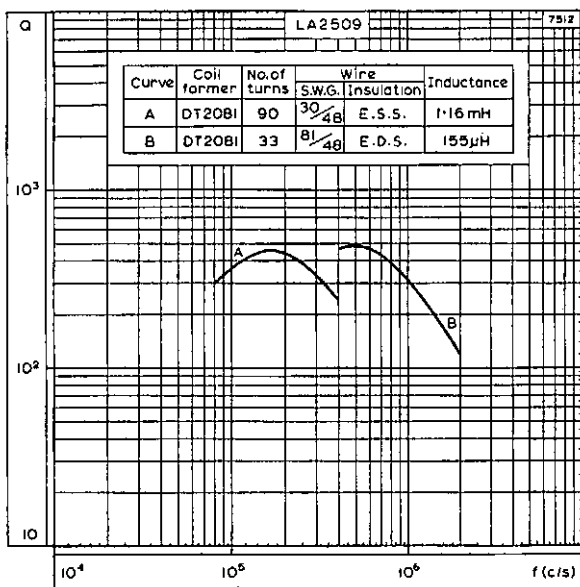
GENERAL NOTES

Coil formers are not supplied with the Vinkor but should be ordered separately. For details see pages 3 and 4.

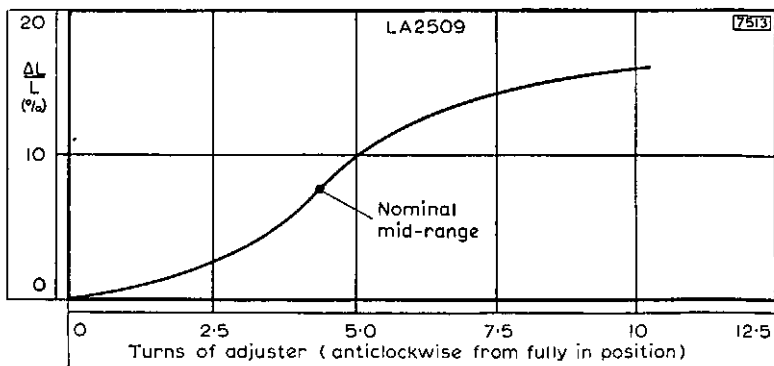
For correct assembly and adjustment of piece parts use aligning plug type DT2032. See separate data sheet.

Non-magnetic screwdriver type DT2047 should be used for precise adjustment of inductance.

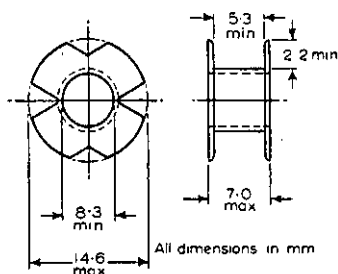




TYPICAL Q CURVES



ADJUSTMENT CURVE



7863

Single section coil former

DT2008—nylon, maximum working temperature=130°C

DT2081—polystyrene, maximum working temperature=80°C.

The nylon is of a low water absorbent grade.

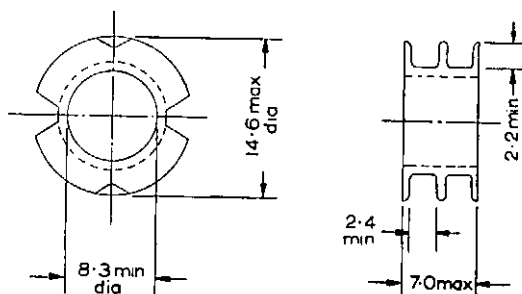
**WINDING DATA FOR FULLY WOUND FORMER
ENAMELLED COPPER WIRE TO B.S.1844 (FINE COVERING)**

| S.W.G. | Cu. dia. (in.) | Turns | Resistance (Ω) |
|--------|-------------------|-------|-------------------|
| 20 | 0.036 | 10 | 0.009 |
| 21 | 0.032 | 12 | 0.014 |
| 22 | 0.028 | 21 | 0.033 |
| 23 | 0.024 | 24 | 0.050 |
| 24 | 0.022 | 27 | 0.066 |
| 25 | 0.020 | 38 | 0.115 |
| 26 | 0.018 | 44 | 0.165 |
| 27 | 0.0164 | 60 | 0.28 |
| 28 | 0.0148 | 78 | 0.45 |
| 29 | 0.0136 | 87 | 0.58 |
| 30 | 0.0124 | 98 | 0.80 |
| 31 | 0.0116 | 113 | 1.05 |
| 32 | 0.0108 | 128 | 1.35 |
| 33 | 0.0100 | 149 | 1.85 |
| 34 | 0.0092 | 177 | 2.6 |
| 35 | 0.0084 | 208 | 3.7 |
| 36 | 0.0076 | 252 | 5.5 |
| 37 | 0.0068 | 305 | 8.3 |
| 38 | 0.0060 | 405 | 14.5 |
| 39 | 0.0052 | 520 | 24 |
| 40 | 0.0048 | 610 | 33 |
| 41 | 0.0044 | 710 | 46 |
| 42 | 0.0040 | 860 | 67 |
| 43 | 0.0036 | 1090 | 105 |
| 44 | 0.0032 | 1340 | 165 |
| 45 | 0.0028 | 1740 | 280 |
| 46 | 0.0024 | 2300 | 500 |
| 47 | 0.0020 | 3350 | 1050 |

WINDING DATA FOR FULLY WOUND FORMER SILK COVERED BUNCHED ENAMELLED COPPER CONDUCTORS TO B.S. 1258

| Strands | S.W.G. | Strand dia. (in.) | Insulation | Turns | Resistance (Ω) |
|---------|--------|----------------------|------------|-------|----------------------------|
| 315 | 48 | 0.0016 | D.S.C. | 9 | 0.014 |
| 81 | 44 | 0.0032 | D.S.C. | 9 | 0.014 |
| 280 | 48 | 0.0016 | D.S.C. | 9 | 0.016 |
| 252 | 48 | 0.0016 | D.S.C. | 9 | 0.017 |
| 81 | 45 | 0.0028 | D.S.C. | 10 | 0.02 |
| 224 | 48 | 0.0016 | D.S.C. | 10 | 0.022 |
| 200 | 48 | 0.0016 | D.S.C. | 11 | 0.027 |
| 180 | 48 | 0.0016 | D.S.C. | 11 | 0.03 |
| 48 | 44 | 0.0032 | D.S.C. | 12 | 0.03 |
| 160 | 48 | 0.0016 | D.S.C. | 12 | 0.036 |
| 140 | 48 | 0.0016 | D.S.C. | 19 | 0.066 |
| 30 | 43 | 0.0036 | S.S.C. | 21 | 0.067 |
| 81 | 47 | 0.002 | D.S.C. | 22 | 0.084 |
| 30 | 44 | 0.0032 | S.S.C. | 24 | 0.097 |
| 100 | 48 | 0.0016 | D.S.C. | 24 | 0.115 |
| 30 | 45 | 0.0028 | S.S.C. | 36 | 0.19 |
| 81 | 48 | 0.0016 | D.S.C. | 36 | 0.22 |
| 30 | 46 | 0.0024 | S.S.C. | 40 | 0.29 |
| 19 | 45 | 0.0028 | S.S.C. | 55 | 0.46 |
| 30 | 47 | 0.002 | S.S.C. | 62 | 0.64 |
| 7 | 42 | 0.004 | S.S.C. | 81 | 0.9 |
| 10 | 45 | 0.0028 | S.S.C. | 87 | 1.4 |
| 9 | 45 | 0.0028 | S.S.C. | 108 | 1.9 |
| 7 | 45 | 0.0028 | S.S.C. | 148 | 3.3 |
| 3 | 44 | 0.0032 | S.S.C. | 220 | 8.9 |
| 3 | 46 | 0.0024 | S.S.C. | 297 | 21 |

Multi-section coil former



7275

All dimensions in mm

2 sections DT2059—nylon, maximum working temperature=130°C.
DT2073—polystyrene, maximum working temperature=80°C.

The nylon is of a low water absorbent grade.

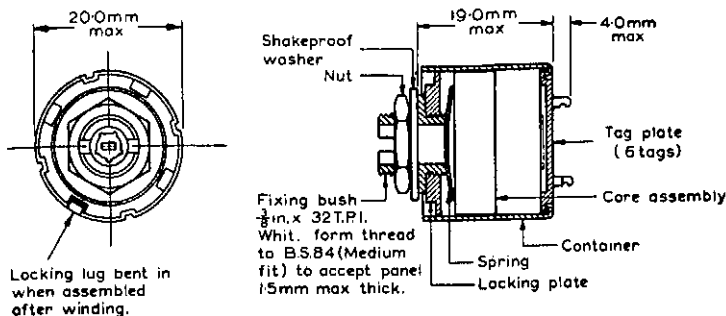
VINKOR ADJUSTABLE POT CORE

LA2510

18mm adjustable pot core specially designed for high quality inductors operating at frequencies up to approximately 2Mc/s.

PRELIMINARY DATA

6699



Dimensions of hexagonal nut are 0.5in. max. across the flats, 0.1in. max. thickness.

ELECTRICAL AND MAGNETIC PROPERTIES OF CORE ASSEMBLY with adjuster at nominal mid-range position.

| | | |
|---|---|-----------------------|
| Effective permeability | μ_e | *40 |
| Turns for 1mH | α | 105 |
| Initial permeability of material | μ_L | |
| Minimum | | 600 |
| Residual plus eddy current dissipation factor | $\tan \delta_{r+e}$ | |
| Typical values measured at: | | |
| B max. < 0.5 gauss, f = 100kc/s | | 0.35×10^{-3} |
| B max. < 0.5 gauss, f = 1Mc/s | | 1.1×10^{-3} |
| Hysteresis factor measured at 100kc/s | $F_h = \frac{R}{L} \cdot \frac{1}{I.f\sqrt{L}}$ | |
| Maximum | | 4.5 |
| Temperature coefficient over the range 20 to 50°C | $\frac{\Delta L}{L \Delta T}$ | 0 to +100 ppm/°C |

*Without the adjuster, the effective permeability of the core is $35.9 \pm 2\%$.

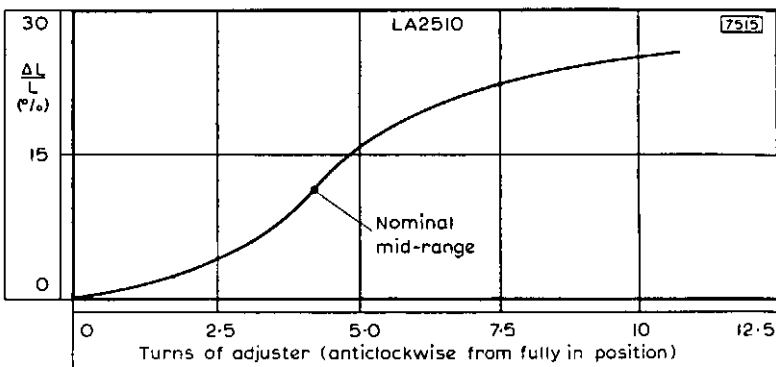
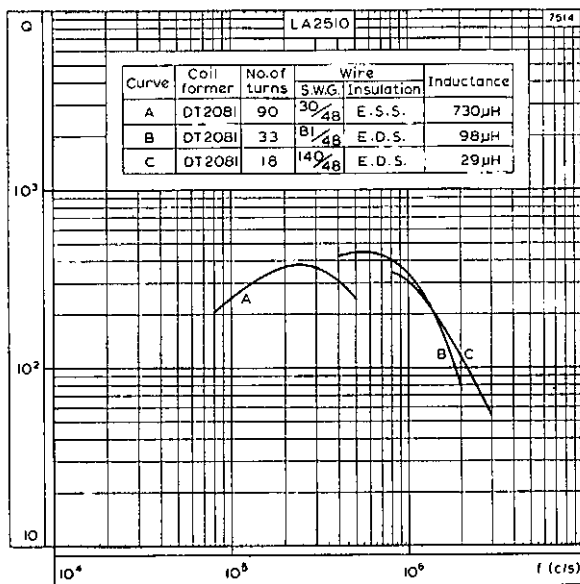
GENERAL NOTES

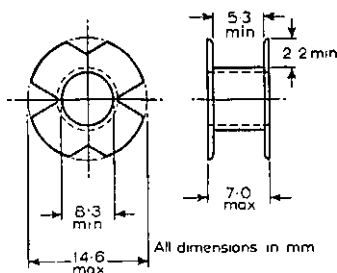
Coil formers are not supplied with the Vinkor but should be ordered separately. For details see pages 3 and 4.

For correct assembly and adjustment of piece parts use aligning plug type DT2032. See separate data sheet.

Non-magnetic screwdriver type DT2047 should be used for precise adjustment of inductance.







7863

Single section coil former

DT2008—nylon, maximum working temperature=130°C.

DT2081—polystyrene, maximum working temperature=80°C.

The nylon is of a low water absorbent grade.

**WINDING DATA FOR FULLY WOUND FORMER
ENAMELLED COPPER WIRE TO B.S.1844 (FINE COVERING)**

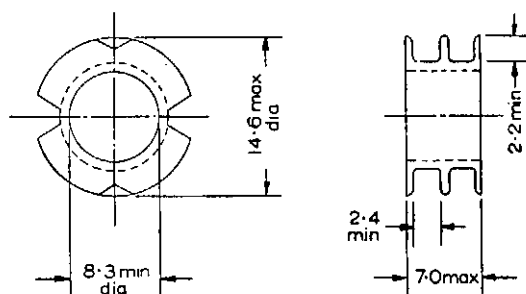
| S.W.G. | Cu. dia. (in.) | Turns | Resistance (Ω) |
|--------|-------------------|-------|-------------------|
| 20 | 0.036 | 10 | 0.009 |
| 21 | 0.032 | 12 | 0.014 |
| 22 | 0.028 | 21 | 0.033 |
| 23 | 0.024 | 24 | 0.050 |
| 24 | 0.022 | 27 | 0.066 |
| 25 | 0.020 | 38 | 0.115 |
| 26 | 0.018 | 44 | 0.165 |
| 27 | 0.0164 | 60 | 0.28 |
| 28 | 0.0148 | 78 | 0.45 |
| 29 | 0.0136 | 87 | 0.58 |
| 30 | 0.0124 | 98 | 0.80 |
| 31 | 0.0116 | 113 | 1.05 |
| 32 | 0.0108 | 128 | 1.35 |
| 33 | 0.0100 | 149 | 1.85 |
| 34 | 0.0092 | 177 | 2.6 |
| 35 | 0.0084 | 208 | 3.7 |
| 36 | 0.0076 | 252 | 5.5 |
| 37 | 0.0068 | 305 | 8.3 |
| 38 | 0.0060 | 405 | 14.5 |
| 39 | 0.0052 | 520 | 24 |
| 40 | 0.0048 | 610 | 33 |
| 41 | 0.0044 | 710 | 46 |
| 42 | 0.0040 | 860 | 67 |
| 43 | 0.0036 | 1090 | 105 |
| 44 | 0.0032 | 1340 | 165 |
| 45 | 0.0028 | 1740 | 280 |
| 46 | 0.0024 | 2300 | 500 |
| 47 | 0.0020 | 3350 | 1050 |



WINDING DATA FOR FULLY WOUND FORMER SILK COVERED BUNCHED ENAMELLED COPPER CONDUCTORS TO B.S. 1258

| Strands | S.W.G. | Strand dia. (in.) | Insulation | Turns | Resistance (Ω) |
|---------|--------|----------------------|------------|-------|----------------------------|
| 315 | 48 | 0.0016 | D.S.C. | 9 | 0.014 |
| 81 | 44 | 0.0032 | D.S.C. | 9 | 0.014 |
| 280 | 48 | 0.0016 | D.S.C. | 9 | 0.016 |
| 252 | 48 | 0.0016 | D.S.C. | 9 | 0.017 |
| 81 | 45 | 0.0028 | D.S.C. | 10 | 0.02 |
| 224 | 48 | 0.0016 | D.S.C. | 10 | 0.022 |
| 200 | 48 | 0.0016 | D.S.C. | 11 | 0.027 |
| 180 | 48 | 0.0016 | D.S.C. | 11 | 0.03 |
| 48 | 44 | 0.0032 | D.S.C. | 12 | 0.03 |
| 160 | 48 | 0.0016 | D.S.C. | 12 | 0.036 |
| 140 | 48 | 0.0016 | D.S.C. | 19 | 0.066 |
| 30 | 43 | 0.0036 | S.S.C. | 21 | 0.067 |
| 81 | 47 | 0.002 | D.S.C. | 22 | 0.084 |
| 30 | 44 | 0.0032 | S.S.C. | 24 | 0.097 |
| 100 | 48 | 0.0016 | D.S.C. | 24 | 0.115 |
| 30 | 45 | 0.0028 | S.S.C. | 36 | 0.19 |
| 81 | 48 | 0.0016 | D.S.C. | 36 | 0.22 |
| 30 | 46 | 0.0024 | S.S.C. | 40 | 0.29 |
| 19 | 45 | 0.0028 | S.S.C. | 55 | 0.46 |
| 30 | 47 | 0.002 | S.S.C. | 62 | 0.64 |
| 7 | 42 | 0.004 | S.S.C. | 81 | 0.9 |
| 10 | 45 | 0.0028 | S.S.C. | 87 | 1.4 |
| 9 | 45 | 0.0028 | S.S.C. | 108 | 1.9 |
| 7 | 45 | 0.0028 | S.S.C. | 148 | 3.3 |
| 3 | 44 | 0.0032 | S.S.C. | 220 | 8.9 |
| 3 | 46 | 0.0024 | S.S.C. | 297 | 21 |

Multi-section coil former



7275

All dimensions in mm

2 sections DT 2059—nylon, maximum working temperature=130°C.
DT 2073—polystyrene, maximum working temperature=80°C.
The nylon is of a low water absorbent grade.



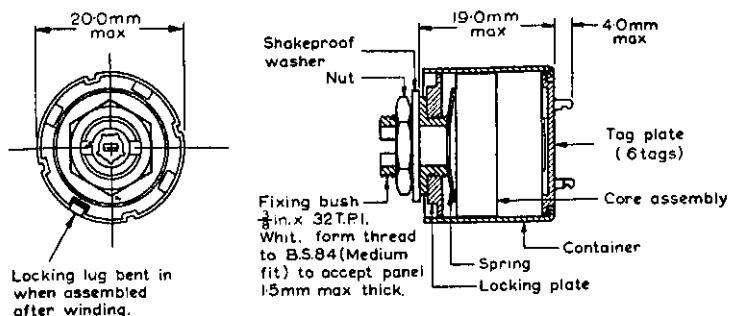
VINKOR ADJUSTABLE POT CORE

LA25II

18mm adjustable pot core specially designed for high quality inductors operating at frequencies up to approximately 3Mc/s.

PRELIMINARY DATA

6699



Dimensions of hexagonal nut are 0.5in. max. across the flats, 0.1in. max. thickness.

ELECTRICAL AND MAGNETIC PROPERTIES OF CORE ASSEMBLY

with adjuster at nominal mid-range position.

| | | |
|---|--|-----------------------|
| Effective permeability | μ_e | *25 |
| Turns for 1mH | α | 142 |
| Initial permeability of material | μ_i | |
| Minimum | | 600 |
| Residual plus eddy current dissipation factor | $\tan \delta_{r+e}$ | |
| Typical values measured at: | | |
| B max. < 0.5 gauss, $f=100\text{kc/s}$ | | 0.23×10^{-3} |
| B max. < 0.5 gauss, $f=1\text{Mc/s}$ | | 0.71×10^{-3} |
| Hysteresis factor measured at 100kc/s | $F_h = \frac{R}{L} \cdot \frac{1}{l.f.\sqrt{L}}$ | |
| Maximum | | 2.3 |
| Temperature coefficient over the range 20 to 50°C | $\frac{\Delta L}{L \cdot \Delta T}$ | 0 to +62.5 ppm/°C |

*Without the adjuster, the effective permeability of the core is $22.1 \pm 3\%$.

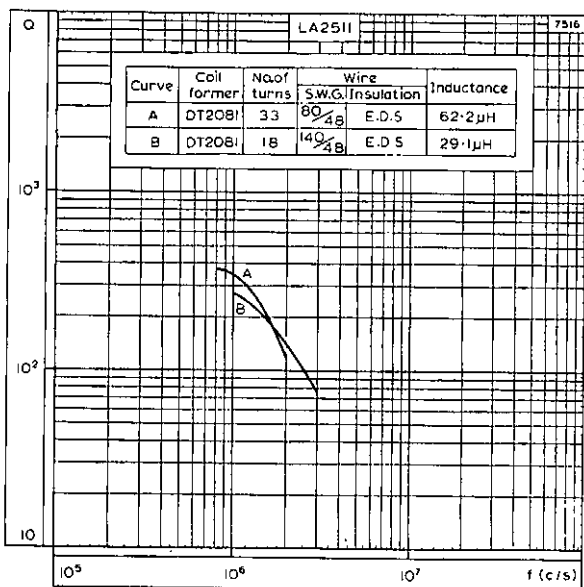
GENERAL NOTES

Coil formers are not supplied with the Vinkor but should be ordered separately. For details see pages 3 and 4.

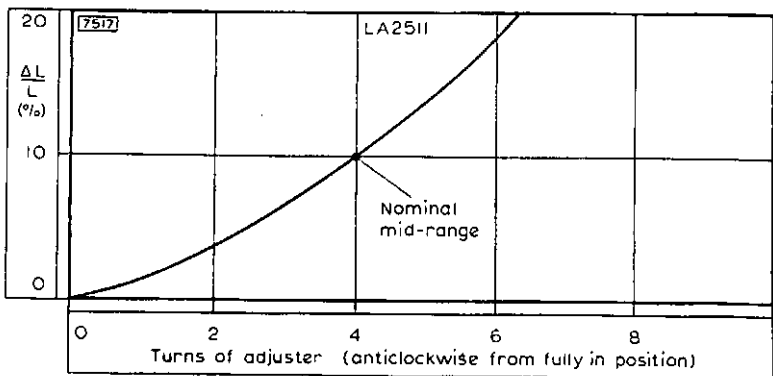
For correct assembly and adjustment of piece parts use aligning plug type DT2032. See separate data sheet.

Non-magnetic screwdriver type DT2047 should be used for precise adjustment of inductance.

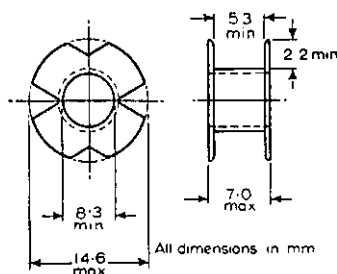




TYPICAL Q CURVES



ADJUSTMENT CURVE



7883

Single section coil former

DT2008—nylon, maximum working temperature=130°C.

DT2081—polystyrene, maximum working temperature=80°C.

The nylon is of a low water absorbent grade.

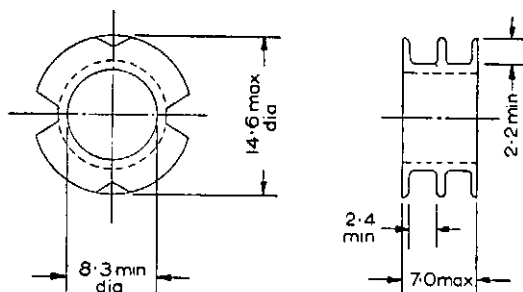
**WINDING DATA FOR FULLY WOUND FORMER
ENAMELLED COPPER WIRE TO B.S.1844 (FINE COVERING)**

| S.W.G. | Cu. dia. (in.) | Turns | Resistance (Ω) |
|--------|-------------------|-------|-------------------|
| 20 | 0.036 | 10 | 0.009 |
| 21 | 0.032 | 12 | 0.014 |
| 22 | 0.028 | 21 | 0.033 |
| 23 | 0.024 | 24 | 0.050 |
| 24 | 0.022 | 27 | 0.066 |
| 25 | 0.020 | 38 | 0.115 |
| 26 | 0.018 | 44 | 0.165 |
| 27 | 0.0164 | 60 | 0.28 |
| 28 | 0.0148 | 78 | 0.45 |
| 29 | 0.0136 | 87 | 0.58 |
| 30 | 0.0124 | 98 | 0.80 |
| 31 | 0.0116 | 113 | 1.05 |
| 32 | 0.0108 | 128 | 1.35 |
| 33 | 0.0100 | 149 | 1.85 |
| 34 | 0.0092 | 177 | 2.6 |
| 35 | 0.0084 | 208 | 3.7 |
| 36 | 0.0076 | 252 | 5.5 |
| 37 | 0.0068 | 305 | 8.3 |
| 38 | 0.0060 | 405 | 14.5 |
| 39 | 0.0052 | 520 | 24 |
| 40 | 0.0048 | 610 | 33 |
| 41 | 0.0044 | 710 | 46 |
| 42 | 0.0040 | 860 | 67 |
| 43 | 0.0036 | 1090 | 105 |
| 44 | 0.0032 | 1340 | 165 |
| 45 | 0.0028 | 1740 | 280 |
| 46 | 0.0024 | 2300 | 500 |
| 47 | 0.0020 | 3350 | 1050 |

WINDING DATA FOR FULLY WOUND FORMER SILK COVERED BUNCHED ENAMELLED COPPER CONDUCTORS TO B.S. 1258

| Strands | S.W.G. | Strand dia. (in.) | Insulation | Turns | Resistance (Ω) |
|---------|--------|----------------------|------------|-------|----------------------------|
| 315 | 48 | 0.0016 | D.S.C. | 9 | 0.014 |
| 81 | 44 | 0.0032 | D.S.C. | 9 | 0.014 |
| 280 | 48 | 0.0016 | D.S.C. | 9 | 0.016 |
| 252 | 48 | 0.0016 | D.S.C. | 9 | 0.017 |
| 81 | 45 | 0.0028 | D.S.C. | 10 | 0.02 |
| 224 | 48 | 0.0016 | D.S.C. | 10 | 0.022 |
| 200 | 48 | 0.0016 | D.S.C. | 11 | 0.027 |
| 180 | 48 | 0.0016 | D.S.C. | 11 | 0.03 |
| 48 | 44 | 0.0032 | D.S.C. | 12 | 0.03 |
| 160 | 48 | 0.0016 | D.S.C. | 12 | 0.036 |
| 140 | 48 | 0.0016 | D.S.C. | 19 | 0.066 |
| 30 | 43 | 0.0036 | S.S.C. | 21 | 0.067 |
| 81 | 47 | 0.002 | D.S.C. | 22 | 0.084 |
| 30 | 44 | 0.0032 | S.S.C. | 24 | 0.097 |
| 100 | 48 | 0.0016 | D.S.C. | 24 | 0.115 |
| 30 | 45 | 0.0028 | S.S.C. | 36 | 0.19 |
| 81 | 48 | 0.0016 | D.S.C. | 36 | 0.22 |
| 30 | 46 | 0.0024 | S.S.C. | 40 | 0.29 |
| 19 | 45 | 0.0028 | S.S.C. | 55 | 0.46 |
| 30 | 47 | 0.002 | S.S.C. | 62 | 0.64 |
| 7 | 42 | 0.004 | S.S.C. | 81 | 0.9 |
| 10 | 45 | 0.0028 | S.S.C. | 87 | 1.4 |
| 9 | 45 | 0.0028 | S.S.C. | 108 | 1.9 |
| 7 | 45 | 0.0028 | S.S.C. | 148 | 3.3 |
| 3 | 44 | 0.0032 | S.S.C. | 220 | 8.9 |
| 3 | 46 | 0.0024 | S.S.C. | 297 | 21 |

Multi-section coil former



7275

All dimensions in mm

2 sections DT 2059—nylon, maximum working temperature=130°C.
DT 2073—polystyrene, maximum working temperature=80°C.
The nylon is of a low water absorbent grade.