



CORNERS:
0.016 Approx.
Radius Bottom,
Chamfer Top.

Dimensions

| | Outside Diameter | Inside Diameter | Height |
|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Before Coating Nominal | 0.310 in 7.87 mm | 0.156 in 3.96 mm | 0.125 in 3.18 mm |
| After Coating (Parylene C) | 0.335 in Max. 8.51 mm Max. | 0.135 in Min. 3.43 mm Min. | 0.150 in Max. 3.81 mm Max. |

Physical Specifications

| Effective Cross Sectional Area of Magnetic Path, A_e (Reference) | Effective Magnetic Path Length, l_e (Reference) | Effective Core Volume, V_e (Reference) | Minimum Window Area (Reference) | Approximate Weight of Finished 125 μ Core | Approximate Mean Length of Turn for Full Winding (Half of I.D. Remaining) |
|--|---|---|---|---|---|
| 0.00953 in ² 0.0615 cm ² | 0.704 in 1.787 cm | 0.00671 in ³ 0.1099 cm ³ | 0.01431 in ² 0.09235 cm ² 18,225 cmil | MPP 0.925g HF 0.925g SMSS 0.725g | 0.49 in 1.25 cm |

Electrical Specifications

| Nominal Permeability | Inductance Factor, mH +/- 8% (+/- 12% for SUPER-MSS) for 1000 turns | Approximate Ratio of DC Resistance to Inductance for Full Winding (Half of I.D. Remaining), Ω /mH | Part Numbers | | | |
|----------------------|---|--|-----------------|----------------|-------------|--------------|
| | | | Molypermalloy | HI-FLUX | SUPER-MSS | |
| 14 μ | 6 | 8.4 | NEW MP-031014-8 | OLD A-340006-8 | HF-031014-8 | MS-031014-8 |
| 26 μ | 11 | 4.6 | MP-031026-8 | A-339011-8 | HF-031026-8 | MS-031026-8 |
| 60 μ | 25 | 2.0 | MP-031060-8 | A-138025-8 | HF-031060-8 | MS-031060-8 |
| 75 μ | 31 | 1.6 | — | — | — | MS-031075-8 |
| 90 μ | 37 | 1.4 | — | — | — | MS-031090-8 |
| 125 μ | 52 | 0.97 | MP-031125-8 | A-137052-8 | HF-031125-8 | MS-031125-8 |
| 147 μ | 62 | 0.81 | MP-031147-8 | A-225062-8 | HF-031147-8 | *MS-031147-8 |
| 160 μ | 66 | 0.76 | MP-031160-8 | A-338066-8 | HF-031160-8 | — |
| 173 μ | 73 | 0.68 | MP-031173-8 | A-223073-8 | — | — |
| 205 μ | 86 | 0.59 | MP-031205-8 | A-201086-8 | — | — |
| 250 μ | 104 | 0.48 | MP-031250-8 | A-364104-8 | — | — |
| 300 μ | 124 | 0.41 | MP-031300-8 | A-386124-8 | — | — |
| 350 μ | 145 | 0.35 | MP-031350-8 | A-407145-8 | — | — |

Heavy Film Magnet Wire Winding Data (Approximate)

| AWG | mm | Full Winding (Half of I.D. Remaining) | | Single Layer Winding with 1 inch Leads | | |
|-----|-------|---------------------------------------|---------------------|--|---------------------|-------------|
| | | Turns | R_{dc} , Ω | Turns | R_{dc} , Ω | l_w , in. |
| 21 | 0.710 | 12 | 0.00651 | 9 | 0.00780 | 7.3 |
| 22 | 0.630 | 14 | 0.01027 | 11 | 0.0108 | 8.0 |
| 23 | 0.560 | 18 | 0.01580 | 12 | 0.0148 | 8.8 |
| 24 | 0.500 | 22 | 0.0247 | 14 | 0.0206 | 9.6 |
| 25 | 0.450 | 28 | 0.0384 | 16 | 0.0285 | 11 |
| 26 | 0.400 | 35 | 0.0602 | 18 | 0.0397 | 12 |
| 27 | 0.355 | 43 | 0.0926 | 20 | 0.0545 | 13 |
| 28 | 0.315 | 54 | 0.1457 | 23 | 0.0762 | 14 |
| 29 | 0.280 | 66 | 0.221 | 26 | 0.104 | 15 |
| 30 | 0.250 | 83 | 0.351 | 29 | 0.146 | 17 |
| 31 | 0.224 | 103 | 0.547 | 33 | 0.201 | 19 |
| 32 | 0.200 | 126 | 0.824 | 36 | 0.272 | 20 |
| 33 | 0.180 | 158 | 1.302 | 41 | 0.382 | 22 |
| 34 | 0.160 | 198 | 2.06 | 46 | 0.543 | 25 |
| 35 | 0.140 | 248 | 3.25 | 52 | 0.760 | 28 |

| AWG | mm | Full Winding (Half of I.D. Remaining) | | Single Layer Winding | | |
|-----|-------|---------------------------------------|---------------------|----------------------|---------------------|-------------|
| | | Turns | R_{dc} , Ω | Turns | R_{dc} , Ω | l_w , in. |
| 36 | 0.125 | 309 | 5.06 | 58 | 1.05 | 30 |
| 37 | 0.112 | 381 | 7.68 | 64 | 1.43 | 34 |
| 38 | 0.100 | 482 | 12.25 | 72 | 2.01 | 37 |
| 39 | 0.090 | 630 | 20.8 | 82 | 2.96 | 42 |
| 40 | 0.080 | 770 | 32.3 | 93 | 4.22 | 47 |
| 41 | 0.070 | 961 | 49.3 | 103 | 5.73 | 52 |
| 42 | 0.063 | 1234 | 79.1 | 116 | 8.05 | 58 |
| 43 | 0.056 | 1525 | 125.9 | 129 | 11.4 | 64 |
| 44 | 0.050 | 1778 | 177.4 | 139 | 14.8 | 69 |

Remarks: * = New part no.

Please note this inductance factor tolerance is + or -12%