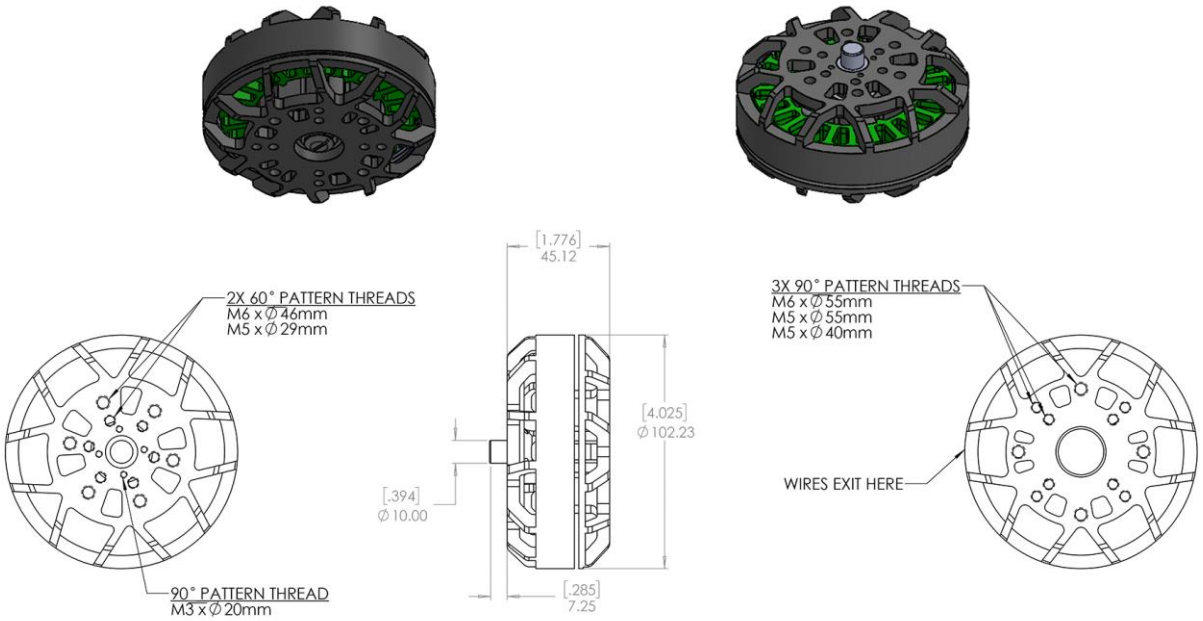


**Stator lengths available:**

| Model | Length (in) / (mm) | | Weight(g) | Continuous Watts | Base Price |
|---|---|---|---|---|---|
| 8814 | 1.8" | 44mm | g | 1,900 | 356.00 |
| 8819 | 2.0" | 51mm | 911g | 2,500 | 418.00 |
| 8830 | 0.0" | 0mm | g | 4,000 | 550.00 |
| 8842 | 0.0" | 0mm | g | 5,500 | 696.00 |
| 8860 | 0.0" | 0mm | g | 8,000 | |

Optimized multicopter / propeller drive.

**Motor type:** outrunner
**Poles:** 22p
**Slots:** 24s
**Finned:**
**Sealed:**
**Sensored:** No
**Gearbox(es):** call
**Shaft size(s):** integral bolt pa
**Max RPM:** 10,000

**8814**

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 1.8 | ozs. | 1,900 | 3,800 |
| mm: | 102 | 44 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | **Saturation Amps** |
|---|---|---|---|---|---|---|---|

## 8814

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 1.8 | ozs. | 1,900 | 3,800 |
| mm: | 102 | 44 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8814/100/14** | 14 | 0.102 | 3.506 | 683.457 | 96.786 | 714 | 10 |
| **8814/95/15** | 15 | 0.107 | 3.166 | 637.894 | 90.333 | 667 | 10 |
| **8814/85/16** | 16 | 0.119 | 2.538 | 598.025 | 84.688 | 625 | 11 |
| **8814/90/16** | 16 | 0.113 | 2.844 | 598.025 | 84.688 | 625 | 11 |
| **8814/80/18** | 18 | 0.127 | 2.250 | 531.578 | 75.278 | 556 | 12 |
| **8814/75/19** | 19 | 0.135 | 1.980 | 503.600 | 71.316 | 526 | 13 |
| **8814/70/20** | 20 | 0.145 | 1.727 | 478.420 | 67.750 | 500 | 14 |
| **8814/65/22** | 22 | 0.156 | 1.491 | 434.927 | 61.591 | 455 | 15 |
| **8814/60/23** | 23 | 0.169 | 1.272 | 416.018 | 58.913 | 435 | 16 |
| **8814/55/25** | 25 | 0.185 | 1.071 | 382.736 | 54.200 | 400 | 18 |
| **8814/50/28** | 28 | 0.203 | 0.887 | 341.729 | 48.393 | 357 | 19 |
| **8814/45/31** | 31 | 0.226 | 0.720 | 308.658 | 43.710 | 323 | 22 |
| **8814/40/35** | 35 | 0.254 | 0.571 | 273.383 | 38.714 | 286 | 24 |
| **8814/38/37** | 37 | 0.267 | 0.516 | 258.605 | 36.622 | 270 | 26 |
| **8814/36/39** | 39 | 0.282 | 0.464 | 245.344 | 34.744 | 256 | 27 |
| **8814/34/41** | 41 | 0.299 | 0.414 | 233.376 | 33.049 | 244 | 29 |
| **8814/32/44** | 44 | 0.317 | 0.368 | 217.464 | 30.795 | 227 | 30 |
| **8814/30/47** | 47 | 0.338 | 0.324 | 203.583 | 28.830 | 213 | 32 |
| **8814/28/50** | 50 | 0.363 | 0.283 | 191.368 | 27.100 | 200 | 35 |
| **8814/26/54** | 54 | 0.390 | 0.245 | 177.193 | 25.093 | 185 | 37 |
| **8814/24/58** | 58 | 0.423 | 0.209 | 164.972 | 23.362 | 172 | 40 |
| **8814/22/64** | 64 | 0.461 | 0.177 | 149.506 | 21.172 | 156 | 44 |
| **8814/20/70** | 70 | 0.508 | 0.147 | 136.691 | 19.357 | 143 | 49 |
| **8814/19/74** | 74 | 0.534 | 0.133 | 129.303 | 18.311 | 135 | 51 |
| **8814/18/78** | 78 | 0.564 | 0.120 | 122.672 | 17.372 | 128 | 54 |
| **8814/17/82** | 82 | 0.597 | 0.107 | 116.688 | 16.524 | 122 | 57 |
| **8814/16/88** | 88 | 0.634 | 0.095 | 108.732 | 15.398 | 114 | 61 |
| **8814/15/93** | 93 | 0.677 | 0.084 | 102.886 | 14.570 | 108 | 65 |
| **8814/14/100** | 100 | 0.725 | 0.074 | 95.684 | 13.550 | 100 | 69 |
| **8814/13/108** | 108 | 0.781 | 0.064 | 88.596 | 12.546 | 93 | 75 |
| **8814/12/117** | 117 | 0.846 | 0.055 | 81.781 | 11.581 | 85 | 81 |

## 8814

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 1.8 | ozs. | 1,900 | 3,800 |
| mm: | 102 | 44 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8814/11/127** | 127 | 0.923 | 0.046 | 75.342 | 10.669 | 79 | 88 |
| **8814/10/140** | 140 | 1.015 | 0.039 | 68.346 | 9.679 | 71 | 97 |
| **8814/9.5/148** | 148 | 1.068 | 0.035 | 64.651 | 9.155 | 68 | 102 |
| **8814/9/156** | 156 | 1.128 | 0.032 | 61.336 | 8.686 | 64 | 108 |
| **8814/8.5/165** | 165 | 1.194 | 0.028 | 57.990 | 8.212 | 61 | 114 |
| **8814/8/175** | 175 | 1.269 | 0.025 | 54.677 | 7.743 | 57 | 122 |
| **8814/7.5/187** | 187 | 1.353 | 0.023 | 51.168 | 7.246 | 53 | 130 |
| **8814/7/200** | 200 | 1.450 | 0.020 | 47.842 | 6.775 | 50 | 139 |
| **8814/6.5/216** | 216 | 1.562 | 0.017 | 44.298 | 6.273 | 46 | 150 |
| **8814/6/234** | 234 | 1.692 | 0.015 | 40.891 | 5.791 | 43 | 162 |
| **8814/5.5/255** | 255 | 1.845 | 0.013 | 37.523 | 5.314 | 39 | 177 |
| **8814/5/280** | 280 | 2.030 | 0.011 | 34.173 | 4.839 | 36 | 194 |
| **8814/4.5/311** | 311 | 2.256 | 0.009 | 30.767 | 4.357 | 32 | 216 |
| **8814/4/350** | 350 | 2.538 | 0.007 | 27.338 | 3.871 | 29 | 243 |
| **8814/3.5/400** | 400 | 2.900 | 0.006 | 23.921 | 3.388 | 25 | 278 |
| **8814/3/467** | 467 | 3.383 | 0.004 | 20.489 | 2.901 | 21 | 324 |
| **8814/2.5/561** | 561 | 4.060 | 0.002 | 17.056 | 2.415 | 18 | 486 |
| **8814/2/701** | 701 | 5.075 | 0.002 | 13.650 | 1.933 | 14 | 486 |
| **8814/1.5/934** | 934 | 6.767 | 0.001 | 10.245 | 1.451 | 11 | 648 |
| **8814/1/1401** | 1,401 | 10.150 | 0.001 | 6.830 | 0.967 | 7 | 972 |
| **8814/0.5/2803** | 2,803 | 20.300 | 0.000 | 3.414 | 0.483 | 4 | 1,944 |

## 8819

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 2.0 | 32 ozs. | 2,500 | 5,000 |
| mm: | 102 | 51 | 906g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8819/100/10** | 10 | 0.102 | 4.386 | 956.840 | 135.500 | 1,000 | 10 |
| **8819/90/11** | 11 | 0.113 | 3.556 | 869.855 | 123.182 | 909 | 11 |
| **8819/95/11** | 11 | 0.107 | 3.960 | 869.855 | 123.182 | 909 | 10 |

## 8819

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 2.0 | 32 ozs. | 2,500 | 5,000 |
| mm: | 102 | 51 | 906g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8819/85/12** | 12 | 0.119 | 3.174 | 797.367 | 112.917 | 833 | 11 |
| **8819/80/13** | 13 | 0.127 | 2.813 | 736.031 | 104.231 | 769 | 12 |
| **8819/75/14** | 14 | 0.135 | 2.474 | 683.457 | 96.786 | 714 | 13 |
| **8819/70/15** | 15 | 0.145 | 2.157 | 637.894 | 90.333 | 667 | 14 |
| **8819/65/16** | 16 | 0.156 | 1.862 | 598.025 | 84.688 | 625 | 15 |
| **8819/60/17** | 17 | 0.169 | 1.588 | 562.847 | 79.706 | 588 | 16 |
| **8819/55/19** | 19 | 0.185 | 1.337 | 503.600 | 71.316 | 526 | 18 |
| **8819/50/21** | 21 | 0.203 | 1.106 | 455.638 | 64.524 | 476 | 19 |
| **8819/45/23** | 23 | 0.226 | 0.898 | 416.018 | 58.913 | 435 | 22 |
| **8819/40/26** | 26 | 0.254 | 0.711 | 368.015 | 52.115 | 385 | 24 |
| **8819/38/27** | 27 | 0.267 | 0.643 | 354.385 | 50.185 | 370 | 26 |
| **8819/36/29** | 29 | 0.282 | 0.578 | 329.945 | 46.724 | 345 | 27 |
| **8819/34/30** | 30 | 0.299 | 0.516 | 318.947 | 45.167 | 333 | 29 |
| **8819/32/32** | 32 | 0.317 | 0.458 | 299.013 | 42.344 | 313 | 30 |
| **8819/30/34** | 34 | 0.338 | 0.403 | 281.424 | 39.853 | 294 | 32 |
| **8819/28/37** | 37 | 0.363 | 0.352 | 258.605 | 36.622 | 270 | 35 |
| **8819/26/40** | 40 | 0.390 | 0.304 | 239.210 | 33.875 | 250 | 37 |
| **8819/24/43** | 43 | 0.423 | 0.260 | 222.521 | 31.512 | 233 | 40 |
| **8819/22/47** | 47 | 0.461 | 0.219 | 203.583 | 28.830 | 213 | 44 |
| **8819/20/52** | 52 | 0.508 | 0.182 | 184.008 | 26.058 | 192 | 49 |
| **8819/19/54** | 54 | 0.534 | 0.164 | 177.193 | 25.093 | 185 | 51 |
| **8819/18/57** | 57 | 0.564 | 0.148 | 167.867 | 23.772 | 175 | 54 |
| **8819/17/61** | 61 | 0.597 | 0.132 | 156.859 | 22.213 | 164 | 57 |
| **8819/16/65** | 65 | 0.634 | 0.118 | 147.206 | 20.846 | 154 | 61 |
| **8819/15/69** | 69 | 0.677 | 0.104 | 138.673 | 19.638 | 145 | 65 |
| **8819/14/74** | 74 | 0.725 | 0.091 | 129.303 | 18.311 | 135 | 69 |
| **8819/13/79** | 79 | 0.781 | 0.079 | 121.119 | 17.152 | 127 | 75 |
| **8819/12/86** | 86 | 0.846 | 0.067 | 111.260 | 15.756 | 116 | 81 |
| **8819/11/94** | 94 | 0.923 | 0.057 | 101.792 | 14.415 | 106 | 88 |
| **8819/10/103** | 103 | 1.015 | 0.047 | 92.897 | 13.155 | 97 | 97 |
| **8819/9.5/109** | 109 | 1.068 | 0.043 | 87.784 | 12.431 | 92 | 102 |

## 8819

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 2.0 | 32 ozs. | 2,500 | 5,000 |
| mm: | 102 | 51 | 906g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8819/9/115** | 115 | 1.128 | 0.039 | 83.204 | 11.783 | 87 | 108 |
| **8819/8.5/121** | 121 | 1.194 | 0.035 | 79.078 | 11.198 | 83 | 114 |
| **8819/8/129** | 129 | 1.269 | 0.031 | 74.174 | 10.504 | 78 | 122 |
| **8819/7.5/138** | 138 | 1.353 | 0.027 | 69.336 | 9.819 | 72 | 130 |
| **8819/7/148** | 148 | 1.450 | 0.024 | 64.651 | 9.155 | 68 | 139 |
| **8819/6.5/159** | 159 | 1.562 | 0.021 | 60.179 | 8.522 | 63 | 150 |
| **8819/6/172** | 172 | 1.692 | 0.018 | 55.630 | 7.878 | 58 | 162 |
| **8819/5.5/188** | 188 | 1.845 | 0.015 | 50.896 | 7.207 | 53 | 177 |
| **8819/5/207** | 207 | 2.030 | 0.013 | 46.224 | 6.546 | 48 | 194 |
| **8819/4.5/229** | 229 | 2.256 | 0.011 | 41.783 | 5.917 | 44 | 216 |
| **8819/4/258** | 258 | 2.538 | 0.009 | 37.087 | 5.252 | 39 | 243 |
| **8819/3.5/295** | 295 | 2.900 | 0.007 | 32.435 | 4.593 | 34 | 278 |
| **8819/3/344** | 344 | 3.383 | 0.005 | 27.815 | 3.939 | 29 | 324 |
| **8819/2.5/413** | 413 | 4.060 | 0.003 | 23.168 | 3.281 | 24 | 486 |
| **8819/2/516** | 516 | 5.075 | 0.003 | 18.543 | 2.626 | 19 | 486 |
| **8819/1.5/688** | 688 | 6.767 | 0.002 | 13.908 | 1.969 | 15 | 648 |
| **8819/1/1033** | 1,033 | 10.150 | 0.001 | 9.263 | 1.312 | 10 | 972 |
| **8819/0.5/2065** | 2,065 | 20.300 | 0.000 | 4.634 | 0.656 | 5 | 1,944 |

## 8830

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 0.0 | ozs. | 4,000 | 8,000 |
| mm: | 102 | 0 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8830/100/7** | 7 | 0.102 | 6.320 | 1366.915 | 193.571 | 1,429 | 10 |
| **8830/90/7** | 7 | 0.113 | 5.123 | 1366.915 | 193.571 | 1,429 | 11 |
| **8830/95/7** | 7 | 0.107 | 5.706 | 1366.915 | 193.571 | 1,429 | 10 |
| **8830/80/8** | 8 | 0.127 | 4.051 | 1196.050 | 169.375 | 1,250 | 12 |
| **8830/85/8** | 8 | 0.119 | 4.572 | 1196.050 | 169.375 | 1,250 | 11 |
| **8830/70/9** | 9 | 0.145 | 3.105 | 1063.156 | 150.556 | 1,111 | 14 |

## 8830

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 0.0 | ozs. | 4,000 | 8,000 |
| mm: | 102 | 0 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8830/75/9** | 9 | 0.135 | 3.563 | 1063.156 | 150.556 | 1,111 | 13 |
| **8830/65/10** | 10 | 0.156 | 2.679 | 956.840 | 135.500 | 1,000 | 15 |
| **8830/60/11** | 11 | 0.169 | 2.285 | 869.855 | 123.182 | 909 | 16 |
| **8830/55/12** | 12 | 0.185 | 1.922 | 797.367 | 112.917 | 833 | 18 |
| **8830/50/13** | 13 | 0.203 | 1.590 | 736.031 | 104.231 | 769 | 19 |
| **8830/45/15** | 15 | 0.226 | 1.290 | 637.894 | 90.333 | 667 | 22 |
| **8830/40/16** | 16 | 0.254 | 1.021 | 598.025 | 84.688 | 625 | 24 |
| **8830/38/17** | 17 | 0.267 | 0.922 | 562.847 | 79.706 | 588 | 26 |
| **8830/36/18** | 18 | 0.282 | 0.828 | 531.578 | 75.278 | 556 | 27 |
| **8830/34/19** | 19 | 0.299 | 0.740 | 503.600 | 71.316 | 526 | 29 |
| **8830/32/20** | 20 | 0.317 | 0.656 | 478.420 | 67.750 | 500 | 30 |
| **8830/30/22** | 22 | 0.338 | 0.577 | 434.927 | 61.591 | 455 | 32 |
| **8830/28/23** | 23 | 0.363 | 0.504 | 416.018 | 58.913 | 435 | 35 |
| **8830/26/25** | 25 | 0.390 | 0.435 | 382.736 | 54.200 | 400 | 37 |
| **8830/24/27** | 27 | 0.423 | 0.371 | 354.385 | 50.185 | 370 | 40 |
| **8830/22/30** | 30 | 0.461 | 0.313 | 318.947 | 45.167 | 333 | 44 |
| **8830/20/33** | 33 | 0.508 | 0.259 | 289.952 | 41.061 | 303 | 49 |
| **8830/19/34** | 34 | 0.534 | 0.234 | 281.424 | 39.853 | 294 | 51 |
| **8830/18/36** | 36 | 0.564 | 0.211 | 265.789 | 37.639 | 278 | 54 |
| **8830/17/38** | 38 | 0.597 | 0.188 | 251.800 | 35.658 | 263 | 57 |
| **8830/16/41** | 41 | 0.634 | 0.167 | 233.376 | 33.049 | 244 | 61 |
| **8830/15/44** | 44 | 0.677 | 0.147 | 217.464 | 30.795 | 227 | 65 |
| **8830/14/47** | 47 | 0.725 | 0.129 | 203.583 | 28.830 | 213 | 69 |
| **8830/13/50** | 50 | 0.781 | 0.111 | 191.368 | 27.100 | 200 | 75 |
| **8830/12/54** | 54 | 0.846 | 0.095 | 177.193 | 25.093 | 185 | 81 |
| **8830/11/59** | 59 | 0.923 | 0.080 | 162.176 | 22.966 | 169 | 88 |
| **8830/10/65** | 65 | 1.015 | 0.067 | 147.206 | 20.846 | 154 | 97 |
| **8830/9.5/69** | 69 | 1.068 | 0.060 | 138.673 | 19.638 | 145 | 102 |
| **8830/9/73** | 73 | 1.128 | 0.054 | 131.074 | 18.562 | 137 | 108 |
| **8830/8.5/77** | 77 | 1.194 | 0.049 | 124.265 | 17.597 | 130 | 114 |
| **8830/8/82** | 82 | 1.269 | 0.043 | 116.688 | 16.524 | 122 | 122 |

## 8830

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 0.0 | ozs. | 4,000 | 8,000 |
| mm: | 102 | 0 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8830/7.5/87** | 87 | 1.353 | 0.038 | 109.982 | 15.575 | 115 | 130 |
| **8830/7/93** | 93 | 1.450 | 0.034 | 102.886 | 14.570 | 108 | 139 |
| **8830/6.5/101** | 101 | 1.562 | 0.029 | 94.737 | 13.416 | 99 | 150 |
| **8830/6/109** | 109 | 1.692 | 0.025 | 87.784 | 12.431 | 92 | 162 |
| **8830/5.5/119** | 119 | 1.845 | 0.021 | 80.407 | 11.387 | 84 | 177 |
| **8830/5/131** | 131 | 2.030 | 0.018 | 73.041 | 10.344 | 76 | 194 |
| **8830/4.5/145** | 145 | 2.256 | 0.015 | 65.989 | 9.345 | 69 | 216 |
| **8830/4/163** | 163 | 2.538 | 0.012 | 58.702 | 8.313 | 61 | 243 |
| **8830/3.5/187** | 187 | 2.900 | 0.009 | 51.168 | 7.246 | 53 | 278 |
| **8830/3/218** | 218 | 3.383 | 0.007 | 43.892 | 6.216 | 46 | 324 |
| **8830/2.5/262** | 262 | 4.060 | 0.003 | 36.521 | 5.172 | 38 | 486 |
| **8830/2/327** | 327 | 5.075 | 0.003 | 29.261 | 4.144 | 31 | 486 |
| **8830/1.5/436** | 436 | 6.767 | 0.002 | 21.946 | 3.108 | 23 | 648 |
| **8830/1/654** | 654 | 10.150 | 0.001 | 14.631 | 2.072 | 15 | 972 |
| **8830/0.5/1308** | 1,308 | 20.300 | 0.000 | 7.315 | 1.036 | 8 | 1,944 |

## 8842

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 0.0 | ozs. | 5,500 | 11,000 |
| mm: | 102 | 0 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8842/85/5** | 5 | 0.119 | 6.096 | 1913.681 | 271.000 | 2,000 | 11 |
| **8842/90/5** | 5 | 0.113 | 6.833 | 1913.681 | 271.000 | 2,000 | 11 |
| **8842/95/5** | 5 | 0.107 | 7.611 | 1913.681 | 271.000 | 2,000 | 10 |
| **8842/100/5** | 5 | 0.102 | 8.431 | 1913.681 | 271.000 | 2,000 | 10 |
| **8842/75/6** | 6 | 0.135 | 4.750 | 1594.734 | 225.833 | 1,667 | 13 |
| **8842/80/6** | 6 | 0.127 | 5.402 | 1594.734 | 225.833 | 1,667 | 12 |
| **8842/65/7** | 7 | 0.156 | 3.571 | 1366.915 | 193.571 | 1,429 | 15 |
| **8842/70/7** | 7 | 0.145 | 4.140 | 1366.915 | 193.571 | 1,429 | 14 |
| **8842/60/8** | 8 | 0.169 | 3.045 | 1196.050 | 169.375 | 1,250 | 16 |

## 8842

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 0.0 | ozs. | 5,500 | 11,000 |
| mm: | 102 | 0 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8842/55/8** | 8 | 0.185 | 2.560 | 1196.050 | 169.375 | 1,250 | 18 |
| **8842/50/9** | 9 | 0.203 | 2.118 | 1063.156 | 150.556 | 1,111 | 19 |
| **8842/45/10** | 10 | 0.226 | 1.717 | 956.840 | 135.500 | 1,000 | 22 |
| **8842/38/12** | 12 | 0.267 | 1.227 | 797.367 | 112.917 | 833 | 26 |
| **8842/40/12** | 12 | 0.254 | 1.359 | 797.367 | 112.917 | 833 | 24 |
| **8842/36/13** | 13 | 0.282 | 1.102 | 736.031 | 104.231 | 769 | 27 |
| **8842/34/14** | 14 | 0.299 | 0.984 | 683.457 | 96.786 | 714 | 29 |
| **8842/32/15** | 15 | 0.317 | 0.872 | 637.894 | 90.333 | 667 | 30 |
| **8842/30/16** | 16 | 0.338 | 0.767 | 598.025 | 84.688 | 625 | 32 |
| **8842/28/17** | 17 | 0.363 | 0.669 | 562.847 | 79.706 | 588 | 35 |
| **8842/26/18** | 18 | 0.390 | 0.578 | 531.578 | 75.278 | 556 | 37 |
| **8842/24/19** | 19 | 0.423 | 0.493 | 503.600 | 71.316 | 526 | 40 |
| **8842/22/21** | 21 | 0.461 | 0.415 | 455.638 | 64.524 | 476 | 44 |
| **8842/20/23** | 23 | 0.508 | 0.344 | 416.018 | 58.913 | 435 | 49 |
| **8842/19/25** | 25 | 0.534 | 0.311 | 382.736 | 54.200 | 400 | 51 |
| **8842/18/26** | 26 | 0.564 | 0.279 | 368.015 | 52.115 | 385 | 54 |
| **8842/17/27** | 27 | 0.597 | 0.249 | 354.385 | 50.185 | 370 | 57 |
| **8842/16/29** | 29 | 0.634 | 0.221 | 329.945 | 46.724 | 345 | 61 |
| **8842/15/31** | 31 | 0.677 | 0.195 | 308.658 | 43.710 | 323 | 65 |
| **8842/14/33** | 33 | 0.725 | 0.170 | 289.952 | 41.061 | 303 | 69 |
| **8842/13/36** | 36 | 0.781 | 0.147 | 265.789 | 37.639 | 278 | 75 |
| **8842/12/39** | 39 | 0.846 | 0.126 | 245.344 | 34.744 | 256 | 81 |
| **8842/11/42** | 42 | 0.923 | 0.106 | 227.819 | 32.262 | 238 | 88 |
| **8842/10/47** | 47 | 1.015 | 0.088 | 203.583 | 28.830 | 213 | 97 |
| **8842/9.5/49** | 49 | 1.068 | 0.080 | 195.274 | 27.653 | 204 | 102 |
| **8842/9/52** | 52 | 1.128 | 0.072 | 184.008 | 26.058 | 192 | 108 |
| **8842/8.5/55** | 55 | 1.194 | 0.064 | 173.971 | 24.636 | 182 | 114 |
| **8842/8/58** | 58 | 1.269 | 0.057 | 164.972 | 23.362 | 172 | 122 |
| **8842/7.5/62** | 62 | 1.353 | 0.050 | 154.329 | 21.855 | 161 | 130 |
| **8842/7/67** | 67 | 1.450 | 0.044 | 142.812 | 20.224 | 149 | 139 |
| **8842/6.5/72** | 72 | 1.562 | 0.038 | 132.894 | 18.819 | 139 | 150 |

## 8842

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 0.0 | ozs. | 5,500 | 11,000 |
| mm: | 102 | 0 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8842/6/78** | 78 | 1.692 | 0.033 | 122.672 | 17.372 | 128 | 162 |
| **8842/5.5/85** | 85 | 1.845 | 0.028 | 112.569 | 15.941 | 118 | 177 |
| **8842/5/93** | 93 | 2.030 | 0.023 | 102.886 | 14.570 | 108 | 194 |
| **8842/4.5/104** | 104 | 2.256 | 0.019 | 92.004 | 13.029 | 96 | 216 |
| **8842/4/117** | 117 | 2.538 | 0.015 | 81.781 | 11.581 | 85 | 243 |
| **8842/3.5/133** | 133 | 2.900 | 0.012 | 71.943 | 10.188 | 75 | 278 |
| **8842/3/156** | 156 | 3.383 | 0.009 | 61.336 | 8.686 | 64 | 324 |
| **8842/2.5/187** | 187 | 4.060 | 0.004 | 51.168 | 7.246 | 53 | 486 |
| **8842/2/234** | 234 | 5.075 | 0.004 | 40.891 | 5.791 | 43 | 486 |
| **8842/1.5/311** | 311 | 6.767 | 0.002 | 30.767 | 4.357 | 32 | 648 |
| **8842/1/467** | 467 | 10.150 | 0.001 | 20.489 | 2.901 | 21 | 972 |
| **8842/0.5/934** | 934 | 20.300 | 0.000 | 10.245 | 1.451 | 11 | 1,944 |

## 8860

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 0.0 | ozs. | 8,000 | 16,000 |
| mm: | 102 | 0 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8860/95/3** | 3 | 0.107 | 10.468 | 3189.468 | 451.667 | 3,333 | 10 |
| **8860/100/3** | 3 | 0.102 | 11.597 | 3189.468 | 451.667 | 3,333 | 10 |
| **8860/75/4** | 4 | 0.135 | 6.531 | 2392.101 | 338.750 | 2,500 | 13 |
| **8860/80/4** | 4 | 0.127 | 7.428 | 2392.101 | 338.750 | 2,500 | 12 |
| **8860/85/4** | 4 | 0.119 | 8.384 | 2392.101 | 338.750 | 2,500 | 11 |
| **8860/90/4** | 4 | 0.113 | 9.397 | 2392.101 | 338.750 | 2,500 | 11 |
| **8860/60/5** | 5 | 0.169 | 4.184 | 1913.681 | 271.000 | 2,000 | 16 |
| **8860/65/5** | 5 | 0.156 | 4.909 | 1913.681 | 271.000 | 2,000 | 15 |
| **8860/70/5** | 5 | 0.145 | 5.691 | 1913.681 | 271.000 | 2,000 | 14 |
| **8860/55/6** | 6 | 0.185 | 3.518 | 1594.734 | 225.833 | 1,667 | 18 |
| **8860/50/7** | 7 | 0.203 | 2.909 | 1366.915 | 193.571 | 1,429 | 19 |
| **8860/45/7** | 7 | 0.226 | 2.358 | 1366.915 | 193.571 | 1,429 | 22 |

## 8860

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 0.0 | ozs. | 8,000 | 16,000 |
| mm: | 102 | 0 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | Saturation Amps |
|---|---|---|---|---|---|---|---|
| **8860/40/8** | 8 | 0.254 | 1.865 | 1196.050 | 169.375 | 1,250 | 24 |
| **8860/38/9** | 9 | 0.267 | 1.684 | 1063.156 | 150.556 | 1,111 | 26 |
| **8860/36/9** | 9 | 0.282 | 1.512 | 1063.156 | 150.556 | 1,111 | 27 |
| **8860/32/10** | 10 | 0.317 | 1.196 | 956.840 | 135.500 | 1,000 | 30 |
| **8860/34/10** | 10 | 0.299 | 1.350 | 956.840 | 135.500 | 1,000 | 29 |
| **8860/30/11** | 11 | 0.338 | 1.052 | 869.855 | 123.182 | 909 | 32 |
| **8860/28/12** | 12 | 0.363 | 0.917 | 797.367 | 112.917 | 833 | 35 |
| **8860/26/13** | 13 | 0.390 | 0.792 | 736.031 | 104.231 | 769 | 37 |
| **8860/24/14** | 14 | 0.423 | 0.675 | 683.457 | 96.786 | 714 | 40 |
| **8860/22/15** | 15 | 0.461 | 0.568 | 637.894 | 90.333 | 667 | 44 |
| **8860/20/16** | 16 | 0.508 | 0.470 | 598.025 | 84.688 | 625 | 49 |
| **8860/19/17** | 17 | 0.534 | 0.425 | 562.847 | 79.706 | 588 | 51 |
| **8860/18/18** | 18 | 0.564 | 0.382 | 531.578 | 75.278 | 556 | 54 |
| **8860/17/19** | 19 | 0.597 | 0.341 | 503.600 | 71.316 | 526 | 57 |
| **8860/16/20** | 20 | 0.634 | 0.302 | 478.420 | 67.750 | 500 | 61 |
| **8860/15/22** | 22 | 0.677 | 0.266 | 434.927 | 61.591 | 455 | 65 |
| **8860/14/23** | 23 | 0.725 | 0.232 | 416.018 | 58.913 | 435 | 69 |
| **8860/13/25** | 25 | 0.781 | 0.201 | 382.736 | 54.200 | 400 | 75 |
| **8860/12/27** | 27 | 0.846 | 0.171 | 354.385 | 50.185 | 370 | 81 |
| **8860/11/30** | 30 | 0.923 | 0.144 | 318.947 | 45.167 | 333 | 88 |
| **8860/10/33** | 33 | 1.015 | 0.120 | 289.952 | 41.061 | 303 | 97 |
| **8860/9.5/34** | 34 | 1.068 | 0.108 | 281.424 | 39.853 | 294 | 102 |
| **8860/9/36** | 36 | 1.128 | 0.097 | 265.789 | 37.639 | 278 | 108 |
| **8860/8.5/38** | 38 | 1.194 | 0.087 | 251.800 | 35.658 | 263 | 114 |
| **8860/8/41** | 41 | 1.269 | 0.077 | 233.376 | 33.049 | 244 | 122 |
| **8860/7.5/44** | 44 | 1.353 | 0.068 | 217.464 | 30.795 | 227 | 130 |
| **8860/7/47** | 47 | 1.450 | 0.059 | 203.583 | 28.830 | 213 | 139 |
| **8860/6.5/50** | 50 | 1.562 | 0.051 | 191.368 | 27.100 | 200 | 150 |
| **8860/6/54** | 54 | 1.692 | 0.044 | 177.193 | 25.093 | 185 | 162 |
| **8860/5.5/59** | 59 | 1.845 | 0.037 | 162.176 | 22.966 | 169 | 177 |
| **8860/5/65** | 65 | 2.030 | 0.031 | 147.206 | 20.846 | 154 | 194 |

## 8860

| | Diam. | Length | Weight | Max Cont. Watts | Max Peak Watts |
|---|---|---|---|---|---|
| inch: | 4.0 | 0.0 | ozs. | 8,000 | 16,000 |
| mm: | 102 | 0 | g | | |

| Motor | KV | Rm Ohms | Io @ 10v | Torque Constant mNm/A | Torque Constant inOz/A | Max Volts (max rpm/Kv) | **Saturation Amps** |
|---|---|---|---|---|---|---|---|
| **8860/4.5/73** | 73 | 2.256 | 0.025 | 131.074 | 18.562 | 137 | 216 |
| **8860/4/82** | 82 | 2.538 | 0.020 | 116.688 | 16.524 | 122 | 243 |
| **8860/3.5/93** | 93 | 2.900 | 0.016 | 102.886 | 14.570 | 108 | 278 |
| **8860/3/109** | 109 | 3.383 | 0.012 | 87.784 | 12.431 | 92 | 324 |
| **8860/2.5/131** | 131 | 4.060 | 0.005 | 73.041 | 10.344 | 76 | 486 |
| **8860/2/163** | 163 | 5.075 | 0.005 | 58.702 | 8.313 | 61 | 486 |
| **8860/1.5/218** | 218 | 6.767 | 0.003 | 43.892 | 6.216 | 46 | 648 |
| **8860/1/327** | 327 | 10.150 | 0.002 | 29.261 | 4.144 | 31 | 972 |
| **8860/0.5/654** | 654 | 20.300 | 0.000 | 14.631 | 2.072 | 15 | 1,944 |

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http://www.neumotors.com

DOMESTIC CONTENT / COUNTRY OF ORIGIN
Motors may be assembled with varying degrees of domestic (USA) content. Please contact to discuss content requirements, solutions, and resulting pricing variances, if any. Baseline motors are assembled and or tested in the US or Mexico from components sourced globally, including China.

QUALITY CONTROL
Our factory is ISO 9001 certified. Quality documentation available on a custom order basis.

POWER RATINGS (Watts):
Continuous rating is the power the motor can deliver while maintaining the external housing temperatures below 100C.

MAX power rating is the power the motor can deliver beginning with motor at a temp of 20C until it reaches it's limit temperature of 100C. The exact maximum power output of a motor is dependent on a number of variables including air flow, ambient air temperature, contact cooling, etc. 100C rating is measured on the outside of the case, which allows for higher internal temperatures and a small measure of overhead.

MAX VOLTAGE
Limited by kv (RPMs per volt) times the applied voltage. Max voltage must be kept below the voltage which will spin the motor over max rpm for the motor series.

MAX AMPERAGE
See power ratings above.

MTBF RATINGS:
When used within the constraints described above, BLDC motors' primary "wear" item(s) are the bearings supporting the shaft. Bearing life is inversely affected by speed, temperature, radial and axial loads. While an MTBF figure can be generated, it would be rendered invalid by excursions beyond prescribed temperatures or load limits – such as prop strikes or side loads. MTBF must be determined on a case by case basis, and even then it would be subject to numerous exceptions.

COMPONENT SPECIFICATIONS
Winding temperature: 180C
Magnet grade: 180C UH grade
Bearings: Japanese SPB bearings

Specifications subject to change without notice.