



**Thrust test datum for EX20 L series inrunner brushless motors**

The applied ESC: ELE ADVANCE 30A

All following datum are from the test results running the motors on high speed for 5 minutes continuously.

**1. EDF thrust test datum of EX20L**

Power

system: EDF-55 motor: EX20L-A weight: 57 g KV: 4600

| propeller | voltage (V) | current(A) | thrust |       | power (Watts) | efficiency |       | Temp. centigrade | rotate speed RPM |
|-----------|-------------|------------|--------|-------|---------------|------------|-------|------------------|------------------|
|           |             |            | g      | oz    |               | g/w        | oz/kw |                  |                  |
| EP2245X6  | 7.4         | 9.1        | 178    | 6.28  | 67.34         | 2.64       | 93.22 | 38               | 23230            |
| EP2245X6  | 11.1        | 16.9       | 376    | 13.26 | 187.59        | 2.00       | 70.69 | 51               | 31910            |

Power

system: EDF-55 motor: EX20L-B weight: 57 g KV: 3900

| propeller | voltage(V) | Current (A) | Thrust |       | power (W) | efficiency |        | Temp. centigrade | Rotate speed RPM |
|-----------|------------|-------------|--------|-------|-----------|------------|--------|------------------|------------------|
|           |            |             | g      | oz    |           | g/w        | oz/kw  |                  |                  |
| EP2245X6  | 7.4        | 5.4         | 128    | 4.51  | 39.96     | 3.20       | 112.96 | 38               | 19490            |
| EP2245X6  | 11.1       | 101         | 269    | 9.49  | 1121.10   | 0.24       | 8.46   | 48               | 27860            |
| EP2245X6  | 14.8       | 15.3        | 441    | 15.55 | 226.44    | 1.95       | 68.68  | 59               | 35120            |

Power

system: EDF-55 motor: EX20L-C weight: 57 g KV: 3000

| propeller | voltage (V) | Current (A) | Thrust |       | power (W) | efficiency |        | Temp. centigrade | Rotate speed RPM |
|-----------|-------------|-------------|--------|-------|-----------|------------|--------|------------------|------------------|
|           |             |             | g      | oz    |           | g/w        | oz/kw  |                  |                  |
| EP2245X6  | 7.4         | 2.9         | 93     | 3.28  | 21.46     | 4.33       | 152.83 | 36               | 15410            |
| EP2245X6  | 11.1        | 5.8         | 179    | 6.31  | 64.38     | 2.78       | 98.05  | 42               | 22810            |
| EP2245X6  | 14.8        | 9.4         | 321    | 11.32 | 139.12    | 2.31       | 81.37  | 53               | 30170            |

Power

system: EDF-55 motor: EX20L-D weight: 57 g KV: 2300

| propeller | voltage (V) | Current(A) | Thrust | power (W) | efficiency | Temp. | rotate speed |
|-----------|-------------|------------|--------|-----------|------------|-------|--------------|
|-----------|-------------|------------|--------|-----------|------------|-------|--------------|

|          |      |     | g   | oz   |       | g/W  | oz/kW  | centigradeC. | RPM   |
|----------|------|-----|-----|------|-------|------|--------|--------------|-------|
| EP2245X6 | 7.4  | 2.1 | 67  | 2.36 | 15.54 | 4.31 | 152.05 | 32           | 13850 |
| EP2245X6 | 11.1 | 3.9 | 141 | 4.97 | 43.29 | 3.26 | 114.86 | 36           | 20360 |
| EP2245X6 | 14.8 | 6.2 | 245 | 8.64 | 91.76 | 2.67 | 94.16  | 42           | 26250 |

power

system: EDF-64 motor: EX20L-A weight: 57 g KV: 4600

| propeller | Voltage(V) | current (A) | Thrust |       | power (W) | efficiency |        | Temp.      | rotate speed |
|-----------|------------|-------------|--------|-------|-----------|------------|--------|------------|--------------|
|           |            |             | g      | oz    |           | g/W        | oz/kW  | centigrade | RPM          |
| EP2540X6  | 7.4        | 9.7         | 209    | 7.37  | 71.78     | 2.91       | 102.68 | 39         | 23250        |
| EP2540X6  | 11.1       | 16.9        | 403    | 14.21 | 187.59    | 2.15       | 75.76  | 53         | 31870        |

power

system: EDF-64 motor: EX20L-B weight: 57 g KV: 3900

| propeller | Voltage (V) | current(A) | Thrust |       | power (W) | efficiency |        | Temp.      | rotate speed |
|-----------|-------------|------------|--------|-------|-----------|------------|--------|------------|--------------|
|           |             |            | g      | oz    |           | g/W        | oz/kW  | centigrade | RPM          |
| EP2540X6  | 7.4         | 5.8        | 158    | 5.57  | 42.92     | 3.68       | 129.82 | 50         | 19750        |
| EP2540X6  | 11.1        | 10.9       | 299    | 10.54 | 120.99    | 2.47       | 87.15  | 52         | 28390        |
| EP2540X6  | 14.8        | 16.3       | 501    | 17.67 | 241.24    | 2.08       | 73.24  | 61         | 35760        |

power

system: EDF-64 motor: EX20L-C weight: 57 g KV: 3000

| propeller | Voltage (V) | current(A) | Thrust |       | power (W) | efficiency |        | Temp.      | rotate speed |
|-----------|-------------|------------|--------|-------|-----------|------------|--------|------------|--------------|
|           |             |            | g      | oz    |           | g/W        | oz/kW  | centigrade | RPM          |
| EP2540X6  | 7.4         | 3.6        | 100    | 3.53  | 26.64     | 3.75       | 132.38 | 38         | 16100        |
| EP2540X6  | 11.1        | 6.4        | 213    | 7.51  | 71.04     | 3.00       | 105.74 | 49         | 23610        |
| EP2540X6  | 14.8        | 9.8        | 358    | 12.63 | 145.04    | 2.47       | 87.05  | 59         | 30470        |

power

system: EDF-64 motor: EX20L-D weight: 57 g KV: 2300

| propeller | Voltage (V) | current(A) | Thrust |      | power (W) | efficiency |        | Temp.      | rotate speed |
|-----------|-------------|------------|--------|------|-----------|------------|--------|------------|--------------|
|           |             |            | g      | oz   |           | g/W        | oz/kW  | centigrade | RPM          |
| EP2540X6  | 7.4         | 2.1        | 75     | 2.64 | 15.54     | 4.83       | 170.20 | 34         | 14100        |
| EP2540X6  | 11.1        | 3.7        | 151    | 5.33 | 41.07     | 3.68       | 129.66 | 36         | 20370        |
| EP2540X6  | 14.8        | 6.3        | 263    | 9.27 | 93.24     | 2.82       | 99.47  | 44         | 26700        |

2. EX20L-A + ELE EPS-C

3.

power

KV

system: EPS-C

64T/12T=5.33

motor: EX20L-A

Value:

4600

| propeller | Voltage (V) | current(A) | Thrust |       | power (W) | efficiency |        |
|-----------|-------------|------------|--------|-------|-----------|------------|--------|
|           |             |            | g      | oz    |           | g/W        | oz/kW  |
| EP-8040   | 7.4         | 3.9        | 106    | 3.74  | 28.86     | 3.67       | 129.53 |
| EP-8040   | 11.1        | 6.1        | 310    | 10.93 | 67.71     | 4.58       | 161.46 |
| EP-8043   | 7.4         | 4.5        | 175    | 6.17  | 33.30     | 5.26       | 185.33 |
| EP-8043   | 11.1        | 7.6        | 399    | 14.07 | 84.36     | 4.73       | 166.80 |
| EP-8060   | 7.4         | 5.4        | 218    | 7.69  | 39.96     | 5.46       | 192.39 |
| EP-8060   | 11.1        | 9          | 425    | 14.99 | 99.90     | 4.25       | 150.03 |
| HD-8060   | 7.4         | 4.9        | 195    | 6.88  | 36.26     | 5.38       | 189.65 |
| HD-8060   | 11.1        | 8.9        | 410    | 14.46 | 98.79     | 4.15       | 146.36 |
| EP-9047   | 7.4         | 5.4        | 221    | 7.79  | 39.96     | 5.53       | 195.04 |
| EP-9047   | 11.1        | 9.8        | 508    | 17.92 | 108.78    | 4.67       | 164.69 |
| EP-9050   | 7.4         | 5.7        | 281    | 9.91  | 42.18     | 6.66       | 234.94 |
| EP-9050   | 11.1        | 10.4       | 604    | 21.30 | 115.44    | 5.23       | 184.52 |
| HD-9075   | 7.4         | 8.1        | 309    | 10.90 | 59.94     | 5.16       | 181.80 |
| HD-9075   | 11.1        | 14.8       | 618    | 21.79 | 164.28    | 3.76       | 132.67 |
| EP-9070   | 7.4         | 8.6        | 363    | 12.80 | 63.64     | 5.70       | 201.16 |
| EP-9070   | 11.1        | 16.3       | 678    | 23.91 | 180.93    | 3.75       | 132.15 |
| EP-1047   | 7.4         | 105        | 532    | 18.76 | 777.00    | 0.68       | 24.15  |
| EP-1047   | 11.1        | 19.1       | 1024   | 36.11 | 212.01    | 4.83       | 170.33 |
| EP-1060   | 7.4         | 7.6        | 379    | 13.37 | 56.24     | 6.74       | 237.66 |
| EP-1060   | 11.1        | 14         | 775    | 27.33 | 155.40    | 4.99       | 175.88 |
| EP-1080   | 7.4         | 12.3       | 475    | 16.75 | 91.02     | 5.22       | 184.04 |
| EP-1080   | 11.1        | 22.1       | 879    | 31.00 | 245.31    | 3.58       | 126.37 |
| HD-1080   | 7.4         | 11.1       | 409    | 14.42 | 82.14     | 4.98       | 175.60 |
| HD-1080   | 11.1        | 18.9       | 776    | 27.37 | 209.79    | 3.70       | 130.45 |