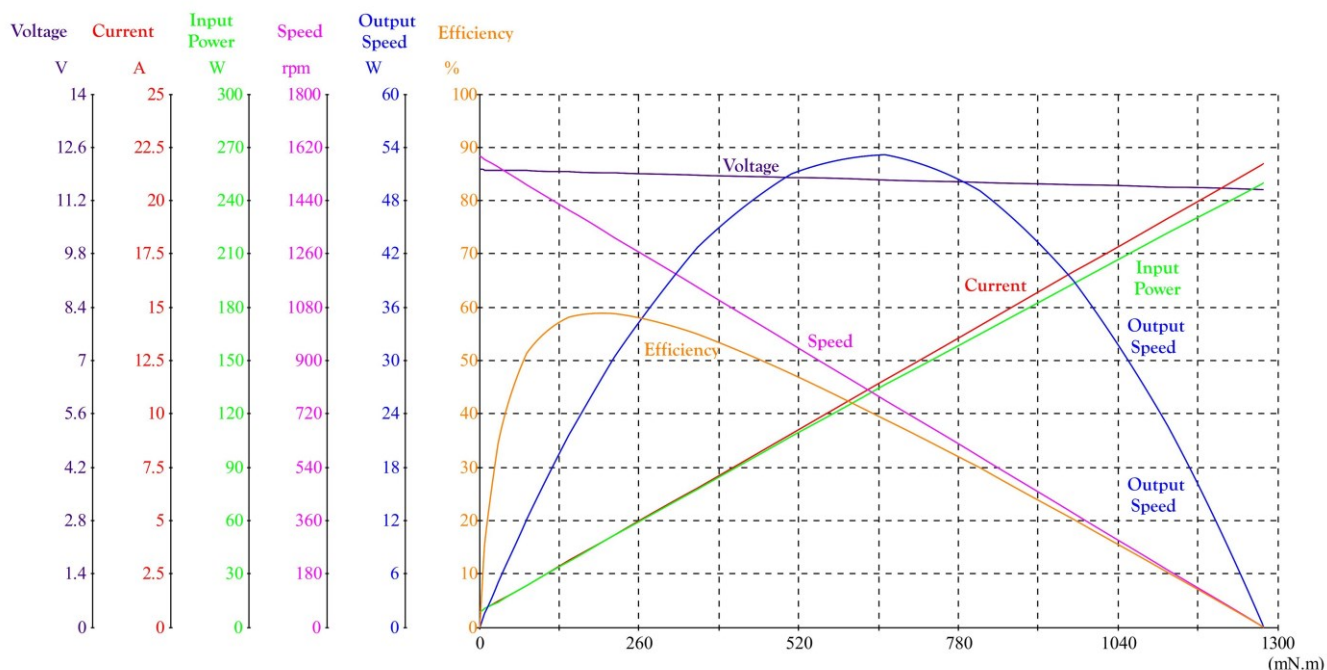


Orange HD Planetary Gear DC Motor Test Report

| | |
|---------|--------------------|
| Voltage | 12V |
| Type | PG45775126000-3.7K |
| Number | |



| Specifications | Voltage | Current | Input Power | Torque | Speed | Output Power | Efficiency |
|------------------------|---------|---------|-------------|--------|--------|--------------|------------|
| | V | A | W | mN.m | rpm | W | % |
| No Load | 12.01 | 0.691 | 8.301 | 0.0 | 1590.3 | 0.000 | 0.0 |
| Max Efficiency Point | 11.93 | 3.882 | 46.32 | 193.6 | 1349.3 | 27.35 | 59.0 |
| Max Output Power Point | 11.75 | 11.60 | 136.2 | 661.7 | 766.4 | 53.10 | 39.0 |
| Maximum Torque Point | 11.50 | 21.74 | 250.0 | 1277.2 | 0.0 | 0.000 | 0.0 |
| End Point | 11.50 | 21.74 | 250.0 | 1277.2 | 0.0 | 0.000 | 0.0 |

| SN | Voltage | Current | Input Power | Torque | Speed | Output Power | Efficiency |
|----|---------|---------|-------------|--------|--------|--------------|------------|
| | V | A | W | mN.m | rpm | W | % |
| 1 | 12.01 | 0.691 | 8.301 | 0.0 | 1590.3 | 0.000 | 0.0 |
| 2 | 12.01 | 0.805 | 9.665 | 6.9 | 1581.7 | 1.143 | 11.8 |
| 3 | 12.01 | 0.807 | 9.684 | 7.0 | 1581.6 | 1.159 | 12.0 |
| 4 | 12.00 | 0.848 | 10.18 | 9.5 | 1578.5 | 1.570 | 15.4 |
| 5 | 12.00 | 0.906 | 10.87 | 13.0 | 1574.1 | 2.143 | 19.7 |
| 6 | 12.00 | 1.016 | 12.19 | 19.7 | 1565.8 | 3.230 | 26.5 |
| 7 | 12.00 | 1.186 | 14.22 | 30.0 | 1553.0 | 4.878 | 34.3 |
| 8 | 11.99 | 1.390 | 16.67 | 42.4 | 1537.5 | 6.826 | 40.9 |
| 9 | 11.98 | 1.660 | 19.90 | 58.8 | 1517.1 | 9.340 | 46.9 |

| | | | | | | | |
|----|-------|-------|-------|--------|--------|-------|------|
| 10 | 11.98 | 1.962 | 23.50 | 77.1 | 1494.3 | 12.06 | 51.3 |
| 11 | 11.97 | 2.297 | 27.49 | 97.4 | 1469.1 | 14.98 | 54.5 |
| 12 | 11.96 | 2.686 | 32.12 | 121.0 | 1439.7 | 18.24 | 56.8 |
| 13 | 11.95 | 3.109 | 37.15 | 146.7 | 1407.7 | 21.62 | 58.2 |
| 14 | 11.94 | 3.447 | 41.16 | 167.2 | 1382.1 | 24.20 | 58.8 |
| 15 | 11.93 | 3.882 | 46.32 | 193.6 | 1349.3 | 27.35 | 59.0 |
| 16 | 11.92 | 4.337 | 51.70 | 221.2 | 1314.9 | 30.45 | 58.9 |
| 17 | 11.91 | 4.858 | 57.84 | 252.8 | 1275.6 | 33.76 | 58.4 |
| 18 | 11.89 | 5.700 | 67.76 | 303.9 | 1211.9 | 38.56 | 56.9 |
| 19 | 11.87 | 6.543 | 77.64 | 355.0 | 1148.3 | 42.68 | 55.0 |
| 20 | 11.85 | 7.385 | 87.49 | 406.1 | 1084.6 | 46.12 | 52.7 |
| 21 | 11.83 | 8.228 | 97.30 | 457.3 | 1021.0 | 48.88 | 50.2 |
| 22 | 11.81 | 9.070 | 107.1 | 508.4 | 957.3 | 50.96 | 47.6 |
| 23 | 11.79 | 9.912 | 116.8 | 559.5 | 893.7 | 52.35 | 44.8 |
| 24 | 11.77 | 10.75 | 126.5 | 610.6 | 830.0 | 53.06 | 41.9 |
| 25 | 11.75 | 11.60 | 136.2 | 661.7 | 766.4 | 53.10 | 39.0 |
| 26 | 11.72 | 12.44 | 145.9 | 712.8 | 702.7 | 52.45 | 36.0 |
| 27 | 11.70 | 13.28 | 155.5 | 763.9 | 639.1 | 51.12 | 32.9 |
| 28 | 11.68 | 14.12 | 165.0 | 815.1 | 575.5 | 49.11 | 29.8 |
| 29 | 11.66 | 14.97 | 174.6 | 866.2 | 511.8 | 46.42 | 26.6 |
| 30 | 11.64 | 15.81 | 184.1 | 917.3 | 448.2 | 43.04 | 23.4 |
| 31 | 11.62 | 16.65 | 193.5 | 968.4 | 384.5 | 38.99 | 20.1 |
| 32 | 11.60 | 17.49 | 203.0 | 1019.5 | 320.9 | 34.25 | 16.9 |
| 33 | 11.58 | 18.34 | 212.4 | 1070.6 | 257.2 | 28.83 | 13.6 |
| 34 | 11.56 | 19.18 | 221.8 | 1121.7 | 193.6 | 22.74 | 10.3 |
| 35 | 11.54 | 20.02 | 231.1 | 1172.9 | 129.9 | 15.96 | 6.9 |
| 36 | 11.52 | 20.86 | 240.4 | 1224.0 | 66.3 | 8.496 | 3.5 |
| 37 | 11.50 | 21.71 | 249.7 | 1275.1 | 2.7 | 0.354 | 0.1 |
| 38 | 11.50 | 21.74 | 250.0 | 1277.2 | 0.0 | 0.000 | 0.0 |