**Power calculations for thrusters only :**

**45 degree :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Forward:**  F1=F2=2kgf=4.62 lbf  C1=C2= 8.91 | **Backward:**  F1=F2= 1.3 kgf = 2.87 lbf  C1=C2= 4.38 A | **Upward:**  F1=F2= 2 kgf = 4.62 lbf  C1=C2= 8.91 A | **Downwards:**  F1=F2= 1.3 kgf = 2.87 lbf  C1=C2= 4.38 A | **Lateral right & lateral left :**  F\_forward= 0.55 kgf =1.2lbf  F\_backward=0.55 kgf =1.2lbf  F\_tail=1.15 kgf =2.61 lbf  C=1.2 A  Ct=3.67 A | **Rotation Right and left :**  F= 0.82 kgf =1.77 lbf  F=0.82 kgf =1.77 lbf  F\_tail=1.15 kgf =2.61 lbf  C=2.06 A  Ct=3.67 A |
| **p=213.84w**  **CT=17.82A** | **p= 105.12 w**  **CT= 8.76 A** | **p= 213.84 w**  **CT= 17.82 A** | **p= 105.12 w**  **CT= 8.76 A** | **p=72.84W**  **Ctotal=6.07 A** | **p=93.48 W**  **Ctotal=7.79 A** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Forward:**  number of thrasters 2  total force 4 kgf  force for 1 thraster 2  cureent for one thraster [8.43 A](https://www.facebook.com/) | **Backward:**  number of thrasters 2  total force 2.6kgf  force for 1 thraster 1.3  cureent for one thraster 4.4 A | **Upward:**  number of thrasters 2  total force 4 kgf  force for 1 thraster 2  cureent for one thraster [8.43 A](https://www.facebook.com/) | **Downwards:**  number of thrasters 2  total force 2.6kgf  force for 1 thraster 1.3  cureent for one thraster 4.4 A | **Lateral right & lateral left :**  Num of thrasters 3  tail force [1.15](https://www.facebook.com/) kgf  tail current 3.67  forward one thraster  force = .65 kgf  forwrad one thraster cureent = 1,61 A | **Rotation Right and left :**  Num of thrasters 3  tail force [1.15](https://www.facebook.com/) kgf  tail current 3.67  forward one thraster  force = .575 kgf  forwrad one thraster cureent = 1,4A |
| **total current 16.86 A**  **p= 202.32 w** | **total current 8.8A**  **p=105.6 w** | **total current 16.86 A**  **p=202.32 w** | **total current 8.8A**  **p=105.6 w** | **total curent to move right = 6.9 A**  **p=82.8 w** | **total curent = 6.5 A**  **p=78 w** |

**30 degree :**