

e-Foil Holland conducted a document comparing and testing different propellers for e-foils.





## Introduction

e-Foil Holland conducted a comprehensive real-life efficiency test of e-Foil propellers, evaluating the performance of 12 different propeller designs. These tests aimed to assess the efficiency and effectiveness of the propellers in real-world operating conditions. By analysing factors such as generated thrust, power consumption, and overall propulsion efficiency, E-Foil Holland gained valuable insights into the optimal propeller designs for their electric hydrofoils. This extensive real-life test provides critical data for improving performance, enhancing energy efficiency, and delivering an exceptional e-Foil experience to users.



## The setup

For the propeller efficiency testing, the following setup was used:

Electronic Details:

- Motor: Flipsky 65161 120KV.
- Motor Controller: VESC Firduo 75100.
- Battery: Ford 50Ah 2.07kWh, 12S, charged to 50.4V.

Weights:

- Battery weight: 14kg.
- Rider weight: 80kg.
- Board weight: 22kg.

Foil Setup:

- Gong V1 mast.
- e-Foil Holland board
- Front wing: Curve M-T.
- Stabilizer: Curve Stab L.
- No propguard

VESC Settings:

- Maximum duty cycle: 95%.
- Maximum motor current: 110A.
- Maximum battery current: 100A.



## Efficiency testing

During the efficiency testing, the following procedure was implemented:

- 1. The tests took place in a canal, eliminating the need for curves or additional starting procedures.
- 2. The testing started with a run of approximately +/-1000m at a speed of 25kph.
- 3. This was followed by a run of approximately +/-500m at a speed of 30kph.
- 4. Full throttle performance was then tested for approximately +/-100m.
- 5. The testing process was repeated in reverse order on the return trip.
- 6. During the testing, the rider maintained a kneeling position on the e-foil.
- 7. A battery was used to test two propellers, after 2 propellors the battery got recharged before proceeding to the next two propellers.
- 8. Each propeller was paired with a corresponding adapter to optimise the flow from the motor to the propeller.
- 9. The water conditions were calm, and there was minimal wind present.

# Thrust testing

During the thrust testing, the following procedure was implemented:

- 1. The board was left floating in the water and connected to a pull scale to measure the pull force exerted.
- 2. The e-foil was operated at full throttle, and the pull force and power input in Watts was carefully recorded.
- 3. To ensure consistent and reliable data, the maximum force was maintained for a duration of 15 seconds and recorded.
- 4. Throughout the testing process, the battery remained connected to a charger, allowing continuous charging to maintain optimal battery performance.
- 5. Adequate time intervals were provided between tests to fully charge the battery before proceeding to test a new propeller.



# **Propellor's tested**

The following propellers were tested in order to evaluate their performance.

Nr	Brand	Blades	Pitch "	Diameter "	Note
1	e-Foil Holland	3	7	5,9	
2	Flipsky	3	5	7,25	
3	Flipsky	3	5	5,8	Recut
4	Highfly	3	7	6	2023
5	Highfly	3	6	6	2023
6	Highfly	3	7	6	2022
7	Highfly	2	7	6	2022
8	Highfly	2	7	6	2023
9	Highfly	2	7	6	Folding
10	Waydoo	3	4,5?	6,3	Old
11	Waydoo	3	7?	4,7	New
12	Hyperdrive	3	7	6,14	

## **Still to test Propellor's**

The following propellers will be tested an added to this document. Want to add your propellor in the list? Send an <u>email</u> and will add you to the list.

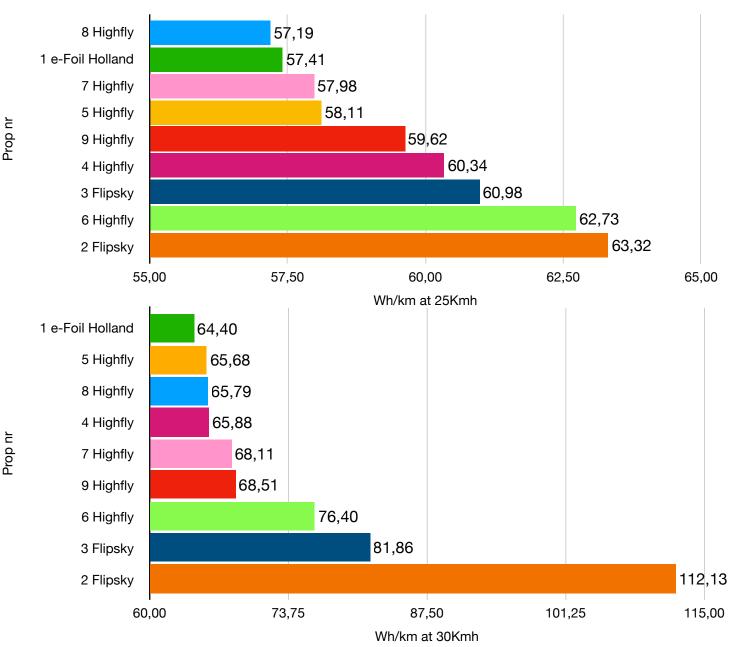
Nr	Brand	Blades	Pitch "	Diameter "	Note
13	Waydoo	2			Folding
14	Highfly	2	8	6	2023
15	Highfly	3	8	6	2023



## Results

## **Results**

The following graphs are presented in ascending order based on performance.



It is important to note that the results of the propeller efficiency test may vary due to several factors. These factors include the rider's weight, weather conditions, electrical connections, battery health, and riding technique. Each of these elements can have an impact on the overall performance and efficiency of the E-Foil system. Therefore, while the test provides valuable insights, it is essential to consider these variables and their potential influence when interpreting the results.

Version: 1,1 Date 18-7-2023 Autor : Kwint info@efoil-holland.com e-Foil holland Netherlands www.efoil-holland.com

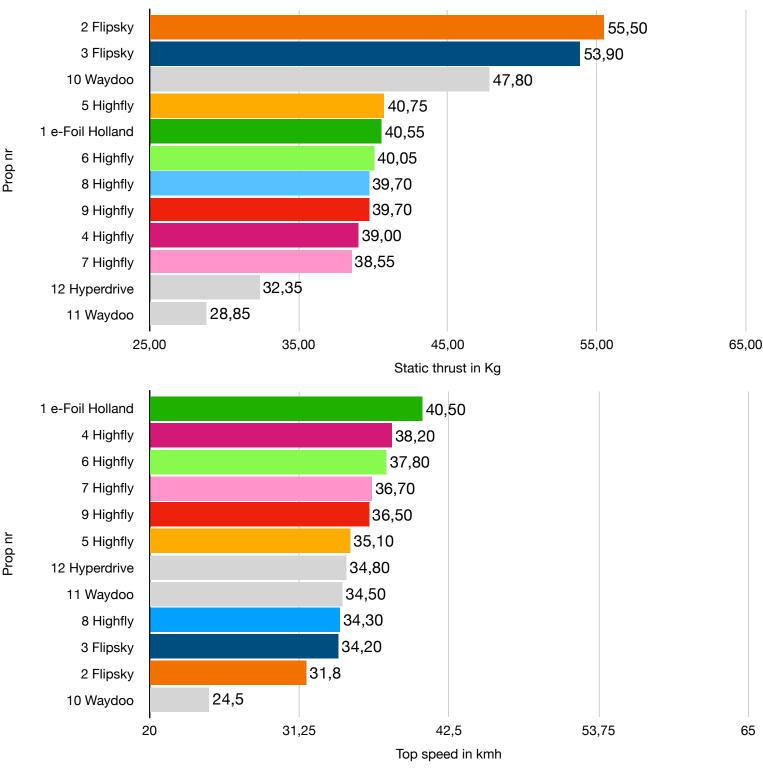


Prop nr

## **Results**

## **Results**

The following graphs are presented in ascending order based on performance.



It is important to note that the results of the thrust test may vary due to several factors. These factors include the weather conditions, electrical connections, battery health,





Prop IDProp numberBrandBrand of the propBladesNr of blades
Blades Nr of blades
Diades IN Or Diades
Pitch " The prop pitch in INCH
Diameter " The prop diameter in INCH EXAMPLE PICTURE
Mounting type How the prop is mounted
Guard / adapter 3D printed files available at EFH
Material finish The way the prop is finished
Meterial Manufacturing and material
Note Some extra info
Result overview
Top speed in kph* Measured in the test trip
Thrust in Kg Measured static
W @ full*   Measured static   EXAMPLE PICTURE
Wh/km @ 25
Wh/km @ 30
Wh/km @ full**
Balance / sound The balance/sound feel
Getting on plane How easy it starts 1/10

Prices and purchase info				
Price 5-7-2023	The price ate the given date			
Link	Where / how you can buy the prop			



# Prop: 0 Example Results

Point	Time	Total distance	Wh usage
1	Start time	Start Distance	Start Wh
2	End time	End Distance	End Wh
Duration	End - start time	Sec	
Avg speed	Avg	kph	
Consumption	End - start Wh	Wh/km @ Avg kph	
Distance	End - start dista	m	

#### Results for 25kph test

#### Results for 30kph test

Point	Time	Total distance	Wh usage
1			
2			
Duration		Sec	
Avg speed		kph	
Consumption		Wh/km @ kph	
Distance		m	

#### Results @ full speed test

Point	Time	Total distance	Wh usage
1			
2			
Duration		Sec	
Avg speed		kph	
Consumption		Wh/km @ kph	
Distance		m	

Prop ID	Test 1	Test 2	Test 3	Test 4	Average
0					(1+2+3+4) / 4

Thrust measured in Kg



General i	information
Prop ID	1
Brand	e-Foil Holland
Blades	3
Pitch "	7
Diameter "	5,9
Mounting type	M8 locknut and shear pin
Guard / adapter available	NO / YES
Material finish	Black Anodised
Meterial	CNC ALU 7073
Note	



Result overview		
Top speed in kph*	40,5	
Thrust in Kg	40,55	
W @ full*	4282	
Wh/km @ 25	57,41	
Wh/km @ 30	64,40	
Wh/km @ full**	133,67	
Balance / sound	Very well balanced and very silent	
Getting on plane	Medium / hard (4)	

\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



#### Prices and purchase info

Price 5-7-2023

Link

235 € including Tax, excluding shipping

Currently not webshop (Order via mail)





# Prop: 1 e-Foil Holland Results

Point	Time	Total distance	Wh usage
1	13:56:12	250,00	19,31
2	13:58:09	1004,00	62,60
Duration	117s	Sec	
Avg speed	23,20	kph	
Consumption	57,41	Wh/km @ 23,20 kph	
Distance	754,00	m	

## Tabel 26

#### Tabel 31

Point	Time	Total distance	Wh usage
1	14:01:26	2470,00	168,33
2	14:03:24	3470,00	232,73
Duration	118s	Sec	
Avg speed	30,51	kph	
Consumption	64,40	Wh/km @ 30,51 kph	
Distance	1000,00	m	

#### Tabel 5

Point	Time	Total distance	Wh usage
1	13:59:34	1710,00	103,51
2	13:59:54	1920,00	131,58
Duration	20s	Sec	
Avg speed	37,80	kph	
Consumption	133,67	Wh/km @ 37,80 kph	
Distance	210,00	m	

Prop ID	Test 1	Test 2	Test 3	Test 4	Average
1	42,2	39,8	40,2	40,0	40,55

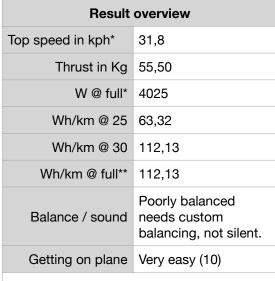




General information			
Prop ID	2		
Brand	Flipsky		
Blades	3		
Pitch "	5		
Diameter "	7,25		
Mounting type	M8 locknut and shear pin		
Guard / adapter available	YES / YES		
Material finish	Powder coated white		
Meterial	Cast ALU		

Note





\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



# Prices and purchase info Price 17-7-2023 22,31 € including Tax, excluding shipping Link BG link





# Prop: 2 Flipsky Results

Point	Time	Total distance	Wh usage
1	15:46:06	2640,00	276,86
2	15:48:23	3590,00	337,01
Duration	137s	Sec	
Avg speed	24,96	kph	
Consumption	63,32	Wh/km @ 24,96 kph	
Distance	950,00	m	

### Flipsky prop 25

### Flipsky prop 30

Point	Time	Total distance	Wh usage
1	15:43:22	1510,00	139,6
2	15:43:50	1750,00	166,51
Duration	28s	Sec	
Avg speed	30,86	kph	
Consumption	112,13	Wh/km @ 30,86 kph	
Distance	240,00	m	

Prop ID	Test 1	Test 2	Test 3	Test 4	Average
2	57,2	55,4	55	54,4	55,5





General information				
Prop ID	3			
Brand	Flipsky			
Blades	3			
Pitch "	5			
Diameter "	5,8			
Mounting type	M8 locknut and shear pin			
Guard / adapter available	YES / YES			
Material finish	NA			
Meterial	Cast ALU			
Note	Recut			



Result overview			
Top speed in kph*	34,2		
Thrust in Kg	53,90		
W @ full*	4262		
Wh/km @ 25	60,98		
Wh/km @ 30	81,86		
Wh/km @ full**	85,43		
Balance / sound	Both depending on skill, balancer required		
Getting on plane	Very easy (9)		
*Top speed and power are taken from peak memorie			

\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



Prices and purchase info			
22,31 € including Tax, excluding shipping			
Requires a balancer and grinder. BG link to unmodified prop			



# Prop: 3 Flipsky recut Results

Point	Time	Total distance	Wh usage
1	15:28:41	2700,00	215,13
2	15:29:40	3130,00	241,35
Duration	59s	Sec	
Avg speed	26,24	kph	
Consumption	60,98	Wh/km @ 26,24 kph	
Distance	430,00	m	

## Flipsky prop recut 25

#### Flipsky prop recut 30

Point	Time	Total distance	Wh usage
1	15:25:21	1080,00	77,43
2	15:26:13	1500,00	111,81
Duration	52s	Sec	
Avg speed	29,08	kph	
Consumption	81,86	Wh/km @ 29,08 kph	
Distance	420,00	m	

#### Flipsky prop recut FULL

Point	Time	Total distance	Wh usage
1	15:26:13	1500,00	111,81
2	15:26:53	1870,00	143,42
Duration	40s	Sec	
Avg speed	33,30	kph	
Consumption	85,43	Wh/km @ 33,30 kph	
Distance	370,00	m	

Prop ID	Test 1	Test 2	Test 3	Test 4	Average
3	54,4	54,2	53,6	53,4	53,9





## Prop: 4 Highfly Overview

General information				
Prop ID	4			
Brand	Highfly			
Blades	3			
Pitch "	7			
Diameter "	6			
Mounting type	M8 locknut and shear pin			
Guard / adapter available	YES / YES			
Material finish	Anodised different colours			
Meterial	CNC ALU 6082			
Weight in Gr	XX			
Note	2023			



Result overview		
Top speed in kph*	38,2	
Thrust in Kg	39,00	
W @ full*	4269	
Wh/km @ 25	60,34	
Wh/km @ 30	65,88	
Wh/km @ full**	91,75	
Balance / sound	Well balanced and sililent	
Getting on plane	Medium (5)	
* <del>*</del> • • • • • • •		

\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



#### Prices and purchase info

Link

Price 17-7-2023

157,3 € including Tax, excluding shipping

High fly <u>Link</u>





# Prop: 4 Highfly Results

Point Time		Total distance	Wh usage
1	16:08:04	2680,00	208,13
2	<b>2</b> 16:09:54 3470,00		255,80
Duration	110s	Sec	
Avg speed	25,85	kph	
Consumption	60,34	Wh/km @ 25,85 kph	
Distance	790,00	m	

#### HighFly 3 balde ' 25 (gold)

### HighFly 3 balde ' 30 (gold)

Point	Time	Total distance	Wh usage
1	16:04:53	1180,00	85
2	16:05:33	1510,00	106,74
Duration	40s	Sec	
Avg speed	29,70	kph	
Consumption	65,88	Wh/km @ 29,70 kph	
Distance	330,00	m	

#### HighFly 3 balde ' FULL (gold)

Point	Time	Total distance	Wh usage
1	16:05:34	1520,00	108,51
2	16:06:06	1840,00	137,87
Duration	32s	Sec	
Avg speed	36,00	kph	
Consumption	91,75	Wh/km @ 36,00 kph	
Distance	320,00	m	

Prop ID	Test 1	Test 2	Test 3	Test 4	Average
4	37,6	38,2	39,8	40,4	39



## Prop: 5 Highfly Overview

General information				
Prop ID	5			
Brand	Highfly			
Blades	3			
Pitch "	6			
Diameter "	6			
Mounting type	M8 locknut and shear pin			
Guard / adapter available	YES / YES			
Material finish	Anodised different colours			
Meterial	CNC ALU 6082			
Weight in Gr	хх			
Note	2023			



Result overview		
Top speed in kph*	35,1	
Thrust in Kg	40,75	
W @ full*	4124	
Wh/km @ 25	58,11	
Wh/km @ 30	65,68	
Wh/km @ full**	77,34	
Balance / sound	Well balanced and sililent	
Getting on plane	Easy (7)	
*Top apood and power are taken from pools memoria		

\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



#### Prices and purchase info

Price 17-7-2023

157,3 € including Tax, excluding shipping

Link

High fly Link

EFOIL HOLLAND



# Prop: 5 Highfly Results

Point	Time	Total distance	Wh usage
1	16:21:15	2890,00	201,89
2	16:23:06	3680,00	247,80
Duration	111s	Sec	
Avg speed	25,62	kph	
Consumption	58,11	Wh/km @ 25,62 kph	
Distance	790,00	m	

## HighFly 3 balde x' 25 (gray)

## HighFly 3 balde x' 30 (gray)

Point	Time	Total distance	Wh usage
1	16:20:13	2380,00	170,92
2	16:20:46	2660,00	189,31
Duration	33s	Sec	
Avg speed	30,55	kph	
Consumption	65,68	Wh/km @ 30,55 kph	
Distance	280,00	m	

## HighFly 3 balde x' FULL (grey)

Point	Time	Total distance	Wh usage
1	16:18:28	1570,00	104,63
2	16:19:00	1890,00	129,38
Duration	32s	Sec	
Avg speed	36,00	kph	
Consumption	77,34	Wh/km @ 36,00 kph	
Distance	320,00	m	

Prop ID	Test 1	Test 2	Test 3	Test 4	Average
5	38,6	41,2	42,4	40,8	40,75



## Prop: 6 Highfly Overview

General information			
Prop ID	6		
Brand	Highfly		
Blades	3		
Pitch "	7		
Diameter "	6		
Mounting type	M8 locknut and shear pin		
Guard / adapter available	YES / YES		
Material finish	Anodised different colours		
Meterial	CNC ALU 6082		
Weight in Gr	XX		
Note	2022		



Result overview			
Top speed in kph*	37,8		
Thrust in Kg	40,05		
W @ full*	4292		
Wh/km @ 25	62,73		
Wh/km @ 30	76,40		
Wh/km @ full**	95,24		
Balance / sound	Generally okay balanced and silent		
Getting on plane	Medium (5)		

\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



#### Prices and purchase info

Link

Price 17-7-2023

Not available anymore

Currently not available





# Prop: 6 Highfly Results

Point	Time	Total distance	Wh usage
1	16:39:26	2780,00	211,64
2	16:41:18	3575,00	261,51
Duration	112s	Sec	
Avg speed	25,55	kph	
Consumption	62,73	Wh/km @ 25,55 kph	
Distance	795,00	m	

## HighFly 3 balde x' 25 (old)

## HighFly 3 balde x' 30 (old)

Point	Time	Total distance	Wh usage
1	16:35:48	1090,00	70,76
2	16:36:43	16:36:43 1520,00	
Duration	55s	Sec	
Avg speed	28,15	kph	
Consumption	76,40	Wh/km @ 28,15 kph	
Distance	430,00	m	

## HighFly 3 balde x' FULL (old)

Point Time		Total distance	Wh usage
1	16:36:48	1570,00	109,03
2	16:37:16	1860,00	136,65
Duration	28s	Sec	
Avg speed	37,29	kph	
Consumption	95,24	Wh/km @ 37,29 kph	
Distance	290,00	m	

Prop ID	Test 1	Test 2	Test 3	Test 4	Average
6	40,6	39,8	39,4	40,4	40,05





## Prop: 7 Highfly Overview

General information			
Prop ID	7		
Brand	Highfly		
Blades	2		
Pitch "	7		
Diameter "	6		
Mounting type	M8 locknut and shear pin		
Guard / adapter available	YES / YES		
Material finish	Anodised different colours		
Meterial	CNC ALU 6082		
Weight in Gr	XX		
Note	2022		



Result overview			
Top speed in kph*	36,7		
Thrust in Kg	38,55		
W @ full*	4096		
Wh/km @ 25	57,98		
Wh/km @ 30	68,11		
Wh/km @ full**	81,54		
Balance / sound	Generally okay balanced and silent		
Getting on plane	Easy (6)		

\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



#### Prices and purchase info

Link

Price 17-7-2023

Not available anymore

Currently not available





# Prop: 7 Highfly Results

Point	Time	Total distance	Wh usage
1	16:47:04	240,00	20,35
2	16:49:02	1080,00	69,05
Duration	118s	Sec	
Avg speed	25,63	kph	
Consumption	57,98	Wh/km @ 25,63 kph	
Distance	840,00	m	

## HighFly 2 balde x' 25 (OLD)

### HighFly 2 balde x' 30 (OLD)

Point	Time	me Total distance	
1	16:49:10	1150,00	72,82
2	16:49:55	1530,00	98,70
Duration	45s	Sec	
Avg speed	30,40	kph	
Consumption	68,11	Wh/km @ 30,40 kph	
Distance	380,00	m	

#### HighFly 2 balde x' FULL (OLD)

Point	Time	Total distance	Wh usage
1	16:49:55	1530,00	98,70
2	16:50:30	16:50:30 1880,00	
Duration	35s	Sec	
Avg speed	36,00	kph	
Consumption	81,54	Wh/km @ 36,00 kph	
Distance	350,00	m	

Prop ID	Test 1	Test 2	Test 3	Test 4	Average
7	38,2	39,4	37,8	38,8	38,55



## Prop: 8 Highfly Overview

General information			
Prop ID	8		
Brand	Highfly		
Blades	2		
Pitch "	7		
Diameter "	6		
Mounting type	M8 locknut and shear pin		
Guard / adapter available	YES / YES		
Material finish	Anodised different colours		
Meterial	CNC ALU 6082		
Weight in Gr	XX		
Note	2023		



Result overview			
Top speed in kph*	34,3		
Thrust in Kg	0,00		
W @ full*	3951		
Wh/km @ 25	57,19		
Wh/km @ 30	65,79		
Wh/km @ full**	78,80		
Balance / sound	Well balanced and sililent		
Getting on plane	Easy (6)		

\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



#### Prices and purchase info

Price 17-7-2023 Link 118,6 € including Tax, excluding shippingHigh fly Link or via EFH mail





# Prop: 8 Highfly Results

Point	Time	Total distance	Wh usage
<b>1</b> 17:06:11		2690,00	192,77
2 17:08:17		3590,00	244,24
Duration	126s	Sec	
Avg speed	25,71	kph	
Consumption	57,19	Wh/km @ 25,71 kph	
Distance	900,00	m	

### HighFly 2 balde x' 25 (new)

#### HighFly 2 balde x' 30 (new)

Point	Time	Total distance	Wh usage
1	17:05:31	2360	171,81
2	17:06:06	2650	190,89
Duration	35s	Sec	
Avg speed	29,83	kph	
Consumption	65,79	Wh/km @ 29,83 kph	
Distance	290,00	m	

#### HighFly 2 balde x' FULL (new)

Point	Time	Total distance	Wh usage
1	17:04:44	1930,00	139,18
2	17:05:21	2280,00	166,76
Duration	37s	Sec	
Avg speed	34,05	kph	
Consumption	78,80	Wh/km @ 34,05 kph	
Distance	350,00	m	

Prop ID	Test 1	Test 2	Test 3	Test 4	Average
8	41,2	39	39,4	39,2	39,7

Thrust measured in Kg



## Prop: 9 Highfly Overview

General information			
Prop ID	9		
Brand	Highfly		
Blades	2		
Pitch "	7		
Diameter "	6		
Mounting type	Click system with shear pin		
Guard / adapter available	NO / YES		
Material finish	Anodised different colours		
Meterial	CNC ALU 6082		
Weight in Gr	XX		
Note	Folding		

Result overview			
Top speed in kph*	36,5		
Thrust in Kg	39,70		
W @ full*	3973		
Wh/km @ 25	59,62		
Wh/km @ 30	68,51		
Wh/km @ full**	81,25		
Balance / sound	Well balanced and silent after opening.		
Getting on plane	Easy (6)		
*Top speed and power are taken from peak moments			

\* lop speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance. Here should be a picture

Here should be a picture

Prices and purchase info			
Price 17-7-2023	361,8 € including Tax, excluding shipping		
Link	High fly <u>Link</u> or via EFH <u>mail</u>		



# Prop: 9 Highfly Results

Point	Time	Total distance	Wh usage
1	20:52:19	390,00	28,25
2	<b>2</b> 20:54:04 1180,00		75,35
Duration	105s	Sec	
Avg speed	27,09	kph	
Consumption	59,62	Wh/km @ 27,09 kph	
Distance	790,00	m	

## HighFly 2 balde Fold' 25

### HighFly 2 balde FOLD' 30

Point	Point Time Total distance		Wh usage
1	20:54:04	1180	75,35
2	20:54:43	1530	99,33
Duration	39s	Sec	
Avg speed	32,31	kph	
Consumption	68,51	Wh/km @ 32,31 kph	
Distance	350,00	m	

### HighFly 2 balde FOLD FULL

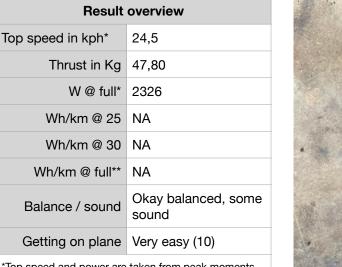
Point	Time	Total distance	Wh usage
1	20:55:40	1950,00	134,63
2	20:56:33	2470,00	176,88
Duration	53s	Sec	
Avg speed	35,32	kph	
Consumption	81,25	Wh/km @ 35,32 kph	
Distance	520,00	m	



## Prop: 10 Waydoo Overview

General information			
Prop ID	10		
Brand	Waydoo		
Blades	3		
Pitch "	4,5?		
Diameter "	6,3		
Mounting type	M8 locknut and shear pin		
Guard / adapter available	NO / NO		
Material finish	Powder coated black		
Meterial	Cast ALU		
Weight in Gr	XX		
Note	Old		





\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



# Prices and purchase info Price 17-7-2023 Unknown Link Available via Flying Fish Link





Prop ID	Test 1	Test 2	Test 3	Test 4	Average
10	47,4	48,8	47,2	47,8	47,8



## Prop: 11 Waydoo Overview

General information			
Prop ID	11		
Brand	Waydoo		
Blades	3		
Pitch "	7?		
Diameter "	4,7		
Mounting type	M8 locknut and shear pin		
Guard / adapter available	NO / NO		
Material finish	Black plastic		
Meterial	Plastic		
Weight in Gr	XX		
Note	New		



Result overview			
Top speed in kph*	34,5		
Thrust in Kg	28,85		
W @ full*	4145		
Wh/km @ 25	NA		
Wh/km @ 30	NA		
Wh/km @ full**	NA		
Balance / sound	Well balanced, some sound		
Getting on plane	Very hard (0) pumping required		

\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



#### Prices and purchase info

Link

Price 17-7-2023

Unknown

Available via Flying Fish Link

EFOIL HOLLAND



Prop ID	Test 1	Test 2	Test 3	Test 4	Average
11	29	28,6	28,4	29,4	28,85



## **Prop: 12 Hyper Drive Overview**

General information			
Prop ID 12			
Brand	Hyperdrive		
Blades	3		
Pitch "	7		
Diameter "	6,14		
Mounting type	M8 locknut and shear pin		
Guard / adapter available	NO / NO		
Material finish	Black/grey plastic		
Meterial	PA12-CF 3D		
Weight in Gr	XX		
Note	3D print		



Result overview			
Top speed in kph*	34,8		
Thrust in Kg	32,35		
W @ full*	3473		
Wh/km @ 25	NA		
Wh/km @ 30	NA		
Wh/km @ full**	NA		
Balance / sound	Okay balanced, some sound		
Getting on plane	Very hard (0) pumping required		
*Ten encod and newer are taken from neak memorie			

\*Top speed and power are taken from peak moments so results might differ from full power consumption \*\*Note, measurement of full speed consumption in based on short trips, which may result in less precise data compared to the 25/30kph tests that cover a greater distance.



Prices and purchase info		
Price 5-7-2023	89 € including Tax, excluding shipping	
Link	Order via <u>Link</u>	



Prop ID	Test 1	Test 2	Test 3	Test 4	Average
12	33	32,4	31,8	32,2	32,35





