

## PROPELLER TEST

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### BOAT DATA:

Beneteau 40 Oceanis

L.W.L. 11.00 meter

Depl. 8.5 Ton

### ENGINE DATA:

Yanmar 3JH4

39 HP @ 3000 rpm

Gear ratio 2.36:1

### TEST PROPELLERS:

(1) 3 Blade fixed propeller France helice 17 x 13 RH

(2) 3 Blade Flex O Fold folding propeller 17 x 14 RH

(3) 3 Blade Gori folding propeller 18 x 13 RH

### COMMENTS:

Speed measured by GPS

Engine rpm checked with tachometer on propeller shaft, with a +/- 30 rpm compared to engine tachometer.

### TEST DATE & PLACE:

September 12<sup>th</sup> 2007 in Oslo Norway

### TEST CONDITION:

Sunny, 17 degrees Celsius, light winds 2 – 3 m/sec.

### TEST RESULT NOTES:

In reverse, the Gori propeller is neutral on the rudder (No prop walk)

Fixed propeller gave noise and vibration from 2600 rpm and up.

Crash stop, from full speed ahead (8.1 knots), the Gori propeller was almost 5 seconds faster (26%) than the other propellers tested.

### PARTICIPANTS:

Even Larsen, Nor-Mar a/s

Runar Jensen, Sleipner Motor a/s

Lars Østergaard, Gori propeller a/s

Morten Jensen, Seil Magasinet

**TEST DATA:****BENETEAU 40 Oceanis with Yanmar 3JH4E**

- (1) 3 blade fixed propeller, France Helice 17 x 13 RH
- (2) 3 blade Flex O Fold folding propeller 17 x 14 RH
- (3) 3 blade Gori folding propeller 18 x 13 RH
- (4) 3 blade Gori folding propeller 18 x 13 RH in Overdrive.

Engine rpm +/- 30	(1) / Rpm	(2) / Rpm	(3) / Rpm	(4) / Rpm
1000	2.8 kn./1000	3.0 kn./ 973	2.8 kn./1000	3.5 kn. /1010
1200	3.3 kn./1159	3.4 kn./1165	3.2 kn./1175	4.2 kn. /1189
1400	4.0 kn./1404	4.2 kn./1410	4.1 kn./1383	4.8 kn. /1378
1600	4.7 kn./1583	5.3 kn./1608	5.0 kn./1578	5.8 kn. /1574
1800	5.4 kn./1786	5.6 kn./1791	5.6 kn./1786	6.5 kn. /1776
2000	6.1 kn./1982	6.2 kn./1968	6.0 kn./1968	7.0 kn. /1969
2200	6.5 kn./2173	6.4 kn./2174	6.5 kn./2169	7.4 kn. /2210
2400	7.1 kn./2374	6.9 kn./2371	7.0 kn./2375	7.8 kn. /2375
2600	7.5 kn./2575	7.4 kn./2578	7.3 kn./2595	8.2 kn. /2584
2800	7.8 kn./2766	7.9 kn./2774	7.7 kn./2797	N/A
3000	8.1 kn./2968	8.2 kn./2979	7.9 kn./2970	N/A
3118 Max.	8.3 kn.			
3044 Max.		8.3 kn.		
3131 Max			8.1 kn.	
2628 Max.				8.4 kn.
Stop length 3 blade fixed propeller	2.50	Boat length	18.9 sec.	
Stop length 3 blade Flex O Fold	2.50	Boat length	19.5 sec	
Stop length 3 blade Gori propeller	2.00	Boat length	14.5 sec.	