

## PROPELLER TEST

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### BOAT DATA:

X-Yacht Xc 42

L.W.L. 12,00 meter

Depl. 11.5 Ton

### ENGINE DATA:

Volvo Penta D2-55/SD

55 HP @ 3000 rpm

Gear ratio 2.19:1

### TEST PROPELLERS:

- (1) 3 Blade Gori propeller 20 x 13 LHS
- (2) 3 Blade Gori propeller 20 x 13 LHS w/o O.D.

### COMMENTS:

Speed measured by GPS

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

### TEST DATE & PLACE:

October 4<sup>th</sup>, 2016 Haderslev, Denmark

### TEST CONDITION:

Sunny, 14/15 degrees Celsius, light winds 2 – 3 m/sec. low current (+/- 0.5 knots)

### TEST RESULT NOTES:

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

Two test runs in each pitch. Up/Down Rpm/Speed noted are average

Both Gori propellers, were able to stop the boat in less than 1.5 boat length, from full speed ahead,

### PARTICIPANTS:

Niels Ditmar, Owner of boat  
Eric Qorning, BSI a/s  
John Lorentsen, BSI a/s  
Lars Østergaard, Gori propeller Aps

**TEST DATA:**

X Yacht, Xc 42, Equipped with Volvo Penta D2-55/SD

- (1) 3 blade Gori propeller 20 x 13 LHS (normal pitch)
- (2) 3 blade Gori propeller 20 x 13 LHS (over drive)
- (3) 3 blade Gori propeller 20 x 13 LHS (Curved edge) w/o OD
- (4) 3 blade Gori propeller 20 x 13 LHS (Straight edge) w/o OD

Engine rpm	(1) / Rpm	(2) / Rpm	(3) / Rpm	(4) / Rpm
1200	4.50 kn /1216	5,30 kn /1213	3.75 kn / 1221	3.60 kn /1202
1400	4.95 kn /1430	6.10 kn/ 1434	4.45 kn / 1428	4.40 kn /1409
1600	5.60 kn /1620	6.70 kn /1627	5.25 kn / 1617	5.20 kn /1620
1800	6,10 kn /1819	7.35 kn /1818	5.90 kn / 1821	5.85 kn/ 1818
2000	6.55 kn /2006	7.75 kn /2006	6.45 kn / 2013	6.40 kn/ 2015
2200	7.20 kn /2205	8,05 kn /2220	7.10 kn / 2217	7.00 kn/ 2207
2400	7.45 kn /2406	N/A	7.25 kn / 2410	7.20 kn/ 2401
2600	7.65 kn /2615	N/A	7.60 kn / 2588	7.65 kn/ 2603
2800	7.95 kn /2788	N/A	7.90 kn / 2785	7.85 kn/ 2806
3000	8,15 kn./2932	N/A	8.25 kn ./3020	8.30 kn./3019

2932 Max. 8.15 kn.

2220 Max. 8.05 kn.

3020 Max 8.25 kn.

3019 Max. 8.30 kn.

Stop length 3 blade Gori propeller (both) 1.5 boat length

Stop length 3 blade Flex O Fold 2+ boat length

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