

Engine Performance Report

Test Conditions

Length Overall 24.6'
Beam 8.5'
Draft 26"
Displacement 5,750
Fuel Capacity 75 gals
Water 30 gals
Boat Name N/A
Boat Type Planing
Hull Number US-FMLT2546A909

Air Temp 57
Wind Speed 5
Wind Direction South
Rel. Humidity 77%
Bar. Pressure 29.35
Sea Water Temp N/A
Wave Height 0
Tidal Current 0
Mar. Advisory 0

Boat Loading

Fuel 400 lbs
Water 30 g
Black 0
Gear 150 lbs
People 2
Est Total 950 lbs

Performance Summary

File Name Ranger tug 25
Test Date 06/18/2009
Technician C.J. Extine
Installation By Rangertugs
Test Location Lake Washington
Elevation -1 m
Max. Speed 19.1 knots
Idle to 4001 8.5 sec

Drive Train

Drive Gear and prop
Gear Mfg Kanzaki
Model KMH40A
Gear 2.04
Trolling No

Propeller Data

Manufacturer Acme
Material Bronze
Dia x Pitch 17 X 14
No of Blades 3
Cup Rating N/A
DAR/EAR N/A
Blade Rake N/A

Cylinder In Line
of 4
Bore x 84 mm x 90 mm
Displaceme 1.995 L
Cont. hp @ 85 kW
Max. hp @ 110 kW
Dry Weight 250 kg

General

Engine Serial
Engine ECU

N/A
N/A

Gear Serial Number
Engine Hours

N/A
1.65

RPM	Running Angle Degree	MPH Stat. Mi.	Knots Naut. Mi.	Boost Press kPa	Fuel Rate L/hr	Eng Load %	Coolant Temp °C	Air Intake Press Deg F	Exhaust BackPress "W.C.
IDLE	1	2.8	2.4	3.8	1.2	40	91	110	20
2000	1	7.8	6.8	19.0	5.9	51	88	115	29
2200	2.4	8.4	7.3	27.5	7.5	57	89	111	32.5
2400	3.4	9.2	8.0	39.9	9.3	62	89	110	39
2600	4.4	10.1	8.8	53.8	11.0	63	90	105	47.5
2800	5	11.7	10.2	68.5	13.1	64	91	102	55
3000	5.4	13.3	11.6	84.1	14.4	63	91	100	67.5
3200	5.4	14.7	12.8	104.6	16.8	68	92	85	87.5
3400	5.5	16.1	14.0	120.9	19.2	72	93	61	101
3600	5.6	17.4	15.1	135.2	22.2	79	94	56	104
3800	6	19.4	16.9	146.1	24.7	84	94	57	113
4000	5.7	20.9	18.2	150.2	27.0	93	95	92	117
WOT	5.4	22.0	19.1	152.5	28.5	100	96	92	124

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Presented by a Yanmar Marine Performance Report Technician