

0330 - Preliminary Range Calculation

Project: Esquire 35

Project nr: 6696 Rev: P1 Date: 29/05/2012

Speed	Total Brake power	Total Brake power	Weather allowance	Total Fuel consumption main engines	Fuel consumption main engine incl margin	Total fuel capacity	Fuel capacity available for range	Duration	Range
1	2	3	4	5	6	7	8	9	10
kts	kW	hp	%	l/hr	l/hr			hrs	nm
10.0	84.0	112.6	10%	22.0	23.1	430	387	16.8	168
15.0	156.0	209.2	10%	39.2	41.2	430	387	9.4	141
20.0	208.0	278.9	10%	53.2	55.9	430	387	6.9	139
22.0	228.0	305.7	10%	58.0	60.9	430	387	6.4	140
24.0	248.0	332.6	10%	64.0	67.2	430	387	5.8	138
26.0	268.0	359.4	10%	72.0	75.6	430	387	5.1	133
28.0	296.0	396.9	10%	81.2	85.3	430	387	4.5	127
30.0	324.0	434.5	10%	92.0	96.6	430	387	4.0	120



- 1) Speed as considered in normal operation in knots
- 2) Brake power in kilowatt (taken from speed and power analysis)
- 3) Brake power in horsepower (taken from speed and power analysis)
- 4) Additional bad weather allowance (percentage)
- 5) Fuel consumption main engines liters/hour, based on prop demand curve engine manufacturer
- 6) Fuel consumption main engines liters/hour, based on prop demand curve engine manufacturer, incl. margin
- 7) Total fuel capacity in liters
- 8) Fuel capacity available for range (90% of total fuel capacity) in liters
- 9) Duration calculated from total fuel consumption/hours and available fuel capacity for range
- 10) Estimated range in nautical miles

Range

Main engines

Generators

Notes