Ship characteristics

Type of ship Condition Ship No.		Azipod Cruise Vessel Service
Displacement	m^3	43437
Length between Perpendiculars	m	260.6
Length overall	m	292.5
Breadth moulded	m	32.2
Depth moulded	m	16.0
Draught fore/aft	m	8.01/8.01
Wetted Surface	m^2	10324
Frontal wind Area	m^2	1560
Lateral wind Area	m^2	9598
Block Coefficient based on Lpp	-	0.646
Trim by the Stern	%	0
Metacentric Height	m	-0.048
LCB, % of LPP forw. of LPP/2	%	2.30
Radius of Inertia, % of LPP	%	25.0
Type of Engine		Diesel Electric
Number of Propellers		2
Type of Propellers		FP, Azimuthing
Direction of Rotation		Inwards
Number of Blades		4.2
Propeller Diameter	m	1.1607
Pitch Ratio at 0.7R		4
Area Ratio		0.600
Shaft Power (ahead) total	kW	2 x 17600
Number of Rudders		2
Type of Rudders		Azimuthing Props.
Position		7.0 m from CL
Area of Rudder	m^2	-
100 x total rudder Area/LBP x T		-
Turning Velocity of Rudder (two Pumps)	deg/s	7.5
Max. rudder Angle	deg	+/-180 or +/- 35
Anchor Weight	kg	31500
Chain Weight	kg/m	552
Number of bow Thrusters		3
Nominal bow thruster Power	kW	3 x 1910 ~3 x 26 t
Number of stern Thrusters		0
Nominal stern thruster Power	kW	-

Equilibrium Speeds

Ship Engine Setting	Propeller		Speed, Knots	
	RPM	Pitch	1000 m	7.20 m
1.0	137	1.1607	24.1	Grounded
0.8	114	"	20.4	Grounded
0.5	75	"	13.4	10.3
0.25	37	"	6.5	5.2
0.125	16	"	2.8	1.8
-0.125	-16	"	-1.9	-1.6
-0.25	-37	"	-4.8	-3.9
-0.5	-75	"	-9.9	-8.5
-1.0	103	"	-13.6	-11.4

Propeller RPM and pitch, and equilibrium speeds for various handle settings for two water depths: deep water and shallow water corresponding to 1.2 times the mean draught.

Abbreviations

LBP, LPP	Length between perpendiculars
LOA	Length over all
B	Breadth
Bmld	Moulded Breadth
Ta	Draft aft
Tf	Draft fore
T, Tm	Draft Average
LCB	Longitudinal center of buoyancy
FP	Fixed pitch
CP	Controllable pitch
CL	Center Line
SB	Starboard side
PS	Port side