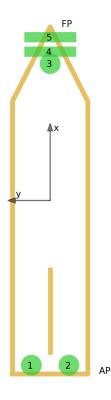
DP report of : Ratownik

DNV Level 1

Hull data

| Data | Symbol | Unit | Value |
|---|------------|------|--------|
| Length between perpendiculars | Lpp | m | 86.56 |
| Maximum breadth at waterline | В | m | 18.8 |
| Summer load line draft | Т | m | 5 |
| Longitudinal distance between the fore most | Los m | | 95.85 |
| and aft most point under water | | | |
| Longitudinal position of Los/2 | XLos | m | -0.13 |
| Half bow angle of enterance | Bow angle | deg | 27.4 |
| Water plane area coeffcient behind miship | CWL_aft | - | 1.034 |
| Frontal projected wind area | AF_wind | m2 | 391.7 |
| Longitudinal projected wind area | AL_wind | m2 | 1203.3 |
| Longitudinal position of the area center of | xL_wind | m | 6.014 |
| AL_wind | | | |
| Longitudinal projected submerged current | AL_current | m2 | 440.9 |
| area | | | |
| Longitudinal position of the area center of | xL_current | m | 4.717 |
| AL_current | | | |
| x position of the skeg aft edge | x skeg | m | -37.8 |
| y position of the skeg aft edge | y skeg | m | 0 |



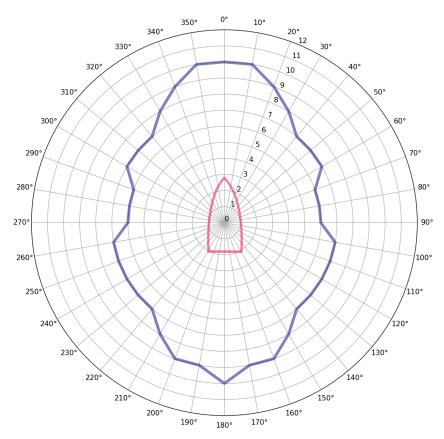
Thrusters data

| Thruster No. | 1 | 2 | 3 | 4 | 5 |
|--|---|--|--|---|---|
| Thruster user name | thr1 | thr2 | thr3 | thr4 | thr5 |
| Туре | Azimuth without nozzle | Azimuth without nozzle | Azimuth with nozzle | Tunnel thruster | Tunnel thruster |
| Characteristic | Only forward mode *except tunnel thruster | Only forward mode *except tunnel thruster | Only forward mode *except tunnel thruster | If tunnel thruster - option 1 - broken inlet | If tunnel thruster - option 1 - broken inlet |
| Rudder type x [m] y [m] z [m] D [m] Brake Power [kW] Type for mech. eff. | No rudder -41.076 4.69 1.54 3.1 1325 tunnel or azimuth | No rudder -41.076 -4.69 1.54 3.1 1325 tunnel or azimuth | No rudder 34.12 0 -1.1 1.65 880 tunnel or azimuth | No rudder 37.12 0 2 1.74 900 tunnel or azimuth | No rudder 40.72 0 2 1.74 900 tunnel or azimuth |
| Rudder surface [m2] | 0 | 0 | 0 | 0 | 0 |

Forbidden zones: thr 1 : 67 - 113 $\,$, thr 2 : 247 - 293 $\,$, thr 3 : None $\,$, thr 4 : None $\,$, thr 5 : None

Results

DP Capability



| Angle | DP number | Wind speed [m/s] | Wave height [m] | Peak period [s] | Current speed [m/s] |
|-------|-----------|------------------|-----------------|-----------------|---------------------|
| 0 | 10 | 28.4 | 9.5 | 11.5 | 0.75 |
| 10 | 10 | 28.4 | 9.5 | 11.5 | 0.75 |
| 20 | 9 | 24.4 | 7.4 | 10.5 | 0.75 |
| 30 | 8 | 20.7 | 5.7 | 10.0 | 0.75 |
| 40 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 50 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 60 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 70 | 6 | 13.8 | 3.1 | 8.5 | 0.75 |
| 80 | 6 | 13.8 | 3.1 | 8.5 | 0.75 |
| 90 | 6 | 13.8 | 3.1 | 8.5 | 0.75 |
| 100 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 110 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 120 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 130 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 140 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 150 | 8 | 20.7 | 5.7 | 10.0 | 0.75 |
| 160 | 9 | 24.4 | 7.4 | 10.5 | 0.75 |
| 170 | 9 | 24.4 | 7.4 | 10.5 | 0.75 |
| 180 | 10 | 28.4 | 9.5 | 11.5 | 0.75 |
| 190 | 9 | 24.4 | 7.4 | 10.5 | 0.75 |
| 200 | 9 | 24.4 | 7.4 | 10.5 | 0.75 |
| 210 | 8 | 20.7 | 5.7 | 10.0 | 0.75 |
| 220 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 230 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 240 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 250 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 260 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 270 | 6 | 13.8 | 3.1 | 8.5 | 0.75 |
| 280 | 6 | 13.8 | 3.1 | 8.5 | 0.75 |
| 290 | 6 | 13.8 | 3.1 | 8.5 | 0.75 |
| 300 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 310 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 320 | 7 | 17.1 | 4.2 | 9.0 | 0.75 |
| 330 | 8 | 20.7 | 5.7 | 10.0 | 0.75 |
| 340 | 9 | 24.4 | 7.4 | 10.5 | 0.75 |
| 350 | 10 | 28.4 | 9.5 | 11.5 | 0.75 |
| 360 | 10 | 28.4 | 9.5 | 11.5 | 0.75 |