



## PRINCIPAL PARTICULARS

|              |                                                                                                                                        |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Year Built   | : 2018                                                                                                                                 |
| Builder      | : PaxOcean Engineering Zhuhai Co., Ltd                                                                                                 |
| Designer     | : Robert Allan Ltd                                                                                                                     |
| Class        | : Lloyd's Register of Shipping ✱ 100A1 Tug, Escort Tug, Fire Fighting Ship 1 with Water Spray ✱ LMC UMS, *IWS for unrestricted voyages |
| Flag         | : Singapore                                                                                                                            |
| Call Sign    | : 9V5832                                                                                                                               |
| IMO No.      | : 9830472                                                                                                                              |
| Official No. | : 401428                                                                                                                               |

## DIMENSIONS

|                    |                         |
|--------------------|-------------------------|
| Length overall     | : 32.00m                |
| Breadth moulded    | : 12.00m                |
| Depth moulded      | : 5.42m                 |
| Design Draft       | : 4.20m (from baseline) |
| Navigational Draft | : 5.53m (max)           |
| Gross Tonnage      | : 496                   |
| Net Tonnage        | : 148                   |

## MACHINERY (INSTALLED WITH CCTV SYSTEM)

|                 |                                              |
|-----------------|----------------------------------------------|
| Main Engines    | : 2 x 2525kW Caterpillar 3516C(HD) @ 1800rpm |
| Generators      | : 2 x 265kW Cummins QSM11D(M) @ 1500rpm      |
| Propellers      | : 2 x Schottel SRP 510 FP                    |
| Air compressors | : 2 x Sperre HL2/77A                         |

## ACCOMMODATION (FULLY AIR-CONDITIONED)

|                       |                                   |
|-----------------------|-----------------------------------|
| Officers              | : 2 x1 berth                      |
| Crew                  | : 4 x 2 berths                    |
| Total                 | : 10 berths (MLC 2006 compliance) |
| Sewage system         | : Taiko Kikai SBH-15              |
| LNG protection system | : Detcon X40 with 6 gas detectors |

## FIREFIGHTING/ANTI-POLLUTION EQUIPMENT

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| FiFi pump (PTO from stbd M/E) | : 1 x FFS SFP 300x400PC of cap 2800m³/hr @ 119m head c/w water curtain |
| FiFi monitor                  | : 2 x FFS 1200/300 dual purpose foam/water of cap 1200m³/hr @ 10 bar   |
| Oily water separator          | : Taiko Kikai USH-05                                                   |
| Oil dispersant system         | : Tetra, V-jet nozzle type (P&S)                                       |

## PERFORMANCE DATA

|                      |                |
|----------------------|----------------|
| Speed @ 100%MCR      | : 13.69 knots  |
| Bollard pull (ahead) | : 82.25 tonnes |
| (astern)             | : 78.25 tonnes |

## TANK CAPACITIES

|            |           |
|------------|-----------|
| Fuel oil   | : 205.4m³ |
| Freshwater | : 32.6m³  |
| Dispersant | : 6.6m³   |
| Foam       | : 6.6m³   |

## TOWING AND DECK EQUIPMENT

|                                   |                                                                                                                                                      |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tow winch / anchor windlass (fwd) | : Rolls Royce heavy duty rendering/recovery escort winch ETWH 2000/800/AW24G2, hydraulic single split drum, two chain wheels & one warping head type |
| Rope capacity                     | : 220m + 150m x 88mm dia synthetics rope @ 8 layers                                                                                                  |
| Recovery (L/M/H)                  | : 80T@8m/min 33T@18m/min 9T@53m/min                                                                                                                  |
| Rendering (L/M/H)                 | : 117T@-18m/min 50T@-35m/min 15T@-84m/min                                                                                                            |
| Brake Holding                     | : 200 tonnes                                                                                                                                         |
| Anchor windlass                   | : 24mm Grade 2 chain pull - 2.5T @ 0~9m/min                                                                                                          |
| Brake Holding                     | : 27.0 tonnes                                                                                                                                        |
| Tow winch (aft)                   | : Rolls Royce TW 2000/100H single drum & 1 warping end                                                                                               |
| Drum capacity                     | : 720m x 52mm Dia SWR @ 11 layer                                                                                                                     |
| Rated pull (L/H)                  | : 14.0T @ 30m/min / 6.0T @ 63m/min                                                                                                                   |
| Deck crane                        | : Palfinger PK12000M SWL – 1.7T @ 6.1m outreach                                                                                                      |

## RADIO AND NAVIGATIONAL EQUIPMENT (GMDSS – A1+A2+A3)

|                    |                              |
|--------------------|------------------------------|
| Radar              | : Furuno X-Band FAR1518      |
| SSB transceiver    | : Furuno FS -2575            |
| VHF transceiver    | : 2 x Furuno FM-8900S w/ DSC |
| Echo sounder       | : Furuno FE 800              |
| Immarsat C         | : Furuno Felcom-18           |
| Navtex receiver    | : Furuno NX-700A             |
| Chart Plotter      | : Furuno GP-1870             |
| EPIRB              | : McMurdo E5                 |
| SART               | : McMurdo S5                 |
| Anemometer         | : Walker 2050 MK2            |
| PA/Talkback System | : Vingtor SPA-V2 & ETB-10    |
| Magnetic compass   | : Saura Keiki MR-150A        |
| Satellite compass  | : Furuno SC-50               |
| Auto pilot         | : Anschutz Nautopilot - NP60 |
| AIS                | : Furuno FA-170              |
| GPS                | : Furuno GP-170              |
| BNWAS              | : Furuno BR 500              |
| Speed Log          | : Furuno DS-80               |
| Hand-held VHF      | : 2 x McMurdo R5             |

*Note: The information and sketches in this document are given in good faith without any express, implied or statutory warranty or condition.*