

DIVERSE MARINE STORM CLASS CTV

Offshore Wind Crew Transfer Vessel

07-2025



Validated Performance

During the CFD process, the design team assessed many options to reduce hull resistance and as a result the hull form dismisses a conventional chine construction in favour of a rounded bilge type design. In CFD this resulted in a 11% reduction in resistance at transition speed, commonly referred to as 'hump speed' and a 7% reduction in resistance at operational speed. Reduction in resistance results in a reduction of fuel burn and CO2 emissions speed for speed.



The Storm Class is configured with a balanced compromise of internal outfit and large forward cargo deck. A large resiliently mounted superstructure accommodates a step free forward access door to the bow of the vessel. A spacious passenger saloon with tiered seating, large galley, and mess area. The saloon has large, double-glazed windows to maximise passenger comfort and reduce motion sickness and is fitted with motion sensors connected to the vessel's AI based motion and performance monitoring system.



The main deck is 'step free' for the technicians with a large forward deck capable of accommodating 10ft and 20ft containers, main deck crane, pressure washer system and bow transfer area with a cupped Buoyant Works bow fender system to maximise transfer capability. The fuel transfer system has a reel below the main deck to maximise reliability.

The Diverse Marine Storm Class CTV has been developed using 20 years of experience of such craft in combination with designer, builder, multiple CTV operators, wind farm developers and prime contractors to meet construction and O&M project requirements.

Extensive CFD has been carried out to develop the hull form that incorporates an ultra-fine entry for excellent head sea performance and tower access but with high reserves of buoyancy above the main chine to provide for equally good following and stern quarter sea keeping performance.

The hull form has been optimised to maximise efficiency without compromising performance ensuring the form is well suited to future alternative fuel and mixed fuel installations. The high bow and low propulsion line ensure impressive access limits whilst a resilient deckhouse provides a safe and quiet environment for crew and technicians during transit and transfer.

Available as Quad IPS, Quad Hybrid IPS, Twin IPS Professional Hybrid, Twin CPP, Twin CPP Hybrid and in the future alternative fuels leading to full electric to cater for different end user requirements and budgets.

DIVERSE MARINE STORM CLASS

01-2025

Offshore Wind Crew Transfer Vessel

GENERAL

Construction Material	Aluminium
Superstructure Mounting	Resilient
Classification	Bureau Veritas 1+ Hull • Mach Wind Farm Service Ship-SI Sea Area 3
Flag	MCA Workboat HS-OSC

DIMENSIONS

Length Overall	27.60m
Beam Overall	10.00m
Depth at Midships	4.10m
Maximum Draft	1.60m excl. propulsor
Lighthouse Displacement	85.63T
Fully Laden Displacement	133.90T
Cargo Area	100m²
Deck Load	2T/m²
Crew	3-4
Industrial Personnel	24

TANK CAPACITIES

Marine Gas Oil	21 m³
Fresh Water	2 m³
Grey Water	1 m³
Black Water	1 m³
Bilge/Dirty Water	0.7 m³
AdBlue/UREA	2 m³

PROPULSION (Base Vessel)

Main Engines	4 x Volvo Penta IPS1050
Installed Power	3352kW
Gearboxes	4 x Volvo Penta IPS 1.99:1
Propulsion	4 x Volvo Penta IPS30 Drives
Propellers	8 x Volvo Penta Q2
Speed Sprint	28.0 kts (Condition 4)
Speed Service	25.0 kts (Condition 3)

ELECTRICAL EQUIPMENT

Network	24v DC, 400/230V 50Hz AC
Generator Sets	2 x BETA GEN49 39kW

DECK EQUIPMENT

Anchor	1 x 150kg VHHP
Anchor Winch	Hercules AAW-150
Deck Crane	TMP 900XL
Bow Centre Fender	Buoyant Works
Bow Shoulder Fender	Buoyant Works
Side Fender	Buoyant Works
Pressure Washer	30-200 bar, 400v, 16l/min FW/SW
Fuel Transfer System	Integrated, Below Deck Reel

FIRE FIGHTING

Engine Space	STAT-X
Fire Pump	1 x DESMI 416l/min, 400v
	1 x DESMI 250l/min, 400v
	Class/Flag Requirements
Loose Extinguishers	

ACCOMMODATION

Main Deck	3 x Twin Cabins (6 Berth) 3 x Internal Stores 1 x External Stores 2 x Heads/Shower Spaces 24 x KPM DS100 c/w 4 Point 1 x Galley & Mess Area 2 x PAX Storage Rack DM Command Console 3 x KPM DS100 c/w 4 Point 1 x Chart Table Area 1 x Crew Mess Area
Wheelhouse	Toshiba Air Cooled Reverse Cycle, Underfloor Heating Throughout + Radiators
Air Conditioning	
Heating	

NAVIGATION & COMMUNICATION

Main Radar	Furuno FAR2218B
Main Electronic Chart	Furuno FMD3100
Second Radar	Furuno DRS4DNXT
Second Electronic Chart	Furuno Time Zero Dual TZ Pro Work
Monitors	2 x Hatteland 24"
	2 x Furuno TZT3 16FTouch 3
Navtex	Furuno NX700B
DGPS	Furuno GPI70
AIS	Furuno FA170 Class A
Compass	Furuno SC70 Satellite
Communication	2 x Icom GM600 Class A
MF/HF	1 x Icom GM800 Class A
Log	1 x Walker 7070
Autopilot	Volvo Penta
Talkback	Phontec 3102 20 Way
Echosounder	Furuno FE800
CCTV	16 x IP67 HD + NVR
Internet	Starlink Satellite Array
Passenger Entertainment	Freeview & Radio/DAB
Communication	2 x Icom GM600 Class A
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