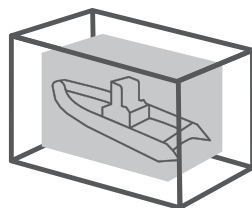




## Fire Fighter Launch Recovery System

The Cube™



Multi-Mission Module

## Complete Cube™ - ready launch and recovery system with integrated painter line for work/transfer boat. Fits in a 40' Cube-ready mission bay.

### Fast and safe deployment of firefighting boat

In an emergency it is important for navy vessels to be able to launch their firefighters in a fast and safe manner. The SH Defence launch and recovery system (LARS) with integrated painter line is a versatile solution that can be used for the fast and safe deployment of a variety of boat types.

In this instance, the SH Defence LARS with integrated painter line is used in combination with a firefighting boat manufactured by Tuco Marine Group, enabling quick and safe deployment of crew for firefighting operations. The LARS consists of a Cube™ Engineered Frame, an SH Defence davit crane with integrated painter line and a ProZero 12m DC Light Pilot boat from Tuco Marine Group.

The SH Defence launch and recovery system with integrated painter line is designed according to DNV GL ST-0378 Offshore and platform lifting appliances and complies with the SOLAS Convention.

### Cube-ready, easy connection

The system is Cube ready and only requires a 40' Cube-ready mission bay including the fully automatic twist lock system and standard connection cabinet CubedIn™. The Cube™ Engineered Frame comes with compatible outlets allowing for easy connection to the mission bay connection cabinet CubedIn™.

### Safe transport and controlled deployment

The firefighting boat is secured in a cradle and connected to the davit boom during voyage. At deployment of the firefighting boat, the vessel crew operates the davit from the mission bay control panel. The davit crane lifts the firefighting boat out of the cradle and starts lowering the boat down the side of the vessel. When the davit boom is clear of the mission bay and vessel hull, the end of the boom, to which the painter line is attached, is extended to provide optimum angling of the painter line for safe deployment of the firefighting boat when it reaches the water.

### Cube™ Engineered Frame

The Cube™ Engineered Frame is provided with corner castings enabling secure sea fastening by means of the fully automatic twist-lock system developed by SH Defence. The frame is customised to withstand the loads

introduced by the davit system. The surface of the Cube™ Engineered Frame is made of glass-reinforced plastic (GRP) grating, which provides a very strong and anti-slip surface.

### SH Defence davit

The SH Defence davit is a compact system supplied with hydraulic pump unit (HPU) and hydraulic control panel (HCP) mounted on the frame. The hydraulic lowering of the davit structure reduces the height of the davit, and the base of the davit is embedded in the frame to reduce the structure height even further.

As an option, the system can be delivered in a NORSOK R-002 compliant setup, introducing gravity lowering with hydraulic braking. This eliminates wear on the system and enables use of stored mechanical power.

### Firefighting boat

The firefighting boat is a ProZero 12m DC Light Pilot from Tuco Marine Group. It is one of a variety of available models. For further information, please visit Tuco Marine Group's website, [www.tuco.dk](http://www.tuco.dk).

Description	Value
<b>Cube Engineered Frame</b>	
Manufacturer	SH Defence
Dimensions (L x W x H)	12192 mm x 4900 mm x 6058 mm
<b>Davit</b>	
Manufacturer	SH Defence
Lifting capacity (SWL)	17 MT
Extension beyond Cube™ edge	3000 mm
<b>Fast rescue boat</b>	
Manufacturer	Tuco Marine Group
Boat length	12000 mm
Boat width	3000 mm



## PRO:ZERO 12M DC - LIGHT PILOT



Info - #5002:

Build year:	2015
Length overall:	12.0 m
Beam overall:	3.0 m
Draft (full load)	0.95 m
Engine:	1 x Volvo Penta D6 330hk



# PRO:ZERO 12M DC - LIGHT PILOT #5002 - SPECIFICATION

## DIMENSIONS:

Length, Overall: 12.0 m  
Beam Overall (with fender): 3.0 m  
Draft (full load, hull): 0.95 m  
Displacement (full load): 6.400 kg  
Cabin: 4, air supported seats

## OPERATIONAL FEATURES

Speed (max): +27 kt  
Fuel capacity: approx. 350 ltr.

## HULL, DECK AND SUPERSTRUCTURE:

The boat is made of a combination of glass- and carbon fibre as sandwich construction with PVC as core material.

## FENDER:

The fender is composed of rigid foam filled profile, covered with PUR, to guarantee maximum buoyancy. The fender has a D shape profile to increase the internal usable beam.

## DECK:

Composite deckhouse featuring seats for passengers and crew.  
Both decks can be accessed from the cabin.  
Removable deck sections to access bow thruster compartment and fuel tank.  
Stowage for mooring equipment.  
Railings and transfer ladders.  
5 mooring bites.  
Foldable mast.  
Decks are self bailing.  
Navigational lights.  
Three mooring cleats.



## TECHNICAL:

### ENGINES, PROPULSION, STEERING & MANOUVERING

1 x Volvo Penta D6 330hk  
1x Craftsmann side thruster  
Complete engine instruments with RPM, temperature, oil pressure and voltmeter for start batteries supplied by engine manufacturer.

### FUEL TANK:

Integrated composite approx. 350litre tank with hatch and filling protection.  
Electronic fuel gauge for tank.  
All fuel systems are pressure tested.

### ELECTRICAL SYSTEM & LIGHTING:

All electrical wiring in marine cable.  
12-volt electrical system.  
Windshield wiper with interval relay, standing position.  
Internal light in cabin.  
Work light, type LED.  
Search light installed in front of cabin  
Integrated 220V shore charge system, including 20m shore cable.  
Inverter for 220V outlet in cabin  
Main switches with separate battery systems for start, navigation / consumption.

### NAVIGATION & ELECTRONIC EQUIPMENT

1 x 12" Chart plotters RayMarine E125  
1 x Ray49E radio, 1x Ray218E radio with hailing horn  
1 x closed 4 kw radome  
Depth sounder  
1 x Evolution autopilot  
1 x Plastimo compass.  
1 x Sailor VHF

### SECURITY EQUIPMENT:

Automatic and manual bilge pump system.  
Fire extinguisher at helmsman station. SeaFire module in engineroom. 6 pax Zodiac liferaft.

