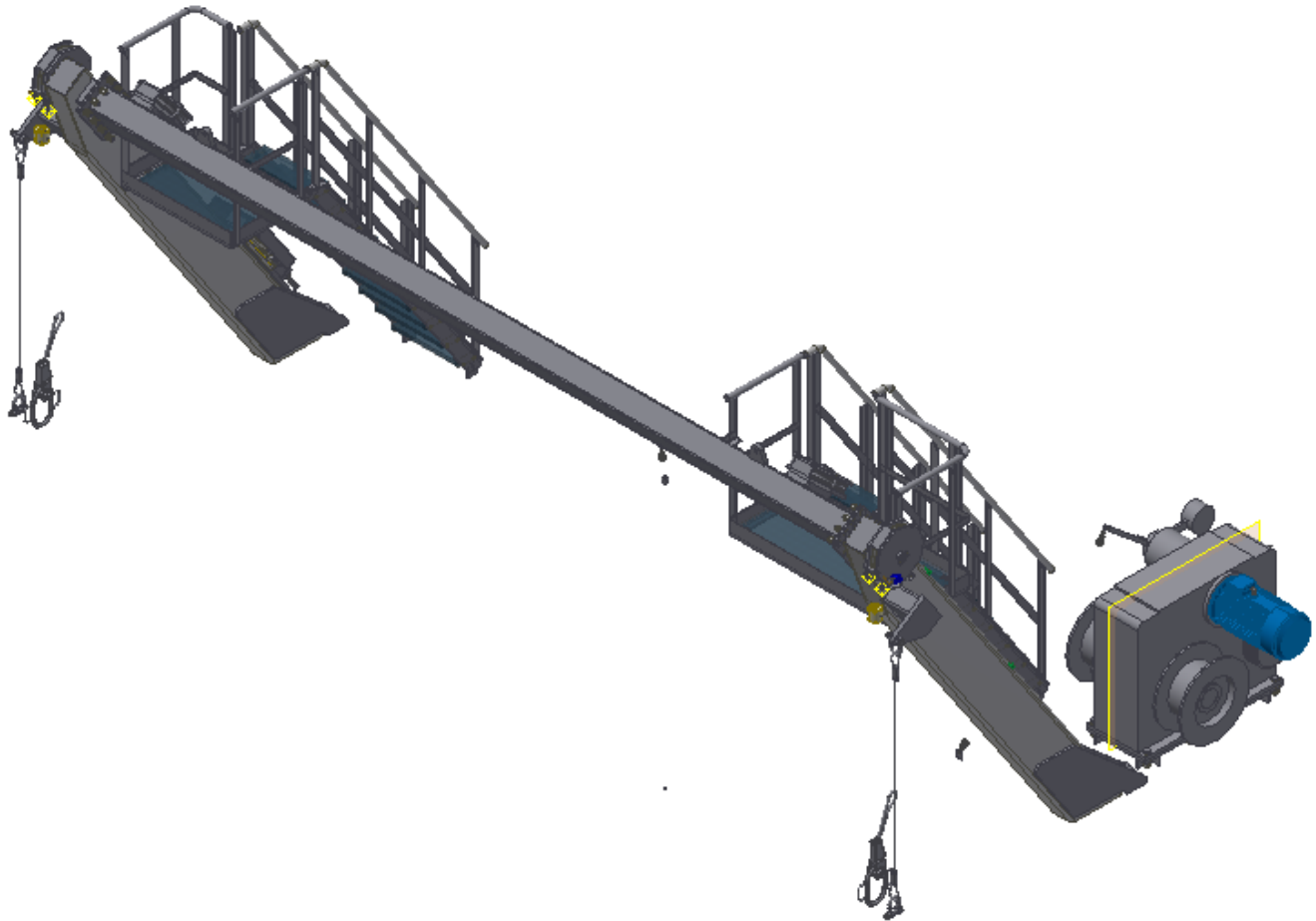




**VIKING
NORSAFE**
Boats and davits

Enterprise No.: NO940411696
www.VIKING-life.com

D-140 – Cantilever Lifeboat Davit with NW-150



TECHNICAL SPECIFICATION

VIKING Norsafe Life-Saving Equipment Norway AS
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VIKING Project No.: TBA

VIKING Doc. No.: TSD-0068

Rev. Date: 26.10.2021

Rev. No: 5

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1. REGULATION AND CERTIFICATION

Applicable rules and regulations In accordance with IMO/ SOLAS requirements, LSA Code and European Council Directive 2014/90/EU on Marine Equipment (MED)

| | |
|--------------------------|---|
| Certificate | MED |
| Other certificate | Class certificate or flag acceptance on request |

2. DAVIT SPECIFICATION

2.1. GENERAL DAVIT

| | |
|--|--|
| Type | Cantilever Lifeboat Davit |
| Model | D-140 |
| Application | Conventional Lifeboat handling |
| Drawing reference | G-500255 |
| Execution | Gravity lowering davit |
| Boarding position | Inboard on deck level |
| Operating position | From deck side and from inside the boat (Gravity lowering) |
| Davit system weight (Approx.) | 7000 kg, davit incl. winch (dry weight) |
| Safe Working Load (SWL) | 15290 kg |
| Trim / list conditions | 20° / 20° |
| Max. lowering height | 60 m (including 20°/20° trim/list condition) |
| Operation temperature | -20°C till +45°C (other range on request) |
| Hoisting speed | 0~5 m/min |
| Min. lowering speed | According to SOLAS regulation ($S = 0.4 + 0.02H$) |
| Manual hoisting | By manual hand-cranking |
| Wire sheaves | Galvanized, equipped with ball bearings |
| Installation | 5 (five) deck welding points |
| Deck reinforcement requirements | See general arrangement drawing |
| Davit system H / W / D | See general arrangement drawing |
| Deck space required | See general arrangement drawing |

The Viking Norsafe Cantilever Lifeboat Davit system is especially designed for safe and efficient launching and retrieval of a Viking Norsafe Conventional Lifeboat. The davit system is designed for long time operation in a tough and corrosive marine/offshore environment. The davit system is designed to fulfil all requirements as given in latest SOLAS/IMO requirements.

The system will allow:

- Launch of lifeboat in maximum load condition
- Gravity lowering of the loaded lifeboat independent of external power supply
- Retrieval of lifeboat with a crew of three persons using electric power
- Retrieval of the lifeboat by manual hand-cranking
- Optional approval for rescue function, according to latest SOLAS regulations



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The davit comprises of two fixed arms and an electrically powered winch operating two wire falls. The davit is intended for lifeboats placed onboard platforms and similar installations, where fixed davit arms offer the best solution.

The davit is designed to achieve optimum performance in terms of safety and reliability, and minimal maintenance levels. The davit is designed to minimize noise emission and provide straightforward service access.

To activate the davit, push and hold down the appropriate button to cause the desired operation. When the button is released, davit operation will cease immediately.

A thermal overload relay in the starter cabinet protects the electrical motor against overheating in case of excessive loads.

The winch is fitted with a one-way clutch. In the event of power loss during hoisting, the brake will automatically activate, and davit motion will stop. A centrifugal brake is located on the winch. The brake controls the speed of descent for the lifeboat. The brake is enclosed and provides reliable operation in all climate conditions.

Electrical limit switches are used to cut power to the winch, if the boat is hoisted above stowage height.

Electrical limit switches will prevent the boat from being hoisted above its upmost position / stowed position. Electrical limit switches on the winch provide failsafe operation of the hand crank.

2.2 WINCH AND WIRE

| | |
|--|--|
| Type | NW-150 winch |
| Drawing reference | G-501209 |
| Wire rope type | Galvanized, rotation resistant (certified item) |
| Wire rope diameter, MBL and spec. | Ø 28 mm, MBL 450 kN, 1960N/mm ² |
| Inner / outer wire end | Secured to drum / Wedge socket and safety wire clamp |
| Wedge socket | Included |
| Master link w/handle | Included (certified item) |

2.3. ELECTRICAL

| | |
|-----------------------------------|--|
| Electric power supply | 440V/3ph/60Hz (other on request) |
| Electrical cabinet | IP56 |
| Remote control | IP56 |
| Limit switch | IP56 |
| Power consumption | 30 kW |
| Starting method | DOL - Direct on line |
| Duty rating | S2-10min |
| Motor space heating | Included, 40W |
| Electrical cabinet heating | Heat loss from 42V transformer |
| Wiring | Included, (only power supply cable required) |
| Cables type | Marine type, flame retardant halogen free |
| Transformer | Included, 440/42VAC (other on request) |



Emergency stop Yes, mushroom type

2.4. PAINTING SYSTEM

| | |
|--|---|
| Blasting | SA 2.5 |
| Specification | ISO 12944-5 |
| System | Marine paint system (Jotun paint system) |
| Coating Two (2) layers (other on request) | Layer 1 Penguard universal, Alu - 220 µm Hardtop XP - 80 µm RAL 9016 (Traffic white) |
| Total dry film thickness | 300 µm |

2.5. DOCUMENTATION

| | |
|---|--|
| Technical specification davit | According to contract specification |
| General arrangement drawing | According to contract specification |
| Electrical wiring diagram | According to contract specification |
| Starter cabinet drawing | According to contract specification |
| Product certificate | According to contract specification |
| Lubrication oil chart | Viking Norsafe standard |
| Spareparts list | Viking Norsafe standard |
| Operation & Maintenance manual | Viking Norsafe standard |
| Installation manual | Viking Norsafe standard |
| Preservation & storage procedure | Viking Norsafe standard |

3. PACKING

Format Packed for transport in a 40 ft standard container

4. OPTIONS

Note: Some options influence davit weight and performance, some option combinations may be incompatible. Maximum SWL must not be exceeded.

marking means to be supplied by maker, marking means not supplied by maker.

| GENERAL DAVIT | |
|---|--------------------------|
| Hoisting fully loaded boat | <input type="checkbox"/> |
| Damping system for main wire fall | <input type="checkbox"/> |
| Additional lowering height | <input type="checkbox"/> |
| Additional shock absorber on winch | <input type="checkbox"/> |
| Additional manual handling crane for electric motor on winch | <input type="checkbox"/> |
| Additional supports for lights, lanterns, starter cabinet etc. | <input type="checkbox"/> |
| Winterization / cold climate heating / canvas solutions | <input type="checkbox"/> |
| Commissioning performed by Viking Norsafe or Viking Norsafe Service Partners | <input type="checkbox"/> |
| Other options on request | <input type="checkbox"/> |



VIKING Project No.: TBA

VIKING Doc. No.: TSD-0068

Rev. Date: 26.10.2021

Rev. No: 5

ELECTRIC SYSTEM

| | |
|--|--------------------------|
| Voltage variation | <input type="checkbox"/> |
| Protection box for remote control | <input type="checkbox"/> |
| Ex-proof, Zone II 2 G Ex de IIB T3 (other on request) | <input type="checkbox"/> |
| Star Δ starting method | <input type="checkbox"/> |
| Additional electric cabinet heater | <input type="checkbox"/> |
| Alternative cabinet size / material / surface protection | <input type="checkbox"/> |

PAINTING SPECIFICATION

| | |
|--|--------------------------|
| Norsok M-501 system (Viking Norsafe Doc. No. TSS-0030) | <input type="checkbox"/> |
| Other painting system and final color | <input type="checkbox"/> |

SPARE PARTS

| | |
|---|--------------------------|
| Spare parts for Startup / Commissioning | <input type="checkbox"/> |
| Spare parts for Onboard spare | <input type="checkbox"/> |
| Spare parts for 1 year | <input type="checkbox"/> |
| Spare parts for 2 years | <input type="checkbox"/> |

DOCUMENTATION

| | |
|--|--------------------------|
| Factory acceptance test procedure | <input type="checkbox"/> |
| Factory acceptance test report | <input type="checkbox"/> |
| Inspection and test plan | <input type="checkbox"/> |
| Shipping, handling and lifting procedure | <input type="checkbox"/> |
| Packing & unpacking procedure | <input type="checkbox"/> |
| Commissioning procedure | <input type="checkbox"/> |
| TAG list | <input type="checkbox"/> |
| Winch drawing | <input type="checkbox"/> |
| Noise test report | <input type="checkbox"/> |
| Weight and COG datasheet | <input type="checkbox"/> |
| Weighing report/certificate | <input type="checkbox"/> |
| Other drawings/documentation/procedures | <input type="checkbox"/> |

5. POSSIBLE BOAT FITTING THIS DAVIT SYSTEM

The VIKING Norsafe boats fit the D-140 davit types and variants.

| | |
|-----------|---------------------|
| JYN-85 | JYN-100 |
| MIRIAM-85 | (Others on request) |



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6. YARD SUPPLY / RESPONSIBILITY

| Transport | Depending on contract |
|--|------------------------------|
| Deck foundations / reinforcement | |
| Assembly, erection and welding to deck | |
| Wire installation on winch, routing on davit and termination | |
| All cables to starter cabinet and agreed interface | |
| Hydraulic oil filling of winch | |
| Testing according to regulation after installation onboard | |
| Preservation and maintenance after davit arrived yard and installed | |