

# INNOVATIVE MARITIME EQUIPMENT

[www.noreq.no](http://www.noreq.no)



## LIFESAVING



Lifeboats and Davits

## CRANES



Ship- and Offshore Cranes

## FENDERS



ISO 17357

## SERVICE



Global network



# WITH AN EYE FOR INNOVATION

The entire maritime industry finds itself in constant development and ship and offshore equipment is being put through the toughest challenges. Progress has been fast but the ocean remains as we have always known it – demanding!

That's why Noreq has always focused on ways to improve traditional equipment solutions. – To achieve better functionality, lifetime, performance and return of investment for our clients.

Enjoy our complete product catalogue!

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## CRANES

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## SERVICE

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# PUSHING SAFETY FURTHER



Safety is essential for everyone operating at sea, and for lifesaving equipment international rules and regulations have become more stringent.

In Noreq we choose to stay in front of this development, to make operations safer and to ensure optimal investments for our clients. Our Compact Davit System and the Torpedo Lifeboat are examples of products that have enhanced the quality of traditional lifesaving equipment.

The Compact Davit System has minimized the threat for wear and tear on the davits, and the Torpedo lifeboat has solved freefall lifeboat challenges, such as directional stability and the stress on onboard personnel. All Noreq series of lifeboats and rescue boats are designed and approved in accordance with international regulations.

Noreq has specialized in pushing safety further. We do it every day – it is our job!





## PRODUCT RANGE:

- Ship davits
- Rig davits
- Rescue/Fast rescue boat davits
- Swingarm davits
- Workboat davits
- Telescopic davits
- Torpedo lifeboat
- Totally enclosed lifeboats
- Partially enclosed lifeboats
- Free-fall lifeboats
- Fast rescue boats
- Rescue boats



*NPD 14100 installed at North Sea Giant.*

## SHIP DAVITS

The Noreq NPD-series pivoting davits are specifically designed for the safe and efficient launching and retrieval of lifeboats. All equipment is integrated inside the davit structure which leads to very easy installation. The davits are intended for long-term, reliable operation in harsh and hazardous marine and offshore environments.

The davit system is designed in accordance with the latest IMO/SOLAS requirements, LSA Code and European Council Directive 96/98 on Marine Equipment (MED). Its carefully considered and epoch-making design, is an advantage when it comes to maintenance and service, installation and deck preparations, and also for heating in Arctic climates.

The lifeboat is launched either from inside the boat or using the remote control unit supplied as standard. Recovery of the lifeboat is performed by an electric/hydraulic winch.

Type	SWL	Hoisting speed
NPD 6000 H	6000 Kg	5/18 m/min
NPD 7700 H	7700 Kg	5/18 m/min
NPD 11300 H	11300 Kg	5/18 m/min
NPD 14800 H	14800 Kg	5/18 m/min
NPD 18200 H	18200 Kg	5/18 m/min
NPD 23000 H	23000 Kg	5/18 m/min

Noreq NPD (standard)



Noreq NPDL



Noreq NPD and NPDL are designed for easy installation on board vessels. NPDL requires even less space in width of deck area, than the standard version, NPD.



The Noreq NPDL-series are developed to be an alternative on vessels with limited space capacities. Its narrow design is ideal where width of deck is limited. Even though we have reduced the outer dimensions, all vulnerable equipment is protected inside the davit structure. The davits are intended for long-term, reliable operation in harsh and hazardous marine and offshore environments.

The davit system is designed in accordance with the latest IMO/SOLAS requirements, LSA Code and European Council Directive 96/98 on Marine Equipment (MED). Its carefully considered and epoch-making design, is an advantage when it comes to maintenance and service, installation and deck preparations, and also for heating in Arctic climates.

The lifeboat is launched either from inside the boat or using the remote control unit supplied as standard. Recovery of the lifeboat is performed by an electric/hydraulic winch.

Please visit our web page for an animation video: [www.noreq.no/download](http://www.noreq.no/download)



**OPTIONAL EQUIPMENT:**

Different painting systems, Radio remote control, EX-proof, High speed winch, Aluminium hinges, Skid.

Type	SWL	Hoisting speed
NPDL 6000 H	6000 Kg	5/18 m/min
NPDL 7700 H	7700 Kg	5/18 m/min
NPDL 11300 H	11300 Kg	5/18 m/min
NPDL 14800 H	14800 Kg	5/18 m/min
NPDL 18200 H	18200 Kg	5/18 m/min
NPDL 23000 H	23000 Kg	5/18 m/min



Noreq Rig Davit.

## RIG DAVITS

The Noreq NRD-series davits are specifically designed for the safe and efficient launching and retrieval of lifeboats. All equipment is integrated inside the davit structure. The davits are intended for long-term, reliable operation in harsh and hazardous marine and offshore environments.

The davit system is designed in accordance with the latest IMO/SOLAS requirements, LSA Code and European Council Directive 96/98 on Marine Equipment (MED). Its carefully considered and epoch-making design, is an advantage when it comes to maintenance and service, installation and deck preparations, and also for heating in Arctic climates.

The lifeboat is launched either from inside the boat or using the remote control unit supplied as standard. Recovery of the lifeboat is performed by an electric/hydraulic winch.

Please visit our web page for an animation video: [www.noreq.no/download](http://www.noreq.no/download)



### OPTIONAL EQUIPMENT:

Different painting systems, Radio remote control, EX-proof, Proportional control, Galvanizing, Extended lifting height, High speed winch, Aluminium hinges.

Type	SWL	Hoisting speed
NRD 6000 H	6000 Kg	5/18 m/min
NRD 7700 H	7700 Kg	5/18 m/min
NRD 11300 H	11300 Kg	5/18 m/min
NRD 14800 H	14800 Kg	5/18 m/min
NRD 18200 H	18200 Kg	5/18 m/min
NRD 23000 H	23000 Kg	5/18 m/min





## FAST RESCUE BOAT RIG DAVIT

The new Noreq NRDS davit is designed for offshore clients who are in need of Fast Rescue boats on board their installations.

The NRDS is in full compliance with the Noreq Davit concept where power pack and all vulnerable parts are protected inside the davit structure itself. The davits are intended for long-term, reliable operation in harsh and hazardous marine and offshore environments.

The davit system is designed in accordance with the latest IMO/SOLAS requirements, LSA Code and European Council Directive 96/98 on Marine Equipment (MED). Its carefully considered and epoch-making design, is an advantage when it comes to maintenance and service, installation and deck preparations, and also for heating in Arctic climates.

The rescue boat is launched either from inside the boat or using the remote control unit supplied as standard. Recovery of the lifeboat is performed by an electric/hydraulic winch.

### OPTIONAL EQUIPMENT:

Different painting systems, Radio remote control, EX-proof, Galvanizing, Extended lifting height, High speed winch, Aluminium flange.



Type

NRDS 3500 H

SWL

3500 Kg

Hoisting speed

18/50 m/min



#### **Noreq Fast Rescue Boat Davit**

*Noreq NPDS is approved and certified for use as Fast Rescue Davit.*

*Here installed on a RoPax ferry.*

## RESCUE BOAT DAVITS/FAST RESCUE BOAT DAVITS

The Noreq NPDS series davits are specifically designed for the safe and efficient launching and retrieval of rescue boats. They are intended for long-term, reliable operation in harsh and hazardous marine and offshore environments. Our rescue boat davit system can also be delivered as Fast Rescue Davit according to IMO Resolution MSC 81.(70) point 8.1.8.

### HYDRAULIC PIVOTING TYPE:

The davit system is designed in accordance with the latest IMO/SOLAS requirements, LSA Code and European Council Directive 96/98 on Marine Equipment (MED). Its innovative new design is an advantage when it comes to maintenance and service, installation and deck preparations, and also for heating in an Arctic climate. The rescue boat is launched either from inside the boat or using the remote control unit supplied as standard. Recovery of the rescue boat is performed by the electric/hydraulic winch. The davit can be supplied with a shock absorber system and constant tension.

Please visit our web page for video: [www.noreq.no/download](http://www.noreq.no/download)



### OPTIONAL EQUIPMENT:

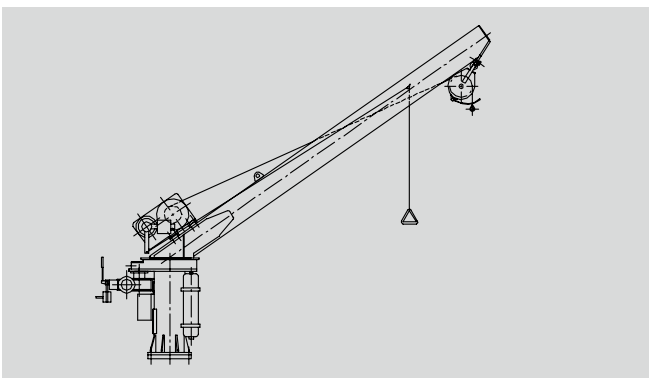
Different painting systems, Radio remote control, EX-proof, Proportional Control, Galvanizing, Hook, High speed winch, Tension system, Shock absorber system, Aluminium hinges, Skid, Ladder, Platform, Stairs, Boat support.

Type	SWL	Hoisting speed
NPDS 1300 H	1300 Kg	18 m/min
NPDS 1800 H	1800 Kg	18/50 m/min
NPDS 3500 H	3200 Kg	18/50 m/min



## SWINGARM DAVITS

Noreq swing arm davits are ideal for use as combined davit for rescue boat and life rafts. It comes in different sizes to meet the different sizes of rescue boats and rafts. Noreq swing arm davits are delivered according to IMO/SOLAS requirements.



### OPTIONAL EQUIPMENT:

Foundation, Cradle, Quick hoist, Converter.

Type	SWL	Arm length
MOB B1500	1500 Kg	3,8m (other length on request)
MOB DR 25/1500 kombidavit	2300 Kg	3,8m (other length on request)
DR 25	2500 Kg	3,8m (other length on request)



## WORKBOAT/DAUGHTER CRAFT DAVITS

The new Noreq workboat davits are specifically designed for the safe and efficient launching and retrieval of workboats. They are intended for long-term, reliable operation in harsh and hazardous marine and offshore environments.

The workboat davit can be delivered with a guiding cradle to ensure better launching and recovery of the craft.

### OPTIONAL EQUIPMENT:

Different painting systems, Radio remote control, EX-proof, Hook, High speed winch, Tension system, Shock absorber system, Aluminium hinges, Skid, Ladder, Platform, Stairs, Boat support.



Type	SWL	Hoisting speed
NPWD 5000 H	5000 Kg	18/50 m/min
NPWD 7000 H	7000 Kg	18/50 m/min
NPWD 9000 H	9000 Kg	18/50 m/min
NPWD 12000 H	12000 Kg	18/50 m/min

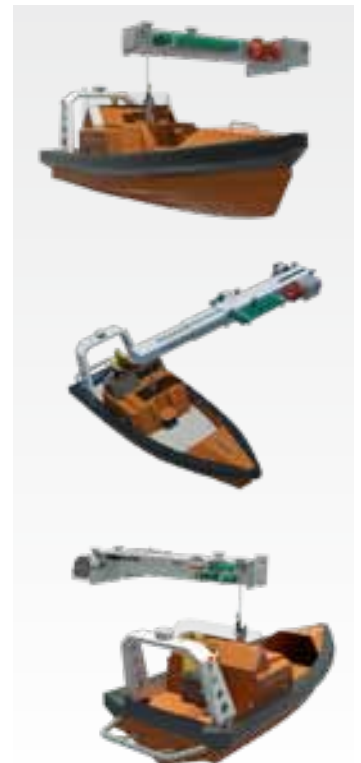


## TELESCOPIC DAVITS

Noreq NTD-series telescopic davits are specifically designed for the safe and efficient launching and retrieval of workboats, daughter craft and lifeboats. They are intended for long-term, reliable operation in harsh and hazardous marine and offshore environments. The telescopic davit provides a space-saving option aboard smaller vessels and can be delivered with both single and double arm configuration.

### OPTIONAL EQUIPMENT:

Different painting systems, Radio remote control, EX-proof, Proportional control, Galvanization, Hook, Aluminium hinges, Ladder, High speed winch, Tension system, Shock absorber system, Boat support.



Type	SWL	Hoisting speed
NTDS 1800 H (single arm)	1800 Kg	6/18 m/min
NTDS 4000 H (single arm)	4000 Kg	6/18 m/min
NTDS 6000 H (single arm)	6000 Kg	6/18 m/min
NTD 8000 H	8000 Kg	6/18 m/min
NTD 12000 H	12000 Kg	6/18 m/min

NORTH SEA GIANT

# SAFETY FOR FUTURE OPERATIONS



The North Sea Giant is amongst the largest and most advanced Offshore Construction Vessels ever built.

The vessel was awarded the prize "Ship of the Year 2012" by Offshore Support Journal for its innovative features including very high redundancy and station keeping capabilities.

Noreq is proud to be selected for delivery of the vessels lifesaving equipment.





## THE TORPEDO LIFEBOAT

In recent years the focus on the capabilities and features of free-fall lifeboats offshore has drawn high attention. The Torpedo lifeboat is representing a new and innovative alternative to ordinary free-fall lifeboats.

Tests performed at Norwegian Marine Technology Research Institute demonstrate that the design of the Torpedo Lifeboat has clear advantages compared to any known design today; especially when it comes to reduced impact to onboard personnel, and in regards to forward distance and directional stability from drop point.

### FEATURES:

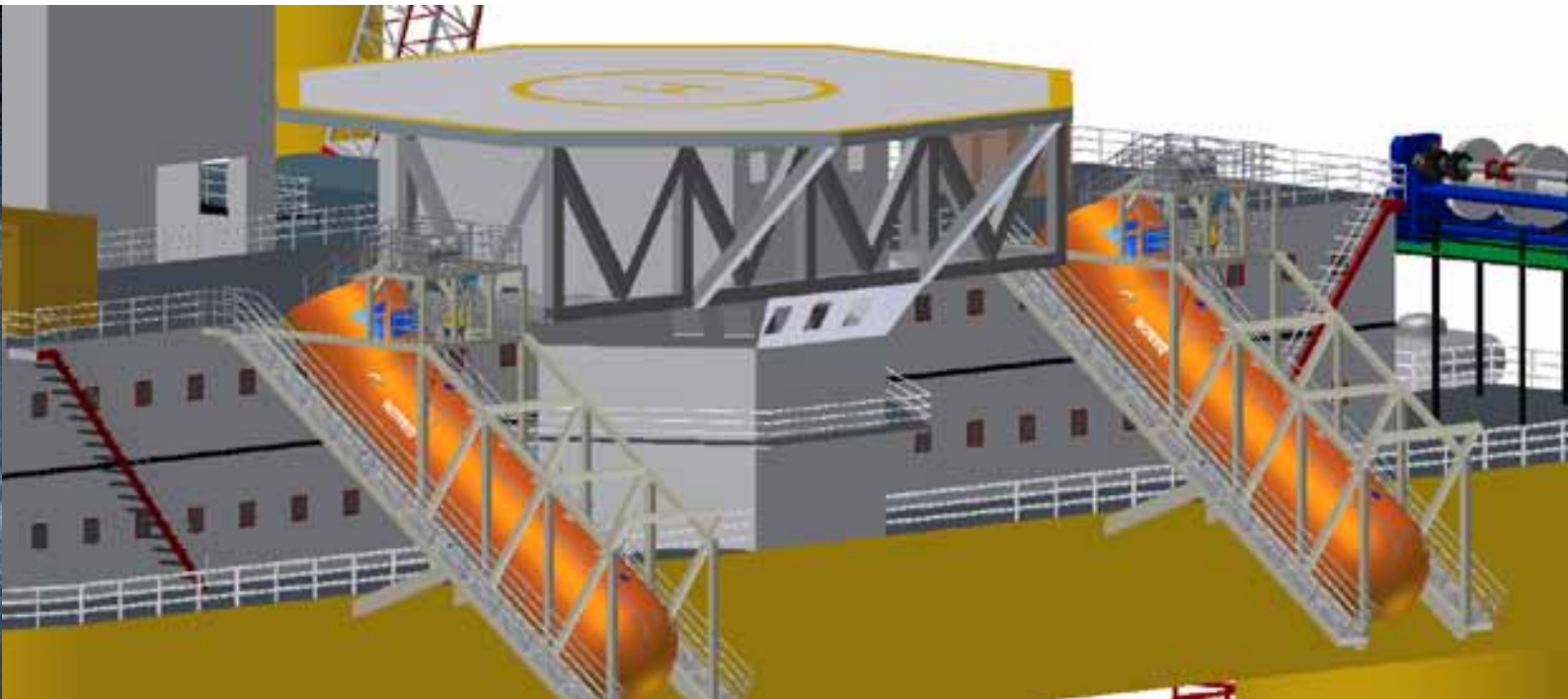
- Design and hull strength withstand the impact loads generated from drop heights and extreme weather/wave conditions
- The combination of design and weight increases the braking time and distance and therefore reduces the loads on the human body and increases the forward speed and distance
- It covers a considerable distance from the drop site due to hydrodynamic design and ballast weight
- Its directional stability is superior
- External conditions, such as wind and waves, have less effect on performance (distance, speed, direction and loads) compared to competing designs.

The Torpedo Lifeboat will be designed and produced according to SOLAS.

The Torpedo Lifeboat is designed to be installed on fixed installations, FPSO's, drill ships, jack ups or floating units as well as ships. The building techniques, standards and outfitting represents a new level of quality in the SOLAS free fall lifeboat segment. It is designed and developed in Norway where rough conditions and harsh environment







Launching arrangement RIG:



Launching arrangement Ship:



*The Noreq Torpedo lifeboat system includes a custom made launching arrangement. With key properties such as lower weight, high strength and stress capabilities, and requires less maintenance due to building material and design.*

are the rule rather than the exception and the Torpedo Lifeboat is made to meet these conditions. It is designed to maintain its unique properties even from shorter drop heights.

The Torpedo Lifeboat is designed to meet the demands of tomorrow, fitted with:

- Bigger interior space than any other SOLAS free fall lifeboat
- Larger seating area
- Custom made seat-belts
- Crew capacity for up to 70 persons

A new system for release, retrieval and secondary launching has been developed. This will increase the level of safety as well as easing the operation. Two optional launching systems will be available. One for mounting outside offshore rigs and on A-frame solution for deck mounting on vessels.

The Torpedo Lifeboat will be built according to SOLAS. In addition **Noreq have also designed the Torpedo Lifeboat in accordance with DNV-OS-E406 and Norsok R-002 and will be able to offer the Torpedo Lifeboat also in accordance to this regulation.** Please contact us for more information.

Please visit our web page for an animation video: [www.noreq.no/download](http://www.noreq.no/download)



**The Torpedo lifeboat is available in the following versions:**

Type	Capacity (persons)	Fully loaded weight (kg)	Max installation height (m) DNV/IMO SOLAS
NTL 50	50	17 500	40
NTL 70	70	24 000	40

*Launching appliances corresponding with the size of lifeboat can be delivered as rig version or as deck/wall mounted version for installation on FPSO's, Drillships etc.*



## TOTALLY ENCLOSED LIFEBOATS

Noreq's totally enclosed lifeboats are designed and tested in accordance with the latest IMO/SOLAS regulations (MED 96/98 EC). Two versions are available, tanker or dry cargo. All boats are fitted with European standard equipment, with engines made by the largest lifeboat engine maker in the world, BUKH, and electrical charging system from DEFA. Steel qualities are either galvanized, AISI 304 or AISI 316, depending on equipment exposure.

Notifying body: Bureau Veritas (others on request)

### SEATING ARRANGEMENT:

Noreq deliver seating arrangements according to various weight/sizes as per regulations.

### OPTIONAL EQUIPMENT:

Bow thruster, VHF, Engine heater, Cabin heater, Air humidifier, Epirb, Sart.

## PARTIALLY ENCLOSED LIFEBOATS

Noreq also provides partially enclosed lifeboats with capacity of 65-150 persons, on request.



Cargo version (C) / Tanker version (T)	Dimension (LxWxH)	Max seating (p at 82.5 kg)	Hook distance (m)	Davit load (kg)
LBT 525 C / LBT 525 T	5.25 x 2.30 x 3.05	25	4.90	4403 / 4753
LBT 650 C / LBT 650 T	6.50 x 2.30 x 3.10	36	6.10	5485 / 5935
LBT 700 C / LBT 700 T	7.00 x 2.70 x 3.10	48	6.60	7216 / 7605
LBT 750 C / LBT 750 T	7.50 x 2.90 x 3.25	68	7.10	8965 / 9335
LBT 850 C / LBT 850 T	8.50 x 2.90 x 3.25	80	8.14	10949 / 11295
LBT 935 C / LBT 935 T	9.35 x 3.60 x 3.25	102	8.95	13825 / 14315
LBT 1090 C / LBT 1090 T	10.90 x 3.90 x 3.50	130	10.50	17406 / 17906



## FREE-FALL LIFEBOATS

Noreq's free-fall lifeboats are designed and tested in accordance with the latest IMO/ SOLAS regulations (MED 96/98 EC). Two versions are available, tanker or dry cargo. All boats are fitted with European standard equipment, with engines made by the largest lifeboat engine maker in the world, BUKH, and the electrical charging system from DEFA. Steel qualities are either galvanized, AISI 304 or AISI 316, depending on how exposed the equipment is.

Notifying body: Bureau Veritas (others on request)

### FREE-FALL DAVITS:

A deck-to-wall mounted davit placed at the stern of the ship, and consisting of a launch ramp, davit arm (A-frame), winch and hydraulic unit. The launch ramp has sliding pads for smooth acceleration of the boat. In situations where free-fall launch is impractical or unsafe, the system has a secondary means of launching the lifeboat. The lifeboat is recovered using a hydraulic winch. Foldable free-fall systems are available on request

**Capacity:** From 45 kN up to 95 kN



Cargo version (C) / Tanker version (T)	Dimension (LxWxH)	Max seating (p at 82.5 kg)	Max drop height (m)	Davit load (kg)
LBF 490 C / LBF 490 T	4.90 x 2.40 x 3.10	16	16	3963 / 4313
LBF 580 C / LBF 580 T	5.80 x 2.55 x 3.10	26	17	5646 / 5976
LBF 680 C / LBF 680 T	6.80 x 2.70 x 3.22	33	22	6440 / 6740
LBF 750 C / LBF 750 T	7.50 x 2.70 x 3.22	36	22	7374 / 7724
LBF 850 C / LBF 850 T	8.80 x 2.94 x 3.30	40	25	8322 / 8722



*Noreq's fast rescue boats can be supplied with both outboard petrol and inboard diesel engines.*

## FAST RESCUE BOATS

Noreq's fast rescue boats can be supplied with both outboard petrol and inboard diesel engines. The boats have high-speed hulls, achieving speed up to 35 knots. Noreq fast rescue boats have hydraulic steering as standard. The robust GRP frame ensures good self-righting abilities, and large drain valves in the stern ensure drainage from the deck. The boats are equipped with high-quality navigation lights and switch panels (IP 56).

## FAST RESCUE BOAT IN ALUMINIUM

The hull is designed for speed and stability, which means optimal working conditions on the vessel in rough sea conditions. The boat achieves speed up to 35 knots.

### ALUBOAT FEATURES:

- Strong, welded, shot-blasted, strengthened aluminium hull.
- Free draining deck.
- Robust, impact resistant and fire-retardant fender.
- Ergonomically designed cockpit.
- Single-point lifting frame with offload release load.
- Inboard diesel engine with waterjet system.

Type	Dimension (LxWxH)	Max seating (p at 82.5 kg)	Speed (knots)	Davit load (kg)
FRB 610 60 hp	6.10 x 2.20 x 2.35	8	22	1631
FRB 610 90 hp	6.10 x 2.20 x 2.35	8	25	1697
FRB 650 Twin 60 hp	6.50 x 2.32 x 2.30	15	28	2697
FRB 650 Inboard 212 hp	6.50 x 2.32 x 2.30	15	30	2927
FRB 750 Inboard 212 hp	7.50 x 2.32 x 2.30	15	30	3078
FRB 720 Alu	7.20 x 2.40 x 2.50	15	30	3015



## RESCUE BOATS

Noreq's rescue boats have a special design that ensures great stability, as the outer and inner hulls are shaped in separate moulds. The buoyancy tank provides sufficient buoyancy to keep the boat afloat when flooded and fully manned. The boat can be delivered with or without an engine.

We deliver rescue boats with petrol engine or diesel inboard engine. The boats are delivered to the latest IMO/SOLAS regulations (MED 96 / 98 AC).

### OPTIONAL EQUIPMENT RESCUE/FAST RESCUE BOATS:

VHF, Console cover, Boat cover, Engine heater. Henriksen hook can be installed upon request.



*Noreq RRB 425 in GRP.*



*Noreq RRB 500 in GRP.*

Type	Dimension (LxWxH)	Max seating (p at 82.5 kg)	Speed (knots)	Davit load (kg)
RRB 425 OE 25 hp	4.45 x 1.84 x 0.75	6	6	904
RRB 500 30 hp	5.00 x 1.86 x 2.58	6	6	1198
RRB 500 60 hp	5.00 x 1.86 x 2.58	6	20	1271
RRB 525 24 hp inboard diesel	5.25 x 2.00 x 2.00	6	6	1293
RRB 525 48 hp inboard diesel	5.25 x 2.00 x 2.00	6	6	1343
RRB 610 48 hp inboard diesel	6.10 x 2.20 x 2.35	10	6	2030

# LIFTING EXPECTATIONS



In 2010 Noreq acquired Acta, – the well known and trusted supplier of offshore marine cranes since 1955.

All NoreqActa cranes are lifetime products that meet all relevant international standards and regulations.

We encourage an open dialogue with clients which helps us maintain our position as a leading manufacturer of integrated crane solutions.

In our experience, a non-compromising attitude towards quality and service is the key to ensuring profitability for our customers.

We provide around the clock after sales service – directly from Noreq or through our network of local agents and partners around the world.

Lifting quality is about long life performance!





**NOREED PACTA**  
Lifting expectations

11M 310  
-10M D.P

**PRODUCT RANGE:**

- Hydraulic stiff boom cranes
- Hydraulic Hose handling cranes
- Hydraulic telescopic cranes
- Hydraulic knuckle boom cranes
- Provision cranes
- Electrical monorail cranes
- Hydraulic monorail cranes





## LIFTING EXPECTATIONS

All NoreqActa cranes are lifetime products that meet all relevant international standards and regulations.

**NoreqActa** cranes are specially designed for;

- safe and efficient operation
- intended for long term, reliable operation in harsh and hazardous offshore & marine environments.

Whether you are in shipping or in the offshore industry, NoreqActa offers a wide selection of cranes with a high quality standard and with a range from 5tm to approx 1500tm.

We will always focus on the clients' specific needs, and offer the best solution based on our extensive and flexible modular crane concept and in close cooperation with the client.



## GENERAL TECHNICAL DESCRIPTION

- Complete crane with crane foundation for welding on deck (standard) or alternatively with flange for bolting to corresponding flange on deck, crane house supplied with ladder and rails for access to platform and jib, crane jib, which is supplied with wire pulleys, hook and block arrangement for load in one or two parts
- (HPU) is an integrated part of the crane house complete with all internal hydraulic pipe and hose connections and with load break automatic in case of hydraulic system failure.
- The crane is supplied complete with all internal hydraulic pipe and hose connections.  
(Hoses acc. to EN 853, Hose ends type DK0 DIN 3865/ ISO 8434-4/DIN ISO 12151-2 [24° Cone O-ring seal])
- Fittings DIN 2353 / ISO 8434 – 1
- Surface treatment with International with total 320 DFT micron
- 355° rotation by means of precise slewing ring
- Certified steel
- Working temperature range from -10°C to +40°C
- Precise step less speed control
- Simultaneous operation of all functions
- Emergency stop device
- All piston cylinder rods made with Nikrom 350
- ATEX packages & certification if required.

## FOR OFFSHORE CRANES ADDITIONAL ITEMS ARE MOUNTED AS STANDARD:

- Automatic Overload Protection System, which protects the crane against shock loads.
- Manuel Overload Protection System, which is used if an external force endangers the crane

NoreqActa cranes are designed in Denmark and the main components purchased in Europe. Manufacturing, assembling and testing under complete control of our Internal Quality Control System.

NoreqActa cranes can be offered according DNV/ LRS/ ABS/ BV/CCS/ Rina/ RMRS/ GL/ API-2C/ EN 13852-1

## OPTIONAL EQUIPMENT:

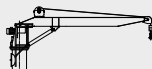


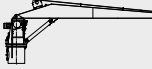


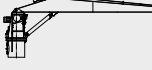


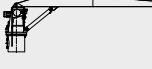


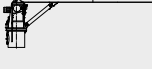


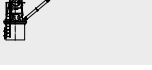


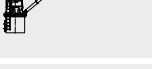


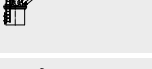


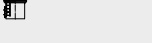


Radio remote control, Cable remote control, Jib light, Oil air cooler, Oil heating element, Press roller, Stainless steel, 360 deg. continuous slewing, Commissioning, supervision and service.

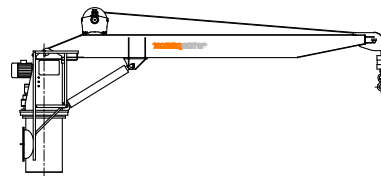
Please do not hesitate to contact us for any other optionals.





HYDRAULIC STIFF BOOM CRANES

Crane series	Type/size	Working radius / Lifting capacity		
HSC 8	HSC 8-20-6 HSC 8-15-8 HSC 8-10-10			
		6 M 2.0 T	8 M 1.5 T	10 M 1.0 T
HSC 18	HSC 18-30-6 HSC 18-20-9 HSC 18-15-12			
		6 M 3.0 T	9 M 2.0 T	12 M 1.5 T
HSC 30	HSC 30-35-9 HSC 30-25-12 HSC 30-20-15			
		9 M 3.5 T	12 M 2.5 T	15 M 2.0 T
HSC 42	HSC 42-45-9 HSC 42-30-13 HSC 42-20-18			
		9 M 4.5 T	13 M 3.0 T	18 M 2.0 T
HSC 75	HSC 75-100-9 HSC 75-80-11 HSC 75-50-18			
		9 M 10.0 T	11 M 8.0 T	18 M 5.0 T
HSC 125	HSC 125-100-12 HSC 125-80-15 HSC 125-50-23			
		12 M 10.0 T	15 M 8.0 T	23 M 5.0 T
HSC 180	HSC 180-100-17 HSC 180-80-21 HSC 180-50-28			
		17 M 10.0 T	21 M 8.0 T	28 M 5.0 T
HSC 240	HSC 240-150-16 HSC 240-100-23 HSC 240-80-26			
		16 M 15.0 T	23 M 10.0 T	26 M 8.0 T
HSC 350	HSC 350-200-17 HSC 350-150-24 HSC 350-100-28			
		17 M 20.0 T	24 M 15.0 T	28 M 10.0 T



The table gives you an overview of the capacities for each type/size. The boom for each series can be shortened with intervals of one (1) meter.

**HOISTING SPEED:**

- 0-20 m/min: HSC 8 – HSC 180
- 0-10 m/min: HSC 240 / HSC 350
- Luffing time: min. 60-100 sec.
- Slewing angel: 350°, limited or 360°, continuously
- Slewing speed: 0-1 RPM step less.

The stated speed and time may vary ±10%. The cranes can be delivered with optional equipment to meet our customers requirements.

**COMBI CRANE**

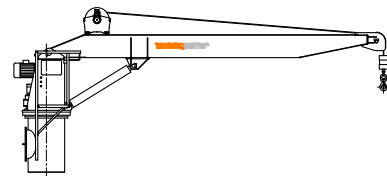
Hydraulic Stiff Boom Crane with connection point for MOB/Raft operation & free-fall for the means of rescue all according IMO/SOLAS regulation

For further information and options please contact us or visit our homepage at [www.noreq.no](http://www.noreq.no)



HYDRAULIC HOSE HANDLING CRANES

Crane series	Type/size	Working radius / Lifting capacity			
HHC 8	HHC 8-20-6		6 M 2.0 T	8 M 1.5 T	10 M 1.0 T
	HHC 8-15-8				
	HHC 8-10-10				
HHC 18	HHC 18-30-6		6 M 3.0 T	9 M 2.0 T	12 M 1.5 T
	HHC 18-20-9				
	HHC 18-15-12				
HHC 30	HHC 30-35-9		9 M 3.5 T	12 M 2.5 T	15 M 2.0 T
	HHC 30-25-12				
	HHC 30-20-15				
HHC 42	HHC 42-45-9		9 M 4.5 T	13 M 3.0 T	18 M 2.0 T
	HHC 42-30-13				
	HHC 42-20-18				
HHC 75	HHC 75-100-9		9 M 10.0 T	11 M 8.0 T	18 M 5.0 T
	HHC 75-80-11				
	HHC 75-50-18				
HHC 125	HHC 125-100-12		12 M 10.0 T	15 M 8.0 T	23 M 5.0 T
	HHC 125-80-15				
	HHC 125-50-23				
HHC 180	HHC 180-100-17		17 M 10.0 T	21 M 8.0 T	28 M 5.0 T
	HHC 180-80-21				
	HHC 180-50-28				
HHC 240	HHC 240-150-16		16 M 15.0 T	23 M 10.0 T	26 M 8.0 T
	HHC 240-100-23				
	HHC 240-80-26				
HHC 350	HHC 350-200-17		17 M 20.0 T	24 M 15.0 T	28 M 10.0 T
	HHC 350-150-24				
	HHC 350-100-28				
HHC 400	HHC 400-200-20		20 M 20.0 T	15 M 15.0 T	32 M 10.0 T
	HHC 400-150-15				
	HHC 400-100-32				



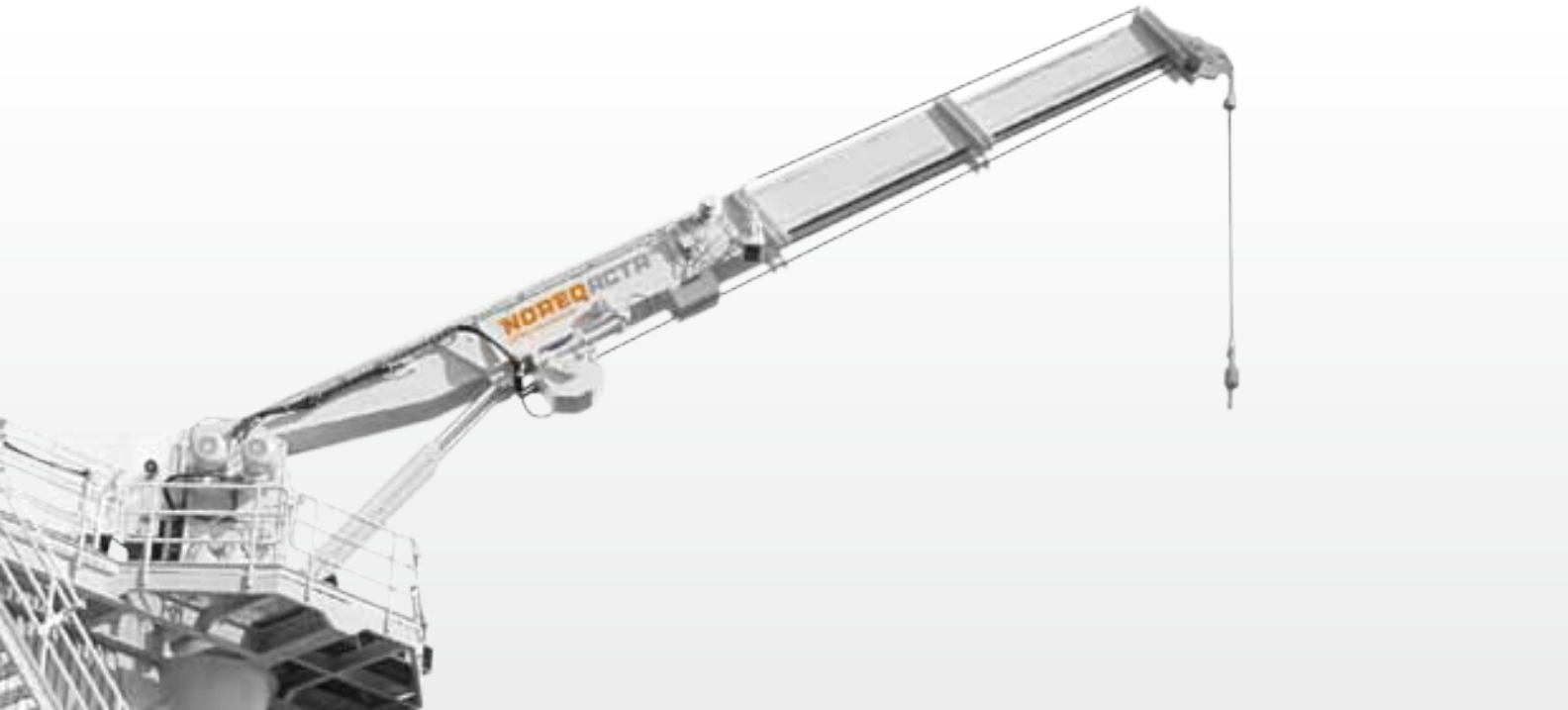
The table gives you an overview of the capacities for each type/size. The boom for each series can be shortened with intervals of one (1) meter.

**HOISTING SPEED:**

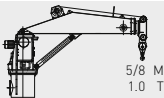

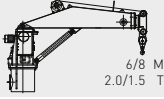

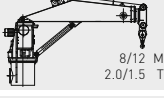



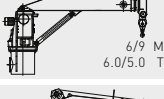

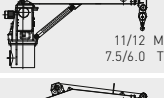





- 0-20 m/min: HHC 8 – HHC 180
- 0-10 m/min: HHC 240+350+400
- with load.
- Luffing time: min. 60-100 sec.
- Slewing angel: 350°, limited or 360°, continuously
- Slewing speed: 0-1 RPM step less.

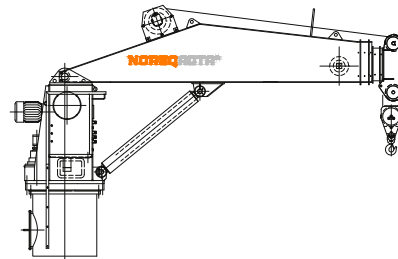
The stated speed and time may vary ±10%. The cranes can be delivered with optional equipment to meet our customers requirements.

For further information and options please contact us or visit our homepage at [www.noreq.no](http://www.noreq.no)



## HYDRAULIC TELESCOPIC CRANES

Crane series	Type/size	Working radius / Lifting capacity	
HSCT 8	HSCT 8-10-5/9 HSCT 8-10-8/11	 5/8 M 1.0 T	 9/11 M 1.0 T
HSCT 18	HSCT 18-20-6/9 HSCT 18-15-8/11	 6/8 M 2.0/1.5 T	 9/11 M 2.0/1.5 T
HSCT 30	HSCT 30-20-8/14 HSCT 30-15-12/19	 8/12 M 2.0/1.5 T	 14/19 M 2.0/1.5 T
HSCT 42	HSCT 42-30-6/11 HSCT 42-20-9/16	 6/9 M 3.0/2.0 T	 11/16 M 3.0/2.0 T
HSCT 75	HSCT 75-60-6/11 HSCT 75-50-9/16	 6/9 M 6.0/5.0 T	 11/16 M 6.0/5.0 T
HSCT 125	HSCT 125-75-11/15 HSCT 125-60-12/19	 11/12 M 7.5/6.0 T	 15/19 M 7.5/6.0 T
HSCT 180	HSCT 180-100-11/17 HSCT 180-80-15/20	 11/15 M 10.0/8.0 T	 17/20 M 10.0/8.0 T
HSCT 240	HSCT 240-150-10/15 HSCT 240-100-15/20	 10/15 M 15.0/10.0 T	 15/20 M 15.0/10.0 T



The table gives you an overview of the capacities for each type/size, but a number of parameters can be customized to your specific application. The boom can be shortened or elongated with intervals of one (1) meter.

- Hoisting speed: 0-20 m/min. step less.
- Luffing time: min. 60-100 sec.
- Telescopic time: 80-120 sec.
- Slewing angel: 350°, limited or 360°, continuously
- Slewing speed: 0-1 RPM step less.

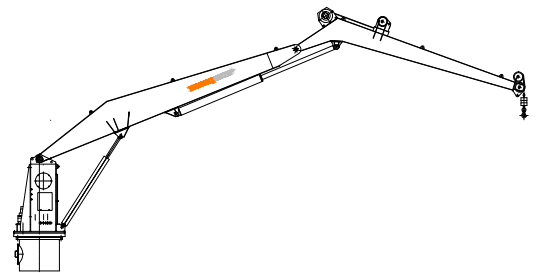
The stated speed and time may vary ±10%. The cranes can be delivered with optional equipment to meet our customers requirements.

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HYDRAULIC KNUCKLE BOOM CRANES

Crane series	Type/size	Working radius / Lifting capacity			
HCK 18	HCK 18-20-8,5		8.5 M	11 M	14 M
	HCK 18-15-11		2.0 T	1.5 T	1.0 T
	HCK 18-10-14				
HCK 30	HCK 30-30-10		10 M	11 M	14 M
	HCK 30-25-11		3.0 T	2.5 T	2.0 T
	HCK 30-20-14				
HCK 42	HCK 42-30-13		13 M	18 M	24 M
	HCK 42-20-18		3.0 T	2.0 T	1.5 T
	HCK 42-15-24				
HCK 75	HCK 75-60-12		12 M	14.5 M	20 M
	HCK 75-50-14,5		6.0 T	5.0 T	3.0 T
	HCK 75-30-20				
HCK 150	HCK 150-150-10,7		10.7 M	14 M	18 M
	HCK 150-100-14		15.0 T	10.0 T	7.0 T
	HCK 150-70-18				
HCK 180	HCK 180-200-8,5		8.5 M	12 M	18 M
	HCK 180-150-12		20.0 T	15.0 T	10.0 T
	HCK 180-100-18				
HCK 240	HCK 240-200-10		10 M	15 M	23 M
	HCK 240-150-15		20.0 T	15.0 T	10.0 T
	HCK 240-100-23				
HCK 350	HCK 350-200-15		15 M	20 M	30 M
	HCK 350-150-20		20.0 T	15.0 T	10.0 T
	HCK 350-100-30				



The table gives you an overview of the capacities for each type/size, but a number of parameters can be customized to your specific application. The boom can be shortened or elongated with intervals of one (1) meter.

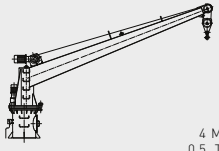
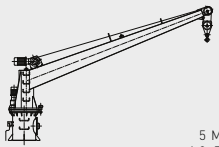

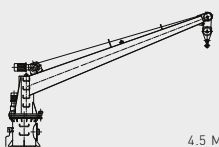


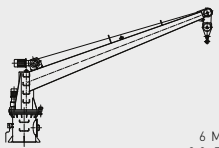


- Hoisting speed: 0-20 m/min. step less.
- Luffing time: min 60-100 sec.
- Knuckle time: min 60-100 sec.
- Slewing angel: 350°, limited
- or 360°, continuously
- Slewing speed: 0-1 RPM step less.

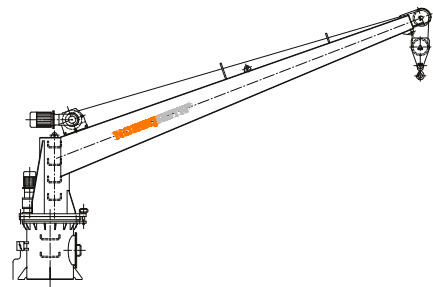
The stated speed and time may vary ±10%. The cranes can be delivered with optional equipment to meet our customers requirements.

For further information and options please contact us or visit our homepage at [www.noreq.no](http://www.noreq.no)



PROVISION CRANES

Crane series	Type/size	Working radius / Lifting capacity		
PC 2	PC 2-5-4		4 M 0.5 T	
PC 5	PC 5-10-5 PC 5-8-6		5 M 1.0 T	 6 M 0.8 T
PC 7	PC 7-15-4.5 PC 7-10-7 PC 7-8-8		4.5 M 1.5 T	 7 M 1.0 T
				 8 M 0.8 T
PC 12	PC 12-20-6 PC 12-15-8 PC 12-10-10		6 M 2.0 T	 8 M 1.5 T
				 10 M 1.0 T



The table gives you an overview of the capacities for each type/size, but a number of parameters can be customized to your specific application. The boom can be shortened or elongated with intervals of one (1) meter.

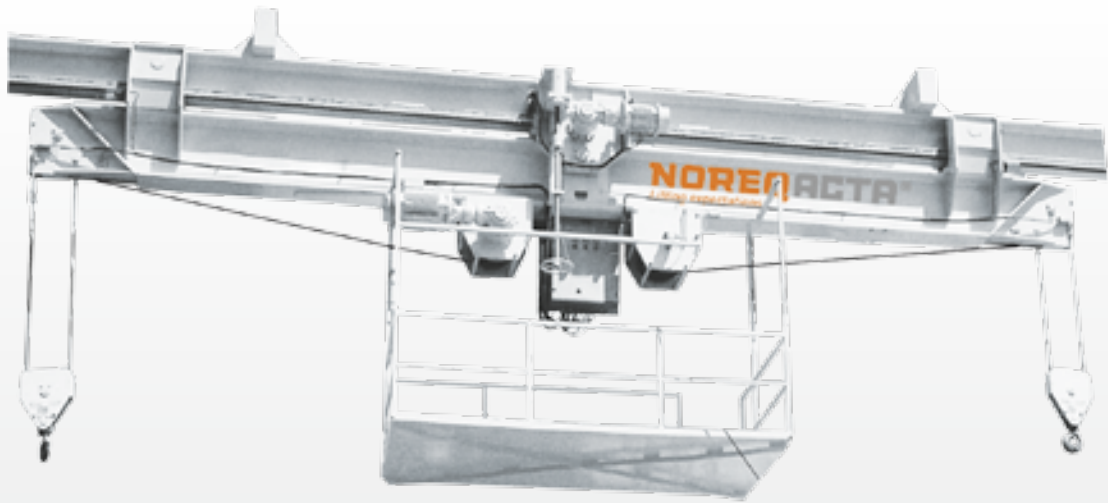
- Hoisting speed: 10 m/min. step less.
- Slewing speed: 0.5 RPM electrical or hand driven.
- Slewing angel: 350°, limited

The stated speed and time may vary ±10%. The cranes can be delivered with optional equipment to meet most of our customer requirements.

Can be offered as;

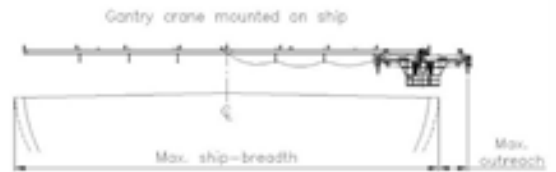
- manual
- electrical
- pneumatic
- hydraulic

For further information and options please contact us or visit our homepage at [www.noreq.no](http://www.noreq.no)



**ELECTRIC MONORAIL/HYDRAULIC MONORAIL CRANES**

Crane series	Type/size	Lifting capacity
HGC/EGC 20	HGC/EGC 20-3-9	 2.0 T
HGC/EGC 30	HGC/EGC 30-3-3-9.6	 3.0 T
HGC/EGC 40	HGC/EGC 40-4-11	 4.0 T
HGC/EGC 50	HGC/EGC 50-5-22.5	 5.0 T
HGC/EGC 85	HGC/EGC 85-4-11.5	 8.5 T
HGC/EGC 100	HGC/EGC 100-4-9	 10.0 T
HGC/EGC 115	HGC/EGC 115-4-9.5	 11.5 T
HGC/EGC 125	HGC/EGC 125-4-9.5	 12.5 T



Monorail crane mounted on ship

The table gives you an overview of the capacities for each type/size, but a number of parameters can be customized to your specific application.

- EGC-series:
- HGC-series:
- Hoisting speed: 10 m/min.
- Hoisting speed: 0-20 m/min. step less.
- Travelling speed: 11 m/min
- Travelling speed: 0-10 m/min step less.

The stated speed and time may vary ±10%. The cranes can be delivered with optional equipment to meet most of customer requirements.

For further information and options please contact us or visit our homepage at [www.noreq.no](http://www.noreq.no)

# PRESENT WHERE CLIENTS OPERATES

Servicing customers all over the world: Noreq has production sites and sales locations in Europe, Asia, North and South America. Local presence is important to Noreq. Our abroad offices are located in the worlds most important maritime hubs.

Noreq is established with own offices in Rio de Janeiro, Singapore, Houston, Dubai, Shanghai, Poland and Denmark.

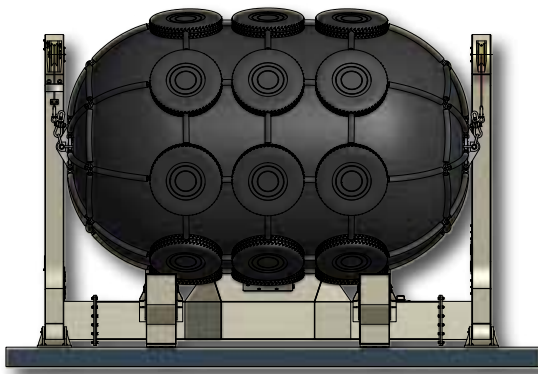
This enables us to offer products to both customers operating worldwide and local companies.







# PROTECTION GUARANTEED



Noreq is a total supplier of pneumatic fenders and pertaining equipment. We offer optimal fender products for ship-to-ship operations, lay-up situations, ports and other maritime activities where vessels and other onshore or offshore installations need protection.

During the last decades we have seen a large increase in number of sophisticated vessels and offshore constructions world wide. Special operations and valuable assets require proper protection and service. Having this in mind, NoreqFender offers a large number of ISO 17357 pneumatic fenders and accessories from stock – ready for shipment – on time.





## PRODUCT RANGE:

Pneumatic fenders

RIB fenders

Fender davits

Complete packages



## QUALITY FENDERS

Our fenders are manufactured and tested in accordance with ISO 17357. They are quality fenders which means our customers get the best rubber quality and the fenders are suitable for all marine conditions. The great forces involved during ship-to-ship operations (STS) and operations in port require a fender of assured quality.

Noreq has a large number of fenders in stock in Rotterdam and Singapore – ready for shipment.

### FEATURES:

- Padding – for better hull protection. Rubber hoses used to protect chains in order to avoid any damage to paint on the ship's hull. Inner pads can be delivered as an optional extra.
- Standard internal initial pressure 50kPa. Also available as 80kPa.
- Fitted with a towing ring, shackle and swivel in galvanized steel. Also available with stainless steel chain.
- Pneumatic fenders can be delivered in various sizes and types. We normally recommend fenders with chain and tyre net (CTN) for protection of the fender body, but they can also be delivered without, as a slingtype or body only.
- In addition to this we also deliver the Noreq RIB Fender. The Noreq RIB Fender is a new design which offers advantages such as lower weight compared to chain and tyre net fenders.

Available range pneumatic fenders (50 kPa):

Online fender calculator at [www.noreq.no](http://www.noreq.no)

Diameter x length (mm)	Energy absorption (kJm)	Reaction force (kN)	Hull pressure at 60% def. (kPa)	Safety valve pressure (kPa)	Testing pressure (kPa)	Fender body weight (kg)	Chain and net weight (kg)	Total weight (kg)
500 x 1000	6	64	132	-	200	36	-	36
700 x 1500	17	137	135	-	200	415	500	915
800 x 1500	27	158	129	-	200	83	110	193
1000 x 1500	32	182	122	-	200	120	152	272
1000 x 2000	45	257	132	-	200	146	182	328
1200 x 2000	63	297	126	-	200	192	202	394
1350 x 2500	102	427	130	-	200	258	255	513
1500 x 2500	135	479	126	-	200	290	395	685
1500 x 3000	153	579	132	-	200	332	435	767
1700 x 3000	191	639	128	-	200	415	500	915
2000 x 3500	308	875	128	-	200	594	910	1504
2500 x 4000	663	1381	137	175	250	1083	1492	2575
2500 x 5500	943	2019	148	175	250	1327	1602	2929
3000 x 5000	1136	2021	135	175	250	1707	2584	4291
3300 x 4500	1175	1884	130	175	250	1763	2324	4087
3300 x 6500	1814	3015	146	175	250	2225	3084	5309
3300 x 10600	3067	5257	158	175	250	3368	4664	8032
4500 x 7000	3696	4470	151	175	250	3624	5100	8724
4500 x 9000	4752	5747	146	175	250	4390	6164	10543

Available range rib fenders (50 kPa):

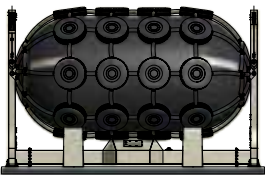
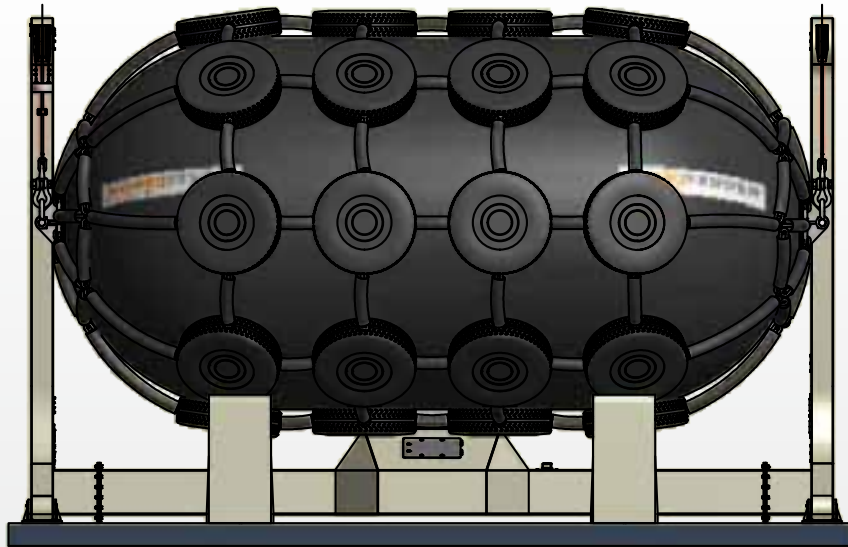
500 x 1000	7	74	148	-	150	50	-	-
1000 x 2000	55	294	147	-	150	175	-	-
1500 x 3000	184	656	146	-	150	420	-	-
2000 x 3500	370	986	141	-	150	1080	-	-
2500 x 4000	726	1550	155	177	200	1750	-	-
2500 x 5500	1057	2256	164	177	200	2000	-	-
3300 x 6500	2106	3406	159	177	245	3600	-	-

Physical property testing of the rubber:

	Test item	Outer layer rubber	Cord rubber and inner layer rubber
<b>Before aging</b>	Tensile strength	Over 180 kgf/cm <sup>2</sup>	Over 100 kgf/cm <sup>2</sup>
	Elongation	Over 400%	Over 400%
	Hardness	Under 70°	Under 65°
	Test resistance	Over 40kgf/cm <sup>2</sup>	
<b>After aging</b>	Tensile strength	Over 80% of the value before aging	
	Elongation	Over 80% of the value before aging	
	Hardness	Under + 80o of the value before aging	

**NOTES:**

- «Guaranteed energy absorption» is the guaranteed energy absorption at 60% deflection.
- Tolerance of reaction force and deflection at guaranteed energy absorption are as follows:
  - Reaction: +/- 10% • Deflection: +/- 5%
- Each reaction and energy absorption is measured under static conditions.
- Testing pressure rate indicates the testing pressure at the factory.
- Weight of fender body and net may vary by +/- 10%.
- We can also manufacture other special sizes in addition to those listed above.

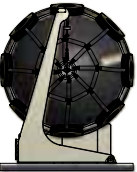


## FENDER DAVITS

The Noreq Fender Davit system is a totally enclosed davit construction with all vulnerable components protected inside the davit structure. It's carefully considered and epoch making design, gives advantages when it comes to maintenance and service, installation and deck preparations, and also for heating in Arctic climates.

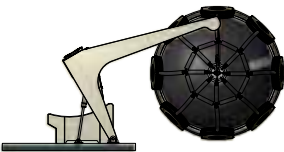
### FEATURES:

- All components protected inside davit structure
- Easy installation
- Available with heating for arctic use
- Covering all fender sizes.



### FENDER CRADLE:

For sheer storage arrangement we can offer the Noreq Fender Cradle – customized for specific needs. Contact us for more information.



Fender Davit	Fender	Diameter	Length	Capacity
NFD 1300	PF1530CTN	1.5 m dia	3.0 m	1300 kg
NFD 1800	PF2035CTN	2.0 m dia	3.5 m	1800 kg
NFD 2500	PF2540CTN	2.5 m dia	4.0 m	2 500 kg
NFD 5500	PF2555CTN	2.5 m dia	5.5 m	5 500 kg
NFD 7100	PF3365CTN	3.3 m dia	6.5 m	7 100 kg
NFD 11000	PF4590CTN	4.5 m dia	9.0 m	11 000 kg
NFD 15000	PF4590CTN	4.5 m dia	9.0 m	15 000 kg



## FENDER ACCESSORIES

In addition to pneumatic fenders and davit/storage devices we assist our customers with pertaining equipment and other fender products. Based on given information we will, together with the client, find the ideal solution individually.

On [www.noreq.no](http://www.noreq.no) you can also find a fender calculation device which is helpful when deciding which fenders you should choose.



### SOME OF THE ACCESSORIES WE CAN OFFER:

- Polypropylene ropes
- Wire ropes
- Shackles, swivels, turnbuckles and other typical hardware
- STS hoses

In addition to the above we can offer other types of marine fendering systems, such as cylindrical fenders, arch fenders and ship fenders. Please contact us for more information.

# WORLDWIDE SERVICE AND AFTER SALES



Noreq's global network of offices and agents enables us to stay in close contact with our clients.

Our service network has been configured to help you get optimal value from your assets. Qualified, experienced personnel are ready to support you with all Noreq supplied equipment, wherever it is – at short notice.

Our responsibility does not stop after installation!







**RANGE:**

Maintenance

After sales

Spare parts

Commissioning & annual services



Service and spare parts for lifting equipment online at [www.noreq.no](http://www.noreq.no)

## SERVICE AND AFTER SALES

Noreq believes it's in our customers best interests to keep in close contact, not only during the purchase period, but also throughout the equipment's lifetime. In that way our customers are ensured the best product and service.

Our responsibility does not stop after installation! Our engineers always operate in accordance with the latest procedures and guidelines.

### SERVICE & MAINTENANCE:

Noreq has trained and authorised service personnel ready to assist you worldwide with all Noreq-supplied equipment.

We offer training and authorisation to our service partners and customers.

Noreq always aims to offer customers service that is in accordance with the latest rules and regulations for all our equipment.

### AFTER SALES/SPARE PARTS:

Noreq has developed a spare parts system for its products, which is designed to ensure our customers quick and safe delivery.



### COMMISSIONING & ANNUAL SERVICES:

Noreq is fully prepared to undertake annual inspections, service and commissioning/ installation of all our products. We have a world wide network of own staff combined with third party service companies to provide assistance within a short time frame. Feel free to contact Noreq Service team for any inquiries.

### TRAINING SCHOOL:

Noreq AS has been selected as supplier of complete lifesaving packages to several training schools worldwide. One of the training schools is located in Dubai Maritime City - the new world-leading, iconic, multi-purpose maritime centre. The Norwegian ResQ training schools have recently been supplied with Noreq's new generation davits.

### PARTNERS:

Our network of offices and agents enables us to stay in close contact with the market and our customers.

Noreq has built up a network of partners that work to Noreq's high standards and who are able to carry out an approved service and sell Noreq equipment. Being presence in many countries allows Noreq's customers to have a local representative that they can contact immediately. We can also offer service worldwide. Our presence in many countries means our customers have a local representative they can contact.



*Noreq offers a worldwide service network to ensure all our clients local presence.*

**NOREQ®**

[www.noreq.no](http://www.noreq.no)

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