

Design according to Norwegian Maritime
Authorities rule No.1853 and ISO7365

ANCHOR HANDLING AND TOWING WINCH



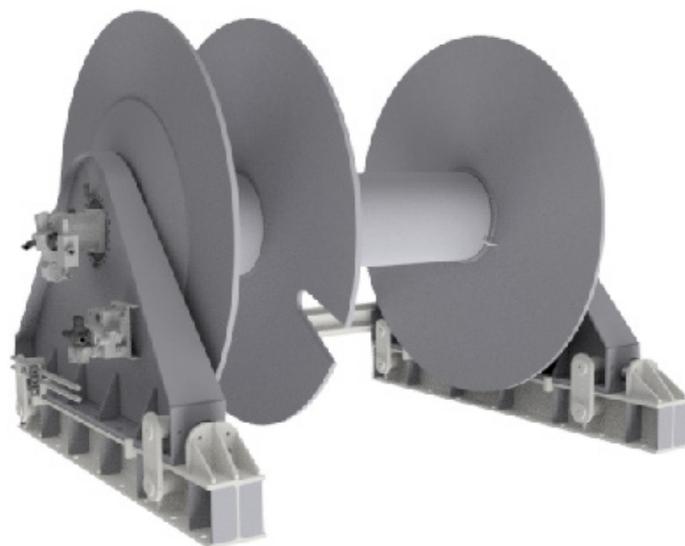
DW30-D20-L20

SWL 30t

TYPETABLE

Hydraulic connections	
P, T DRAIN, LS	38x4, 42x3, 28x2, 12x1,5
Oil pressure, flow	230Bar, 200l/min nom.
Motor displacement	Variable: 55 - 110ccm
Max towing load/anchor weight	Layer 1: 30t
Towing line: MBL acc. to ISO 7365	72.6t
Pull force for anchor handling, Ø64mm	Layer 1: 30t Last Layer: 14t

PMH DW30-D20-L20 is a multi purpose winch for anchor handling and towing, built according to Norwegian Maritime Authorities rule "No. 1853 on construction and supervision of smaller cargo ships" and dimensioned in accordance with ISO7365. The winch has a he winch has a torque that corresponds to 30 tons on the first layer.

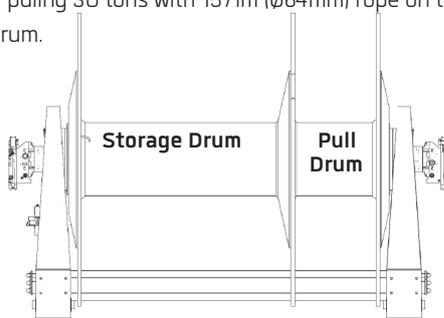


DW30-D20-L20-S with tension control

PMH DW30-D20-L20 is equipped with an emergency release, load sensing, programmable load-control system and a logging functionality.

SPLITTED DRUM (S)

The winch can also be delivered with a splitted drum to achieve the possibility of puling 30 tons with 1571m (Ø64mm) rope on the storage side of the drum.



DW30-D20-L20-S

EMERGENCY RELEASE

The Emergency release enables the winch to release the rope with a residual force of less than 2 tons on the middle layer.

LOAD SENSING AND LIMITING SYSTEM

The winch is equipped with an electronic control system for sensing and limiting the load, in accordance with new regularions given by the Norwegian Maritime Authorities rule "No. 1853 on construction and supervision of smaller cargo ship".

The control system has two different modes: "**Tension Mode**" and "**Minimum Load Mode (no mode)**". Modes can only be selected from the touch screen in the system's control panel.

In **Tension Mode (main mode)**, the operator can enter the maximum limit for the current operation based on the rope's breaking strenght or the anchor's fastening strength. The system will automatically limit the maximum capabilities at the given strength, and the secure load will not exceed this limit.

In **Minimum Load Mode (no mode)**, the heave capability will be reduced to a minimum. This mode is only active when **Tension Mode** is not selected or in an blackout of the control system.

LOGGING OF ALL OPERATIONS

During all operations with loads over 200kg, the system will automatically log all data. The log includes date and time, load data, active operator mode, hydraulic pressure and, if available, the geographic coordinates of the vessel. All data are logged to a USB drive. The USB drive has to be present before any mode can be selected. If removed during operation, the system will automatically activate the **Minimum Load Mode (no mode)**.

Norwegian Fishing Authoreties NYTEK rules, § 19 requires logging during anchor mooring processes within the aquaculture industry.

Log file

The log file on USB drive, can be imported into spreadsheets, like MS Excel, for further analysis. This log data contains all information as described above.

WIRELESS REMOTE CONTROL (OPTION)

The winch can also be delivered with a wireless remote control. This remote control system can also be programmed to control other deck equipment.

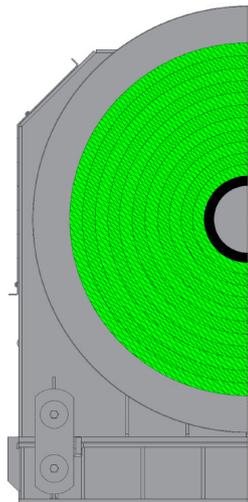
Winch design:

- Variable speed
- Emergency Release
- High drum capacity
- Steel
- Hydraulic drive



Control system design:

- Tension Control
- Tension Limiting
- Operation Logging



Layers	Pull	Capacity
1. Layer	30t	62m
35%	21,5t	136m
40%	19,1t	220m
50%	15,5t	315m
60%	12,7t	539m
70%	11,3t	805m
80%	9,9t	1287m

Pull force and drum capacity for each layer are based on a Ø64mm rope, drum length of 2 metres and utilisation of 80% of the drum.

DW30-D20-L20 is the perfect winch for tensioning of any mooring arrangement. Together with the "Rope Lock" it will become a unique tool! See own brochure for "Safe Work on Deck".

PETTER'S MARINE HYDRAULICS aims to satisfy our customers by providing reliable products with excellent performance and 24/7 customer support

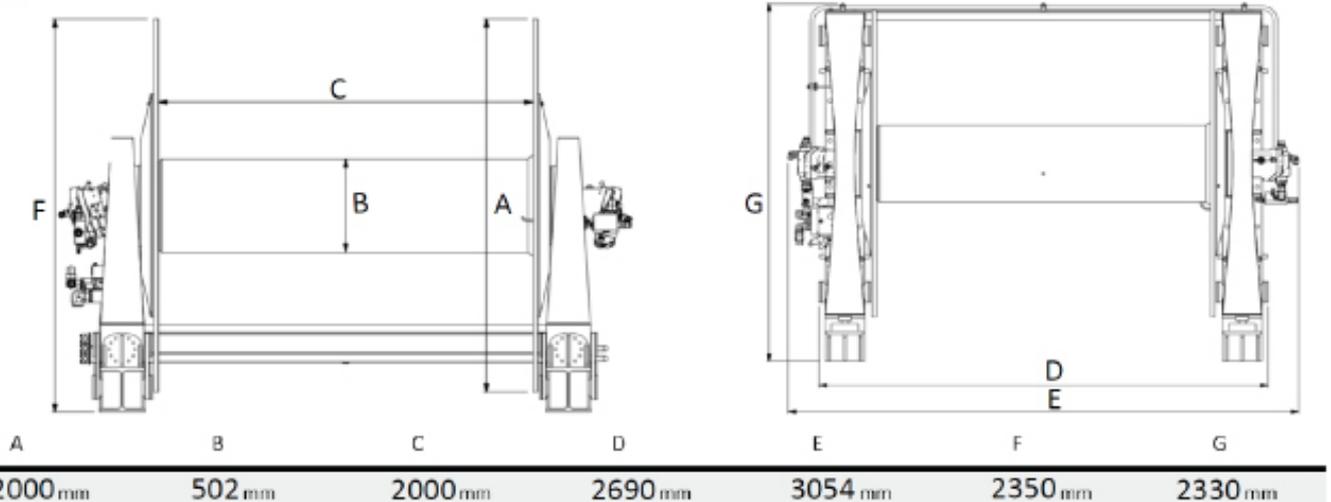
For the customer that demands a little bit more, **PETTER'S MARINE HYDRAULICS** offers a support contract that ensures 24/7 technical phone support and on-site support within 24 hours if a breakdown or malfunction should occur. We also offer proactive service contracts for periodic maintenance of all equipment, including software updates

TYPE TABLE

Type	Weight	Drum capacity on full drum, Ø64mm	Split drum (S)	Drum capacity on full drum, Ø64mm	
			Weight (S)	Drum 1	Drum 2
DW20-D20-L20-(S)	~5,2t	1662m	~5,9t	1180m	457m

DW30-D20-L20 is only designed for use with fibre rope.

DW-30





STANDARD MANEUVERING SOLUTIONS

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