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#### WINCH STANDARDS & BHW GROUP LTD

The British Standard: BS EN14492-1 for power driven winches, BS EN14492-2 for power driven hoists provides the means for conformity to essential Health and Safety requirements of the EN Machinery Directive and the essential Health & Safety at Work Act 1974.

Conformity to these standards is the joint responsibility of the supplier, the installer and the company operating the product.

**UK C E** BHW Group Ltd products are fully compliant and carry a CE and UKCA mark. A Declaration of Conformity is also supplied with each winch or hoist.

**Our aim at BHW Group Ltd** is to ensure the correct machine is supplied to suit the application and we welcome the opportunity of discussing the proposed application and offer advice. It will help us considerably if information regarding the maximum and average loads to be lifted or pulled - and approximate frequency of use can be provided.

**For hoisting applications**, the minimum breaking force (MBF<sup>\*\*</sup>) of the wire rope must be 5 x the lifting capacity of the hoist. The ratio of wire rope diameter to mean drum diameter<sup>\*</sup> is usually at least 15:1. This will vary according to the application, the average operating time per day and the average and maximum weights being lifted.

**For pulling applications,** as a general rule, winches used in pulling applications rarely see their maximum rated capacity and are used intermittently for short running periods. In these applications the wire rope MBF<sup>\*\*</sup> to winch rating can be a minimum 2:1 and the ratio of wire rope to mean drum ratio\* as low as 10.1.

In applications where the winch is used for longer running times and more frequently sees higher loading conditions the wire rope to MBF<sup>\*\*</sup> should be 3:1 and the ratio of wire rope to mean drum ratio<sup>\*</sup> 12:1.

**For recovery vehicles** the permissible standard of wire rope MBF\*\* to winch rating can be a minimum 2:1 and the ratio of wire rope to mean drum ratio\* only 10:1. This minimum standard is permitted because the running time is so short and the winch rarely sees maximum load.

**Wire rope capacities** the maximum amount of wire rope on the drum must leave a freeboard to the top of the drum flange of 1.5x wire rope diameters to prevent the wire rope coming off the drum.

Winches and hoists with capacities over 1000kg must be load limited.

\* Mean drum diameter = the drum diameter plus the diameter of the wire rope. \*\* MBF = the Minimum Breaking Force of the wire rope.

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# HEAVY DUTY HOISTS 120 - 500kg DH120 (120kg), DH300 (300kg), DH500 (500kg) 12V or 24V DC

These commercial, 12V or 24V DC machines have been specifically designed for lifting applications on vehicles and boats.

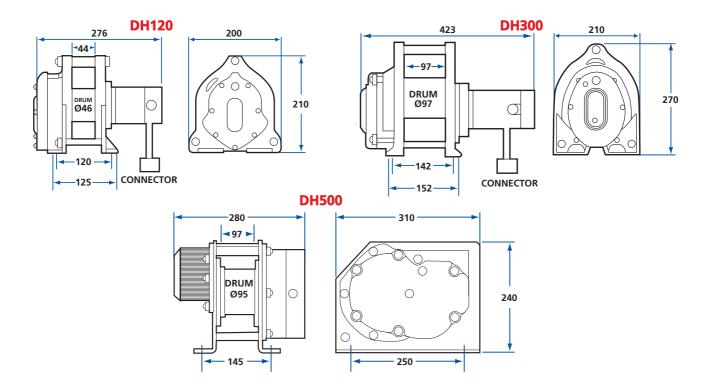
#### **FEATURES INCLUDE**

- 12V or 24V reversible permanent magnet motor
  Reliable and low maintenance
- Dynamic and mechanical brake
  Provides instant, safe braking
- Lightweight and compact design For easy handling and installation
- Low amp draw For higher duty cycle
- Excellent rope to drum ratio Aids wrapping and prolong wire rope life
- Low sound levels Causes less noise pollution
- Supplied complete with wire rope Galvanised finish for longer life
- 360° weighted safety hook Swivel type with safety catch
- 3.5 metre plug in pendant control 2 button plus emergency stop
- Foot mounted Can also be installed upside down
- Quick release power lead Plug in with commercial type 2 pole plug

3.5 metre plug in pendant control with 2 buttons plus emergency stop supplied with all heavy duty hoists







SPECIFICATIONS		DH120		DH300		DH500	
Voltage:		12V	24V	12V	24V	12V	24V
Lifting: Capacity Height		120kg		300kg		500kg	
		5m		12m		12m	
Weight:	Hoist only	17kg		27kg		34kg	
	Total kit	19kg		34kg		37kg	
Line speed:1st layer		3.5m/min		2m/min		2m/min	
Last layer		5m/min		3m/min		3m/min	
Duty cycle:		All Heavy Duty Hoists have a duty cycle of 25%, with a maximum of 60 starts per hour					
Wire rope: Diameter		4mm		5mm		6mm	
Length		5m		12m		12m	
Rope construction		6 x 19 wire core, galvanised for longer rope life. Minimum factor of safety = 5:1					
Motor:		Reversible permanent magnet motor					
Outputs:	Kilowatts	0.1kW	0.1kW	0.3kW	0.3kW	0.3kW	0.3kW
	Amperes	20A	10A	30A	15A	50A	25A
Braking:		Mechanical ratchet brake					
Drum:	Length	46mm		97mm		97mm	
	Drum ø	70mm		95mm		95mm	
	Flange ø	155mm		190mm		190mm	
		Rope dia	meter to Drum	diameter factor of	f safety = 15:1		

# **NOTES**

These hoists must not be used for the movement of personnel and 7 wraps of wire rope must be maintained on the drum.

Data shown is approximate and intended as a guide only.

## WARRANTY

Each new hoist is guaranteed against defects in workmanship and material defects for a period of twelve months from date of purchase.

Wire ropes are not included under warranty.

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